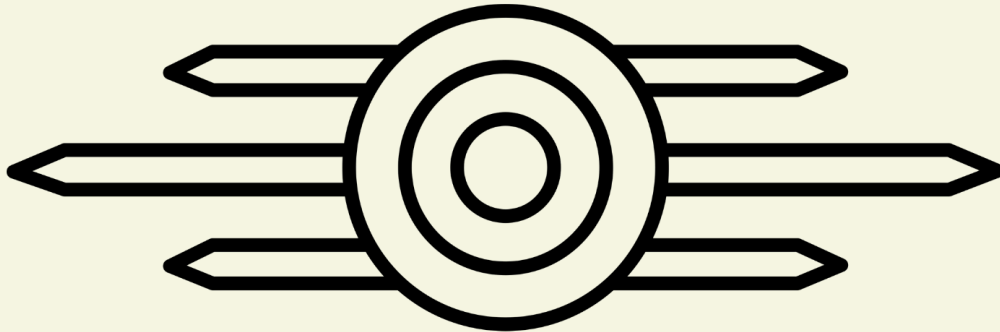


Fallout 4 Load Order Framework



A VAULT DWELLER'S

**LOAD ORDER
SURVIVAL GUIDE**

VDSG PRE VTB-004-111 POCKET REFERENCE EDITION

**ISSUED BY VAULT-TEC DOCUMENTATION
DEPARTMENT**

All visual representations and projections have been
developed through the use of Science.

Last Update: 2/04/2024

Load Order Survival Framework

The idea of load order survival is to plan ahead, organize yourself, and sort your mod list using categories to build your load order framework.

The outline is enabled on Google Docs for those on a browser that supports it.

Quick Search: Use **Control + F** on Windows PC in order to search for a specific mod.

Quick Reference: [Build Your Framework](#)

I have no idea what a mod is or what to do: [What Are Mods and What is Load Order?](#)

How to make the most use of the Survival Guide: [About the Guide](#)

Template Categories' Definitions: [Framework Template Categories](#)

Be Organized: Load Order Framework Templates [Google Sheet](#) | [Text-only](#)

Research Mod Placement: [Load Order Survival Framework](#)

Common Issues: [Troubleshooting](#), [Warnings](#), [Cautions](#)

Don't know the jargon in a mod description? [Important Definitions and Glossary of Terms](#)

Having trouble accessing this document? Try the [website](#) or let us know on [Discord](#).

PC Players: See the [Useful Links](#) section for additional load order tools at your disposal.

Discord: Mod not on the research list? Ask about it at the [Parent Server](#). See [Getting Help From Discord](#) for more info.

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Note: Please do not make share requests of this document. If you would like to submit a grammar edit or have something to add, contact oddlittleturtle either on [Discord](#) or on my [website](#).

Acknowledgements

This document would not be possible without **VagorDacil** for the original Parent Thread; **Wahker** for compiling the original category list; **thejeepdriver** for maintaining the new Parent thread; **the authors of the Skyrim “Living” Master List** for the inspiration for this one; Umbra Reference Manual for layout inspiration.

Special thanks to:

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A special thank you to theJeepDriver, VagorDacil, and Wahker:

The original Parent Thread was created by VagorDacil and used Wahker's original load order list. Thank you both for providing such a great resource to console mods. Seeing the list and getting to know the community on the Bethesda.net site was one of the best things that could have happened to me.

As mods were made and more information became available about how the FO4 Creation Engine is different from Skyrim's, oddlittleturtle made a new list for TheJeepDriver's [new thread](#). Jeep did the

design work for the Google sheet¹ using oddlittleturtle's list and maintained the Fallout 4 Load Order FAQ and Assistance Thread on Bethesda.net. The thread and framework would not be what it is today without Jeep's passion for organization and enthusiasm to start a new thread when the original was languishing with old data. Thank you for compiling everyone's information for the FAQ, Jeep.

A special thank you to Willyb9:

[Willyb9](#) is one of the most knowledgeable people I met when first joining Bethesda.net. If you look through the pages of both Load Order Threads on Bethesda.net, you will find his words of wisdom. He was one of the first people I met on ANDREWXCX's comment pages and he is the one who introduced me to 3lric. Thank you, Willyb9, for your friendship, your support, and helpfulness.

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Information in this document is subject to change without notice. Updates occur often, but major updates occur around the 20th of each month, if there are no smaller updates prior to.

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If you see something clearly WRONG, PLEASE tell me! I do not want to crash anyone's game or give out incorrect information about any mod by mistake. The majority of the example mods on the Framework were tested on Xbox by those listed as Contributors with additional information provided by the community at the Parent Thread during testing sessions. Further input has come as the modding community developed, mods' scripting examined, and were looked at with community tools such as xEdit. See [Links to Electronic Copies](#) for ways to get in touch.

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In the event of loading issues of this document, the [Framework Template Category Definitions](#) have their own webpage. They are officially located and maintained at:

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You can find instructions [here](#), on the website, or on the link in the FAQ at the top of the worksheet.

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Website

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Fallout® 4

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⁵ 7-11-21: This is to guarantee everyone has the most recent copy.

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FOREWORD

Fallout 4 Load Order Framework: A Vault Dweller's Load Order Survival Guide is divided into six (6) parts.

About The Guide explains what this document is and describes how to make the best use of it.

Modding Your Game 101 defines load order and modding as they pertain to Fallout 4 and Bethesda games, and provides detailed information about manually modding your game and the importance of testing a load order before committing to a save and best practices to observe and troubleshooting info as well as warnings and cautions to take into consideration when using mods. Readers will also find the sorting order for building your Framework in the detailed list of *Framework Template Category Definitions*. If you need the definitions in website format for bookmarking purposes or easier reference, you can find them [here](#). (Mobile users, turn your phones to the side for access to all menus available on website.)

Before You Download focuses on planning practices to help players think long-term when choosing mods for playthroughs.

Downloading Basics describes how to use the in-game mod menu and adding and deleting a mod.

Load Order Survival Framework is what most players come to the document for as it provides detailed information about mods that have been tested and their suggested starting placement in load orders. When using the Framework, keep in mind that mods listed are just an example of what category they fall under. You still have to test the mods against your own list of mods you want to use. Not all will work together or in that order.

The Appendices provide additional information including conflict resolution tutorials for PC players and in-depth analysis of load orders.

This document is always being edited and changelogs are available at the Load Order Parent Thread, though at the moment they are tucked in and hard to find unless one has been an active participant in discussions since 2017 when this document was first conceived on the original parent thread. The official changelog can be found by visiting [here](#). All changelog posts are posted to Twitter when they happen and cover this Guide, the website, and any updates to the FAQs on Discord. Only major updates to our Guides and FAQs are on the changelog.

Load Order Parent Thread Closure⁶

As of 7/6/2021, the Parent Thread at Bethesda.net has closed. In lieu of this, you may receive help on Discord. If you need to look up a comment on a mod page, you can do so by doing a forum search by Mod ID. See [How to search for mod comments](#) for more information.

Direct all questions about this document to either oddlittleturtle's [website](#) or [Discord](#).

The Parent Thread is archived at the following locations:

Archive.org: [Updated Load Order FAQ and Assistance Thread - All Platforms](#)

Archive.is: [Archived at Archive.is](#)

The former parent thread has an excellent FAQ to give you more information on modding. It is recommended you read that first. If you are not sure of a mod and it is not on this list, ASK at the thread.

Please note: the Categories are slightly different

Because of the forum closure, and until a new forum home is created, a server is set up as the official Parent Server: [Armored Reptile Modding](#)

You can also ask in the official BethesdaStudios Discord on the Fallout 4 mods channel. Keep in mind that if asking on the official BethesdaStudios discord that only fans and/or mod authors will be assisting since mods are outside Bethesda's official support and not everyone has time.

On any server you join: Please be courteous to others within the chat room. We're all fans and all gamers. Toxicity towards others is neither wanted nor encouraged.

Getting Help from Discord

The [Parent Server](#) provides support for all platforms and all are welcome provided all players are respectful. The Parent Server is not just for load order discussion. You can join chats about other games as well. You are expected to be a part of the community just as you were on the Parent Thread.

Note: Do NOT share personal information online or on Discord.

Please be considerate and use a link to your load order framework template in your post. Discord really isn't the best medium for load orders, but it works if we keep things orderly by only posting a link. (Be sure when you make a copy of one of the templates and make your document shareable.) Let us know what issues you are having, the platform on which you are playing, and if you have any questions, just ask. As with the former Parent Thread, we are here to help and let you know what mods conflict. We

⁶ 8-12-2022: It was not until today that I realized that no one could see any comments this document has from me (oddlittleturtle) and theJeepDriver and other contributors dating from 2017-current. They are being added as footnotes with the date of the comments.

require that you add your character name or gamertag to your template. “Copy of” templates have been used as hoaxes and have broken people’s games. If you are going to build your framework, make sure you are not just copypasta’ing someone’s broken load order.

For posting purposes, the [Google Sheet](#) on page one works best as it has fields that provide more information to those who are helping, such as web links, what’s enabled/disabled, what platform, etc. The information is also beneficial to you as it serves as your planning guide and Framework Index, allows you to keep up with how many mods you’re planning to download, and it’s easily editable. Please fill it out entirely prior to posting, and if you have any questions while filling it out, or have questions about mods that haven’t been included on the list, don’t hesitate to ask us.

More Info:

[How do I use the load order Framework Template?](#)

[Discord Community Guidelines](#)

[Discord Terms of Use](#)

[Official Parent Discord](#)

[Bethesda Game Studios Official Discord](#)

Keep in mind that this is a hobby and not a day/night job for any of the players on the server. We’re all gamers who enjoy modding and socializing with others who mod their games. Time Zones greatly differ. We are not affiliated with Bethesda Game Studios in any shape or form.

Console-specific Information

This document is designed to help players use the in-game manager and is mostly console-specific; however, the current maintainers of the document do not have access to the PlayStation version of the game. If there is an Xbox version that is external-asset free, it stands to reason that the PlayStation will probably behave the same way, though that is in no way a guarantee.

If you are a PlayStation player, we encourage you to join us in discussions on the Armored Reptile Modding server to discuss any PlayStation-related quirks encountered while using mods as there are several friendly helpers on Armored Reptile Gaming server who play exclusively on PS4 and PS5. All gamers are welcome on the Parent Server.

Playstation players who have save errors, please see the 0kb error in Useful Links for a complete guide to fixing the issue. We have included the first half of the fix in this document [here](#).

For other public Discord servers who support this document, please see [Useful Links](#).

You may also receive help on oddlittleturtle’s [website](#).

PC-specific Information

The order set out in this document also works on PC with a few exceptions. F4SE mods will not be covered. You may ask about them and receive assistance in the Parent Server, if a player there knows

the answers. There are a few links to useful F4SE mods, such as Power Tools for Power Grid Corruption, as well as useful load order tools under the Useful Links Section.

When setting up your Framework, please use the actual names of the mods in your list and not the filenames. The in-game menu manager only lists mods by filename if you've downloaded a mod off-site. The Google sheet Framework Template has a handy place for you to list the mod's web page for not only our reference to assist you, but yours too.

If you are not planning to download mods with loose files, you do not have to "enable" modding on your Fallout4Custom.ini. Fallout 4 is ready for mods right out of the box with its own in-game mod manager. If you are going to use loose mods, there are many things to be aware of, such as load order for loose file modding is *download* order and any script that is older than what is loose will not be read by the game.

If you are using the in-game manager or the Bethesda website for the first time, see [Downloading Basics](#).

The appendices contain information regarding conflict resolution and how to fix pc-specific issues such as texture-related performance and how to fix previs/precombines. However, for a more comprehensive guide for PC modding, see [Optimizations Guide Collection 2](#). See [Useful Links](#) for other Discord servers if our current members are unable to help you.

Useful Links

Bethesda.net Mods Website

[All Mods](#) - Search mods

[My Mods - Library](#) - Access your downloaded mods (Requires Bethesda.net account)

[My Mods - Favorites](#) - Access your favorite mods (Requires Bethesda.net account)

Blank Framework Template

Build your framework outside the game

[Load order Framework Google spreadsheet](#)

[Load order Framework Paste](#)

[How do I use the load order Framework Template?](#)

Official Parent Server

[Armored Reptile Modding](#) - Official Parent Server

See [Getting Help from Discord](#) for information on how to post a link to Discord

[Collective Modding](#) - PC-Specific Modding

Armored Reptile Modding [Server ToS](#)

[Discord Tos](#)

[Discord Community Guidelines](#)

Official Changelog

Changes and updates occur as I or theJeepDriver have time. Major changes are noted in articles on oddlittleturtle's website and generally occur around the 20-30th of the month. Minor grammar edits are usually only noted if they are part of a larger update. Some months receive daily updates, other months receive an update near the end of the month or none at all. Because of this, it is not advised to make a copy of this document. We have a shortened link for everyone to use along with Bookmarked headings for easy linking. We did not really track revisions and changes prior to 2019 except on the Parent Thread at Bethesda. We have been at Armored Reptile Modding since 2018.

[Changelog](#)

Subscribe to the newsletter to receive updates in your inbox or follow us on [Twitter](#) or [Ko-fi](#).

Load Order General Information

[Updated Load Order FAQ and Assistance Thread, All Platforms - Former Parent Thread](#) (closed 7/24/2021 - Archived)

[OLD Parent Thread](#) - Please post any questions to the Parent Discord Server. (Archived)

[Examples of Working Load Orders Xbox](#) (OLD; pre-1.9 Patch; pre-Nuka World) - defines working as “playable and highly stable”. (Archived)

Examples of Working Load Orders - by wombleman (link no longer works)

[Load Order and Troubleshooting](#) - by Wahker (link no longer works)

[Load Order Worksheet](#) - by Wahker (link no longer works)

[Load Order FAQ](#) - by oddlittleturtle

Bethesda Official Discord Servers

<https://discord.gg/bethesdastudios> - Official BGS Discord Server

<https://discord.gg/Bethesda> - Official Bethesda at Home Discord Server

Other Discord Servers

Most mod authors already have their information on their mod pages. Read the descriptions!

The following mod author Discords provide support for their mods. [Contact](#) theJeepDriver or oddlittleturtle if you would like your modding website or Discord linked. Linkage does not constitute an endorsement. These are provided so you can reach a mod author if you have questions. The Bethesda forums are no longer available to contact them. Observe all server rules and don't be an asshole.

[AFKMods](#)

Caffeine or Die

[Collective Modding](#) (50+ mod authors⁷, plus Buffout4 Crash logging guidance)

[Creative Family Mods](#)

[FrogPrincessQ4](#)

[Sim Settlements](#)

[SKKMods](#)

[TheRealJenn's Server](#)

[Vronykah's server](#)

[The Reclamationists](#)

[MAIM](#)

Modding Legal

[Bethesda Terms of Service](#)

[Mods based on Copyright Material - things to know before you make a request \(or download a mod\)](#) - By ANDREWXCX (Archived)

Community Patches, Fixes, and Optimization Mods

[Important Community Patches and Fixes](#) by theSoundofSnow (Poet) - important information for all platforms

Unofficial Fallout 4 Patch [Xbox](#) | [PS4](#) | [PC](#) | [Bug Tracker](#) | [Support Forum](#)

⁷ This server includes Witcher games and other modding. It also provides support for Buffout 4 and The Midnight Ride

[Frost Cell Fixes](#) - For use with Frost instead of PRP

Previsibines Repair Pack [PC](#) | [PC Lite](#) | [Xbox](#) | [Bug Tracker](#) | [Support Discord](#) - load order specific requirements: BOTTOM

Note: Previsibines Repair Pack (PRP) is a continuation and update of Fo4FI_FPS_Fix which is an updated replacement of Boston FPS Fix by BetaVirus. Console players should use PRP instead of Boston FPS Fix to avoid Far Harbor header incompatibility on Xbox. The mod was never updated on Xbox until PRP came along.

Far Harbor will have severe visual issues if there is a header incompatibility with a mod on Xbox. As of UFO4P version 2.15, the header information causing visual issues on Xbox is removed and returned to vanilla header information. A new game may be required on Xbox if updating to 2.15 mid-play to ensure header information changes within the game save. New players and fresh games do not have to worry about this while using UFO4P.

If you experience the issue on PC (flickers), check your modlist in xEdit to determine if any need a PRP patch or if you do not have PRP in the correct load order.

Diagnostic Tools

Important

Xbox diagnostic tools are for use during mod tests and not during normal gameplay. When requesting assistance, keep in mind if they are in your load order, anyone assisting is going to assume the character is your test character and not your primary. Pre-planning and testing is important so you do not have to download a diagnostic tool mid-play. They are not designed for singling out a specific mod and there is not any type of logger.

Load Order: bottom of the list

PC-only

[Buffout 4](#) - Engine fixes and crash logger

[Installation instructions](#)

Xbox

[SKK Object Counter](#) - Complex Actor diagnosis

Note: Console players should be aware that this tool is not to tell you if the faction overhaul has issues and does NOT mean the faction overhaul is 'bad'. This tool is there to assist you when determining if you are using too many weapon mods along with a faction overhaul or even not using an overhaul at all.

TIP: Add mods to your favorites to play with on a different character if you feel like you absolutely need them. Duplicate the load order tabs on the [Framework Google Sheet](#) to set up multiple character builds for later.

Multiple Platforms

SKK Script Lag Latency Test - [Xbox](#) | [PC](#)

Note: Do not use if using Buffout 4. PC players can also test latency with an ini edit. See [Script Lag and other harmful ini settings](#) for more information.

If you feel you need this, re-evaluate your load order. It is interesting to see what's what but there isn't a way to know what is causing any lag. The base game has over 7000 scripts, Automatron adds another 400, etc. It might be of use to mod authors testing their scripting on Xbox to run comparative, parallel tests between PC and console for mod making since no other mods will be installed during such tests.

Optimization System Information

[Understanding precombines, previs and why mods that disable them can cripple game performance.](#) - By ANDREWCX (Archived)

[Scrapping Mods and Performance](#) by DAManding

[Precombines, Previs, and Load Order](#) by oddlittleturtle

[Modern Precombines](#) by starhamster/BenRierimanu

[Modern Previsbines Deep Dive](#) by PJMail

PlayStation-specific

[PS4 Restrictions on PS4 mods](#) - by ANDREWCX (Archived)

[0kb FAQ Thread](#) - For PS4 assistance with the 0kb save error (Archived)

Troubleshooting

[Installing Workshop Mods and Broken Workshop Menus](#) - by Crayonkit/DAManding (Archived)

[New Games Missing Mod-Added Inventory Items](#) - by SKK50 (mostly for mod authors; however, very useful to players in regards to *when to add a mod with a holotape*)

[Info - GUIDE: HELP! My Settlement crashes on Approach/Fast Travel](#) (Sim Settlements troubleshooting) by Harry Young (Bug Organizer, Staff Member, Support Team, SimSettlements.com)

[Fallout 4 Crash Guide](#) by Kinggath

["Operation Not Completed" Troubleshooting](#) by oddlittleturtle

[Advanced Troubleshooting](#) by TheSoundofSnow

[List of Bugs in Fallout 4](#) - Independent Fallout Wiki

[Interior Cell Navcut Bug](#) - Kinggath | [Information Summary](#) | [F4SE Bugfix](#)

Videos

[Fallout 4 Xbox Load Order Guide](#) | Optimize Your Mod Placement⁸
[Load Order #1 - What is it?](#) (PC-specific, but VERY informative for all platforms)

[Modding 101 || Load Order || A to ESL || Elder Scrolls & Fallout](#) - by Gamerpoets
[Mod Organizer 2 - Installation and Set Up](#) - by Gamerpoets
[Merge Plugins: Start to Finish](#) - by Gamerpoets

Stay Organized

If you aren't going to participate on Discord, here are some other links to keep up with your load order while you plan:

- [Pastebin](#) - Online text editor
- [Google Docs](#) - Sheets or Docs

Useful Load Order Tools (PC)

[B.A.E.](#) - to inspect BA2s to insure F4SE scripting has not been included
[BodySlide and Outfit Studio](#) - to customize load order armors to your chosen body
[Buffout 4 Installation Guide and Known Crash List](#) - Crash list is also helpful to Xbox players
[Canary Save File Monitor](#)
[Cathedral Assets Optimizer](#) - to archive loose files (Not for Xbox BA2s; Xbox BA2's must be built with Creation Kit)
[Creation Kit](#) - to archive loose files (or to download Archive 2 for use with Wrye Bash)
[FO4Edit](#) (xEdit) - checking for conflicts and creating load order patches
[FO4LODGen](#) - Generating, Regenerating LOD
[Pra's FO4Edit Scripts](#)
[Wrye Bash](#) (BAIN installer) - to archive loose files, check plugins for HITMEs, deleted navmesh, and ITMs

More Info:

[Using BAIN and Archive.exe to Package a Skyrim Mod](#) - for the basics. Archive 2 has a different interface. Archive 2 is included in the [Creation Kit](#).

Mod File Management Software (PC)

While the Framework is designed for all players on all platforms, this guide focuses on using the in-game mod manager for console players and for PC players downloading from the Bethesda website.

⁸ 5-14-2020: Wahker's original list. This list has since been modified due to the optimization system.

Note: Currently, Vortex is not recommended for AWKCR, AWKCR-dependent mods like Armorsmith, or Armorsmith-dependent mods because these mods require manual sorting or patching.

Note: BA2 extraction is not recommended. Loose files can cause load order/data folder management issues and a previous version of the extractor corrupted certain types of texture files.

[FO4-Plugin-Manager](#) (manual) Simple plugins.txt manager, recommended for mod tests, small load orders

[Mod Organizer 2](#) (virtual directory installer) Multiple profiles, completely clean data directory, recommended for large load orders with loose files. **DO NOT USE TO EXTRACT BA2 FILES!!**

[Vortex](#) (auto sorter installer) integrates with NexusMods, multiple profiles, multigame support, slow download from NexusMods unless paying (mods are free, don't pay for mods)

[Wrye Bash](#) (manual) More in-depth manager, recommended for all load orders and mod testing, can be used to streamline BA2 packaging for load order management

Other Helpful Modding Forums

[AFK Forums](#) - Unofficial Fallout 4 Patch team

[Sim Settlements Forums](#) - Sim Settlements team

[DAmanding's Website](#) - Crayonkit/Creative Clutter team

[Creation Kit Wiki](#) - Dynamic, community-edited help for mod authors; contains useful information for mod players as well

[Creation Kit Wiki clone](#) - Temporary clone until official wiki is updated

[Content Creator Help](#) - FO4 modding education Discord server to start your own mod making career (must be in good standing with NexusMods to join)

Papyrus Engine Articles

[Myths and Legends: Papyrus Ini Settings](#) by Thallassa - Pertains to Skyrim ini settings but most are also used for Fallout 4 and are the same where FPS is concerned.

[Save File Notes \(Papyrus\)](#) - by [JLundlin](#) - Information on how the game saves papyrus scripts

[Script Lag and harmful ini settings](#) by smkViper - A few notes from the original developer of the papyrus engine

Note: Console players should be wary of "performance" .ini edit mods that make any change to the settings listed in the article, and modders should avoid adding those settings to consoles.

Useful F4SE mods (PC only)

[Auto Gamepad Switch](#) - by Registrator2000

[Buffout 4](#) - by Fudgyduff (Crash logs handled [here](#) - read all Discord info before submitting log)

[FO4 HotKeys](#) - by Registrator2000

[Mod Configuration Menu](#) - by Registrator2000

[Power Grid Tools](#) - by Registrator2000 and Kinggath

More Info:

See [Power Grid Corruption and the Scrap Crash](#) for how to avoid this detrimental issue on console
MO2 Users who use Profile-specific saves see [this post](#) for configuring FO4 HotKeys

Bethesda Support Center

While Bethesda Support does not provide support for user-generated content and game mods, it is helpful to keep up to date with the site status for outages.

[Support Twitter](#)

[Support Status Page](#)

[Fallout 4 General Manual Docs](#)

You will need to have a Bethesda.net account for the following:

[Fallout 4 Feedback](#) - show them some love or report a bug

[Fallout 4 In-Game Support](#)

[Fallout 4 Error Codes Support](#)

[Fallout 4 Technical Support](#) (this is not load order)

Microsoft Support Center

While Microsoft Support does not provide support for user-generated content and game mods, it is helpful to keep up to date with the site status for outages.

[Support Status Page](#)

[Disability Answer Desk](#)

[Hardware & Networking Support](#)

[Series S|X Smart Delivery Troubleshooting](#)

[Xbox Game Save Cloud Error Messages](#)

[Game Pass PC](#)

PlayStation Support Center

While PlayStation Support does not provide support for user-generated content and game mods, it is helpful to keep up to date with the site status for outages.

[Support Status Page](#)

[Hardware and Repairs - PS4](#)

[Hardware and Repairs - PS5](#)

ABOUT THE GUIDE

WHAT IS THE LOAD ORDER SURVIVAL GUIDE?

A Vault Dweller's Load Order Survival Guide is designed to help players manually find the best, most stable load order for their Fallout 4 game by emphasizing load order planning and game modification placement, followed by maintenance and optimization of load orders. Within the pages is a guide with categories for players to use for mod placement, useful tips, tricks, and cautions while using Fallout 4 game modifications. It is an evolving guide that will change and grow with the community as more information becomes available and new modding techniques are developed.

In [February 2017](#), the document began as a master list of categories with a set of mods taken from various working and stable load orders. It has been further expanded over the course of several years, and it is in active development. The document itself was originally inspired by the *Skyrim Master List* by LukeKB, thefirebirdman, honorsbastion13, and Poisd2Strike. It has since evolved into a full how-to mod guide with mods for research purposes. While it is geared towards console players, it is the intention of the document to be as comprehensive as possible and the information contained within can be used by all platforms.

The Survival Guide utilizes the categories as set forth by Wahker in his "Load Order Worksheet" thread and the VagorDacil's [original thread](#), and it has been further refined as we've played and discovered that Skyrim SE and Fallout 4 are different when it comes to adding mods for gameplay. There are many new systems. These categories are referred to collectively as the **Load Order Survival Framework**.

Features

- How to plan your playthrough using mods
- Glossary of terms used by the modding community
- Sorting order with glossary and a template for your planning needs
- Frequently asked questions
- Troubleshooting and problem-solving Information
- Example mod placement
- Detailed installation guide

All platforms are welcome on the Parent Server, and there have been several helpful people who use or have knowledge of the various mod managers to assist with platform-specific issues. All players should be able to use the categories as is and are welcome to ask load order specific and mod manager specific questions on the Parent Server. PC Players who use Buffout 4 should submit their crashlogs to Collective Modding, linked in the [Useful Links](#) section.

Unfortunately, because Bethesda.net has closed their forums on May 24, 2021, the official Parent Thread of this document is in the process of finding a new home. You can ask about load orders and get help on Discord. See [Getting Help From Discord](#) for more information.

HOW TO USE THIS DOCUMENT

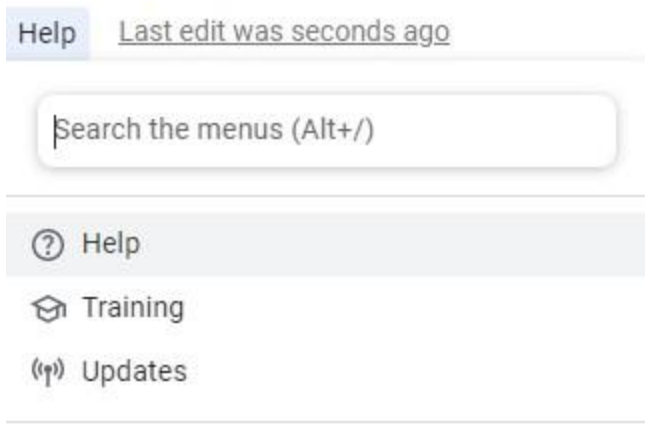
When building your load order framework, remember:

1. **The Framework is just a guide.** Everyone's load order is going to be different based on what the mods you add to the game. The mods within the Framework are there to get you started in your research by providing compatibility info with other mods and alternate mods where available. There are over 14k on the Bethesda.net website just for Xbox alone.
2. **You are responsible for your own game.** Read all possible documentation and follow any special instructions regarding any mod you want to use. Please use common sense.
3. **Modding your game is not plug and play.** Mods require testing prior to enabling and upkeep while playing. Creation Club changes to the engine sometimes require load order finessing and fluffing after updates.
4. **Plan ahead.** Think about what you want to accomplish during your playthrough prior to downloading. We're limited to 150 mods and 2GB on Xbox and 100 mods and 900 mb on PS4. The website keeps up with *GiB* while the in-game manager keeps up with *GB*. The Creation Engine is not designed to handle plugin removal and scripted mods break lists they edit -- such as the workshop menu.
5. **Start fresh between each new character.** As part of your planning process, console players should clear their reserve space to remove any Creation Club content, delete any old saves, and re-download.
6. **There is no such thing as a 100% stable load order.** Shit happens. It's software, and mod authors are hobbyists who enjoy sharing their fanworks with the community. Save often.
7. **The console is not a high-end PC.** Unfortunately, the limits placed by the developers are there for a reason. Plan your load order and use mods responsibly to keep from breaking your console.
8. **Obey the Rule of One.** Mods do not merge on runtime. That is why load order is so important: Whatever is below is going to override what is above. Some mods simply will not work if another mod is blocking what a mod needs to run. Mods that alter or rebuild precombines will not work with others that also rebuild them.

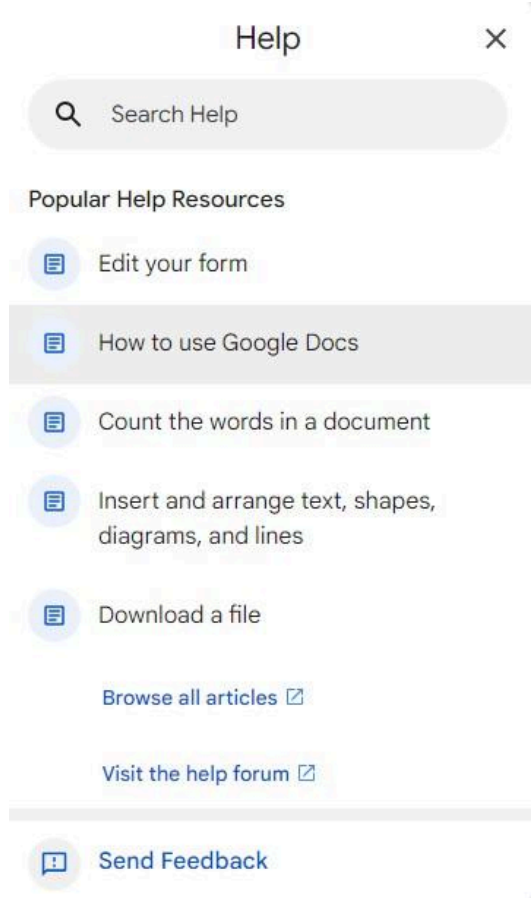
Using Google Docs

If you are new to using Google Docs, the Help Menu is located at the top of your browser under the name of the document.

1. Click on **Help > Help** to open a new pop-up window



2. Click **How to Use Google Docs** or search for specific information.



Note: This document is edited from a PC running Chrome and not a tablet or a smartphone. Smartphones and tablets will require the GoogleDocs App to access.

Search function

Hit **Control + F** on your keyboard on Windows PC in order to search for a specific reference or name of mod. Mods listed within *Load Order Survival Framework* are examples of starting placement.

MODDING YOUR GAME 101

Playing with Mods on consoles in Fallout 4 is a fun and enjoyable experience. Every Mod Author offers something new and different to the vanilla game. Because of the diverse nature of Mods, be sure to read all documentation accompanying the Mod of your choice to know the processing limitations of your console and determine conflict resolution.

Once you download a Mod, you will need to adjust its load order. Read the documentation to find out its best place in your load order.

If you've never used the Bethesda.net website, this document has instructions. You can also find the instructions on oddlittleturtle's website if your device is having trouble.

More Info:

[Downloading Basics](#) - this document

[Mod Downloading Basics](#) - website

WHAT ARE MODS AND WHAT IS A LOAD ORDER?

Mods are user-created modifications to Fallout 4. They allow a player to expand their gameplay beyond what's available in the vanilla game and official DLCs. Mod data files are read from top to bottom, with the bottom-most mods having priority over the top. They do not merge at runtime, which is why having a load order, knowing which mods conflict, and which of those conflicts are incompatibilities or overrides is important.

The Rule of One and You

A record or asset of a data file can only be touched once. This is known as the Rule of One. Consoles do not have the benefit of xEdit to examine data files "under the hood". Best practice to avoid potential issues is to only choose one of any type of mod to add to your load order until you've tested two of the same type together. That is where the Framework and its categories comes into play. It will give you an overview of like mods.

Load order determination becomes easier with practice. There are several basic concepts to understand before downloading mods of the same type or even those that have mod dependencies or are the dependencies of other mods.

What Are “Data Files”?

Mod Data Files come in two flavors: Master Files and Plugins. These are the core Data Files that contain the game records. There are two types of Master files: .ESM (Elder Scroll Master) files and the new .ESL (Light Master). The Plugins are .ESP (Elder Scroll Plugin) files. Plugins can be “flagged” as ESL to load at the Light Master runtime on PC. The in-game manager does not distinguish between a normal ESP and an ESL-flagged ESP.

Technically, even Master Files are Plugins but for the sake of this explanation, we are defining the data files by their extensions. Any software that adds on to a program is a plugin.

TIP: Console players can examine mod extensions on any mod ported from Nexus Mods by following the linked original mod page in the description and previewing the file contents on the Files tab. Many mods will state in the description if they are ESL flagged ESP mods.

Master Files

These are the primary databases of which all else is modded. They will rely on no other information but themselves. These are plugins that automatically jump to their preferred spot in your load order. The only times you will have to worry about their order are if you ever have to update the data file, if it is modding a Creation Club DLC, if it has a strange dependency, or if there is a conflict.

TIP: Fill out the [Framework template](#) and then download Master Files before any plugins and in Framework category in order to avoid having to re-sort them in-game or with a third-party manager.

Light Master Files

These are the second of the Master Files but have a slightly different behavior under the hood as the ESM data files. These will also jump automatically to the top of your load order. These should auto-sort under normal Master Files.

Light Master files created by modders cannot use standard Plugin ESP as masters or this will cause the ESP master to load in incorrect order with the rest of the Master Files. This is problematic on consoles where we cannot see the extensions and should be avoided entirely on PC.

CONSOLE VS. PC CONSIDERATIONS:

Light Master files created by modders count against the 150/100 mod limit on console whereas on PC, they do not as long as they stay within Light Master Budget and the file handle limit is not reached.

Plugin Files

These are the ones you will have to adjust to get your game running properly. Some .ESP files are set as Masters and will need to go higher in your load order than others or they are a required element to run

another plugin. You will need to read each mod's description to see if the file you are downloading requires other files to work properly.

Tip: Fill out the [Framework template](#) and then download plugins after you've downloaded any Master Files and in Framework order to avoid having to re-sort them in-game or with a third-party manager.

Initialization Files

There are also some mods that tweak the configuration files of the game through the use of a blank .esp file and slaving the configuration file to it. Mods that include the file will need a restart of Fallout 4 before the effects will show in the game. These are sometimes referred to as .INI edits. These edits are not part of the plugin archive.

Note: Initialization files are not available to PS4 players. The file is external and not part of the data file.

Game Save Files

The Creation Kit can't touch or view save files but they are used to restore game states between gaming sessions. They are stored separately from other data files. Plugin removal will cause issues with game saves and it is neither recommended by the modding community nor is it officially supported. See [Power Grid Corruption](#) and [What are Scripted Mods?](#) for more information about problems and corruption encountered when removing mods mid-play and continuing with the same game save.

Important

Not all game data is contained in the data files. Assets (such as scripts, textures, sounds, models, etc.) are stored separately. Scripts are also stored externally and are stripped from a savegame if a plugin is removed thereby causing bugs, issues, and unexpected behaviors. See [What are "Scripted" mods?](#) for more information regarding best practices while using scripted mods and for a better understanding of how scripts work.

More Info:

[Data Files](#) - Creation Kit Wiki (Stacked card reference from Skyrim)

[Data Files](#) - Creation Kit Fallout 4 Wiki

[Power Grid Corruption](#)

Master Mods and Dependencies

A master mod is a data file whose records must be read by the game first before any other mod touches those records. It could be a Master data file (see Master Files above for more information); it could be the beginning of a mod suite created by a specific author; or it could be a mod that other mod authors have modded or patched with meshes, data entry updates, or scripting.

On the Bethesda website, many mod authors have made use of the **Required Dependencies** tab. You will find it by scrolling the bottom of the mod page on your web browser. (It must be selected if you use a mobile device.)

Master Mod - A mod that contains the records that will be modded by an addon or patch. These may or may not jump to the top of the load order but they must go above any patches or addons. Ports of master mods must be named the same as their PC versions and must contain the same record IDs in order for ported patches or addons to work properly.

Addon Mod - A mod that adds additional records that can be modded by other addons or patches. It is generally part of a suite of mod by the same author but may be an addon by another author. Some may or may not communicate with their masters via scripting. Some may or may not provide bug fixes to their master.

Patch Mod - A mod that “patches” or modifies the records or assets of another mod. It will have required dependencies that may or may not be more than one mod. It may or may not provide new or updated assets and may or may not communicate via scripting. It may or may not be by the same mod author as the master.

Note: When downloading from the in-game mods manager, if you encounter **Mod cannot be downloaded because it requires files not present**, check the date. When the Bethesda.net site first launched there were issues adding *Required Dependencies* for anything other than the Season Pass DLC. If the mod is hosted on another site, a Google search or simply following the link may help you to find the parent it is dependent upon.

Mod Ports: If the mod is a port, check dependencies on the original mod page from where it was ported. Ported mods that do not have the same editor IDs or names as mods that require them will not be able to be used with their original patches. This can be especially problematic if one mod requires a normal Plugin but the port is a Light Master conversion (ESL-flagged ESP) or if the port is a merged plugin of many different mods (generally called ‘bundles’ on the Skyrim side).

PC Considerations: It’s generally easier to create your own patch rather than rely on others so that you can have a patch for your specific mod list rather than a hodge-podge of things that may or may not work/conflict. It will give you better control over your load order and your game. Do not be afraid of xEdit or the Creation Kit. They are fren.

Conflicts, Overrides, and Conflict Resolution

Keeping like mods with like mods and grouping mods into categories keeps you organized and helps you to see what could possibly be a Rule of One Conflict or a simple record override. Read the mod description to determine the best starting placement.

Overrides: Mods themselves are overrides of the original game records. Some mods can be used together to override the changes of another mod.

Conflicts: Two mods modify the same record. Some are just an override, others may be incompatible.

Incompatibility: Some mods do not work together at all. Whatever is lowest will have priority over the top.

Types of Incompatibilities

ModA modifies the vanilla texture of a road as part of a graphical overhaul. ModB also modifies the vanilla textures of a road as part of a different graphical overhaul. These two cannot be used together because 1) it would be a waste of space to keep the conflict loser and 2) there is no way to resolve an asset conflict of this nature.

Some conflicts are more dangerous, such as two different scripts attempting to do the same thing to the same record, but by using different methods. This type of script conflict could lead to your game not loading or the game not functioning optimally or CTD after a while.

Choosing a Conflict Winner

When you choose between two conflicting mods, whether they be outright conflicts or simple overrides, you are choosing a conflict winner. There are five choices:

1. Remove one or both mods causing the conflict - especially if they are not playing nice together.
2. Resolve the conflict by downloading a compatibility patch.
3. Resolve the conflict by creating a compatibility patch.
4. Change the load order.
5. Don't do anything.

More Info:

[What is Load Order?](#) - More in-depth explanation

Blank Framework Template Spreadsheet

Load orders are unique to every individual. There are thousands of mods to choose from, and everyone has their own playstyle. No one load order will be the same, even if someone copied from another player or downloaded a mod pack.

The Load Order Framework Template uses the sorting definitions [here](#) to give you more control over your planning before you download any mods. You can find example placements [here](#) to help you get started. If you've chosen an Overhaul (that is, a full game overhaul), you can find some information [here](#).

Use it as a tool to keep yourself organized as you plan your playthrough. You can also track the file size of each mod so that you do not go over the limit and be faced with “Operation Not Completed” errors. It has a built in calculator for tracking MiB and KiB from the Bethesda website.

More Info:

[Load Order Framework Basic Template Before You Download](#)

[Load Order Framework](#) - Sorting definitions, oddlittleturtle’s website

[Sorting Definitions](#) - same as above but within this document

[Example Placements](#)

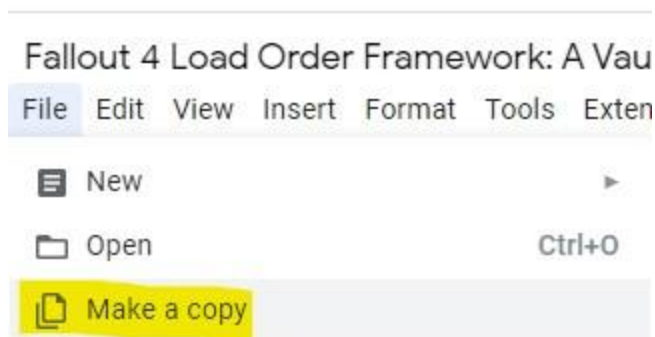
[Gameplay Overhaul examples and information](#)

Setting Up Your Framework Template

To save a copy of the sheet to your Google Drive, you will need a Google Account. They are free. Instructions below are for those who are downloading using Windows PC.

Note: The instructions differ slightly for mobile. Google Drive and Google Sheets apps are required on mobile.

1. Click on the link to the Load Order Framework Basic Template spreadsheet above.
2. In the menu at the top of this page, go to **File > Make a Copy**



3. Save to your [Google Drive](#)

You are ready to begin building your load order Framework with your new Google Sheet.

More Info:

[How do I use the load order Framework Template?
Using Google Sheets](#)

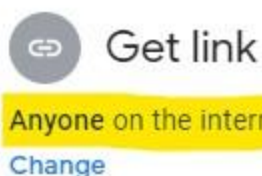
Sharing Your Framework on the Parent Server

If you are going to post to the Parent Server, we request that you use the spreadsheet and share the link with us so we're all on the same page. We cannot help sort or tell you what is conflicting unless we know what mods you're using and the order in which you use them. You must include your Discord name, Character name, or gamertag on your sheet when you share it. "Copy of" worksheets are not accepted. Google Documents' default settings are to restrict access for anyone. You'll need to update the link to share it with us or your friends.

1. At the top of the Google Sheet, on the right hand side of the page, click the **"Share button"**. A new window with two blocks will pop-up.



2. Look at the **"Get Link"** block. Click **"Change"** and update **"Restricted"** to read **"Anyone on the Internet with this link can view"**.
3. Now we'll copy the link to your cache by clicking the **"Copy Link"** button.



4. Go to the [Parent Server](#), observe the Server Rules and [Code of Conduct](#), ask any questions, and post your copied link.

Please be courteous to others. We're all gamers, love the game, and do this as a hobby. Our rules are in place to protect you and our other members and follow Discord's Code and Rules.

More Info:

[Getting Help from Discord](#)
[Discord Community Guidelines](#)
[Discord Terms of Service](#)

Framework Template Categories' Definitions

The game reads each plugin you download and keeps an index of it. Use the Framework Categories below to build your framework index into a sorted load order. What is below will override the top.

These sorting categories have roots from previous Fallout titles as they are descendants of Wahker's original load order list but updated for the new game engine and tested against available Xbox mods. There are more on this document than were found on the parent thread and that are found on the [Blank Template](#) as these are intended to be more specific and are grouped by sub-categories. Previous games also did not have papyrus scripting and are not the same as Skyrim due to several major additions and subtractions to the exe for Fallout 4.

The general rule when sorting is hard edits and then scripted so that hard edits do not override the script-injected forms. For example, if you download a mod that hard edits a leveled item list such as adding a new magazine to mailboxes and then want to use another mod that adds more items to the same mailbox list, the new mod will be installed below the first one.

It is your responsibility as a player to read all documentation regarding mods you use, including documentation on ported mods from NexusMods or other modding sites, such as Moddb.com.

Note: If using a **game overhaul**, it will be the only mod in your load order unless it requires patches for any Creation Club Content you've downloaded or if there are additional mods (also called patches) that are modifications of said overhaul.

More Info

You can find these sorting definitions with a navigation menu for each of the category titles at [Fallout 4 Load Order Framework](#).

Links to more examples are provided under the *Example Mods* section under each of the following headings.

Master Files

These automatically jump to the top, sort them in the same order as everything else.

If using the unofficial patch, it should be the first mod in your load order unless otherwise specified by an MA whose mod records need to be overridden by the unofficial patch – as is the case of Clean My Settlement REDUX.

Example mods:

- Armor and Weapons Keywords Community Resource (AWKCR)
- Better Sorting
- Sim Settlements
- Unofficial Fallout 4 Patch
- More [Master Files](#) examples

Note: Mods that are ESLs will load before all other user-generated mods regardless of where the in-game manager places them.

AWKCR on Nexus PC and Bethesda.net are two different versions. See notes for [Armor and Weapon Keywords](#).

Fast Starts and Frameworks

SKK's Fast Starts will need to be run as high as possible when using them. This category is reserved for those mods.

Plugins/patches for masters that are not affected by the following categories also will go here, such as the DLC patches for NAC.

Example mods:

- [Fast Starts and Frameworks](#) examples

Faction and AI Overhauls

Mods in this section are enemy and faction level lists, AI packages and faction data that need to run above any Gameplay changes or settlement mods.

Example mods:

- We are the minutemen
- Enemy level lists
- Faction level lists
- AI packages
- More [Faction & AI Overhaul](#) examples

New Landmasses/Creation Club VR Settlements

New Creation Club VR settlements or DLC-sized works. Vanilla world edits go near the bottom due to Fallout 4's Optimization System.

Example mods:

- [New Landmasses/Creation Club VR Settlements/Worldspaces](#) Examples

New Factions

New factions that are NEW factions and enemy lists or need to overwrite the faction lists above. These are enemy and faction level lists.

Those that have world edits, will go with mods that add world edits.

Example mods:

- [New Factions](#) examples

Vanilla Quests Modifications /Community Fixes

Self-explanatory. (Formerly called Bug Fixes, Unofficial Patches)

Most bug fixes are now contained in the Unofficial Fallout 4 Patch; however, there are some that are not. Precombines, for example, are left out of the UFO4P. Mods that affect Survival Mode's HC_Manager and HC_ManagerScript go here (only use one mod that touches HC_ManagerScript).

Mods that affect Fallout 4's major systems go here (or higher – depending on mods above this section), including Followers and FollowersScript (only use one mod that touches FollowersScript), and WorkshopParent and WorkshopParentScript (only use one mod that touches WorkshopParentScript).

This section could contain patches to vanilla quests that have no effect and are not affected by any mods below. Patches to the Creation Club creations that have no effect on the categories below may be placed here.

Subsections:

- Followers
- Survival Mode
- Workshops
- Other

Example Mods:

- V.A.T.S.Freeze Fix
- Mods that feature vanilla dialogue changes
- More [Vanilla Quests](#) examples

More Info:

A more complete list of [Important Community Patches and Fixes](#)

Settlement and Workshop Menu Items (Vanilla Menus)

Mods that add to your menu with vanilla keywords - no overhauls. The menus are considered 'hard edits' to the workshop menu formlists.

Many PS4-only building mods fall in this category.

Warning

It is a bad modding practice to remove mods in the middle of your game. Many mods in this section will de-stabilized the game if removed in the middle of a play through.

Mods in the Powered Objects section will cause the Scrap Crash (regardless of gaming platform - PC, PlayStation, or Xbox) if removed in the middle of a game due to how the Power Grid functions. See [Power Grid Corruption](#) for more information.

Mods that add craftable NPCs or have workshop assignable stations generally do so by hooking into the main Workshop Parent script. Treat mods as DLC in order to avoid complications, strange behaviors, save game corruption, or game instability.

Subsections:

- Powered Objects
- Workshop Assignable
- Decorations
- Other

Example mods:

- Manufacturing Extended
- Workshop Interactive Objects
- Craftable Cats
- More [vanilla keyword Settlement Building](#) examples

Settlement and Workshop Menu Items (Scripted)

Mods that add to your menu via Script Injection.

Building mods with a holotape or chem

Subsections:

- Specialized Toggle Menus
- Pre-SMM Scripting
- Settlement Menu Manager Plugins

Example mods:

- Settlement Menu Manager, Any mods requiring SMM
- Dead Wasteland
- Custom Vanilla Objects (CVA)
- More [scripted Settlement Building](#) examples

Warning

It is a bad modding practice to remove mods in the middle of your game. All mods in this section break workshop menus if removed improperly.

Regardless of script-injection, mods that add powered objects, workshop assignable objects, craftable NPCs should be treated as DLC and not removed in the middle of the game.

Settlement and Workshop Menu Overhauls

Mods that alter the items in the menu; model replacement/additional snap points

Example mods:

- Workshop Rearranged
- Vanilla Extensions
- USO addons
- patches to Workshop Rearranged
- More [menu and mesh settlement building overhaul](#) examples

Warning

It is a bad modding practice to remove mods in the middle of your game. Many mods in this section will de-stabilize the game if removed in the middle of a play through.

Mods in the Powered Objects section will cause the Scrap Crash (regardless of gaming platform - PC, PlayStation, or Xbox) if removed in the middle of a game due to how the Power Grid functions. See [Power Grid Corruption](#) for more information.

Mods that add craftable NPCs or have workshop assignable stations generally do so by hooking into the main Workshop Parent script. Treat mods as DLC in order to avoid complications, strange behaviors, save game corruption, or game instability.

Game-Play Changes and Tweaks

Changes how you play the game. Mods that alter major systems may have to be looked at under the hood for compatibility with scripted mods. Major systems' alterations, such as those that dramatically alter Survival Mode, Settlements, or Followers with hard edits to the scripts will need to go higher in the load order.

Subsections:

- Game Settings
- Survival Mode additions
- New Game Mechanics
- Perks and Spells

- Alterations to Vanilla Game Mechanics
- Object Level Lists (not weapons or armor)

Example mods:

- [Gameplay Changes and Tweaks](#) examples

Warning

Use caution with perk mods due to Engine Bug. PS4 Players should use caution with perks that allow you to have all the perks at once on top of being leery of perk mods in-general due to game bug. After reaching level 255, perks lock at 43.

New Companions and Pets

New companions that are added to the vanilla system or use a separate system.

Example mods:

- [New Companions and Pets](#) examples

Note: Some companion mods that add references to the world may work better under Quests, nearer the bottom of the load order. It depends on other mods you plan to use.

Some mods may also require mod-added hairs and should be placed below the hairs or the hairs brought up into this section. Again, it depends on what other mods you plan to use. Read descriptions and dependencies prior to download.

NPC and Companion Changes

NPC overhauls such as those that change faces of companions/npcs, add new scripts to the Actors with hard edits, or hard edit names of settlers. These are not race edits. These are changes to the Actor forms of NPCs. Mods that require mod-added hairs will need to go below the hair in order to show up and in some load orders moving the hair above this section is fine.

Only choose one to avoid overrides that may accidentally break another mod.

Subsections:

- Overhauls
- Followers
- Settlers
- Other

Example mods:

- [NPC and Companion Changes](#) examples

Radio and Audio Mods

Self-explanatory.

Radios are quests that function in the background providing the music set on different frequencies the radio object will use.

Audio mods can range from tiny to large and everyone has different tastes so individual testing is required. For example, adding a mod that updates how sound reverberates with a mod that does not take anything but vanilla sounds into consideration, may do the exact opposite of what an audiophile wants to hear.

Important

Do not restart radios if they suddenly stop in the middle of your game. This is indicative that the Mod Author used an older, incomplete tutorial when setting up their mod. It will play through the song list only once and then stop. This is normal functionality of such a mod and is, unfortunately, working as expected given the tutorial used. Simply thank the MA for making it and move on to a different mod the next time you play. When reporting the 'bug' the MA may give instructions for 'clean start' which is a bad modding practice and cannot be done safely with quest mods (regardless of which platform you play on).

Note: There is an exception with certain audio mods: weapon sounds and footstep sounds - those are considered weapon and armor modifications (some mods could directly edit the footstep sounds on an armor form itself)

Example mods:

- [Radio and audio](#) mod examples

Visual, Texture, Atmospheric Improvements

Only choose one of each. Do not stack weather or lighting mods.

Textures and meshes in this section are pure texture and meshes and blank plugins only. Mods that add new plants/trees to the world will go in terrain edits near the bottom.

Weather mods generally have edits that will tint the ground and grass; however, some lighting mods will have those as well.

Subsections:

- Weather
- Greenifiers/Foliage
- Textures

Example mods:

- [Visual, Texture, Atmospheric Improvements](#) examples

Lighting and Water Changes

Water is a complex object in the game world. Many mods that manipulate it, however, do so by only two methods, mesh edits or lighting edits. Mesh edits come before lighting so the lighting can then affect the new edits to meshes.

Note: Some lighting is not designed for use with certain meshes and certain meshes are not designed for certain types of lighting.

Console vs PC considerations: While PC mods can be downloaded via the Bethesda website the same as console, PC players using third-party mod managers may need to lump this category with the atmospheric as many console mods are offered as different plugins rather than all one mod.

Example Mods:

- Water mods
- Lighting mods
- More [Lighting and Water](#) examples

Vanilla Settlement Changes and Tweaks

Mods that implement changes to the workshop parent script or the workshop bench

This section may be deprecated at a later date in lieu of using Vanilla Quests and New Settlements (or used as subsection to New Settlements) due to the amount of new mods that add new settlements and Workshop Framework/Sim Settlements. It totally depends on what mods you've chosen as to whether or not a mod you use will actually need to go in this section.

Some mods that extend the borders of settlements could be placed here if no other settlement mods, scrapping mods, or world edits are present.

Example mods:

- [Vanilla Settlement Changes and Tweaks](#) examples

Sorting Mods

Sorting mods generally work by renaming every object in the game to match RegEx text in the HUD. They are considered overhauls and require a HUD overhaul, such as DEF_UI to work.

Only use one.

Example mods:

- Val's Sorting
- Better Sorting
- Ugh. Keys.
- Armorsmith
- UCO
- More [Sorting Mod](#) examples

HUD and DEF_UI Mods

The HUD (Heads Up Display) or the GUI (Graphical User Interface) is a series of animated Flash programs. Xbox does not have access to F4SE (Fallout 4 Script Extender) so the HUD is programmed in Flash and XML. PC does have access to F4SE. DEF_UI has largely been replaced by Fall_UI on PC. PS4 cannot have HUD Mods due to SONY restrictions.

Note: Some HUD mods do not work due to age and the HUD being too updated, make sure to read the documentation and mod page comments on both Bethesda and NexusMods.

Console vs PC considerations: HudFramework on PC is a master file, while it is not on Xbox for load order.

Warning

keyNuker has been obsolete since Nuka World DLC came out. DEF_UI, by the same mod author, replaced it as the newer version when crashing began to happen at the Transit Station.

DEF_Widgets_Core will force HUDFramework to load above it in the in-game menu though on Xbox HUDframework is not a master file, but DEF_Widgets is.

ENGINE BUG: Custom camera mods with INI edits will require [Barber Camera Fix](#) (included in Third-Person Camera for Xbox) to fix an engine level bug that occurs with custom camera edits.

Subsections:

- Camera
- HUDFramework
- Main Menu/DEF/FallUI
- Scopes/Other SWF
- INI
- Other

Example Mods:

- HUDFramework
- DEF_UI_Core
- More [HUD and DEF_UI](#) examples

Pip-boy Map Mods

Pipboy Replacers, Pipboy Maps, Map markers

The Pipboy is a complex object that functions as a way to access inventory, is part of the player skeleton, and is part of the HUD menu system. It contains animations that are both 3D Havok-engine based and 2D Flash programming. Some older animation mods may break the animations and some mods that promise more frames per second speed up the HUD animations where it is difficult to select certain inventory items when using the gamepad or mouse click.

If the Pipboy breaks, it becomes impossible to access the inventory, quest data, radio data, or to see the player status.

Subsections:

- INI (initialization files, such as those that remove the Pip-boy FX)
- Replacer
- Maps
- Pip-boy HUD

Example Mods:

- [Pipboy mods](#) examples

Character Model Replacers, Enhancers

Meshes that enhance characters. Hair, hands, EVB, CBBE, makeup, new animations

Previous games had a “race” for each skin color, such as Asian/Black/Caucasian or Redguard/Nord, etc. Fallout 4 only has one race for all adult human NPCs as well as one body per gender called HumanRace. This form handles everything about the race, including the paths to the skeleton and body,

the equipment slots, Workshop Population Rating (1), default heights for male and female, default gore, Actor Values for conditions (such as Left Arm or Torso condition), Face Phonemes used by the dialogue system and mouth morphs, default presets and hair colors used by the LooksMenu, default face textures, facial morphs that show up as selectable in the LooksMenu (such as eye type, mouth type, ear type, etc), and face tints such as scars, grime, face paint, makeup, eyebrows, and face tattoos. It does not cover eye textures or hair meshes.

Children, Ghouls, and Ghoul Children have their own separate race. Feral ghouls, while “actors”, are considered Creatures by the game and have ambush furniture linked via their creature keyword to their furniture object.

Warning

Ambush furniture is handled at the engine level; do not scrap ambush furniture such as mole rat hills!

Fallout 4 is the first BGS game to have a different body than previous games. It is why CBBE is not compatible with vanilla textures. Fallout 4's body is all one body except the hands and head. Footstep sounds are on the Havok collision of each object but can be added to armor forms.

When determining whether or not to use a “unique player” mod, take heed that the character's body replacer will be in a different path from everything else and may or may not be compatible with edits to HumanRace, animations, bodies with physics, skeletons (or skeleton nodes for mods such as Classic Holstered Weapons or Visible Weapons), or with mods that directly edit the player entry such as Pocket Vehicles or Immersive Gameplay.

Skin tints such as freckles, eyebrows, makeup, and scarring are race edits. Replacers are fine to stack but hard edits to the HumanRace file are impossible to duplicate across multiple mods and incredibly hard to patch. Each entry has to have a unique identifier on the HumanRace form and affects both male and female. These include facial morphs if using a facial morph extension mod (currently only LooksMenu/PC).

New Presets can also be a part of HumanRace if they have been hard edited to HumanRace. If a mod is replacing a default preset and requires any of the models by another mod, the models will need to load first. Read the descriptions of each. Presets with JSON files will also need to have their models loaded first.

Warning

Some very old animation mods added animations by directly editing HumanRace. This, unfortunately, makes several weapons' mods animations incompatible. Newer animations correctly duplicate HumanRaceSubGraphData to add new animations and keywords for new weapons.

Warning

Mods merged with xEdit/zEdit will break LooksMenu JSON presets so do not merge hair/eye/etc mods unless you plan to update the formIDs on every JSON preset in your data folder.

The same is true for Xbox ports if there are other ports requiring the formIDs of a mesh for a preset.

Subsections:

- Face/Face Morphs
- Body (Human)
- Body (Creature)
- Stats (Creature)
- Hair
- Eye
- Presets (adjust as necessary for perk mods if presets are new and included on HumanRace)
- Skeleton/Animation (does not include weapon animations. Furniture animations will generally fall under Settlement and Workshop Mods. **Adjust as necessary for Pip-boy replacers and human race edits**)

Example Mods:

- *Face Morphs*: IFAR, Oni Face Parts
- *Body (Human)*: Busty, Unique Player, Standalone Tattooed Player, Robot Leg Outfits, EVB, CBBE, bodies with physics
- *Skeleton/Animation*: Classic Holstered Weapons, Dave's Poses
- More [Character Model](#) examples

Weapons, Armor, Clothing, etc. (non-craftable)

Weapon, clothing, armor Level lists additions that do not require AWKCR to function (these are NOT items that are placed into the world and are not overhauls to vanilla weapons)

This section and below will vary greatly between individuals and is highly dependent upon which crafting overhaul is chosen, if a faction overhaul is in play, if vanilla weapons are overhauled (not this section), or if the armor/weapon is given as a quest item. Read mod page descriptions carefully.

Note: Non-script-injected mods will require compatibility patches.

Mod ports: Bethesda.net has limited amount of characters for their descriptions. Follow links back to the original mod page for additional information. If not enough information is given on a weapon/armor port (especially if there is no link back to follow), it is not worth your time to download. There's no way to know how the mod will fit in the load order without a full description.

Subsections:

- Weapons
- Clothing
- Armor
- Level Lists (not covered elsewhere - depends on your load order and if you are using a Faction mod, Quest, etc.)

Example Mods:

- [New non-craftable Weapons, armor, Clothing](#) examples

Craft Your Own

Fallout 4's Crafting System is complex and some armors, weapons, and robot parts are connected not only to crafting but to the leveled item lists via specialized keywords on the weapon itself. This complexity was one of the reasons Armor and Weapons Community Resource (and other mods like it) was created. It also makes the lower portion of your load order difficult to manage if using too many weapons mods. Poorly implemented mods in this section (as well as other weapons and armor sections) could possibly have adverse effects on game performance.

Mods that add craft-able items to a Chemistry Station, Power Armor bench, Armor bench, Robot Workbench, etc. This category includes new workbenches.

With more and more crafting mods available, observe the Rule of One: Only choose one crafting overhaul. Determine what type of crafting system you want and if any patches are necessary. There is no "easy button" for this section or the weapons and armors sections.

Power armor is a complex object that is a furniture object with animations and an level list inventory. It also has a script for Fusion Cores which are affected by perks, disease effects, and magic effects. Some power armor modifications work better higher in the load order, some work better placed lower.

Purely crafting with the workbenches that doesn't add to the level lists. These are not barrels or linings added to vanilla weapons since those are armor and weapons modifications on the weapons and armor themselves.

Subsections:

- Framework/Overhaul
- Chemistry Bench
- Armor Bench (wearable weapons)
- Power Armor Bench
- New Workbenches
- Armor and Weapons Community Resource Addons
- New Recipes

Example mods:

- Equipment and Crafting Overhaul (ECO)-dependent mods
- AWKCR-dependent mods
- Other craftables such as robots and power armor
- More [Craft Your Own](#) examples

New Settlements, World Edits

New settlements and some player homes must hook into Workshop Parent to function properly. Do not uninstall in the middle of a play through. Where these fall may be determined by other mods in your load order and may work best placed at the end. They also have a tendency to run together with new quests.

Any mod that adds a new settlement or player home requires a new game for edits to work properly and hook into Workshop Parent properly. Workshop Parent runs prior to the Chargen screen at the beginning of the game.

Read mod descriptions prior to adding to your Library.

Subsections:

- New Settlements
- Player Homes

Example mods:

- Player homes
- New Settlements
- Single cell edits
- Interiors that do not disable precombines
- More [World Edit](#) examples
- More [Player Home](#) examples

New Quests

These are mods that may or may not show up in the Pipboy data tab either as a main quest, side quest, or miscellaneous quest. Some mods may contain world edits for markers and triggers which may or may not have persistence. (Persistent objects generally cannot be modified during an ongoing game and require a new game.)

This section could also contain new dialogue that has a specialized priority (beyond being load order specific) so that dialogue shows up. Most of this section will require new game start to take affect, so read the descriptions carefully.

Example mods:

- Tales of the Commonwealth
- The Machine and Her
- Larger area edits that include NPCs
- Weapons and armor added to the world not in level lists or crafted
- New Dialogue (vanilla dialogue overhauls are in located in Vanilla Quests)
- More [Quests and Collectibles](#) examples

Weapon and Armor Modifications

These are vanilla weapon overhauls, such as those that rename weapons or change their stats, weapon/armor replacers, or add mods such as barrels, ammo, receivers, etc.

What goes here is directly dependent on your crafting overhaul and whether you've chosen See-Through Scopes, including which version, what weapon or armor requires additional patches or addons or if you've chosen to modify weapons animations.

Note: Armor linings, while craftable, are added directly to vanilla armor and may need to go below quest mods. The same with weapon barrels, scopes, and such.

Mod Ports: There are many that have been incorrectly ported or require mods either no longer available or were ported and the original names changed. Inter-mod communication scripting requires that the names remain the same in order to function correctly. A dependent mod must have the same name and form IDs in order to work.

Do not use bundles, mod packs, or merges (or whatever the porter is calling their mod) with mods that say they require a specific mod. Those bundled/repacked/merged plugin mods will not have the same editor IDs or mod name. They must be identical to the PC version or they will not function correctly with other mods.

Subsections:

- Framework/Overhaul
- Replacer
- Armor Bench
- Weapon Bench
- Weapon Sound/Animations
- Ammo

Example mods:

- Equilibrium
- See-Through Scopes
- Weapons that are placed in the world
- New barrels

- New weapon animations
- New weapon and footstep sounds
- More [Weapon and Armor](#) examples

Scrapping, World Edits, Landscape and Terrain

World edits that disable the precombines. Also contains world edits that break and rebuild precombines.

Only choose one scrapping mod.

Read documentation carefully - for example Sim Settlements and Immersive Gameplay contain scrapping so no other scrapping mod is needed - as a result neither can be used together without issues.

More Info:

[Precombines, Previs, and Load Order](#) - Important info for planning the bottom of your load order
[Optimization System Information](#) - Additional links

Note: Landscape elevation is tied to previs and so careful load order management is necessary.

Example Mods:

- Scrap that Settlement!
- Enhanced Lighting and Effects (requires Previsibine Repair to avoid performance issues)
- Beantown Interior Project (requires BI Optimization Patch to avoid performance issues)
- More [World Edits and Scrapping](#) examples

Framework Bottom

Specialty mods that need to override the top; Patches to anything above that will not work anywhere else.

Example mods:

- Immersive Gameplay (place above PRP, if using)
- Cheat Terminal
- Place Anywhere
- Previsibine Repair Pack
- Full Dialogue Interface (Requires Look-up Failed Patch)
- Start Me Up/Start Me Up Redux
- Patches that will not fit elsewhere
- More [Bottom of the order](#) examples

More Info:

[Load Order Framework](#) - This list, but with clickable links

Important Considerations for Mods Fitting More Than One Category

Some mods may fit into more than one category. It is imperative that you read the descriptions, mod author's FAQs and the comments section of every mod you want to use before you install it. If you have any questions after a thorough exam, you can always ask the mod author on their mod page (if they are active), on their Discord, or on the Parent Server. PC players have additional tools while console players do not.

If a mod affects multiple categories, place it lower in your load order unless the mod author gives specific instructions on placement - like bottom of the load order for Immersive Gameplay or Freecrafter.

Downtown Boston Issues

Downtown Boston (areas around Faneuil Hall, Haymarket Mall, Goodneighbor, Old Union Church, Shenley's Oyster Bar, etc.) is extremely dense with multiple spawn points, events, load doors, and containers all packed into a small area across multiple cells. If you're having problems there, it's more than likely a result of having too many mods doing too many things.

When precombines are disabled, this area is among the first places to show a noticeable performance hit. There are tweak mods that are designed with the intent of making the area better, but actually make it worse on accident, so be sure to double check prior to downloading.

More Info:

Optimization System:

[Understanding Precombines](#)

[Precombines, Previs, and Load Order](#)

Weapons and Limitations:

[Troubleshooting, Warnings, and Cautions](#)

[Weapons, Level Lists, and Game Engine Limitations](#)

The game has built-in limitations for a reason. Faneuil Hall and Haymarket Mall, in particular, are extremely sensitive to having overbuilt settlements. It is recommended to only build up one settlement per play through if you're going to be using FO4 as a building sim, and if you are questing, do not begin building until most of the quests you want to build are complete.

Keep in mind that if you cannot get downtown *without* mods, you will not be able to get there *with* mods. There is, however, Previsibine Repair Pack to fix previs bugs that may provide some reprieve, but it does not work for all load orders.

External Assets and PlayStation Players

Many mod authors enjoy sharing their works with the entirety of the community. Some game mods however cannot be brought to PS4 because of SONY's restrictions. It isn't because they don't want to share with you.

External assets include:

- New Meshes (3D objects)
- New Scripts
- Precombines and Previs files (optimization)
- New Textures
- Additional files such as text files (used for animations) and initialization files (used for tweaking various game settings)

More Info:

See [Understanding SONY restrictions on PS4 mods - things to know before you make a request](#) by ANDREWXCX for more information about mod limitations and restrictions placed on Playstation 4.

PLAYER DUE DILIGENCE

While this document serves to help you gain an understanding of how to load order, you should always use all available resources and due diligence as you build your load order framework. Mod authors put in hours (sometimes years) of work to enrich gameplay and some put in even more hours with FAQs, websites, bug trackers, and maintaining active Discord servers.

When building your framework, be sure to check a mod author's website or Discord server for additional information, regardless of what platform you've chosen to play on.

A Porter or YouTuber isn't going to know how a mod functions unless the porter or YouTuber has assumed active development of the mod. While this isn't true one hundred percent of the time, many ports are by other console gamers who have never modded before. The person or team who made it is going to know how it works and is supposed to work, so reach out to them first. That said, some mod authors cannot support console ports due to not having a Playstation or Xbox to test on, so keep that in mind when searching for additional information.

Support Requests

Load order support is not the same thing as mod support. While some mod authors offer limited support for load orders, a mod author can only help you with *their* mod, and not how their mod interacts with other mods, so keep that in mind when requesting support from the author.

Also keep in mind that some mod authors do not take bug reports for console and simply like to know if people like playing with their mod. For example, the ports that I've done are not supported by the original

authors either due to the OMA not wishing to or due to me taking over active development of it to update or add things with permissions from the OMA.

Contacting the Original Author

Since the closing of the Bethesda forums, Mod Authors have no way to receive feedback, bug reports, or comments on their console mods, and some mod authors have pulled their mods from NexusMods due to disagreements with the NexusMods Terms of Service and the toxic environment there. Many mod authors have no way of knowing if you like their mod or if there are issues with it, and many mod authors simply like to chat about Fallout 4 and want to get to know their players. Always try to find a way to thank the original author for their work. They did not have to create it, and they did not have to share it. If it's a port, they did not have to allow the port.

If you cannot find a mod author, try checking at the Bethesda Studios Official Discord or Collective Modding Discord. Both these Discord servers have over ten thousand members.

More Info:

[Useful Links](#)

Avoid Toxicity

Should you decide to reach out to a mod author, keep in mind that you are a representative of the console player-base and some mod authors have had a very bad experience with it from when mods first came out for Fallout 4. When providing feedback or interacting with a mod author, don't be an asshole. No one likes a toxic environment and some people are weirded out by random friend requests.

"I BEG YOU TO PORT THIS TO PLAYSTATION" / "PORT THIS TO XBOX!!! PLZZZZ" are extremely toxic comments and unwanted.

PC players, when reaching out to a mod author, keep in mind that you are a representative of the PC player-base and toxic comments are also unnecessary and unwanted. You have more tools at your disposal, including a crash logger, and a plethora of modding videos in which to adjust your load order without accusing a mod author of breaking the game you've added too many mods to.

Bethesda.net Ratings and Download Counts are Useless

The ratings and downloads counts on Bethesda.net only tell other players if the mod is *popular*. Popularity is meaningless, and it doesn't mean that people are actually playing with the mod. The website does not keep up with individual downloads. If a mod has updated more than once, then the amount of downloads will be off. If you subscribe and then unsubscribe and then re-subscribe to a mod, the amount of downloads will be counted twice.

More often than not, console and Bethesda.net have more downloads than the same mod on NexusMods so many mod authors who do not keep up with Bethesda.net may not realize how large their

player-base is, and those of us who do update our mods on Bethesda.net have no way to know if people are actually using our mods without connecting with our player-base via forum or Discord.

The original author has no way to connect to their player base if a porter has a link to their Discord on the mod page and not the mod author's. Individual player feedback and interaction is the only way a mod author is going to know if their mod is fun to play with or if there is unexpected behavior. Most mod authors create things for the feedback and rapport they build with their player-base, not the downloads or ratings. If you are a fan of the mod author, let them know (but don't be an asshole about it.)

More Info:

[Modding Best Practices](#)

[Software "Bugs" and You](#)

IMPORTANT DEFINITIONS AND GLOSSARY OF TERMS

By knowing what terms a mod author uses in their description, it will be easier to find load order placement for the mods you want to play with. This glossary is also available on the [website](#) with clickable links for each term.

AWKCR

The abbreviation for Armor and Weapons Keywords Community Resource. Also called Armor Keywords in some mod descriptions.

Autosave

Data is automatically saved at certain points in the game and when you open the Pip-boy. By default, the game only has three (3) autosave slots. Not recommended for use when testing mods. You can turn autosaving off from the Main Menu on all difficulty modes but Survival Mode. Autosave is the only method of saving on this mode.

Note: Data does not appear to store properly in an autosave on PS4 and Xbox. Game bugs have occurred when loading the game from an autosave, specifically texture files on Xbox that have not been compressed properly or using mods that have not packaged FaceGen data.

When exiting the game, exit from a different location than an autosave location -- like behind a load door -- in order to avoid incorrectly loaded data producing bugs.

Buffout 4

Engine fix and crash logger available for PC players. Mod porters should not port mods on the crash log list until the mod author has fixed issues. Join Collective Modding Discord for more information.

Cached Data/"Clear Your Cache"

Temporary files stored to improve gameplay. Can corrupt over time or build up on consoles to prohibit gameplay or other functionality. Periodically, clearing the cache with a full power cycle on Xbox is part of healthy console maintenance. Textures are cached on Xbox.

More Info:

[How Do I clear my cache?](#)

[When should I clear my console's cache or rebuild my PS4 database?](#)

CBBE/Caliente's Beautiful Bodies

Hi-poly female-character-only body mesh. On console it was stolen so many times that the mod author did not release it to console for several years. A smaller-poly-than-original-CBBE mesh with zapped female parts to conform to Bethesda.net site rules is available for Xbox. UV texture Maps do not match vanilla bodies, vanilla armor must be rebuilt for it. Abbreviation for Caliente's Beautiful Bodies.

Warning

Human NPCs use the same bodies as the player. Only use one mesh per gender.

Clean Save

No mods on a save, completely vanilla.

Clean Save/Re-initializing a Mod

NOT a true clean save. Attempt to re-initialize scripts by disabling a mod on a hard save and then re-enabling during a play through.

Warning

Dangerous method of enabling a mod. Do not use mod if instructions tell you to re-initialize the mod. It has not been implemented correctly. Wait for MA to fix bug that causes it to disable in the middle of game, such as radio mods that have not been scripted properly and shut down after playing one scene.

Creation Engine

Fallout 4's game engine. It is a fork of the Gamebryo Engine.

Creation Kit

Bethesda's in-house editor given to the community for free to edit their games. Prior to *The Elder Scrolls V: Skyrim* it was called the <Game Name> Construction Kit and Garden of Eden Construction Kit (G.E.C.K.).

More Info:

How to make mods using the Creation Kit is documented at CreationKit.com.

Crash-to-Dashboard/Crash-to-Desktop/CTD

The game stops functioning and the player returns to the homepage of the console or the desktop of the PC.

Create2DTexture Fatal Error

A fatal error on PC that occurs when using a corrupted texture. Do not unpack base game or mod-added BA2 files with Archive 2 or MO2. Xbox players should read bug logs of all Nexus ports prior to downloading to ensure port has not included a fatally corrupted texture. This type of error is usually not mod-author-error, some modding tools available do not correctly read certain DDS block compressions. GIMP, a commonly used free program, did not have native DDS block compression until 2019. This was a common issue at one point with CoD Modern Warfare; modern weapons mods with these textures should be avoided until the mod author can create new textures.

Delete/Deleted/Deleting

Completely removing the mod from your load order after disabling (uninstalling). Incorrectly deleting a mod can result in Remnants of Data remaining (also known as ghost space on the Skyrim side).

More Info:

[Downloading Basics](#)

Disable/Disabled/Disabling

Mod is still in your load order and library, but not enabled for gameplay.

More Info:

[What is the Difference Between Disabling and Deleting](#)

DDS/Direct Draw Surface

Format of DirectX 2D images. The file extension of all textures in the game is .DDS.

Enable/Enabled/Enabling

Mod is in your load order and enabled. Mods are automatically enabled upon download.

More Info:

[What is the Difference Between Enabling and Installing.](#)

EVB/Enhanced Vanilla Body

Moderately-hi-poly male and female character body mesh. UV texture maps are mapped to vanilla paths. Male body with phallus available for PC.

Warning

Your character only has one body. Only use one mesh. Most EVB mods available for console include both male and female versions.

Exit Save

A save method added by popular demand specifically for Survival Mode but affects all difficulty modes. Data is saved to one (1) slot when exiting to the main menu and overwritten upon new exit. Not recommended for use when testing mods. Keep Exit Saves when playing Survival Mode.

Note: Data does not appear to store properly in an exit save on normal game modes other than Survival Mode. Game bugs have occurred when loading the game from an Exit Save.

More Info:

Fallout 4 Script Extender/F4SE

Game Modification application in .dll injection format that indirectly modifies the .exe in order to expand the Papyrus native scripts' events. Mod authors must make their source code publicly available. Cannot be used on consoles due to console manufacturers' policies. Due to the nature of the game modification, it must be updated to the latest runtime whenever Fallout 4 updates. All mods dependent on F4SE must also be updated.

FO4Edit

Also known as xEdit. Community-created editor for cleaning mods of ITMs and deleted references. The program can also be used to make edits to plugins and create them. To use xEdit in other games, rename the executable. For example: SSEEdit.exe is the executable for Skyrim Special Edition, renaming it to FO4Edit.exe will allow mod authors with a legal copy of Fallout 4 to clean Fallout 4 mods. See Appendices for brief tutorials for cleaning and patching load orders.

Note: PC players are expected to patch their own games using xEdit due to the level of customization they can do. Not everyone will have the same mods in their lists and nearly everyone adds to the lists that are available.

More Info:

[Tome of xEdit](#)

Form List

List of forms used by the game. Several 'vanilla' quests were included with Far Harbor and Nuka World that allow for safe formlist injection, so if a mod has those DLC as a requirement, double check with the mod author prior to requesting removal of DLC if you don't own the DLC. The Workshop Menus are an example of a formlist that is visible to the player.

Warning

Removal of mods that script-inject into formlists without reverting said formlist to vanilla prior to removal will permanently break the formlist. Other mods that you cannot remove in the middle of a playthrough that have formlists include the Unofficial Patch and Settlement Menu Manager.

Form(s)

The game's records. Each form has a unique ID number and name. When you pick up an object from the world, it destroys the object and replaces it with a uniquely ID'd object that will not be found in any other game. This ID number is called the PRID. These PRID numbers are unique to each game. PRID numbers are impossible to reference on Xbox and PS4 due to the lack of debug console and scripts needed to find the numbers.

FPS

Abbreviation for either Frames Per Second or First-Person Shooter. On consoles turning the game into First Person Shooter by increasing Field of View (FOV) decreases Frames Per Second.

More Info:

[What is framerate?](#)

Freeze/Frozen/Freezing

The game framerate drops so much that the player cannot move. Usually requires restart of game.

Hard reset/Power Cycle

Manually shutting down the console and unplugging it, then waiting 5-10 minutes (depending on which console), and then rebooting.

More Info:

[How do I clear my cache?](#)

Hard save/Manual Save

Using the save option from the main menu instead of allowing an autosave or selecting Quicksave. You can have more than three saves up to 2 GB of data on Xbox in a separate partition. Each time a player makes a save, the file size will grow.

Note: If experiencing save bloat due to run-away scripts or other script-polling issues, players may be limited to making sure to overwrite the save instead of making new saves.

HITMEs

“Higher Index than Masterlist Entries”. These records are produced most often when an advanced mode of xEdit/FO4Edit or the Creation Kit is used to improperly remove a master. Plugins with these records are considered unrecoverable and must be rebuilt from scratch as a new plugin. These plugins will produce odd behaviors including CTD. The safest way to ensure that the plugin does not crash a game is to not use the plugin. An example of a plugin with HITME records includes Diverse Children. Console players do not have a way to see a plugin to know if it contains these records. Mod authors are encouraged to revert to backups from before the records became corrupted.

Identical To Master Records

Also known as ITMs or “dirty” edits. PC players can clean such edits with the community-created program called xEdit (FO4Edit) through its automatic cleaning process. Console players do not have a way to see a plugin to know if it is “dirty” or not. Identical to Master Records are discouraged for use and considered “bugs”.

INI File

A text file with the .ini extension in a specialized format that loads at runtime; an initialization file. PC and Xbox can make use of .ini files to further tweak their games. Xbox must have the .ini “attached” to an .esp in order to use it, and once a file is enabled, one must completely quit the game and relaunch in order for the changes to be made.

On the Xbox controller: *Home > Fallout 4 > More Options > Quit* and then re-launch the game. Or you can restart your Xbox.

DO NOT REMOVE INI FILES mid play, even if they are harmful edits. Removal will cause oddities and CTDs on the console. Start a new game if you need to remove them. Some ini edits are permanently saved to the save file while scripted ini edits do not appear to be.

Leveled Actor/Leveled Actor List

A form that is used to generate one or more NPC based on the current level of the player. Leveled actors that are added via script with nested arrays that do not have declared lengths spawn slower than simple arrays. Nested arrays on downtown spawns are problematic and cause performance issues.

Enemy spawn points have a hard-coded limit of 128 NPCs. Game stability ruptures upon hitting this limit.

Leveled Item/Leveled Item Lists

A form that is used to generate one or more items based on the current level of the player. Leveled items that are added via script with nested arrays that do not have declared lengths spawn slower than simple arrays. Nested arrays on downtown spawns are problematic on consoles and cause performance issues.

There is a 255 hard-coded limit on level lists. Game stability ruptures upon hitting the limit.

Some weapon, armor, and robot craftables are connected to level listed item lists via keyword. Crashes and lag have occurred when keywords typos or other errors occur.

Light Nodes/Add-on Nodes

Save specific numerical values that affect light meshes with nodes defined in the Creation Kit. Conflicts between nodes’ values will adversely affect lighting visuals. Add-on node meshes include the Pip-boy, Power Armor Helmets, and Workshop Lamps.

Load Order

The order in which the game engine reads mod data files. Mod data files are read from top to bottom with the bottom-most data file having priority, which is why the order is important to game stability. Install in load order. Console players are encouraged to follow PC guidelines in the event of switching to PC playing: Consider *load* order as *download* order. You can plan your load order outside the game by using a [Planning Guide](#) and a worksheet with the Framework categories.

More Info:

[Load Order Framework](#)

Loose Files

Files “loose” in folders in the Data Folder. Regardless of mod manager, if a mod has loose files, a player’s load order will be download order. Loose files stay active unless completely removed from the Data Folder. You can archive loose files during planning by using the Creation Kit, Archive 2, or Cathedral Assets Optimizer. Archiving instructions using Archive 2 can be found in Useful Links. Console players are encouraged to adopt download order and plan the load order ahead of downloading in the event of switching to PC modding to ease transition.

LOOT

PC program used for organizing load orders. The LOOT master list the program uses is community updated and receives updates regularly. If the mod is not on the LOOT master list used by the program, the application will order the mods incorrectly so best judgment is necessary by the player, and it is recommended to learn how to manually sort load orders before using it. The program will also sort child mods above parents if header information is incorrect. While it may be a mess to re-sort, it is indicative of mods that should be further examined in xEdit or re-saved in the CK prior to starting a game.

Master File

An .esm data file (such as Fallout4.esm or ArmorKeywords.esm) or .esl file that must load first for other plug-ins to work. All master files force themselves to the top of your load order menu. User-created .esl files count against the 255 plug-in maximum on consoles, but not on PC.

The game files and DLC are localized master files with additional header information. These should NOT be cleaned with xEdit. Fallout 4 \neq Skyrim

Master File/Dependency

A data file that is patched by another mod. The master file in this case is not necessarily an .esm, such as HUDFramework on Xbox or Armorsmith.

Mod/Game Mod/Game Modification

A game modification in the form of a data file that allows players to extend gameplay. Also known as plug-in or master file. Extensions used: .esl, .esm, and .esp. May add additional files such as texture, .swf, or .ini files.

More Info:

[What Are Mods and What is Load Order?](#)

Mod

An object modification of a form, sometimes referred to as *OMODs*. These are most often used by weapons, armor, and robots, but can be used by other forms to dynamically add and remove keywords and other datum to objects. Not to be confused with Mod/Game Mod/Game Modification.

ModCol

Groups of OMODs are called ModCols (Mod Collection) and work as specialized leveled item lists of weapons, armors, or robot pieces. ModCols can only be modified once per load order and cannot be modified with scripts. Multiple game modifications that modify the same weapon, armor, or robot piece must be patched to avoid conflict.

Model/Mesh

3D object you can see that is wrapped with a texture.

Object Modification/Object Mod

Also known as a weapon or armor mod or OMOD. Upgrades to weapons, armors, and robots that are either hidden, in the case of Fallout 4's Legendary upgrade system, or craftable by the player.

OMA

Abbreviation for Original Mod Author, the copyright holder of a mod.

Optimization

In computer programming, optimizing is basically using less to produce the exact same outcome. For example, using only one multiplication rather than three for the same numerical result in a script.

Papyrus

Object-oriented scripting language used by the Creation Engine for *Fallout 4*, and introduced with *The Elder Scrolls V: Skyrim*.

More Info:

[What Are "Scripted" Mods?](#)

Plugin

A .esp or .esl data file that modifies your game. All Plugins are dependent on Fallout4.esm. Mod plugins that aren't dependent on the FO4 master are considered "packaged wrong" and force themselves to the bottom of your load order menu. The game engine will only allow 255 plugins. Due to processing limitations of consoles, Xbox plugin limit is 150 and PS4 plug-in limit is 100. PC players can surpass the 255 plug-in limit by merging plug-ins or converting small files to .esl format.

Note: The in-game mod manager for consoles does not distinguish between .esl, .esp, or .esl "flagged" .esp format for plugin limit.

Precombine/precombines/precombined meshes

Pregenerated precombined static and physics data utilized by the game engine for optimizing game performance. Disabling across the entire game world without regenerating causes performance issues and failures on consoles. Single cell disabling disables previsual data in a grid of 3x3 around the player character and results in performance issues in the area. It is up to the console player if they wish to play with mods using this method on console to save space.

PC players can regenerate previsibility and precombined data on such mods. See [Appendices](#) for brief tutorial.

More Info:

[Precombines, Previs, and Load Order](#)

Previs

Pregenerated calculations used to precombine static meshes utilized by the game engine for optimizing game performance. It is utilized to view precombined statics across cell borders.

Quicksave

A method of saving that only uses one slot. Quicksaves are overwritten by next quicksave. Not recommended for testing mods.

GAME ENGINE BUG: If you are still in the same cell the save was made in, there is the potential for issues due to the game state not resetting properly.

Quick Resume

Feature on the Xbox Series S & X that allows the player to switch from one game's temporary save state to another. The temporary save state does not appear to function correctly with Fallout 4 and appears to only save the persistent data which could possibly lead to memory leaks into other saves, such as a vanilla tester save or a previously-played vanilla game. Not recommended for testing mods.

Remnants/Data Remnants

Often referred to as '*ghost space*' by Skyrim SE players. Additional files attached to Plug-ins or Master Files not flagged by the built-in manager and unable to be deleted by the player. Most often occurs when a mod has been uninstalled improperly. Occurs on both PC and Xbox but fixes on PC are much easier. In most cases on Xbox, requires reserved space and cache clearance to remove.

More Info:

[What is Operation Not Completed?](#)

["Ghost Space" and Data Remnants](#)

["Operation Not Completed" Troubleshooting](#)

Reference/References

Any form added to the render window in the Creation Kit or created by scripts at runtime. Deleted references will cause CTD if another mod needs the reference for use, therefore deletion of references in the render window is discouraged. PC players can run xEdit to remove accidental deletions, but console players must rely on mod authors to publish cleaned mods. References that are part of the precombines and moved will be disabled.

More Info:

[Precombines, Previs, and Load Order](#)

Reinitializing a Mod/Clean Save

Called a clean save by many mod authors. Not a true clean save. Disabling and re-enabling a mod during a play through in an attempt to re-initialize bugged or updated scripts.

More Info:

[What is the difference between a clean save and a vanilla save?](#)

Reserved Space

Reserved memory partition on consoles for mod data files. 2 GB on Xbox; 900 mb on PS4.

More Info:

[How many mods can I download?](#)

[What is "Operation Not Completed"?](#)

["Operation Not Completed" Troubleshooting](#)

["Ghost space" and Data Remnants](#)

Save Bloat

Runtime errors that add extra, unwanted data to a save file increasing the file size.

Scrap Crash

Unrecoverable file save corruption that occurs on all platforms after incorrectly scrapping a powered workshop object.

More Info:

[Power Grid Corruption and the "Scrap Crash"](#)

SMM/Settlement Menu Manager

Settlement Menu Manager is a workshop menu framework mod that uses Inter-mod communication scripting to communicate with other mods that use its scripted hooks to inject their menus.

Warning

Uninstalling SMM without first using its uninstall function will destroy all workshop menus, including Creation Club.

Uninstalling a workshop mod during a playthrough and continuing on the same save is an unsafe modding practice.

More Info:

[What are scripted mods?](#)

[Power Grid Corruption and the “Scrap Crash”](#)

STS

The abbreviation for Scrap That Settlement or See-Through Scopes. Scrap That Settlement was the first mod on console to use the abbreviation and is what the Parent Server uses and the former Parent Thread used.

Texture/UV Map

A 2D image that contains colors and minute details that is wrapped around the flat surface of a model file/mesh. Game textures are usually built around a high poly object to create fine details at the texture-level, and then mapped to a lower poly “game-ready” 3D object for purposes of “performance”.

Diffuse textures are the colors. Normal Maps are the “bump” maps that use game lighting to make a 2D flat image look 3D. Specular Maps are the “shiny” maps that give the 3D model a reflection.

Cube maps are environmental textures in the shape of a cube. Xbox One, Xbox One S, and Xbox One X do not always read cube maps properly if the textures were not created with a specialized program with the appropriate block compression. (Cube Map Arrays are not supported.) Cube maps are easily corrupted by modding tools that do not specialize in the appropriate block compression.

LUTs, also known as Look Up Tables, are texture gradients used to add color to black and white 2D images. Their size varies from 1 pixel by 15 pixels to 255 pixels by 255 pixels. The colors of Automatrons, some power armors, 10mm gun, pipe weapons, and hair are determined by LUTs.

Texture compression limitations for Xbox One still apply to Xbox Series X | S (Xbox does not read BC7 block compression), but X | S will scale them as needed: 4k for X, 1440p for S.

More Info:

[4k Texture Problems](#) (applies to Xbox One and Xbox One S)

[DirectX and UWP and Xbox One](#)

[DirectX and UWP on Xbox Series X | S](#)

Uninstall/Uninstalled/Uninstalling

Completely removing the mod from your load order after disabling.

More Info:

[Downloading Basics](#)

Wrye Bash

Mod manager with built-in plugin checker to inspect plugins for various problems. Currently inaccurately lists official masters and Creation Club Content as needing cleaning (cleaning official masters is dangerous for uploading to Xbox and is in general discouraged by the modding community). Accurately displays deleted navmesh and deleted base records.

xEdit

Also known as FO4Edit. Community-created editor for cleaning mods of ITMs and deleted references. The program can also be used to make edits to plugins and create them. To use xEdit in other games, rename the executable. For example: SSEEdit.exe is the executable for Skyrim Special Edition, renaming it to FO4Edit.exe will allow mod authors with a legal copy of Fallout 4 to clean Fallout 4 mods. See Appendices for brief tutorials for cleaning and patching load orders.

Note: PC players are expected to patch their own games using xEdit due to the level of customization they can do. Not everyone will have the same mods in their lists and nearly everyone adds to the lists that are available.

More Info:

[Tome of xEdit](#)

MODDING BEST PRACTICES

Ignore Bethesda.net's categories.

Unfortunately the categories that Bethesda uses for their site have not been used by others correctly and many authors and porters place their mods in categories that have nothing to do with their mod. It makes searching and knowing what a mod does very difficult for the player. Read the description in order to figure out where mods go on the Framework.

Ignore Test Mods unless you are on a mod author's alpha/beta testing team.

Alpha testing is reserved for experienced players. Playing with a test mod that has no instructions for use is a sure-fire way to break your game.

Disable the Xbox Series Quick Resume feature for Fallout 4.

While this Series S/X feature can be advantageous to other games, it is not recommended for use while playing with mods as the temporary save data can become "stuck" and may leak into other saves via memory leak if there are mods with poorly implemented scripting.

Create a test character or two.

Create a Clean Save character -- a vanilla character with mods disabled -- make a save point prior to leaving the vault. **Xbox Players Only:** Name the character Clean Save - you can rename the character with Cheat Terminal after you download it.

More Info:

[Test Characters and You](#)

Note: There is no such thing as a clean save after mods have been enabled and a save made.

Plan your load order prior to installing and enabling.

Xbox mods are capped at 150 mods and 2 GB of reserved space due to performance issues with the built-in load order menu. PS4 mods are capped at 100 mods and 900 MB. Please note that one should NEVER uninstall the Unofficial Fallout 4 Patch and continue on an existing save and there are several other mods that cannot be uninstalled and the save continued due to how much they edit or other reasons. Read ALL documentation prior to enabling.

More Info:

[Before You Download](#)

[What is a Gameplay Overhaul and how does it affect my load order?](#)

Know the differences between gigabytes and gibibytes.

The built-in load order menu uses *Gigabytes* as a system of measurement while the Bethesda.net website uses *Gibibytes*. There are 1.073741824 *Gigabytes* in 1 *Gibibyte*. Know how to calculate prior to downloading so that you are not left wondering why you cannot download a mod while the built-in menu says that you can. A useful online calculator can be found at [GBMB](#)⁹.

More Info:

[What is “Operation Not Completed”?](#)

[“Operation Not Completed” Troubleshooting](#)

Be aware of Xbox One X modding limitations.

Elric, the program that shipped with the Creation Kit for Xbox conversion, has not been updated for use with Xbox One X. XOX came out after Fallout 4's Creation Kit shipped; therefore XOX players will need to limit the amount of downloads containing meshes and textures to avoid load and performance issues. There is nothing the modding community can do about this limitation. Modders do not have access to the XOX development kit, which is video game development company-only.

Plan for the long haul.

It is not a good practice to continually enable and disable mods during gameplay. This can cause problems and lead to save game corruption. Mods that change game settings or global variables keep those changes within the save; they are not kept with the mod file. Some script variables ‘leak’ onto other saves (usually a PC-only concern). That’s why you need a throw away test character you don’t mind damaging.

More Info:

[Papyrus Save Notes](#)

[Saving and Scripts](#)

Leave room for updates and patches.

Some mods require compatibility patches to get them to play nice with others. For some mods, there is simply no way to get them to work together because they alter the same piece of code or file.

Exit your game properly to avoid bugs.

To mitigate detrimental side effects to the integrity of the save and dump the temporary cache, save in one location, go through a load door (or another cell), and then exit the game.

Due diligence is the responsibility of the player.

Know what a mod does prior to downloading. If you don’t know, politely ask the mod author to explain. Or if it’s a port of a NexusMods mod, visit the NexusMods page and read the details there. The mods listed within the framework portion of this document are not to be considered recommended or endorsed. The framework is there for your reference only as you build and test your personal load order.

⁹ No endorsement implied. Offered as a convenient link for readers only.

If you can't be bothered to read a mod description, you will not receive support from the mod author.

Some mods don't have enough in the mod description to be able to determine what a mod does. Mods without an explanation of what they do cannot be fit into the load order. Save yourself time and frustration by leaving these types of mods alone.

Know how to uninstall a mod before downloading.

After removing a mod from your load order, either revert your save to a save point prior to installing the removed mod or start a new game. Uninstalling a mod and continuing the same save is bad practice and can lead to serious problems down the road including random CTD, game bugs, and save game corruption.

The Creation Engine is not designed for plugin removal. Each game has its own set of unique IDs assigned to each reference as you pick up and drop items from your inventory. Mod-added items' IDs that are removed can be recycled. A null object will lead to save game corruption.

Perk mods that add a perk to the player via armor (such as new legendaries or new abilities on the equipment) seldom have an uninstall function. Uninstalling mods while items are equipped will permanently bake the perk into the save and leave the perk forever with the player.

More Info:

[Downloading Basics](#)

[Treat Game Mods as DLC](#)

[Saving and Scripts](#)

Know the console limitations.

It is not a good practice to install more than 10 mods at a time, especially if the mods are large or do multiple things. Frames per second for Fallout 4 is tied to the Papyrus scripting system. FPS Boost on Xbox Series slows the scripting system down and can create script lag, which further slows FPS and can cause freezing or CTD.

Know a mod author's limitations.

Not everyone has the same skill set or interest. If a mod author is only making one type of mod, then do not ask the MA for a mod that has nothing to do with the type of mod they've created.

Understand the In-game Mod Manager.

Keep mods disabled until you have adjusted the order and are ready to test play (Installed). Note that this is also true for PC players who opt to use the in-game mod manager for manual installation rather than a third-party manager.

More Info:

[Downloading Basics](#)

Warning

Mods AUTOMATICALLY ENABLE when downloading using the in-game mod manager on any platform.

PC mods with incorrect header information will either jump to the bottom of the load order or disable and then jump to the bottom of the load order.

Manual Modding on PC is recommended for first timers.

This helps you learn where your data files are being stored, how to troubleshoot your problems, and how to bash patch your game for your specific load order. There is the in-game mod menu manager for those who opt to download from Bethesda.net and a manual option on NexusMods and most modding websites.

Only Invalidate Older Files if you plan on using loose files.

On PC, players have the option of enabling loose files. However, if you only use archives, you do not have to invalidate.

Check archives after downloading.

On PC, download [B.A.E.](#) and inspect .BA2s prior to using. If a mod has been uploaded that contains Actor.pex or ScriptObject.pex that is not the primary F4SE files, submit a bug to the mod author. These files have been erroneously packaged and will cause load order issues if you have not invalidated older files or if you're running a mod manager that has a virtual data folder. On Xbox, these will break the game.

Do not use LOOT.

Manual load order arranging is recommended over automation. LOOT only works for small load orders and sometimes does not work properly at all. The LOOT list is manually updated by its team and not every mod is on this list. That said, it is a useful tool to determine ITMs and UDRs.

Note: Mods with improper header information do not sort properly with LOOT.

Be polite and respectful to mod authors.

Mod authors do this in their spare time and are not employees of Bethesda. What we are playing with are mods they use in their own games and have shared with the community. They are under no obligation to continue support of a mod after its release, but many do so if they have time. Don't make modding unfun for them. Keep in mind that a single popular mod may have up to 100,000 downloads or more. It is unfair to think that one person can handle support for that many people. Please remember that modders are people just like you.

Note: Many have their own Discords and enjoy engaging with their player-base. Join them and let them know you like their mods.

There is no “standard” when it comes to modding.

Every author has their own way of doing things and authors cannot be expected to test their mod with every other mod out there.

Read descriptions and all documentation accompanying a mod.

Unfortunately Bethesda.net has a character limit on mod descriptions. Some of the larger, more extensive mods need more explaining or special instructions for installation, so read the description and [comments](#) there first and if it is a port, check all documentation from the ported site.

Some mod authors have their own FAQs that give you information on everything you could possibly need to know about their mods. There are some mod authors who have set up dedicated websites to their mods or use reddit or Discord. Some mod authors don't have the time and rely on the community to help them out.

Note: It is not advised to use mods that do not have enough information in the description to find a place for them in the load order. Save yourself some time and find mods that are uploaded by individuals who want you to download their stuff.

Use due diligence prior to making any type of request.

Many mod authors state on their FAQ or in their mods' descriptions if they have the time to fill requests. There are many NexusMods mods that use assets from other mod authors' work and that cannot be ported without full permission from all parties involved.

Many NexusMods mods also require the Fallout 4 Script Extender, ENB, or Menu Configurator. Unfortunately those are not able to be used on consoles. They are not .ESM, .ESP, or .ESL data files.

Mods that have DLC requirements may have the requirements due to using specific scripts only found in the DLCs. Porting from one Bethesda game to another is not allowed by Bethesda.

Use due diligence prior to making an external harddrive purchase.

External drives are expensive and they are all different. Storage drives are not necessarily the same thing as a good external SSD drive. If choosing to run the game from an external, make sure the drive is capable of running the same speed as if from the internal harddrive and that the USB cable is capable of it as well. A crap cable or slow external can make it look like the game is under performing when it is the hardware you've chosen.

Never download a mod that you suspect is stolen.

Per the Creation Kit EULA, all user-generated content belong to their creators with a license given to Bethesda for hosting, promoting, and advertising. Stolen files are usually created by those who have no idea what they are doing and can ruin your save game. Report all stolen files. **Do not rely on others to report for you.** Take action and report. Provide links where possible of stolen mods. Informing the original mod author so they can take the steps to remove their mod is also a good idea. Do not harass

uploaders of suspected mods. Some uploaders are genuinely unaware of this and do not understand they fall under US Copyright law.

More Info:

[Modding Guidelines](#)

Never download a mod that you know breaks the hosting terms of service of Bethesda.net.

Mods that contain nudity and/or violence against children are against the hosting terms of service of Bethesda.net and should be reported. Do not rely on others to report for you and do not harass the uploaders.

More Info:

[Modding Guidelines](#)

Mods are free.

The EULA of the Creation Kit requires that mod authors offer mods free of charge. If you come across a mod author or website who charges for their mods or access to mods, please report them (note: donating to a mod author is entirely different - the mod author is not charging for services; in most cases you are donating to keep their website or community running). Never pay for a free mod. It is against the EULA and more than likely prosecutable under US law. Never fall for a pay-for-service scam. The mod uploaded is usually broken; more than likely it is a rip of another game or stolen and requires extra assets to be useful. You will have no way to recoup your money.

Save often.

TROUBLESHOOTING, WARNINGS, AND CAUTIONS

Troubleshooting Offline Saving on Xbox.

New-to-Xbox players may not be aware that playing offline resets the Xbox's clock to factory time—when that Xbox first left the factory. In the save menu, saves are ordered by date with the top-most save being the latest date. When saving offline, the last time you played will be at the bottom of the save list.

Be wary of “performance” mods and mods that promise more FPS.

TIP: Overall stability can be improved by using less mods or only using a suite of mods designed to work together.

Framerate unlockers, such as ini edits that promise more frames per second can potentially cause instability and papyrus stack dumps.

Framerate is locked at 30 frames per second on Xbox One, Xbox One S, and PS4 and 60 frames per second on PC and Xbox Series for Fallout 4. Both the Papyrus engine and Havok system measure how they work based on the locked frames. The faster the framerate, the less time papyrus has to process and collision on certain objects as well as their animation may malfunction and cause issues.

At 30 frames: the Papyrus engine has 33 ms per frame to process. If papyrus cannot complete the process in 33 ms in one frame, it gets pushed to the next and so on until the process is complete. Frozen screens downtown are sometimes the result of the papyrus engine not being able to push the process into the next frame. At 60 frames per second, the time the papyrus engine has to process is *reduced* by half at 16.67 ms per frame. **This processing time is not sustainable on Xbox One, Xbox One S, or PS4.**

The game's native functions do not have enough time to process at 60 fps on Xbox One, Xbox One S, PS4, and some lower-end CPUs.

More Info:

[What is Papyrus?](#)

[Script Lag and harmful ini settings](#) by smkViper at the original Bethesda forums

[Myths and Legends: Papyrus Ini Settings](#) by Thallassa

[What is Framerate?](#)

TIP: If you are constantly lagging in downtown on vanilla, examine your console's or computer's settings. Determine if it is hardware related.

Some mods attempt to 'lessen load' by deleting objects within the render window. Deleting objects in the render window will cause the deleted references to regenerate infinitely at cell 0,0,0 and is a known cause of crashes, freezes, and other issues. This has been known since prior to Skyrim. Fallout 4 is optimized via the previs and precombine optimization system and those must be regenerated when changes are made to a cell.

More Info:

[Previs, Precombines, and Load Order](#)

Troubleshooting Pipboy and Power Armor Headlamp Lighting Conflicts.

Keep in mind that your save can only have one set of lighting add-on nodes. These nodes are defined as numerical values on the light mesh itself and within the Creation Kit.

If one mod uses the same number as another mod, there will be a conflict and you cannot use both mods together. For example, Submersible Power Armor light addon node on the headlamp conflicts with the Captain Cosmos Creation headlamp. Using both turns off both headlamps because of the conflict.

More Info:

[AddonNode List](#) (the list is not complete)

Troubleshooting Race and Facial Tints Conflicts.

The load order and thus the save may only have one set of facial tints defined. Facial tints are such things as eyebrows, dirt, makeup, freckles, tattoos, etc. They are numerical values defined on a single form (Race) within the Creation Kit (PC players can have additional values added without conflict via JSON 'injection' if using LooksMenu).

Having multiples of the same value (such as a freckle tint and tattoo tint assigned by third party software with the same number instead of the Creation Kit for defining) will cause the game not to render either tint at all and sometimes will cause all tints to disappear. Another issue is attempting to use more than one facial tint mod and again having all tints disappearing leaving only the blend-level dark skin tone behind. (Facial tinting works similar to Photoshop layers and masks) While the first conflict cannot be fixed on console, the second is easily fixed by choosing one mod over the other.

Yet another issue with facial tinting occurs when a mod does not have the correct sizes of face skin textures, has defined the incorrect compression block by not capitalizing the extension on the texture, etc. These issues will cause the game not to render the texture and the underlying dark blend-level tone is all that is available for visuals. Currently Xbox has a 'bug fix' mod to help with that, but is not sufficient for all cases.

Do not scrap mole rat hills.

Mole rat hills are ambush furniture. Ambush furniture should not be scrapped. The enabling of such is done at the engine level and are linked with the 3D object that the player sees. The safe way to remove them is via scripting. The Unofficial Patch has the scripting to safely remove them. When using the

UFO4P, simply leave the settlements and travel at least 5 cells away from the settlement to allow the objects' 3D to Unload. Five cell distance is approximately the distance from the east of Sanctuary to around Wicked Shipping. You can also fast travel away or enter an interior to give the cell time to unload the objects from memory.

If they are not unloading properly, the re-evaluation of your load order will be necessary to determine which mod is not allowing them to unload their 3D. You can read more about this via [this post](#) on the parent server by Sclerocephalus, the programmer of the Unofficial Fallout 4 Patch who researched the issue to create the fix included in the UFO4P. [Image of post](#) for those without Discord membership.

Do not use mods that disable precombines and previs across the entire game world.

These types of mods cripple performance on consoles and hamper performance on PC, regardless of how much ram is dedicated to gaming. On a high-end PC, the effects may not be as noticeable but precombines and previs can also be regenerated by the player there. When precombined meshes are disabled across the gameworld, the game is no longer properly occluded or optimized for gameplay. The more your character has explored the more data your system has to process, and adding more and more mods and attempting to render everything simultaneously, can lead to a crash or worse.

At the very least, there will be noticeable framerate drops in cells where the precombined meshes are disabled.

NOTE: There are mods that REQUIRE the precombined meshes to be disabled or they will not function. They *have* to edit the cells or specific references. (They are generally regenerated, but this causes a compatibility issue when using with other mods that touch the same cells with in a 3x3 of the affected cell or cells).

TIP: Plan your playthrough accordingly and be prepared for framerate loss in the edited cells. PC and Xbox players can use PRP - Previsibines Repair Pack to repair precombine bugs and regenerate the optimization system in certain areas. PC players have the ability to follow the instructions for PRP and regenerate for their entire load order. Save often.

More Info:

[Precombines, Previs, and Load Order](#)

Be aware of mods that alter the elevation of an area, whether it be a single area edit or multiple areas.

While elevation edits in Skyrim do not affect system performance, elevation edits do affect performance in Fallout 4. Landscape is tied to the optimization system. Mods that alter terrain will need to have rebuilt the precombines and previs. Any mod below a landscape alteration that makes changes to the same area will either conflict or turn off the precombined references of the mod above.

Be aware of what the “scrap crash” is and how to avoid it (on console) and fix it (on PC).

The “scrap crash” is caused by power grid corruption. It occurs on all platforms. The crash occurs when a powered workshop object is not removed the proper way and orphan entries remain behind as, more or less, ticking timebombs in your save file. Unfortunately, power grid corruption is unrecoverable on consoles. Once it is ‘baked’ into the save there is nothing you can do but start over. There is a Fallout 4 Script Extender mod that PC players can use that will fix the issue, however, it is impossible to do on consoles.

More Info:

[Power Grid Corruption and the “Scrap Crash”](#)

Every mod added increases the chances of encountering problems.

This is not the fault of the mod authors. Modding your game on any platform is a risky endeavor. They all do this. Modding is very much ‘at your own risk.’

Be wary of single mods that do multiple things.

Using these types of mods can lead to incompatibility issues with other mods. Research compatibility patches prior to download and plan your load order and playthrough accordingly.

Gameplay overhauls are generally intended to be used as your load order without any other mods installed.

Avoid mods that do too much.

Some mods are just too ambitious for our systems to handle. It is a console limitation. There is nothing stopping the player from trying out new mods (mods are free to try and free to play with), but do not blame a mod author for console limitations. There’s nothing they can do about that.

Be wary of cheat mods that give you perks instantly.

PlayStation players should especially use caution because of SONY’s restrictions on external assets. Use these mods at your own risk. In layman’s terms, they will break your game. More specifically, these type of mods can damage required game data, can crash your crafting menus, and lead to save corruption. If the data isn’t there or is corrupted, the game cannot function properly, and the save is ruined.

The game has a limitation on how many levels the player can have; it may be a game engine bug or it may be built in. After 255 levels, the perks reset to 43. (An issue for players of the original Start Me Up who started at level 300.)

Be wary of mods that have not been updated prior to the Nuka World Add-on.

Patch 1.7 introduced several changes to menus, quests, and level lists, and the Bethnet site updated September 26, 2016. Use due diligence and common sense prior to downloading mods that use that date as last time updated. Generally, it was not an actual update to the mod. Best practice is to double check the last update date on the NexusMods if it is a ported mod. Game settings did not change but each DLC updated the previs or precombines.

Note: There are several on our framework list for reference. All players should do your own due diligence.

Be wary of mods that have not been updated to reflect changes brought on by the Creation Club.

Patch 1.10 introduced having to update HUD menus with each update and changes to the workshop menu. If the mod adds a widget to the HUD, use due diligence and read the comments to make sure the mod is actually working or if it requires a patch to make it work. It also introduced new keywords for weapon, armors, and the Pip-boy to add the new paint skins. Introduction of the Virtual Workshops saw under-the-hood changes to the engine regarding settlements and workshop.

More Info:

[Creation Club](#)

Use caution when adding mods that include hi-res textures (Xbox OG/S/X Only).

The console is not equipped with the proper graphics card and the processor has to work overtime in order to render it. Xbox One X is also not able to process all the parts downtown at the forced 4k resolution and performance is just as bad as using OG Xbox One there. There are also occlusion errors downtown and players experience lag there on vanilla. If previs is disabled NPC spawns are no longer pre-culled and weapons and armors that include high poly meshes or high resolution textures significantly damage performance.

4k Texture issues do not pertain to Xbox Series unless the optimization system is disrupted.

More Info:

[4K Texture Problems](#)

Use caution when adding too many mods that add to leveled item lists.

There is a hard cap of 255 objects within a level list. Conflicts and CTDs arise when two or more mods try to add objects to the same leveled item list. A script can be used to inject the item without conflict; however, this method is not without complications, especially where weapons and armors are concerned.

Fallout 4 introduced a specialized modification leveled list system to build weapons and armor dynamically when the cell loads. Overloading these specialized lists or using mods that conflict with them can cause severe issues while playing including freezing, issues with Papyrus script manager, and up to CTD. Plan your play through accordingly.

More Info:

[Weapons, Level Lists, and Game Engine Limitations](#)

Use caution when adding too many workshop items mods.

When Fallout 4 released, the workshop menu was not designed to support many workshop items. Bethesda added additional keywords after building and adding more items to the menu became popular. The workshop menu can become unstable if using too many workshop mods that add too many items to the menus. Creation Club menus have added to the strain. While mod authors have recognized this and have built their mods to alleviate some of the added stress, caution is still advised.

Plan your playthrough accordingly and read for any additional mod requirements such as Settlement Menu Manager, Workshop Framework, or other mods.

Be wary of mods that added OMODs with earlier versions of xEdit (FO4Edit) prior to December 10, 2018.

Weapons and armor modifications (those that you craft in the workbenches), also called object modifications or OMODs, that were made with only xEdit (FO4Edit) 3.2 or lower and not the Creation Kit are problematic at best. Creation of OMODs with only xEdit prior to the 4.0 release was discouraged by the xEdit team. Records for these forms were not decoded properly prior to the release of the Creation Kit and some records continued to be missing/improperly decoded until the release of xEdit 4.0.

To mitigate save file corruption: Make sure you are using the most up-to-date version of Fallout 4, the mod that adds new OMODs, and verify that the mod author is now using xEdit 4.0 or higher for any mod editing if they do not wish to use the Creation Kit.

Xbox players will need to double-check on nexusmods.com if they are using a port of a weapon or armor that has an update or creation date prior to *December 10, 2018*. Check on Nexusmods for the last date and double-check with the porter that they remade any OMODs in the Creation Kit instead of just a straight port. Do be polite, the porter may not be the original mod author (OMA).

Do not use *abandoned* mods that solely used xEdit 3.2 or lower for OMOD creation. The OMODs have to be rebuilt with the Creation Kit. This can be done on PC for personal use only based on mod file permissions, but not on console, where uploaders must abide by the [Modding Guidelines](#).

Be aware of DLC (AIO) mods that contain the Far Harbor workspace.

While this is not the case for all mods, new mod authors and porters may be unaware of the issues of modding Far Harbor. The workspace is finicky, especially when combined with other master files. Unfortunately, Boston FPS Fix VD AIO, which is a proof-of-concept/test mod for precombine regeneration, is one such mod. It has been updated into Previsibine Repair Pack on PC and Xbox has a newer, modular version of PRP.

FREQUENTLY ASKED QUESTIONS

You can find these questions and answers and more on the [Parent Website](#).

Short URL for bookmark: <https://oddsmods.xyz/uxR3ho>

Q. What is the difference between installing and enabling a mod?

Answer:

Enabling: After downloading a mod, the mod is marked as enabled.

Installing: Downloading a mod, moving it to its correct position in your load order, and ensuring that it is enabled.

Note: The in-game mod manager automatically enables a mod for gameplay.

Q. What is the difference between deleting and disabling a mod?

Answer:

Disabling: Marking the mod as disabled in the mod manager. Return to the Main Menu screen to allow plugins.txt to refresh.

Deleting: Completely removing a mod from your machine by either clearing the reserve space or manually deleting from the console. A cache clearance is advised afterwards.

Q. How many mods can I download?

Answer:

Xbox:

You may download up to a limit of 150 mods and 2 GB of space. Plan your space prior to downloading to avoid issues with not being able to download.

Note: 2 GB is approximately 1.86265 GiB, which is the unit of measurement used by the Bethesda.net website. The Google sheet linked on the first page calculates this for you. Use the Xbox tab. Enter MiB & KiB from the website instead of the in-game manager.

Digital Storage

2 = 1.86265

Gigabyte Gibibyte

Formula for an approximate result, divide the digital storage value by 1.074

File Size:	87.1 MiB
Date Created:	August 30, 2021
Last Updated:	August 30, 2021
Views:	649,168
Downloads:	32,072
Favorites:	10,728

PlayStation:

You may download up to 100 mods and 900 mb. Plan your space prior to downloading to avoid issues with not being able to download.

Note: 900 mb is approximately 858.307 mib, which is the unit of measurement used by the Bethesda.net website. The Google sheet linked on the first page calculates this for you. Use the PlayStation tab. Enter MiB & KiB from the website instead of the in-game manager.

Digital Storage

900 = 0.83819

Megabyte Gibibyte

Formula for an approximate result, divide the digital storage value by 1074

PC:

You may have up to 255 data files with the ESM and ESP extension. You may have more with the ESL extension as they load differently than 'normal' data files. Modded ESL files may not be dependent upon ESM or ESP files.

ESP files flagged as ESL are treated as masters but load with ESPs.

More Info:

[Understanding the difference between GB and GiB](#)

[Downloading Basics](#)

["Operation Not Completed" Troubleshooting](#)

[Data File](#)

Q. What is the difference between a 'clean save', a 'dirty save', and a 'vanilla save'?

Answer:

There are two types of 'clean saves'. One is actually a vanilla save, the other is a bad modding practice in an attempt to re-initialize a badly scripted mod or an updated mod that doesn't use version control to initialize its scripting when a player updates.

Vanilla save/Clean Save:

No mods enabled.

Clean save:

Also known as 're-initializing a mod or quest'. It is a bad modding practice where badly scripted mods force a player to reinitialize their quest by disabling it, making a save without that mod enabled, and then reenabling the mod again. Mods with these instructions in the description should be avoided.

Dirty save:

Also known as a 'clean save' - re-initializing a quest mod by disabling it, making a save without that mod enabled, and then reenabling the mod. Mods with these instructions in the description should be avoided.

Note: It is not advised on any platform to disable a mod and continue on the same save. The save cleaner app available to PC players is only to be used in the most dire of circumstances.

Examples:

Radio mods that have no scripting or poorly implemented quests or scripts will shut off after a while. Do not attempt to re-initialize. Simply report the bug to the mod author if it hasn't been reported (be polite, please – no one needs toxicity on their bug tracker) and move on. PlayStation radio mods have no way of implementing the necessary scripting.

Mods with persistent references generally require a new game instead of a re-initialization, but beginner modders will sometimes tell players to re-initialize or use a clean save in order to update. Wait until your playthrough is complete and start a new game before updating to avoid issues with persistent data not updating properly.

Q. What is the cache?

Answer:

In computing, the cache acts as short-term memory to store local data to speed up processing time. On consoles, these temporary files and data can build up over time and can lead to issues with game freezes, connectivity, and slow game loads.

Q. How do I clear my cache?

Answer:

Xbox:

1. Press the Xbox button on the front of the Xbox One for about 10 seconds until it shuts down.
2. Unplug the power supply from the Xbox.
 1. For the **S** and **X**, wait 10 - 20 seconds to reset the internal power supply. Then *skip to step five (5)*. The original Xbox One's cache is in the power brick and so requires additional steps.
3. Unplug the console from the wall and wait for the LED on the power supply to go out.
4. Plug the power supply back into the wall.
5. Reconnect the power supply to the console.
6. Turn the Xbox back on by pressing the Xbox button on the console or your controller.

PS4:

1. Press and hold the PlayStation button on your controller.
2. Select "Turn Off PS4".
3. Let the PlayStation 4 fully power down and then wait for 10 to 20 seconds.
4. Unplug the console power cable. Wait for 2 minutes.

5. Plug the console power cable back in.
6. Restart the PlayStation 4.

More Info:

[How to Restart or Power Cycle Your Xbox Console](#)
[Cannot Start PlayStation In SafeMode](#)

Q. When should I clear my console's cache or rebuild my PS4 database?

Answer:

- When preparing your console for a new game.
- After console OS updates.
- After game updates.
- After uninstalling a game you no longer wish to play.
- For troubleshooting.
- If the console seems laggy or there are connectivity issues.
- After installing mods with large texture files.
- While playing with mods with large texture files.
- After deleting a character or save.
- After uninstalling a mod and deleting a save that mod is tied to.
- As part of normal maintenance of your Playstation 4.
- As part of normal maintenance of your Xbox One.

Q. Why is my game crashing?

Answer:

Any number of reasons. The Creation Engine, while updated for modern consoles, still contains code dating back to TESIII: Morrowind from the original Gamebryo Engine.

Needs patching. A delta or compatibility patch is required to make most mods play nice together so they do not overlap in places that will cause crashing; however, not every porter has permission to bring the patch over or it is not thought about. Some mods do not have permissions for patching with other mods.

(Those mods should be avoided on Console, so check the mod description for the NexusMods link and avoid them.)

Level lists at capacity. Downtown is rife with spawn points that, when overloaded with high-poly weapons or armor mods, will cause problems. Just as the amount of plugins the game can load is 255, the amount of forms in the level lists for all BGS games using the same engine is 255. Once a level list has hit this limit, it effectively breaks the game.

Mod conflict. Some mods do not play well with others. A conflict between the two will cause crashes.

Navmesh errors and conflicts. Navmesh deletion will cause crashes.

Save bloat. Scripting errors will cause crashes.

Data corruption. This could be anything from a mesh that has accidentally gone bad to a record that was improperly decoded, or simply from downloading a zip file from another modding site and data not unpacking properly for upload to the Bethesda site. We are using software, and it happens. Even the game's textures are types of software read by the game.

Autosave corruption. Corrupted save while consoles sync with the cloud if internet connection is lost, or other reasons.

Mod removal. Uninstalling a mod leads to crashes and save corruption. Removing a mod in the middle of a playthrough will recycle all the unique IDs created by the game engine. Treat mods as DLC. You wouldn't remove an official DLC and expect the game to function correctly afterwards would you? (Hint: No. No, you would *not*.)

Mod removal the second. Removing a mod that has a scrap list tied to a powered object could cause crashing if that object's number (which is no longer in the save) corrupts the file by recycling, the more objects are in the workshop scrap lists that have been scrapped and returned, the higher the chances of power grid corruption

Textures are 4k on previous gen Xbox. Xbox One X has a forced 'patch' that does not play well with BGS games. The upscaling of textures (even for those that are *supposed* to be 512 or 1k - like eye color) to 4k has caused major issues for Xbox One X players while downtown and in other parts of the game. Keep in mind that original Xbox One consoles are not native 4k.

Incorrect Texture Compression. Xbox does not read BC7 or BC6H compression blocks, nor does it use OpenGL yet. OpenCL and OpenGL compatibility are in the works. Currently, Xbox One is using DirectX 11.X, which is a subset of Direct 11.2 and is not compatible with Windows 10 DirectX 11.3. Modding tools provided to mod authors are the same as when Fallout 4 released in 2015. Clearing the cache and not using texture mods are the only work arounds.

Cloud Sync Error. Corrupted save while Xbox syncs with the cloud, if internet connection is lost or other reasons.

Particle Overload. Fallout 4 uses NVIDIA's Flex library for particle simulation, and it does not seem to play very well with consoles or AMD architecture, as a result the volumetric lighting, excessive explosions, molotovs and fires will cause freezes, sometimes crashes.

Dangerous INI edits in use. Edits like uGridsToLoad, pUsePreCombinedObjects, pUsePreCulledObjects are dangerous edits and should not be touched. A value other than 5 uGridsToLoad will cause random encounters to stop triggering.

Dirty BA2s. The archives which hold the external files, such as textures and scripts, have additional files grabbed by the Creation Kit. These additional files conflict with other mods and cause issues. Mod authors who do not use a clean data folder to create mods are more prone to having dirty BA2s. F4SE scripting will attach itself to BA2s so mod authors must be careful when packaging.

Far Harbor has deleted itself. When editing Far Harbor, it will sometimes delete itself in the editor. It must be re-added using xEdit. Players should check the dates. Older mods that came out right after Far Harbor are more prone to the error; however, there are mods from new mod authors that do not know that Far Harbor is set up differently (and the Creation Kit does not seem to like it).

Conflict with apps running on PC. If not using the in-game manager, PC players should check that their virus software has not caused their third-party mod manager to stop working properly.

Conflict with apps running on Xbox. Not all apps downloaded in the Microsoft store are designed to work while other games are running. Ensure they are not the cause of potential crashes by uninstalling them and testing a save.

Xbox Series X overprocessing or processing too fast. Yep.

More Info:

[Load Order FAQ](#)

Q. What is a “Patch”?

Answer:

In computing, a “patch” is a program/app that alters software in order to improve, update, or fix it. Patches are used to fix bugs in apps, add new functionality, or fix security problems.

An Unofficial Patch is a third-party software patch created without the original developer.

More Info:

[Unofficial Patch](#) (wikipedia)

[What is a patch and what are the different types of patches?](#)

Q. What is a Compatibility Patch?

Answer:

A Compatibility Patch is a mod that alters the records of two or more mods to make incompatible mods function together.

More Info:

[Compatibility Patch](#)

[What is a patch and what are the different types of patches?](#)

Q. How do I Disable the Quick Resume Feature on Series S and X?

“It’s not a bug, it’s a feature.”

Answer:

The Quick Resume Feature looks shiny and new and may work for some games but may also cause bugs, glitches, and other problems for Fallout 4. It is recommended to not use this feature while playing with and testing mods in an attempt to mitigate any issues that could arise by using Quick Resume.

You must manually disable Quick Resume on a game-by-game basis, each time you load the game. There is no setting under your Settings menu to globally disable the feature. Removing a game from the Quick Resume list will shut down the game and delete the temporary save state. Recovery of the data is not possible at this time.

1. Press the Guide Button
2. Navigate to My Games & Apps
3. Navigate to Quick Resume (this will have a list of games)
4. Press the Menu Button
5. Navigate to Remove from Quick Resume
6. Restart the game

Q. What is “Operation Not Completed” and why won’t the in-game manager let me download when I have enough room to download?

Answer:

This can happen for a number of reasons. The first place to check is the [Bethesda Service Status Center](#) to check if the Bethesda servers are having issues. They use AWS so if AWS is having issues, so will many other companies. You can also check their [official Discord](#).

If you have downloaded a mod of the same name and switched to a mod that also has the same name, it will delete the plugin and leave behind external assets that take up room in your reserve space. This is commonly referred to as “Ghost Space” by Skyrim players but it is actually remnant data left behind from an improper uninstallation. This happens on both Xbox and PC. PC players can encounter it when downloading from one site and then downloading an update from the Bethesda site.

You must delete the mod, delete the mod that left the assets behind properly, and then re-download the mod you want to change to.

Ensure you have the amount of space required to download the mod you want. Virtual storage does not have the same values as manufacturer storage space. GB is not the same thing as GiB.

More Info:

[How to Fix Operation Not Completed](#) when encountering Data Remnants/Ghost Space
[“Operation Not Completed” Troubleshooting](#) for an explanation of virtual storage space and examples of how it happens.
[“Ghost Space” and Data Remnants](#)

Q. What is a Gameplay Overhaul and how does it affect my load order?

Answer:

A Gameplay Overhaul is a bundle of mods by different authors ported to consoles as one mod, a full load order in one mod, or a mod that touches more than one system such as a perk or weapons/armor overhaul.

A gameplay overhaul that affects all systems of the game must be treated as the game itself. Generally you will only have the gameplay overhaul in your load order. (Playing with fewer mods is not a bad thing!)

Many gameplay overhauls require patches to be compatible with other mods, such as any that touch vanilla dialogue, leveled item lists, leveled actor lists, or vanilla weapons, robots, or armors, but some overhauls have built-in scripted patches. Others can be overridden with other mods with loss of functionality. Some mod authors produce “series” of mods that are modular so that one can pick and

choose. Patches for other weapon and armor and leveled item lists mods on consoles can quickly eat up valuable space in the load order, so careful pre-planning is a necessity.

Patches for other mods on PC can be merged together and some mod authors “flag” patches as ESL files. Flagged ESL files do not work the same way on console and are treated as the 150/100 console mod limit.

File size is not indicative of how many records a gameplay overhaul will touch. For example, gameplay overhauls that add new dialogue for new quests, regenerate precombines, or add new weapons and armors will be much larger than a mod that only touches vanilla records.

When choosing from “series” type overhauls that are modular it is a best practice to pick from the series the same mod author has created in order to avoid unexpected interaction from other mods the series mod author never took into account for. Keep in mind that not all mod authors are in communication with each other and, unfortunately, the modding community is prone to drama.

Examples of gameplay overhauls:

- Immersive Gameplay
- Junkmaster
- War Never Changes
- Project X DLC
- Commonwealth of Decay
- Sim Settlements 2
- Armor and Weapons Community Resource

Q. Why don't dead bodies de-spawn in a timely manner?

Answer:

Dead body clean up is controlled by the game engine. It occurs once the engine hits a certain amount of memory consumed. This can take a while if you are just starting a new game. Clean up speed varies for each NPC types. Some are created at runtime via the story manager and these are deleted by the engine much faster than a placed NPC. Unique actors are the slowest for the engine to clean up.

There are no mods that can successfully clean up a preplaced dead body. There isn't a way to delete a dead body. A mod author can only mark them for deletion. The dead body, regardless of preplaced or run-time creation, will still be within the memory limit ("exist") even if it is disabled by a mod with the mark for deletion.

Furthermore, the engine will move anything in a cell back to its original place (called an Editor Location) when the cell resets. This is noticeable with the vicious dog actor at the entrance of Sanctuary. There are certain exceptions to this. For example, if a mod author deletes the reference (actually hits the delete key on the reference), that reference will not spawn back in its original space but will respawn at cell 0,0,0

continuously upon cell reset. This will eat away at how much memory the game has and can cause serious performance issues. It will lead to crashing if another mod requires that reference to work.

The Unofficial Patch team attempted to provide a fix for the dead bodies in 2016; however because this is how the engine works, there is nothing to fix and the team removed any edits regarding it. Therefore, it is not advised to use mods that claim to clean up dead bodies unless it's done at the engine level using such tools as F4SE. This is impossible on console.

GAMEPLAY TIP: While not a solution, an 'immersive' work around to cleaning up bodies in settlements for Xbox and PC would be to use the Autobutcher of Manufacturing Extended. Players can use a mod like Move That Object! to pick up heavier Actors. Do note that if the dead body, such as the Vicious Dog at the entrance to Sanctuary, is set for respawn, it will reappear in its original location even after you've scrapped it.

Suggested load order for this work around:

Settlement and Workshop Menu Objects (Vanilla Menus)

- Manufacturing Extended
- Manufacturing Extended Expanded

Gameplay Tweaks/Changes

- Move That Object! (or a similar mod with the same gameplay settings)

Have another work around? Come join us on [Discord](#).

GAME INCONSISTENCY: There does appear to be a game inconsistency with the Vicious Dog Actors. Unlike settlers who have their own loot corpse that are set to no respawns on the actor, the Vicious Dog dead Actors are the actual template for all other vicious dogs in the enemy level list and are therefore set to respawn. This is most seen at the entrance to Sanctuary Hills.

Fixing such an inconsistency may or may not break other things, but one thing that cannot be done is to remove the flag from the actual template as it will break the other actors that are in the enemy level lists. Players will need to avoid mods, particularly older ones, that remove that flag from that dog form.

MENU CRASHES ON XBOX SERIES

There appears to be an issue with the Fallout 4 Main Menu keeping the last save and last load order active on Series S|X. Because of this, it is assumed that Fallout 4 version 1.10.163.0.1 does not support the *Quick Resume* feature.

How It Happens

It appears to occur when deleting a mod prior to deleting the save it is associated with. If the mod a player deletes is baked into the saved or baked into the *Quick Resume* feature, it can cause crashes to the desktop upon re-entering the game. You may experience this crash as the first clip animates or soon after.

Prevention

Delete saves before deleting mods. Manually delete any saves associated with mods before deleting the mod from your system so that *Quick Resume* or *Gamepass* do not grab the last save.

Disable FPS Boost. Fallout 4 version 1.10.163.0.1 does not appear to support *FPS Boost*. If you run the game from an External SSD, *FPS Boost* may be automatically disabled, but running from the Internal hard drive automatically turns it on if you have a television that supports it.

Clean up any Gamepass errors. If running the game from an External SSD, ensure that Gamepass doesn't download to the internal hard drive and create errors. Gamepass does not appear to currently be recognizing the DRM from the disk on Series X if the game is installed on an External. Choose which method you wish to play on Series X prior to entering the game.

How to Fix

Should you encounter crashes in the menu or as the first game clip is animating, you will not be able to enter the game to get to your saves.

Method 1

Clear the game save data from the console. There are two Save Data boxes. You will need to delete from the larger of the two. Only clear from the console so you can resync the save data.

Return and Resync. Return to the game and allow the game to resync data. Returning to resync allows you to see if the above worked.

Say Good-bye. Manually delete the last saves where the mod is baked in (all of them).

Keep it clean. Ensure that a character without mods is selected (if you have one, otherwise, you're good) by selecting:

LOAD >> Select Character >> Scroll down to your character's name >> Select

Reboot or Power Cycle. Completely Exit the Game. Reboot your Series or perform a Power Cycle and return to the game.

Method 2

If the Method One does not work, more extreme measures are called for. No, there is no other option if you are getting this kind of crash, if the above does not work.

Clear the 2GB reserve space. You will have to re-download any mods and Creation Club Content.

Clear the game save data from the console. There are two Save Data boxes. You will need to delete from the larger of the two. Only clear from the console so you can resync the save data.

Return and resync. Return to the game and allow the game to resync data. Returning to resync allows you to see if the above worked.

Say good-bye. Manually delete the last saves where the mod is baked in (all of them).

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PRECOMBINES, PREVIS, AND LOAD ORDER

Fallout 4's Optimization System has several parts, but the two primary parts of the system that affect both load order *and* performance are precombined references and previs. These are part of visibility optimization in the rendering (graphics) pipeline and are used to speed up Fallout 4's rendering performance.

Precombines

Precombined References are one part of Fallout 4's Optimization System. They are designed to keep 3D object counts as low as possible by combining multiple objects together into one 3D object. So instead of the game having to determine each piece of geometry individually as the player sees it, like-geometries are merged together into one mesh. Due to processor load, combining these objects at runtime is not possible, so they were precombined by the developers before the game shipped (and thus the term "Precombines").

A common analogy of how precombines work is a Lego house. All the pieces are individual until they are snapped together to form what looks like a singular piece. Unlike a Lego house, however, editing one reference in a cell's precombined references will disable all the precombined references for that cell (or cells if objects are precombined from multiple cells). This has a domino effect on other systems, particularly on what's called previs.

Previs

Previs, or Precomputed Visibility Data, is another part of Fallout 4's Optimization System. This data carries a greater impact on game performance. It is calculated using the precombined references and determines what information is seen across world cells. This precomputation stops the game engine from performing wasted operations when a player views a building in the distance or one close up but is located in an adjacent world cell. It stops wasted rendering of NPCs when they are behind a building or hidden by another object. In other games, this would be similar to what's called the Occlusion Culling. Because of processor load for precombining references, this data cannot be calculated at runtime and had to be precalculated by developers before the game was shipped (and thus the terms "precomputed visibility" or "previs").

Precombination Invalidation

The optimization system is designed to turn off if it detects an invalid precombined reference. This could be in the form of a mod with a wild (accidental) edit on a reference in a cell adjacent to where your character is standing, or it could be a purposeful edit on a mod that adds a new building or settlement, disables shrubbery, or allows extended scrapping functionality.

It turns off because any changes to a mesh that has been precombined into a new one would be invalid anyway, and the previs cannot be used if the precombined reference is invalid. You could end up with a whole lot of really big meshes that are supposed to be doing something when they aren't. So not only would you have a lot of wasted space, you have wasted operations going on since there would be no

pre-culling of visuals and the game would be reading every individual object that was supposed to be precombined.

Processor and Framerate

Framerate controls how animations work, how objects with physics interact with the world, how the scripts work, etc. It isn't just about visual fidelity when it comes to playing Fallout 4. Dips in framerate can cause anything from animations to break to quests to lag and up to outright crashes.

When precombines are disabled across the map and therefore previs, mods that take up spare processor load capacity (like Chameleon effects, Legendary effects, weather, NPCs, other effects, etc.) could increase the load to upwards of 130% rather than the peak of 80-90%. This increase in processor load can lead to crashes that seem totally random. (They're not. The game is telling you it's got issues.) These random crashes are sometimes blamed on other mods that have nothing to do with rendering but they are the straw that has broken the camel's back because the processor is overloaded.

More Info:

[What is Framerate?](#)

What types of mods are designed to turn off the optimization system?

Mods with trees, buildings, other collisioned-static objects, and landscape terrain and height replacements are all types of mods that are designed to turn off the optimization system and so mod authors either leave the system alone or rebuild the precombined geometry and recalculate the previs. It varies from mod author to mod author and some newer modders and or porters do not yet realize there is an optimization system. Those that add references to but not replace may or may not also turn off the system. A competently-made mod that **adds to** -- but *does not* replace, 'set initially disabled', delete or undelete -- should not.

Other mods that are designed to turn off the system:

- Mods that extend the scrapping functionality of the settlement system
- Mods that contain 'dirty' cell edits
- Mods that contain 'wild' cell edits
- Mods that delete references

Mods that contain deleted references are considered too dangerous for use and should be avoided. However, if the description of a mod says 'deleted', it does not necessarily mean that. There is a method to set a reference to 'initially disabled' that will not cause CTD upon load when another mod references it. These mods will need to recompute the precombined references and visibility graph data.

Mods that contain 'dirty' cell edits should have already been cleaned for console use; however, there are new modders and porters that have not yet learned that it is a best modding practice to do so. (Even though it has been considered a best modding practice since The Elder Scrolls IV: Oblivion, there are many contradictory tutorials and sources still available.)

Mods that add new settlements with scrapping functionality usually have rebuilt the optimization system. When in doubt and it is not mentioned in the description, ask the author on their forum thread or in their Discord. Be sure to read all [comments](#) and messages to make sure the author has not already answered the question. Mods that require .ini edits for scrapping mods are considered too dangerous for use and should be avoided.

Load Order Management Challenges

There are significant load order challenges when using certain types of world edit mods, such as scrapping, new settlements, changes to the vanilla landscape or buildings, or even mods that add weapons or armor in containers. Most of these challenges can be overcome by a "less is best" approach when building your framework or simple avoidance of mods we know are problematic.

The primary challenge is that only one set of precombined/previs data can exist per load order, and in most cases, this is the vanilla data. The system is designed to turn off to avoid overlaps and potential errors or invalidated data. Overlaps or meshes invalidated by moving or deleting a reference will disable the system in cells in a 3x3 area around the affected area containing overlapping or erroneous data. Any mod that invalidates or overlaps (e.g. breaks) the precombined references will have a serious impact on overall game performance.

File size considerations

Since precombined references and previs are part of the Optimization System, mods that replace the data instead of not including it will obviously be better overall for game performance, but precombined meshes are very large. A mod with a large number of cell edits could have anywhere from 150 MB to 8 GB of space used depending on what is replaced and how much – such as mods that turn the Commonwealth into a forest. The tools available to mod authors do not have a way to reduce the file size of the precombined meshes.

OPTIMIZATION SYSTEM BEST PRACTICES

Never use a mod that uses the ini setting `bUseCombinedObjects=0`.

This will cripple the current save to the extent of requiring a new game. The developers used this setting during development, but it was never intended for game play. Mods like Scrap Everything - Ultimate Edition use this setting. PC players are advised to not use the setting and regenerate the precombines for your load order if choosing to use this mod. It is impossible to use on console without damaging the save integrity. The meshes are too large for the console to be regenerated.

Never use a mod that uses the ini setting `bPreCulledObjectsEnabled=0`.

It is part of the settings the developers used while creating the game, but it was never intended for game play. If you are not creating mods, then you do not need this setting.

Use due diligence and plan your load order.

There are thousands of mods to choose from. There is no way that a single mod author can test against every conflict possibility and precombined references are mod-specific. It is up to the end player to be

aware of what mods do and how much your system will handle by testing a mod on a throw away character prior to committing to a full playthrough.

Use due diligence with texture replacers.

There are several different ways to change textures on world edits. Unfortunately, one of those ways disables the precombines using a material swap on the reference itself. This is mostly seen on PlayStation because there is no way to change the texture with an external asset. On Xbox there is no way for a player to tell which method a mod uses.

Remember that mods lower in the load order have priority over the top-most mods.

This is especially important for mods that alter cells and affect the optimization. If two mods touch the same cell while the one above rebuilds the system and the one below turns off, the one that is below will turn off the system in the one above. Vice versa, edits within the mod that turns off precombines will not show up if placed above a mod that rebuilds them. Research compatibility patches prior to download.

Know the difference between the precombined references that are currently disabled and formerly disabled.

If a mod author has rebuilt the precombines then the meshes should be included in the BA2 archive. However, if they are included and performance is still an issue, there is either a conflicting mod overriding the cell and re-disabling that cell's visibility data or the mod author may have accidentally re-disabled the visibility data in an update by nudging another item (which is very easy to do, unfortunately).

Use due diligence when downloading a mod by a new modder or porter.

There are hundreds of websites and discord servers and not all modders get their information from official or peer-reviewed sources such as the official Creation Kit wiki, the official Creation Kit mirror on UESP, AFK Discord, BGS Discord, Collective Modding Discord, or xEdit Discord. New modders who have never published on Nexusmods do not have access to the mod-author-only forums and not all information from tests has been published to the official wiki for community use.

Know Your Load Order.

A compatibility patch to the visibility data requires you to know your load order and how the cell edits work together. If you are using a mod that rebuilds precombines and creates a new previs graph for that mod, but are also using another mod that disables the visibility, you cannot use this method. You'll need to optimize the visibility of your entire load order. PC players have access to Previsibines by BenRierimanu. Xbox players also have a smaller version of Previsibines that will fix several key areas.

Never accuse a mod author of hurting your game.

No one sets out to purposely hurt anyone's game, and due to bad information and misunderstanding how the rendering subsystem worked and terrible mod practices (namely not cleaning ITM records or out-right deletions of references) carried over from Skyrim, many cell edit mod authors disabled the visibility subsystem unknowingly and continued to do so until recently. Furthermore, the rendering subsystem does not play well with other cell edits. Conflicts must be mitigated by regenerating the data for the entire load order, which is up to the player. Not the mod author. They do not have the mods you've chosen.

Know if the mod you're using has disabled the previs.

If the mod does not use the above ini settings, you'll need to examine it in xEdit first. You may have to remove any cell ITM (Identical to Masters) references.

Do not use archive invalidation.

Create BA2 Archives for the game to read the visibility data properly. BA2 archives are used by the vanilla game and formatted in a way that increases game stability.

Back up, back up, back up!:

Always make a backup of any plugin you will be making changes to.

More Info:

[Precombined References](#) - technical information from the Creation Kit Wiki

[Why Disabled Precombines Hurt Performance](#) - Sim Settlements explanation

[Understanding precombines, previs and why mods that disable them can cripple game performance](#) - ANDREWCX's explanation

[Precombines, Previs, and Load Order](#) - oddlittleturtle

[Modern Precombines](#) - technical manual on how to build previsibines for your game (PC) and information regarding them

WHAT ARE “SCRIPTED” MODS?

When a mod description refers to a “scripted” mod, it is letting the player know that the mod the player is downloading a mod using the Papyrus scripting language. Some mods, however, do not say they are scripted even if they are, and this can be confusing to a new player – and sometimes even a veteran.

Note: Scripts are not bad things. They are what make Fallout 4 do things. They are only scary if uninstalled and you continue on the same save, or if they are installed incorrectly – or if a new guy hasn’t quite learned the programming language yet. And even then, simply choose a different mod to play with. There are thousands to choose from.

What is Papyrus?

The Papyrus scripting language is the basis of quests. Papyrus is what turns a game object into something that we as players can experience. Base objects are extended with additional properties or behaviors. The developers created the language for Skyrim and then further refined it for Fallout 4. The language focuses on player actions and then responding for specific events in the game.

It also is the force behind many of the complex behaviors in Fallout 4 such as Followers, Survival Mode, Dogmeat’s Behaviors, Legendary Effects, Power Armor Enchantments, Timers, Workshops, Perk Abilities, and Animated Events. These animation events include drinking from the water fountains found around the world, clicking a switch, and the crows flying off when the player comes within range.

More Info:

For those wanting more information about how frames-per-second (FPS) works in Bethesda games, [Myths and Legends: Papyrus Ini Settings](#) is an interesting source of information.

WARNING: Modders should avoid using or making mods with the settings listed in the article. Console frames-per-second is capped at 30 FPS on OG Xbox One, Xbox One S, and Xbox One X.

Papyrus Tweaks is a mod that should be considered dangerous to use as it enables all the settings listed in the article and overloads the Papyrus VM.

[Papyrus](#) - Papyrus Technical Data, Creation Kit Wiki

So What in the World is a “Script”?

A script is just a plain text document compiled into a readable format for the game to interpret and do. New scripts are “external assets” and therefore restricted by SONY.

When a mod adds a script to a vanilla object it stays with that object for the entirety of the playthrough – unless it is poorly implemented or the player hasn't received the proper instructions (or misinterpreted the instructions) on how to install the mod and the script never runs in their game or if it does, does so in a way never intended by the mod author.

More Info:

[External Assets and PlayStation Players](#) - the limitations and restrictions of modding on Playstation 4

Saving and Scripts

A player can hit save at any time, whether it be an automatic save during sleep or opening the Pip-boy or a manual save or quicksave from the main menu. Scripts will pause during the save process and then resume after the save is complete.

So let's say you've got a mod you're tired of playing with and want to remove it, but it is scripted and you've just made a save while that script is paused and waiting to resume. You cannot remove it and continue. Not without going back to before the script was installed on your game. Not everything about a script is baked into a save. The script external asset might be deleted, but that script will still exist on any object it was attached to waiting continue the process for the rest of the whatever was deleted. This can result in the object not functioning like it was supposed to, runtime errors contributing to save bloat, and crashes – some that seem random, some that occur almost immediately after returning to the save.

More Info

[Treat Game Mods as DLC](#)

[Save File Notes](#)

What is Save Bloat and How Do I Avoid It?

What Types of Mods Could Be Scripted Mods?

Any object in the game can be extended with scripting so therefore any mod could be scripted even if it doesn't specifically say so in the mod's description – even on Playstation. Mod authors have access to the full library of vanilla scripts that can be used in their projects, and these scripts are packaged with the game itself and therefore not "external".

Creation Club Virtual Workshop added a new set of "hidden" scripts to the vanilla game that mod authors can use even if the player doesn't have that particular Creation Club creation.

Warning

PlayStation players, especially, should use caution when attempting to disable mods and continuing on the same save because Bethesda never intended for their scripts to be removed and therefore there are no "uninstall" functions for PlayStation. Always return to a save that never had the mod or start fresh.

Notable Types of Scripted Mods

Read the descriptions and look for “script-inject” or “uninstall” in the wording. All mods that have an uninstall function with a holotape or chem or add a holotape or chem will be scripted.

Scripted mods could include the following¹⁰:

- Armors
- Chems and Consumables
- Followers
- Holotapes and terminals
- New Settlements, player homes
- NPCs, Settlers
- Perks
- Power Armor
- Quests
- Radios
- Robot armors
- Survival Mode or survival mode mimicry
- Weapons
- Weather and climates
- Workshop Menus

Perk mods that add new perks to the player do so with a script—either one from Automatron or self-written—or armor enchantments. Once a perk is added to the player it is baked into the save. Armor enchantments that are perks can be removed by unequipping the enchanted item. Armor enchantments include mods that add new legendaries or a buff such as a resistance to ghouls.

Weapons and armors that are scripted—and most are unless they’re hard edits to vanilla forms—have no way to uninstall safely. Console players have no way of knowing if a weapon or armor mod has merged their naming rules with that of vanilla or AWKCR’s ruleset.

Any quest will be 100% scripted and many mods contain quests that are set up as “dummy” quests to simply push a script—such as one that “script-injects”. Mods that add new dialogue or radios are also quest mods. Depending on what the mod with a quest is doing it may not have a safe way to uninstall.

Radios have additional scripted scenes that loop and require hidden NPCs to function. If they are improperly set up or have no additional scripting to loop them, they will shut off after the first scene (which is usually the music play list). There is no way to restart them on consoles but PC players can force a radio quest to restart with console commands.

¹⁰ Almost anything can have a script attached to it or be extended to add new behaviors and properties.

New settlements are complex triggers and keywords with a quest that hooks into the primary settlement system. The workshop object that a player activates in order to build objects within that settlement has persistence in order for the player to be able to view their caravan lines (among other things) in the Pip-boy when they are nowhere near the settlement. There is no safe way to uninstall a new settlement or a mod that uses the settlement system.

Note: New settlements also have a functioning power grid and use the power grid system.

More Info:

[Power Grid Corruption and the Scrap Crash](#)

Script-Injection

When a description says “script-injection”, this means that the mod author has used a script to add new items to the player character, leveled item lists, NPC spawn lists, or workshop menus and formlists.

There are two means of script-injection in Fallout 4. One uses a function called AddForm. This is the most commonly used (examples include: adding settings holotapes or new items to the player character or a leveled item list, adding a new workshop menu, or adding new NPCs at spawn points).

The other uses a function called Merge. This function is only used for weapons and armor mods to update base game instance naming rules of their new gun or armor they’ve added to a leveled item list using AddForm. The instance naming rule list is the list that tells the game what to call a weapon or armor set when you add it to the base weapon or armor piece.

These could be names of linings and materials on armors that will show up at the top of the screen tacked onto the piece you’re modifying. So let’s say the mod you’ve downloaded adds a new chest piece that allows you to craft welded materials and asbestos lining on it and it also adds this chest piece to the level list for raiders. For this example, we’ll say these new materials and lining are totally brand-new to the mod and don’t use the same keywords as vanilla or AWKCR (or another crafting mod). The name, when it spawns, will be Welded Asbesto-lined Chest Piece (or something like that) because the keywords on the new armor mods are script-injected onto the instance naming ruleset list using Merge.

Note: Weapon and Armor mods that have Far Harbor or Nuka-World as a master may have re-used vanilla scripting to merge their naming list so PlayStation players should be aware of the possibility of using a scripted armor or weapon.

Some mods’ descriptions could also include “script-injection” as a way of describing how they’ve added a perk to your character or follower rather than using an armor enchantment (such as a ring or new legendary). In this case, they would be using the function AddPerk.

More Info:

Creation Kit - technical information for the curious.

[AddForm - LeveledItem](#)
[AddForm - FormList](#)
[AddForm - LeveledActor](#)
[AddPerk](#)

Scripted Mods Best Practices

Don't disable/uninstall and continue on the same save.

Bethesda never intended for plugins (either vanilla or mods) to be uninstalled during a playthrough. When saving, scripts pause and then resume after the save is complete. Scripts leave behind operations that could still run in a very fragmented, broken way. Because of really bad modding practices in the community, mod authors were forced to implement “uninstall” features in their mods.

Furthermore, the Creation Engine and how it indexes the unique PRIDs of each playthrough is not designed for plugins to be turned off in the middle. These PRIDs are recycled if uninstalled, creating a timebomb if they return “None” when the original save thinks there’s supposed to be something there.

More Info

[Power Grid Corruption and the Scrap Crash](#)
[Save File Notes](#)

Know when to install a script-injection mod.

Some older scripted mods are implemented poorly and script-inject items onto the player at the wrong time during the prologue. These mods should be avoided until the author can fix them. A lot of mods come with a craftable holotape, chem, or aid item in case papyrus backs up during start-up.

Know when to update.

It is better to wait for the next playthrough with a fresh character to update a mod. As a general rule of thumb, only update scripted mods during a playthrough if they contain a holotape that re-initializes the script. Not reinitializing a script could result in a script malfunctioning during gameplay. Without debug functions to reset a script, this is very problematic on consoles.

Warning

Some mod authors suggest using a ‘clean save’ to reinitialize the scripting, however this is a bad modding practice of poorly implemented scripting and not recommended.

Keep in mind that not everyone has the same skill set, and there are very bad tutorials out there.

More Info:

[How Do I Update a Mod Using the In-game Mod Manager?](#)
[What is the difference between a vanilla save and clean save?](#)

Know the various types of scripted mods.

Chems and Aid Items - Some Mods come with chems or aid items to be built in the Chemistry Station. Read the directions for use prior to using them. Some will uninstall the Mod from your game and will need to be uninstalled and reinstalled from your load order to function properly again. This is not a safe practice.

Settings Holotapes - Read all documentation when mods come with holotapes. Some mods require using the holotape to turn off the script in order to remove the mod. Some are only settings and do not have an uninstall feature at all. Mods like Cheat Terminal add the mod to the player character when you first open the Pipboy.

Leveled Item Lists - Once you install a scripted level list mod, do not uninstall it in the middle of a playthrough. It will permanently break the level list(s) it edits. As a general rule of thumb, install level list altering mods at the start of a new game. Certain level lists are only called once per playthrough. If you install mid-play, the level list may not be altered properly and either will not work or cause issues later in the play through.

Warning

These types of mods generally do not come with an uninstaller because there is no safe way to uninstall on console due to the limitations of Papyrus. This is a limitation, not a mod author error.

Leveled Actor Lists - Once you install a scripted level actor list, do not uninstall in the middle of a playthrough. These NPC spawn lists will permanently break. Leveled Actor Lists have no uninstall but a function called Revert – which can break any other mod that script-injects its NPCs into the same list as the mod you want to uninstall. As a general rule of thumb, install leveled actor lists at the start of a new game. Certain lists will be called once per playthrough and each enemy spawn point in the game has a turf controller that controls enemy AI. Both installing and uninstalling mid-play could cause oddities with enemy spawns.

Form Lists - The same applies to form lists as it does to leveled lists. Formlists permanently break if objects are not removed from them before uninstalling. Workshop menus are formlists, but there are other lists such as lists of voice types for robots or master AI package lists. *Settlement Menu Manager* provides a safe method of installing a menu via scripts. It also provides a holotape to attempt to save menus that are broken if a mod is accidentally uninstalled. See SMM's mod page on both Nexusmods.com and Bethesda.net for more information.

Perks - Do not uninstall in the middle of a playthrough. Perks are commonly attached to the player character or other actors similarly to magic effects. While perk script fragments are discouraged for use unless absolutely necessary, there may be a mod that requires such a practice in order to function.

Warning

Mods with too many perk fragments can overload the Papyrus engine as most perk entries except “Activate” fire faster and with little regard to everything else. This is both a limitation and a mod author error; however, there is little official documentation on the subject so can happen quite easily, especially on console, where the graphics engine takes precedence over the Papyrus engine. It is up to the player to test mods prior to including them into their load order.

Quests - All scripts run through the quest system, and if the quest is pushed by the Story Manager or adds new objects or NPCs to the world, there is no way to safely remove that mod at all. Dummy quests are those with just a script for script injection or mod maintenance purposes. Dialogue quests add new dialogues to vanilla NPCs or new NPCs. New followers will have several sets of quests running simultaneously to hook into the Followers System. New quests can be those that add objectives for the player to do during gameplay. Most new quests function better near the end of your load order. Some of those quest mods also come with a holotape that players will need to use to turn off the script when not in use.

Workshop/Settlement Building Mods - Many settlement workshop mods add menus by way of script injection and come equipped with either a holotape or a chem to be built in the Chemistry Station. Many also require Settlement Menu Manager. This requirement is a scripted hook that look for SMM in your load order.

Note: Some building mods add new lights, light switches, or other objects that hook into the power grid system. Read all documentation prior to installing as uninstalling could lead to power grid corruption.

Warning

Disabling a scripted workshop mod without first uninstalling in-game can seriously damage your save and workshop menu. Read the mod description on where to find the chem or holotape and follow the mod author’s instructions if you need to uninstall the mod for any reason. The workshop menu is a form list of keywords and other form lists.

WHAT IS “SAVE BLOAT” AND HOW DO I AVOID IT?

What is Save Bloat

First of all, *what is it?* "Save bloat" is a term used to define runtime errors with Fallout 4's Papyrus scripting system and engine-level issues with unoptimized code. Save bloat occurs when the save gets padded by these errors. The file size keeps expanding until you've run out of room to save. On consoles, there is limited space for saves.

These errors can happen for a number of reasons such as installing or uninstalling mods in the middle of the playthrough, installing a mod that does not have the most optimized code (not everyone is a programmer), or worse, unintstalling that poorly implemented mod and stripping the script from the save but leaving the bits behind looking for that script and failing. Each time that script fragment attempts to look for the stripped code, it returns an error. Depending on how many errors that stripped script has caused in your save and how long you've played, it could lead to not being able to save after a while. You will more than likely encounter other more agregious bugs and errors if continuing to play on such a save.

Runtime errors can also happen on an unmodded save if a script slows while frames have dropped. (It's very rare.)

The term can also be applied to using up all the save space while scrum saving.

How To Avoid Save Bloat

Uninstalling and installing mods in the middle of the playthrough are two of the leading reasons behind save bloat. There are also mods with poorly implemented code that could lead to problems; however, they will not generate as many errors as stripping a scripted mod from the save.

By planning your load order and not touching things until you're done with your save, you can save yourself some trouble.

Other tips for saving:

1. Auto-saves are the bane of modding. They're great for normal play but we only have 3. These overwrite each other. If a save is overwritten and you find yourself needing to return to a previous save, it is very problematic.
2. Quick saves are also the bane of modding. You only get one and it will be overwritten the next time you make a quick save. It's great for fast saves, but problematic if you boo-bood and need to return to a save.
3. Scrum saving is both good and bad. Scrum saving can make it look like you've got save bloat simply because of the amount of saves you've got. Make sure to create manual saves (only keep about 5-10 per character) but keep in mind that for console, you do have a limit of how many you can save overall (Microsoft and Bethesda have not released the figure as of this writing). There may or may not be a limit

for PC Game Pass. We work on the assumption that Xbox has 2 GB of space for saves, but it may only be 1 GB, the same as PS5.

How do I fix "save bloat" if it occurs?

If you are seeing this on a regular basis, something is very wrong with your game. It may or may not be mod-related. On PC, it could be your virus protection service stopping the game from running as it should. On console, something as innocent as a firmware or OS update could have done something wonky behind the scenes.

It is recommended to manually delete all saves and reinstall the game. Start all saves from scratch if this has happened at seemingly random. Save bloat is actually quite rare. PC players should probably look into using Buffout 4 to fix engine issues and the crash auto-scanner.

Warning

Never unintstall scripted mods in the middle of a game and continue on the same save. ALWAYS revert to a save before you installed it.

INTERIOR CELL NAVCUT BUG AND LOAD ORDERS

Understanding Navmesh, NPC Pathing, and Navcutting

The function of Navmesh is to define the path where an NPC (called an Actor) can walk, run, attack, or conduct its primary sandboxing functions, such as sleeping, eating, and interacting with objects in a pre-determined radius around that NPC. It is a 3D object with the primary purpose of providing AI with navigational details within the 3D space. The word “Navmesh” is a portmanteau of navigation and mesh (meaning the 3D object).

Dynamic navmesh is new to Fallout 4 and occurs only in cells that are flagged in the Creation Kit as Workshop. This allows player-placed objects to interact with the navmesh and cut holes so that NPCs won't attempt to travel through the player-placed object but will instead walk around it. The word “Navcut” is a portmanteau of navigation and cut or cutting the hole. Navcutting is not unique to Fallout 4 and is present in other BGS games. Only now, in Workshops, it's supposed to be dynamic and player-placed.

Supposed to be. There appears to be a bug discovered by kinggath, the mod developer of Sim Settlements, that affects the navmesh around all settlement objects, not just within interior workshops such as Home Plate and Vault 88, but in all interior cells at the same 3D spatial coordinates as the player-placed object in another interior cell.

How The Bug Happens and How It Can Affect Gameplay

When a settlement object is placed, it does so with a bounding box in the basic shape of the object to cut the hole in the navmesh. This is supposed to be unique to locations flagged by a mod or by the base game as Workshops, and it is supposed to be unique to each interior location. The unfortunate matter is that there is a missing code check at the engine level and that missing check causes all player-placed navcuts to persist across all interior cells, including mods, Creation Club, and the vanilla game and DLCs.

Note: This unique feature won't happen with, say, spawned workbenches from Cheat Terminal. Those types of objects aren't registered by the game as designated navcutters, even if they are spawned in a settlement.

If an NPC cannot travel correctly to a marker or trigger to advance a quest, it could be detrimental to the save, leaving the player unable to complete quests, especially if the cell does not dump its data upon quitting the game and reloading the cell.

How The Bug Affects Mod Choices for Load Orders

Interior Settlement mods have to have a unique set of coordinates for each of those interiors per load order to avoid interference with other interior mods (regardless of Workshop flagging) and the base game interiors. That's right. Per Load Order.

So, just as with Addon Nodes, HumanRace, and Precombines, we can only have one set of interior workshop coordinates that do not share the same spacial coordinates of another interior workshop cell.

Now here is another problem on top of that: cell dimensional limitations. Interiors are limited to the coordinate range of -32767 to 32768. That sounds like a lot until you add several very large interiors with the base game, the DLCs, and all of the Creation Club Creations. Even if there were a community effort to coordinate between all the coordinates, you've got a finite amount of space everything can take up.

If you have questions about an interior workshop cell mod, please ask the mod author for the coordinates or ask us on the [Parent Server](#).

Prevention and How to Fix

Important

It is **never advised** to update a mod in the middle of a playthrough, regardless of what platform you play on and regardless of so-called engine fix mods, especially if those mods add persistent objects like scripted objects, hand-placed enemy spawns, interior workshop containers, new settlements or settlers, quests on a Story Manager node, trigger boxes, markers, load doors, NPC bedding, etc. An engine fix isn't going to update a persistent reference on your game save.

There currently is no engine-level fix for Xbox or PlayStation. Players can, however, take preventative measures by observing good downloading and save management practices. Because there is a lot of panic in the modding community due to this bug, a mod author may attempt to move their cell coordinates so their mod remains unique. Cell data updates usually require new games in order to see any changes to that cell. Only objects that are not persistent will move and the navcut that will be affecting all cells is considered persistent.

Warning

Moving powered objects requires F4SE functions. Consoles do not have F4SE. Do not update new settlements in the middle of a game to prevent the Scrap Crash from occurring.

More Info:

[Power Grid Corruption](#)

While it will not help Vault 88 or Home Plate – those should be fixed officially by Bethesda – prevention is quite simple. Only choose one interior cell mod if you're going to use interior mods and limit what you build in Home Plate and Vault 88. The current method of playing is to choose between a building load order and a questing load order. It makes things much simpler and load order management is much easier.

PC Considerations

Players on PC can attempt to use Interior Navcut Fix to see if it will resolve the problem. This is an engine-level fix that requires F4SE. New games will be required due to the persistence issue described above if currently playing. Other than that, taking preventative measures by observing good downloading and save management practices is key to good load order management. Make note of all workshop mod spatial coordinates in xEdit prior to enabling on an ongoing save or even a new one.

Warning

Interior Navcut Engine Fix requires a plugin that may or may not be updated in the future. Relying solely upon it and not using best practices when downloading is ill-advised. There will be a future update to the game to include new Creation Club and any F4SE plugins that are no longer within a development cycle will need to be retired from load orders just as the mod authors have retired.

Navcut Bug Best Practices

Observe good save management practices. Before entering any interior, make a hard save. This is in case you have to revert. It not only will help you take preventative measures for this but will save you steps in the event of some other event failing.

Observe good download practices. Read the descriptions and use the Framework to make a determination of load order. You only need one interior mod on your framework if you're going to play with interiors.

Determine your playthrough before downloading. [Build your Framework](#). That is what this guide is about. Determine beforehand if you are playing questing, building, or exploring and build your load order around your pre-determined playstyle. Choose only one interior mod and expect navmesh issues in Vault 88 and Home Plate.

Do not update a mod with persistence in the middle of your game. Most cell updates require new games in order to prevent other bugs, other navmesh issues, and problematic persistent objects. If save-quit-reload does not unload the cell properly and quests cannot be completed due to either building an object in the same spot as a quest object or overbuilding your interior settlement, consider restarting on a fresh character.

Reload a previous save. If you find a cell that had loaded data and your companion is not pathing correctly, you can try to reload the cell by dumping all the data. It is a similar process to clearing the system cache. Saving, quitting the game completely, and reloading the save will unload cell data, but do

note that it may require a cache clearance to completely finish the process. Power cycle your Xbox and follow cache clearance guidelines from Sony for PlayStation.

Avoid Quick Resume. Quick Resume can break the unloading process on Xbox. If PlayStation has a similar feature, make sure it is not interfering with the unloading process.

Help mod authors. Not everyone hangs out on Reddit or other forums. If you'd like to participate in active discussions on the matter with mod authors to assist the modding community, join us on the [Parent Server](#) or join Collective Modding where the discussions are actively taking place. More information is needed from PlayStation users, but Xbox users should join as well.

Mod Authors and Porters

Until Bethesda provides a fix, mod authors of interior cells and workshops who port their work to Bethesda.net are encouraged to provide the cell co-ordinates in the description of their ports so that players without access to tools such as xEdit or the Creation Kit will have the basic information to make a load order determination.

How to Test for The Bug on Your Game Save

- Start a new test character, or use one that hasn't built anything but has Home Plate available as a player home.
- Grab a companion, any will do, and travel to Vault 111. Proceed to the original room where your player was trapped in the Cryo Pod. At the back of that room is a raised platform. This corresponds with the same spatial coordinates as the red door in Home Plate. Direct the companion to walk on the platform. They should be able to.
- Now go add a bunch of objects around the red door in Home Plate. Cover as much of the area as you can.
- Return to Vault 111 with your companion and direct them to walk on the platform. Note that your companion is now having pathing issues, and probably will not be able to travel correctly or as cleanly as they did before you crammed a bunch of junk around the Home Plate door.

More Info:

[Interior Cell Navcut Bug](#) - Independent Fallout Wiki

[Major New Fallout 4 Bug Discovered: Shared Interior Cell Navcutting](#) - Kinggath

[EngineFixesF4](#) - Deweh

[Interior Navcut Fix F4SE Plugin](#) - Snapdragon

WEAPONS, LEVELED ITEM LISTS, LEVELED ACTOR LISTS, AND GAME ENGINE LIMITATIONS

Downtown is rife with spawn points that, when overloaded with high-poly weapons or armor mods or even new NPCs, will cause problems. Just as the amount of plugins the game can load is 255 (on PC), the amount of forms in the level lists for all BGS games using the same engine is 255. Once a level list has hit this limit, it effectively breaks the game. Each enemy spawn point has a table it references called an array that holds enemy spawns. This array has a hard-coded limit of holding 128 entries. Once this array hits the limit, it breaks the AI for the enemy spawn point and quite possibly the game.

Note: There is a way to extend this limit called a nested array; however, extending takes longer for the game to process. As of this writing, there are no known mods that extend this spawn limit. Generally nested arrays are used for formlists (such as Settlement Menu Manager), leveled item lists (such as most script-injected weapons and armors), and the workshops (such as Sim Settlements 2).

Many weapon and armor mods use a common resource script by `A_Blind_Man` that script-injects their objects into the wrong lists. Additionally, the script itself may or may not be optimized, depending on which version was used by either the OMA or porter. Nested arrays with undeclared lengths take longer to cycle through. There is no way to know on console if the script injection will add to the process time of entering a cell and there is no way to know if those weapons have been injected into the correct level lists.

Always make a test character and go to several spawn points with Gunners, Raiders, and enemies with pistols and shotguns — those seem to be the lists that have the most errors.

Keep in mind that no mod author purposely sets out to hurt anyone's game. There are a number of mods that were ported (and subsequently abandoned) by porters who only wanted to have fun on their Xbox, and simply shared with everyone.

Weapons

All weapons are built dynamically drawing from multiple resources within the game engine. There are many pieces built on top of a “dummy” form with each piece added determined by the engine by a set of keywords that are connected to each system.

Leveled List Best Practices

Know the limits.

There is a hard-coded limit of 255 entries of leveled item lists and a hard-coded limit of 128 entries to enemy spawn points. This includes scripted- and Creation Kit-defined entries. There is no official documentation on how much a leveled actor list can hold; however, given that downtown has a tendency to buckle when too many spawns occur, a “less is best” approach to adding NPCs is advised.

Warning

Hitting the 255 limit BREAKS THE GAME. Do not pass go, do not collect \$200. Game breaks. Do NOT use mods that do not stop the quest and continually add weapons at start-up.

More Info:

[AddForm - LeveledItem - Notes](#)

[Creating Arrays](#)

Plan your load order around the limits.

Don't cram a bunch of weapons, armors, and NPCs mods in your load order and expect them all to spawn correctly if they hit the limit. You only need one or two weapons and armors. You do not need them ALL.

More Info:

[Before You Download](#)

Be aware of keyword mismatch crashing.

Mods that do not match the appropriate keywords to the appropriate workbench keyword will cause a crash at the workbench. If those same keywords are incorrectly used on the object template or object mod form, they could lead to crashing when the game engine calculates the results of a leveled item list roll.

Know what level lists are doing what.

Pipe weapons are used for several "factions". Script injection into the wrong level list could cause the wrong type of weapon to appear on the wrong faction or double up weapons.

More Info:

[Script-Injection](#)

POWER GRID CORRUPTION AND THE "SCRAP CRASH"

Power and lighting is, in some cases, necessary for building a creative-looking settlement. Every builder has their own style and own preferences. All powered items such as lights, connectors, generators, vault pieces, wires, power armor displays, the workshop container itself, *et cetera* are all connected to the workshop power grid. When a powered object is incorrectly removed and bypasses the game engine's coding for removal in workshop mode, corruption of that power grid occurs.

The power grid entry for that object is orphaned but still references it even though it is no longer there. These orphaned entries accumulate over time if improper scrapping or modding practices are used and are regarded as ticking time bombs. Even one is considered a ticking time bomb. As each PRID is

generated by the game as you build more objects for your settlements, it recycles IDs that are no longer in use. The more orphaned grid entries you have, the greater the chances the game will choose one of those deleted entries and cause the game to crash. This can happen when storing or scrapping (thus “scrap crash”), or it can occur when you attempt to use the object - move, wire up, even build the object - in workshop mode.

How It Happens

Bad Modding Practice

Uninstalling a mod in the middle of a playthrough with the intention of continuing on the same save without first scrapping or otherwise deleting all objects added by that mod.

Poorly Implemented Papyrus Code

Papyrus scripts cannot add or remove an item from the power grid. It can, however, delete an object and bypass the code and leave an orphaned entry behind.

Scripted Deletion of Objects

On PC, players have access to the debug functions to mark items for deletion or disable an object. On Xbox, players have access to Place Anywhere to temporarily disable objects while building. There are also mods that while aren't necessarily scripted poorly, deletes an object and bypasses the removal code.

Prevention

Use good modding practices.

Manually scrap everything from a settlement mod if you need to uninstall it for any reason. Keep in mind that the developers never intended for mods to be uninstalled from a save, and it's always a good idea to either start a new game or go back to a save prior to installing/enabling a mod you want to remove.

Use due diligence and test mods prior to adding them to your main save.

New programmers to the Papyrus code may not understand that scripts cannot add or remove an item from the power grid. Unfortunately, one of the primary reference tools for modding, the Creation Kit wiki, gives very little information about how the power grid works. We all begin somewhere, and this is not the fault of any new mod author who wants to share their work with you. It is up to you to test mods prior to adding them to your main save and help others by letting the new mod author know about any bugs you encounter by giving as much detail as possible and being polite in the process.

Always manually scrap.

Do not use MarkForDelete or Disable console commands on powered objects. Using debug functions while playing the game is a bad practice in general. When using Place Anywhere on Xbox, do not use it to disable powered objects. Avoid mods that do the scrapping for you (ones that add a holotape or MCM command).

Repairing the Corruption

If the corruption has already occurred in your save on console, prevention will not help. You will only be able to start a new game.

F4SE players now have access to Power Grid Tools by Registrator2000 and Kinggath. Kinggath also patched in a prevention method into Sim Settlements and Workshop Framework if you use those mods.

More Info:

For more information about the Scrap Crash, you can read more about it [here](#) and [here](#).

TEST CHARACTERS AND YOU - WHY THEY MATTER

PLAYING VERSES TESTING

It is highly recommended that before adding any mod to your main save, you test it with a throw-away character. *Why?*

The game engine is not set up to uninstall a mod during gameplay and some mods will leave pieces of themselves in the save that could potentially cause you problems after a while. This is especially true of scripted mods that add persistent references and properties that are not set to “const”, such as with mods that add holotapes for players to customize their game. As there is no way to tell on console without downloading the source code from a source other than Bethesda.net, testing is an essential practice.

Best Practices While Testing Mods

No autosave or exit save.

Turn all autosaves off in the Gameplay Settings menu. When exiting the game, go to a different cell first so that when you re-enter the game, the data will load in properly. Then exit by opening the pipboy first. You'll be able to keep up with saves more easily if you manually save each time. Exit save is overwritten each time you use it. The game only stores three (3) autosaves.

No quicksave.

While quicksave is fine on un-modded play, the save file may not catch any modifications to certain things and create a bug that wouldn't be there otherwise. There is some debate about this, but it is still recommended to use hard saves only when testing. Quicksave is overwritten the next time you use it. By not using Quicksave, you lessen your chances of accidentally overwriting something important.

Know when to enable a mod.

Any mod can be scripted and some scripts will not run if a save has already been made prior to installing the mod. A mod can seem like it was poorly implemented if installed at the wrong time.

Test one at a time.

You need to know what a mod does in its vanilla state before you can add others.

Back up your test character.

Save your vanilla test character to a flashdrive (For PS4 PSN account holders, you can save a test character to the cloud.) This option is not available to Xbox players. You only have the option of automatic cloud saving.

Make your test character with hard saves at several different points in the playthrough.

How to Create a “Throw-Away” Test Character (PS4 and Xbox)

1. Play through the Prologue on an un-modded character. When you reach the point in the prologue where you are given a chance to name your character, name it TEST.
2. Continue to play until you reach the point where you receive the pipboy.
3. Make a hard save. Make a note of it for future reference.
4. Continue playing and exit the vault.
5. Let the pop-ups play through, then make a hard save. Make a note of it for future reference.
6. Continue playing until you reach Sanctuary and open the Sanctuary workshop.
7. Make a hard save. Make a note of it for future reference.
8. Delete any other save files but these three.

If you need a higher level character in which to test mods:

1. Install Freemaker by AndrewCX (do NOT enable any other mods) using the instructions in Adding a Mod
2. Build the Daddy-O Extreme chem in the chemistry workbench
3. Build shipments of wood and steel in the chemistry workbench
4. Take the Daddy-O Extreme chem
5. Open the Sanctuary workshop and build wood or metal prefabs - doesn't matter where or how, this is just a test character - until you've reached the level needed for the test
6. Make a hard save. Make a note of it for future reference.
7. Enable the mod you want to test. (Do not use Exit Save when returning to the main menu.)

How to Create a “Throw-Away” Test Character (Modded Xbox and PC)¹¹

You will need the mod Cheat Terminal for this method. Save it to your favorites or your library on Bethnet for easy access in the mod menu on your Xbox. This method creates a new save file for your character.

Do not, under any circumstances, use any of the ‘cheats’ for any type of testing and any bugs found during this type of test are invalid. It is usually better to use the method above for a completely thorough test.

Warning

Some mods conflict with Cheat Terminal's scripting, such as Craft Armor and Craft Weapons by Whisper/Baronicyardiff which produce infinite loops that will crash your game when using both and using the ‘Infinite Items’ cheat.

1. Playthrough the Prologue and exit Vault 111 on an un-modded character.

¹¹ 10-17-2020: This method is no longer supported. There are now mods available that produce script conflicts to the extent of game crashes. Use a vanilla character to create your first hard save just after the mirror. Wait 30 seconds, create a second hard save. Wait 30 seconds, create a third hard save. You now have 3 characters to return to for mod testing.

- a. Or start from any point on an un-modded character if you want the character to be higher level than level 1 (you will have to adjust the SPECIALs, see below).
2. Make a hard save. Open the Pip-boy and exit to the main menu. Do not make an exit save.
3. Install Cheat Terminal using the download instructions listed below.
 - a. Do NOT enable any other mods.
 - b. If you are already using mods and want to test other mods with them, you may use the instructions below on your modded character; however this method is for making a clean save character on which to enable mods.
4. On your Pipboy, scroll to INV > MISC > Cheat Terminal Portable
5. In the Cheat Terminal Menus: [Game Alterations] > [Player Manipulation] > [Change Name]
6. Rename your character to TEST or something similar to be able to easily distinguish your test character from the others.
 - a. NOTE: If you do not do this directly after exiting Vault 111 (that is, your character is level 1), you will have to adjust the SPECIAL points allocated to bring them down to 28. Press Y to Reset the points.
7. Close the Pipboy.
8. Press X to Accept.
9. Press the menu button to call up your save options and make a new Save.
10. You now have a new character file to test with.
11. You can now use Cheat Terminal to adjust your character's SPECIALs, perks and level and turn on God Mode (if needed) and enable any other functions for testing new mods. Make a new save after doing so, re-open your Pip-boy and exit to the main menu.
 - a. NOTE: For testing purposes, turn off auto-save functions in the Settings menu, delete any Exit Saves, and do not re-load Exit Saves or any Auto Saves.

If you need any information on using this method, please see the Parent Server.

SOFTWARE "BUGS" AND YOU

What is a "bug"?

A "bug" simply is unexpected behavior in a piece of software. It can occur for many reasons such as unexpected runtime errors, developer error, or player error.

The only true way to find out if the mod you are using has a "bug" in it is to test it alone on a clean vanilla save to find out what it does, and if it is doing what the description says that it does. Do not trust the words of others.

Is Fallout 4 itself "bugged"?

Simple answer: There are some things that could be better implemented and some quests on PS4 have a tendency to fail.

Complex answer: It depends on your definition of bug. If it is behaving unexpectedly, yes. There are several bug fix mods, one of which is a larger-sized community-reported bug fix mod called the Unofficial Fallout 4 Patch that is the most comprehensive.

Here is a list of [known bugs](#).

SOFTWARE BUG: Archive2, the program that ships with the Creation Kit, contains a bug that will corrupt cubemaps if extracted with the program. IceStormNG has provided a fix for PC players on Collective Modding Discord. See [Useful Links](#).

More Info:

See Poet's list of [Important Patches & Fixes for Fallout 4](#)

These are community-created patches and fixes and not all are available across all platforms either due to scripting limitations on PlayStation or requiring F4SE. A staple of load orders for stability should be the Unofficial Patch, which is maintained by the Unofficial Patch Team. (It is also a requirement of Workshop Framework.)

How to Submit a Bug Report to a Mod Author

Bug Reporting Best Practices

Do not use Cheats, Console Commands, or Cheat Mods play tests as definitive guides for bug reports.

These types of things have a tendency to *produce* bugs and so any play tests with them enabled cannot be trusted.

It only takes one.

If you see that there is already a report for the same issue, there is no need to submit another one. You only waste both your time and the author's. Mod authors are hobbyists who do things in their spare time and some only offer their mods as-is where-is and do not provide support after uploading.

Exhaust all other troubleshooting methods.

How many times were you able to reproduce the problem? Have you cleared your cache?

Know that you are not experiencing a mod conflict or override.

Double check that what you are experiencing is not a conflict with another mod. Test the mod by itself on a clean vanilla save.

Know that no mod author sets out to hurt anyone's game.

They are people and fans of the game they've made the game modification for. Most 'bugs' are due to player errors and usually load order conflicts.

Be as detailed as possible.

If the issue is reproduced identically each time, then let the author know about it on their bug reporting form. Check descriptions of mods on Bethesda.net to confirm where that is. Keep in mind, they must be able to reproduce the issue on their PC if they do not have a console. If they cannot, then there is nothing to be done. “Working” load orders are defined as “playable”.

[Bug Reporting Template](#) - If a bug is not fully tested or documented, no one can fix it.

[Unofficial Patch Bug Tracker](#) - The Unofficial Patch is a community project. If it isn't documented, report it. Also report unexpected behaviors in the patch itself. Also keep in mind when reporting to the Unofficial Patch Team that anyone can respond. The team believes in community effort. If someone happens to say, “wait for a team member” or something to the effect, it is more than likely not a patch team member responding but another helpful member of the community. [Here](#) is a list of the current UFO4P contributors.

How to Submit a Bug Report to Bethesda

If you've encountered an unexpected behavior that is vanilla, you can help the developers by reporting it to them on the Bethesda Support site. As of this writing, there are six categories to choose from to submit an issue. You can also use their feedback form to let them know how much you enjoyed their game.

No mods must be installed.

While Bethesda is very open to the modding community - they have provided us with the means to mod their game, after all – they do not provide technical support for mods. You will have to ask a mod author or join us on the Parent Thread if you have any mod-related issues.

Exhaust all other troubleshooting methods.

How many times were you able to reproduce the problem? Have you cleared your cache?

Creation Club is not mods.

Creation Club creations are DLC. Some were created by contracted creators that are also part of the modding community. Bethesda has a history of hiring mod authors. You can submit any issues with CCC to the Bethesda Support site.

Be detailed.

Let them know what the expected behavior was and let them know what the behavior currently is.

[Bethesda Feedback Support Site](#) - Choose a category and fill out the form with as much detail as possible so that the development team can look at the problem.

Above all, be polite.

PS4 0kb Issue Troubleshooting¹²

The 0kb issue is not a new issue. It has been around for quite some time and happens to games other than those published by Bethesda Game Studios. The issue seemed to increase around the time of PS4 update 5.05 or so, and the amount of Creation Club content downloaded seems to increase the likelihood of occurrence.

How It Happens

It is not currently known how or why the 0kb happens; however, Bethesda claims to have fixed an occurrence of the 0kb problem for Skyrim's latest version of the game when bulk-downloading Creation Club content. Unfortunately, Fallout 4 does not have an update to remove the auto-start on the content.

Possible Software Conflict. There may be some kind of conflict between the OS and the game that did not happen on a regular basis prior to PS4 update 5.05 sometime in October of 2017. There was already a randomness to it on Bethesda games as well as other games but as of October 2017, more and more PS players posted to the Bethesda forums about it.

Overloaded Video Card. Other reasons that may be causing it include an update that allowed the system to run for longer periods of time without cache clearance and possibly bloating saves. Before January 2018, saves would simply crash if the cache got too full and would display subtle warning signs when it was time to stop and clear the cache.

Too Many Mods. The amount of mods that players can play with was reduced for an unknown reason by the developers. While this may seem “unfun”, this reduction is there for a reason even though as players we do not know what that reason is. Plan your load order and build your character and how you want to play before downloading mods.

Too Many Creation Club Items. Armor and weapon skins Creation Club items seem to increase the likelihood of the error occurring. The packs you can purchase are not “all-in-ones”, they are individual plugins. There is also the issue of having to reinstall the game in order to remove Creation Club so planning is essential for PS4 players.

More Info:

[Creation Club](#)

Prevention

Plan Your Playthrough. Unfortunately downloading a bunch of Creation Club content prior to starting the game increases the chances of the 0kb error of occurring so it is recommended not to download too

¹² 1-18-22: Please use the link until this section is completed.

many and to plan your game. Because PS4 does not have a reserve space to clear the new content, the game must be reinstalled each time you play. You can create multiple tabs for yourself on the Framework template and to give yourself a handy multi-character worksheet. You can then decide what to install for each of your character builds.

Take Frequent Breaks from Gaming. The PS4 does not notify the player when the video card has reached capacity. Taking frequent breaks to clear the cache will help to prevent issues.

Use Proper PS4 Maintenance. The 0kb Problem-solving Thread has five steps. The first step is to teach you proper PS4 maintenance and to give you a guide to find the problematic save.

Turn off Auto-Upload. Players with PS Plus accounts are encouraged to turn off Auto-Upload during the troubleshooting process and while playing with mods. During the troubleshooting process, *ALL saves will appear corrupted* if the Auto-Upload option remains on as the system will continue to upload saves regardless of corruption.

Troubleshooting Your Saves

There are five steps to troubleshooting the PS4 0kb Issue. These steps are a guide outlined by Desslock2870 and Edfitz1 to help you solve this issue. It is not recommended to take shortcuts. The first step is outlined here. For steps 2 - 5, please see Desslock2870's thread on the Bethesda forums.

Step 1: Start here. The maintenance basics for preventative measures against the issue

Step 2: Mod checking. Check your mods to ensure they are not the cause

Step 3: New Saves Not working. If you've completed Step 1 and saves still don't work.

Step 4: Last Resort. Nothing is working, try this step.

Step 5: Absolutely nothing is working and no mods are installed.

PS Plus Accounts: Turn off Auto-Upload prior to doing the steps outlined below. *ALL saves will appear corrupted* if this option remains on as the system will upload a save whether it is corrupted or not.

Settings > Application Saved Data Management > Uncheck Auto-Upload

Step 1

Step one is the "Maintenance Basics" to give you preventative measures to help avoid the error in the future.

Troubleshoot Your Saves and Create a New Save Folder

The most recent save and possibly the save before is a corrupted file. When the prompt is generated, these files will sometimes appear in System Storage after you close the game but may not have a thumbnail. These saves have to be deleted from both System Storage and Online Storage (if applicable).

Maintenance Routine

You will need a thumb drive or external storage drive. To use this feature, you will need to have signed on to the PS Network at least once. FAT and exFAT formatted USB devices are supported. When a USB Storage Device is connected to your PS4, Extended Storage will appear in the menu under Settings > Storage.

Backup Your Saves

1. Navigate to System Storage. Settings > Application Saved Data Management > Saved Data in System Storage
2. Copy all Saves you wish to keep to USB Storage Device
3. Navigate to the Home Screen > Select Capture Gallery
4. Copy all screenshots and video captures to USB Storage Device.
5. Delete screenshots and video captures from Capture Gallery

Delete the Fallout 4 Save Folder

1. Navigate back to System Storage
2. Delete Save Folder from Fallout 4.

Settings > Application Saved Data Management > Saved Data in System Storage > Delete > Options > Multiple Applications > Fallout 4 > Delete

Power Cycle Console

This is also called a full reboot, hard reset, or cold restart.

1. Press and hold the power button in front of the PS4 for about 7 to 10 seconds until Secondary Beep occurs. Allow the system to power down.
2. When the light stops blinking, unplug the PS4 from outlet.
3. Leave the system unplugged for at least one minute.

Rebuild the Database by Booting up into Safe Mode

The PS4 must be completely shut down (not in Rest Mode) to boot up into Safe Mode. Rebuilding the database does not take long, usually less than a minute, but could possibly take longer if it is the first time the database has been rebuilt.

1. Press and hold Power button in front of PS4 about 7 to 10 seconds until Secondary Beep occurs and release button.
2. Follow the directions on screen. Use the charging cable to plug in the controller and press the PS Button.
3. Select Rebuild Database.

Cache Clearance

Power down PS4. Power > Power Options >

When the light stops blinking, unplug the PS4 and wait between 5 to 15 minutes.

Restart Game and Rebuild Save Folder

1. Power system back up
2. Start Fallout 4 to create a new save folder and adjust settings to your preferences
3. Close game.

Option 1: Tap PS4 Button > Home Screen > Highlight Fallout 4 > Options > Close Application

OR

Option 2: Press and Hold PS4 Button > Quick Menu > Close Application

Find a Working Save

You will need to find a working save from your Backups that you created in an earlier step. This is a 'rinse and repeat' task until you find a save that works.

1. Navigate to USB Storage Device
2. Download the save you wish to test to System Storage
3. Start Fallout 4 and Load the only save listed.
4. If the save does not work, return to [Delete the Fallout 4 Save Folder](#) and repeat all steps again.

More Info:

See [0kb Problem Solving Thread](#) for more information and Steps 2-5.

See [Playstation 4 User's Guide](#) for more information.

See [Creation Club](#) for more information.

SURVIVAL MODE TROUBLESHOOTING

This bookmarked section has a shortened URL for linking convenience for discussion:

<https://tinyurl.com/FO4SurvivalModeIssues>

There are two known issues¹³ with survival mode that have work-arounds:

- CTD on Save
- V.A.T.S. Freeze

CTD on Save

There's a possibility of your game not saving after it reaches a certain point and the game crashes to desktop (CTD). No one knows the reasons behind this because the console is a closed system. No load order can fix that; it's either an engine issue or Xbox itself.

This particular issue is as follows: When attempting to save the game, the game freezes, a buzzing sound occurs, and crashes immediately to the Xbox home screen.

There is a work-around, but it is by no means a “game-saver” so players will need to plan for the possibility that games will no longer function after the first occurrence. Once the CTD on Save problem starts happening, it will continue to occur for the remainder of the playthrough.

Work-around

1. Load the latest “Hard Save”
2. Once in-game, access the main menu, and select Load
3. Find and reload the latest “Hard Save” (the same save that you previously loaded)
4. Once back in-game, all saves should work as normal.

More Info:

[Important Definitions and Glossary of Terms - Hard Save](#)

Best Practices While Attempting Double-Load Hard Save Work-Around

Exit Saves are necessary.

It has been the experience of testers using this work-around, that deleting Exit Saves negatively affects game-play. It is advised while using this method and while playing on Survival Mode to keep Exit Saves.

Duplicated Exit Saves May Occur.

If using this method somehow duplicates any Exit Save, delete the oldest one.

Visual Weirdness.

¹³ 6-28-21: Have you encountered others? Come chat with us on Discord.

After the second load, players may experience visual stuttering until the game sorts itself out. The visual quality does not appear to affect game-play. The visual quality may be affected from anywhere between one and five minutes. Let the game sort itself before attempting to make another save.

Attempt Hard Saves Where Possible.

Cheat Terminal, [Smokeable Cigars and Cigarettes](#), Simple Survival Game Save are three mod options to choose from to make hard saves in survival mode. Only choose one mod to make your hard save. For example if you choose Smokable Cigars because of the other features, you do not need Simple Survival Game Save and will not need to use the functionality within Cheat Terminal.

The mods above are classified as 'cheat mods' because they do more than what the developers intended.

More Info:

See [Software Bugs and You](#) for more information if unexpected behaviors occur.

See [Corsair2's Fix for the "CTD on Save" Bug on Xbox](#) for more information.

V.A.T.S. Freeze

V.A.T.S. Freeze is an occurrence during Survival Mode that will happen when a player enters V.A.T.S. while being affected by Fatigue, Hunger, Thirst, etc.

How It Happens

Survival Mode's "diseases" such as Fatigue, Hunger, and Thirst are treated by the game as consumable objects. These consumable objects are automated via timers on the Survival Mode controlling Papyrus Script HC_ManagerScript. When a player enters V.A.T.S. while one of the timers completes its countdown to add one of the "diseases" to the player, the game freezes which forces the player to reload the last save.

Types of Mods that Cause the Freeze

V.A.T.S. Freezing happens on vanilla but mods that offer the same functionality without patching their scripting to account for it can also accidentally cause the bug to occur. These mods include:

- Mods that add automatic drinking or eating
- Mods that add automatic stim-pak use

Work-around

Avoiding using V.A.T.S. during survival mode gameplay will keep the bug from occurring.

JDBruce has a mod available for players that updates survival mode's scripting. Patches for mods that cause the freeze must include their own patches in order to provide the fix. PC Players can download the mod [here](#).

Unfortunately, the V.A.T.S. Freeze Fix mod that has been uploaded for use on Xbox is not up-to-date with the current version of the Unofficial Patch and the uploader may have retired from modding. players will need to choose between having survival mode's scripting fixed by the Unofficial Patch or using the V.A.T.S. Freeze Fix. Both mods can be used together although some quirks may occur since neither mod uses the same scripting for their fixes. A scripted patch is recommended, but not required.

There is no fix for PlayStation due to external asset limitations. See [Understanding Sony Restrictions on PS4](#) by ANDREWCCX for more information.

Best Practices and Troubleshooting V.A.T.S. Freezing

Plan your survival game around V.A.T.S. Freeze Fix.

HC_ManagerScript is edited by the V.A.T.S. Freeze Fix mod, so players will need to plan their survival games around using VFF. Do not download mods that specifically say that it touches "HC_Manager" or "HC_ManagerScript." Using VFF will mean that mods like Everyone's Best Friend and Survival Options are not going to be incompatible with your load order.

V.A.T.S. is not necessary for gameplay.

Some players use mods like See-Through Scopes and Criticals Outside V.A.T.S. to enhance their gameplay to avoid using V.A.T.S. and some avoid using V.A.T.S. altogether to make the game more challenging. Plan how you wish to play before downloading mods.

Save often.

More Info:

See [VATS Freeze Fix](#) for more technical information.

WHAT IS FRAME RATE?

Video is put together in a series of frames, and the speed at which those images are shown is the rate. So if the video is captured and played back at 30 frames per second, then 30 distinct still images are shown each second.

This rate determines the viewing experience of video. Hollywood, for example, uses 24-30 frames per second since this is how we see the world. The faster the action on screen, the more frames are required so the viewing experience is smoother. Anything higher than 30 fps is used for recording video game footage or creating slow-motion video. Streamers who shoot video game footage record at 60fps because there are a lot of things happening on their screen at once.

Device

The device you use to view your video determines the viewing experience. Not all devices have the screen refresh rate to handle higher frame rates and not all devices support higher refresh rates.

If the device is stuck at a slow refresh rate, restart your Xbox. You can also check that the TV is not doing too much work to process the image. Clear motion rate, Image Enhancement, or Dynamic Contrast are some of the phrases to look for. Running the HDTV calibration tool may help to optimize TV settings.

Refresh Rates

A refresh rate is not the same thing as a frame rate. Refresh rates on televisions are the amount of times the TV will refresh the picture. A 60Hz TV will refresh the display 60 times per second. The higher the refresh rate of your TV, the smoother the experience.

Xbox One S and X support 120Hz at 1080p and 1440p while Xbox Series X/S supports 120Hz at 4k. However the games are locked at 30 frames per second on Xbox One S and X.

Sixty frames per second at 120Hz is no different than watching 60Hz. However, if you are playing 30 frames per second from a 60Hz television, there will be a slight stutter while playing though most people will not see this stutter. Frames are added alternating at 2-3 frames. A smoother experience would be 120Hz where the same amount of frames are added per second. You can get that by playing at 1080p on Xbox One S or 1440p on Xbox One X.

The requirements for Xbox Series to have a smooth refresh rate are the following:

- Series X
- Ultra High Speed HDMI cable that supports HDMI 2.1
- TV that supports HDMI 2.1
- Enable Xbox and TV to 120 Hz

Deadlocked Scripts

The papyrus system only has a minimum amount of time to run. Because the framerate is locked to the papyrus engine, increasing the frame rate slows down the amount of time scripts have to run.

Running a load order with a massive amount of scripting and attempting to increase framerate can be harmful to your game.

PC players can check the papyrus logs. Unfortunately console players have no way of checking to see if their framerate issues are due to an overloaded papyrus VM.

More Info:

See [Troubleshooting, Warnings, and Cautions](#) for information regarding hard-coded frame rates for the physics engine.

CREATION CLUB

[Understanding \(and When Possible Resolving\) Mod Conflicts with Creation Club Items](#) - by ANDREWXCX
- A very informative and useful read if you are having issues with CC items and mods working together.

Note: *AWKCR* and *Armorsmith Extended* (full and framework) on Bethesda.net have not been updated with the new 'materials' paint schemes for vanilla weapons and armor and require a patch in order to function properly. *Unified Clothing Overhaul (UCO)* has been kept up to date. For more information, please see ANDREWXCX's post above, read UCO's comments' pages, or inquire in the Parent Server. You *can* successfully run AWKCR, Armorsmith, and UCO together and have UCO patch both AWKCR and Armorsmith; however there may be mods that make direct edits to vanilla weapons and armors that conflict.

Optionally, Xbox players can now also use Equilibrium for weapons paints, Crafting Framework and its AWKCR patch, or Standalone Workbenches and its crafting addons.

New Games With Creation Club Content

Creation Club content loads when the player exits the vault. What this means is there will be a stack of Creation Club quests PLUS vanilla game quests all firing at once. This can lead to quest lag and script bloat, among other things, if you have more than one or two Creation Club items. You will need to wait for the quests to catch up. It might be best not to move the character while this is happening. After you've played with purchased content and no longer want to play with it, you will need to reinstall the game (on PS4), or wipe the reserve space (on Xbox). On PC, you can move it out of the data folder or use Mod Organizer 2 to manage Creation Club content.

Having too many CC quests loaded at the start of the game will cause issues with Codsworth not responding properly during gameplay at Sanctuary and keep you from being able to exit the vault.

Note: There are now mods that delay or bypass CC quests loading. Read all documentation. All require a new game in order to “catch” CC quests before they being running.

Installing Creation Club Content

TREAT CREATION CLUB CONTENT AS MODS as far as *installation* goes. While they are not mods, but official DLC and set up under the hood as such, Official Creation Club content takes priority over modded content, and the game’s executable, master file, and HUD translation string files are updated upon each release. Do not install all at the same time and expect a smooth experience.

Install one at a time.

Use the directions on how to install Mods for installing Creation Club Content. You have to allow your console to refresh after each install, the same as with Mods or issues can occur.

How do I remove Creation Club Content?

Xbox

Delete the character the CC is installed on. Clear your 2 GB/1.86265 gib reserve space. Clear cache. Start a new game.

PlayStation

Re-install your game. Clear cache. Start a new game.

PC

Delete the character the CC is installed on. Navigate to **Steam\SteamApps\Fallout 4\Data** and find the appropriate file. It is recommended you simply move the file to another folder rather than delete so you do not have to re-download. The manifest file will not update. Start a new game.

Warning

Creation Club Content is to be treated as DLC when uninstalling: You will break saves completely by uninstalling any base game DLC, same applies to Creation Club. (And it should apply to mods as well.) Delete your old save, clear your cache, and start a new game after removal.

The Creation Engine is not designed to have plugins removed, regardless of what any modding site says. *Fallout 4* and *TES V: Skyrim* are not *TES IV: Oblivion*. (Prior to *Skyrim*, you could remove mods without much issue.)

More Info:

[Treat Game Mods as DLC](#)

[What are “Scripted” Mods?](#)

BEFORE YOU DOWNLOAD...

Build Your Framework

The purpose of building your framework as you plan your load order is to keep you organized outside the in-game menu. Console players and those who choose the in-game manager don't have much in the way of organization. PC players have the ability to do so with the help of mod managers.

Learn the Basics

That's what this guide is here for.

It is your game and you are in control of it; however, downloading and then organizing can lead to load order disorder. Downloading after you've used the Bethesda website to favorite mods and then inside the game (while, yes, an extra step or two or three), allows you to download and install in the order of your framework.

More Info:

See [Useful Links](#) for other external links for more information.

PC players, using this method may help you as well (even if you use external sites) because your load order is *install order* and managing overwrites is a pain and can lead to disastrous results if you've installed in the wrong order.

See [Load Order Optimization](#) for instructions on BA2 archiving so you do not have to deal with loose files. Mods downloaded from the Bethesda website are already packed and ready for you; however, inspecting the BA2s with B.A.E. is recommended as mistakes happen. We're all human. See [F4SE Warning](#) for more information on what to look for.

Clear Old Data

"Out with old, in with new." If you aren't using it, you do not need it. Hoarding should be saved for in-game and not with your load order. Start fresh and make a plan. It could also save you from encountering "Operation Not Completed."

More Info:

["Operation Not Completed" Troubleshooting](#)

Make a Plan

Who are you? What do you want for your character? How will mods fulfill those things?

See [Planning A Modded Play-through](#) for a template of questions to ask yourself as you look for mods and plan how you're going to play.

Get Organized

Use the [Framework Categories](#) and plug in your chosen mods. You can use the Google Worksheet Template linked on page one of the Survival Guide. If you have questions about mods not covered here, please visit us at the Parent Server so we can either tell you from experience or look up a mod with xEdit. We sometimes hang out at the official Bethesda Studios server as well.

More Info:

[Load Order Framework](#)

[Blank Load Order Framework Template](#)

[How do I use the Load Order Framework Template?](#)

[Parent Server](#)

[Bethesda Studios Server](#)

Test Your Framework

All load orders are unique and individual to each player. If you've copied from someone else, they may not always tell you about quirks they've dealt with while playing so test your load order so you know what to expect and do not rely on others to do it for you.

More Info:

[Test Characters and You](#)

Have fun

There are thousands of mods to choose from, and someone made something they wanted to share with you. Do not forget to thank them (even if it doesn't quite work as expected). They did not have to share, but they did.

Best Practices and Troubleshooting

Remove old data.

If you've previously played with mods and/or Creation Club Content, clear your reserve space and any saves that required them. Mods that add grass textures have a tendency to store the textures in the cache for longer periods of time (no idea why) and so clearing the cache is a good idea when removing texture mods in general.

Determine what type of gameplay you want.

No one will be playing the game but you. You will need to decide what you want to accomplish during your play through. Are you just in it to build settlements? Are you just interested in the main quest and

want to enhance it? Are you into base defense? Not enough green in the Commonwealth? Want to be the raiding-est Raider that ever raided?

Determine which game mode you want to play in. There are several game mode in which to choose, from easy to survival.

More Info:

[Survival Mode Troubleshooting](#) for issues to be aware of.

Make a list of mods you want with this in mind.

This is your core list and can be accomplished with the 150 mod and 2 GB cap (100 mod and 900 mb on PlayStation) if you plan accordingly.

Take into consideration Creation Club Content.

Purchase Creation Club Content prior to the installation of mods so you can clear the reserve space after purchase and redownload only the modules you plan to use in your current game. That way you do not have to download mods twice.

Evaluate your list and see if any mods need to be enabled mid-play.

There are a few mods that need to be enabled after certain quests, such as several centered around the Minutemen Castle, and much of the Deadly Series is meant for a high level character (which is problematic when starting a new game). Note that if you enable mid-play there could be issues with persistence due to how the game engine works and some mods' edits will not show up. Test as you are evaluating your list.

Take into consideration persistent references.

Persistent references will not show up if enabled in the middle of a playthrough and will sometimes remain after removing a mod. These include vanilla quests with "Aliases" and updating in the middle of a playthrough. Scripts with persistence will create save bloat and other issues if removed. "Run-away registrations" can be considered persistent as once the script is removed from the load order, there is no way to shut down that script registration. Mods with persistence include: Quests, dialogue, some types of world edits, edits to vanilla quests, updates to scripted or quest mods, scripted mods, quests with new followers. As you evaluate your list, keep in mind that all mods with persistence will require enabling before selecting New Game on the menu.

More Info:

[Remote Papyrus Event Registration](#) - technical details of script registration

[Levels of Persistence](#) - AFKMods - Article is for Skyrim but contains information for Fallout as well.

Fallout 4's engine is more advanced where Papyrus registrations are concerned.

[Alias](#) - technical details. Fallout 4's Alias information has not been updated on the Wiki; however, there are very little differences between how quest aliases work between Skyrim and Fallout. Fallout 4 is slightly more advanced.

Evaluate your list and see what mods modify vanilla scripts.

Vanilla scripts can only be modified once. Anything else will overwrite the new.

Note: Mods should be enabled one by one and tested with a character you have no intention of actually playing with before you commit to a main save with your Framework mods installed. Play with them individually and see what they do before you add more.

Keep in mind Load Order as you enable mods for testing.

The order in which you enable is the order in which the game reads (also called installing a mod). Enable mods in the order you want the game to read them.

Keep in mind the engine is not designed for mods to be removed.

If you've come across a mod that does not work, it may not be working for several reasons – some may be load order related, others may be poor implementation. Read all documentation prior to installing so that you know how to uninstall it if a problem occurs mid-play.

More Info:

[What are "Scripted" mods?](#)

[Modding Best Practices](#)

As you're testing, make note of the last save you're using.

If you accidentally add an incompatible mod, you'll need this information to go back to a previous save to recover. Once the mod is in a save, it's there for good as mods leave pieces of themselves in saves.

Mod not on the list and you're not sure where it should fall?

Ask about it in the Parent Server.

Are you planning a play through? I've re-written the [planning guide](#) with more useful information.

For archival purposes: Original article [Original Article \(Obsolete\)](#).

You can also start a discussion at the [Parent Server](#).

DOWNLOADING BASICS

These instructions assume the player has already read the Mod Description and any other documentation on Bethesda.net or Nexusmods, such as comments, mod author FAQs, changelogs, and patch notes, *prior* to download. **If you have not already done this, do NOT complete this step until you have.** Modding your game is not plug and play. It requires you to be aware of what the mod is editing and any bugs or quirks that will need to be monitored as you play.

Bethesda and mod authors make it clear that the player is responsible for their games. Mods are downloaded at their own risk and are subject to Bethesda's Terms of Service. If you do not agree to the terms, do not download mods.

More Info:

These instructions are also located on the web: [Mod Downloading Basics](#)

Bethesda.net Account Required

If you do not have a Bethesda.net account, you will need to [create one](#) before adding mods to your [favorites](#). The account will need to be linked to your platform of choice in order to play with mods. You will need an email address where you can receive recovery information in the event that you lose your password.

More Info:

More information about account linking can be found [here](#) at the Bethesda.net Support Site.

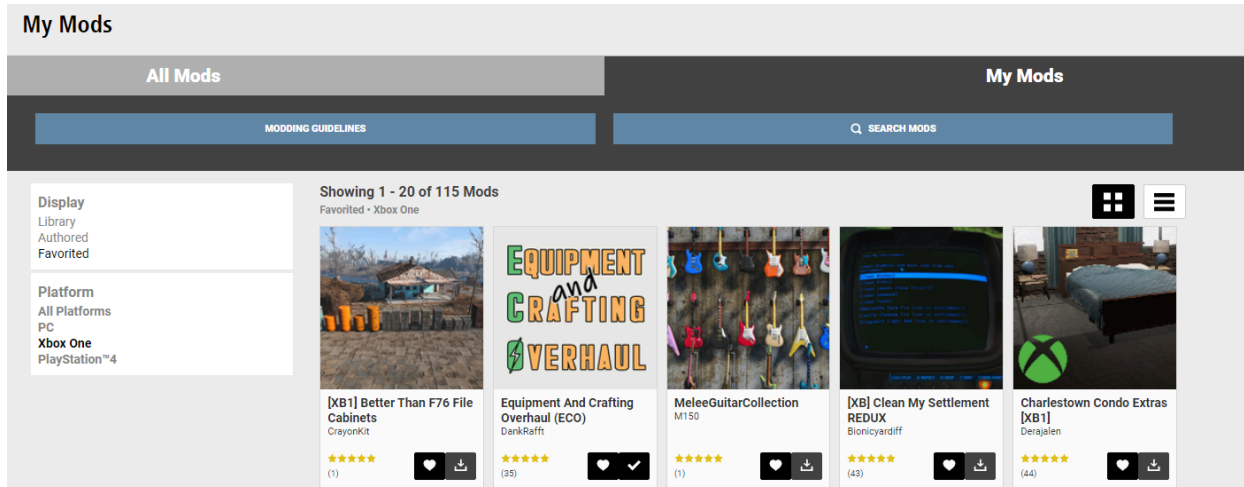
NAVIGATING THE BETHESDA WEBSITE

There are two mod sites on the Bethesda website. One is for [Fallout 4](#) and the other is for [Skyrim Special Edition](#). Both sites function the same way, and so does the in-game mods menu for both games on all platforms.

"All Mods" Tab

The "All Mods" tab lists all the mods available. You can use the filters on the side of the page to find the mods you want and the search under the magnifying glass to search for specific mods. Navigation on a mobile device is somewhat difficult where size is concerned and so either Firefox or Chrome on a large-screen device is recommended.

"My Mods" Tab



The "My Mods" tab lists all mods you have added to your Library, to your Favorites, or have uploaded to the website using the Creation Kit.

The My Mods tab takes some effort to get used to. To filter by Display and by Platform, you must first select the display and then the Platform. Mods will be ordered by the date of when the mod was last updated or when its description was last changed (whichever is "latest").

You can search through your mods from this tab as well.

Important

If Authoring mods, please click on the [Modding Guidelines](#), read them and agree to them prior to uploading to Bethesda.net. It is unfun to browse mods that are just going to be removed by the moderators. They will cause reserve space issues for Xbox players.

More Info:

[All Mods](#) - Search mods

[My Mods - Library](#) - Access your downloaded mods

[My Mods - Favorites](#) - Access your favorite mods

USING THE IN-GAME MOD MENU

The in-game mod manager works similarly across all platforms, including PC. The only difference with PC is that it does not track downloads. It will, however, track file size of mods that are properly packaged in BA2 files. Modded load orders with only BA2 files do not require archive invalidation.

Note: The game reads all temporary references from each save game loaded on the main menu start up. If you have a lot of world edits, this may take a while or lead to a game freeze. If the game freezes, you have reached the limit of your console. This is a console limitation.

More Info:

[How do I clear my cache?](#)

If you encountered “Operation Not Completed” when downloading, make sure you have an understanding of the differences between manufacturer’s storage value GB and virtual storage values GiB (which is what the website uses). This is also encountered when attempting to download a mod of the same file name.

More Info:

[“Operation Not Completed” Troubleshooting](#)

PC Considerations

- Mods downloaded with the in-game manager are directly added to the Data Folder. Instructions for other mod managers go beyond the purpose of this article.
- Mod file size is not tracked by the in-game manager unless the external assets are packed in BA2 archives. Modded load orders with only BA2 and no loose files do not require archive invalidation.
- There is not a limit on how many mods you can download using the mod manager. There is a limit on how many you can use: 255 plugins including the six DLC and any Creation Club .ESM DLC.
- Do not download mods of the same name using two separate mod managers. Delete or remove the old mod from your data folder before attempting to download the same mod from the Bethesda website.

HOW DO I ADD OR DELETE A MOD?

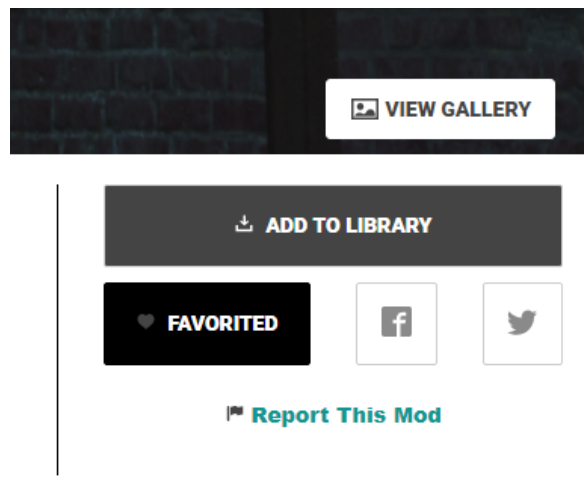
Add Mod to Favorites

1. From the Bethesda.net website, save the Mod you wish to download to your Favorites.

Note: Only a maximum of 98 will show up in your in-game Favorites Menu. PC players may use an ini setting to extend this number.

Xbox players can use [Ugh. Mods Manager Cap.](#) (700) or [Mods Menu Cap Increased](#) (250) depending on how many favorites you intend to add to increase the amount of favorites you can see - choose one or the other.

PC Players can find the ini setting used for Ugh. Mods Manager Cap [here](#).



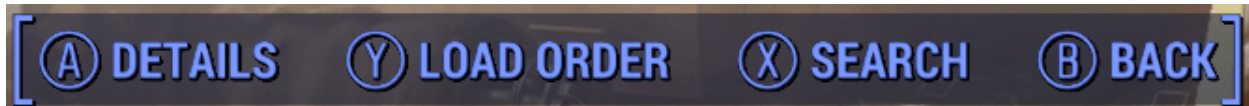
Navigating the Mods Manager

2. From the Main Menu of Fallout 4, select Mods.



You are presented with the In-game Mod Manager.

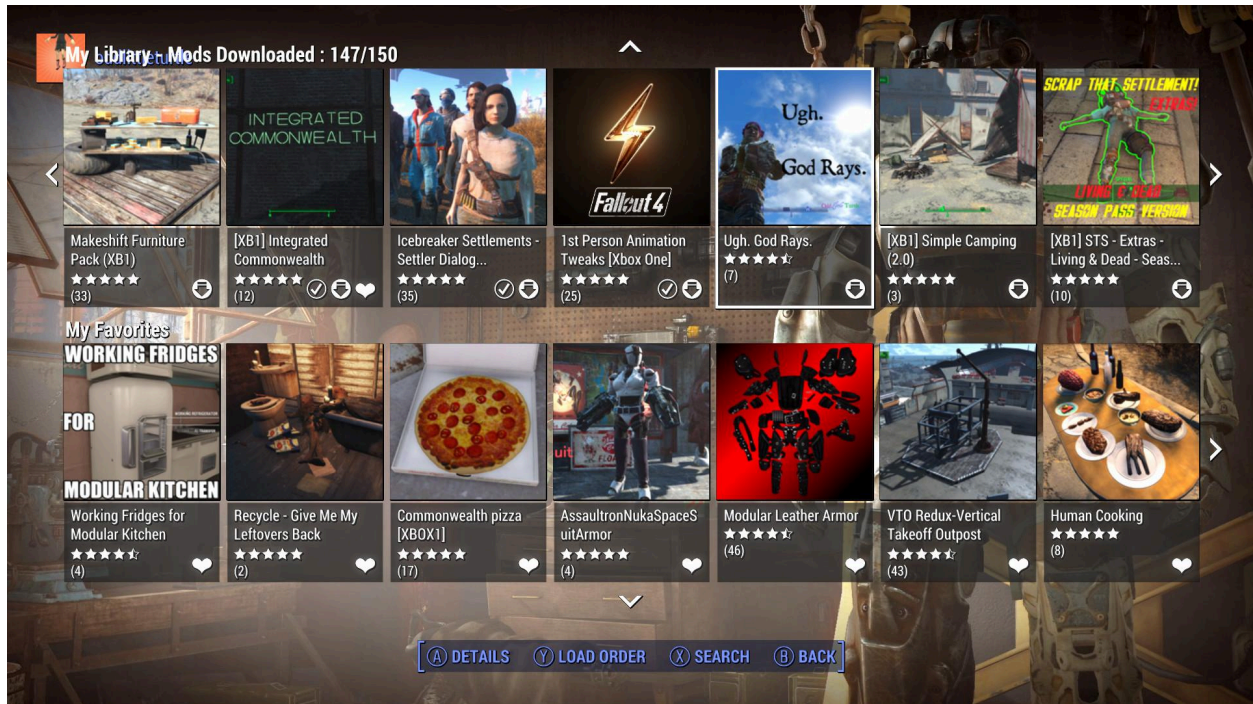
You are given four (4) options and the ability to scroll through the Mods using your controller (or mouse if on PC).



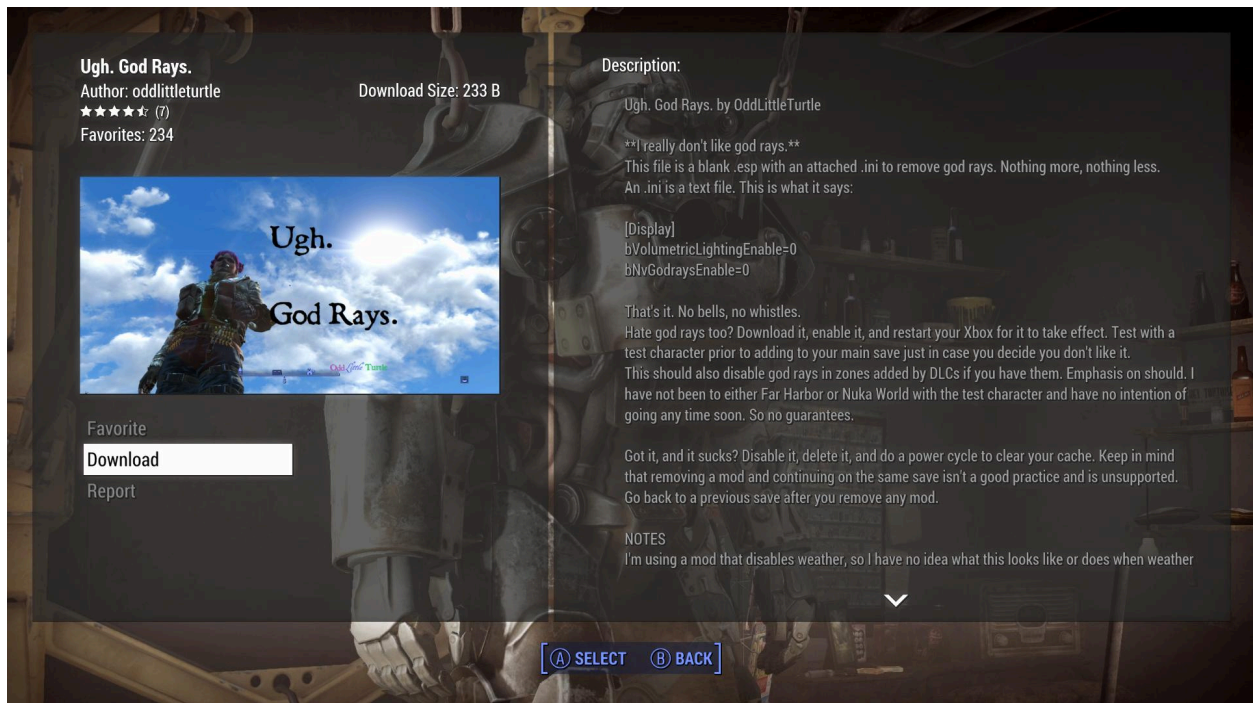
Download from the Favorites Menu

The Favorites menu is ordered by date, which is why writing mods down on your Load Order Framework spreadsheet is necessary. It will help you to keep up with your load order before you download mods. It will also help you to avoid data remnants or "Ghost Space" in the event you download two mods that have the same name.

- Select the Mod you wish to download from “My Favorites”, and press the button for “Details” (Xbox: A button, PS4: X button, PC: Enter on keyboard). This will present you with the Details Tab of the mod.



From the Mod Details Tab, you are presented with two options (Unfavorite and Download). When selecting a mod that has not been favorited from the website or previously favorited from the manager, the options will be Favorite and Download.



4. Scroll to Download and Select Download.
5. Wait for mod to Download.
6. After the mod is downloaded, select Disable.

Note: Downloading a mod will automatically Enable the mod and place it at the bottom of your Load Order unless the Mod data file is a Master File with the .esm or .esl extension. If the mod is a Master file, it will jump to the top after you select it again. It can then be disabled and sorted appropriately at the top of your load order.

More Info:

See [What Are Mods?](#) for more information about Master files.

After downloading a mod:

1. Do not immediately start your playthrough
2. Disable the mod
3. [Adjust](#) the load order in accordance with your [Framework](#) and the [Load Order Categories](#).
4. Exit to the Main menu to reload the game's plugin list.
5. Return to the Load Order Screen and enable the mod.
6. Exit the Main Menu to re-refresh the game's plugin list.
7. For mods that require a restart: Exit the game completely and restart your console.
8. Repeat as necessary.

Xbox Players: If you have been downloading large amounts of textures or meshes, power cycle your console to clear the cache so weird glitches or bugs do not occur.

PlayStation Players: Some mods like Simple Green do not cause weird glitches if you clear your cache after downloading.

More Info:

[How do I clear my cache?](#)

Disabling a mod

There is a difference between disabling and deleting a mod. One completely removes the mod from your system and the other simply removes it from your savegame.

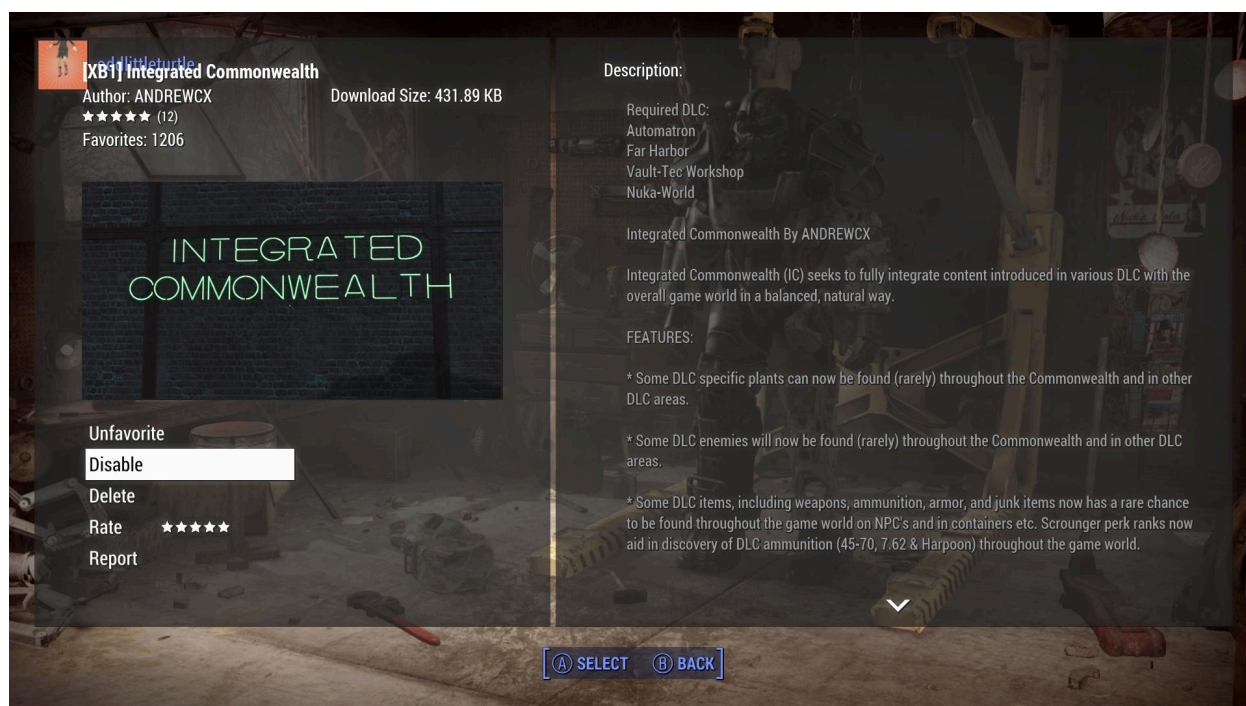
If you are disabling a mod for troubleshooting purposes know that if the mod is scripted or has added a perk to the player character, it may well break the save you're trying to salvage. There is no such thing as a "clean" save if you've already had mods on that save.

More Info:

[What is the difference between deleting and disabling a mod?](#)

[What is the difference between a "clean save" and a "vanilla save"?](#)

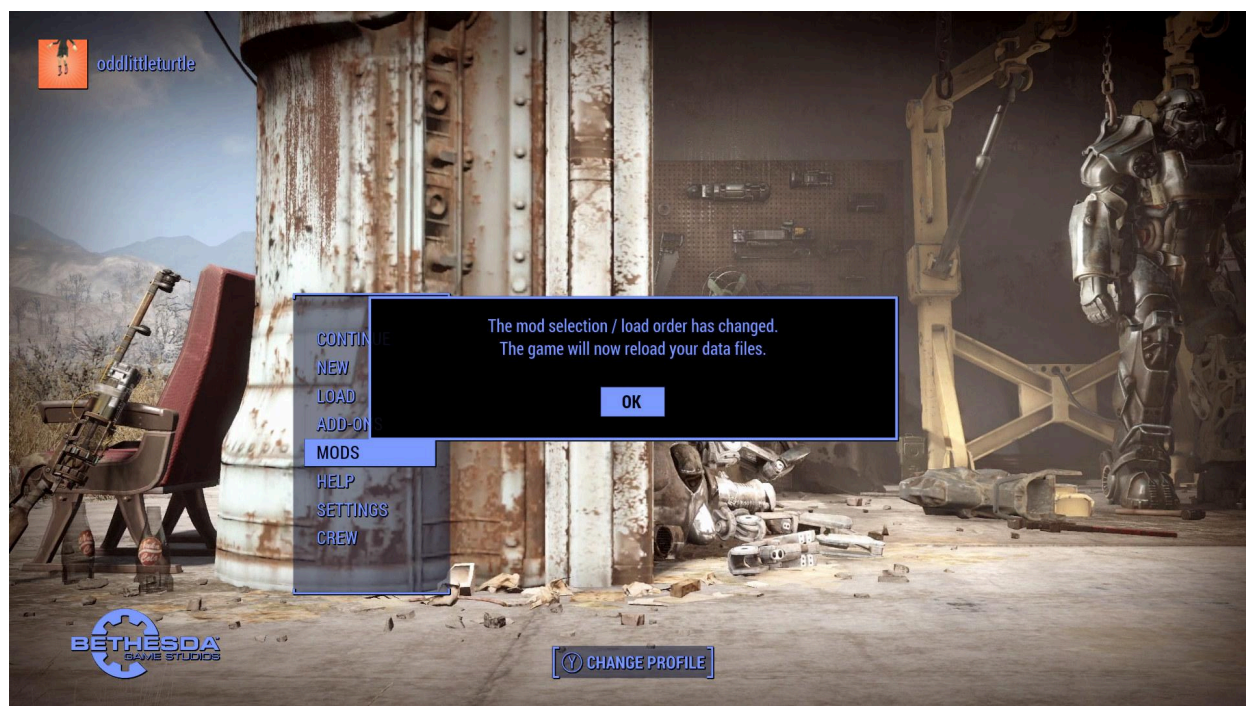
How do I disable a single mod?



1. Delete any saves associated with the mods you wish to Disable.
2. On the Main Menu, select Mods
3. Select Load Order
4. Select the Mod you wish to Disable.
5. On the Mod Details Screen, select Disable.

6. Return to the Main Menu
7. Select "Ok" to allow the Data Files to reload.
8. Clear your cache after you've completed disabling the mods you no longer want.

Note: Disabling or Deleting more than one mod at a time without returning to the Main Menu to refresh Data Files may result in an improperly downloaded or disabled mod; however this is not the case 100% of the time and depends on the mods. It is advised to always return to the Main Menu after downloading to refresh in order to mitigate any possible issues.



Deleting a Mod

If you *have* to delete a mod mid-playthrough:

1. Delete/Scrap **all items** related to that mod from your inventory or your workshop (See Power Grid Corruption for more information on why it is a bad idea to leave workshop items behind)
2. Use uninstall chem/holotape if required
3. Disable
4. Uninstall
5. Reset your machine and clear your cache
6. Delete ALL saves with the mod's data written onto it

7. Make a new save and continue

If the mod author says the mod is clean enough to continue mid-playthrough:

1. Make a hard save
2. Delete/Scrap all items related to that mod from your inventory or your workshop
3. Use uninstall chem/holotape if required
4. Disable
5. Uninstall
6. Reset your machine and clear your cache
7. Make a new save
8. Load your new save and continue

How Do I Delete or Disable All Mods?

Xbox Players: When deleting mods by clearing the reserve space only, they will remain in your Library. It is easier to use the Bethesda website to clean up your Library and organize your Favorites rather than the Mods Manager.

PlayStation Players: If you have to uninstall the game from your console, mods may stay in your Library. It is easier to use the Bethesda website to clean up your Library and organize your Favorites than use the In-Game Manager.

All Players: You will need to remove any saves associated with the mods disabled or deleted. The saves will be broken or not functioning as intended with mods missing.

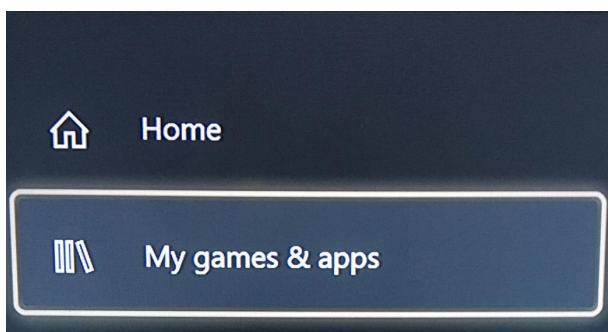
From the Mods Manager:

1. From your Load Order Screen, select Options
2. Choose Delete All Mods or Disable All Mods
3. Wait for Mods to Delete or Disable
4. Return to the Main Menu
5. Select Ok to allow Data Files to Reload (Do NOT download or re-enable mods without first reloading the Data Files)
6. Delete any Saves associated with the previous load order

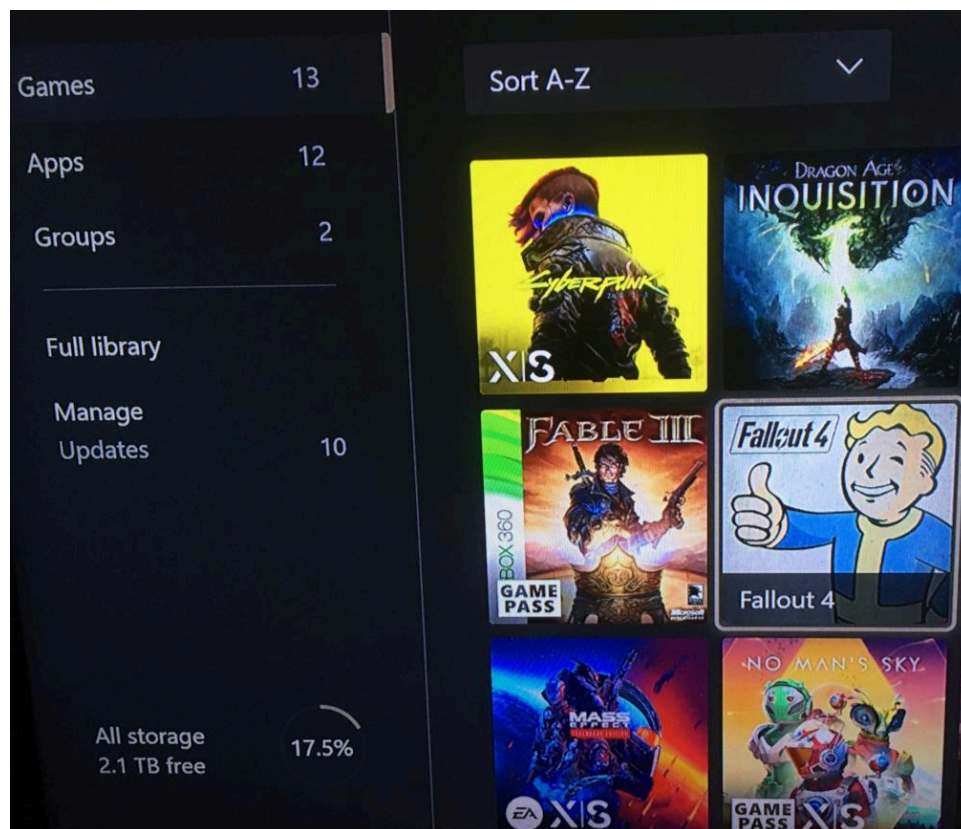
7. Clear your cache
8. Xbox players should clear their reserves space before beginning downloading again and starting a new game
9. PlayStation players should take this opportunity to rebuild their database if they have not done so in a while.

Xbox Reserve Space Clearance:

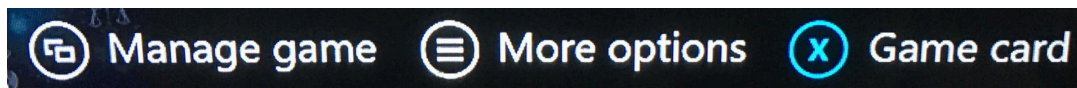
1. Hit the Home button on your Xbox Controller and scroll down to **My games & apps**



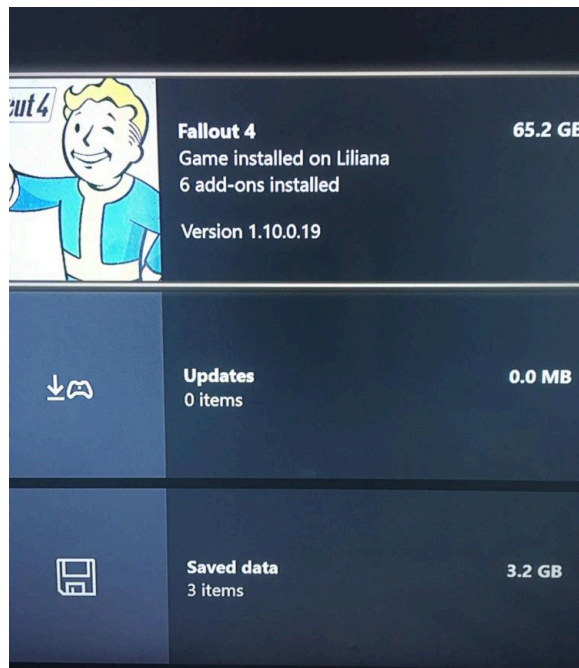
2. Select **See All > Games > Find and highlight Fallout 4**



3. Select **Manage Game**.



You will be presented with the game management screen. Saved Data will have three (3) items.



4. Select **Saved Data**. A new screen with a list of three items pops up.

- The first item Reserved Space is reserved for sync data used by the game and other information.
- The second item are your saves. Deleting your saves here will not delete the saves from the cloud unless you choose the option. If sync errors occur, clearing local saves may mitigate issues.
- The third item is the Reserve Space where mods you have downloaded is stored.

Fallout 4 Saved data

Total space savings: 3.2 GB

When you use this game or app on this console, any data it saves (such as game progress) will appear here.

Delete all



Reserved space

1.5 KB



oddlittleturtle

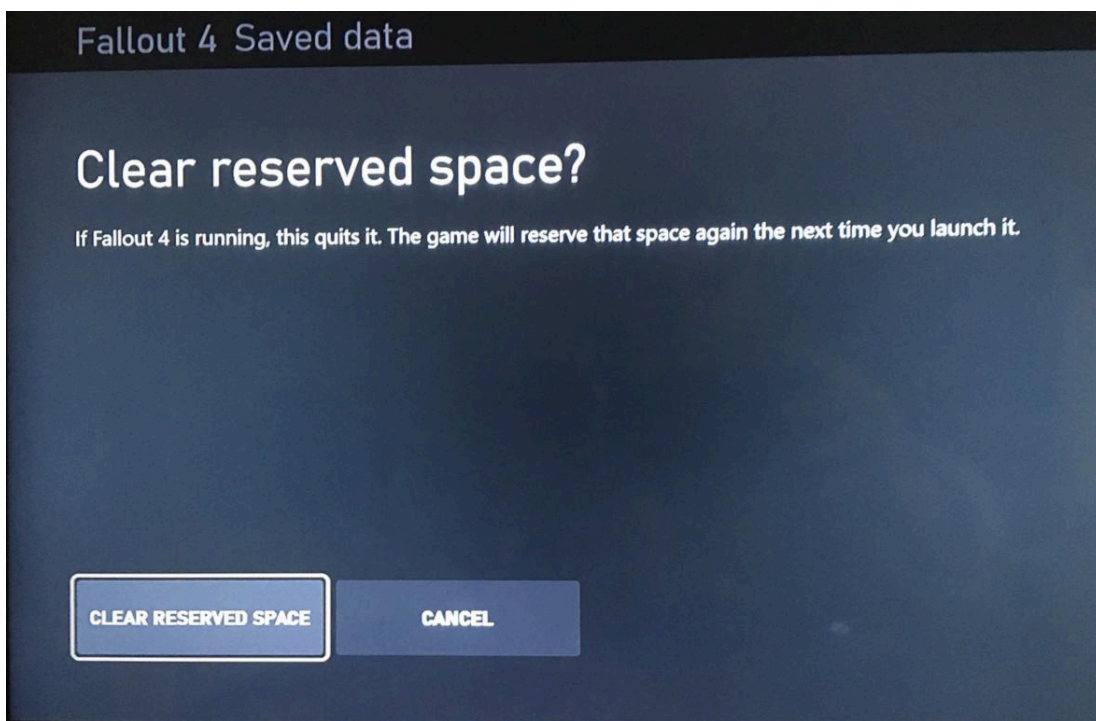
1.2 GB



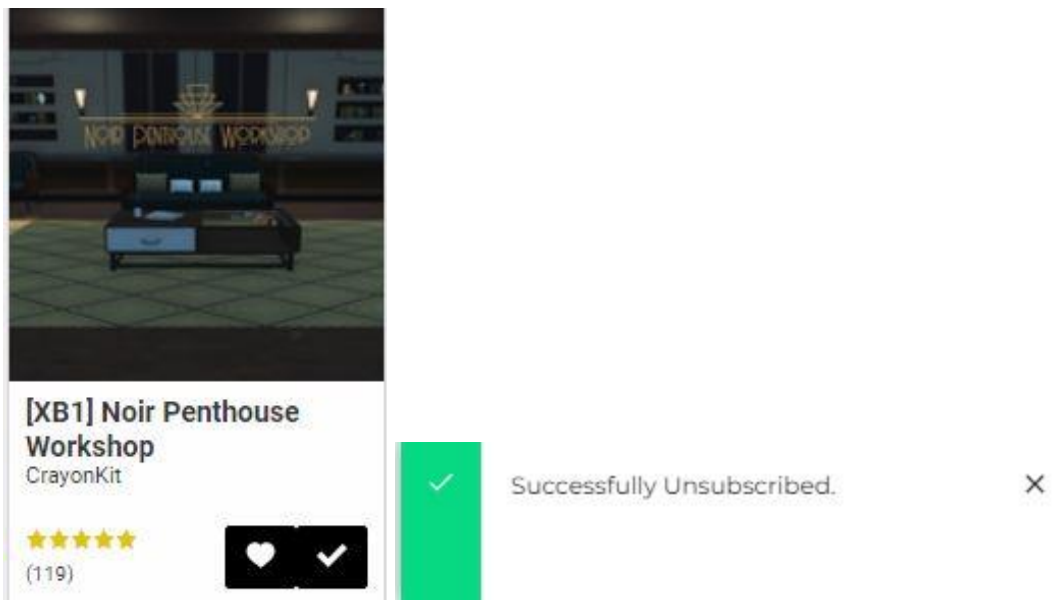
Reserved space
Installed on Liliana

2.0 GB

5. Select the third item **Reserved Space**. A new screen will pop-up for confirmation.
6. Select **Clear Reserved Space**



7. Use this opportunity to clean up your mods list on the [Bethesda website](#). Transferring the mods to your Favorites in your Library is as easy as clicking a button. The heart represents Favorites, the check mark represents a subscription to the mod (it is downloaded or was download prior to clearing the cache). A pop-up will tell you when you've transferred from your Library to your Favorites.



HOW TO ADJUST LOAD ORDER USING THE IN-GAME MANAGER

Follow the Framework you've created.

1. From the Main Menu, select **Mods**.
2. From the Mods Menu Screen, select **Load Order**.
3. Highlight a mod and press the **Select** button.
4. Scroll with either your controller or mouse to move the mod to the position listed on your Framework.
5. Return to the Main Menu and press **OK** to refresh the data files.
6. Restart your console or clear your cache if you've already made a save.
7. Start your game.

HOW DO I UPDATE A MOD USING THE IN-GAME MANAGER?

Has your favorite mod been updated when you check the in-game mods page? Are you waiting for a bug fix?

Here are a few things to keep in mind prior to ever updating:

Updates Are Never “Required”

When a mod pops up in the menu as being updated, they are never required. You have the option of not downloading them if you like the version you are using.

Updating During a Playthrough Is Not Actually Recommended

The mod you are updating **MUST** have the same file name as before or the in-game manager will treat it as a new mod and remove all forms associated with it or corrupt the power grid if using a mod that adds powered objects, thus breaking your save. Because some mod authors rename their files in between versions, it is not recommended to update a mod during a playthrough unless you are absolutely certain that the file has not been renamed.

It is also not recommended to update a mod during survival gameplay. There is no way to make a hard save outside using cheat mods and some cheat mods do not work as intended. There is no way for players to know if a scripted mod uses version control in order to refresh any scripts or quests, and it therefore also not recommended to update a scripted mod in the middle of your playthrough. Version control is impossible on PlayStation though some mods do re-use the vanilla scripting and most PS4 mods that are scripted have more going on under the hood with multiple story management quests and vanilla scripting than their PC and Xbox counterparts because of how they must be set up for use on PlayStation.

Check The Version Notes Changelog Prior to Updating

Before ever updating a mod, **read the mod author notes and version notes** and check what’s been added. Many mod authors use the [comments section](#) of their pages to let players know what has been updated. Some mod authors simply use the Bethnet version system. Some update their descriptions with the information. Others still keep a changelog onsite or offsite. It varies greatly between the authors. Sometimes an update will make the mod incompatible with others and Xbox has no way to revert back to a previous version. **So be sure to check out what the new version does prior to download.**

“Ghost Space” and Data Remnants on Xbox and PC

Some mods require deletion prior to updating otherwise they will leave behind their texture or mesh files and bloat the Xbox reserve space. Some refer to this as ‘ghost space’; however this terminology is dated and incorrect. The files are still there as remnants but are inaccessible to Xbox players to complete the deletion process. A prime example of a mod that needs to be deleted prior to updating (or switching back and forth between versions) is Armorsmith Framework and its larger version Armorsmith Full. Remnants can also be left behind when updating a mod on PC, but it is much easier on PC to simply delete the remnants from the data folder and re-download the mod again.

If you ever encounter data remnants, the process of clearing them is to find the mod that you incorrectly deleted and re-download it. Then go through the correct process of removal. If you cannot find the mod that was incorrectly removed, then you will need to clear the Xbox reserve space.

Note: Mods flagged in “WIP” on the Bethesda website generally will leave behind data remnants on Xbox if the mod is removed from the site.

More Info:

[“What is “Operation Not Completed” and why won’t the in-game manager let me download when I have enough room to download?”](#)

[“Operation Not Completed” Troubleshooting](#)

The Mod I’m Updating Has Several DLC Plug-ins

The general rule of thumb is that if the mod has several plug-ins, update the base component first and then update the plug-ins afterwards. You can find more information regarding this in the parent thread.

The Mod I’m Updating Has Weapons Modifications

The general rule of thumb is that if the mod has Weapons Modifications, do not update it until you are ready to start a new game or if the mod author has tested the mod for updates and deems it worth the trouble of removing all the modifications from the weapon that is updating. It is not advised to update a mod with Weapons Modifications without first removing all modifications as it could cause crashes upon loading the game or entering menus or the weapons’ workbench.

Remember: The in-game manager shoves the updates to the bottom of the load order and you’ll need to readjust. This is true for all platforms using the in-game manager. After readjusting your order, do a hard reset, then open your game with an unmodded test character to confirm the mod is working as intended.

Updating a Mod From Start To Finish

1. Make a hard save on the character you are updating. This is the save you will be returning to after the update process.
2. Save the mod to your favorites to easily find the mod to re-download. Make a note of where it is in your load order. You will need to place the mod back in the same position so there is little data loss between deleting and downloading.

Important

During this process DO NOT re-enter the save at any time. Make sure the mod is back in your load order and enabled!

3. Use the steps outlined above in [Disabling a Mod](#) and [Deleting a Mod](#) and then clear your cache to complete the deletion of the mod’s game files.

4. Re-enter the mod manager and re-download the mod. Refresh your main menu and your console to complete the download process. PC players may also benefit from exiting the game and returning.

Problematic Start Up Mods

Mods that have not been implemented properly for start-up are problematic and should be avoided. If a mod that adds a holotape is not set up properly or if a mod that disables the precombines around the Vault 111 cell cause issues, do not use.

Note: Some mods have a backup method to allow you to craft the holotape in case of script failure. These mods cannot be removed in the middle of gameplay, their scripts may have unending registrations due to the script failure.

Check the date of mods. If they have been ported, be sure to use due diligence to examine the dates. Mods that have not been updated on other sites since 2016 that add holotapes or have large amounts of bug reports might need to be retired from your load order or might already be obsolete. Mods that were created in the beginning should be considered learning mods of the mod authors who have gone on to make others. In most cases, they have learned from their mistakes or have updated to fix bugs.

TROUBLESHOOTING CRASHES

Stay calm. Let's see what we can do to fix that.

Things to keep in mind:

1. There is no such thing as 100% stable load order.
2. What difficulty are you playing? Are you playing on Survival Mode?
3. Did you read the mod author's instructions for placement in your load order?
4. Did you read the mod page's comments for special instructions, bug reporting, etc.?
5. Have you adjusted your load order to match the categories below and/or mod author's special instructions and/or the advice found on the forums?
6. Did you attempt to install a mass of mods all at once?
 - a. Not a good idea. Some mods are too large to do this or alter more than one thing at once. Your machine will not be able to handle so many calls at once.
7. Did you uninstall a mod mid-playthrough and continue to play on a dirty save afterwards?
 - a. Not a good idea. In fact, you may have permanently damaged your save. You can try reverting back to a clean save and deleting any instances of the mod to see if it fixes the issue.

- b. Not scrapping powered objects prior to mod removal permanently damages your save file with power grid corruption and you will continue to experience random crashing when attempting to scrap or use a powered object.
- 8. Are you sure it was a mod and not the game engine itself?
 - a. Due to the breadth and scope of the game itself, this is an unfortunate occurrence. Also, some of the older Xboxes cough and hiccup their way through the game due to internal hardware problems.
- 9. How many other games and apps are sitting on your Xbox's hard drive?
 - a. If you've got an older machine, this could very well be a problem. (I had this issue after updating several mods.)
- 10. Where were you in game when the crash occurred?
 - a. There are areas in the game that are notorious hogs when it comes to resources, and coupled with trying to run multiple mods or mods that fundamentally alter the area could cause issues.
- 11. Are you using a landmass mod that adds a quest?
 - a. Have you tried moving that mod lower in your order?
 - b. Most quest mods that haven't yet been completed should go near the bottom of the load so that what they're adding doesn't get overwritten by other mods.
- 12. Are you using a mod that overrides something important?
 - a. This usually occurs when you've downloaded a stolen mod. Be sure of the authenticity of the mods you are using, report the theft to Bethesda, remove the mod from your load order and start a new game.
- 13. Have you cleared your Xbox's memory cache?
 - a. Mods that add green and other texture mods will leave the green and or textures they add if disabled mid-play. You'll need to clear the cache in order to fully remove the mod.
 - b. See below for instructions on how to do this
- 14. Have you tried a hard reset?
 - a. See below for instructions on how to do this
- 15. Have you tried a power cycle?
 - a. See below for instructions on how to do this
- 16. Were you able to reproduce the crash after resetting?

- a. Make a note of it. Repeat. Make a note of it. Repeat.
17. What mods were you running concurrently with the mod you think might have caused the crash?
18. Are those mods compatible with the mod you think might have caused the crash?
19. Was this due to a known bug with the mod?
20. Was this due to a known bug with the game engine?
21. Are you able to access your load order?
 - a. If not, visit the Parent Server for assistance.

Things to do:

See if you can reproduce the crash multiple times then give detailed information on the Parent Server as far as where you were, any mods you had enabled, what DLCs you have installed, how far into game play you were, etc. Each load order is as individual as the person playing, but the more details you provide, the more help you will be able to receive to resolve the issue.

Note: If this is due to a bug with the mod itself, you'll need to give a detailed account to the mod author with a list of your mods in a [pastebin](#) or use the [Template](#) listed at the beginning of this guide.

20-Jul-2021 - Bethesda comments are now closed. :(Many authors have Discord servers. Be courteous to others in the chat rooms and use a link to your load order instead of posting the entire thing.

More Info:

[Software "Bugs" and You](#)

In order to pin-point which mod is giving you trouble, you'll need to begin disabling them one-by-one and using your test character. Don't forget to use an uninstall chem if the mod requires it. Reset your cache after disabling each mod - texture mods, like those that add grass, are stored in the cache. Some mods are scripted and leave little pieces of themselves in the save (this is usually called a dirty save and leads to runtime errors also known as save bloat).

If you are having infinite load times, you could try one of these methods first:

Take Note of How Many Games You Have Installed

Check how many games you have installed on your hard drive. If you are near your hard drive's limit, you may need to uninstall a few in order for your machine to run smoothly. (I've had this experience before.) Be sure to reset the Xbox after uninstalling each game, just like you would uninstalling a program or app on a PC.

How to Reset Your Xbox One

1. Press the Guide button to bring up the Guide menu
2. Select > Turn off console
3. Unplug the power supply from wall
4. Unplug the power supply from console
5. Wait until the LED turns off (two to five minutes; sometimes longer)
6. Plug power supply into wall
7. Plug power supply into console
8. Turn on Xbox

How to Clear the Cache of Your Xbox

Xbox One

1. Press and Hold Power Button on front of the console for 10 seconds
2. Wait until the console powers down
3. Unplug the power supply brick from the console
4. Unplug the power brick from the wall and wait for the LED on the power supply to go out. This can take anywhere from 10 seconds to 5 minutes. If you've played for a long length of time, it has taken up to twenty (20) minutes for the LED to go out. The Xbox One's power brick reserves the charge, therefore, preserving the cache. The charge must be completely gone in order to clear the cache.
5. Plug the power supply back into the wall.
6. Reconnect the power supply to the console.
7. Turn the Xbox back on by pressing the Power Button on the console or using your controller to power your Xbox on.

Xbox One S, Xbox One S

1. Press and Hold Power Button on front of the console for 10 seconds
2. Wait until the console powers down
3. Unplug the power supply from the console
4. Wait 20 seconds.

5. Plug the power supply back into the wall.
6. Reconnect the power supply to the console.
7. Turn the Xbox back on by pressing the Power Button on the console or using your controller to power your Xbox on.

Xbox One Series S|X

1. Press and Hold Power Button on front of the console for 10 seconds
2. Wait until the console powers down
3. Unplug the power supply from the console
4. Wait a full two minutes before continuing. The system has a different architecture than previous-gen consoles, and this wait is required for the system to completely shut down.
5. Plug the power supply back into the wall.
6. Reconnect the power supply to the console.
7. Turn the Xbox back on by pressing the Power Button on the console or using your controller to power your Xbox on.

How to clear the cache of your PS4:

1. Press and hold the PlayStation button on your controller.
2. Select "Turn Off PS4".
3. Let the PlayStation 4 fully power down and then wait for 10 to 20 seconds.
4. Unplug the console power cable. Wait for 20 minutes.
5. Plug the console power cable back in.
6. Restart the PlayStation 4.

Rebuilding the database is part of good maintenance of your PS4. The Rebuild Database option does a defrag of the PS4 and will free up memory space, speed up your console, and fix issues. The Rebuild scans the drive and creates a new database of all content, thus cleaning the disc drive.

How to rebuild the database of your PS4:

1. Press and hold the PlayStation button on your controller.
Select "Turn Off PS4".

2. Press and Hold down the power button on the front of the PS4, until the console beeps twice (once immediately, then another after a few seconds of holding.)
3. Connect your Dual Shock remote via USB cable.
4. Press the PS button on the controller to pair devices.

The console will now be in Safe Mode.

5. Go to option "5. Rebuild Database" and press X.
6. "The database will be rebuilt, it might take a few hours to rebuild the database" will be displayed, Select OK.
7. The screen will go blank while the Database is being rebuilt. When the Rebuild has finished the console will return to the sign in screen.

More Info:

See [Cannot Start PlayStation in Safe Mode](#) for more information regarding PS4 resetting and cache clearance.

Nuke Your Mods

If you are having issues gaining access to the game itself after installing a mod, currently the only solutions are to clear your mods or try poised2strike's method.

Instructions for clearing mods:

See [Fallout 4 Crashing at Startup - Clear out mods](#) for more information.

Community / Fallout / Fallout 4 / Fallout 4 Support / Xbox / Fallout 4 Crashing at Startup - Clear out Mods

< Fallout 4 Crashing at Startup - Clear out Mods



gstaff

Post #441
Posted Oct 23, 2016, 9:23 PM
English

In the event that your game will not load properly, please try these steps to clear out Mods.

How do delete Mods on Xbox One if you cannot load the game

1. Press the Xbox button to return Home
2. Navigate to the bottom of the Home menu and select the "My Games & Apps" app
3. In the "Games" category, highlight the Fallout 4 app
4. Press the Menu (Start) button and select the "Manage Game" option
5. Navigate to the right where the "Saved Data" list is, and highlight "Reserved Space"
6. Press the Menu (Start) button and select the "Clear reserved space" option
7. If the reserved space fails to clear, hard reset the console and retry steps 1-6

How do I delete Mods on Xbox One if I the game is crashing on startup:

1. Return home by pressing the Xbox button.
2. Navigate to Fallout 4 on the Home menu
3. Press Menu button > Manage Game
4. Navigate to Saved Data > Reserved Space (2GB)
5. Select clear reserved space.
6. Reset your console or do a power cycle.

NOTE: There are two Reserved Spaces. One contains save data (and is smaller than 2GB) and the other contains mod data (and is labeled with 2GB). Deleting the save data will cause the Xbox one to resync with the cloud. Deleting the mod data will permanently delete mods from your Xbox.

LO Framework LEGEND KEY

Addons/Patches

If a mod has DLC patches or addons for additional functions, it will be noted if known. These are not the same thing as “versions”. “Versions” are considered whole new mods. Follow the mod author’s instructions for use. *Rule of thumb*: Addons and patches go below the mods they are dependent upon.

Alternative mods

If a mod has an alternative or there is similar-functioning mod by a different author, it will be noted if known. There are 13k mods. Most have alternatives. Not all are going to be listed. Read descriptions and determine if two mods are too similar to use. If you have questions about them, see us on the Parent Server to look under the hood for you. **Choose one or the other. Not both.**

Compatibility/Known Conflicts/Overrides

Mods that override or create bugs when using two mods will be noted if known. Cross-check with mod descriptions, comments, and mod author discords in case a mod gets updated and the guide has not been. There are 13k mods and while the guide is long, it is not complete nor should it be expected to be.

Installing

Approximate load order. Keep in mind that load order is determined by the hex index of your personal list and should not be moved once it is set after starting a game. Doing so may de-stabilize your game. Install in the order of your personal Framework. See [What is the Difference Between Enabling and Installing?](#)

F4SE Warning

Contains dirty BA2s due to accidentally packaging from the CK. players are advised to wait until the MA updates their mod as this will break things on Xbox and brick the game if another mod has not commented out F4SE scripting hooks. This is not the fault of the MA and an easy fix. It happened a lot at the beginning of console modding and many new mod authors do not have information due to bad tutorials or guides. **Do NOT harass the MA about this.**

Important

These are important informational notes that players need to know. Cross-check with mod descriptions and comments in case a mod gets updated and the guide has not been. The mods on the list are not intended to be definitive. It is only a guide. Check with mod authors and their descriptions first.

Patch Warning

If a mod requires a compatibility patch to be functional in your load order, it will be noted. It is up to the mod authors whether or not they will make patches for other mods. See [What Is a Patch?](#) for the differences between “patches”.

Requirements

If a mod requires another mod or a DLC/Creation Club Creation, it will be noted if known. See [Treat Mods as DLC](#) to learn about the various systems FO4 has and why new games are sometimes required to add mods.

Versions

If a mod has multiple versions, it will be noted if known. This is not the same thing as Addons/Patches. Versions are considered whole new mods that contain the same data and cannot be used with patches/addons from another version (unless the description/mod author says so). It is up to the player to find which version works best for their load order.

Warnings

These are major notes that players need to know that may contain info about game breakage or incompatibilities that cause bugs. These are also notes that players will need to take heed of when planning. The incompatibilities when using with other mods may cause crashes or breakage of other mods in the load order. PC players are able to fix certain warnings, such as disabled precombines, wild edits, incorrectly packed BA2s, and ITMs. Download xEdit and use your copy of the Creation Kit. Keep in mind that someone made these things for free and are hobbyists.

Mod Authors and Porters

If you're using the same data folder to play as to create mods, inspect your BA2s prior to publishing with [B.A.E.](#) (or another BA2 viewer), and make sure that Actor.pex and ScriptObject.pex are not included or any of the other scripts added by F4SE. The CK does and will add these if you are not vigilant. Also, **COMMENT OUT F4SE hooks, events, and/or functions** when porting so that accidental dirty BA2s will not crash Xbox!! If the mod does not work with these things commented out, then they cannot be ported to Xbox. :p

Make use of xEdit and Wrye Bash Plugin Checker. Clean your mods, and make sure if you're editing Far Harbor that you've returned it to the mod. The CK likes to delete it.

LOAD ORDER SURVIVAL FRAMEWORK

The mods here are for your compatibility research purposes. This list is not a 'load order'. They are not a recommendation of use nor are they endorsed. They are not there for you to attack someone if there are bugs present. Read all information about them in their mod descriptions and if you have questions, ask the mod author if they are still modding. If it is a port, keep in mind that quite a number of porters have only ported and do not actively maintain mod development. A mod author will best know their mod.

Note about Bugs: If issues/bugs are found, an MA has to be able to reproduce the bug in order to verify and modding takes anywhere from weeks to months to do. Some MAs do not offer technical support for such things, and it should not be expected. Mod authors are hobbyists, and do not work for you. See [Software "Bugs" and You](#).

Sort your mods using the [Framework Template](#) outside of the game.

Mod You Want to Use Is Not Listed

I cannot maintain this list by myself. There are far, far too many mods to test and check. I want to help others, but I also want to be able to mod and play the game too. Currently there are over fourteen thousand Xbox mods, six thousand PS4 mods, and five thousand PC mods on the Bethesda website. This document only has a little over seven hundred that are listed here to assist players as they research.

If you want to use a mod not listed, and you don't know where to put in your load order, please ask about it on the Parent Server. Also, if you have suggestions for inclusion, please direct them to the Parent Server by posting your load order for review. When you post your load order there, it gives us an idea of what mods are in use to add to the list. We will also be able to tell you if there are mods that are going to conflict with each other. The Parent Server is searchable so mods discussed there may not be on this list. Do a search on the Server to find information not listed here.

Information should be publicly shared and discussed in a civil manner to avoid misunderstandings. Do not expect to post on Discord and not be asked questions. We're nerds. We want to know things. Questions will be asked. Ask questions back.

MASTER FILES

- Cheat Room (Bradenm1)
 - Comprehensive cheat mod
 - ~~Mod author has dedicated website for all of his mods <http://www.bradensmods.com/>¹⁴~~
 - Read all information prior to downloading and installing
 - All versions available on Bethesda.net
 - **Add-ons/Patches**

¹⁴ 9-16-2022 Mod author's website is no longer functioning.

- Has several patches/plug-ins that are placed directly below it if you have the DLCs
- **Compatibility/Known conflicts/Overrides**
 - Other cheat mods.
 - Craft Armor, Craft Weapons by bionicyardiff/whisper
 - **Choose only one Cheat Mod.**
- **Installing**
 - Will move on its own to where it needs to be and is programmed to re-order the load order. Problematic if enabling after start up
- **Mod Alternatives**
 - Cheat Terminal
 - Ultimate Cheat Mod
 - Console Cheat Mod
 - Dr. Mobius Finite Stash
 - Mechanist Lair Elevator Holotapes Easy
 - Simple Developer Room Access
 - Armor Room
 - Cheat Boston (world edits with navmesh)
 - Vrexia's Magical Rings
 - Weapon Pack
 - Mega Cheat Ring
 - Cheat Caps and Mats
 - Simple Survival Console Enabled
 - Cheat Engine
 - Sanctuary Supply Stash
 - Cheats, Tweaks, and Unlocks (this is also an overhaul of gameplay)
 - Script-free Alternatives include Freemaker, Freecrafter, or Doors To Dev Rooms
 - **Choose only one Cheat Mod.**
- **Patch Warning**
 - Does not have inter-mod communication to search for DLC items and requires patches for those DLC. Should you only want one mod slot, use Cheat Terminal instead or another of the alternatives.
 - Does not have inter-mod communication to search for mod-added items and requires patches for those. Should you only want one mod slot that does search for certain weapons, use Cheat Terminal instead. See Cheat Terminal entry.
- **Warning**
 - Does not currently appear to be working properly on PS4. PS4-players use caution if downloading, or use with very little other mods. Issue is more than likely due to the MA not being able to properly script without external assets due to Sony restrictions
 - Do not use the 'Infinite Items' cheat or any like it. There are too many mods that conflict with the scripting and the placeholder object in your inventory. It will cause an infinite loop which can lead to a game crash. Only PC can keep from crashing if the computer is strong enough, but the save will not be recoverable after the loop begins. See Craft Weapons and Craft Armor since those mods use the same scripting.
- **Versions**

- Russian Translation available
- Clean My Settlement REDUX (Bionicyardiff/Whisper)
 - Scrapping mod that does not disable precombines.
 - **Alternate Mods**
 - Other scrapping mods (see scrapping mods)
 - **Important**
 - Scrapping mod. Do not use it with other scrapping mods unless they are on the MA's load order sheet.
 - **Installing**
 - if using, MA requires the Unofficial Patch to override several items. Install above UFO4P
 - Important
 - Per mod author
 - **Compatibility/Known Conflicts/Overrides**
 - Allow the UFO4P to override.
 - Mod Author has created an example load order worksheet for their mods: [here](#)
- Unofficial Fallout 4 Patch (Unofficial Patch Team)
 - Is a comprehensive bug fixer that contains user-submitted and -reported bug fixes for nearly every aspect of the game.
 - [Bug Tracker](#) - report game bugs on bug tracker (authors must be able to reproduce)
 - Read all information prior to installing
 - **Important:**
 - As of version 2.1.4 contains optimization bug fixes to precombine/previs system. See [Precombines, Previs, and Load Order](#) for more information. Pair with Previsibine Repair Pack for more comprehensive optimization bug fix.
 - It does not contain fixes for Creation Club.
 - There is no "settler bug" with this mod. This is a vanilla game issue that has to do with overbuilding an area, unoptimized code at the game engine level, and having too many settler calls for the engine to handle. It has nothing to do with the mod, nor can this mod fix it.
 - **Warning:**
 - This mod implements version control as well as replacing vanilla scripting. **Do not uninstall in the middle of a playthrough.** It will cause game instability and lead to save corruption. No support is provided if a player does so.
 - **Requirements:**
 - Automatron
 - Wasteland Workshop
 - Far Harbor
 - Contraptions Workshop
 - Vault-Tec Workshop
 - Nuka-World
 - **Installing:** if using, first mod to install prior to starting the game
 - Esp Master file. Will move on its own to where it needs to be. Will need to be adjusted after updating. This should be FIRST in your order if you use it unless another master is designed to have their mod overridden by UFO4P edits. Read mod descriptions on pages for their placement.

- **Alternative mods:**
 - There is a list of fix mods this mod makes obsolete on AFK forum.
- **Compatibility/Known conflicts/Overrides:**
 - Compatible with Start Me Up Redux
 - Allow all other mods to override (except Cheat Room and Clean My Settlement Redux or any other mod that says in the description that UFO4P must override)
 - **NOT compatible with:**
 - Nora Companion (WIP)
 - Start Me Up
 - Followers mods that overwrite Followers.psc (such as Everyone's Best Friend)
 - Survival mods that overwrite hc_managerscript.psc
 - Workshop mods that overwrite workshopparents.psc.
 - Most recent version of BS Defence is for a different version that uses older scripting
 - Any mod that is run under this one has the chance of overriding the bug fixes if they don't use the fix introduced in this mod. Read each mod's description. Ask mod author of the mod you want to use if you think there might be conflict or ask on the Parent Server.
- **Patch Warning:**
 - Mods that override the scripting or quest fixes need a patch (either separate or built in) to function correctly with fixed scripting. It is up to the mod authors of conflicting mods to create patches or PC players can make their own with knowledge of CK and xEdit. It is not that difficult and permissions are located [here](#).
 - Mods that require UFO4P will need to be updated when UFO4P so wait until updating if using a mod that has it as a requirement or check with the MA
 - Requires patch for Everyone's Best Friend, Survival Widgets, VATS Freeze Fix, most are already patched and available on Nexus or there are instructions on how to patch. See Poet's Optimization Guides if on PC.
- **Versions:**
 - An external-asset-free version is available to PS4 players that offers a safer alternative to Freefall 4.
- **Workshop Framework**
 - Overhaul of all vanilla workshop scripting
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that do not use it
 - Not compatible with BS Defence (either version)
 - **Installing**
 - Install with masters
 - Install above Sim Settlements
- **Armor and Weapon Keywords Community Resource (AWKCR) 3.02 (Valdakil)**
 - Vanilla Weapons and Armor Overhaul
 - Choose either Valdakil's version or Gambit's version (Gambit's version is only necessary if bomb-making or mod author specifies which version they built their mod upon.)
 - This is a comprehensive sorting and crafting mod.

- Required for several clothing and armor mods. See individual mod's description for requirements. You do not need this mod unless you run a mod that requires it, are using DEF_UI and want to sort weapons and armors, or want to craft vanilla weapons.
 - **Addons/Patches:**
 - ACO - Armor and Clothing Overhaul, but has ACO patch
 - Armorsmith
 - UCO - Unified Clothing Overhaul
 - Others too numerous to list
 - **Compatibility/Known Conflicts/Overrides:**
 - ACO - Armor and Clothing Overhaul, but has ACO patch
 - Junkmaster
 - Simple Clothing Keywords
 - Vanilla Crafting Expansion
 - Blacksmith's Crafting Expansion
 - **Installing:** if using, install after UFO4P. If no UFO4P, first mod
 - **If you aren't using the Season Pass version:** The plug-ins for the DLCs go after any master files. Choose the plug-ins for DLC you own.
 - **Mod Alternatives:**
 - ACO (Armor and Clothing Overhaul)
 - ECO
 - Simple Clothing Keywords
 - Vanilla Crafting Expansion
 - **Patch Warning:** this is a vanilla weapons and armor overhaul. All vanilla weapons and armor edits from other mods will need to be patched to work with it.
 - **Versions:** There are TWO versions.
 - One for players with the Season Pass or All DLC and one for players who do not have all the DLC - CHOOSE ONLY THE VERSION YOU NEED
 - Xbox version is not the same version as the PC NexusMods version.
 - Bethesda.net PC version for patching Xbox:
 - <https://bethesda.net/en/mods/fallout4/mod-detail/1999492>
- Armor and Weapons Keywords Community Resources (AWKCR) 4.+ (**Gambit77**)
- Choose either Valdakil's version or Gambit's version.
 - Vanilla Weapons and Armor Overhaul
 - This is a comprehensive sorting and crafting mod.
 - Required for several clothing and armor mods. See individual mod's description for requirements. You do not need this mod unless you run a mod that requires it, are using DEF_UI and want to sort weapons and armors, or want to craft vanilla weapons.
 - *Currently very few console mods use Gambit's version.* Updating is only necessary if a mod requires the new bomb-making benches or any newly re-categorized sorting OMODs.
 - **Addons/Patches:**
 - Too numerous to list. Because this is an overhaul to vanilla weapons and armors, it will conflict with every crafting, weapon and armor mod unless it is set as a required file.
 - **Compatibility/Known Conflicts/Overrides:**
 - ACO - Armor and Clothing Overhaul, but has ACO patch
 - Junkmaster

- PAWA (patch available)
 - Simple Clothing Keywords
 - Vanilla Crafting Expansion
 - Blacksmith's Crafting Expansion
 - Current PC version is not compatible with version 008 SKK Craft Weapons and Scrap Ammo
 - Equipment and Crafting Overhaul (ECO)
- **Installing:** if using, install after UFO4P. If no UFO4P, first mod
 - **If you aren't using the Season Pass version:** The plug-ins for the DLCs go after any master files. Choose the plug-ins for DLC you own.
- **Mod Alternatives:**
 - ACO (Armor and Clothing Overhaul)
 - Blacksmith's Crafting Expansion
 - Simple Clothing Keywords
 - Vanilla Crafting Expansion
- **Patch Warning:** this is a vanilla weapons and armor overhaul. All vanilla weapons and armor edits from other mods will need to be patched to work with it.
- **Versions:** There are TWO versions.
 - One for players with the Season Pass or All DLC and one for players who do not have all the DLC - CHOOSE ONLY THE VERSION YOU NEED
- **Warning:** current version (4.02) breaks power armor bench and requires fix patch - DL fix patch if problem occurs
 - If using with PAWA - Power Armored Wasteland Adventures, PAWA has a patch to fix and make things compatible
- **PC PLAYERS¹⁵: DO NOT USE VORTEX TO DOWNLOAD OR MANAGE AWKCR OR AWKCR-DEPENDENT MODS. Manual or MO2 is recommended.¹⁶ Community-maintained NMM is recommended by the mod author.**
- USO - Unlocked Settlement Objects - Base File (ANDREWCCX)
 - Comprehensive workshop menu overhaul for all platforms.
 - [FAQ](#) - The mod author has a FAQ for all his mods. Read it prior to downloading any.
 - **Addons/Patches:** There are DLC plug-ins, and their placements are directly based on what mods you are using.
 - **Compatibility/Known Conflicts/Overrides:**
 - Mods that overwrite the Raider menu are NOT compatible with this mod
 - Some mods that have not been updated since prior to Nuka-World DLC are not compatible with this mod
 - Lowpoly's and Junkmaster are NOT compatible.
 - Move Power Armor in Workshop! By SgtBobSwagger is NOT compatible
 - **Installing:** Install with master files' settlement menus.

¹⁵ 6-11-21: PC players, check stickies on Nexus. PlayStation players may ignore.

Note to mod authors: MA did not upload a copy of Xbox version to PC for creating AWKCR mods on console. Nexus version is different from console version and correct version may not be available. PlayStation mod authors have UCO and Valdasil's version to use on Bethesda.net to create PlayStation armors/weapons.

¹⁶ 6-30-21: Bethesda.net PC version for patching Xbox: <https://bethesda.net/en/mods/fallout4/mod-detail/1999492>

- **Important:** This mod will add time to your workshop menu loading (there is nothing that can be done to fix this; it adds several DLCs worth of objects to your workshop menu)
- **Important:** All vanilla menus are moved to USO Integrated menu.
- **Patch Warning:** This is a workshop menu overhaul mod.
 - This mod requires a compatibility patch with *Workshop Rearranged* and any mod that makes changes to the *Raider tab*
- **Versions:** There are unsupported “Legacy” versions that do not overhaul the menus, but may crash the game because of the amount of objects added to menus. (This is the reason mod author converted it to an overhaul mod) These versions are not masters.
- Cages Overhauled and More (3lric)
 - Comprehensive mod that adds all creatures from game as tameable captures
 - [FAQ](#) - The mod author has a FAQ. Read it prior to downloading any.
 - **Requirements:**
 - Wasteland Workshop
 - **Compatibility/Known Conflicts/Overrides:**
 - Not entirely compatible with Orphans of the Commonwealth - Unclothed children from Orphans will sometimes replace adults with no way to rename them from “guard”, “doctor”, etc. Orphans cannot be assigned anything other than farming.
 - **Installing:** Enable with master files’ settlements menus. Mod will move to top on its own - adjust as necessary depending on what other mods are already masters.
 - **Patch Warning:**
 - Overhauls the cages menu
 - **Versions:** There is a DLC version. Choose one or the other.
- PAWA - Power Armored Wasteland Adventures (3lric)
 - Comprehensive mod that overhauls power armor, serves as framework for 3lric’s mods requiring it
 - [FAQ](#) The mod author has a FAQ. Read it prior to downloading any.
 - **Addons/Patches:**
 - Collectibles Addon
 - **Compatibility/Known Conflicts/Overrides:**
 - Incompatibility with bug in AWKCR 4.+ (Gambit77’s)
 - Compatible with Beantown Interiors, Beantown Optimization Patch, Drunken Gnomes, Integrated Commonwealth, and AWKCR (Valdaci’s)
 - **Installing:**
 - Enable with masters’ crafting edits.
 - If using AWKCR, install after.
 - **Patch Warning:**
 - Users of AWKCR 4.+ will need to use the optional patch to fix bug
- Snap’N’Build (ad3d0)
 - Workshop menu mod that is scripted.
 - **Compatibility/Known Conflicts/Overrides:**
 - Mesh snap points. This is a master file and snap points can be overridden by other mods. Place Anywhere can be used as a work around.
 - **Installing:** Enable with master files’ settlement menus.

- **Important:** Scripted. Adds its own scripted menu to the Structures menu and several items to the vanilla wood menu.
- **Patch Warning:**
 - There is an optional patch for compatibility with Workshop Rearranged snap-points that will need to be loaded after Workshop Rearranged
- **Warning:** Do not uninstall during mid-playthrough.
 - Uninstalling requires uninstall procedures to keep menus from breaking. Scrap all objects prior to disabling if you have to disable to avoid power grid corruption.
- The Master Plan (Ethreon)
 - Workshop menu mod that serves as framework for many of Ethreon's mods. It is only the updated vanilla menu and new menu art objects (mesh and textures), not the actual placeable workshop items.
 - **Important:** Prior to the last update, mod was not a master file. This note remains for those still using the prior version. *Due to the way the Creation Kit now treats .esp files, they can no longer be master files of another .esp when updating. The CK will actually break such files by removing the dependencies and destroying the form ids. Unfortunately, this means that when Ethreon updated to fix bugs and add a new category, he had to convert it to a true master file and convert all the other Master Plan files to include masterplanEthreon.ESM as their master file. Do not update unless you are starting a new game, you will lose any buildings built. This is not the fault of the mod author, but the way things had to be in order to update the mod.*
 - **Addons/Patches:**
 - **(limited list, do search on Bethesda.net)**
 - Vanilla Extensions
 - Red Rocket Reborn
 - The Cabin in the Woods
 - Port Royal
 - Stairs, Ladders, Ramps
 - Castle in the Sky
 - Atom's Greatness
 - Wasteland Billboard
 - Bob's Iguana Diner
 - **Compatibility/Known Conflicts/Overrides:**
 - Adds new menu to Wood menu without scripting.
 - Not compatible with mods that touch wood menu without scripts
 - **Installing:** Enable with master files' settlement menus.
 - **Patch Warning:**
 - Required compatibility patch for Workshop Rearranged which must be updated every time Workshop Rearranged is
 - Mod author usually updates patch a few days after Workshop Rearranged, so you will need to be patient to install Workshop Rearranged updates otherwise mod's menu will not appear in Wood menu (items should still be in game if you forgot to wait for updated patch)
 - **Versions:**
 - Not required if you download the mod author's non-master plan versions of his mods

- It is assumed this mod is in legacy.
- Endless Warfare(Devilswish182)
 - Adds 1475 scripted spawn markers to Commonwealth
 - **Compatibility/Known Conflicts/Overrides:**
 - AWKCR
 - **Installing:** Enable with master files' world edits
 - **Patch Warning:**
 - Adds new race and adjusts vanilla squire items. Squire items will not show up when using AWKCR.
 - **Work-around:** Add UCO to load order to override squire edits if using AWKCR.
 - **Warning:** Using with many weapon mods and cranking everything up to eleventy thousand is not advisable on console. Xbox is unable to handle the strain on the processor.
 - **Warning:** Scripted. DO NOT REMOVE MID-PLAY
- Integrated Commonwealth (ANDREWXCX)
 - World overhaul with level list integration.
 - Makes adjustments to level lists, adds objects to cells, adds extra spawns to certain spawn points, makes adjustments to several Game Settings
 - [FAQ](#) The mod author has a FAQ. Read it prior to downloading any.
 - See Description for more details
 - Addons/Patches:
 - **Alternative Mods:**
 - Wasteland Imports
 - Distributed DLC Level Lists
 - XB1 DLC Weapon Distribution
 - **Compatibility/Known Conflicts/Overrides:**
 - Mostly compatible with Wasteland Imports. Same leveled item lists are hard-edited, however Wasteland Imports will override.
 - **Installing:** Enable with master file world edits.
 - **Important:** Best used on a new game but can be installed later. Will take anywhere from several in-game hours to 30 in-game days to see. **Some items will not show up if installed mid-play due to the nature of how the game works.**
 - **Patch Warning:**
 - Level lists can be overridden or patched by mods that overhaul factions
 - **Requirements:**
 - All DLC (Season Pass/GoTY)
- Sim Settlements(Kinggath)
 - Settlement System Overhaul
 - **Addons and Patches:**
 - List of Expansion Packs and Addons [Here](#)
 - **Compatibility/Known Conflicts/Overrides:**
 - List of Incompatible Mods [Here](#)
 - **Installing:**
 - Install after AWKCR if using.
 - Install after UFO4P if using.
 - See mod author's website for more information about load order

- **Important:** Holotape and ASM are located in Museum of Freedom; probably should be installed prior to beginning Minutemen quests
- **Patch Warning:** See incompatible mods
- **Requirements:**
 - HUDFramework
 - Settlement Menu Manager
 - See mod author website for any other info
- **Versions:**
 - See mod author website
 - There is an All-in-One version. Read ALL Documentation regarding installation and requirements **prior to downloading**.
- **Warning:** Building too many plots can cause game to freeze/crash.
- **Warning:** Use with other mods not recommended on console due to high memory usage. **Older Xbox Ones** may have issues running the scripts properly. It is advised (not by mod author) to only run a few mods when running this mod.
- **Warning:** Sim Settlements Conqueror takes **2 hours real-time** for scripts to initialize on console
- **Per DAManding:** " the recommended thing to do is park their character in the vault, looking at the floor, and let it sit there for a couple hours until the progress meters are all done before even exiting the vault. especially on lower end hardware and consoles"
- Sim Settlements 2 (Kinggath)
 - Settlement and world overhaul
 - See wiki.SimSettlements2.com
 - [Bug Tracker](#)
 - **Addons/Patches:**
 - There are numerous addon packs made by the community
 - **Compatibility/Known Conflicts/Overrides:**
 - **Installing:**
 - Install after UFO4P
 - Install after Workshop Framework
 - See mod author website for other information
 - **Important:** This should be the only mod in your load order if using
 - **Patch Warning:**
 - **Requirements:**
 - 1 GB of space
 - Workshop Framework
 - HUDFramework
- True Storms: Wasteland - Storm and Weather Overhaul (Fadingsignal)
 - This is a weather overhaul
 - Adds new particle geometry and textures
 - **Addons/Patches:** Has patch for DLCs
 - **Alternative Mods:** other weather mods. Choose one or the other.
 - **Compatibility/Known Conflicts/Overrides:**
 - This mod is not compatible with other weather or lighting mods
 - **Installing:**

- Install with master lighting and weather mods
- **Important:**
 - Per mod author: “Mods with patches for True Storms will not work with version v1.4 unless they are updated!...Using old patches may cause unintended behavior and issues...”
- **Patch Warning:**
 - Requires patches for Darker Nights and Valdakil’s Item Sorting
- **Warning:**
 - Reports of this mod being a bit too much for consoles. If using, do not use alongside a lot of other mods.
- SimpleGreen - SimpleSeasons ‘Spring’ (ANDREWXCX)
 - Base file for the SimpleSeasons Series. Retextures grass and adds trees to the world.
 - [FAQ](#) The mod author has a FAQ. Read it prior to downloading any.
 - **Addons/Patches:**
 - Grass Reduction Patch also available if too much grass in Covenant, Starlight Drive-in, etc.
 - Plug-in for Nuka World available
 - **Alternative Mods:** other green world mods. Choose one or the other
 - **Compatibility/Known Conflicts/Overrides:**
 - Mods that do the same thing
 - **Installing:**
 - Install with master world edits
 - **Important:**
 - If you see floating grass anywhere, reset your console’s cache - this is a console issue, not the mod’s fault
 - Does NOT disable precombines
 - **Versions:**
 - Winter version
- Natural and Atmospheric Commonwealth (NAC)
 - This is weather AND visual overhaul
 - **Addons/Patches:**
 - If using with Far Harbor and or Nuka World, download the additional Far Harbor and or Nuka World add-ons and run this mod at the end of your master file list. Place add-ons directly below.
 - **Compatibility/Known Conflicts/Overrides:**
 - This mod is not compatible with other weather mods or mods that adjust god rays
 - This mod is compatible with mods that remove lens flare via configuration INI fragment; but certain aspects of lens flare may be removed
 - **Installing:**
 - Install with master lighting and weather mods (see addons/patches if using DLC)
 - **Versions:**
 - NAC-X. Choose one or the other.
 - **Warning:** Not for use on the Xbox One original (OG). It is too much for the console to handle downtime, even after disabling all new weathers. Disabling weathers defeats the purpose of having a weather mod.
- Shirtless Outfits Modular Master (Guidion)

- Crafting mod with a store and world edits.
- **Addons/Patches:**
 - Mod author has list of modules [here](#)
- **Compatibility/Known Conflicts/Overrides:**
 - Compatible with Vanilla body and EVB
 - Not entirely compatible with CBBE (clipping, etc)
- **Installing:**
 - Install with master world edits
- **Important:** Precombines are disabled near Red Rocket and Sanctuary. Mod created prior to mod authors knowing about precombines.
- **Versions:**
 - There are TWO versions. One is an All-In-One, the other is just Modular. Pick one or the other. Do NOT download both.
- **Warnings:**
 - PC players are advised to regenerate the precombines for their load order. The mod disables precombines in the area where the store is located. Xbox players, if you choose to use, save often and expect not to be able to build much, if any, at Sanctuary or Red Rocket.
- **Freefall 4 (PS4 mod)**
 - **WARNING: Do NOT use with other mods.** This is a stand-alone mod not intended for use with mods. **It is intended for an otherwise vanilla playthrough.**
 - **WARNING:** Scrap the Commonwealth - Nuka World Add-on and Freefall 4 are NOT compatible! Do NOT use together. The game *will* crash in the main menu and you *will* have to re-install FO4 and your mods in order to bring back functionality.
 - Mod author has a thorough changelog on the mod page. **Read all information about this mod before installing.** This mod contains 'dirty' edits in order to work on PS4. This type of edits renders it **incompatible** with just about every other mod. PS4 players, if you intend to use this mod, it should be the only mod you run otherwise, you're on your own as to troubleshooting and problems. There are too many variables involved.
 - This mod is an overhaul and comprehensive bug patch intended to fix vanilla game bugs.
 - This mod has DLC plug-ins. Read the descriptions and documentation on each prior to installing.
 - An alternative is the Unofficial Fallout 4 Patch for PS4.
 - Not compatible with Ultimate Cheat Mod (PS4)
- **More Immersive Quest Start - Gauss Rifle**
 - Removes script to start quest on quest form, adds triggers to world
 - **Installing:**
 - ESL file. Will position itself in load order where it needs to go upon enabling.
 - **Important:** Ported without testing or chucksteel owning the content. See [chucksteel's post](#).
 - **Requirements:**
 - Creation Club Gauss Rifle
- **More Immersive Quest Start - Anti-materiel Rifle**
 - Removes script to start quest on quest form, adds triggers to world
 - **Installing:**
 - ESL file. Will position itself in load order where it needs to go upon enabling.

- **Important:** Ported without testing or chucksteel owning the content. See [chucksteel's post](#).
- **Requirements:**
 - Creation Club Anti-materiel Rifle
- More Immersive Quest Start - Captain Cosmos
 - Removes script to start quest on quest form, adds triggers to world
 - **Installing:**
 - ESL file. Will position itself in load order where it needs to go upon enabling.
 - **Important:** Ported without testing or chucksteel owning the content. See [chucksteel's post](#).
 - **Requirements:**
 - Creation Club Captain Cosmos
- More Immersive Quest Start - Doom BFG
 - Removes script to start quest on quest form, adds triggers to world
 - **Installing:**
 - ESL file. Will position itself in load order where it needs to go upon enabling.
 - **Important:** Ported without testing or chucksteel owning the content. See [chucksteel's post](#).
 - **Requirements:**
 - Creation Club Doom BFG
- More Immersive Quest Start - Fantasy Hero
 - Removes script to start quest on quest form, adds triggers to world
 - **Installing:**
 - ESL file. Will position itself in load order where it needs to go upon enabling.
 - **Important:** Ported without testing or chucksteel owning the content. See [chucksteel's post](#).
 - **Requirements:**
 - Creation Club Fantasy Hero
- More Immersive Quest Start - Nuka Cola Collector Workshop
 - Removes script to start quest on quest form, adds triggers to world
 - **Installing:**
 - ESL file. Will position itself in load order where it needs to go upon enabling.
 - **Important:** Ported without testing or chucksteel owning the content. See [chucksteel's post](#).
 - **Requirements:**
 - Creation Club Nuka cola Collector Workshop
- More Immersive Quest Start - Pint-sized Slasher
 - Removes script to start quest on quest form, adds triggers to world
 - **Installing:**
 - ESL file. Will position itself in load order where it needs to go upon enabling.
 - **Important:** Ported without testing or chucksteel owning the content. See [chucksteel's post](#).
 - **Requirements:**
 - Creation Club Pint-Sized Slasher
- More Immersive Quest Start - Solar Cannon
 - Removes script to start quest on quest form, adds triggers to world
 - **Installing:**
 - ESL file. Will position itself in load order where it needs to go upon enabling.
 - **Important:** Ported without testing or chucksteel owning the content. See [chucksteel's post](#).
 - **Requirements:**
 - Creation Club Solar Cannon

- More Immersive Quest Start - Zetan Arsenal
 - Removes script to start quest on quest form, adds triggers to world
 - **Installing:**
 - ESL file. Will position itself in load order where it needs to go upon enabling.
 - **Important:** Ported without testing or chucksteel owning the content. See [chucksteel's post](#).
 - **Requirements:**
 - Creation Club Zetan Arsenal
- More Immersive Quest Start - Dogs
 - Removes script to start quest on quest form, adds triggers to world
 - **Installing:**
 - ESL file. Will position itself in load order where it needs to go upon enabling.
 - **Compatibility/Known Conflict/Overrides:**
 - When using SKK Fast Start, restart Xbox for pip-boy. There is an issue using both mods that neither author can fix.
 - **Requirements:**
 - Creation Club Dog
 - TransDOGrifier
 - **Versions:**
 - There are versions for individual dogs and an all-in-one with all dogs available.
 - All-in-one was specifically rebuilt for Xbox when the original mod failed on Xbox in testing.
- Simple Clothing Keywords
 - Simple alternative to AWKCR
 - **Addons/Patches**
 - See mod author's load order [template](#)
 - **Alternative Mods**
 - AWKCR
 - ACO (Armor and Clothing Overhaul)
 - Blacksmith's Crafting Expansion
 - Vanilla Crafting Expansion
 - Armorsmith
 - **Compatibility/Known Conflict/Overrides**
 - Not compatible with other crafting mods
 - AWKCR
 - ACO
 - Blacksmith's Crafting Expansion
 - Vanilla Crafting Expansion
 - Armorsmith
 - UCO
 - Not compatible with armors/clothing that requires AWKCR
 - **Installing**
 - ESL file. Will position itself in masters upon installation. Install with masters below PAWA, if using
- Standalone Workbenches
 - Master file for mod author's crafting mods

- Modder's resource, simple alternative to AWKCR
- **Addons/Patches**
 - Shipments Expanded
 - Craft Armor
 - Craft Clothing
 - Craft Power Armors
 - Craft Weapons
 - Crafting Rearranged
 - See mod author's load order [template](#)
- **Alternative Mods**
 - AWKCR
 - ACO (Armor and Clothing Overhaul)
 - Blacksmith's Crafting Expansion
 - Vanilla Crafting Expansion
 - Armorsmith
- **Compatibility/Known Conflict/Overrides**
 - Not compatible with other crafting mods
 - AWKCR
 - ACO
 - Blacksmith's Crafting Expansion
 - Vanilla Crafting Expansion
 - Armorsmith
 - UCO
 - Not compatible with armors/clothing that requires AWKCR
- **Installing**
 - ESL file. Will position itself in masters upon installation. Install with masters below Simple Clothing Keywords
- Shipments Expanded
 - **Installing**
 - ESL file. Will position itself in masters. Install with masters below Standalone Workbenches, if using
 - **Requirements**
 - Wasteland Workshop DLC
 - Standalone Workbenches

FAST STARTS AND FRAMEWORKS

SKK.50 has RTFMs on their Discord and their NexusMods mods pages. Mods are currently in [legacy mode](#) due to [NexusMods paid mods announcement](#) and NexusMods prohibiting mod authors from opting out by disallowing deletion of files. All info about their mods can be found on their Discord community.

All of SKK's mods are scripted. Do not remove in the middle of a playthrough and expect the game to continue to function without bugs or crashes.

- SKK Fast Start New Game
 - Scripted alternate start

- Mod author has FAQ and [RTFM](#)
 - [FastStart Inter mod communication](#)
 - Info on [Inventory Items Missing from New games](#)
 - If no Pipboy - located in box near Vault exit; see Mod page for exact location
 - If using SKK Fast Settlements and no Pip-Boy at chosen settlement - make hard save, exit game completely and reenter game.
 - Wait until all startup quests have completed their start up cycle before making first hard save and adding mods
 - Wait for all quests popups to finish plus an additional few moments before moving character after vault exit, especially if using more than one Creation Club item
 - All Creation Club items begin their quests when the Vault door opens
 - **Addons/Patches:**
 - Fast Start Location
 - Fast Start Reunions
 - Fast Start BOS
 - Fast Start Minutemen
 - Fast Start Institute
 - Fast STOP Institute
 - Preston is Killable
 - **Alternative Mods:**
 - Start Me Up
 - Other alternate start mods
 - **Compatibility/Known Conflicts/Overrides:**
 - Scripts expect vanilla scripts
 - Not compatible with alternate start mods, especially ones that do not set the appropriate quest triggers
 - Anything that touches the pip-boy will cause issues. Wait until after start up occurs to install any pip-boy mods.
 - **Installing:**
 - Install after all master files prior to game start.
 - Do not use any HUD mods installed at startup
 - **Important:** For AIO alt start, use with SKK Fast Start Location
 - **Requirements:**
 - New game
 - **Warning:** Mods that have scripting issues depositing holotapes into inventory, should be installed after SKK has run in order for their holotapes to show up.
- SKK Fast Start Location
- Start at a workshop or point of interest.
 - Read [user guide](#) on mod description
 - If using SKK Fast Start, see notes and RTFM
 - Addons/Patches:
 -
 - **Compatibility/Known Conflicts/Overrides:**
 - Scripts expect vanilla scripts

- **Installing:**
 - Install after SKK Fast Start New Game if using
- **Important:** See known issues on mod description
- **Requirements:**
 - New game
 - For AIO Alt Start: SKK Fast Start New Game
 - Not designed for alt starts other than SKK Fast Start
- SKK Fast Start Reunions
 - Skips main quest to the point of Fort Hagen and “Reunions” and unlocks Codsworth, Piper, Valentine as well as Fort Hagen, Diamond City, and Vault 114.
 - See [User Guide \(RTFM\)](#)
 - **Alternative Mods:**
 - Amazing Followers Tweaks (not a full alternative but contains similar scripting where Dogmeat is concerned. See below)
 - **Compatibility/Known Conflicts/Overrides:**
 - Scripts expect Vanilla Scripts
 - Not for use with alt starts
 - Amazing Followers Tweaks - cancels out Dogmeat as a companion
 - Not for use with Synthetic Player
 - Not compatible with Start Me Up
 - **Installing:**
 - Install after master files
 - Install after SKK Fast Start New Game if using
 - Install after SKK Fast Start Location if using
 - **Important:** Clear out companion comments with Nick, Piper, and Dogmeat to get them to offer companionship
 - **Requirements:**
 - New game
- SKK Fast BoS
 - ArcJet triggers Prydwen and not Reunions
 - Read Mod [RTFM](#)
 - **Addons/Patches:**
 - Kellogg CeralKiller
 - **Compatibility/Known Conflicts/Overrides:**
 - Scripts expect vanilla scripts
 - Not compatible with Enter the Brotherhood
 - **Installing:**
 - Install after SKK Fast Start if using
 - Install after Reunions if using
 - **Important:** Must be outside after finishing ArcJet quest with Danse in order to see Brotherhood enter Commonwealth
 - **Warning:** Do NOT disable while Prydwen is entering the Commonwealth!
- SKK Fast Minutemen
 - Skip initial Minutemen quests
 - [FAQ](#) - Read FAQ prior to download

- **Addons/Patches:**
 - Preston is Killable
 - SKK Workshop Ownership Utilities
- **Compatibility/Known Conflicts/Overrides:**
 - Scripts expect vanilla scripts
 - Not compatible with alternate start mods, especially ones that do not set the appropriate quest triggers
- **Installing:**
 - Install after SKK Fast Start New Game
- **Important:**
 - If you are still using v003, there is an issue with the Concord people. A patch is necessary to fix if the issue occurs. *Work around:* update to latest version on new game.
 - Mod functions better on new games.
- SKK Fast Start Institute
 - Read mod [RTFM](#)
 - **Addons/Patches:**
 - Fast Start Minutemen
 - Fast Start BOS
 - Fast Start Reunions
 - **Compatibility/Known Conflicts/Overrides:**
 - Scripts expect vanilla scripts
 - Not compatible with alternate start mods, especially ones that do not set the appropriate quest triggers
 - **Installing:**
 - Install after SKK Fast Start New Game
 - **Important:**
 - Show No Mercy must be completed in order to use BOS for Institute Destruction
 - Tradecraft must be completed and player must be a part of Railroad to use Railroad for Institute Destruction
 - The First Step and player must be General of Minutemen to use Minutemen for Institute Destruction
 - **Warning:** “From Within” quest does not advance
- SKK Fast Overboss
 - Enables Shank and Home Sweet Home upon exit of Cola Cars
 - **Addons/Patches:**
 - Preston is Killable
 - **Compatibility/Known Conflicts/Overrides:**
 - Scripts expect Vanilla Scripts
 - Not compatible with mods that skip Nuka World
 - **Installing:**
 - Enable after SKK Fast Start New Game
- Universal Actor Scale Remover
 - Will keep child settlers from scaling to adult size
 - Default object adjustment, removes keyword

- **Compatibility/Known Conflicts/Overrides:**
 - Not compatible with mods that alter the keyword for scaling
 - FurnitureScaleActorToOne
- **Installing:**
 - Install with framework mods
 - Install above mods that alter furniture objects
- Commonwealth Contraband
 - Mod author has Xbox group on Xbox Live and Discord Group
 - [FAQ](#) - Read FAQ before downloading
 - Mod is in legacy mode as of Aug 2019
 - **Installing:**
 - Install after masters or with other world edit mods (depends on other mods in load order)
 - If not running SKK 'Fast' mods, run just under master files beneath NAC add-ons if using.
 - Per mod author: load as far to the top as possible
- Ultimate Cheat Mod (**PS4 mod**)
 - **Per mod author: load as far to the top as possible**
 - Not compatible with Freefall 4
- Draw Distance Tweaking
 - Ini settings adjusted via script. For proper set up, adjust settings - do NOT turn off pop-ups - and fully restart game. See info on INI files in "[Important Definitions](#)"
 - Do not use with mods that adjust lighting, grass, shadows, or draw distance edits.
 - There is only one popup at the load time; disabling the mod and reenabling to reboot the scripts may be necessary if the scripts malfunction for whatever reason
 - Do NOT use the Ultra settings on Xbox regardless of original, S, or X. It is not recommended by the mod author unless you are taking pictures and plan on going back to a save prior to adjusting the settings as such.
 - Some of the ini edits do not work properly on Xbox.
 - Mod is no longer maintained.
 - Note: Scripted ini edits do not appear to remain with the save and must be reset each session. This also happens with PC Skyrim. Only ini edits that are recognized by the game and are 'hard edits' do not need to be reset.
- Simple Green Seasons - Red/ Fall
 - **Addons/Patches**
 - SimpleGreen Grass Reduction Patch
 - **Alternate Mods**
 - Other foliage mods
 - SimpleGreen Seasons - Yellow/Summer
 - SimpleGreen Seasons - Winter
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods listed under alternates
 - Not compatible with scrapping mods - choose either to remove or to add; don't do both (it is not logical)
 - **Important**
 - If grass is too much at Starlight and other places, add SimpleGreen Grass Reduction Patch

- **Installing**
 - Placement is dependent on other mods in your load order
 - Install after SimpleGreen master
- **Requirements**
 - SimpleGreen “Spring”
- Simple Green Seasons - Yellow/Summer
 - **Alternate Mods**
 - Other foliage mods
 - SimpleGreen Seasons - Red/Fall
 - SimpleGreen Seasons - Winter
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods listed under alternates
 - Not compatible with scrapping mods - choose either to remove or to add; don't do both (it is not logical)
 - **Important**
 - If grass is too much at Starlight and other places, add SimpleGreen Grass Reduction Patch
 - **Installing**
 - Placement is dependent on other mods in your load order
 - Install after SimpleGreen master
 - **Requirements**
 - SimpleGreen “Spring”
- SimpleGreen Grass Reduction Patch
 - **Alternate Mods**
 - Insignificant Object Remover
 - No Twigs
 - **Compatibility/Known Conflicts/Overrides**
 - Do not use with mods that change grass density
 - **Installing**
 - Install after SimpleGreen and SimpleGreen addons
 - **Requirements**
 - SimpleGreen

FACTION & AI OVERHAULS

- Commonwealth 2.0 - Animal Poverty
 - **Alternative Mods**
 -
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with any mod that alters animal death and inventory lists
 - **Installing**
 - Install above scripted level lists
 - Install with gameplay changes or with level lists
 - **Patch Warning**

- Requires patch for any mod that hard edits animal death and inventory lists
 - **Requirements**
 - Far Harbor
 - Nuka World
- Commonwealth 2.0 - Raider Overhaul (LazyMurph)
 - Alters Raider Leveled Lists
 - Alters combat AI similar to Search and Destroy - choose one or the other
 - Place high in load order
 - **Bug/Issue:**
 - Reports of mod not working correctly. There are alternatives since this mod came out.
 - Reported raiders showing up in skivvies, but cannot confirm if due to bug in mod, incorrect load order or mod conflict with another mod - Players will have to test themselves (It sounds like mod conflict; however it may also be due to bug in game engine itself similar to game engine bug with generic settler mods - see Better Settlers at Bottom of Load Order for more information on this game engine bug)
 - **Alternative Mods:**
 - Random Encounter Manager
 - **Compatibility/Known Conflicts/Overrides:**
 - Any mod that alters raider level lists and Automatron robots will conflict
 - Search and Destroy may conflict
 - Arbitration may conflict
 - Other mods like Arbitration and search and destroy may conflict
 - **Installing:**
 - Install after masters
 - Install after Fast Starts if using
 - **Important:**
 - Mod has not been updated since December 2016 on Bethesda.net. There have been many changes to the game build and other mods since then.
 - There is not a PC version to look under the hood
 - Use at your own risk
 - **Patch Warning:**
 - This is an overhaul mod. Not compatible with any mod that overhauls the Raider faction or adds to the Raider Leveled Lists
 - **Requirements:**
 - Far Harbor
 - Automatron
 - Nuka World
 - **Versions:**
 - There are two versions. One has an additional weapon in it, which accounts for file size.
- Commonwealth 2.0 - Encounter Overhaul (LazyMurph)
 - This is an *overhaul mod*. Not compatible with any mod that affects enemy spawn points
 - Commonwealth 2.0 series designed by mod author to work together
 - **Alternative Mods:**
 - Random Encounter Manager
 - **Compatibility/Known Conflicts/Overrides:**

- Any mod that unlevels the game will conflict
- **Installing:**
 - Install with gameplay or encounter zone edits
- **Important:**
 - Mod has not been updated since December 2016 on Bethesda.net. There have been many changes to the game build and other mods since then.
 - There is not a PC version to look under the hood
 - Use at your own risk
- **Patch Warning:**
 - This is an overhaul mod. Not compatible with any mod that overhauls the Raider faction or adds to the Raider Levelled Lists
- **Requirements:**
 - Far Harbor
 - Automatron
 - Nuka World
- Commonwealth 2.0 - Faction Overhaul (LazyMurph)
 - This is an *overhaul mod*. **There is not a PC version to look at for Xbox players.**
 - Completely overhauls Power Armor; see mod description for details
 - If not starting a new game, one must wait 30 in-game days for changes to take place
 - Adds to Commonwealth 2.0 - Raider Overhaul
 - **Alternative Mods:**
 - Random Encounter Manager
 - Many others.
 - **Compatibility/Known Conflicts/Overrides:**
 - Any mod that unlevels the game will conflict
 - Not compatible with any mod that overhauls Brotherhood, Gunners, Minutemen, Super Mutant, Railroad, and Power Armor lists
 - Not compatible with Buffed Minutemen Militia or other Minutemen overhaul mods
 - **Installing:**
 - Install with gameplay or encounter zone edits
 - **Important:**
 - Mod has not been updated since April 11, 2017 on Bethesda.net. There have been many changes to the game build and other mods since then.
 - There is not a PC version to look under the hood
 - Use at your own risk
 - **Patch Warning:**
 - any mod that overhauls Brotherhood, Gunners, Minutemen, Super Mutant, Railroad, and Power Armor lists will need a patch
 - **Requirements:**
 - Far Harbor
 - Automatron
 - Nuka World
- The Deadly Commonwealth (Every Enemy Faction Overhaul)
 - Mod author has already been informed of bugs on the comments section of Bethesda.net.

- This is an overhaul mod. **This mod contains deleted references. Not recommended for use without cleaning.**
- **Addon Patches**
 - Optimization Patches Collection (PC Only)
- **Alternative Mods:**
 - Many.
- **Compatibility/Known Conflicts/Overrides:**
 - This mod is not compatible with any of the same author's Deadly series; however, is compatible with UIF - Union of Independent Federations by the same author.
 - Not compatible with mods that alter LCharRaider, LCharChildrenofAtom, LCharFeralGhoul, LCharRaiderBoss, LCharSuperMutantAuto, LCharGunner
 - Do not use with mods that alters any of the enemy factions above
 - Script injected weapons may have compatibility issues if they do not take into account the new enemy levels
 - Possible issues when using with Gunners vs Minutemen Creation. Use both with caution. There are other alternatives to use than this one if you want to use your purchased Creation
 - Lighting changes at Old North Church.
 - Conflicts with mods that touch cells in warnings below
- **Installing:**
 - Install below masters
 - Install below Fast Start if using
 - Install above mods that script inject into enemy weapon level lists
 - Install above lighting mods
 - **Use at your own risk.** *Xbox:* Due to deleted references, not recommended. Xbox players have no way to clean. *PC:* clean mod and regenerate precombines before use or overwrite with Optimization Patches Collection.
- **Important:**
 - Adjustments to load order may be necessary when using with mod-added weapons
 - New encounters are not added to the encounter system and do not have triggers in new areas. The ones added to vanilla areas are not linked to encounter triggers. New encounters will appear regardless of level.
 - Only choose one faction overhaul. Several factions use the same weapon and armor level lists.
 - This mod does not take into consideration DLC. Use with DLC with caution.
 - Use at your own risk
- **Patch Warning:**
 - Patches will be required to use with any other enemy mod
 - Patches will be required for AWKCR
 - Patches for DLC/CCC affected cells recommended
- **Requirements:**
 - Cleaning with xEdit required prior to use
 - Precombines/Previs regenerated required prior to use
- **Versions:**
 - This is the AIO

- Deadly series comes in several individual packs (which are or were beta versions of this one).
 - **Warnings:**
 - **ITMs (“dirty” edits)**
 - Armor_Raider_GreenHood, Armor_FlightHelmetBrown, ClothesChildofAtom3, ClothesChildofAtom2, Gauss Rifle. PC players use xEdit to remove these ITMs as they will override other mods in your LO if lower and will need to be cleaned if you use AWKCR. Xbox players should not be using this mod because of deleted references. If willing to risk game crashes in areas below: use a mod like UCO and a generic weapon patch for AWKCR for vanilla weapons to override
 - **Deleted References (these also disable precombines in cell and cells referenced on their previs data file that calculates which meshes are precombined):**
 - **THESE WILL CAUSE GAME CRASHES**
 - Deleted References at BADTFL, Gunner’s Plaza, Vault 75. *PC*: run xEdit and clean and regenerate precombines in CK in those cells to return cells to vanilla but updated timestamp. *Xbox*: We cannot clean. Expect crashes if using.
 - **Precombines/Previs Disabled:**
 - Andrew Station interior
 - Gunners Plaza exterior
- **Deadly Super Mutants Of The Commonwealth**
 - **This mod contains deleted references. Not recommended for use without cleaning.**
 - **Mod is under beta but has not been updated since 2016.** Consider mod a WIP and or abandoned. Use alternative mod.
 - Adds additional Super Mutants types but does not add to level list
 - **Alternative mods:**
 - Many. Choose only one mod that affects Super Mutants
 - The Deadly Expansion
 - **Compatibility/Known Conflicts/Overrides:**
 - Not compatible with same mod author’s The Deadly Commonwealth
 - Per mod author: compatible with Deadly Raiders, Deadly Gunners, Deadly Ghouls, Deadly Triggermen
 - Conflicts with mods that touch cells listed in warnings below
 - **Installing:**
 - Install with world edit mods above mods that alter weapons
 - Install above mods that script inject into pipe weapons
 - Per mod author: top of load order if problems arise
 - **Use at your own risk.** *Xbox*: Due to deleted references, not recommended. Xbox players have no way to clean. *PC*: clean mod and regenerate precombines before use.
 - **Important:**
 - Adjustments to load order may be necessary when using with mod-added weapons
 - New encounters are not added to the encounter system and do not have triggers in new areas. The ones added to vanilla areas are not linked to encounter triggers. New encounters will appear regardless of level.

- Only choose one faction overhaul. Several factions use the same weapon and armor level lists.
 - This mod does not take into consideration DLC. Use with DLC with caution.
 - Use at your own risk
- **Requirements:**
 - precombine/previs regeneration required for use
 - Cleaning of mod with xEdit required for use
- **Warnings:**
 - **Precombines/Previs Disabled:**
 - Abernathy farm disabled precombines - name is overwritten to "N"
 - Commonwealth cell 21, 18 disabled precombines (just south of Salem)
 - **Deleted References (these also disable precombines in cell and cells referenced on their previs data file that calculates which meshes are precombined):**
 - **THESE WILL CAUSE GAME CRASHES**
 - Deleted references at -17,-13 - disabled precombines at LakeCochituateExt06 and MassFusionDisposal
 - Deleted references at -17,-14 - disabled precombines at LakeChituateExt13 and MassFusionDisposalExt
 - Deleted references at FortHagenExt02 - disabled precombines at Fort Hagen and -21, -3
 - Deleted references at -3, -18 (cell referenced by previs file for Gunner's Plaza and POISC16) - disabled precombines for -3, -18, POISC16, and GNNExt02
 - Deleted references at Gunner's Plaza GNNExt
 - Deleted references at -5,-9
- **Deadly Raiders Of The Commonwealth**
 - Adds additional encounters to game
 - **Alternative mods:**
 - Many
 - The Deadly Commonwealth Expansion
 - Random Encounter Manager
 - **Compatibility/Known Conflicts/Overrides:**
 - Not compatible with Commonwealth 2.0 - Raider Overhaul
 - Not compatible with same mod author's The Deadly Commonwealth
 - Conflict with mods that touch DrumlinDiner - deleted references at DrumlinDiner
 - Conflict with mods that touch cells listed in Warnings below
 - **Installing:**
 - Install with quests above mods that alter weapons for raiders
 - Install with factions if problems arise
 - **Use at your own risk.** Xbox: Due to deleted references, not recommended. Xbox players have no way to clean. PC: clean mod and regenerate precombines before use.
 - **Important:**
 - Adjustments to load order may be necessary when using with mod-added weapons
 - New encounters are not added to the encounter system and do not have triggers in new areas. The ones added to vanilla areas are not linked to encounter triggers. New encounters will appear regardless of level.

- Only choose one faction overhaul. Several factions use the same weapon and armor level lists.
 - This mod does not take into consideration DLC. Use with DLC with caution.
 - Use at your own risk
- **Patch Warning:**
 - Patch required for mods that alter EncRaider01Boss, EncRaider05Melee, EncRaider03Grenade, EncRaider04Grenade, EncRaider02b
- **Requirements:**
 - Cleaning of mod with xEdit required for use.
 - Previs/Precombines regenerated required for use.
 - PC players: recommend placing spawns on encounter system (modding it yourself), especially for Zimonja and Drumlin
- **Warnings:**
 - **ITMs (“dirty” edits):**
 - SuperDuperMartExt
 - **Wild edits (accidentally moved):**
 - CloudDistant05_25 in Concord
 - **Precombines/Previs Disabled:**
 - Cells -14,13; -14, 12; - Landscape height changed and precombines disabled
 - POIJ019 - Landscape height changed and precombines disabled
 - **Deleted References (these also disable precombines in cell and cells referenced on their previs data file that calculates which meshes are precombined):**
 - **THESE WILL CAUSE GAME CRASHES**
 - DrumlinDiner
 - ConcordExt
 - Encounters at RelayOutPostZimonja are not set up on the encounter trigger system or settlement attack system. Spawns may respawn without a settlement attack quest running.
 - Drumlin Diner’s people get wiped out by encounter. Drumlin Diner is one of Carla’s posts to sell items.
- **Deadly Gunners Of The Commonwealth**
 - Adds additional encounters to game
 - **Alternative mods:**
 - Many
 - Random Encounter Manager
 - The Deadly Commonwealth Expansion
 - **Compatibility/Known Conflicts/Overrides:**
 - Mods that edit grenades will override
 - Not compatible with the same mod author’s The Deadly Commonwealth
 - **Important:**
 - Adjustments to load order may be necessary when using with mod-added weapons
 - New encounters are not added to the encounter system and do not have triggers in new areas. The ones added to vanilla areas are not linked to encounter triggers. New encounters will appear regardless of level.

- Only choose one faction overhaul. Several factions use the same weapon and armor level lists.
- This mod does not take into consideration DLC. Use with DLC with caution.
- Use at your own risk
- Mod author recommends to download later in game. This is not recommended for Xbox since too many things happen under the hood and could cause instability. Mod encounter system is not set up properly for Xbox.
- **Installing:**
 - Install under masters with other factions
 - Place high in load order and adjust as necessary. Mod Author recommends top of load order.
- **Requirements:**
 - Cleaning of mod with xEdit required for use.
 - Previs/Precombines regenerated required for use
 - PC players: recommend placing spawns on encounter system (modding it yourself), especially for Drumlin
- **Warnings:**
 - Drumlin Diner people are wiped out by Gunners. If using Deadly Raiders, prolonged battle between factions occurs.
 - **ITMs:**
 - SanctuaryExt
 - **Wild Edit:**
 - Vanilla map marker static object renamed to Gunner Outost Alpha and object bounds recalculated
 - **Deleted References (these also disable precombines in cell and cells referenced on their previs data file that calculates which meshes are precombined):**
 - **THESE WILL CAUSE GAME CRASHES**
 - Cell 7,12 - disabled precombines in cells 7, 12 and 6, 12
 - DrumlinDiner - precombines disabled in cells DrumlinDiner, -12,12
 - Cell -14, 13 - precombines disabled at -14,13 and -15, 12
- **Deadly Ghouls Of The Commonwealth**
 - **Alternative mods:**
 - The Deadly Commonwealth Expansion
 - **Compatibility/Known Conflicts/Overrides:**
 - Not compatible with the same mod author's The Deadly Commonwealth
 - **Installing:**
 - Install under masters with other factions
 - Place high in load order and adjust as necessary. Mod Author recommends top of load order.
 - **Important:**
 - New encounters are not added to the encounter system and do not have triggers in new areas. The ones added to vanilla areas are not linked to encounter triggers. New encounters will appear regardless of level.
 - This mod does not take into consideration DLC. Use with DLC with caution.
 - Use at your own risk

- Mod author recommends downloading later in game. This is not recommended for Xbox since too many things happen under the hood and could cause instability. Mod encounter system is not set up properly for Xbox.
 - PC players: recommend placing spawns on encounter system (modding it yourself)
 - **Requirements:**
 - PC: use xEdit and remove wild edit
 - **Warnings:**
 - **Wild Edit:**
 - TrinityTowerExt
- **Deadly Triggers of the Commonwealth**
 - Mod author has “discontinued” this mod. PC version not available to look at.
 - Place high in load order under master files
 - Not compatible with the same mod author’s The Deadly Commonwealth Expansion
 - Unsure if mod needs to be cleaned like the other mods of this series
 - Unsure if mod needs precombines regenerated like other mods of this series.
 - **Use at your own risk**
- **Deadly Bosses Of The Commonwealth**
 - Adds faction bosses to kill that give you loot.
 - Mod is still in Beta as of Apr 29, 2018. Report bugs to the mod author.
 - **Alternative mods:**
 - Random Encounter Manager
 - The Deadly Expansion
 - **Compatibility/Known Conflicts/Overrides:**
 - Changes EditorID of FlareGun and changes name to something else rather than adding new gun.
 - Not compatible with Automatron
 - Not compatible with the same mod author’s The Deadly Commonwealth
 - **Installing:**
 - Only download if intending to beta test. Use test character.
 - Install under masters
 - **Important:**
 - Mod is still in beta. Report bugs on Mod Author’s comment page.
 - New encounters are not added to the encounter system and do not have triggers in new areas. The ones added to vanilla areas are not linked to encounter triggers. New encounters will appear regardless of level.
 - This mod does not take into consideration DLC. Use with DLC with caution.
 - **Use at your own risk**
 - Mod author recommends to download later in game. This is not recommended for Xbox since too many things happen under the hood and could cause instability. Mod encounter system is not set up properly for Xbox.
 - PC players: recommend placing spawns on encounter system (modding it yourself)
 - **Patch Warning:**
 - Requires patch for Automatron’s Fort Hagen Satellite Array updates
 - **Requirements:**

- PC: Clean with xEdit, patch for Automatron and regenerate precombines for Fort Hagen Satellite Array
- **Warnings:**
 - **Deleted References (these also disable precombines in cell and cells referenced on their previs data file that calculates which meshes are precombined):**
 - FortHagenSatelliteArrayExt - these deletions will cause crashes with Automatron DLC
- Buffed Minutemen Militia 2
 - Adjusts Minutemen level lists
 - Not compatible with mods that adjust the Minutemen levels lists
 - Starting Point Only. Adjust as necessary.
- Fallout 3 NV Feral Ghouls Replacer
- NPCs Travel
 - May not be compatible with the Deadly Series; may not be compatible with mods that adjust NPC leveled lists; individual testing is required with other mods
 - Starting point only. Adjust as necessary.
 - NPCs arriving in skivvies could be caused by loading this mod mid-game due to game engine issue and not mod's fault. See Better Settlers at Bottom of Load Order for more information. (oddlittleturtle had only one instance of naked settler spawn when loaded mid game and with Guidion's EVB and three clothing mods that adjusted raider, settler, and gunner level lists.)
 - Mod author is not a native English speaker. To help MA understand you if you have questions, don't use compound sentences that could potentially confuse a translator and lead to misunderstandings.
- FCOM - Fallout Commander (MadGodSheogorath)
 - **Addons/Patches:**
 - **Note:** If using a patch/addon from a mod author other than original, report bugs to patch MA not original. Patch MAs are responsible for their patch and any bugs it may or may not add to mod, not the MA of the mod they are patching.
 - Additional patches and addon available by mod author [here](#)
 - FCOM-AR Patch
 - FCOM-NieroCoA Patch
 - FCOM-NierolEX Patch
 - FCOM-RemnantOfficerUniform
 - FCOM-CCIncinerator Patch
 - FCOM-CCHelfirePatch
 - FCOM-CCX02Patch
 - FCOM-EnclaveOfficerPatch
 - FCOM-MM Patch
 - FCOM-RtLX03 Patch
 - FCOM-RtLX02Patch
 - **Compatibility/Known Conflicts/Overrides:**
 - Compatible with America Rising; however there is an optional patch for more functionality between the two (immersion?)
 - **Important:**
 - Restructured as of 3.11

- **Installing:**
 - Install with masters
- **Patch Warning:**
 - Optional patch for America Rising
 - Hellfire Troopers are in patches and removed from main mod
- **Requirements:**
 - Automatron
 - Far Harbor
 - Nuka World
- **Versions:**
 - Outdated 2.82
- **DLC Leveled List Integration (MrArc/Comptonassterry)**
 - DLC ammo and weapons integrated into raiders, gunners, super mutants, and rust devils lists
 - **Alternate Mods**
 - Integrated Commonwealth
 - DLC Weapon Distribution
 - Wasteland Imports
 - Distributed DLC Level Lists
 - Most gameplay overhauls
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that do the same thing
 - **Installing**
 - Install above script injected leveled list alterations
 - **Patch Warning**
 - Hard edits to level lists. Requires compatibility patch for any mod that alters same list
 - **Requirements**
 - Automatron
 - Nuka World
 - Far Harbor
 - **Versions**
 - Integrated into Wasteland Imports
- **DLC Weapon Distribution**
 - Distributes DLC weapons via scripted injection.
 - **Alternate Mods:**
 - Integrated Commonwealth
 - Wasteland Imports
 - Distributed DLC Level Lists
 - Commonwealth 2.0 - Vendor Lists
 - DLC Leveled List Integration
 - **Compatibility/Known Conflicts/Overrides:**
 - Do no use with mods that do the same thing. You will overload the weapons lists, especially downtown.
 - Possible conflict with modded weapons that use 7.62 and .45-70 instead of their own ammo

- **Installing:**
 - Install after masters
 - Install after Fast Start if using
 - Install after hard edits to level lists
- **Important:**
 - Script injected level lists; do not disable in the middle of a playthrough
- **Requirements:**
 - Far Harbor
 - Nuka World
- Distributed DLC Level Lists
 - Distributes DLC and CCC weapons and armor via script injection if player has them installed.
 - **Alternate Mods:**
 - Integrated Commonwealth
 - Wasteland Imports
 - XB1 DLC Weapon Distribution
 - Commonwealth 2.0 - Vendor Lists
 - DLC Leveled List Integration
 - **Compatibility/Known Conflicts/Overrides:**
 - Do no use with mods that do the same thing. You will overload the weapons lists, especially downtown.
 - **Installing:**
 - Install after masters
 - Install after Fast Start if using
 - Install after hard edits to level lists
 - **Important:**
 - Script injected level lists; do not disable in the middle of a playthrough
 - Inter-mod communication is active for level lists for all DLC and CCC items if the player has them installed. Injection after installing DLC/CCC will happen after the next game start if installed in the middle of a game.
 - If installing CCC on an on-going game, players will need to wait for level lists to reset.
 - **Requirements:**
 - Far Harbor
 - Nuka World
- Soldiers are People Too
 - **Compatibility/Known Conflicts/Overrides:**
 - BOS overhaul.
 - **Installing:**
 - Install after masters
 - Install after Fast Start if using
 - Install before scripted injection of inventories
 - **Patch Warning:**
 - Requires a patch to work with other BOS overhauls.
 - **Versions:**
 - There are several versions. Choose which one works with your load order.
- Gunner Armor Paint In Faction Distribution

- Updates level lists of gunners faction to CCC Armor paint
- **Compatibility/Known Conflicts/Overrides:**
 - Gunners overhaul
- **Installing:**
 - Install after masters
 - Install after Fast Start if using
- **Requirements:**
 - Creation Club Gunner Armor Paint Job
- **Warning:** Author's description does not specify if script inject or hard edit. Testing on individual load orders against other mods that hard edit is required for confirmation. Go forth and test!

NEW WORLDSPACES/LANDMASSES/QUESTS

If the mod adds a new worldspace, it should be a master file if it is above a certain size (not necessarily determined by actual file size, but record size) or be loaded as high in your load order as possible so that everything loads correctly. Check each mod's description and comments prior to download and placement. Quests here are those added by the new worldspace/land mass or Quests that need their scripting to fire before the rest of the load order. Quests that add new NPCs and edits to vanilla quests but don't add new worlds should be loaded nearer the bottom of the load order.

If you are unsure, ask in the Parent Server.

- America Rising - A Tale of the Enclave
 - **Addons/Patches:**
 - Note: not all are by the same MA as mod; some may work and some may not. Do not report bugs to MA if using a patch by another MA. The MA who made the patch is responsible for their patch, not the MA of the mod they are patching. Search Bethnet for additional. These were just in a prelim search.
 - America Rising - Gear of the Enclave
 - Gear of the Enclave Distribution
 - Enclave Minutemen [AR]
 - FCOM-AR Patch
 - America Rising CC X-02 Patch
 - Militarized Enclave [AR]
 - Better America Rising Level Lists
 - KalibKadafi's Enclave Officer Uniform America Rising Patch
 - CC Heavy Incinerator America Rising Patch
 - Enclave CC Paint America Rising Patch
 - **Compatibility/Known Conflicts/Overrides:**
 - World edits in the same area as mod

- **Important:** America Rising has 48419 records as of this writing. It is a very large quest mod with a brand new world space. Plan your load order around it.
- **Installing:**
 - Install with new world spaces
 - If Oil Rig or any portion of mod is blocked, move to New Quests near the bottom of load order.
- **Warnings:**
 - **ITMs:**
 - EncBosSoldier05Legendary, EncBosSoldier07Legendary, EncBosSoldier08Legendary, EncBosSoldier09Legendary
- FCOM-AR Patch
 - **Installing:**
 - Install after FCOM, America Rising and FCOM X02/Hellfire X03
- Union Of Independent Federations, UIF (Deadly New Faction Mod)
 - **Compatibility/Known Conflicts/Overrides:**
 - Possible conflict with SKK's Fast Start BOS
 - Not compatible with Creation Club
 - Not compatible with latest game build on Xbox
 - May not be compatible with UFO4P
 - See comments on mod pages on Xbox and PC version
 - Not compatible with Nuka World
 - Mod overwrites COMPreston quest which is Preston's dialogue that was updated for Nuka World
 - Not compatible with mods that overhaul companion dialogue and include Preston's dialogue
 - Not compatible with Gunners factions mods, contains dirty edits to several gunners forms
 - Overwrites Gas Masks, RailroadArmoredCoat, ClothesMilitaryCap, Danse's left power armor leg, Danse's right power armor leg
 - **Installing:**
 - Install at the end of the load order if you want to try it with other mods after you have killed Kellogg.
 - Due to game crashing bugs and dirty edits, it is not recommended until the mod author issues a fix and cleaning. See comments on mod pages on both Xbox and PC versions.
 - **Important:**
 - Designed for high level character
 - Should be one of the only mods in your load order; test with high level test character to see if this works with your load order
 - Do not use if have all DLC
 - **Requirements:**
 - Prydwen must be in Commonwealth and not be destroyed
 - **Warnings:**
 - Deleted references - game will crash if another mod references them

- Won't work and will crash the game if downloaded prior to killing Kellogg.
 - Installing mods that far into the playthrough is not recommended on Xbox.
 - Precombines are broken in nearly every area of map mod touches
 - Mod needs to be cleaned with xEdit for use on PC. Xbox players are out of luck until the mod author finalizes their mod with cleaning.
- Open Borders (Tim-timman)
 - Per mod author: high as possible in load order
 - Starting point only if no other mods other than masters in load order.
 - Base game only
 - Maxwell's World
 - **Important:** Maxwell's World is a very large quest mod with a brand new world space. Xbox players should plan load order around.

NEW FACTIONS

Most of these listed script inject their new NPCs into vanilla levels lists. Read the descriptions.

- Capital Wasteland Behemoths
- DC and West Coast Super Mutants
- Institute Centaurs
- Lamprey Floaters
- M's Abominations
 - Scripted level list injection of characters
 - Do not remove mid play, you will break all spawn points the mod injects onto
 - Starting point only. May need to be run lower or higher depending on your load order.
 - Not Compatible with Far Harbor. Far Harbor is deleted from the game (CK does this. Mods with Far Harbor cell edits require checking in xEdit.)
- Mojave Cazadores
- Mojave Geckos
- Mojave Mantises
- The Famished

VANILLA QUESTS

Survival Mode

- Unlimited Survival Mode (registrator2000)
 - Disabling a mod after installing is not advised and not officially supported
 - Mod is not parented to Fallout4.esm and the in-game manager does not know the mod exists
 - PC version requires F4SE
- Survival Options

- **OBSOLETE¹⁷ and not currently compatible with current build - Use Cheat Terminal's functions instead - or alternative.**
- **Alternative Mods**
 - Mad's Damage Tweaks
 - Multiple other mods
- **Compatibility/Known Conflicts/Overrides**
 - NOT compatible with any mods that edit hc_manager (such as Everyone's Best Friend)
 - Not compatible with Survival Stats Widget
 - Not compatible with VATS Freeze Fix
 - Not compatible with Immersive Gameplay
 - Not compatible with Unofficial Fallout 4 Patch
 - Not compatible with Everyone's Best Friend
 - Not Compatible with mods that alter hc_managerscript
- **Requirements**
 - Survival Mode Only
- VATS Freeze Fix By JDBruce
 - Makes changes to the Survival Mode controlling script (HC_ManagerScript) to add a fix to freezing in V.A.T.S. when the timer times down to add diseases (hunger, thirst, fatigue, etc) to the player
 - **Compatibility/Known Conflicts/Overrides:**
 - Not compatible with mods that modify HC_ManagerScript.pex (Survival Mode), such as Survival Options, Immersive Gameplay 5, Everyone's Best Friend, etc.
 - **Installing:**
 - Install under masters
 - Install above mods that require HC_manager to function
 - **Important:** See [Survival Mode Troubleshooting](#) for more information.
 - **Patch Warning:**
 - Mod-added automatic food/water/stimpak etc. will need patch in order to take advantage of fix
 - Script Patch for Unofficial patch necessary if using
 - **Requirements:**
 - Survival Mode. If you are not going to play in survival mode, do not install.
 - **Warnings:** Mod-added foods/water/stimpak not affected
 - This is a survival mode overhaul. Plan your load order around it if using.
- Survival Sleep Anywhere
 - Edits Survival Mode quest to treat mattresses and sleeping bags like beds
 - **Alternative Mods**
 - Tribute Rude Awakening
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that hard edit HC_Manager: Immersive Gameplay, Everyone's Best Friend, Survival Options
 - **Installing**

¹⁷ 5-25-2020: Xbox version is obsolete and not compatible with the game or most survival mods available. At last look, PC version requires scripted patch for any mod that touches HC_Manager such as VATSFreeze Fix, Everyone's Best Friend, and Unofficial Patch. Only patch scripts if you know what you're doing.

- Install with Gameplay tweaks or Vanilla Quests, depends on other mods in load order
- **Requirements**
 - Survival-mode only mod
- **Versions**
 - PC version rolled into Survival Options, but Survival Options not compatible with current version of game



Workshops

Companion Overhaul¹⁸

- Unlimited Companions Framework
 - Mod has not been updated since Sept 27, 2016. Unofficial Patch has updated script for affinity fix
 - Reported issues with this mod working; See comments page for more information
 - **Alternate Mods**
 - Everyone's Best Friend
 - Amazing Followers Tweaks
 - More Companion Slots: Human + Robot + Dog
 - **Installing**
 - Starting point only. If not working - place LAST in LO
 - **Compatibility/Known Conflicts/Overrides**
 - Xbox: **Not compatible with Unofficial Fallout 4 Patch**. Requires scripting patch.
 - Not compatible with mods that alter Followers.psc
- Everyone's Best Friend (Dogmeat + Companion) (Valdakil)
 - **Alternate Mods**
 - Unlimited Companions Framework
 - Amazing Followers Tweaks
 - More Companion Slots: Human + Robot + Dog
 - **Compatibility/Known Conflicts/Overrides**
 - Not Compatible with More Companion Slots: Human + Robot + Dog
 - Not compatible with mods that alter HC_Manager - will overwrite HC_Manager (such as Survival Options and Immersive Gameplay 5; see Survival Options for more details)
 - Xbox version has possible script conflict with Unofficial Fallout 4 Patch
- More Companion Slots: Human + Robot + Dog
 - Works as advertised: You can take Dogmeat, a human, and a robot
 - **Known bug:** Dogmeat whimpers when new human companion equipped
 - Unsure if bug or game engine: Does not recognize Codsworth as robot; Ada is recognized as robot as well as other automatrons; Curie was not tested by oddlittleturtle (you'll have to test her yourself)
 - **Known bug:** Ada's follower script is not complete in the vanilla Automatron which causes Ada to act strange and stay at her 'home' settlement of Red Rocket

¹⁸ 6-14-2022: Followers.psc is a framework system for all companions with affinity. Only choose one mod that overwrites this system. All new companions that have affinity have to hook into it.

- **Alternate Mods**
 - Everyone's Best Friend
 - Unlimited Companion Framework
 - Amazing Followers Tweaks
- **Compatibility/Known Conflicts/Overrides**
 - Overwrites Follower script; do not use with any other mod that alters Followers script; it will cause Ada to be unrecruitable and you will not be able to complete Automatron
 - Do not use unless you have Automatron
 - Unsure if bug or game engine issue: Works best after completion of Automatron quest just as building robots works best; possible issue with Ada not following commands if installed prior to completion of Automatron (more than likely not a bug with mod but with vanilla Automatron due to Ada's Follower Script not being complete)
 - Has possible script conflict with Unofficial Fallout 4 Patch
- More Smarter Companions Mod (Xbox One)
 - Vanilla Companions only
 - See Description and NexusMods page for more details on how the Companions work with this mod
 - Adjusts Companions AI
 - **Alternate Mods**
 - Many
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that alter companions. Directly edits companions and will need a patch to work with any mod that alters companions in any way
 - **Important**
 - Most vanilla perks added by this mod are player-only
 - **Installing**
 - Load order adjustments necessary if using with Moddable Robot Settlers, Nick Valentine's Day, Get Danse out of his Power Armor, Keep Radiants in the Commonwealth, and The Danse Dilemma - See [Analysis of a Load Order](#) or old Parent Thread for [more information](#)
 - **Patch Warning**
 - See Analysis of a Load Order for use without a patch
 - Patches recommended for use with companion mods
- Amazing Followers Tweaks¹⁹
 - **Alternate Mods**
 - Simple Camping
 - Mobile Workshop
 - Build Anywhere
 - Workshop Anywhere
 - Everyone's Best Friend
 - More Companion Slots
 - Unlimited Companions Framework
 - Conquest

¹⁹ 6-14-2022: Follow the mod author's instructions for this mod. Where it falls is determined by other mods you have in your load order.

- **Compatibility/Known Conflicts/Overrides**
 - Override with SKK's Fast Start Reunions - scripting is similar where Dogmeat is concerned
 - Do not use with mods that add mobile workshops, you only need one.
 - Do not use with mods that touch followers' scripting. Mod's scripting expects vanilla. Only use one follower overhaul.
 - Conflict with Start Me Up - Start Me Up contains a few problematic bugs where the spouse is concerned
 - Conflict with Start Me Up REDUX - conflicts with spouse quest; spouse spawn script override each other
- **Installing**
 - Install per mod author instructions.
- **Warnings**
 - Mod was created before mod authors knew about the power grid. Use caution when using with powered objects. To prevent any unwanted issues with power grid, scrap powered objects before moving workshop. See [Power Grid Corruption](#) for more information.

Other

- Brawl Bug Fix
 - **Alternative mods:**
 - Unofficial Fallout 4 Patch
 - Not necessary if using UFO4P, included in fixes
- Icebreaker Settlements Overhaul
 - Overhauls vanilla NPC dialogue in settlements
 - **Addons/Patches:**
 - Icebreaker Piper
 - **Alternative mods:**
 - Settler and Companion Dialogue
 - BaalWD Dialogue Alterations
 - Hush It!
 - **Compatibility/Known Conflicts/Overrides:**
 - Not compatible with mods listed under Alternative Mods. Choose one or the other.
 - Overrides to settlers dialogue quest
 - Not compatible with Start Me Up or Start Me Up Redux
 - **Important:** Does not affect Companion dialogue.
 - **Installing:**
 - Install after masters with vanilla quest edits
 - Install before mods that affect vanilla quests with dialogue
 - Testing required with individual quest mods
 - Adjust load order on test character to find best placement among other quests.
 - **Patch Warning:**
 - Patches required for vanilla dialogue quest edits
 - **Requirements:**

- Vanilla start game enabled quests are modified. Requires a new game to use.
- Icebreaker Piper
 - Overhauls Piper's dialogue
 - **Alternative mods:**
 - Pleasing Piper Attitude Adjuster
 - Settler and Companion Dialogue Overhaul
 - Start Me Up Redux
 - **Compatibility/Known Conflicts/Overrides:**
 - Not compatible with mods listed under Alternative Mods. Choose one or the other.
 - Overrides Piper's dialogues
 - Not compatible with Start Me Up or Start Me Up Redux
 - **Installing:**
 - Install with vanilla quest edits
 - If issues, install with NPC and Companion Changes
 - Testing required with individual quest mods
 - Adjust load order on test character to find best placement among other quest mods
 - **Patch Warning:**
 - Mods that adjust Story of the Century may need patches
 - **Requirements:**
 - Vanilla start game enabled quests are modified. Requires a new game to use.
- BaalWD Dialogue Alterations
 - Overhauls vanilla NPC dialogues
 - **Alternative mods:**
 - Settler and Companion Dialogue
 - Icebreaker Settlements Dialogue Overhaul
 - Hush It!
 - **Compatibility/Known Conflicts/Overrides:**
 - Not compatible with mods listed in Alternate Mods
 - Overrides to vanilla quests with dialogue fixed by UFO4P
 - Not compatible with Start Me Up or Start Me Up Redux
 - **Installing:**
 - Install with vanilla quest edits
 - Install before mods that affect vanilla quests with dialogue
 - Testing required with individual quest mods
 - Adjust load order on test character to find best placement among other quests.
 - **Important:**
 - Does not affect Companion idle dialogue
 - **Patch Warning:**
 - Last modified Dec 20, 2016. Patch for UFO4P recommended but not required due to updated dialogue files from UFO4P
 - **Requirements:**
 - Vanilla start game enabled quests are modified. Requires a new game to use.
 - **Warnings:**
 - Created for female player characters. All references to male removed.
- Hush it!

- Overhauls vanilla NPC dialogues
- **Alternative mods:**
 - Settler and Companion Dialogue
 - Icebreaker Settlements Dialogue Overhaul
 - BaalWD Dialogue Alterations
- **Compatibility/Known Conflicts/Overrides:**
 - Not compatible with mods listed in Alternate Mods
 - Overrides to vanilla quests with dialogue fixed by UFO4P
- **Installing:**
 - Install with vanilla quest edits
 - Install before mods that affect vanilla quests with dialogue
 - Testing required with individual quest mods
 - Adjust load order on test character to find best placement among other quests.
- **Patch Warning:**
 - Patches required for vanilla dialogue quest edits
- **Requirements:**
 - Vanilla start game enabled quests are modified. Requires a new game to use.
- Dearest [Name] Best Dog Ever.
 - Series of Dogmeat renamers. Choose one, not all if going to use.
 - Instructions for use on mod page and on first comment of mod page.
 - Do not enable while Dogmeat is your companion
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that rename Dogmeat
 - **Installing**
 - Install below mods that alter Dogmeat's name
 - Can be installed with mods that alter Dogmeat or Quests
- Keep Radiants in the Commonwealth
 - **Alternate Mods**
 - Ugh. Radiants.
- Ugh. Radiants.
 - **Alternate Mods**
 - Keep Radiants in the Commonwealth

SETTLEMENT BUILDING MODS (adds items to menu vanilla way)

Powered Objects

- Manufacturing Extended (Kentington)
 - Adds additional builders to builder menu
 - **Addons/Patches**
 - Manufacturing Extended Expanded
 - Due to bug with Power Armor contraption, MEE is an all but required addition
 - **Alternative Mods**
 - PS4: Manufacturing Overhaul

- Compatibility/Known Conflicts/Overrides
- **Installing**
 - If problems occur, move higher into load order.
 - Adds to vanilla contraptions menus
- **Important**
 - Place high in load order, per mod author of Manufacturing Extended Expanded on their NexusMods page
 - Sometimes auto butcher will “eat” corpses on Fast Travelling to location. You will be unable to attain materials from the corpses. To fix, monitor contraption and if problem occurs, store auto butcher in workshop and then rebuild. Reverting back to a save prior to Fast Travelling in is also recommended if you want the materials lost.
 - Accidental lol: If accidentally put wrong type of object on conveyor belt for butchering, auto-butcher will also “eat” it but not process it. Storing will cause object to fall out, but object may also clip into the ground and be unable for Player Character to pick up again. Be mindful of what is going onto the conveyor belt and to which contraption it is going.
- **Requirements**
 - Contraptions DLC
- **Warnings**
 - When used alone, there are issues with Power Armor contraption
 - Latest version of Manufacturing Extended Expanded is supposed to patch problems with ME
- Manufacturing Extended Expanded
 - Addon for Manufacturing Extended
 - **Alternate Mods**
 - PS4: Manufacturing Overhaul
 - **Installing**
 - Install after Manufacturing Extended
 - Install near the top of the workshop mods
 - **Important**
 - Adds to vanilla contraptions menus
 - Latest version patches several problems with Manufacturing Extended
 - **Requirements**
 - Manufacturing Extended
 - Contraptions DLC
- Contraption - Composter
 - Adds an additional builder to the builder menu
 - **Alternate Mods**
 - PS4: Manufacturing Overhaul
 - **Compatibility**
 - Compatible with Manufacturing Extended Expanded
 - **Installing**
 - Install after Manufacturing Extended
 - Install after Manufacturing Extended Expanded
 - **Important**
 - Adds to vanilla contraptions menus

- **Requirements**
 - Contraptions
 - Manufacturing Extended
- Curved Conveyor (cadpaq)
 - Adds new conveyor belts to the builder menu
 - **Alternate Mods**
 - Advanced Settlement Power - Contraptions
 - **Important Information**
 - Added to Advanced Settlement Power - Contraptions; do not use both
- High Speed Conveyor Lifts (cadpaq)
 - Adds new lifts to builder menu
 - **Alternate Mods**
 - Advanced Settlement Power - Contraptions
 - **Important Information**
 - Added to Advanced Settlement Power - Contraptions; do not use both
- Logics Electronics
 - Adds new electronics to power menu
 - **Alternate Mods**
 - Advanced Settlement Power
 - **Installing**
 - Install with workshop powered object
- Advanced Settlement Turret Set (ccmads)
 - Adds new turrets to the workshop menu
 - **Alternate Mods**
 - Hardcore Defense System
 - Modern Warfare Sentry Turret
 - Paper Shredder Turrets
 - Power Free Turrets
 - Stronger Workshop Defenses
 - Sturdy Armored Settlement Turrets
 - Top Attack Turrets
 - Turret Grenades
 - VaultBoy Turret
 - Whisper's Enhanced Turrets
 - Whirlygig Sentry
 - Workshop Turret Pack
 - **Important**
 - It is important to know that turrets have AI; be aware of how many you place
 - **Installing**
 - Install with other workshop defense/powered menu mods
 - **Requirements**
 - The DLC version requires Automatron and Far Harbor
 - **Versions**
 - There is a version for DLC and version for no DLC

➤ Hardcore Defense System

- Add on for The World is Dying
- There is not enough information in the description to make a determination as to exactly what this mod does and there is no PC version to verify. It is assumed it is both a turret adder and a workshop script and quest edit.
- **Alternate Mods**
 - Advanced Settlement Turret Set
 - Modern Warfare Sentry Turret
 - Paper Shredder Turrets
 - Power Free Turrets
 - Stronger Workshop Defenses
 - Sturdy Armored Settlement Turrets
 - Top Attack Turrets
 - Turret Grenades
 - VaultBoy Turret
 - Whisper's Enhanced Turrets
 - Whirlygig Sentry
 - Workshop Turret Pack
- **Compatibility**
 - Modifies vanilla system
 - Designed for The World is Dying
- **Important**
 - There is not enough information on the mod page to know exactly what this mod does. It is listed as an overhaul. Recommended to either use it on a vanilla game with no other mods like it installed or only use it with The World is Dying to avoid conflicts with other mods.
- **Installing**
 - Install below The World is Dying

➤ Modern Warfare Sentry Turret

- Adds new turret with new meshes and textures
- **Alternate Mods**
 - Advanced Settlement Turret Set
 - Hardcore Defense System
 - Paper Shredder Turrets
 - Power Free Turrets
 - Stronger Workshop Defenses
 - Sturdy Armored Settlement Turrets
 - Top Attack Turrets
 - Turret Grenades
 - VaultBoy Turret
 - Whisper's Enhanced Turrets
 - Whirlygig Sentry
 - Workshop Turret Pack
- **Important**
 - It is important to know that turrets have AI; be aware of how many you place

- **Installing**
 - Install with other workshop defense/powered menu mods
- Power-Free Turrets, Elevators, and More
 - Adds new powerless turrets and elevators
 - **Alternate Mods**
 - Advanced Settlement Turret Set
 - Hardcore Defense System
 - Modern Warfare Sentry Turret
 - Paper Shredder Turrets
 - Stronger Workshop Defenses
 - Sturdy Armored Settlement Turrets
 - Top Attack Turrets
 - Turret Grenades
 - VaultBoy Turret
 - Whisper's Enhanced Turrets
 - Whirlygig Sentry
 - Workshop Turret Pack
 - **Compatibility/Known Conflicts**
 - Wild edit on FaceGenBarberChair required by beginning characters. Do not use it during the same playthrough as SKK Fast Start or USO.
 - Contains ITMs on several objects that will require cleaning on PC or careful load order management on Xbox. Place above any workshop mods that alter: WorkshopRadioBeacon²⁰, WorkshopLightBox01, DLC05_PosterAFrame
 - Sound file removed from base form; will affect mods that require the file.
 - **Important**
 - Elevator fixes from the Unofficial Patch may not be carried over given the mod was created prior to fix.
 - **Installing**
 - *Wholly dependent on other mods in load order due to ITMs*
 - If risking use, it will have a different placement for every load order
 - If using alone, enable with workshop powered objects
 - **Requirements**
 - Contraptions Workshop DLC
 - **Warnings**
 - Sound for NPCRobotTurretLowTechMotorLPM removed from form. Turrets are an NPC and therefore have a VoiceType. Mod does not appear to correctly adjust the VoiceType level. (bug)
 - Mod created prior to xEdit being known to remove ITMs
 - ITMs - WorkshopRadioBeacon, WorkshopLightBox01, DLC05_PosterAFrame
 - Wild Edit - FaceGenBarberChairVault
- Stronger Workshop Defenses
 - Adds new turrets to defense menu

²⁰ 1-23-2022: Testing required with Sim Settlements 2; however given that it has ITMs, wait until the author has cleaned it.

- **Alternate Mods**
 - Advanced Settlement Turret Set
 - Hardcore Defense System
 - Modern Warfare Sentry Turret
 - Paper Shredder Turrets
 - Power Free Turrets
 - Sturdy Armored Settlement Turrets
 - Top Attack Turrets
 - Turret Grenades
 - VaultBoy Turret
 - Whisper's Enhanced Turrets
 - Whirlygig Sentry
 - Workshop Turret Pack
- **Compatibility/Known Conflicts**
 - There are two versions of the mod. Use one or the other
 - Workshop Rearranged, requires patch
- **Important**
 - It is important to know that turrets have AI; be aware of how many you place
- **Installing**
 - If using Workshop Rearranged install with WR and patch
 - Install with other workshop defense menu mods
- **Patch Warning**
 - There is a compatibility patch available for Workshop Rearranged so the turrets fall under their proper category, Defenses
 - Stronger Workshop Defenses
 - Workshop Rearranged
 - Patch
- **Requirements**
 - Patches for Workshop Rearranged require all DLC
- **Versions**
 - Stronger Workshop Defenses - with perks
 - Stronger Workshop Defenses - without perks

➤ Top Attack Turrets

- **Alternate Mods**
 - Advanced Settlement Turret Set
 - Hardcore Defense System
 - Modern Warfare Sentry Turret
 - Paper Shredder Turrets
 - Power Free Turrets
 - Stronger Workshop Defenses
 - Sturdy Armored Settlement Turrets
 - Turret Grenades
 - VaultBoy Turret
 - Whisper's Enhanced Turrets
 - Whirlygig Sentry

- Workshop Turret Pack
 - **Important**
 - It is important to know that turrets have AI; be aware of how many you place
 - **Installing**
 - Install with other workshop defense/powered menu mods
- VaultBoyTurret
 - Adds new turrets with new meshes and textures
 - **Alternate Mods**
 - Advanced Settlement Turret Set
 - Hardcore Defense System
 - Modern Warfare Sentry Turret
 - Paper Shredder Turrets
 - Power Free Turrets
 - Stronger Workshop Defenses
 - Sturdy Armored Settlement Turrets
 - Top Attack Turrets
 - Turret Grenades
 - Whirlygig Sentry
 - Whisper's Enhanced Turrets
 - Workshop Turret Pack
 - **Important**
 - It is important to know that turrets have AI; be aware of how many you place
 - **Installing**
 - Install with other workshop defense/powered menu mods
- Whirlygig Sentry
 - See mod page for description of what this mod does
 - **Alternate Mods**
 - Advanced Settlement Turret Set
 - Hardcore Defense System
 - Modern Warfare Sentry Turret
 - Paper Shredder Turrets
 - Power Free Turrets
 - Stronger Workshop Defenses
 - Sturdy Armored Settlement Turrets
 - Top Attack Turrets
 - Turret Grenades
 - VaultBoyTurret
 - Whisper's Enhanced Turrets
 - Workshop Turret Pack
 - **Important**
 - Read MA's Mod [FAQ](#) prior to use; take note of warnings and conflicts
 - Vertibird mesh is rather higher poly than most objects
 - Vertibirds have their own AI

- **Installing**
 - Load order will be different depending on mods you've chosen
 - Install below MA's 'whirly' companion, if using
 - Install below vertibird modifications, if using
 - Install with AI modifications/Companion Edits but above modifications to world references that move Carla or Cricket, if large amount of mods in load order
 - Installation is wholly dependent on other mods affecting vertibird AI and if workshop overhauls are present
- **Compatibility/Known Conflicts**
 - Not recommended for use with playthroughs where player takes over Nuka World
- **Warnings**
 - Wild Edits - weird wild edits on Carla and Cricket world references. Unknown why they are necessary. Only affects load order placement.
- Workshop Turret Pack
 - Adds new turrets
 - **Alternate Mods**
 - Advanced Settlement Turret Set
 - Hardcore Defense System
 - Modern Warfare Sentry Turret
 - Paper Shredder Turrets
 - Power Free Turrets
 - Stronger Workshop Defenses
 - Sturdy Armored Settlement Turrets
 - Top Attack Turrets
 - Turret Grenades
 - VaultBoyTurret
 - Whirlygig Sentry
 - Workshop Turret Pack
 - **Important**
 - It is important to know that turrets have AI; be aware of how many you place
 - **Installing**
 - Install with other workshop defense menu mods
- Alternate Power Sources
 - Power source objects from Dead Wasteland as stand-alone module
 - **Alternate Mods**
 - Dead Wasteland
 - **Compatibility/Known Conflict**
 - Items are the same as Dead Wasteland. Use one or the other.
 - **Important**
 - When dealing with powered objects, scrap items don't store.
 - **Installing**
 - Install with other powered menu object mods
- Solar Street Lamps
 - Street lamps added to powered object menu
 - **Important**

- When dealing with powered objects, scrap items don't store.
 - **Installing**
 - Install with other powered menu object mods
- Solar Power (Andy-Van)
 - **Important**
 - When dealing with powered objects, scrap items don't store.
 - **Installing**
 - Install with other powered menu object mods
- Request Time - Power Pylons (Ethreon)
 - **Important**
 - When dealing with powered objects, scrap items don't store.
 - **Installing**
 - Install with other powered menu object mods
- Makeshift Battery Generator (Ethreon)
 - Adds new type of generator from Vanilla Extensions to power menu as stand-alone module
 - **Alternate Mods**
 - Vanilla Extensions
 - **Compatibility/Known Conflict**
 - Vanilla Extensions - Use one or the other.
 - **Important**
 - When dealing with powered objects, scrap items don't store.
 - **Installing**
 - Install with other powered menu object mods
- NDL Series - Conduits (Ethreon)
 - Adds new type of conduits from Vanilla Extensions to power menu as stand alone-module
 - **Alternate Mods**
 - Vanilla Extensions
 - **Compatibility/Known Conflict**
 - Vanilla Extensions - Use one or the other.
 - **Important**
 - When dealing with powered objects, scrap items don't store.
 - **Installing**
 - Install with other powered menu object mods
- NDL Series - Warehouse (Ethreon)
 - **Alternate Mods**
 - There are a number of mods including official DLC that add Warehouse pieces; if you have the official DLC, you do not need this mod
 - **Installing**
 - Install with other build menu object mods
- Vault 88 Corners Plus
 - Adds new windowed and door Vault-tec corner pieces to Vault-tec menu
 - **Alternate Mods**
 - Settlement Objects Expansion
 - **Important**

- When dealing with powered objects, scrap items don't store.
 - NexusMods Port - original mod author is no longer modding due to IRL issues, no support is provided
- **Installing**
 - Install with other powered menu object mods
- **Patch Warning**
 - There is a patch available for PC players to add More Vault Room material swaps to the new corners
- **Requirements**
 - Vault-Tec DLC

Workshop Assignable

Workshop Assignable objects have additional scripting attached to the objects to link them to settlers and your workshops. These cannot be safely uninstalled in the middle of a playthrough, regardless if there are "script-injected" menus, especially if settlers are assigned.

- Craft Your Own ROBOT!!
- Gone Hunting/Fishing (Seraph1122)
 - Assignable objects that add food
 - **Important**
 - Mod author lost the original files when computer crashed, no support is provided
 - **Installing**
 - Install with settlement object mods that use vanilla keywords to add to the menu
 - **Requirements**
 - Far Harbor DLC
- Workshop Interactive Objects (Astlem)
 - Assignable objects
 - **Installing**
 - Install with settlement object mods that use vanilla keywords to add to the menu
- Assignable School Desks
 - Adds assignable school desks for child settlers, if using a mod like Simple Settlers or Orphans of the Commonwealth
 - **Alternate Mods**
 - Unlocked Settlement Objects
 - Workshop Rearranged
 - School Desks by Frogprincess
 - **Important**
 - Retired/Obsolete. There are newer mods that function as intended. Bugs have never been fixed.
 - Can be used with Orphans of the Commonwealth
 - **Installing**
 - Obsolete. Bugs outnumber the mod's usefulness and it hasn't been updated to correct issues. Thank the mod author for making it for us and move on.
 - Use at your own risk.
 - **Warnings**

- Known issue of making Orphans grow to adult size.
 - Possible fix if Orphans grow to adult size: assign them to a child size bed from SnapBeds. May fix, may not.
 - There is a mod to correct issue if it occurs: Universal Actor Scale Remover
- PS4 Base Game (No DLC) Guard Chairs
 - Adds additional guard chairs under defense menu
 - **Installing**
 - Install with settlement object mods that use vanilla keywords to add to the menu
- Vendor Rugs and a Guard Rug Too!
 - Adds additional vendor rugs and a guard rug
 - **Alternate Mods**
 - Shop Rugs
 - Shop Rugs 2.0
 - Ugh. Vendor Rugs.
 - Unlocked Settlement Objects
 - **Important**
 - PS4 only
 - **Installing**
 - Install with settlement object mods that use vanilla keywords to add to the menu
- Shop Rugs
 - Adds additional vendor rugs
 - **Alternate Mods**
 - Shop Rugs 2.0
 - Vendor Rugs and a Guard Rug Too!
 - Ugh. Vendor Rugs.
 - Unlocked Settlement Objects
 - **Important**
 - PS4 only
 - Obsolete. MA has a more up to date version available
 - **Installing**
 - Install with settlement object mods that use vanilla keywords to add to the menu
 - **Versions**
 - Shop Rugs 2.0 is more up to date and recommended over this one
- Shop Rugs 2.0
 - Adds additional vendor rugs
 - **Alternate Mods**
 - Shop Rugs
 - Vendor Rugs and a Guard Rug Too!
 - Ugh. Vendor Rugs.
 - Unlocked Settlement Objects
 - **Important**
 - PS4 only
 - No support provided. MA's computer crashed and they are unable to update.
 - **Installing**

- Install with settlement object mods that use vanilla keywords to add to the menu
 - **Versions**
 - Shop Rugs (does not have as many animations)
 - Shop Rugs 2.0 DLC
 - Shop Rugs 2.0 (no DLC)
 - If you have have all DLC, use the DLC version. If not, use the base game version (No DLC).
- Sarajiel's Vendor Rugs For Coffee And Donuts Workshop Pack
 - Adds vendor rugs for Coffee and Donuts Workshop Pack DLC
 - **Important**
 - Mod flagged as ESL so forms load before any masters regardless of what the in-game manager says; however the effectiveness of flagging the mod is moot on console. It is read by the manager as a normal mod in regards to plugin count.
 - **Installing**
 - Install with settlement object mods that use vanilla keywords to add to the menu
 - **Requirements**
 - Coffee and Donuts Workshop Pack DLC
- Sarajiel's Military Pose Idle Marker
 - Adds an invisible chair object with a military pose instead of sitting
 - **Alternate Mods**
 - Unlocked Settlement Objects
 - Shop Rugs 2.0 (PS4)
 - Busy Settlers - Rugs
 - **Important**
 - Mod flagged as ESL so forms load before any masters regardless of what the in-game manager says; however the effectiveness of flagging the mod is moot on console. It is read by the manager as a normal mod in regards to plugin count.
 - **Installing**
 - Install with settlement object mods that use vanilla keywords to add to the menu
- Sarajiel's Smoking Idle Marker
 - Adds an invisible chair object with a smoking animation instead of sitting animation
 - **Alternate Mods**
 - Shop Rugs 2.0 (PS4)
 - **Important**
 - Mod flagged as ESL so forms load before any masters regardless of what the in-game manager says; however the effectiveness of flagging the mod is moot on console. It is read by the manager as a normal mod in regards to plugin count.
 - Adds to Special Menu
 - **Installing**
 - Install with settlement object mods that use vanilla keywords to add to the menu
- Busy Settlers
 - Adds assignable objects
 - **Installing**
 - Install with settlement object mods that use vanilla keywords to add to the menu
 - **Versions**

- There are two versions, one with objects, one with rugs. Choose a version to use
- Busy Settlers - Rugs
 - **Installing**
 - Install with settlement object mods that use vanilla keywords to add to the menu
 - **Versions**
 - There are two versions, one with objects, one with rugs. Choose a version to use
- Slavery by Crimsomrider (Crimsomrider)
 - **Installing**
 - Install with settlement object mods that use vanilla keywords to add to the menu
- Immersive Market Stalls by Crimsomrider (Crimsomrider)
 - **Installing**
 - Install with settlement object mods that use vanilla keywords to add to the menu
- Butcher Meat Rack
 - **Addons/Patches**
 - Optional patch available for Workshop Rearranged
 - **Installing**
 - Install with settlement object mods that use vanilla keywords to add to the menu
- Craftable Cats
 - **Installing**
 - Install with settlement object mods that use vanilla keywords to add to the menu
- Kitty Galore - Craftable Cat Idle Objects
 - **Installing**
 - Install with settlement object mods that use vanilla keywords to add to the menu
- Crimsomrider's Unique Furniture (Crimsomrider)
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with other version of mod
 - **Installing**
 - Install with settlement object mods that use vanilla keywords to add to the menu
 - Install after Workshop Rearranged - note that Workshop Rearranged may be overridden.
 - **Important**
 - If using with Workshop Rearranged: Test if you cannot find objects in menu when using both. WR has many menus that this mod can get hidden in.
 - **Requirements**
 - One version requires all DLC
 - **Versions**
 - Two different versions. If you own all DLC, use the version for DLC
- SuperMutantWorkShop
 - **Installing**
 - Install with settlement object mods that use vanilla keywords to add to the menu
 - May need to be higher or lower depending on other mods
 - **Warnings**
 - Do not remove in the middle of a playthrough
 - Settlers are controlled by the machine added by workshop. When it is removed, Mutant and ghoulish settlers disappear

- Only build one workshop machine

Decorations

➤ Functional Displays

- Mod is in Beta and never updated; use at your own risk
- **Compatibility/Known Conflicts/Overrides**
 - Not compatible with current version of FO4
 - Not compatible with Decoration & Furniture Expansion Pack (WIP); is compatible with “Stable” version
- **Important**
 - Custom script does not “see” weapons’ mods (OMODs) and therefore only unmodified vanilla weapons will be visible.
 - Do not grab any of the weapons to prevent crashing to desktop. Use inventory screen.
 - PC players: delete everything in the meshes folder except the Functional Displays folder. Xbox players are not able to do this so it is not recommended for use on console.
- **Warning**
 - Xbox version has not been updated since 2016
 - PC players check Buffout 4 crashlog and crash log guidance if you choose this mod; no load order assistance is provided for Buffout 4 Crashlogs if found in load order

➤ A Handful Of Prewar Workshop Items

- **Important**
 - All items added by larger mods - if using larger mod, this mod is not necessary

➤ Atom’s Greatness (Ethreon)

- Adds church kit pieces.
- Found in its own menu under the Wood category when using Master Plan
 - If using Workshop Rearranged, this place in the menu may change in a future update - be sure to check the WR changelogs when updating
- **Alternative mods**
 - Snappy Housekit
- **Compatibility/Known Conflicts/Overrides**
 - Not compatible with other version of mod
 - You will have multiple pieces of the same item if using with Snappy Housekit
- **Installing**
 - Master Plan version: Install after Master Plan
 - No Master Plan version: Install with settlement object mods that use vanilla keywords to add to the menu
- **Requirements**
 - Master Plan
 - There is a version available if you do not wish to use Master Plan
- **Versions**

- Master Plan version
 - No Master Plan version
- Bob's Iguana Diner (Ethreon)
 - Diner kit
 - Found in its own menu under the Wood category when using Master Plan
 - If using Workshop Rearranged, this place in the menu may change in a future update - be sure to check the WR changelogs when updating
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with other version of mod
 - **Installing**
 - Master Plan version: Install after Master Plan
 - No Master Plan version: Install with settlement object mods that use vanilla keywords to add to the menu
 - **Requirements**
 - Master Plan
 - There is a version available if you do not wish to use Master Plan
 - **Versions**
 - Master Plan version
 - No Master Plan version
- Box Houses(Ethreon)
 - Boxcar kit with extra pieces and snaps
 - Found in its own menu under the Wood category when using Master Plan
 - If using Workshop Rearranged, this place in the menu may change in a future update - be sure to check the WR changelogs when updating
 - Found under Structures > Metal if not using Master Plan
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with other version of mod
 - **Installing**
 - Master Plan version: Install after Master Plan
 - No Master Plan version: Install with settlement object mods that use vanilla keywords to add to the menu
 - **Requirements**
 - Master Plan
 - There is a version available if you do not wish to use Master Plan
 - **Versions**
 - Master Plan version
 - No Master Plan version
- Cabin in the Woods (Ethreon)
 - Log cabin modeled after Viking type homes
 - Found in its own menu under the Wood category when using Master Plan
 - If using Workshop Rearranged, this place in the menu may change in a future update - be sure to check the WR changelogs when updating
 - Found under Scaffolding if not using Master Plan version
 - **Compatibility/Known Conflicts/Overrides**

- Not compatible with other version of mod
 - **Installing**
 - Master Plan version: Install after Master Plan
 - No Master Plan version: Install with settlement object mods that use vanilla keywords to add to the menu
 - **Requirements**
 - Master Plan
 - There is a version available if you do not wish to use Master Plan
 - **Versions**
 - Master Plan version
 - No Master Plan version
- Captain's Workshop Mega Pack
 - Adds 125 new items with new textures to all menus
 - **Important**
 - Plan your load order; file size is large
 - **Installing**
 - Install with workshop items that use vanilla keywords
 - **Requirements**
 - Contraptions DLC
 - Wasteland Workshop DLC
- Castle in the Sky (Ethreon)
 - All new models and textures; 600 pieces - plan workshop menus accordingly and space considerations
 - Found in its own menu under the Wood category under Master Plan
 - If using Workshop Rearranged, this place in the menu may change in a future update - be sure to check the WR changelogs when updating
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with other version of mod
 - **Installing**
 - Install after Master Plan with workshop object mods
 - **Requirements**
 - Master Plan
- Cloth Covered Awnings
 - **Alternative Mods**
 - Snappy Housekit
 - **Installing**
 - Install with settlement object mods that use vanilla keywords to add to the menu
- Concrete Walls (Ethreon)
 - **Alternative Mods**
 - Vanilla Extensions
 - **Installing**
 - Install with settlement object mods that use vanilla keywords to add to the menu
 - **Important**
 - Not necessary if using Vanilla Extensions
- Craftable Greebles 1.5 (Rebsy)

- **Alternate Mods:** Most objects added have been added to Custom Vanilla Assets or USO; pick this mod or those two or you will have issue with the workshop menu including breakage of menu
- **Compatibility/Known Conflicts/Overrides**
 - Slight incompatibility with Workshop Rearranged. No patch for WR is available.
- **Installing**
 - Install with settlement object mods that use vanilla keywords to add to the menu
 - Install below Workshop Rearranged
- **Important**
 - Adds over 200 objects to the Wall Decorations menu. If you use it, be mindful of scrolling quickly through the menu. It could potentially crash your game. It is a limitation of consoles not the mod.
 - There are several objects that un-placeable or un-selectable if placed. It is due to the objects never being intended for players to create in the workshop. Save prior to placement. You may be able to scrap those with Scrap that Settlement/Scrap that Commonwealth installed; however this is untested
- Custom Crafting Stations + Clutter
 - **Installing**
 - Install with settlement object mods that use vanilla keywords to add to the menu
- Dinos Decorations
 - Adds many pre-built decorative objects to the Miscellaneous Decorations menu.
 - **Alternative mods**
 - CREActive Clutter
 - **Compatibility/Known Conflicts/Overrides**
 - Included in CREActive Clutter.
 - **Installing**
 - Install with Workshop Objects mods
 - **Important**
 - Now part of CREActive Clutter
 - Still works but is no longer supported.
 - Depending on how many other mods you are using, could potentially cause crash issues on Xbox while scrolling through the menus. Not the mod's fault but a limitation in the game engine.
- Functional Objects Overhaul
 - **Alternative mods**
 - Workshop Rearranged
 - Vanilla Extensions
 - Unlocked Settlement Objects
 - Dead Wasteland
 - **Compatibility/Known Conflicts/Overrides**
 - Will need patch for structures menu
 - **Installing**
 - Install with Workshop Objects mods
 - **Important**

- Xbox version was in WIP but got taken down by accident when WIP was purged. As of this writing, the mod author has chosen not to reinstate. PC mod only.
 - Adds 1000 or so objects to menu - use with caution with other large workshop mods; too workshop menu objects will break the menu
 - Running with any of the Alternative Mods is redundant. Choose one or the other.
 - **Patch Warning**
 - Requires compatibility patch to run with Workshop Rearranged or the SMM version
 - **Requirements**
 - **Versions**
 - Two versions:
 - Adds to Structures menu
 - Settlement Menu Manager version (recommended to avoid patches)
- Immersive Lawn Flamingos
 - Adds decor and laser turret
 - **Alternative Mods**
 - CREActive Clutter
 - **Compatibility/Known Conflicts/Overrides**
 - Included in CREActive Clutter.
 - **Important**
 - Now included in CREActive Clutter
 - It is important to know that turrets have AI; be aware of how many you place
 - **Installing**
 - Install with decorative workshop menu mods
- Megaloaders and Cranes
 - **Installing**
 - Install with settlement object mods that use vanilla keywords to add to the menu
- Minutemen Morale Pack
 - Adds objects to the Decoration menu under Paintings, Posters, and Flags
 - **Compatibility/Known Conflicts/Overrides**
 - Vanilla override on red carpet square (CarpetSquare02 0015CC8F) will turn it blue instead of red (this carpet piece is in 29 references in the gameworld, including a lifeguard chair); it is also used by Unlocked Settlement Objects
 - **Installing**
 - Install above Workshop Rearranged if using
 - Install above re-texture mods
- OCDecorator (Ethreon)/OCDecorator Dispenser
 - **Addons/Patches**
 - Patch: Creation Club + OCDecorator
 - **Alternative mods**
 - CREActive Clutter
 - Dead Wasteland
 - Dinos Decorations
 - Place Anywhere (has function to make loot items static)
 - **Compatibility/Known Conflicts/Overrides**
 - Requires patch for Creation Club menu

- Requires patch for Workshop Rearranged
 - **Installing**
 - Install with settlement objects mods along with Creation Club patch (patch is required even if you do not own Creation Club items)
 - **Important**
 - Per mod description: Known issues with placing objects on shelving due to game engine and not mod itself - Place Anywhere in conjunction with this mod recommended by mod author; **Patch Warning**
 - Requires patch for Creation Club or Workshop Rearranged
 - **Requirements**
 - Menu is hard edited. Patch for any mod that edits menus
 - **Versions**
 - OCDecorator Dispenser
 - OCDecorator DLC
 - OCDecorator Static Loot
 - **Warnings**
 - OCDecorator Dispenser: Do not place legendaries in Static Loot container. Legendary Items Legendaries cannot be preserved when placing them in the OCDispenser also due to game engine.
 - Resource hungry mod. Too many objects in one place cause significant drops in frame rate.
- OCDecorator - DLC (Ethereon)
- **Addons/Patches**
 - Patch: Creation Club + OCDecorator
 - **Alternative mods**
 - CREActive Clutter
 - Dead Wasteland
 - Dinos Decorations
 - Place Anywhere (has function to make loot items static)
 - **Compatibility/Known Conflicts/Overrides**
 - Requires patch for Creation Club menu
 - Requires patch for Workshop Rearranged
 - **Installing**
 - Install with settlement objects mods along with Creation Club patch (patch is required even if you do not own Creation Club items)
 - **Important**
 - Per mod description: Known issues with placing objects on shelving due to game engine and not mod itself - Place Anywhere in conjunction with this mod recommended by mod author; **Patch Warning**
 - Requires patch for Creation Club or Workshop Rearranged
 - **Requirements**
 - All DLC
 - Menu is hard edited. Patch for any mod that edits menus
 - **Versions**

- OCDecorator Dispenser
 - OCDecorator DLC
 - OCDecorator Static Loot
 - **Warnings**
 - OCDecorator Dispenser: Do not place legendaries in Static Loot container. Legendary Items Legendaries cannot be preserved when placing them in the OCDispenser also due to game engine.
 - Resource hungry mod. Too many objects in one place cause significant drops in frame rate.
- Old World Decorations
 - Matching decor for Old World radio stations
 - **Addons/Patches**
 - PC: WR patch (optional)
 - **Installing**
 - Install with decorative workshop menu mods
 - **Important**
 - Very large file; plan your mod downloads accordingly, especially if you're planning to use the radio stations this mod was made for
 - **Patch Warning**
 - If you want the menus sorted logically while using Workshop Rearranged, WR includes an optional patch in the NexusMods FOMOD download for PC players. Follow the directions for download.
 - **Requirements**
 - Contraptions version requires Contraptions
 - **Versions**
 - With Contraptions Support
 - No DLC
- Old World Plaids
 - New textures for bedding, sofas, chairs, and drapery. Bed textures available when using SnapBeds
 - **Installing**
 - Install with decorative workshop menu mods
 - **Important**
 - Xbox version not supported by mod author
 - Does not come in modules
 - Very large file; plan your mod downloads accordingly
- Patch: CC & OCDecorator
 - **Installing**
 - Install with settlement objects mods below OCDecorator
 - **Important**
 - REQUIRED for use with OCDecorator or OCDecorator's menu will not show up in the workshop menu regardless of purchased CC items.
 - Unable to find a PS4 equivalent.
- Pipe Galore (Ethreon)
 - Found in its own menu under the Wood category when using Master Plan

- If using Workshop Rearranged, this place in the menu may change in a future update - be sure to check the WR changelogs when updating
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with other version of mod
 - **Installing**
 - Master Plan version: Install after Master Plan
 - No Master Plan version: Install with settlement object mods that use vanilla keywords to add to the menu
 - **Requirements**
 - Master Plan
 - There is a version available if you do not wish to use Master Plan
 - **Versions**
 - Master Plan version
 - No Master Plan version
- Port Royal (Ethereon)
 - Found in its own menu under the Wood category when using Master Plan
 - If using Workshop Rearranged, this place in the menu may change in a future update - be sure to check the WR changelogs when updating
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with other version of mod
 - **Installing**
 - Master Plan version: Install after Master Plan
 - No Master Plan version: Install with settlement object mods that use vanilla keywords to add to the menu
 - **Requirements**
 - Master Plan
 - There is a version available if you do not wish to use Master Plan
 - **Versions**
 - Master Plan version
 - No Master Plan version
- Posts, Supports and Beams
 - See mod description for locations of clutter in menus
 - **Installing**
 - Install with decorative workshop menu mods
- Raider Hanging Cloth
 - No collision on items. Available for Xbox as a PS4 port. See mod description for details.
 - **Installing**
 - Install with decorative workshop menu mods
- Settlement Supplies Expanded (Ethereon)
 - **Xbox:** Placement of large cliff objects is easier if you have Place Anywhere and enable 'Grid Snapping'
 - **PS4:** There are several videos on YouTube with instructions on how to place the larger items
 - **Alternate Mods:**
 - Unlocked Settlement Objects

- Workshop Rearranged
 - Dead Wasteland
 - Vanilla Extensions
- **Compatibility/Known Conflicts/Overrides**
 - Included in Alternative Mods
- **Installing**
 - Install with decorative workshop menu mods
- Shopping Carts
 - **Installing**
 - Install with decorative workshop menu mods
- Slum Lord Beds
 - **Installing**
 - Install with decorative workshop menu mods
- Stairs, Ladders, Ramps (Ethreon)
 - Found in its own menu under the Wood category when using Master Plan
 - If using Workshop Rearranged, this place in the menu may change in a future update - be sure to check the WR changelogs when updating
 - **Alternative Mods**
 - Vanilla Extensions
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with other version of mod
 - Included in Vanilla Extensions
 - **Installing**
 - Master Plan version: Install after Master Plan
 - No Master Plan version: Install with settlement object mods that use vanilla keywords to add to the menu
 - **Requirements**
 - Master Plan
 - There is a version available if you do not wish to use Master Plan
 - **Versions**
 - Master Plan version
 - No Master Plan version
- Unlocked Settlement Objects (Wasteland Workshop Plug-in) (ANDREWXCX)
 - Legacy mod
 - Be sure to read mod author's FAQ and any version notes prior to updating
 - **Alternate Mods**
 - Unlocked Settlement Objects Season Pass version
 - Workshop Rearranged
 - Dead Wasteland
 - **Compatibility/Known Conflicts/Overrides**
 - Conflict with Workshop Rearranged
 - Run this after Workshop Rearranged if starting a new character for full functionality of plug-in. WR sometimes "eats" the retextured warehouse pieces even with the compatibility patch enabled. However, there are other players who have reported no issues with placement above WR. It all depends on your load order.

- **Important**
 - The reason the MA made the much larger USO that re-arranges the menu is because the legacy versions overloaded the menus. Use with caution. Not recommended for use with other workshop mods due to how many objects are in a single menu.
- **Installing**
 - Install after Workshop Rearranged, if using
 - Recommended only to use USO legacy if going to use due to sheer amount of objects in single workshop menus.
 - Per mod author: It is best to keep USO Plug-ins in a group. So if you've got one below WR, it may be a good practice to keep them all under.
- **Requirements**
 - REQUIRES Base component and Wasteland Workshop DLC
- **Versions**
 - You DO NOT need this if you are using the Season Pass version
- Unlocked Settlement Objects (Automatron DLC Plug-in) (ANDREW CX)
 - Legacy mod
 - Be sure to read mod author's FAQ and any version notes prior to updating
 - **Alternate Mods**
 - Unlocked Settlement Objects Season Pass version
 - Workshop Rearranged
 - Dead Wasteland
 - **Compatibility/Known Conflicts/Overrides**
 - Conflict with Workshop Rearranged
 - Run this after Workshop Rearranged if starting a new character for full functionality of plug-in.
 - **Important**
 - The reason the MA made the much larger USO that re-arranges the menu is because the legacy versions overloaded the menus. Use with caution. Not recommended for use with other workshop mods due to how many objects are in a single menu.
 - **Installing**
 - Install after Workshop Rearranged, if using
 - Recommended only to use USO legacy if going to use due to sheer amount of objects in single workshop menus.
 - Per mod author: It is best to keep USO Plug-ins in a group. So if you've got one below WR, it may be a good practice to keep them all under.
 - **Requirements**
 - REQUIRES Base Component and Automatron DLC
 - **Versions**
 - You DO NOT need this if you are using the Season Pass version
- Unlocked Settlement Objects (Far Harbor DLC Plug-in) (ANDREW CX)
 - Legacy mod
 - Be sure to read mod author's FAQ and any version notes prior to updating
 - **Alternate Mods**
 - Unlocked Settlement Objects Season Pass version

- Workshop Rearranged
 - G2M Workshop
- **Compatibility/Known Conflicts/Overrides**
 - Conflict with Workshop Rearranged
 - Run this after Workshop Rearranged if starting a new character for full functionality of plug-in. WR sometimes “eats” the retextured warehouse pieces even with the compatibility patch enabled. However, there are other players who have reported no issues with placement above WR. It all depends on your load order.
- **Important**
 - The reason the MA made the much larger USO that re-arranges the menu is because the legacy versions overloaded the menus. Use with caution. Not recommended for use with other workshop mods due to how many objects are in a single menu.
- **Installing**
 - Install after Workshop Rearranged, if using
 - Recommended only to use USO legacy if going to use due to sheer amount of objects in single workshop menus.
 - Per mod author: It is best to keep USO Plug-ins in a group. So if you’ve got one below WR, it may be a good practice to keep them all under.
- **Requirements**
 - REQUIRES Base Component and Far Harbor DLC
- **Versions**
 - You DO NOT need this if you are using the Season Pass version
- Unlocked Settlement Objects (Vault-Tec DLC Plug-in)
 - Legacy mod
 - Be sure to read mod author’s FAQ and any version notes prior to updating
 - **Alternate Mods**
 - Unlocked Settlement Objects Season Pass version
 - Workshop Rearranged
 - Settlement Objects Expanded
 - Many others
 - **Compatibility/Known Conflicts/Overrides**
 - Conflict with Workshop Rearranged
 - Run this after Workshop Rearranged if starting a new character for full functionality of plug-in.
 - **Important**
 - The reason the MA made the much larger USO that re-arranges the menu is because the legacy versions overloaded the menus. Use with caution. Not recommended for use with other workshop mods due to how many objects are in a single menu.
 - **Installing**
 - Install after Workshop Rearranged, if using
 - Recommended only to use USO legacy if going to use due to sheer amount of objects in single workshop menus.
 - Per mod author: It is best to keep USO Plug-ins in a group. So if you’ve got one below WR, it may be a good practice to keep them all under.
 - **Requirements**

- REQUIRES Base Component and Vault-Tec DLC
 - **Versions**
 - You DO NOT need this if you are using the Season Pass version
- Unlocked Settlement Objects (Nuka-World DLC Plug-in)
 - Legacy mod
 - Be sure to read mod author's FAQ and any version notes prior to updating
 - **Alternate Mods**
 - Unlocked Settlement Objects Season Pass version
 - Workshop Rearranged
 - Many others
 - **Compatibility/Known Conflicts/Overrides**
 - Conflict with Workshop Rearranged
 - Run this after Workshop Rearranged if starting a new character for full functionality of plug-in.
 - **Important**
 - The reason the MA made the much larger USO that re-arranges the menu is because the legacy versions overloaded the menus. Use with caution. Not recommended for use with other workshop mods due to how many objects are in a single menu.
 - **Installing**
 - Install after Workshop Rearranged, if using
 - Recommended only to use USO legacy if going to use due to sheer amount of objects in single workshop menus.
 - Per mod author: It is best to keep USO Plug-ins in a group. So if you've got one below WR, it may be a good practice to keep them all under.
 - **Requirements**
 - REQUIRES Base Component and Nuka-World DLC
 - **Versions**
 - You DO NOT need this if you are using the Season Pass version
- Unlocked Settlement Objects (Contraptions Plug-in)
 - Legacy mod
 - Be sure to read mod author's FAQ and any version notes prior to updating
 - **Alternate Mods**
 - Unlocked Settlement Objects Season Pass version
 - Workshop Rearranged
 - **Compatibility/Known Conflicts/Overrides**
 - Conflict with Workshop Rearranged
 - Run this after Workshop Rearranged if starting a new character for full functionality of plug-in.
 - **Important**
 - The reason the MA made the much larger USO that re-arranges the menu is because the legacy versions overloaded the menus. Use with caution. Not recommended for use with other workshop mods due to how many objects are in a single menu.
 - **Installing**
 - Install after Workshop Rearranged, if using

- Recommended only to use USO legacy if going to use due to sheer amount of objects in single workshop menus.
 - Per mod author: It is best to keep USO Plug-ins in a group. So if you've got one below WR, it may be a good practice to keep them all under.
 - **Requirements**
 - REQUIRES Base Component and Contraptions DLC
 - **Versions**
 - You DO NOT need this if you are using the Season Pass version
- Unlocked Settlement Objects (Mash-ups)
 - Legacy mod
 - Be sure to read mod author's FAQ and any version notes prior to updating
 - **Alternate Mods**
 - Unlocked Settlement Objects Season Pass version
 - Workshop Rearranged
 - Settlement Objects Expansion
 - **Compatibility/Known Conflicts/Overrides**
 - Conflict with Workshop Rearranged
 - Run this after Workshop Rearranged if starting a new character for full functionality of plug-in.
 - **Important**
 - The reason the MA made the much larger USO that re-arranges the menu is because the legacy versions overloaded the menus. Use with caution. Not recommended for use with other workshop mods due to how many objects are in a single menu.
 - **Installing**
 - Install after Workshop Rearranged, if using
 - Recommended only to use USO legacy if going to use due to sheer amount of objects in single workshop menus.
 - Per mod author: It is best to keep USO Plug-ins in a group. So if you've got one below WR, it may be a good practice to keep them all under.
 - **Requirements**
 - REQUIRES All plug-ins above, all DLCs and Base component
 - **Versions**
 - You DO NOT need this if you are using the Season Pass version
- Unlocked Settlement Objects Cubes!
 - Legacy mod
 - Be sure to read mod author's FAQ and any version notes prior to updating
 - **Alternate Mods**
 - Unlocked Settlement Objects Season Pass version
 - Settlement Objects Expansion
 - Ground
 - **Compatibility/Known Conflicts/Overrides**
 - Conflict with Workshop Rearranged
 - Run this after Workshop Rearranged if starting a new character for full functionality of plug-in.
 - **Important**

- The reason the MA made the much larger USO that re-arranges the menu is because the legacy versions overloaded the menus. Use with caution. Not recommended for use with other workshop mods due to how many objects are in a single menu.
 - **Installing**
 - Install after Workshop Rearranged, if using
 - Recommended only to use USO legacy if going to use due to sheer amount of objects in single workshop menus.
 - Per mod author: It is best to keep USO Plug-ins in a group. So if you've got one below WR, it may be a good practice to keep them all under.
 - **Requirements**
 - REQUIRES Base Component
 - **Versions**
 - You DO NOT need this if you are using the Season Pass version
- Unlocked Settlement Objects - Radio
 - Legacy mod
 - Be sure to read mod author's FAQ and any version notes prior to updating
 - These are radio mods that add radio stations to the game and radios to the workshop menu.
 - **Alternate Mods**
 - Unlocked Settlement Objects Season Pass version
 - Settlement Objects Expansion
 - Ground
 - **Compatibility/Known Conflicts/Overrides**
 - Conflict with Workshop Rearranged
 - Run this after Workshop Rearranged if starting a new character for full functionality of plug-in.
 - **Important**
 - The reason the MA made the much larger USO that re-arranges the menu is because the legacy versions overloaded the menus. Use with caution. Not recommended for use with other workshop mods due to how many objects are in a single menu.
 - There are 3 to pick and choose from; you can use all three together.
 - **Installing**
 - Install after Workshop Rearranged, if using
 - Recommended only to use USO legacy if going to use due to sheer amount of objects in single workshop menus.
 - Per mod author: It is best to keep USO Plug-ins in a group. So if you've got one below WR, it may be a good practice to keep them all under.
 - **Requirements**
 - REQUIRES Base Component
 - **Versions**
 - You DO NOT need this if you are using the Season Pass version
- Warehouse Clutter
 - Menu formlists: Decorations > Floor and Furniture > Containers
 - **Alternate Mods**
 - Dead Wasteland (maybe)

- **Installing**
 - Install with Settlement Building Mods
- **Versions**
 - PS4 version available
- Wasteland Billboard (Ethreon)
 - Found in its own menu under the Wood category when using Master Plan
 - If using Workshop Rearranged, this place in the menu may change in a future update - be sure to check the WR changelogs when updating
 - **Alternative Mods**
 - Vanilla Extensions
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with other version of mod
 - **Installing**
 - Master Plan version: Install after Master Plan
 - No Master Plan version: Install with settlement object mods that use vanilla keywords to add to the menu
 - **Requirements**
 - Master Plan
 - There is a version available if you do not wish to use Master Plan
 - **Versions**
 - Master Plan version
 - No Master Plan version

Other

- G2M - Craftable FishFarmBridge (g2m.agent)
 - **No longer Available on Bethnet.**
 - Does not have custom menu. Resource > Misc.
 - **Alternate Mods**
 - G2M Workshop
 - **Installing**
 - Install with Settlement Building Mods - Decorations/Resources
 - **Requirements**
 - Far Harbor
 - **Versions**
 - This is just the Fish Farm/Coastal stuff from G2M Workshop. Choose one or the other
- Food Generators (Ash1597)
 - PS4
 - **Important**
 - Added to Food Menu under Resources
 - **Installing**
 - Install with settlement mods

SETTLEMENT BUILDING MODS (Mods that inject menus through scripts or mods with advanced scripting)

More Info:

[What are Scripted Mods?](#)

Specialized Toggle Menus

- Gore Galore!
 - Has menu toggle - Construct holotape in Chemistry station. Does NOT work like normal holotape since external assets are not available on PS4. See Mod Description for usage
 - Adds gore guns to shoot gore with
 - **Important**
 - MA cautions to use sparingly due to console limitations
 - **Installing**
 - Install with settlement menu mods that use vanilla keywords to add to the menu
- Military Clutter
 - Menu formlists: Furniture - Misc.
 - Has menu toggle - Construct holotape in Chemistry station. Does NOT work like normal holotape since external assets are not available on PS4. See Mod Description for usage
 - **Installing**
 - Install with settlement menu mods that use vanilla keywords to add to the menu
- Lights with Shadows and Beam Effects
 - **Compatibility/Known Conflicts/Overrides**
 - Disabling god rays and lens flare may adversely affect how this mod functions
 - **Important**
 - Use sparingly due to console limitations
 - **Installing**
 - Install with settlement menu mods that use vanilla keywords to add to the menu

Pre-SMM Scripting

ALL OF THE FOLLOWING MODS REQUIRE UNINSTALLATION HOLOTAPE OR CHEM TO TURN OFF SCRIPT. UNINSTALLING WITHOUT DOING SO WILL PERMANENTLY DAMAGE YOUR WORKSHOP MENU. **Just because they have a holotape or chem, does not mean they can be removed safely. Some contain powered objects.** It is not recommended to remove scripted mods in the middle of playthrough except for troubleshooting purposes. The Creation Engine does not support plugin removal. The save is no longer stable after mod removal.

More Info:

[Power Grid Corruption and the Scrap Crash](#)

[What are scripted Mods?](#)

- Gruffydd's Signs and Posters (GruffyDD)²¹
 - **Add-ons/Patches**
 - Gruffydd's Signs of the Times
 - Gruffydd's SotT Add On Perk Chart
 - **Alternate Mods**
 - Signs of the Times - Posters
 - Signs of the Times - Signs
 - Signs of the Times - Road Signs
 - Perk Chart Stand-alone
 - Workshop Rearranged
 - Kuro Tab
 - **Compatibility/Known Conflicts/Overrides**
 - Slight conflict with Workshop Rearranged
 - **Important**
 - Large file size mod; plan your playthrough accordingly
 - Some signs will not place properly or will become unselectable if mod placed before Workshop Rearranged in load order.
 - **Installing**
 - Install after Workshop Rearranged if using both mods.
 - **Versions**
 - PC: AFKmods version appears to be the most up-to-date for PC
 - Xbox: Xbox version is spaced out over several mods last updated Sept 27, 2016.
 - Xbox: Stand-alone versions of each of the individual packs except SotT.
 - **Warning**
 - Do not uninstall in the middle of a playthrough. Some posters have lighting that hook into the power grid.
- GruffyDD's Signs of the Times (GruffyDD)
 - **Installing**
 - Install after GruffyDD's Signs and Posters
 - **Requirements**
 - Requires GruffyDD's Signs and Posters
 - **Versions**
 - See Master file above
- Looks Mirror
 - Has not been updated since Sept 27, 2016
 - See mod forum at NexusMods for more information on bugs and compatibility issues - Mods that overwrite the mirror file may conflict
 - Read mod description to get proper camera angles for using
 - **Alternate Mods**
 - Cheat Terminal
 - Unlocked Settlement Objects

²¹ 2-16-2017: Unsure if this document will ever be seen by anyone but me. Will have to go back and add author names later. Just trying to get done with initial pass.

- Vault-tec DLC
 - Craftable Barber In Settlements
 - Nuka World Barber Chair
- **Compatibility/Known Conflicts/Overrides**
 - Due to how the 'Activate' perk entry works, you can only have one 'Activate' entry active at the same time. If using a mod that allows you to activate items and it has the ability to turn off the perk while using other mods - such as Place Anywhere, use the chem or holotape to turn off the other mod while using this one.
 - Toggle "Master Control" off in Place Anywhere menu
 - Possible conflict with Locksmith - Lock Your Doors N Containers
 - Possible conflict with Cannibalism while playing Survival Mode (reports mixed and not confirmed; possibility of other conflict with another, unknown activator)
 - Do not use with Cheat Terminal
- Decorations and Furniture Expansion Pack - DFEP
 - Adds an additional menu at the end of the main menu
 - Xbox versions in WIP on Bethesda.net, newer PC version in WIP on Bethesda.net
 - **Alternate Mods**
 - Creative Clutter
 - Workshop Rearranged
 - Unlocked Settlement Objects
 - Many others
 - **Compatibility/Known Conflicts/Overrides**
 - Creation Club on some versions of this mod
 - **Installing**
 - Install after Workshop Rearranged, if using
 - **Versions**
 - Xbox: "Stable" and "WIP" - both are in WIP as of Jan 2020
 - PC: "New" version in WIP last updated Jan 2020, another version last updated Sept 27, 2016
 - **Warning**
 - Do not uninstall in the middle of a game; scripting appears to be broken
 - Xbox version of Mod is not up-to-date with current build - Menu appearing may be problematic with Creation Club; may require patch
 - The PC version last updated Sept 27, 2016 on Bethesda.net is dirty and contains unnecessary edits. PC players advised to clean mod, remove unnecessary edit to workshop menu, and change script on mod to Settlement Menu Manager. Unsure about 'stable' version of Xbox edits. Xbox version should not be scripted.
 - PC players should use caution downloading one version to the other - both versions are named the same thing. Operation Not Completed will occur. It is assumed the same will happen for Xbox players if switching between Stable and WIP, but as of this writing, oddlittleturtle has not attempted. Avoid Operation Not completed and delete the mod completely before attempting to download another version of it.
- Advanced Settlement Power (cadpaq)
 - Has uninstallation holotape.

- **Alternate Mods**
 - Advanced Settlement Power - Contraptions
- **Installing**
 - Install with powered objects settlement mods
- **Warning**
 - Power mod - While it has an uninstallation holotape it is not advised to uninstall. Do not uninstall in the middle of a playthrough. Scrap items and do not store them if not using them. See [Power Grid Corruption](#) for more information
- Advanced Settlement Power - Contraptions (cadpaq)
 - Has uninstallation holotape.
 - **Alternate Mods**
 - Advanced Settlement Power
 - **Installing**
 - Install with powered objects settlement mods
 - **Requirements**
 - Contraptions DLC
 - **Warning**
 - Power mod - While it has an uninstallation holotape it is not advised to uninstall. Do not uninstall in the middle of a playthrough. Scrap items and do not store them if not using them. See [Power Grid Corruption](#) for more information
- Electronics (unclechubby)
 - **Alternate Mods**
 - Advanced Settlement Power
 - **Installing**
 - Install with powered objects settlement mods
 - **Requirements**
 - Wasteland Workshop DLC
 - **Warning**
 - Power mod - Do not uninstall in the middle of a playthrough. Scrap items and do not store them if not using them. See [Power Grid Corruption](#) for more information
- Immersive Decor
 - **Important**
 - Scripted for more than the menu. Do not uninstall in the middle of playthrough.
 - **Installing**
 - Install with scripted settlement mods
- Better Stores
 - Requires uninstall chem to disable. Scrap all objects prior to using chem.
 - Adds its own scripted menu to Decorations menu.
 - Both PC and Xbox versions are available on Bethesda.net
 - **Add-ons/Patches**
 - There is a Far Harbor expansion
 - **Compatibility/Known Conflicts/Overrides**
 - New animal spawns will not sandbox with vanilla catbowls or dogbowls, the animals' sandboxes are not set up for such
 - **Installing**

- Install with scripted settlement mods that add to the Decorations Menu
 - **Important**
 - Not recommended to uninstall during mid-playthrough unless mod author says otherwise. Animals have AI.
- Better Stores - Far Harbor Expansion
 - See mod author descriptions for more info
 - **Installing**
 - Install after Better Stores
 - **Important**
 - Not recommended to uninstall during mid-playthrough unless mod author says otherwise.
 - **Requirements**
 - Better Stores
 - Far Harbor
- Dead Wasteland
 - PC players: If not using mods with 'loose' files, you do not have to enable them in your Fallout4Custom.ini. FO4 is already set up for modding.
 - **Addons**
 - Alternate Power Sources
 - Alternate Guard Sources
 - Alternate Water Sources
 - Water Wheel Powered Generators
 - Vendor Vans
 - **Alternate Mods**
 - Dead Wasteland Full
 - Workshop Rearranged
 - **Compatibility/Known Conflicts/Overrides**
 - Do not use Full version with Alternate Power Sources, Alternate Guard Sources, or Alternate Water Sources by same author, you will have duplicates
 - Choose either the full version or the mesh/texture reduction version - the meshes that have been taken out are the individuals listed in Addons. Choose which version works best for your load order
 - **Installing**
 - Install with scripted settlement mods
 - **Versions**
 - Full version (Dead Wasteland Full) and texture and mesh reduction version (Dead Wasteland)
- Do It Yourself (Dinosaurs)
 - Adds its own scripted menu to Furniture menu
 - **Addons**
 - Not "true" addons but mods that have snap point compatibility:
 - Creative Clutter
 - Renovated Furniture
 - **Important**

- Settlement resource hungry. Too many objects in one place can cause drops in frame rate.
 - Scripted. Do not uninstall during mid-playthrough
 - **Installing**
 - Install with scripted settlement mods
 - **Requirements**
 - Newer version requires Settlement Menu Manager
 - **Versions**
 - Two versions; older version and updated version uploaded by caretaker [DAmanding](#) (Crayonkit)
- ElvenBlossom's Items (ElvenBlossom)
 - Adds its own scripted menu to main menu
 - Scripted. Do not uninstall in the middle and continue without taking the chem. Does not have a re-installation method. Once a player takes the pill, it's permanently gone from the menu. Not taking the pill and attempting removal permanently breaks the workshop menu without a way to fix.
 - **Installing**
 - Install with scripted settlement mods
- G2M Workshop (g2m.agent)
 - Mod author has retired
 - Mod author has detailed instructions for installation and updates on mod's description
 - See mod description for list of compatible building objects
 - Adds script injected menu to main menu
 - Requires uninstall holotape to disable
 - **Alternate Mods**
 - G2M Craftable Fish Farm Bridge (PC only)
 - **Compatibility/Known Conflicts/Overrides**
 - Not exactly compatible with:
 - Workshop Rearranged (several snap points do not work; doors are hit and miss)
 - Vanilla Extensions (several snap points do not work)
 - May have issues with mods that add new keywords to workshop workbenches
 - May have script conflict with Settlement Menu Manager - do not use menu repair function if using Settlement Menu Manager. If you have a broken menu, you may not be able to repair it if attempting both mods (but you should not have disabled a scripted workshop mod in the middle of a playthrough to get the broken menu in the first place)
 - Not exactly compatible with Start Me Up or mods that skip the prologue
 - **Important**
 - Vanilla doors are overridden.
 - Scripted for more than the menu. Do not uninstall in the middle of a playthrough.
 - **Installing**
 - Installing depends on other mods in load order. Just because it's compatible with the menu does not mean it's compatible with snap points added by WR or Vanilla Extensions (or other mod) or other scripting
 - Install below mods that touch vanilla doors if you want the closing door functionality
 - Install above Workshop Rearranged if you want to use WR's door closing functionality

- Install below Workshop Rearranged if you want to use this mod's door closing functionality
 - **Requirements**
 - Wasteland Workshop
 - Far Harbor
 - **Versions**
 - Two versions - one that requires Far Harbor and Wasteland Workshop and one that is only the coastal stuff from Far Harbor that isn't scripted
- PWR - Passive Water Resources (Ghzbfa)
 - Adds to the vanilla Resources menu under Water
 - **Alternate Mods**
 - Alternate Water Sources
 - **Compatibility/Known Conflicts/Overrides**
 - Not exactly compatible with Place Anywhere. Will need to toggle "Master Control" in Place Anywhere menu off to use full functionality of this mod
 - Per mod author: should be compatible with Uncapped Settlement Surplus
 - Advanced features not compatible with Anyone Can Fill a Bottle!
 - **Important**
 - This mod does more than add workshop items to menu, see mod description and notes on [settings] holotape. Do not uninstall in the middle of a playthrough.
 - Scrap all objects prior to uninstalling, use holotape, disable/delete mod from load order and delete all saves that had any instances of mod on it or revert to a save prior to installing
 - **Installing**
 - Install with scripted settlement build mods
 - Requirements
- SWG - Snappable Windmill Generators (Wind Farms) (Ghzbfa)
 - **Alternate Mods**
 - Vanilla Extensions
 - Alternate Power Sources
 - **Important**
 - This mod adds more than just workshop items to menu, do not uninstall in the middle of a playthrough.
 - **Installing**
 - Install with scripted settlement mods or with powered object mods
 - **Warning**
 - Power mod - Do not uninstall in the middle of a playthrough. Scrap items and do not store them if not using them. See [Power Grid Corruption](#) for more information
- Settlement Objects Expansion Pack (ccmads)
 - Adds its own menu under Structures, Furniture, Decorations, and Electric
 - Adds a few items to several vanilla DLC menus (Vault-Tec)
 - It used to be frequently updated. Check descriptions, mod author notes, and videos for update information. Mod Author keeps a detailed changelog on the NexusMods and does a showcase video for each update.
 - **Addons/Patches**

- Auto-Doors Patch
 - Settlement Objects Expansion Pack - Vanilla Menu Restorer/Fixer
 - Craftable Institute Elevator
 - Craftable Vault Elevator
- **Important**
 - Mod description has uninstall information due to improper uninstalling when mods first came out. Many people were breaking their menus. Do not uninstall scripted workshop mods in the middle of a playthrough.
 - Large size buildable water planes are removed for Xbox. There were issues that could not be resolved by MA.
 - Vault-Tec items will not appear in settlements other than Vault 88 until after Vault-Tec DLC quests are complete.
 - Requires uninstall chem to disable. See mod author's full notes for install and uninstall instructions. Mod author also has How-To videos on this on their NexusMods page.
 - See Mod Page video and description for information on using water tiles with Place Anywhere.
- **Installing**
 - Install with scripted settlement objects
 - Install below Workshop Rearranged if any compatibility issues occur with menus
- **Warning**
 - Has powered objects. Do not uninstall in the middle of a playthrough. Scrap powered items and do not store them if not using them. See [Power Grid Corruption](#) for more information
- **Requirements**
 - All DLC requires all 6 original DLC
- **Versions**
 - All DLC
 - No DLC
- **Craftable Vault Elevator For DLC**
 - Adds elevators to Structure > Elevator menu
 - **Important**
 - Scripting is more advanced than just workshop menus. Do not uninstall in the middle of a playthrough without returning to a point prior to install or starting a new game. See [What are Scripted mods?](#) for more information.
 - **Installing**
 - Install with scripted settlement objects
 - **Requirements**
 - Vault-Tec DLC
 - **Warning**
 - Has powered objects. Do not uninstall in the middle of a playthrough. Scrap powered items and do not store them if not using them. See [Power Grid Corruption](#) for more information
- **Craftable Institute Elevator**
 - See Mod page for instructions for use regarding camera
 - Adds elevators to Structure > Elevator

- **Important**
 - Scripting is more advanced than just workshop menus. Do not uninstall in the middle of a playthrough without returning to a point prior to install or starting a new game. See [What are Scripted mods?](#) for more information.
- **Installing**
 - Install with scripted settlement objects
- Settlement Objects Expansion Pack - Auto Doors Patch
 - **Compatibility/Known Issues/Overrides**
 - May have compatibility issues with Workshop Rearranged and its Auto Doors patch. PC players can fix with xEdit. Xbox players, choose one or the other.
 - **Installing**
 - Install below SOE and Auto Doors: SOE > Auto Doors > Auto Doors Patch
 - **Versions**
 - All DLC
 - No DLC
- Settlement Objects Expansion Pack - Vanilla Menu Restorer/Fixer
 - This mod is added to complete the SOE set. It is only necessary if you've royally messed up by uninstalling SOE without using the holotape and continuing on the same save. When the mod first came out there were individuals breaking their menus when the updating. The MA made this to fix any issues with updating or derpage because of bad info regarding how FO4 settlement menus work.
 - This will only fix the menu. There is no fix for power grid corruption on Xbox. If you have not scrapped any powered objects added by this mod and uninstall and require the use of this mod to fix the broken menu, you will have issues with your save anyway. See [Power Grid Corruption](#) for more information
 - **Alternate Mods**
 - Settlement Menu Manager
 - **Installing**
 - Do not mess up the rest of your load order by moving into position after downloading. Install at bottom and follow instructions on mod page.
 - Do not download unless you need it. It will uninstall any other settlement menu mod while attempting to fix broken menus. Due to the age, it will probably break Settlement Menu Manager or cause issues with it and any mods installed requiring SMM.
 - Don't need this mod, guys. See [What are Scripted Mods?](#) to keep your menus safe so you do not need it.
- SnapBeds - Useable bunkbeds
 - Large file size; plan load order accordingly
 - Important
 - Script injection. Do not uninstall in the middle of a play through without first using the uninstaller. Only uninstall for troubleshooting purposes.
 - **Installing**
 - Install with scripted settlement mods
 - **Patch Warning**

- PC Players: If choosing to use version 0.8, use WR patch if using WR and Homemaker patch for Homemaker 1.41. (recommended to save slots and use SB v1.0.1, but it's your game)
 - **Versions**
 - Lite (no additional meshes or textures)
 - With additional textures from CozyBeds and Clean Beds
- Thematic and Practical (5like)
 - Adds its own menu to the main menu via script injection.
 - NO LONGER AVAILABLE on bethesda.net
 - **Compatibility/Known Conflicts/Overrides**
 - Mod does not use its own name space nor does it have its scripts in BA2 files for PC. Script overrides could possibly happen with other mods that use the same form ID numbers and script names for generically named Quest Fragment scripts. If another mod asks to override (or vice versa), it is a script conflict and both mods cannot be used together.
 - **Installing**
 - Install with scripted settlement mods
 - Recommend for PC players to use Archive 2 (comes with CK) and package mod into BA2 for easier load order management. Manual download to separate folder and archive files.
 - **Warning**
 - Script injection. Do not uninstall in the middle of a play through without first using the uninstaller. Only uninstall for troubleshooting purposes.
- Thematic and Practical DLC (5like) - **NO LONGER AVAILABLE on bethesda.net**
 - Requires uninstall chem to disable. Scrap all objects prior to using chem and disabling.
 - Not recommended to uninstall during mid-playthrough unless mod author says otherwise.
-

Requires Settlement Menu Manager (SMM)

- Settlement Menu Manager
 - Only required if the mod description says so
 - **Can be used to repair damaged workshop menu** - see instructions for use on NexusMods page
 - Required procedure for uninstallation - see instruction for use on NexusMods page
 - **Recommended replacement for Universal Menu Fixer.**
 - Do not uninstall without going through uninstallation procedure in holotape. You will break all menus that are added by other mods requiring this mod.
- Kuro Tab
 - Large mod, plan playthrough accordingly
 - **Important**
 - Due to size constraints on Xbox, mod author reduced the size of the textures to 1024x1024. They will blur on Xbox Series X if you get too close.
 - **Installing**
 - Install after Settlement Menu Manager
 - **Requirements**

- Settlement Menu Manager
 - Season Pass/GoTY/6 original DLCs
- Workshop Decorations Pack (Astlem)
 - THERE ARE TWO VERSIONS OF THIS MOD
 - One uses lights that act as toggles.
 - One adds new meshes and requires Settlement Menu Manager
 - Settlement Resource Hungry. Use caution when placing too many items in one location. One decoration set has ~100 objects. Using caution is because of console limitations, not due to the mod. Placing too many can lead to a drop in FPS in settlements on older consoles.
- School Desks by FrogPrincess_Q4 (official port by Crayonkit)
 - Adds assignable school desks for child settlers if using a mod like Simple Settlers or Orphans of the Commonwealth
 - **Alternate Mods**
 - Unlocked Settlement Objects
 - Workshop Rearranged
 - Assignable School Desks
 - **Important**
 - See information regarding mod on Mod page and webpage
 - **Installing**
 - Install after Settlement Menu Manager
 - **Requirements**
 - Settlement Menu Manager
 - A mod that adds Child Settlers
- Sim Settlements Add-ons
 - See Sim Settlements forums for all information regarding Sim Settlements and its add-ons <https://simsettlements.com/site/index.php>
 - Make note of the size and if clutter arrangements are available - these arrangements as well as the scripting can cause performance issues on console
- Housekeeping - Scavenging Deluxe
 - Requires Settlement Menu Manager
- CREative Clutter (Crayonkit/DAManding)
 - Requires Settlement Menu Manager
 - Adds its own scripted menu to main menu.
 - Not recommended to uninstall during mid-play throughout unless mod authors say otherwise.
 - Compatible with other mods that inject their own menu
 - Settlement resource hungry. Mod authors recommend using settlement budget increase mods. Use caution when placing too many of the items in one settlement; due to the limitations of consoles, particularly older consoles, game freezes can occur. This is not due to the mod itself but due to lack of control/discipline of the end player.
 - See [FAQ](#) at Bethesda.net for both Xbox and PC versions. CREative Clutter will no longer be available for download from NexusMods.
- Modular Kitchens

- There are two versions of this mod: Modular Kitchens by EvanPox and Updated Modular Kitchens by CrayonKit. **Use the Updated version.** EvanPox has retired from modding and turned the mod over to CrayonKit. The original version is obsolete.
 - **If using original version on Xbox, wait until your next playthrough to update.** Updating will give you two of the same menus unless you remove the original, which is not recommended during a playthrough, even with a chem uninstallation. See warnings in [WHAT ARE “SCRIPTED” MODS?](#)
 - Updated version requires Settlement Menu Manager
 - Original version has an uninstallation chem (DO NOT UNINSTALL without taking chem)
- See [FAQ](#) at Bethesda.net for both Xbox and PC versions. Modular Kitchens will no longer be available on NexusMods.
- Snappy Housekit (robboten)
 - Adds its own menu to structure menu via script injection.
 - NOTE about Snappy Test - Snappy Test has the same .esp name as Snappy Housekit. It is not recommended to switch mid-play as the scripting is different within Snappy Test and is backwards compatible with an older PC version of Snappy Housekit prior to the merge of the Decokit. Missing Decokit menus have been confirmed when switching mid-play (the only way to reenale the menus is through console commands that Xbox does not have access to). You can update to the test version on a new game and all the menus should be available.
 - Requires uninstall chem/holotape to disable. Scrap all objects prior to using chem and disabling. Read ALL instructions prior to disabling.
 - It is not recommended to disable during mid-playthrough.
 - This mod will increase the time it takes for the workshop menu to open. This is unavoidable. It adds a great deal of objects to the workshop menu. Prior to version 5.0 added nearly 3 minutes to load time of workshop menu. Version 5.0 adds many more objects than prior versions.
 - *Snappy Scrap* is also available for Xbox. Same-color versions of Snappy's houses replace in-game versions. The description does not state if precombines and previsual data have been rebuilt after replacement. Use Snappy Scrap with caution as there is no way visually to detect if they are.
- Wasteland Resources
 - Light alternative to Northland Diggers
 - **Alternative Mods**
 - Northland Diggers
 - **Important**
 - See Mod page for information
 - It is important to know there is no limit on the resources produced; use caution
 - **Installing**
 - Install below SMM
 - Mod author has suggest load order for their mods if only using their mods: [Template](#)
 - Requirements
 - Settlement Menu Manager
 - Wasteland Workshop DLC
 - Far Harbor DLC
 - Nuka World DLC
- Whisper's Enhanced Turrets

- Adds new turrets
- **Alternate Mods**
 - Advanced Settlement Turret Set
 - Hardcore Defense System
 - Modern Warfare Sentry Turret
 - Paper Shredder Turrets
 - Power Free Turrets
 - Stronger Workshop Defenses
 - Sturdy Armored Settlement Turrets
 - Top Attack Turrets
 - Turret Grenades
 - VaultBoyTurret
 - Whirlygig Sentry
 - Workshop Turret Pack
- **Important**
 - See Mod page for MA warnings
 - It is important to know that turrets have AI; be aware of how many you place
- **Installing**
 - Install with other workshop defense menu mods below SMM
- **Requirements**
 - Settlement Menu Manager
- Whisper's Institute Build Kit
 - **Installing**
 - Install below SMM
 - **Requirements**
 - Settlement Menu Manager
- Wireless Workshop Items
 - **Installing**
 - Install below SMM
 - **Requirements**
 - Contraptions DLC
 - Wasteland Workshop DLC
 - Vault-Tec DLC
 - Settlement Menu Manager

SETTLEMENT BUILDING MODS (Overhauls menu or makes changes to menu)

- Vanilla Extensions (Ethereon)
 - New snap points; Found in its own menu under the Wood category when using Master Plan
 - If using Workshop Rearranged, this place in the menu may change in a future update
 - **Addons/Patches**
 - Workshop Rearranged Patch - (use the one created by WR author)

- **Alternative Mods**
 - Workshop Rearranged
 - Dead Wasteland
 - Unlocked Settlement Objects
- **Compatibility/Known Conflicts/Overrides**
 - Not compatible with other version of mod
 - Requires a patch for use with Workshop Rearranged
 - Does not require patch for USO - objects however are redundant. Choose one or the other for less duplication
- **Installing**
 - Install below Master Plan
 - Install above Workshop Rearranged if snap points for railings go wonky; you will lose some of the potted plant objects
 - Install below Workshop Rearranged if you want to override the snap points to Workshop Rearranged and lose some functionality of WR
- **Requirements**
 - Master Plan
 - There is a version available if you do not wish to use Master Plan
- **Versions**
 - Master Plan version
 - No DLC version
- **Warnings**
 - Very snappy. If snapping annoys, you can place above Workshop Rearranged if using and add WR patch for Master Plan. Some loss of items will occur but it is a trade off. Test before using.
- **Pre-War Settlement Items**
 - Adds slew of pre-war items pre-Vault-Tec DLC to new menu under Raider Menu
 - **Alternate Mods**
 - A Handful Of Prewar Workshop Items
 - Unlocked Settlement Objects
 - Workshop Rearranged
 - Vanilla Extensions
 - Official Vault-Tec DLC (for some items)
 - **Compatibility/Known Conflicts**
 - Unlocked Settlement Objects (USO)
 - Workshop Rearranged
 - Vanilla Extensions
 - **Patch Warnings**
 - Requires patch for USO or Workshop Rearranged; however both these mods add the same items so pick which you want to use so as not to overload the workshop menu and slow it down. It is not necessary to use them all at the same time.
- **Paper Shredder Turrets**
 - Edits vanilla turrets
 - **Alternate Mods**
 - Advanced Settlement Turret Set

- Hardcore Defense System
 - Modern Warfare Sentry Turret
 - Power Free Turrets
 - Stronger Workshop Defenses
 - Sturdy Armored Settlement Turrets
 - Top Attack Turrets
 - Turret Grenades
 - VaultBoy Turret
 - Whisper's Enhanced Turrets
 - Whirlygig Sentry
 - Workshop Turret Pack
 - **Compatibility/Known Conflicts**
 - Modifies vanilla turrets; do not use with mods that modify vanilla turrets
 - Sturdy Armored Settlement Turrets - redundant; choose one or the other
 - Workshop Rearranged - not recommended to override
 - Immersive Gameplay - can override if you want
 - **Important**
 - It is important to know that turrets have AI; be aware of how many you place
 - **Installing**
 - Install in Settlement Building Mods (overhauls)
 - Install below mods like Immersive Gameplay, Workshop Rearranged
 - **Patch Warning**
 - Given this is an edit to vanilla turrets, compatibility patches will only add to the amount of mods you use. Choose one or the other when determining the strength of turrets.
 - Mod can be used to patch Immersive Gameplay's edits to turrets. Test before committing to a save to see if you like it.
- Sturdy Armored Settlement Turrets
- Edits vanilla turrets
 - **Alternate Mods**
 - Advanced Settlement Turret Set
 - Hardcore Defense System
 - Modern Warfare Sentry Turret
 - Paper Shredder Turrets
 - Power Free Turrets
 - Stronger Workshop Defenses
 - Top Attack Turrets
 - Turret Grenades
 - VaultBoy Turret
 - Whisper's Enhanced Turrets
 - Whirlygig Sentry
 - Workshop Turret Pack
 - **Compatibility/Known Conflicts**
 - Modifies vanilla turrets; do not use with mods that modify vanilla turrets
 - Paper Shredder Turrets - redundant, choose one or the other

- Workshop Rearranged - not recommended to override
 - Immersive Gameplay - can override if you want
- **Important**
 - It is important to know that turrets have AI; be aware of how many you place
- **Installing**
 - Enable with mods that modify vanilla settlement objects
 - Enable below Immersive Gameplay (if using) to override IG's turrets if you want different stats for turrets
- **Patch Warning**
 - Given this is an edit to vanilla turrets, compatibility patches will only add to the amount of mods you use. Choose one or the other when determining the strength of turrets.
 - Mod can be used to patch Immersive Gameplay's edits to turrets. Test before committing to a save to see if you like it.
- Workshop Rearranged (IgnobleSteward)
 - Workshop menu, junk item, scrap list, and snap point overhaul that has a few leveled item list updates. Plan your load order around this mod if using.
 - **Addons/Patches**
 - Has many available compatibility patches; check for patches doing a search for Workshop Rearranged or WR or check the mod's description. A non-exhaustive list:
 - WR- Master Plan Patch
 - Workshop Rearranged - Stronger Defenses Patch
 - WR - Butcher Meat Rack Patch
 - WR - Snap'n'Build Patch
 - WR - Atomic Radio
 - **Alternative mods**
 - Unlocked Settlement Objects
 - Vanilla Extensions
 - Dead Wasteland
 - **Compatibility/Known Conflicts/Overrides**
 - Some workshop mods need to go below this mod in order for their menus to show up or, in the case of GruffyDD's Signs mods, for snap points to work on the signs. Read the mod's description and if there's a compatibility patch for WR.
 - **Installing**
 - Install below all other workshop menu edits with the exception being the patches.
 - Load Order for Patches:
 - WR
 - Mod to be patched
 - Patch for WR and Mod
 - **F4SE Warning**
 - PC players with Mod Configuration Menu: There is a feature of unlocking settlement objects. You may use this feature instead of USO if you choose. (Thank you, Jesse Rezentes).
 - **Important**
 - VIS will override junk

- Mods that add new snap points to vanilla objects are not required when using this mod. It contains a mesh snap point overhaul
 - **Patch Warning**
 - Patches for workshop menus, junk lists, leveled item lists
 - **Requirements**
 - Season Pass/GoTY/All DLC
 - **Versions**
 - **Warnings**
- Unlocked Settlement Objects (Season Pass) (ANDREWXCX)
 - Workshop menu overhaul that reorganizes all menus to the Raider menu specifically created for PS4 and ported to Xbox and PC. PC players can create a patch for themselves if needed with xEdit.
 - **Addons/Patches**
 - Generic Patch
 - AWKCR Patch
 - **Alternative mods**
 - Dead Wasteland
 - Workshop Rearranged
 - Vanilla Extensions
 - **Compatibility/Known Conflicts/Overrides**
 - Will conflict with any workshop mod that touches the same vanilla items
 - Will conflict with mods that edit the Raider Menu
 - **Installing**
 - Mod is a master file with a single file for the season pass that can be run after Workshop Rearranged along with the Generic patch to patch the raider menu.
 - **F4SE Warning**
 - none
 - **Important**
 - Non-legacy version includes: USO Automatron, USO Wastland Workshop, USO Far Harbor, USO Contraptions Workshop, USO Vault-Tec Workshop, USO Nuka-World, USO Mashups, USO Cubes!
 - Does NOT include USO Radio Series or Generic Override Patch
 - **Patch Warning**
 - Requires patches for Raider menu or any vanilla object it touches
 - **Requirements**
 - Season pass addon requires all DLC
 - **Versions**
 - There is a large overhaul and a legacy overhaul. The legacy overhaul unfortunately is too large for the menus to handle which is why the newer Raider-Menu-Overhaul exists.
 - **Warnings**
 - Do not switch from individual plug-ins to season pass plug-in during existing play-through as you will lose many items built. Start a new character before switching. See Scrap Crash for power grid corruption information.
- Unlocked Settlement Objects (Generic Compatibility Patch - access menu) (ANDREWXCX)

- REQUIRED compatibility patch for Workshop Rearranged
- Place this BELOW all USO mods; including the radio mods if running USO Radio from lower in the order.

GAMEPLAY CHANGES, TWEAKS

Gameplay changes affect how you play the game. They adjust the game settings, add new features, tweak little things like how much power output a thing has, adjust or give you new perks, override survival mode, etc. This section is not intended for large overhauls like Immersive Gameplay, Junkmaster, and their ilk (Those types of mods are stand alone, all-in-one load orders.) Some of these mods can be used to override gameplay overhauls' settings since the gameplay overhaul will be the only mod in your load order.

Game Settings

Global game settings, initialization files, and default objects

- Infinite Power Cable Length
 - PS4
 - Game setting. Power line lengthener
 - **Compatibility**
 - Not compatible with other mods that lengthen power lines. Use only one power line lengthener
 - Not compatible with mods that alter
 - fWorkshopWireMaxLength
 - **Important**
 - Going beyond a certain point with wires may cause issues with the workshop power grid. Exercise caution when using.
 - **Installing**
 - Install with other game settings mods
- Raised Settler Cap
 - PS4
 - Game Setting. Raises max from 10 to 100.
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that alter
 - iWorkshopSettlerPopulationMax
 - **Important**
 - Use caution when overbuilding. PS4 can handle more than Xbox can due ot less processor strain due to external files; however, if precombines are broken or if the settlement is overbuilt, that extra processing gets eaten very quickly
 - **Installing**
 - Install with game settings
- Difficulty XP Setting
 - PS4
 - **Compatibility/Known Conflicts/Overrides**

- Not compatible with mods that do the same thing
 - **Important**
 - Mod description does not specify the amount
 - **Installing**
 - Install with game settings
- Increased Settler Limit - Awareness - Wire length - Corpse Collisions (StormLord/MrTroubleMaker)
 - Game settings. Settlers will detect one floor above them
 - **Alternative Mods**
 - Puma's Longer Power Lines
 - 99 settlers
 - Corpse Collision
 - Running with Corpses
 - Weightless Bodies and Objects
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with 99 Settlers.
 - Not compatible with mods that add corpse collision.
 - Not compatible with other mods that lengthen power lines. Only use one power line lengthener
 - Not compatible with mods that alter
 - fWorkshopWireMaxLength
 - iWorkshopSettlerPopulationMax
 - fSandboxCylinderTop
 - fSandboxCylinderBottom
 - **Important**
 - Going beyond a certain point with wires may cause issues with the workshop power grid. Exercise caution when using.
 - Causes a bit of lag on OG XB1 when grabbing pylons if wires connected due to length. Series X does not appear to have the issue.
 - When used with Settlements Border Extended and/or Settler Sandbox and AI Expansion, settlers do not stay within vanilla settlement boundary when assigned to collecting resources. Have also seen occurrences on current playthrough of farmers wandering off too.
 - **Installing**
 - Install with other game setting mods
- Puma's Longer Power Lines (Puma361)
 - Single Game setting - Power line lengthener
 - Legacy mode - has not been updated since Nov 2015 on NexusMods (Sept 27, 2016 on Bethesda.net). Does not need updating. Does not have archive.
 - **Alternative Mods**
 - Numerous (this setting was one of the first settings altered for workshops)
 - Increased Settler Limit - Awareness - Wire length - Corpse Collisions
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with Immersive Gameplay
 - Not compatible with Increased Settler Limit - Awareness - Wire length - Corpse Collisions

- Not compatible with other mods that lengthen power lines. Only use one power line lengthener
 - Not compatible with mods that alter
 - fWorkshopWireMaxLength
 - **Important**
 - Going beyond a certain point may cause issues with the workshop power grid. Exercise caution when using.
 - Using the infinite and triple versions on Xbox is not advised due to possible power grid corruption that could occur if over-building.
 - Causes a bit of lag on OG XB1 when moving pylons if wired regardless of which version used due to lengths of wires. Series X has a bit less of an issue.
 - **Installing**
 - Install with game settings
 - **Patch Warning**
 - Easily overridden. PC players, it is only a single edit. Roll into bashed patch for your load order. Use Wrye Bash or xEdit to make patch.
 - **Warning**
 - There is a duplicate triple version that was uploaded recently to Bethesda.net. Use caution if switching between original mod author version and porter's version. See "Operation Not Complete" Troubleshooting to avoid errors.
 - **Versions**
 - [Triple](#)
 - Double
 - Infinite
- Arbitration
- Gameplay settings and Combat Style updates
 - PC port version does not specify which files were merged/used from the PC version.
 - **Alternative Mods**
 - Search and Destroy
 - Immersive Fallout
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with Immersive Gameplay
 - Not compatible with Search and Destroy
 - Not compatible with mods that alter Combat Styles
 - **Installing**
 - Install with gameplay
 - Install below mods that alter molotov cocktail explosions
- Search And Destroy - Extended Combat Range And Stealth Searches (Mm137)
- Legacy mode - Has not been updated since Sept. 27, 2016. Does not need updating.
 - Game settings to update distances and stealth point regen
 - **Alternative Mods:**
 - Arbitration
 - Immersive Fallout

- **Compatibility/Known Conflicts/Overrides:**
 - Not compatible with Arbitration
 - Not compatible with Immersive Gameplay
 - Not compatible with mods that alter the same game settings
 - fCombatStealthPointRegenMin
 - fCombatStealthpointRegenAlertMult
 - fCombatStealthPointRegenLostMult
 - fCombatStealthPointHostileMult
 - fSneakMaxDistance
 - fSneakExteriorDistanceMult
- **Installing:**
 - Install with other game settings mods
- Mad's Damage Tweaks
 - The Mod Formerly Known as MADNESS. Affects damage output.
 - **Alternative Mods**
 - Immersive Gameplay
 - Survival Options (but survival options is not compatible with current build of game)
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with Immersive Gameplay
 - Not compatible with Survival Options
 - **Installing**
 - Install with other game settings mods on normal modes
 - Install with other game settings, after Survival Mode mods when playing on survival mode
- Minor XP Rewards Removed (demonbreather)
 - Legacy Mode/obsolete: No longer updated by author; all features rolled into Scarcity
 - **Alternative Mods**
 - Scarcity
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with Scarcity
 - Not compatible with mods that alter XP of the items listed in description
 - **Important**
 - Mod author plays on survival mode
 - **Installing**
 - Install with other game settings mods
- Scarcity (demonbreather)
 - **Alternative Mods**
 - Minor XP Rewards Removed
 - **Compatibility/Known Conflicts/Overrides**
 - Minor XP Rewards Removed
 - **Important**
 - Read description for all info concerning this mod; do not use with others like it
 - Mod author plays on survival mode
 - **Installing**
 - Install with gameplay tweaks

- Adjust as necessary for leveled item lists
 - **Versions**
 - TWO versions - one for Season Pass; one for base game
 - Base game version has DLC Add-ons; choose what best fits for your game
- Rain Of Brass
 - Three game settings that extend lifetime of casings
 - **Alternative Mods**
 - PC versions (15 mins, 1 hr)
 - Xbox “light” version
 - Xbox “full” version
 - PS4 versions (2)
 - **Compatibility/Known Conflicts/Overrides**
 - Easily overridden by larger mods that include the settings
 - PS4 versions are not compatible with each other
 - Light and full versions should not be used together
 - Only affects vanilla ballistics
 - Won’t work with mod-added ballistics - according to porter’s description, however game settings should work with all ballistics unless overridden by another mod or they aren’t designed for console
 - Not compatible with mods that alter the same game settings
 - fGunShellLifetime
 - fGunShellCameraDistance
 - iDebrisMaxCount
 - **Installing**
 - Install with game settings
 - **Patch Warning**
 - PC players, it is easier to roll these settings into a bashed patch at the end of your load order (or into a mod that has other game settings) and not waste a slot better used for something else. Use Wrye Bash or xEdit.
 - **Versions**
 - There are two different PS4 versions - PS4 use caution if switching between the two for testing. They were ported by two different people. See “Operation Not Completed” Troubleshooting if you encounter issues due to same name.
 - There are two different Xbox versions - See “Operation Not Completed” Troubleshooting to learn how to avoid encountering “Operating Not Completed”
 - All versions ported are 2015 version and not newly rebuilt 2020 version.
- Realistic Ragdoll Force (DDefender)
 - **Alternative Mods**
 - Ugh. Death.
 - Realistic Death Physics - No animations
 - **Compatibility/Known Conflicts/Overrides**
 - Compatible with Corpse Collision
 - Compatible with Ugh. Death.
 - Not compatible with Realistic Death Physics
 - Compatible with Realistic Death Physics - No animations

- **Installing**
 - Install with other game settings
- Realistic Death Physics
 - **Alternative Mods**
 - Ugh. Death.
 - Realistic Death Physics - No animations
 - **Compatibility/Known Conflicts/Overrides**
 - Compatible with Ugh. Death.
 - Not Compatible with Realistic Death Physics - No animations
 - No animations version compatible with Realistic Ragdoll Force, main version is not.
 - Installing
 - **Versions**
 - One with animations, one without
- Corpse Collision
 - **Alternative Mods**
 - Running with Corpses
 - Weightless Bodies and Objects
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that add corpse collision
 - **Installing**
 - Install with gameplay tweaks
- Running with Corpses
 - **Alternative Mods**
 - Corpse Collision
 - Weightless Bodies and Objects
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that add corpse collision
 - **Installing**
 - Install with gameplay tweaks
- Weightless Bodies and Objects
 - **Alternative Mods**
 - Corpse Collision
 - Running with Corpses
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that add corpse collision
 - **Installing**
 - Install with gameplay tweaks
- Slower Leveling (IcyDeadPeople)
 - **Alternative Mods**
 - Immersive Gameplay
 - Slow Leveling
 - Level Cap
 - Several others (only choose one of this type)
 - **Compatibility/Known Conflicts/Overrides**

- Easily overwritten by larger mods
 - Not compatible with mods that do the same thing
 - **Installing**
 - Install with game settings
- Slow Leveling (IcyDeadPeople)
 - **Alternative Mods**
 - Immersive Gameplay
 - Slower Leveling
 - Level Cap
 - Several others (only choose one of this type)
 - **Compatibility/Known Conflicts/Overrides**
 - Easily overwritten by larger mods
 - Not compatible with mods that do the same thing
 - **Installing**
 - Install with game settings
- More XP Per Level
 - PS4
 - **Installing**
 - Install with game settings
 - **Versions**
 - Base: 600, Bump: 120
 - Base: 750, Bump: 150
- Fallout 4 FPS Experience
 - FPS - first person shooter
 - Scripted INI edits and debug messages.
 - Debug code only. Debug does not work as intended on Xbox.
 - If trying and removing, start a new game or return to point prior to installing and delete saves associated. Not safe for removal mid play. Spells remain with character but broken.
 - **Compatibility**
 - Debug scripting not compatible with Xbox
 - **Installing**
 - Install with scripted game settings
 - **Important**
 - Scripts not designed for Xbox. Mod author did not use CK messages and call Show() function for Xbox.
 - INI settings that are scripted must be re-set each time player loads the game. There is no registration on the script to re-check the INI settings.
- Vanilla Moon
 - This is an ini file. Restart FO4 after enabling in order to see changes.
 - **Installing**
 - Can be installed with other ini settings, with game settings, or visual.
 - **Versions**
 - There are several versions that increase the size of the moon. Choose one.

Survival Mode

Additions and new features to survival mode

- Tribute Rude Awakenings (Solidemptiness)
 - Allows player to sleep anywhere but with danger of being ambushed
 - **Alternative Mods**
 - Sleep Anywhere
 - **Compatibility/Known Conflicts/Overrides**
 - While it is compatible with Survival Options, Survival Options is currently not compatible with the game.
 - Per mod author: Compatible with Campsite, Sleep or Save, Survival Options and Survival Quick save mods
 - **Installing**
 - Install with Survival Mode mods
 - Plan your load order around survival mode, not the other way around
 - **Requirements**
 - Designed for survival mode
 - **Warnings**
- Sleep or Save
 - **Alternative Mods**
 -
 - **Compatibility/Known Conflicts/Overrides**
 - Conflicts with Place Anywhere. To use both mods, go to Place Anywhere's settings and set the Options Menu Button to OFF, then reset Sleep or Save via the mods holotape.
 - **Important**
 - Save-o-chem is constructible in chem bench using jet and mentats. Allows a save out in the field.
 - MIWest1970 encountered issues using it on the bunker bed in Sanctuary, but not others.
 - **Installing**
 - Install with survival mods
 - Plan your load order around survival mode, not the other way around

Game Mechanics

New game mechanics, edits to game mechanics

- Fireflies
 - **Compatibility/Known Conflicts/Overrides**
 - Possibility of vanilla radiation visual effect producing incorrect effect if using with a weather mod or radiation damage tweak mod. Requires individual testing with such mods.
 - **Important**

- Script detects when player enters cell, use the lightest density settings on Xbox if using load orders with additional spawns or level list edits to avoid complications when crossing cell borders
 - **Installing**
 - Appears to work just about anywhere
 - Install with new gameplay mechanics
- Outfit Switcher
 - Tentatively placed here until further testing can be done.
 - Appears to work just about anywhere
- Pocket Vehicles (KhajitForCoin)
 - **Important**
 - Per mod author: Hotkey (Favorite) vehicle chem. DO NOT take while in Pipboy. Game WILL crash.
 - Per mod author: cannot enter power armor or use power armor while under influence of vehicle chem.
 - Wait until vehicle chem has worn off until looking at Pipboy. Game WILL crash if you're still in vehicle mode. It takes about ~10 seconds after stopping vehicle mode to return back to human.
 - Do not use to travel fast. Game will completely freeze. Game was not meant to load EVERYTHING at once and there is not enough processing power on console to load more than 5x5 grids.
 - You **can** fly at accelerated rate even when over encumbered
 - **Installing**
 - Installing solely depends on other mods in load order. Adjust as necessary.
 - **Warning**
 - Edits default character
- Realistic Headshots (Shad0wshayd3)
 - Headshots 20x normal
 - **Addons/Patches**
 - Realistic Headshots for Automatron
 - Realistic Headshots for Far Harbor
 - Realistic Headshots for Nuka World
 - Alternative Mods
 - Compatibility/Known Conflicts/Overrides
 - **Installing**
 - Install with Movement/Game Mechanics/VATS
- Sneaky Kills by 5133p39 (Ported by Chucksteel)
 - Animation
 - Alternative Mods
 - Compatibility/Known Conflicts/Overrides
 - **Important**
 - Player must not be detected in order for kills to work
 - Kills on work on humans and non-feral ghouls only
 - **Installing**
 - Install with game mechanics/game tweaks

- Unlocking Violence (XB1)
 - **Addons**
 - Unlocking Violence [addons]
 - **Alternative Mods**
 - Locky Bastard/Locky Boom
 - Wasteland Imports 1.51
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with Locky Bastard/Locky Boom
 - Not compatible with Wasteland Imports 1.51
 - Compatible with Wasteland Imports 1.52
 - **Installing**
 - Install with game mechanics or new perks
 - Install below mods that alter vanilla doors
 - Install above Place Anywhere
- Unlocking Violence [addons] (XB1)
 - **Requirements**
 - Far Harbor
 - Nuka World
 - Unlocking Violence
 - **Installing**
 - Install after Unlocking Violence
- Locky Bastard/Locky Luke's Locky Boom (ported by KungFuMan)
 - **Alternative Mods**
 - Unlocking Violence
 - Wasteland Imports 1.51
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with Unlocking Violence
 - Not compatible with Wasteland Imports 1.51
 - Compatible with Wasteland Imports 1.52
 - Mostly compatible with Place Anywhere. Perk can only be turned on for one mod at a time. Turn off Place Anywhere through the Master Options Menu by using the Place Anywhere Chem (see Place Anywhere mod page for specific instructions)
 - **Installing**
 - Install with game mechanics or new perk mods
 - Install above Place Anywhere
- Salvage Beacons
 - Communication station is available in the settlement menu. Settler can be assigned to it.
 - Issues and community info is located at MA [website](#)
 - **Installing**
 - Install with game mechanics
- Campsite
 - Book located at Sanctuary Bunker
 - Camping items are able to be crafted at the chem bench.
 - **Addons/Patches**

- Workshop Rearranged Campsite Patch
 - **Patch Warning**
 - Requires menu patch for Workshop Rearranged
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that modify the Sanctuary Bunker interior cell.
 - **Installing**
 - If using Workshop Rearranged, install above
 - Install with game mechanics
- **Zombie Walkers**
- Turns feral ghouls into Romero-style zombies
 - Console version has not been updated. Wait until 3.0 Beta is complete to install. 2.6.3 is problematic for saves
 - **Alternative Mods**
 - Feral Ghouls Expansion Pack
 - **Compatibility/Known Conflicts/Overrides**
 - While not exactly a conflict, do not use with mods that add new spawns to the world, such as Endless Warfare
 - **Installing**
 - Install with a small-ish load order, this mod does a lot under the hood
 - Install with gameplay changes
 - **Warning**
 - Use mod version 3.0 and above. 2.6.3 has a bug in it that will crash game. Fixed in 3.0+
 - Complex Actors are marked as persistent in 2.6.3. Do not use on games with a lot going on

Perks and Spells

Perks applied to player character to do stuff, edits to vanilla perk chart

- **Mutations for Fallout 4**
 - New perks
 - **Installing**
 - Install with perk and spell mods
- **Chameleon and Stealth Fixes (Bionicyardiff/Whisper)**
 - **Compatibility/Known Conflicts/Overrides**
 - Patch might be necessary when using PAWA
 - Testing required when using SKK Fast Start due to possible pip-boy issue/overlap.
 - **Important**
 - Pip-boy HUD while wearing Power Armor may go wonky when using. Work-around: exit pip-boy and return to reset things. MA looking into issue. See Mod page for information
 - **Installing**
 - Install in gameplay tweaks

- Clear Ownership
 - **Compatibility/Known Conflicts/Overrides**
 - Use holotape if derpage occurs
 - **Installing**
 - Install in gameplay tweaks
- ETRFC - Exit Terminal Ready For Combat(whisper/bionicyardiff)
 - **Installing**
 - Install in gameplay tweaks
 - **Important**
 - Game cycles through animations which takes a bit; entering and exiting terminals in rapid succession may cause issues. See Mod page for more information.
 - **Warning**
 - Adds scripting for Canary Save File Manager; do NOT uninstall in the middle of the playthrough
 - See Mod page for known issues and workarounds
- Idiot Savant Activates %% of the Time(Shad0wshayd3)
 - Vanilla perk edit
 - **Compatibility/Known Conflicts/Overrides**
 - Easily overridden
 - **Installing**
 - Install with other vanilla perk edits
 - **Versions**
 - 100% of the time
 - 75% of the time
 - 50% of the time
 - 25% of the time
- Lady Killer for Women, Black Widow for men
 - Vanilla perk edit
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that alter Lady Killer or Black Widow
 - **Installing**
 - Install with vanilla perk edits
- Lady Killer and Balck widow Effects for Both Genders
 - Vanilla perk edit
 - **Compatibility/Known Conflicts/Overrides**

- Not compatible with mods that alter Lady Killer or Black Widow
 - **Installing**
 - Install with vanilla perk edits
- Fortune Finder Fix
 - **Compatibility/Known Conflicts/Overrides**
 - Possible conflict with mods that affect bottle cap mines
 - **Installing**
 - Install below perk mods
 - If using mods that affect bottle cap mines, this mod may need be installed below
- Junk to Components
 - **Compatibility/Known Conflicts/Overrides**
 - Toggle Place Anywhere master option off while adventuring (if using) to avoid options from cancelling each other out and not appearing
 - **Installing**
 - Install with gameplay tweaks or in crafting
 - Mod author has template available for use when using only their mods: [template](#)
- Raider Boogeyman Perk
 - New perk for Nuka World if doing “good” play through of Nuka World and miss the perks
 - **Important**
 - Complete Open Season to receive
 - See Mod page for all conditions
 - **Installing**
 - Install with other perk mods in gameplay tweaks
- Real Night Vision
 - **Compatibility/Known Conflicts/Overrides**
 - Not for use with other mods that change night vision
 - **Installing**
 - Install with other perk mods in gameplay tweaks
 - Installation with lighting/weather mods may have to be juggled depending on the lighting and weather mod.
- Level Cap
 - Adds a perk to the player that allows you to cap your level at any number using a holotape setting
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that alter XP game settings
 - **Important**
 - Holotape script-injected into player inventory on start-up. Craft settings holotape in Chem bench

- Because of how terminals work vs how the pip-boy works, the holotape will only work at terminals.
 - Once you reach the level cap, you will no longer receive notifications of locations discovered or quest objectives completed. These items are still recorded in your pip boy.
 - **Installing**
 - Install with new perks
- Pet-Feed-Call Dogmeat Xbox
 - Do not enable while Dogmeat is your companion
 - Obsolete with the new Creation Club dog addons. Not advised for use if you have Transdogrifier or the new dogs.
 - **Installing**
 - Install with perk mods

Objects and Furniture Value Tweaks

(no settlement-related, no snapping, no level lists, no textures) Where these types of mods fall is directly related to everything else in your personal load order.

- Crimsomrider's Convenient Resources
 - **Installing**
 - Install after workshop building mods/patches
 - Install after mods that lengthen the power lines
 - **Important:**
 - Is a settlement building mod. However, this mod seems to work best placed below Workshop Rearranged, USO, and Vanilla Extensions, which is why I've temporarily placed it here at the top of Gameplay Tweaks. Move as required for your own load orders.
 - If using with USO's Menu patch, place patch below. (Thank you, Poised2Strike)
 - Move lower in your load order if the power boxes do not produce power. (Thank you, Poised2Strike)
- Sane Fusion Cores (Arthmoor)
 - Compatibility/Known Conflicts/
 - Installing
- Caps of the Commonwealth.
 - Caps now have weight and you can construct tins to move caps into at chem bench.
- Better Cooking Stations
 - Legacy Mode: OLDER pre-DLC MOD, use with caution (especially if you have all the DLCs)
 - Per MA: high in load order but below Orphans of the Commonwealth due to Orphans having dirty edits on cooking stations
 - Place below mods that alter cooking stations
 - Not compatible with Vault-Tec DLC terminal scripts, uses older version of workshopobject script prior to Vault-Tec DLC release. Do not use the Vault-tec DLC terminal to assign settlers to the new stations. Do it manually. There may be conflicts regardless.
 - When using with Place Anywhere, make sure Place Anywhere is turned off while exploring or you will not be able to access Better Cooking Stations

- Not compatible with Animated Drinking without patch
- Not compatible with Mojave Imports: Goodies from the Wasteland without patch
- Patches available for PC, none available for Xbox
- Requires addons for Far Harbor and Nuka World if you have those DLC and want to have the new cooking stations in those locations (not available for Xbox)
- Troubleshooting: Followers have issues with pathing to stations sometimes; this is a game pathing issue, not a mod issue. If using with a scrapping mod that has disabled navmesh, followers will not path at all, so be careful when scrapping items that you cannot normally scrap and then placing settler idle objects (goes for all mods, not just this one)
- Workshop Spotlight Fix (ccmads)
 - **Alternative Mods:**
 - Unofficial Fallout 4 Patch
 - **Important:** Do not use if using UFO4P, scripting is too similar and will create bugs rather than fix
 - **Versions:**
 - There are two versions; one for players with ALL DLC, one for players without
- Forest Grove Marsh Fix
 - **Alternative mods:**
 - Unofficial Fallout 4 Patch
 - Not necessary if using UFO4P; included in fixes
- "Accessing Maglocks ..." Delay - Bug Fix
 - **Alternative mods:**
 - Unofficial Fallout 4 Patch
 - Not necessary if using UFO4P, included in fixes
 - Use if you do not have all DLC
- Explosive Tweaks
 - **Installing**
 - Install under mods that affect vanilla explosives or with gameplay tweaks

Vendor, Food, Container Leveled Item Lists

(not faction, not armor, not weapons) hard edit, requires patches if wanting to edit same list

- Commonwealth 2.0 - Lazy Murph's Vendors (LazyMurph)
 - Alters vendor leveled lists
 - **Alternative Mods**
 - Workshop Rearranged
 - Integrated Commonwealth
 - DLC Weapon Distribution
 - Distributed DLC Level Lists
 - Others like the above
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with any mod that alters vendors or their level lists
 - Not compatible with mods in the Alternative section - either choose hard edit or scripted. They will be doing the same thing.
 - Compatible with: DOOMBASED Weapons

- **Installing**
 - Install with gameplay changes or changes to level lists. Other mods will directly affect the lists.
 - Install above DOOMBASED Weapons
- **Patch Warning**
 - Requires patches for Vendors and Vendor Level lists
- **Requirements**
 - Far Harbor
 - Nuka World
- Commonwealth 2.0 - New Nuka Cola Flavors
 - Alters Nuka Cola Vending machines leveled lists
 - **Alternative Mods**
 - Integrated Commonwealth
 - Wasteland Imports
 - Commonwealth 2.0 - Flavorpocalypse
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with any mod that alters Nuka Cola vending machines leveled lists - only Choose ONE
 - Not compatible with mods listed under Alternative
 - **Installing**
 - Install above scripted level lists
 - Install with gameplay changes or with level lists
 - **Patch Warning**
 - Requires patch for any mod that hard edits vending machine lists
 - **Requirements**
 - Nuka World
- Commonwealth 2.0 - Flavourpocalypse
 - Alters Nuka Cola and Vim! Vending Machines leveled lists
 - “Evolved” version of Commonwealth 2.0 - New Nuka Cola Flavors - only choose ONE
 - **Alternate Mods**
 - Integrated Commonwealth
 - Wasteland Imports
 - Commonwealth 2.0 - New Nuka Cola Flavors
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with Commonwealth 2.0 - New Nuka Cola Flavors
 - Not compatible with any mod that alters Nuka Cola or Vim! Vending Machines leveled lists
 - Not compatible with mods listed as alternate
 - **Installing**
 - Install above script injection mods
 - **Patch Warning**
 - Hard edit. Requires patch for use with mods that alter Nuka or Vim! Lists via hard edit
 - **Requirements**
 - Far Harbor
 - Nuka World

- Some Assembly Required²² (Power Armor Overhaul)
 - Read the mods description for the full list of changes.
 - Rebalances materials/perk requirements needed to repair Power Armor:
 - Raider: Armorer 1
 - T-45: Armorer 2, Science! 1
 - T-51: Armorer 3, Science! 2, Nuclear Physicist 1
 - T-60: Armorer 4, Science! 3, Nuclear Physicist 2
 - X-01: Armorer 4, Science! 4, Nuclear Physicist 3
 - **Addons/Patches**
 - Legendary Merged Patch
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that touch power armor.
 - Not compatible with mods that alter Danse's X01 armor level list
 - ITMs in several cells will need to be overridden by any mods with those cells
 - **Installing**
 - Install above mods that rebuild precombines
 - Install above mods that add to Fort Strong, Concord Museum, GNN, and Fort Hagen
 - **Patch Warning**
 - Patch for MQ102 required for mods that touch "Out of Time"
 - **Important**
 - Removes all but three complete Power Armor sets from the Commonwealth.
 - Alters the Power Armor suit in the Musuem of Liberty.
 - **Warnings**
 - Accidental disabled precombine at POIMilitaryBB08 - 001561D6 Woodcrate02 - Previs affected in 3x3 grid around cell.
 - Accidental ITMs at FortStrong01, ConcordMuseum01, GNN01, FortHagen02

Level list patches

(not armor, not weapons) - patches above lists

Level list scripted Injection

(not armor, not weapons) script inject

➤

NEW COMPANIONS AND PETS

Pets

- Pet Bloodbug
- Quantum Pet Deathclaw

²² 5-4-2022: The placement here is tentative. Where you place it is solely determined by other mods in your load order based on the cell edits. It really needs cleaning. Expect and plan for FPS drops near the military installation listed if used. Single-cell precombine breakage \neq whole world but is problematic with other mods and with a lot going on.

- Pet Hermit Crab
- Pet Wolf
- Pet Scorpion
- Pet Ash Gulper
- Nuka Queen Pet
- Talking Dog Black Lab
 - Requires Creation Club
- Talking Dog Golden Retriever
 - Requires Creation Club
- Pet Worms
- Pet Gatorclaw
- Angler Workshop Pets
- Fog Crawlers Workshop Pets
- Workshop Ant Swarm
- Workshop Rats
- Pet Ants

Followers

- Fallout NV - ED-E Companion
- DC Molerats
 - Script injects into vanilla faction lists and adds new companion
- WRVR - New Companion And Radio Station For The Commonwealth And Far Harbor
- DolphinianFollower
 - See mod page for more information
- Heather Casdin
 - May do better nearer the end of the load order
- Bloodbug Follower

NPC AND COMPANION CHANGES

- Moddable Robot Companions
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that hard edit Professor Goodfeels, Codsworth, and Graygarden robot records
 - **Requirements**
 - Automatron
 - **Installing**
 - Install with mods that affect NPCs
 - Install PRIOR to discovering Sunshine tidings in order to keep Professor Goodfeels. Installing afterwards does no good for the Professor.
 - **Patch Warning**
 - Patch required for use with mods that hard edit Codsworth, Professor Goodfeels, and Graygarden Robot settlers

- **Versions**
 - There are individual versions available on PC. Xbox and PS4 versions are for Goodfeels, Codsworth, and the Graygarden robots all-in-one
- Nick Valentine's Day
 - Not compatible with mods that edit Nick's Race Data
 - Do no use with mods that alter Nick
- Codsworth Automatron Fix
 - PS4
 - **Alternative Mods**
 - Moddable Robot Companions
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that touch Codsworth
 - **Installing**
 - Install with companion changes
 - **Requirements**
 - Automatron
- Get Danse Out of His Power Armor
 - **Alternate Mods**
 - Cheat Terminal
 - Settler and Companion Dialogue Overhaul
- Gage's Thoughts Fix
 - Will remove option to buy from Gage
 - **Requirements**
 - Nuka World

Settlers

- Varied Raiders
 - Adds raiders faces as templates
 - **Compatibility/Known Conflicts**
 - Will conflict with mods that update the raider template forms
 - **Installing**
 - Install with NPC Changes or lower
 - Install prior to new game start only
 - **Important**
 - Does not include face gen data. If dark face occurs, reload save. PC players can generate face data and pack into archive for performance improvements.
- Varied Gunners
 - Adds gunners faces as templates
 - **Compatibility/Known Conflicts**
 - Not necessary if using Sim Settlements 2
 - **Installing**
 - Install with NPC Changes or lower
 - Install prior to new game start only
 - **Important**

- Does not include face gen data. If dark face occurs, reload save. PC players can generate face data and pack into archive for performance improvements
- Dogs Not Brahmin (ANDREWXCX)
 - **Compatibility/Known Conflicts/Overrides**
 - Easily overridden by other mods that touch brahmin records
- Simple Settlers (Immortal) (ANDREWXCX)
 - Settlers are immortal; this is due to a bug in game engine itself, not the mod
 - Originally made for PS4
 - Mod author has extensive [FAQ](#); read before installing
 - **Alternate Mods**
 - Simple Settlers (Mortal)
 - Better Settlers
 - Beautiful Female Settlers
 - Orphans of the Commonwealth
 - Youth of the Commonwealth
 - others
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with any mod that alters WorkshopNPC, like Better Settlers, Beautiful Female Settlers, Orphans of the Commonwealth, etc.
 - Compatible with SIC - Settler Identity Card, Compatible with Cages Overhauled and More
 - Do NOT use with Simple Settlers (Mortal); choose one or the other
 - **Requirements**
 - Vault-Tec Workshop
 - Far Harbor
 - Nuka-World
 - **Warnings**
 - Reports of infinite battle between settlers if synth settler discovered - recommend Mortal version over Immortal version - YMMV
- Simple Settlers (Mortal) (ANDREWXCX)
 - Originally made for PS4
 - Mod author has extensive [FAQ](#); read before installing
 - **Alternate Mods**
 - Simple Settlers (Immortal)
 - Better Settlers
 - Beautiful Female Settlers
 - Orphans of the Commonwealth
 - Others
 - **Compatibility/Known conflicts/Overrides**
 - Not compatible with any mod that alters WorkshopNPC, like Better Settlers, Beautiful Female Settlers, Orphans of the Commonwealth, etc.
 - Compatible with SIC- Settler Identity Card, Compatible with Cages Overhauled and More
 - Do NOT use with Simple Settlers (Immortal); choose one or the other
 - **Important**
 - Settlers are mortal and can die by falling as well as in raids

➤ Beautiful Female Settlers

- Updates female settlers faces
- **Alternate Mods**
 - Simple Settlers
 - Better Settlers
 - Youth of the Commonwealth
 - Orphans of the Commonwealth
- **Compatibility/Known Conflicts**
 - Will conflict with mods that affect LCharWorkshopNPC and requires patch to use with any other settler mods
 - Conflicts with all mods listed in Alternate Mods
- **Installing**
 - Install with NPC and Companion Changes or Faction and AI Overhauls
 - Install prior to new game start only
- **Important**
 - Includes Lots More Hairstyles. You'll have repeats and possibly a laggy hair menu if you use with Lots More Hairstyles and this mod together.
 - Does not include face gen data. If dark face occurs, reload save. PC players can generate face data and pack into archive for performance improvements.
- **Patch Warning**
 - PC players will need to use xEdit to fully integrate with other settler mods.

➤ Better Settlers

- Updates settlers faces and adds more
- **Addons**
 - Better Settlers MORTAL pack
- **Alternative Mods**
 - Simple Settlers
 - Youth of the Commonwealth
 - Orphans of the Commonwealth
- **Compatibility/Known Conflicts**
 - Will conflict with mods that affect LCharWorkshopNPC
 - Will conflict with mods that affect vanilla settlers Actor forms
 - Will conflict with mods that affect settler outfits
- **Installing**
 - Install prior to new game start only. Outfit forms with this mod are not created correctly and mid-play will cause settlers to arrive unclothed and unarmed. See warnings for bugs in mod that cause game bug.
 - Install with NPC and Companion Changes, Faction and AI Overhauls, or Bottom of the load order
- **Important**
 - Does not include face gen data. If dark face occurs, reload save. PC players can generate face data and pack into archive for performance improvements.
- **Patch Warning**
 - PC players can use xEdit to patch LCharWorkshopNPC
- **Warnings**

- Outfit forms have not been set properly and cause a bug that affects settler inventory. Only armor forms or level lists that have armor forms can go in the outfit forms. The mod unfortunately places new weapons lists there.
- Better Settlers MORTAL Pack
 - Makes generic settlers from Better Settlers mortal so they can be killed in raids
 - **Installing**
 - Install after Better Settlers
 - **Important**
 - Does not fix outfit form bug from main mod
 - **Requirements**
 - Requires Better Settlers
- Orphans of the Commonwealth (sadyamused)
 - **Alternative Mods**
 - Better Settlers
 - Simple Settlers
 - Youth of the Commonwealth
 - Diverse Children
 - **Compatibility/Known Conflicts**
 - Requires patch for Workshop Framework
 - Not compatible with mods that allow extra scrapping in Bunker Hill
 - Not compatible with mods that update LCharWorkshopNPC
 - Not compatible with Better Settlers
 - Not compatible with Youth of the Commonwealth
 - Hard crash observed when attempting to use with Simple Settlers when both mods attempt to spawn NPCs
 - Conflicts with Better Cooking Stations (and any mod that modifies any cooking station)
 - Not exactly compatible with Cages Overhauled and More - See Cages notes for details
 - **Installing**
 - Only choose one kid mod to override LCharWorkshopNPC
 - Install prior to game start only
 - Install above Better Cooking Stations
 - **Important**
 - Bethesda.net version has not been updated since 2016
 - Requires manually cleaning with xEdit to remove deleted and moved records prior to use
 - Children do not have their own skeletons. They use adult skeletons so any furniture that is marked as 'Child can use' can be used by children. This causes an unfortunate bug if they use vanilla or modded furniture with the ScaleActorToOne keyword. The skeleton will scale to adult size. Use a mod that has actual children furniture included that does not use the keyword.
 - **Patch Warning**
 - Requires patch for Workshop Framework
 - PC Players can patch mod with xEdit and manually clean the edits to vanilla forms in Bunker Hill and Goodneighbor
 - **Versions**

- Full version
- Light version
- Choose one or the other
- **Warnings**
 - **Deleted references** in Bunker Hill. Disables precombines in BunkerHillExt
 - [REFR:001D545A] (places TrashPileCor01 [STAT:0008B604] in GRUP Cell Temporary Children of BunkerHillExt [CELL:0000DBC0] (in Commonwealth "Commonwealth" [WRLD:0000003C] at 4,3) in Precombined\0000DBC0_32B39DA3_OC.nif)
 - [REFR:001D545C] (places TrashEdge03_Nochunks [STAT:001ADB1D] in GRUP Cell Temporary Children of BunkerHillExt [CELL:0000DBC0] (in Commonwealth "Commonwealth" [WRLD:0000003C] at 4,3) in Precombined\0000DBC0_32B39DA3_OC.nif)
 - **Moved references** in Bunker Hill. These moved records, unfortunately, are part of the precombines in BunkerHillExt
 - [REFR:001D545B] (places TrashEdge01 [STAT:0008A5D7] in GRUP Cell Temporary Children of BunkerHillExt [CELL:0000DBC0] (in Commonwealth "Commonwealth" [WRLD:0000003C] at 4,3) in Precombined\0000DBC0_72B39DA3_OC.nif)
 - [REFR:001D545F] (places TrashEdge03_Nochunks [STAT:001ADB1D] in GRUP Cell Temporary Children of BunkerHillExt [CELL:0000DBC0] (in Commonwealth "Commonwealth" [WRLD:0000003C] at 4,3) in Precombined\0000DBC0_32B39DA3_OC.nif)
 - [REFR:0023DA48] (places TrashEdge02 [STAT:0008A5E0] in GRUP Cell Temporary Children of BunkerHillExt [CELL:0000DBC0] (in Commonwealth "Commonwealth" [WRLD:0000003C] at 4,3) in Precombined\0000DBC0_32B39DA3_OC.nif)
 - [REFR:0023DA49] (places TrashEdge03 [STAT:0008B5FD] in GRUP Cell Temporary Children of BunkerHillExt [CELL:0000DBC0] (in Commonwealth "Commonwealth" [WRLD:0000003C] at 4,3) in Precombined\0000DBC0_2BEA5372_OC.nif)
 - Children are unkillable. Can cause infinite battle if child is chosen as a synth and attacked.
 - Wild edit on cooking furniture
- Youth of the Commonwealth 2.0 (redragon1981)
 - **OBSOLETE - Xbox version is not compatible with current build or main quest.**
 - Adds settlers with body sizes similar to Lucy Abernathy to resemble young adults
 - **Alternative Mods**
 - Any other settler mod
 - **Compatibility/Known Conflicts**
 - Not compatible with Start Me Up, Start Me Up Redux, UFO4P
 - Not compatible with scrap mods
 - In its current state, not compatible with the main quest. Dirty edit against the aaaMarkers cell seems to have broken the enable parents on MQ106. It looks like the older version of the CK just went grabby hands with everything.
 - **Installing**

- Not recommended for use without cleaning and fixing several issues. Thank the mod author for making it and choose a different mod if on console. Xbox players cannot clean the mod in order to use.
 - Mod has not been updated since 2016
 - **Important**
 - Xbox version is the Lite version and does not contain face gen data. If dark face occurs on youth, reload save.
 - Requires the Main Quest to be fixed/taken out of mod in order to use. All enable parents are removed from searching for Kellogg
 - **Patch Warning**
 - **Versions**
 - 2.0
 - **Warnings**
 - Clean and fix mod before use.
 - Dirty edit for Out of Time, Reunions, Tracking Kellogg, aaaMarkers cell
 - **Deleted References:** Removes all the enable states on MQ106 at 0000E4D7 MQ106TrackSite04
- ANiceOakTree's Diverse Children
 - **Alternative Mods**
 - Better Settlers
 - Simple Settlers
 - Orphans of the Commonwealth
 - **Compatibility/Known Conflicts**
 - Not compatible with mods that modify LCharWorkshopNPC
 - Allow override of Youth of Commonwealth
 - Allow override of Orphans of the Commonwealth
 - **Installing**
 - Install with NPC and Companion changes
 - **Important**
 - Only choose one kid mod to override LCharWorkshopNPC
 - **Patch Warning**
 - Requires patch for mods that affect LCharWorkshopNPC
 - **Versions**
 - Full version
 - Lite version
 - Choose one and plan for
 - **Warnings**
 - **Deleted References:** Two deleted records in LCharWorkshopNPC detected by xEdit as < Error: Could not be resolved >. This means the records were improperly removed before a save of the file occurred or some other reason. NPC spawns may have issues.
 - Children are unkillable. Can cause infinite battle if child is chosen as a synth and attacked.
- Better Unique Settlers [base game] (Ash1597)
 - PS4
 - **Alternate Mods**

- Odd's Default Settlers
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that edit the unique settlers in farms
 - **Installing**
 - Install with NPC changes
 - **Patch Warning**
 - Requires patch to work with mods that alter the unique settlers, such as the Abernathys
- Unique Settlers+
 - Updates base script properties for unique settlers on their Actor form
 - **Alternative Mods**
 - Odds Default Settlers
 - **Compatibility/Known Conflicts/Overrides**
 - Not Compatible with mods that touch the unique settlers
 - Not Compatible with Odd's Default Settlers
 - **Installing**
 - Install with NPC changes
 - Install above Simple Settlers or mods like Simple Settlers
- Odd's Default Settlers
 - Renames the unique settlers found at settlements from "settler" to something else.
 - **Alternate Mods**
 - Unique Settlers +
 - Better Unique Settlers
 - **Compatibility/Known Conflicts/Overrides**
 - Do not use with NPC mods that alter the same NPCs
 - Anything can easily overwrite this
- Leveled Settlers and Scavengers
 - Updates settler Actor forms templates that affect every settler's stats
 - Alternative Mods
 - **Compatibility/Known Conflicts**
 - Very easy to override with other mods
 - **Important**
 - The way the mod is set up is the most compatible with other mods
 - **Installing**
 - Install with NPC changes
 - **Versions**
 - Xbox only one version - up to level 20
 - PC 2 versions - level 20 or up to level 99

Other

- What's Your Name?
 - Tentatively placed here. Adjust as needed for your load order
 - NOTE: oddlittleturtle has tested this mod all over and hasn't had an issue with it on both PC and Xbox - please let us know on the Parent Server if you've found any compatibility issues
 - Scripted. Do not remove mid play.

- Peaceful Radstags
 - PS4
 - **Installing**
 - Install with NPC AI changes

RADIO AND AUDIO MODS

Warning

Check all copyrights prior to downloading. Free mods must have licenses for music.

See [Mods based on Copyright Material - things to know before you make a request \(or download a mod\)](#)
- By ANDREWXCX for more information on Copyrighted material.

- Reverb and Ambiance Overhaul
 - Bug fix and attenuation modifier for all sounds in the game
 - **Compatibility/Known Conflicts/Overrides**
 - Sound replacers that don't have correct volume levels (bug) may not be able to be adjusted with the sliders. Remove bugged sound replacer and find one that has correct volume levels to work with sliders.
 - **Installing**
 - Install above all sounds
 - **Versions**
 - Two versions, choose one for your load order. All DLC version and one that only requires base game.
- Faded Glory - A post apocalyptic Soundscape
 - Author/writer has their own [SoundCloud](#)
 - **Alternate Mods**
 - Radium Volume II
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with Radium without patch
 - **Important**
 - Does not touch radios. Ambient music
 - **Installing**
 - Install with audio mods
- Radium Volume II - A music mod
 - **Alternate Mods**
 - Faded Glory - A post apocalyptic soundscape
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with Faded Glory without patch
 - **Important**
 - Does not touch radios. Ambient music
 - **Installing**

- Install with audio mods
- Radio New Vegas - With Mojave Radio
 - Newest version on NexusMods requires Fallout: New Vegas to be installed. This version cannot be made available to console players. Information below is for the 2018 version on Bethesda.net. Notes about mod stopping on NexusMods is still there. Do not uninstall quest mods/scripted mods in the middle of a playthrough.
 - **Alternate mods**
 - Other radio mods
 - **Compatibility/Known Conflicts**
 - Radio frequencies:
 - Mojave Radio: 88.0
 - New Vegas: 90.0
 - **Installing**
 - Install with radio mods
 - **Requirements**
 - PC version: Fallout: New Vegas
 - Xbox version: Fallout 4 base game
 - **Warning**
 - Radio quest was not set up correctly. This mod will stop after the first loop. Do not uninstall in the middle of a playthrough.
- Old World Tunes - Boston (cdante/brandoman)
 - There are several radio stations to choose from.
 - Files range from medium to large; plan your playthrough and mod downloads accordingly
 - Copyrighted material cannot be used on YouTube, only mod author has permission
 - **Compatibility/Known Conflicts/Overrides**
 - All frequencies are compatible with each other.
 - OWR Agatha's song frequency: 91.357803
 - OWR Billy Bob's frequency: 91.527351
 - OWR Cadillac Jack's frequency: 91.120003
 - OWR Civil Defense frequency: 91.369453
 - OWR Chilling Tales frequency: 91.665375
 - OWR FNGS frequency: 91.628578
 - OWR GNR frequency: 91.120216
 - OWR Gopnik frequency: 91.223343
 - OWR Malt Shop Mayhem frequency: 91.238091
 - OWR Nine Inch Nails frequency: 91.874397
 - OWR Pee Wee's frequency: 91.000229
 - OWR Old World Tunes radio frequency: 91.198837
 - OWR Red Rocket Radio Bob frequency: 91.395622
 - OWR SynthStream frequency: 91.257927
 - OWR The French Connection frequency: 91.707153
 - OWR The Sealed Book frequency: 91.388527
 - OWR The Weird Circle frequency: 91.936157
 - OWR Tumbleweed Tunes frequency: 91.694527
 - OWR West Vault Radio: 91.302788

- OWR XMinus One frequency: 91.096519
 - OWR Zero Hour frequency: 91.546219
- **Installing**
 - Install with radio mods
- Atomic Radio (kris_takahashi)
 - Large file, plan your playthrough and mod downloads accordingly.
 - Mod author has dedicated blog you can find by reading the description. Read materials thoroughly before downloading.
 - **Compatibility/Known Conflicts//Overrides**
 - Radio frequency:
 - **Patch Warning**
 - Workshop Rearranged has a compatibility patch for the radios in the workshop menu
 - **Installing**
 - Install with radio mods

VISUAL, ATMOSPHERIC, TEXTURAL IMPROVEMENTS

Weather

You only need one weather mod. They all edit the same basic records. Some include new sounds for birds, crickets, wind, and thunder and lightning. Some include water lighting edits. Read all descriptions thoroughly before adding. Never remove in the middle of a playthrough. Some lights have persistence. Some weathers are scripted.

- Calamity Weathers
 - This is a visual/weather overhaul; do not use with other visual/weather overhaul mods
 - Complete lighting, ImageSpace, and Weather overhaul
 - **Addons/Patches**
 - Winter Climate
 - Far Harbor Addon
 - Nuka World Addon
 - Fallout 2287 Nuclear Winter Patch
 - Calamity Weathers Interiors
 - Calamity Lookspack
 - **Alternate Mods**
 - Other weather mods
 - Other lighting mods
 - TreyM's LUT framework
 - TreyM's LUT Framework II
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with darker nights mods
 - Not compatible with lighting mods
 - Do not use with mods that affect volumetric lighting, lens flare, or god rays
 - Do not use with other weather mods

- Do not use with mods that add new LUTs
 - Do not use with water mods
 - **Important**
 - Only use one weather mod
 - **Installing**
 - Install with weather
 - Install above Winter Climate and other patches
 - **Requirements**
 - DLC addons require the DLCs
- Calamity Weathers - Winter Climate
 - Winter only weather addon to Calamity Weathers
 - **Alternate mods**
 - Other weather mods
 - Other lighting mods
 - **Compatibility/Known Conflicts/Overrides**
 - Same as base mod
 - **Installing**
 - Install below Calamity Weathers
 - Install above Fallout 2287 - Nuclear Winter
 - **Patch Warning**
 - Requires patch for Fallout 2287 - Nuclear Winter
 - **Requirements**
 - Far Harbor and Nuka World
 - Calamity Weathers
 - Calamity Weathers DLC addons
- Clarity
 - This is a visual/weather overhaul; do not use with other visual/weather overhaul mods
 - ImageSpace, Water Lighting, and Weather overhaul
 - **Performance heavy mod. Not recommended for use if having performance issues**
 - **Addons/Patches**
 - Previsibines Repair Pack Stable build (not available on console)
 - **Alternate Mods**
 - Calamity Weathers
 - Vivid Weathers
 - Other weather mods
 - Other lighting mods
 - Other water mods
 - **Compatibility/Known Conflicts/Overrides**
 - **Not compatible with Previsibines Repair Pack on console**
 - Not exactly compatible with texture mods that enhance blood splatter since it disables it
 - Not exactly compatible with IronSights mods
 - Not compatible with interior cell edit mods
 - Not compatible with darker nights
 - Not compatible with Enhanced Lights and Effects
 - Not compatible with Calamity Interiors

- Not compatible with god rays or lens flare mods
 - Not compatible with Nytra's
 - Not compatible with water mods
 - Not compatible with mods that change the pipboy flashlight
- **Important**
 - Porter did not remove ESL flag from plugin. In-game manager does not detect ESL flag. 100 mods (PS4)/150 mods (Xbox) is the limit on consoles.
 - Ini setting disables blood splatter
 - Game Setting: flronSightsDOFStrength
- **Installing**
 - Install above lighting
 - Install above grass
 - Install above underwater lighting
 - Installing with weapon mods that modifies ironSights depth of field requires placement planning - Install below or don't use mod that modifies ironSights
 - Xbox: Ini setting requires shutting down game completely
- **Requirements**
 - Automatron DLC
 - Far Harbor DLC
 - Wasteland Workshop DLC
 - Vault-Tec DLC
- **Warning**
 - Xbox: If porter enabled god rays settings to ultra, it will tank performance on consoles
 - PC: If enabling god rays ini settings to ultra, make sure you have a minimum of 16 GB vRAM.
 - Touches all cell headers in game and brings down optimization and performance
 - There is no way to patch PRP on console. PRP has patch on PC. The header information does not match on console.
- **CVO - Commonwealth Visual Overhaul (Sargeschultz11)**
 - This is a visual/weather overhaul; do not use with other visual/weather overhaul mods
 - ImageSpace and weather overhaul
 - **Addons/Patches**
 - Commonwealth Weather Overhaul
 - **Alternate Mods**
 - Other imagespace mods
 - Other weather mods
 - Lens flare mods
 - Volumetric lighting mods
 - **Compatibility/Known Conflicts/Overrides**
 - Does not appear compatible with Heaven's Dryland Settlement - Blacks out the inner workshop
 - Do not use with mods that affect volumetric lighting, lens flare, or god rays
 - Do not use with weather mods
 - Choose either DLC version or Base game version

- **Important**
 - Does not touch underwater visuals; however modded underwater visuals may not match. Mod created for vanilla underwater lighting
- **Installing**
 - Install above lighting mods
 - Install above underwater lighting
- **Requirements**
 - DLC version requires Nuka-World and Far Harbor
- **Versions**
 - DLC version
 - Base game version
- Commonwealth Weather Overhaul
 - This is a visual/weather overhaul; do not use with other visual/weather overhaul mods
 - Weather, sound, imagespace, god rays, and climates - complete weather overhaul
 - **Alternate Mods**
 - Other weather mods
 - Other god rays mods
 - Other image space mods
 - **Installing**
 - Install after CVO
 - **Requirements**
 - CVO ("soft" requirement)
 - **Warning**
 - Affects 2 regions: CoastalRegion and Downtown Region - these include overriding sounds in the area (mod does not affect sounds on record but is the same record used for other mods) Adds new weathers to these regions
- Darker Nights
 - This is a visual/weather overhaul; do not use with other visual/weather overhaul mods
 - **Addons/Patches**
 - Vivid weathers patch
 - **Alternate Mods**
 - Other weather mods
 - Other lighting mods
 - **Compatibility/Known Conflicts/Overrides**
 - Other weather mods
 - Other god rays mods
 - Other image space mods
 - **Installing**
 - Install below weather mods
 - Install above this mod's patches but above weather mod patches
 - See mod description for installation instructions
 - **Patch Warning**
 - Requires patch for weather mods
 - **Versions**

- There are several versions. Determine which one you want. Each version has a patch for several weather mods.
- Moribund World
 - This is a visual/weather overhaul; do not use with other visual/weather overhaul mods
 - **Alternate Mods**
 - Other weather mods
 - Other lighting mods
 - **Compatibility/Known Conflicts/Overrides**
 - Do not use with other weather mods
 - **Installing**
 - This will be the only lighting/visual/weather mod in your load order
 - Install above grass
 - Install below water or allow water to overwrite
- NAC X
 - This is a visual/weather overhaul; do not use with other visual/weather overhaul mods
 - **Alternate Mods**
 - Other weather
 - Other lighting
 - Calamity Weathers
 - Vivid Weathers
 - NAC
 - TreyM's LUT Framework
 - Vivid weathers
 - Vivid Waters
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with other weather mods
 - Not compatible with lens flare or god ray mods
 - Not compatible with mods that adjust ImageSpace Adapters, such as water mods
 - **Installing**
 - Install with weather and lighting mods
 - Install above textures
- Realistic Lighting
 - Weather/lighting overhaul
 - **Alternate Mods**
 - Other weather mods
 - Clarity
 - LUT Framework
 - Darker Nights
 - Enhanced Interiors
 - PhyLight
 - **Compatibility/Known Conflicts/Overrides**
 - Might need a patch for PRP headers
 - Not compatible with other LUT or ImageSpace mods
 - Not compatible with Darker Nights

- Not compatible with other weather mods
 - Not compatible with light mods that adjust interior lighting
 - **Installing**
 - Install above texture mods
- Vivid Weathers
 - This is a visual/weather overhaul; do not use with other visual/weather overhaul mods
 - **Addons/Patches**
 - No Snow Under the Roof patch
 - Darker Nights for Vivid Weathers
 - Lore Quest & Player home
 - Vivid Weathers No Ground Fog
 - Autumn Plugin
 - Silent Hill Plugin
 - Natural Bright
 - Summer Plugin
 - Nuclear Winter 2287 patch
 - Nuka World Patch
 - Far Harbor
 - Winter Plugin
 - Vivid Waters patch
 - **Alternate Mods**
 - Other weather mods
 - Other lighting mods
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with other weather or lighting mods
 - Not compatible with god ray or lens flare mods
 - Use water mods made for this mod
 - **Installing**
 - Install above texture mods
- Vivid Weathers No Ground Fog
 - **Alternate Mods**
 - Silent Hills Plugin
 - **Compatibility/Known Conflicts/Overrides**
 - Choose between fog and no fog. Silent Hills plugin is all fog.
 - **Installing**
 - Install below Vivid Weathers
 - **Important**
 - Only affects Commonwealth weathers
 - **Requirements**
 - Vivid Weathers
- Vivid Weathers Silent Hills Plugin
 - Seasonal plugin to change the odds of weathers occurring based on season - that weather type being all fog all the time
 - **Alternate Mods**
 - Summer Plugin

- Winter Plugin
 - Autumn Plugin
 - Spring Plugin
 - **Compatibility/Known Conflicts/Overrides**
 - Choose only one seasonal plugin.
 - **Installing**
 - Install below Vivid Weathers
 - **Requirements**
 - Vivid Weathers
- Vivid Weathers Spring Plugin
 - Seasonal plugin to change the odds of weathers occurring based on season
 - **Alternate Mods**
 - Summer Plugin
 - Winter Plugin
 - Autumn Plugin
 - Silent Hills Plugin
 - **Compatibility/Known Conflicts/Overrides**
 - Choose only one seasonal plugin.
 - **Installing**
 - Install below Vivid Weathers
 - **Requirements**
 - Vivid Weathers
- Vivid Weathers Summer Plugin
 - Seasonal plugin to change the odds of weathers occurring based on season
 - **Alternate Mods**
 - Spring Plugin
 - Winter Plugin
 - Autumn Plugin
 - Silent Hills Plugin
 - **Compatibility/Known Conflicts/Overrides**
 - Choose only one seasonal plugin.
 - **Installing**
 - Install below Vivid Weathers
 - **Requirements**
 - Vivid Weathers
- Vivid Weathers Autumn Plugin
 - Seasonal plugin to change the odds of weathers occurring based on season
 - **Alternate Mods**
 - Spring Plugin
 - Winter Plugin
 - Summer Plugin
 - Silent Hills Plugin
 - **Compatibility/Known Conflicts/Overrides**
 - Choose only one seasonal plugin.

- **Installing**
 - Install below Vivid Weathers
- **Requirements**
 - Vivid Weathers
- Vivid Weathers Winter Plugin
 - Seasonal plugin to change the odds of weathers occurring based on season
 - **Alternate Mods**
 - Spring Plugin
 - Autumn Plugin
 - Summer Plugin
 - Silent Hills Plugin
 - **Compatibility/Known Conflicts/Overrides**
 - Choose only one seasonal plugin.
 - **Installing**
 - Install below Vivid Weathers
 - **Important**
 - Does not add winter ground textures
 - **Requirements**
 - Vivid Weathers
- Vivid Weathers Natural Bright
 - ImageSpace Adapter plugin
 - **Installing**
 - Install below Vivid Weathers
 - **Requirements**
 - Vivid Weathers
- Darker Nights Vivid Weathers Patch
 - **Installing**
 - Install below Darker Nights and Vivid Weathers
 - **Requirements**
 - Vivid Weathers
 - Darker Nights
 - **Versions**
 - There are several versions to choose from based on base Darker Nights mod
- Ugh. Radstorm.
 - Weather overhaul. Not compatible with other weather mods. Made as request.
 - **Alternate Mods**
 - Other weather mods
 - **Requirements**
 - ALL DLCs required.

Greenifiers/Foliage

This section is reserved for grass density mods and those that have to be placed in-between weather/lighting mods.

Foliage mods that replace trees instead of adding new ones (or replacing tree textures) to add new green (brown, red, etc) trees and shrubbery across large swaths of cells generally do so by disabling precombines. Texture replacers that do not replace the precombined/previs data for trees that have been set up correctly will not turn the Commonwealth into a forest. Mods that add new trees are placed in Landscape near the bottom of the load order.

Winter foliage overhauls are also placed in this category.

Performance mods:

Fallout 4 is a CPU-intensive game. If you are seeing a lot of GPU usage, check that you have not disabled preculling, previs, or precombines. CPU should be around 60-80%. See [Precombines](#) information by ANDREWcX. PC players should be sure to use mods that are packed in BA2 archives to increase performance, and look into Previs Repair Pack.

- Commonwealth Flora Overhaul
 - **Alternate Mods**
 - SimpleGreen
 - Simple Green Winter
 - Overgrowth
 - Other foliage/flora/grass texture replacers
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods listed under Alternate Mods
 - Let weather and lighting override
 - **Important**
 - Given MA's description and the fact they included their weather/lighting mod in another mod, they may have accidentally included their weather/lighting in this mod. Let weather and lighting mods override this one, if using. MA was new at time of upload and mod has not been updated.
 - **Installing**
 - Per MA: install above weather/visual mods
 - **Requirements**
 - Per MA: Xbox One X
 - Xbox One X, Series S, Series X
- True Grass 'Lite' + Grass Reworked
 - Grass retexture and grass density updater
 - **Alternate Mods**
 - Insignificant Object Remover
 - SimpleGreen
 - SimpleGreen Reduction Patch
 - Nytra's Reduced Grass Density
 - Nytra's Performance Tweaks
 - Other grass and flora texture replacers
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that modify grass textures, grass forms (IOR) or grass density

- Allow overwrite with SimpleGreen
 - SimpleGreen Grass Reduction Patch requires testing
 - **Important**
 - Ini setting file included. Ini setting covers grass visuals
 - **Installing**
 - Install after weather mods
 - Install with other visual mods
- **Less Grass**
 - Reduces visibility of grass
 - **Alternate Mods**
 - SimpleGreen Grass Reduction Patch
 - Nytra's Performance Tweaks
 - Nytra's Reduced Grass
 - True Grass 'Lite' + Grass Reworked
 - **Important**
 - Console does not react well to having grass removed. Lag occurred on OG with other mods of same nature. Series X may not need grass reduction.
 - Console does not react well to having a large density of grass added. Grass in FO4 is animated by game engine.
 - **Installing**
 - Install with Visual Greenifiers/Foliage
 - **Versions**
 - Several Versions. Choose which works best for your load order.
- **Reduced Grass Density (Nytra)**
 - Reduces grass density
 - **Alternate Mods**
 - SimpleGreen Grass Reduction Patch
 - Insignificant Object Remover
 - True Grass 'Lite' + Grass Reworked
 - **Compatibility/Known Conflicts/Overrides**
 - Do not use with mods that change grass density
 - Not compatible with Complete pack. Complete pack includes "medium" version of this mod
 - **Important**
 - Console does not react well to having grass removed. Medium version has less lag on OG. Mod has not been tested on Series X due to age and power behind series X does not need 'performance' mods.
 - Visual mod only.

Note: If you are lagging, check that you are not using a mod that disables the precombines or you are using too many mods. Most modded setups on Series X are fine without mods specifically geared towards 'performance'.

- **Installing**

- Install beneath mods that modify land height (NOTE: land height modification disables precombines and requires regeneration of precombines)
 - **Versions**
 - Reduced Grass Density - lite
 - Far Harbor patch
 - Reduced Grass Density - medium
 - Far Harbor Patch
 - Reduced Grass Density - full
 - Far Harbor Patch
- Nytra's Performance Tweaks (Complete Pack) (Nytra)
 - Visual tweaks to grass and lighting
 - **Alternate Mods**
 - Weather mods
 - Grass/foilage mods
 - Nytra's Reduced Grass Density
 - Insignificant Object Remover
 - SimpleGreen Grass Reduction Patch
 - Winter Overhaul
 - Disable Volumetric God Rays
 - Disable Lens Flare
 - Ugh. God Rays
 - Ugh. Lens Flare
 - More like FLARE Harbor
 - True Grass 'Lite' + Grass Reworked
 - **Compatibility/Known Overrides/Conflicts**
 - Not compatible with weather mods - weathers require god rays to function
 - Not compatible with lighting mods, allow overwrite if necessary
 - Not compatible with mods that reduce grass density, allow overwrite if necessary
 - Not compatible with mods that remove god rays or lens flares
 - Not compatible with individual packs by same author
 - **Installing**
 - Install beneath mods that change grass
 - **Important**
 - This is one of those mods that has weird placement since it affects God Rays, Lens Flare, and Grass Density - it must be placed beneath any mods in Textures and Atmospheric Changes if there are any other grass or lighting mods in use
 - **NOT a 'performance' mod. Only visual. Performance mods do not work on Xbox.** F4SE is required for optimizing certain programming in the game engine and so cannot come to Xbox.
 - **Requirements**
 - GoTY/Season Pass/All 6 DLC
- Insignificant Object Remover (AKcelsior)
 - Removes grass objects from land forms
 - **Alternate Mods**

- Reduced Grass Density
 - Mods that add grass
 - SimpleGreen Grass ReductionPatch
 - True Grass 'Lite' + Grass reworked
 - **Compatibility/Known Conflicts/Overrides**
 - Do not use with mods that change grass density
 - Not compatible with SimpleGreen Grass Reduction Patch
 - **Installing**
 - Install above STS - Scrap That Settlement if using
- No More Twigs
- Removes grass objects from land forms
 - **Alternate Mods**
 - Insignificant Object Remover
 - Other grass mods
 - Mods that change the textures of ForestGrassObject03.nif, ForestGrassObject02.nif, and ForestGrassObject04.nif
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that change grass - you either want the vanilla gone or you want the vanilla updated. Choose one or the other.
 - **Installing**
 - Install below foliage/grass/landscape mods
 - **Warning**
 - Deletes 3 GRAS forms from game instead of removing the model or retexturing with blank texture

Textures

These are pure textures and material files with only a blank plugin. Not that loose files are not recommended for use on PC because of performance issues. Pack textures/material files into BA2 archives. Those that are pure textures without edits to the ESMs could be candidates for ESLs. Note: ESLs count against the load order limit on Xbox.

4k Texture Info

4k textures on Xbox One and Xbox One S hamper performance. Use caution when choosing texture improvements. Fallout 4 was created under partnership with Nvidia, not AMD. Xbox uses a gimped AMD. Keep your console cool at all times to prevent Xbox overheating while running hi-res textures. Using 4k textures on Xbox One and Xbox One S is not recommended. There is not enough memory for both graphics and processes.

There are several different ways to change textures on world edits. Unfortunately, one of those ways disables the precombines using a material swap on the reference itself. This is mostly seen on PlayStation because there is no way to change the texture with an external asset. On Xbox there is no way for a player to tell which method a mod uses.

- Optimized Vanilla Textures

- Adds mipmaps for PC players to vanilla textures; on Xbox it is just vanilla textures
- File Size Warning: With all retextures, plan your load order accordingly
- **Alternate Mods**
 - All other texture mods that retexture vanilla
- **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that cover the same textures
- **Important**
 - Per mod author: Works with Vivid Fallout; let Vivid Fallout override conflicts - in other words: Vivid goes below.
 - Reports of loss in performance on Xbox - unable to confirm
 - Xbox: Removing mid-game results in infinite load screen; unable to confirm if BA2 has issues on Xbox or was packaged with F4SE scripting
 - Not necessary on Xbox. Conversion to Xbox via CK adds what this mod claims is missing. Packaging in BA2 increases performance. Xbox graphics will not function properly without mipmaps so the developers would have had to run everything through xtexconv for Xbox optimization. See [Microsoft Documentation on DirectXTex](#). Code samples for xtexconv for the curious are located [here](#).
- **Installing**
 - Install above all texture mods
- **Optimized Building Textures**
 - Reduces resolution of diffuse textures by 50%.
 - Mod description does not specify if normal maps were re-baked to improve GPU performance.
 - File Size Warning: With all retextures, plan your load order accordingly
 - **Alternate Mods**
 - Other texture mods that cover buildings
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with other building retextures
 - **Installing**
 - Not necessary on Xbox Series, game has series patch from developer
 - Install above other texture mods that affect buildings - which negates the use of this mod
- **Optimized Landscape Textures**
 - Reduces resolution of diffuse textures 50%
 - Mod description does not specify if normal maps were re-baked to improve GPU performance
 - File Size Warning: With all retextures, plan your load order accordingly
 - **Alternate Mods**
 - Other mods that cover landscape textures
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with other landscape textures
 - **Installing**
 - Not necessary on Xbox Series, game has series patch from developer
 - Install above texture mods that affect landscape - which negates the use of this mod
- **Enhanced Blood Textures**
 - **Installing**
 - Install with textures

- **Warning**
 - Use only Enhanced Blood Textures Basic, which is the textures only version. The full version has poor script implementation that will crash the game
- Visible Galaxy 4k
 - Replaces sky mesh and textures
 - File Size Warning: With all retextures, plan your load order accordingly
 - **Important**
 - Mipmaps may not have been generated for the textures on PC, however, current editions of the Creation Kit automatically compress to the correct Xbox format and add mipmaps to textures
 - **Installing**
 - Install below weather modifications
 - **Warning**
 - Xbox One and Xbox One S are not native 4k and do not have vRAM. Possible performance issues can arise when using this mod along with other 4k texture mods.
 - **Versions**
 - There are two versions. Choose which one you want. Don't use both.
- Vivid Fallout - Landscapes
 - Texture replacer for landscapes (dirt, grass, shrubs, etc)
 - File Size Warning: With all retextures, plan your load order accordingly
 - **Alternate Mods**
 - Other mods that cover landscape textures
 - True Grass
 - A little bit of green
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with other landscape textures
 - **Installing**
 - Install with other visual mods that replace textures
- Vivid Fallout - Roads and Bridges
 - Texture replacer for road and bridge textures
 - File Size Warning: With all retextures, plan your load order accordingly
 - **Alternate Mods**
 - Other texture replacers that cover roads and bridges
 - A little bit of green
 - **Compatibility/Known Conflicts/Overrides**
 - Allow a little bit of green to override if using
 - **Installing**
 - Install with other visual mods that replace textures
- Vivid Fallout - Trees
 - Texture replacer for tree textures
 - File Size Warning: With all retextures, plan your load order accordingly
 - **Alternate Mods**
 - Other textures replacers for trees
 - **Compatibility/Known Conflicts/Overrides**
 - Allow A Little Bit of Green to override if using

- SimpleGreen and other mods that use vanilla textures for trees are fine to use with this mod
 - **Installing**
 - Install above A Little Bit of Green
 - Install with other visual mods that replace textures
- Vivid Fallout - Rocks
 - Texture replacer for rocks/cliffs
 - File Size Warning: With all retextures, plan your load order accordingly
 - **Compatibility/Known Conflicts/Overrides**
 - Allow A Little Bit of Green to override if using
 - **Installing**
 - Install above A Little Bit of Green
 - Install with other visual mods that replace textures
- Vivid Fallout AIO
 - File Size Warning: With all retextures, plan your load order accordingly
 - Combines all of the above. Do not attempt to use all.
 - Reports of loss in performance - unable to confirm
 - Removing mid-game results in infinite load screen - no idea why this is as textures are NOT baked in a save; use a test character prior to enabling on main save
 - Reports of better performance compared to other texture mods such as Optimized Vanilla Textures on Xbox One X - unable to confirm
 - Do not use with Optimized Vanilla Textures. Many of the same objects are affected, and it is a waste of space on Xbox to have both mods.
- Verdant Wasteland
 - Mod is under active development; double check NexusMods page prior to download; read all information provided by mod author
 - **Alternate Mods**
 - Weather mods
 - Landscape mods
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with weather mods that are master files; climate data is overridden
 - Allow weather mods to override climate data
 - Choose only one landscape mod
 - Does not touch grass objects (twigs, tiny rocks)
 - **Important**
 - LOD and DLCs not yet supported
 - **Installing**
 - Installing is determined by other mods in your load order
 - Install above weather mods if using
 - Install with texture mods if not using weather mods
 - Install above IOR
 - Install above No Twigs
 - **Warning**
 - Alters Climate to change sunset/sunrise time; plan playthrough accordingly

- Alters starting date of leaving Vault 111 to June 1, 2287 6 am instead of October 23, 2287 11 am and does not alter any terminals updating the date so game start date and terminal info will be off when playing. Unknown if data altered causes issues with any modded date data in scripting. Individual testing required.
- A Little Bit of Green
 - Texture replacers for landscapes (flora, elm trees, roads, grass, etc)
 - File Size warning: With all retextures, plan your load order accordingly.
 - **Alternate Mods**
 - Vivid Fallout AIO
 - Vivid Fallout Landscapes
 - Optimized Landscapes Textures
 - True Grass
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with True Grass
 - Allow overwrite of mods in Alternate Mods or Choose only one.
 - **Important**
 - Includes all flora objects (melon, corn, nutfruit, etc)
 - Installation instructions for PC on NexusMods are incorrect. The instructions provided look like they are from Skyrim LE. FO4 is different.
 - **Installing**
 - Install with other visual mods that replace textures
 - Install below Vivid Fallout
- Borealis Landscape
 - File size warning: with all retextures, plan your load order accordingly
 - **Addons/Patches**
 - Borealis LOD
 - **Alternate Mods**
 - A little bit of green
 - Veldt
 - Other landscape modifiers
 - SimpleGreen
 - Vivid Fallout
 - **Compatibility/Known Conflicts/Overrides**
 - You only need one landscape modifier; space is limited
 - Not compatible with SimpleGreen
 - **Installing**
 - Install with other visual mods that replace textures
 - Installing is dependent on other mods in your load order if using LOD addon
 - **Patch Warning**
 - LOD addon is separate
- Borealis Landscape LOD
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with FAR
 - **Installing**
 - Install after Borealis Landscape

- LOD showing up is dependent on previs calculated properly across cell borders. LOD for FO4 is very difficult for mod authors to do. It either works or doesn't. Do **not** blame the MA. This addon (and Borealis Landscape) may need to go to the bottom of the load order, depending on other mods in your framework. PC Players can regenerate LOD for their load order using FO4LODGen.
- Veldt
 - File size warning: with all retextures, plan your load order accordingly
 - **Alternate Mods**
 - A little bit of green
 - Vivid Fallout
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with A Little Bit of Green (ALBoG is not compatible with True Grass)
 - Allow override of SimpleGreen
 - **Installing**
 - Install below True Grass
 - Install below SimpleGreen if using
 - **Requirements**
 - True Grass
 - Far Harbor
 - Nuka World
 - **Versions**
 - Three different versions. Choose only one.
 - "Grass Retexture"
 - "Greener Pastures"
 - "Greener Pastures (Performance)"
- S.T.A.L.K.E.R. Texture Overhaul
 - **Alternate mods**
 - Optimized Building Textures
 - Another building texture mod
 - **Warning**
 - Mod does not work due to improperly implemented pathing structure.
 - Corrupted texture that causes Create2DTexture crashes
 - Not recommended for use until mod author fixes
- More Realistic Pipe Weapon Textures
 - **Compatibility/Known Conflicts/Overrides**
 - Affects only 2 texture files
 - Allow override with pipe weapons work bench mods
 - **Installing**
 - Install with other visual mods that replace textures
 - Install below pipe weapons if using mod that replaces workbench mods
- Boston Ivy by FrogprincessQ4
 - Texture replacer for Ivy
 - **Alternate Mods**
 - Vivid Fallout AIO

- Vivid Fallout Landscapes
 - Other AIOs texture replacers that cover Ivy
- **Compatibility/Known Conflicts/Overrides**
 - Allow overriding if using with landscape AIO
- **Installing**
 - Install with other visual mods that replace textures
 - Install after landscape retextures
 - If using a landscape retexture mod that requires low load placement due to rebuilding precombines, install near bottom of load order
 - Install after A Little Bit of Green
- **Versions**
 - Several different versions. Choose only one.
 - Brown
 - Dull Green
 - Grassland Green
 - Red
 - Russet
 - Vibrant Green

➤ Frosted Over

- Full winter overhaul of over 4000 textures
- **Addons/Patches**
 - Xbox version is three plugins due to file size and upload restrictions for Xbox
- **Compatibility/Known Conflicts/Overrides**
 - Not compatible with foliage mods
 - Not compatible with texture mods
 - Semi-compatible with weather mods; some non-winter weathers may show up without patch.
 - Allow overwrite of weather mods
 - Not compatible with FAR
- **Important**
 - Mod is 1.6 GiB on PC; Xbox players plan your load order accordingly should you decide to use. You only have 1.8 GiB to work with. (approx. 200 MB left over after download)
 - Does not include DLC
 - LOD showing up is dependent on previs calculated properly across cell borders. LOD for FO4 is very difficult for mod authors to do. It either works or doesn't. Do **not** blame the MA. LOD is very difficult to do for FO4. It either works or it doesn't. PC Players may have to regenerate LOD for themselves if using other mods.
- **Installing**
 - Installing with weather mods takes load order juggling. Determine which snowfall textures you want to use, The ones from this mod or the ones from the weather mod. Either install above or below.
 - Install below weather mods to override sunny weathers
 - Install above Fallout 2287 Nuclear Winter if using
 - Install near the bottom of the load order if using with area edit mods or mods that place armor/weapons in the world

- Winter Overhaul V1
 - **Addons**
 - Winter Overhaul Addon
 - Far Harbor Patch
 - **Alternate Mods**
 - Icepick Overhaul
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with FAR
 - Semi-compatible with Simple Seasons Winter, LOD will be different
 - **Important**
 - Includes LOD and LOD textures, mods that disable the precombines may or may not break the LOD as well and cause visual issues.
 - LOD showing up is dependent on previs calculated properly across cell borders. LOD for FO4 is very difficult for mod authors to do. It either works or doesn't. Do **not** blame the MA.
 - **Installing**
 - Install after weather mods
 - Install between weather mods and Fallout 2287 Nuclear Winter if using
 - Install after Simple Seasons Winter if using
- Winter Overhaul Addon
 - Adds winter texture roads/paths to Winter Overhaul V1
 - **Compatibility/Known Conflicts/Overrides**
 - Conflicts with Vivid Fallout Roads and Bridges
 - **Installing**
 - Install after Winter Overhaul v1
 - Install after Far Harbor patch if using
 - **Requirements**
 - Winter Overhaul v1
- Icepick Overhaul
 - Texture overhaul of game for winter
 - **Alternate Mods**
 - Winter Overhaul V1
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with FAR
 - Not compatible with Winter Overhaul V1. They have the same texture paths.
 - Other textures can override
 - Xbox: Do not use with another full texture overhaul; individual texture mods required for overriding other things if you're going to override. Otherwise, it's fine on its own.
 - **Important**
 - There are some trash piles that are also used for interiors so mod author left those alone.
 - **Installing**
 - Install between weather mods and Fallout 2287 Nuclear Winter if using
 - Install after weather mods
 - Install after Simple Seasons Winter if using

- **Versions**
 - Two versions, one vanilla, one for DLC (“Complete”). Choose one.
- **Fallout 2287 - Nuclear Winter**
 - Snow shaders, temperature based gameplay mechanics; gameplay overhaul
 - Includes HUD widgets
 - **Addons/Patches**
 - Calamity Weathers patch
 - Natural and Atmospheric Commonwealth patch
 - Vivid Weathers patch
 - Polluted Climate patch
 - Campsite patch
 - Nuclear Winter Frozen Ones
 - Nuclear Winter Clothing
 - **Important**
 - While not a full overhaul of all aspects of the game, treat this mod as a gameplay overhaul and plan your full load order around this mod’s mechanics
 - **Installing**
 - Install with gameplay mechanics unless using weather mod or winter texture mod
 - Install below weather mods, if using
 - Install below winter texture mods, if using
 - HUD may function better if installed below HUDFramework
 - **Patch Warning**
 - Requires patches for some weather mods

LIGHTING CHANGES

Many lighting changes cannot be used together. General rule of thumb: choose only one. Water enhancements and changes to water data go below lighting changes, unless they are purely textures. ImageSpaces color the land and grass textures.

General

These are general, individual changes to lighting, such as LUTs, ImageSpaces, Image space Adapters, patches for weather mods, and Lights that need to be installed below grass or textures, or need to override a weather mod. Some mods contain “GOBOs” which will need to be installed below texture mods for them to show up, such as a new flashlight texture with new light colors.

- **True Nights for True Storms by Nikonthenet**
 - Older mod, pre-Patch 1.10. Has not been updated on Nexus since 2016.
 - Created for use with ENB and True Storms.
 - **Alternate Mods**
 - Calamity Weathers
 - Darker Nights for True Storms
 - AGM Climate for True Storms
 - **Compatibility/Known Conflicts/Overrides**

- Invalid IMAD, corrupts saves
 - **Installing**
 - PC: Manually rebuild IMAD before installing
 - Install below True Storms
 - Installing on Xbox is not advised. Requires ENB.
 - **Requirements**
 - ENB (Unsure why it was ported to console)
 - True Storms
 - **Warnings**
 - Contains invalid Image Space Adapter that corrupts saves. PC: Manually rebuild within CK. Do not duplicate the record. Create from scratch. See [Buffout 4 Installation guide](#) for more information.
 - PC Patch available if using True Storms and ENB.
- Calamity Weathers Interiors
 - **Addons/Patches**
 - Vault 88 Interior patch
 - **Compatibility/Known Conflicts/Conflicts**
 - Not compatible with lens flare or god rays mods
 - Not compatible with Enhanced Lighting and Effects
 - **Installing**
 - Install below Calamity Weathers
 - **Requirements**
 - Calamity Weathers not required but is designed for it
- Vault 88 Calamity Weathers Interior Patch
 - **Installing**
 - Install below Calamity Weathers Interiors
 - **Requirements**
 - Vault Tec DLC
 - Calamity Weathers Interiors
- Calamity Weathers Lookspack
 - Changes ImageSpace LUT to brown tone
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with TreyM's LUT framework
 - **Installing**
 - Install below Calamity Weathers
 - Install below Calamity Weathers' patches and addons
 - Requirements
 - Calamity Weathers
- Disable God Rays (PoppaMcNikap)
 - Ini file. Close game completely to initialize settings
 - Alternate Mods
 - Ugh. God Rays.
 - Other God ray mods
 - Weather mods

- Compatibility/Known Issues/Conflicts
 - Not compatible with weather mods. Either you want weather or you don't.
- Installing
 - Install with lighting
- Disable Lens Flare (PoppaMcNikap)
 - Ini file. Close game completely to initialize settings.
 - Alternate Mods
 - Ugh. Lens Flare.
 - Ught. God Rays, Jr.
 - More Like FLARE Harbor
 - Weather Mods
 - Nytra's
 - Compatibility/Known Issues/Conflicts
 -
 - Installing
 - Install with lighting
- Disable God Rays (Nytra)
 - Claims performance by setting god rays to zero
 - **Addons**
 - Patches for DLC
 - **Alternate Mods**
 - Ugh. God Rays.
 - Any weather mod
 - **Compatibility/Known Issues/Conflicts**
 - Not compatible with weather mods. Either you want weather or you don't.
 - Not compatible with Enhanced Lighting and Effects
 - Not compatible with some lighting mods
 - Do not use if using Nytra's Performance Tweaks (Complete Pack)
 - **Installing**
 - Install with lighting
 - Install above DLC patches
 - **Important**
 - Does not fully turn off god rays, only sets them to zero. Only an ini setting can turn them off completely.
 - Unnecessary on Xbox Series
- Disable Lens Flare (Nytra)
 - Claims performance by setting lens flare to zero
 - **Addons**
 - Patches for DLC
 - **Alternate Mods**
 - More Like FLARE Harbor
 - Ugh. God Rays. Jr.
 - Any weather mod
 - **Compatibility/Known Issues/Conflicts**
 - Not compatible with some weather mods. You either want nice sunlight or you don't

- Not compatible with Enhanced Lighting and Effects
 - Not compatible with mods that add flashlights to the pipboy
 - Not compatible with some workshop mods that add new lamps
 - Do not use if using Nytra's Performance Tweaks (Complete Pack)
- **Installing**
 - Install with lighting
 - Install above DLC patches
- **Important**
 - Does not fully turn off lens flare, only sets to zero. Only an ini setting can turn them off completely.
 - Unnecessary on Xbox Series
- More Like FLARE Harbor...
 - Removes lens flare/glare from Far Harbor lanterns so they don't show through the geometry
 - **Alternate Mods**
 - Nytra's
 - Ugh. God Rays. Jr.
 - **Compatibility/Known Issues/Conflicts**
 - Not compatible with lens flare mods
 - Not compatible with Nytra's
 - **Installing**
 - Install with lighting
- Ugh. God Rays.
 - Turns off god rays with ini setting
 - **Alternate Mods**
 - Nytra's
 - Weather mods
 - Ugh. God Rays, Jr.
 - Disable God Rays
 - **Compatibility/Known Issues/Conflicts**
 - Not compatible with most weather mods or mods that use god rays to work. Either you want weather or you don't.
 - Not compatible with Nytras mods
 - Not compatible with Enhanced Lighting and Effects
 - **Installing**
 - Install with lighting
 - INI file. Xbox: Requires restart of game to take effect.
 - **Important**
 - Created to avoid pixelized god rays
 - Not necessary on Xbox series.
 - Has same filename as Ugh. God Rays. Jr
 - Mod author no longer has file, no updates are necessary
- Ugh. God Rays. Jr
 - **Alternate Mods**
 - Weather mods

- Ugh. God Rays.
 - Ugh. Lens Flare.
 - Disable God Rays
 - Disable Lens Flare
 - **Compatibility/Known Issues/Conflicts**
 - Not compatible with Nytras mods
 - Not compatible with most weather mods or mods that use god rays and lens flares to work.
 - Has same filename as Ugh. God Rays.
 - **Important**
 - Mod author no longer has file. It will not receive support. No updates are necessary.
 - INI file. Xbox: Requires restart of game to take effect.
- Ugh. Lens Flare.
- - Not compatible with Nytra's mods
 - Probably compatible with More Like FLARE Harbor but makes having both redundant. Choose one or the other.
 - Mod author no longer has file. It will not receive support. No updates are necessary.
 - INI file. Requires restart of game to take effect.
- Ugh. God Rays. The Third.
- PS4 only.
 - Lighting overhaul to remove all god rays and lens flare from lighting.
 - Not compatible with lighting mods.
 - Not compatible with Nytra's mods.
 - REQUIRES ALL DLC

Water

Most water data will be manipulated by a weather mod. Lighting may be weird if choosing mods from separate authors. These are designed to override. When choosing, read the description to make sure they aren't overriding too much of the weather overhaul.

- PhyDark
- Lighting overhaul; affects all default lights, including water data
 - **Alternate Mods**
 - Any weather mod
 - Clarity
 - Any interior lighting mod
 - Calamity Weather Interiors
 - **Compatibility/Known Conflicts/Overrides**
 - If you don't want the water data added by this mod, allow water data mod to override
 - Not compatible with other lighting mods
 - **Important**
 - Removes model file pathnames from all dust. This will affect any interior mods/player homes that use dust for lighting ambiance.

- **Installing**
 - If using water data, install above water mods
 - Install below grass/foilage/greenifier mods
- **Versions**
 - There is a version for base game only and a version for DLC, choose one or the other
- **PhyLight**
 - Lighting overhaul; affects all default lights, including water data
 - **Alternate Mods**
 - Any weather mod
 - Clarity
 - Any interior lighting mod
 - Calamity Weather Interiors
 - **Compatibility/Known Conflicts/Overrides**
 - If you don't want the water data added by this mod, allow water data mod to override
 - Not compatible with other lighting mods
 - **Important**
 - Removes model file pathnames from all dust. This will affect any interior mods/player homes that use dust for lighting ambiance.
 - **Installing**
 - If using water data, install above water mods
 - Install below grass/foilage/greenifier mods
 - **Versions**
 - There is a version for base game only and a version for DLC, choose one or the other
- **WET - Water Enhancement Textures**
 - Overhauls some water data and adds new textures
 - **Alternate Mods**
 - Vivid Waters
 - Clean Water of the Commonwealth
 - PhyDark
 - PhyLight
 - **Compatibility/Known Conflicts/Overrides**
 - Semi-compatible with Clear Water of the Commonwealth
 - Semi-compatible with Vivid Waters "vanilla"
 - Compatible with lighting mods that adjust underwater image space
 - Not compatible with PhyDark or PhyLight
 - **Installing**
 - Install after lighting mods
 - Install above Vivid Waters
 - Install above Clean Water of the Commonwealth
 -
- **Vivid Waters**
 - Full water overhaul
 - **Alternate Mods**
 - PhyLight

- PhyDark
 - Clean Water of the Commonwealth
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with water textures
 - Not compatible with water data overhauls
 - Compatible with No More Puddles
 - Semi-compatible with WET
 - Not compatible with Clean Water of the Commonwealth
 - Not compatible with PhyDark or Phylight
 - **Important**
 - PC: Use FO4LODGen to generate LODs to avoid blue line bug
 - Xbox: LOD blue line. MA was unable to generate LOD (FO4LODGen not completely available at time). Visual only. Should not affect gameplay.
 - Xbox: strange circle around Player. (Per mod description) PC version of mod does not have ini settings attached so this may not occur for players. Test prior to committing to save.
 - **Installing**
 - Install below weather mods
 - Install below texture mods
 - Per mod author: Install after WET (which is confusing since they do the same thing)
 - **Versions**
 - There is a “vanilla” version and one created for Vivid Weathers to update its water data. Choose the best option for your load order
- Clean Water of the Commonwealth
- Adjusts water data
 - **Alternate Mods**
 - Vivid Waters
 - PhyDark
 - PhyLight
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that adjust underwater image space
 - Not compatible with Vivid Waters
 - **Installing**
 - Install below lighting mods

VANILLA SETTLEMENT CHANGES, TWEAKS

This section will be seeing an overhaul. Continue to use best judgement when placing mods that disable the precombines.

- Better Settlement Defense (BS Defense)
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with Workshop Framework
 - Not compatible with UFO4P 2.1.4

- There are TWO versions, one for those who are running the Unofficial Patch (UFO4P) and for those who aren't. Decide which you want and your playstyle and download accordingly.
 - **DOUBLE CHECK THAT THE UFO4P VERSION HAS BEEN UPDATED TO THE LATEST VERSION OF THE UFO4P PRIOR TO DOWNLOADING**
 - Whenever the UFO4P updates, WAIT to update until this mod has also been updated if you are using the UFO4P version
- If your settlement defense is lower than 150, the game continues to use the vanilla mathematics and randomness for settlement defense quest. Nothing is requiring you to have your settlement defense at 150 or higher.
- 1.7 Update: "Instead of needing 150 defence to win, your defence will need to be higher than your Food+Water now."
- Note: This mod also works well above Settlement Building Mods.
- No Combat Boundaries (Mm137)
 - Mod author recommends pairing with Search and Destroy for unpredictable fights
 - Legacy Mode - Has not been updated since Sept. 27, 2016 on Bethnet
 - Only affects Commonwealth Encounter Zones
 - **Alternative Mods:**
 - **Compatibility/Known Conflicts/Overrides:**
 - Not compatible with mods that do the same thing
 - **Installing:**
 - Install below mods that alter encounter zones
 - **Important:** Single ITM on DarkHollowPondZone
- Settler Sandbox and AI Expansion (Omega356258)
 - Hard edits to sandbox AI packages. Mod was designed for Vault 88 but affects all settlers
 - **Alternate Mods**
 - Unofficial Fallout 4 Patch
 - Alert Carry - Lower Your Weapons
 - Fallout 4 AI Overhaul
 -
 - **Important:**
 - When used with Increased Settler Limit - Awareness - Wire Length - Corpse Collisions, settlers do not stay inside settlement borders when assigned to collecting resources. Have also seen occurrences on current playthrough of farmers wandering off too. Varies by settlement, varies by load order.
 - When used with Settlement Borders Extended, settlers will explore further away from the primary settlement when assigned to resources AND farming (*examples: Greentop nursery settlers also explored nearby and got into fights with Super Mutants at the hospital and bloodbugs nearby at Taffington Boathouse, some used seating around the nearby town and wandered into a Deathclaw fight at the sinkhole; Egret Tours Settlers took up residence at the Super Mutant hive at the nearby Coast Guard station - actually were using the beds in the jail cells and not the ones at Egret Tours and settlement happiness dropped; Abernathy family showed up at my diner in Sanctuary for their evening meal a few times; settlers from the Slog piddled around in the gardens at Finch Farm; calling*

settlers with the bell took 3 hours in-game time at Mirkwater and did not call them all; unassigned settlers roam to other nearby settlements with bars and chairs).

- If using Mortal Settlers, it may be advised to be prepared for many funerals while using this mod as settlers tend to explore further away from settlement borders. To avoid too many casualties choose this mod or Mortal Settlers if you are counting casualties while defending your bases.
- **Installing:**
 - Mod Author now recommends this mod to be just under settlement workshop mods; unsure of placement when using Sim Settlements - check mod author's documentation on SimSettlements.com.
- **Warning:** If using with other AI mods or mods that add to level lists, this mod has been reported to be taxing on consoles downtown. Further testing by itself is required.
- Unrestricted Settlements (ANDREWCCX)
 - There are TWO Versions of this. Read the mod author's notes, check which DLC you have, and choose the one that best fits your play style.
 - Mods that changes settlements conflict. Per mod author: "Any mod that edits one of the settlements may conflict (changes build area, build limits, adds materials to the workbench etc) - typically just putting this mod near the bottom of your load order will resolve this. Due to the way the mechanist's lair is opened by a quest, you may need to disable and reenable the mod after you complete Automatron to ensure you update the record for the lair."
 - Starting point. YMMV and also depends on DLCs and mods you have installed. Move to bottom of load if conflict here.
- Better Interior Workshops
 - **Alternative Mods**
 - Unrestricted Settlements
 - **Compatibility/Known Conflicts/Overrides**
 - Possible weirdness with Factories of the Commonwealth
 - Unrestricted Settlements
 - **Important**
 - Scripted for use with Workshop Framework but is not required
 - Do NOT uninstall without returning to save prior to install to continue after uninstalling
 - **Installing**
 - Install with scripted vanilla settlement changes
- Raze My Settlement
 - **Installing**
 - Install here or with scrapping mods
 - **Requirements**
 - Workshop Framework
 - **Warning**
 - Xbox players: heed warnings on mod page
- Visible Idle Markers
 - **Addons/Patches**
 - Workshop Framework
 - **Important**

- Only makes them visible so you can build around them
 - **Installing**
 - Install with vanilla workshop changes
- Whisper's Workshop Utilities
 - Light alternative to Place Anywhere
 - **Alternative Mods**
 - Place Anywhere
 - Copypasta
 - **Compatibility/Known Conflicts/Overrides**
 - Copypasta - does similar things without the copypasta part and menu weirdness - choose one or the other
 - Place Anywhere
 - **Installing**
 - Install with vanilla workshop changes
 - Install lower in the load order if necessary
- Panda's Infinite Budget (Ethereon)
 - May have conflict with Unrestricted Settlements and Better Interior Settlements. See that mod for more info.
 - Choose only one settlement budget expansion mod
 - Budget Expansion Option is included in Cheat Terminal; choose one or the other
 - Not exactly compatible with Conquest. Conquest settlements automatically have unlimited budget. Using at same time will cause budget to gradually increase but at a reduced rate.
- Open- and Closable Mechanist Doors
- ShelteredBeds
- Mercer Safehouse - Always Spectacle Island
 - **Alternative mods**
 - Mercer Safehouse - Always Red Rocket
 - Mercer Safehouse - Always Outpost Zimonja
 - Mercer Safehouse - Always Taffington Boathouse
 - Mercer Safehouse - Always Sunshine Tidings Co-Op
 - Mercer Safehouse - Always Starlight Drive-in
 - Mercer Safehouse - Always Croup Manor
 - Mercer Safehouse - Always Jamaica Plain
 - Mercer Safehouse - Always Hangman's Alley
 - Mercer Safehouse - Always Murkwater Construction Site
 - Mercer Safehouse - Always Coastal Cottage
 - Mercer Safehouse - Always Kingsport Lighthouse
 - **Compatibility/Known Conflicts/Overrides**
 - Choose one of the series. Not all.
 - **Installing**
 - Install on new game with mods that affect vanilla quests or vanilla settlements
- Mercer Safehouse - Always Red Rocket
 - **Alternative mods**
 - Mercer Safehouse - Always Spectacle Island

- Mercer Safehouse - Always Outpost Zimonja
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 - Choose one of the series. Not all.
 - **Installing**
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 - Choose one of the series. Not all.
 - **Installing**
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 - Choose one of the series. Not all.
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 - Choose one of the series. Not all.
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 - Mercer Safehouse - Always Murkwater Construction Site
 - Mercer Safehouse - Always Kingsport Lighthouse
 - **Compatibility/Known Conflicts/Overrides**
 - Choose one of the series. Not all.
 - **Installing**
 - Install on new game with mods that affect vanilla quests or vanilla settlements
- Mercer Safehouse - Always Kingsport Lighthouse
 - **Alternative mods**
 - Mercer Safehouse - Always Spectacle Island
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 - Mercer Safehouse - Always Croup Manor
 - Mercer Safehouse - Always Jamaica Plain
 - Mercer Safehouse - Always Hangman's Alley

- Mercer Safehouse - Always Murkwater Construction Site
 - Mercer Safehouse - Always Coastal Cottage
 - **Compatibility/Known Conflicts/Overrides**
 - Choose one of the series. Not all.
 - **Installing**
 - Install on new game with mods that affect vanilla quests or vanilla settlements
- Echo Lake Lumber Expanded Build Area
 - Not compatible with other mods that extend same area.
 - No longer available. Mod author removed since it wasn't working properly.
- Settlement Borders Extended
 - **OBSOLETE**
 - I cannot with good conscience recommend the use of this mod. It has not been updated since before Official Patch 1.6 which introduced code that makes this mod break Starlight and Jamaica Plain
 - **THIS MOD HAS BEEN ABANDONED**
 - Has not been updated since Sept 27, 2016
 - Official Patch 1.6 introduced code that this mod does not use and causes Starlight and Jamaica Plain to be un-editable in Workshop Mode.
- Settlement Border Expansion Project
 - See mod description for more information
 - Tested by oddlittleturtle. Starlight bug NOT encountered on any character tested. Works as advertised
 - Several settlements are not yet expanded due to quests; mod author is working on it.
- All Settlements Extended
 - Starlight bug NOT encountered on character. Works as advertised.
 - Disabling of precombines within settlements. Do not overbuild when using this mod. Drops in framerate may occur as certain objects are no longer optimized within settlements and within a 3x3 block of cells around the settlement.
 - Place above STS if using.
- Starlight Bug Fix
 - **OBSOLETE MOD**
 - Starlight fixed with official patch from Bethesda.
 - Do not enable unless Starlight workshop has broken and you can no longer build at Starlight.
 - If Starlight has broken, find the mod that broke it and do not use it. The one that broke Starlight is the obsolete mod.

SORTING AND MENU CHANGES

INI

- Faster Workshop Mode (Registrator2000)
 - This is a WIP mod. Report any bugs to mod author.
 - This might be an INI file. You will need to completely exit FO4 in order for the changes to take hold.
 - Not compatible with USO Performance Boost Patch. Use instead if not using USO if you want to browse the workshop menu faster.

- NOTE: this boosts the speed of the workshop menu itself, not the wait time while opening the menu
- **Does not appear to be available on Bethesda any more**
- Ugh. Patience.
 - Ini file and game setting tweak to boost speed of workshop menu itself. Exit the game completely and reenter or reset your Xbox for effect to apply.
 - Not compatible with USO Performance Boost Patch. Choose one or the other.
 - Game setting will boost time it takes for scrolling through holotape menus
-
- USO Performance Boost Patch
 - Not compatible with Faster Workshop Mode; edits many of the same things
 - Requires quitting and restarting of game for effects to apply
 - Requires USO
 - NOTE: this boosts the speed of the workshop menu itself, not the wait time while opening the menu
- Ugh. Keys.
 - Renames all keys in game for use with DEF_UI rollups
 - Renames all pipboy games for use with DEF_UI rollups
 - Do not use with other key renamers
 - Does not require DEF_UI, but DEF_UI makes it useful.
 - Not compatible with Valdasil's Sorting
- Valdasil's Item Sorting
 - Starting point ONLY - In most cases, should be nearer the bottom. Totally dependent on your load order.
 - Requires Armor Keywords Community Resource
 - Item **overhaul**.
 - Requires patches for any item that it affects in order for the tags to be properly seen in the pipboy
 - Scrupulous Scrapping must go below - you will lose item tags
 - Several versions of the mod to choose from based on your load order and what you want to sort or change
 - **Patch Warning**
 - Any mod that touches vanilla items will need a patch
 - Any new mod that does not use the RegEx provided by VIS or DEF_UI will require a patch
 - List of compatible mods here: <https://www.nexusmods.com/fallout4/mods/3877/?tab=posts>
 - **Requirements**
 - UFO4P version requires UFO4P
- Keynuker
 - **OBSELETE MOD** - Use DEF_UI mods instead; same mod author
 - Has not been updated for Nuka World, causes crashes at Nuka World transit center

HUD-RELATED

This section is relevant to your specific load order. Adjust *section* (not order of mods in section) as necessary to your specific mods. To have a nice HUD setup, you do NOT need all mods in this section. Read all documentation for HUD and DEF_UI mods prior to download.

Camera

- In-game Third Person Camera Configuration
 - To make animations work you can use the chems in Chemistry
 - Scripted ini edits. Camera may or may not reset after each session.
 - Contains bug fix for camera angles.

HUDframework

- HUDFramework
 - Creates the framework for most HUD mods
 - Patch Warning
 - Patches must be created as it overrides/overwrites MainMenu.swf (most mods have already been patched)
 - PC version is an ESM master file while Xbox is an ESP. See NexusMods documentation for use on PC and how to make Xbox versions
- Immersive HUD (iHUD)
- HoloTime (registrator2000)
- Companion Status

Main Menu/DEF/FallUI

- DEF_UI Core (Neanka)
 - REQUIRES AWKCR
 - Newer versions (translation files for compatibility with current official patches) are not available for console due to dependency on F4SE
 - UI Overhaul
 - Not compatible with HUD mods unless they are patched
 - Scrap components file will conflict with scrapping mods
 - PC version requires F4SE and new translation files with each Creation Club official patch update
 - Read all instructions included in text file
 - Remove translate_xx.txt from your Interface folder and use Neanka's updated strings files
 - DEF_UI Customization article by Valdakil:
<https://www.nexusmods.com/fallout4/articles/165>
- DEF_UI INV config
 - There are not that many to choose from. Choose only ONE.
 - Specific requests should be made in the appropriate request forum
 - PC players: included in DEF_UI; DEF_UI_INV.xml - customize as needed using the included utility
- DEF_UI HUDFramework Patch

- REQUIRED for Nuka World players and HUDFramework players
- Should be placed above preset, tags, tabs, rollups, plug-ins, and other patches
- PC players: separate download from DEF_UI core files
- DEF_UI HUD preset
 - There are many to choose from
 - Normal settings included in DEF_UI Core for Xbox; no customized preset required if not wanted
 - PC players: either Build your own with the included DEF_UI HUDMenuset.exe (DO NOT open in a web browser; use Flash Player) or download a preset
 - DEF_HUD.xml REQUIRED for DEF_UI to function on PC
- DEF_UI tags
 - Controls icon-to-tags mappings
 - Used by DEF_UI_INV
 - Will not work without VIS/a sorting mod
- DEF_UI tabs
 - Controls the tabs that are present in the Container and Barter menus
 - Will not work without VIS/a sorting mod
- DEF_UI rollups
 - Controls item rollups in the Pip-boy
 - A sorting mod is needed for use with this mod; however will work without a sorting mod for user-made holotapes prefaced with [Setting] or (Setting)
 - PC version: lyrConf.xml
- DEF_UI plugins
 - Only one or two are available
- DEF_UI patches
 - DEF_UI iHUD Patch goes here
 - iHUD Patch is only necessary if you want certain elements to remain on screen - check description for further details

Scopes/Other SWF

- XB1 Scope Overlay (PC Port)
 - Modifies ScopeMenu.swf
 - Incompatible with other mods that modify ScopeMenu.swf
 - Unsure of compatibility with See-Through Scopes - Individual testing required.
- Quick Trade (Registrator2000)
 - Not compatible with many mods. Individual testing required.

INI

- Green Power Armor HUD (Chucksteel)
 - Ini file mod
 - Requires restart of game in order for changes to take effect. To restart game: Hit Home/Guide button on Xbox One controller > Scroll to Recent > Fallout > Options > Scroll to Quit > Re-enter Fallout. You should see changes when you load up your save.

Other

- Visible Companion Affinity
 - There are three plug-ins for DLC to choose from. Read the instructions and pick which ones you need for the DLCs you have installed.
 - Starting point only. Requires individual testing with LO.

CHARACTER MODEL REPLACERS/ PLAYER CHARACTER ENHANCEMENTS

○

Skeleton/Animation

- Classic Holstered Weapons
 - Skeleton node modification
 - Mod author has a [list](#) of incompatibilities and fixes for PC players
 - **Alternate mods**
 - Skeleton mods
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that alter skeleton
 - Not compatible with Unique Player mods
 - Not compatible with CBP Physics mods
 - **Important**
 - PC players: Turn off visible weapons with ini edit *isHolsterVisibleOnNPCs=0*
 - PC players: Customization options [here](#)
 - **Warning**
 - Crashes game if using too many weapons
 - Not recommended for Xbox players due to crashes and propensity of players to overburden with weapons
- Lowered Weapons
 - **Addons/Patches**
 - Lowered Weapons Standalone
 - **Alternate Mods**
 - Automatically Lowered Weapons (PC only)
 - **Warning**
 - Causes animation crashes
- Dave's Poses Xbox One Edition
 - **Compatibility/KnownConflicts/Overrides**
 - None known
 - **Installing**
 - Install with Character meshes/enhancements
 - Items are crafted in Chemistry Station
 - Read Description for Details

~~○ Mod Author accidentally uploaded INI file that forces the Pipboy UI to display white; changes will take place after restarting game (See INI File under Important Definitions for info)~~

- Tactical Animation NexusMods Port
 - Note: There is a game bug that is countered with In-game Third Person Camera Configuration
 - Not compatible with other body animation mods, such as Girly Animation and mcgFemaleWalk
- Girly Animation
 - Not compatible with other body animation mods, such as Tactical Animation and mcgFemaleWalk
- mcgFemaleWalk
 - Not compatible with other body animations, such as Tactical Animation and Girly Animation
 - Not compatible with weapons mods that add new animations
- Smokable Cigars and Cigarettes
 - Not compatible with Cigarette in Mouth
 - Cannot construct medicinal herb smokes from Better Stores
 - There are two versions. A version ported by the original author and a ported version that says 'updated' without information on what was updated. Use the 'updated' version with caution.
- Have a Beer - Animated Drinking
 - Adds items to level lists
 - Makes adjustments to drinkable items; needs a patch for other mods that do the same

Face/Face Morphs

- Immersive Face Animations REMAKE (IFAR)
 - There are two versions - one is "Serious" and subtle, the other over-exaggerates - choose only one
- Immersive Mouth and Teeth

Body (human)

Choose only one body per gender; some mods have textures included, some mods include both male and female bodies.

Note: Unique Player mods will not be compatible with most animation mods, new skeleton mods, or mods that add nodes to the skeleton for holstered weapons, particularly Classic Holstered Weapons

- Unique Player (PC)
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with Classic Holstered Weapons
 - Not compatible with other unique player bodies
 - Not compatible with Busty
 - Not compatible with CBBE armors if using vanilla body
 - **Installing**
 - PC: follow instructions on mod page, customizable for CBBE
- Unique Player Female Tattoos and Scars (ported by Bhk1990)
 - Busty body, unique player, female only

- **Alternate mods**
 - Other female bodies
- **Compatibility/Known Conflicts/Overrides**
 - Not compatible with Classic Holstered Weapons
 - Not compatible with other female unique player bodies
 - Not compatible with Busty
 - Not compatible with CBBE armors
 - Not compatible with skin texture mods
- **Installing**
 - Install with character model replacers/enhancers
- Unique Player Female Scars (ported by Bhk1990)
 - vanilla body, unique player, female only
 - **Alternate mods**
 - Other female bodies
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with Classic Holstered Weapons
 - Not compatible with other female unique player bodies
 - Not compatible with CBBE armors
 - Not compatible with skin texture mods
 - **Installing**
 - Install with character model replacers/enhancers
- Unique Women Tattoo
 - Busty body, unique player, female only
 - **Alternate mods**
 - Other Busty mods
 - CBBE
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with Busty
 - Not compatible with CBBE or CBBE armors
 - Not compatible with Classic Holstered Weapons
 - Not compatible with skin texture mods
 - **Installing**
 - Install with character model replacers/enhancers
- Tattooed Player
 - Unique body, male and female, EVB as base
 - **Alternate mods**
 - Other bodies
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with Classic Holstered Weapons
 - Not compatible with skin texture mods
 - Not compatible with Busty or CBBE
 - Not compatible with CBBE armors
 - **Installing**
 - Install with character model replacers/enhancers
- Superhero Body with Scars - Unique Player (ported by Bhk1990)

- Superhero body,unique player, male only
- **Alternate Mods**
 - Other male bodies
- **Compatibility/Known Conflicts/Overrides**
 - Not compatible with Classic Holstered Weapons
 - Not compatible with skin texture mods
- Downloading does not appear to be possible
- Super Hero with Tats and Scars
 - Superhero body, unique player, male only
 - **Alternate Mods**
 - Other male bodies
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with Classic Holstered Weapons
 - Not compatible with skin texture mods
 - **Installing**
 - Install with character model replacers/enhancers, may need to go below armors
- Super Hero Body Without Tattoos
 - Superhero body, unique player, male only
 - **Alternate Mods**
 - Other male bodies
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with Classic Holstered Weapons
 - Compatible with some skin textures
 - **Installing**
 - Install with character model replacers/enhancers
- Super Hero Body with Tattoos
 - Superhero body, unique player, male only
 - **Alternate Mods**
 - Other male bodies
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with Classic Holstered Weapons
 - Not compatible with skin texture mods
 - **Installing**
 - Install with character model replacers/enhancers
- Robo Leg Outfits
 - Unique body for player with robo leg, outfits included
 - Both male and female
 - **Alternate Mods**
 - Other bodies
 - **Compatibility/Known Conflicts/Overrides**
 - Probably not compatible with Classic Holstered Weapons for the same reason as Unique Player
 - Compatible with skin texture mods
 - **Installing**

- Install with character model replacers/enhancers
- BodyTalk 3
 - Male body replacer similar to CBBE but for males
 - Compatible with vanilla textures
 - Not compatible with EVB
- Busty Enhanced Vanilla Body Replacer
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with other body replacers
 - Two different mods named Busty. One replaces the body completely (this one) and one adds morph data. If using CBBE, use the other one.
 - You only need one body mod.
 - Starting point only. May have to be adjusted for armor mods.
- Enhanced Vanilla Body (EVB) with immersive underwear
 - You only need one body mod. DO NOT use more than one body mod.
 - Starting Point only. Depending on clothing and armor mods, may need to be run after them. Individual testing required.
 - Affects both male and female.
 - NOT Compatible with CBBE
- Enhanced Vanilla Body (EVB) with wastelandish underwear
 - Starting point only. Depending on clothing and armor mods, may need to be run after them. Individual testing required.
 - Do not use more than one body mod.
 - NOT compatible with CBBE
- Enhanced Vanilla Body With Alternate Underwear by Crimsomrider
 - Starting point only. Depending on clothing and armor mods, may need to be run after them. Individual testing required.
 - Do not use more than one body mod.
 - Affects both male and female.
 - NOT compatible with CBBE
- Enhanced Vanilla Body - Alternate Underwear (Black and short) by Crimsomrider
 - Starting point only. Depending on clothing and armor mods, may need to be run after them. Individual testing required.
 - Do not use more than one body mod (Note: thank you to whomever caught the typo - I accidentally deleted your correction).
 - Affects both male and female.
 - NOT Compatible with CBBE
- Enhanced Vanilla Body by Guidion
 - Starting point only. Depending on clothing and armor mods, may need to be run after them.
 - NOTE: There are two versions of this mod - one is regular Nevernude, the other is slotted Nevernude. Depending on the type of clothing mods you use, you will need to decide if you need the overlay or if you need the underwear to take up biped slots
 - Affects both male and female humans and ghouls.
 - NOT compatible with CBBE (thank you, fightingtosurvive121)
- Caliente's Beautiful Bodies
 - This mod is the female body ONLY. The clothing is separate.

- Affects ALL females in the game.
- Choose from Slim shape or Curvy shape. Vanilla shape is not available to Xbox players.
- You CANNOT use vanilla clothing with this mod. The textures are mapped to a different place and will cause black textures in places.
 - Note: The Mercenary Pack armor works but you will not be able to see the fingernails in first person since the hands are in a different shape on the UV map.
- **You only need one body mod.**
- **Starting point only.** You may need to run Armorsmith and or UCO above this mod in order to keep from freezing in the armorsmith workbench.
- Caliente's Beautiful Bodies All-In-One
 - This is the All in One version that includes outfits for base game and DLCs.
 - Affects ALL females in the game.
 - Choose from Slim shape or Curvy shape. Vanilla shape is not available to Xbox One players.
 - You cannot use clothing made for vanilla body with this mod. The textures are mapped to a different place and will cause black textures in places.
 - Note: The Mercenary Pack armor works but you will not be able to see the fingernails in first person since the hands are in a different shape on the UV Map.
 - **You only need one body mod.** See notes for EVB for male bodies.
 - **Starting point only.** You may need to run Armorsmith and or UCO above this mod in order to keep from freezing in the armorsmith workbench.
- Top Surgery Scars
 - Male only unique texture with top scars
 - PC version is LooksMenu Overlay, Xbox version is unique body texture
 - **Alternate mods**
 - Other male bodies
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with Pocket Vehicles
 - Not compatible with Classic Holstered Weapons
 - **Installing**
 - Install with character model replacers/enhancers below male body replacer, if using Crimsomrider's armors or incompatible armors, try moving below the armor or do not use the armor
-

Body (creature)

- Classic Ghoul Redux
 - Replaces bodies and faces of all ghouls
 - Compatible with outfits made for vanilla body

Stats (creature)

- Insanely Dangerous Turrets
 - Upgrades enemy turrets to make them stronger

Hair

- Crocodile Hairstyle
- Lots More Male Hairstyles
- Lots More Female Hairstyles
- Lots More Beards and Moustaches
- Manly Man Buns
- Commonwealth Cuts

Eye

- The Eyes of Beauty Fallout 4 Edition
- Crimsomrider's Illusive Man's Eyes

Presets

Presets that require any of the above will go here. Keep in mind that Presets may affect HumanRace by actually adding to the HumanRace form. Only choose one HumanRace edit. HumanRace is a database form with entries with numerical values for both male and female. These numerical values must be unique per load order.

If a preset does not require any of the above, then placement will be dependent upon any perk changes.

- Face Texture Glitch Fix A
 - May or may not be required if using a mod that alters NPC faces with new textures (such as Kind of Cool Face Tattoos)

PIP-BOYS AND MAP MODS

The Pip-boy is an animated 3D object with a series of Flash programs that gives the player access to their inventory and other data related to gameplay. It can also affect the player skeleton. Armors have to make room for the Pip-boy on the player arm or the player will lose access to inventory, radio, data, and stats menus.

INI

- Pipboy Color Enabler (Ray1)
 - Blank .esp; just a .ini tweak to turn the Pipboy lettering white while enabling coloring on the map.
 - As with all .ini adjustments, restart game after enabling in order for mod to work and show the correct colors
 - Not to be confused with UCO Pipboy Color Swap Enabler by ANDREWXCX, which does something totally different

Replacer

- Pip-Boy 3000A (HcGxGrill)
- Holotape Classic
 - Intended for use with Pip-Boy 3000A or vanilla Pip-boy
- Tactical Tablet
 - **Warning**

- Causes crashes while browsing workbenches, commonly with Crafting Overhaul. See [Buffout 4](#) common crash information regarding this mod. Very applicable to console players since bad meshes will crash things. Use at your own risk.

Maps

- Improved Map with Roads
 - Starting Point Only; Works with some load orders, does not work with others.
 - Not an .ini file; .dds texture file. Because of bugs in the CK, the texture file may have (for lack of better words) gone wonky when packed into a BA2 file (which is the archive file required by Xbox to read) prior to patch 1.9, which is why it works with some and not others.
 - DDS texture file may not have been created properly for Xbox?
 - Mod is no longer supported
 - May need Pipboy Color Enabler in order to work properly? Individual testing required
 - ONLY USE ONE MAP MOD

Pip-boy HUD/Flashlights

- STATS - Vault Girl
 - Modifies Pipboy_StatsPage.swf
- Pip-boy Automatron Palettes
 - If used with Junkmaster, palettes will also work on Vault 81 and Vault 88 Pipboys
 - Place below Junkmaster if using
- Pipboy Flashlight
 - **Alternate Mods**
 - **Compatibility/Known Conflicts/Overrides**
 - Mods that have the same addon values
 - Lighting mods that override the GOBO, such as ELFX and some weather mods

WEAPONS, ARMOR, CLOTHING, ETC. (Non-craftable)

Includes new weapons and armor and vanilla changes to weapons and armor and level list edits.

USE CAUTION RUNNING TOO MANY WEAPONS AND ARMOR MODS THAT ADD TO THE LEVEL LISTS; it will take the Xbox longer to process and may lead to a crash if you are using with mods that increase the amount of enemies you encounter - Some consoles can handle it, others have major issues. If you run multiple mods that adjust the same level list, the last mod loaded will overwrite any others; in many cases this will lead to a crash without a patch. There is a hard-coded 255 limit on level lists. Hitting this limit will break the game.

- Project Variance
 - Adjusts level lists

- New armors do not use AWKCR's OMODs and adjusted biped slots so if you have a patched mod that adjusts the level lists of raiders to include all types of armor, then the new raiders in hazmat suits will show up in their skivvies. The hazmat suits use vanilla slots.
- .50 Cal Machine Gun
 - Edits vanilla assault rifle - do not use with other mods that also edits the vanilla assault rifle
 - Place below Immersive Gameplay if using (you will lose all IG edits to the assault rifle if you use both)
- Riot Shotgun (Xbox Edition)
 - Standalone weapon
 - Edits level lists - mod author does not specify script-injection or direct vanilla in description - individual testing is required
 - On-going edits; recommend either tracking instead of downloading OR downloading and not updating until new game so that level lists won't go wonky upon edit
- The Makeshift SMG²³
 - Modifies level lists of raider bosses, named raiders and raider veterans.
 - Mod author does not specify direct edit or script-injected level list integration within description. **Individual testing required.**
- DOOMBASED Weapons
 - There is a merged file and then there are individual weapons. Choose which works for you. You do not need the individual weapons if you use the merged.
 - Double check that the individual weapons do not edit the same vanilla level lists as any other weapons prior to enabling.
- Skibadaa Weapons
 - There are two versions of the merged file and then there are individual weapons. Choose which works for you.
 - Double check that they do not edit the same vanilla level lists as any other weapons prior to enabling.
- Glock 19X MWR Version (FX0x01, ported by Lkilogore14)
 - **Addons/Patches**
 - **Alternative Mods**
 - Glock 19x - Pistol (LandoCummando port)
 - **Compatibility/Known Conflicts**
 - Not compatible with Ardent117's Glock 19x. Mods share same name. This will cause Remnant Data/Ghost Space on Xbox if you attempt to download both.
 - Not compatible with port by LandoCummando for same reason.
 - Not compatible with ported patches by LandoCummando. Includes 10mm and Deliverer replacers.
 - **Installing**
 - Leveled Item injection. Injection will occur upon installation to the following lists: LGND_PossibleLegendaryItemBaseLists_GunGroupHigh, LGND_PossibleLegendaryItemBaseLists_GunGroupLow, LGND_PossibleLegendaryItemBaseLists_SpecialGuns, LLI_Gunner_Auto,

²³ 3-18-2018: If anyone tests this, please use a test character and test it along side a mod that directly edits the vanilla lists - if the weapon is not showing up when you this ABOVE that mod, then it is more than likely a direct edit. Please let us know on the Parent Thread.

LLI_Gunner_SemiAuto_Boss, LLI_Raider_Auto, LLI_Raider_Weapons_Boss, LL_Vendor_Weapon_GunGeneralStore, LL_Vendor_Weapon_GunSpecialty.

- **Important**

- Weapon itself is script-injected into level item lists that expect leveled items to choose from when spawning. Spawning issues for Gunners, Raiders, and Legendaries can occur. **Individual testing required, especially on Xbox where it is more difficult to test.**
- Aim Model is set up as Deliverer's Aim Model while there is an Aim Model in the code. It just is not set on the weapon. PC players wishing to use the Aim Model created for the weapon will need to make adjustments in the Creation Kit or xEdit, and is a quite simple fix.

- **Patch Warnings**

- Patch required for mcgFemaleWalk

- **Versions**

- There are two Glock 19x mods available by two different porters. It is the same gun with the same data file name. One is an all in one replacer of the 10mm and Deliverer and the other is just the weapon, but has replacer patches. One can save mod slots by using the port by LKilgore14 if one wants to replace all. Both mods have the same problems as the original NexusMods mod. See *Important* and *Warnings* for more information.

- **Warnings**

- Base game level list injection provided by Far Harbor addon for Legendaries not used. Weapon itself is script-injected into legendary lists rather than use base game scripting from the DLCs to safely inject. Legendaries are not set up the same way as normal level lists. PC players who know their way around quests can do a simple fix for themselves prior to playing. Xbox Porter will need to fix if straight port and add either Far Harbor or Nuka World as a master to make use of the appropriate DLC Legendary scripting for safe injection.
- Creation Kit generates editor warnings when opening mod for inspection where animations are concerned on both subgraph data records. Biped Object names were not added. However, this may be issue only with Editor and not the mod. If animations are weird while playing, author will need to update the subgraph data records.

- Glock 19x - Pistol (FX0x01, ported by LandoCummando)

- **Addons/Patches**

- These patches are for player choice. Read the descriptions to determine which works best for your load order. Do not add all and expect a smooth time. Note: if you want an all in one replacer and to save mod slots, see the port by LKilgore14, which is the all in one.
- MWR - Glock 19x - 10mm Replacer (FX0x01)
- MWR - Glock 19x - Deliverer Replacer (FX0x01)
- MWR - Glock 19x - AIO (FX0x01)

- **Alternative Mods**

- Glock 19X MWR Version (LKilgore14 port)

- **Compatibility/Known Conflicts**

- Not compatible with mcgFemaleWalk
- Not compatible with Ardent117's Glock 19x. Mods share same name. This will cause Remnant Data/Ghost Space on Xbox if you attempt to download both.

- Not compatible with port by Lkilogore14 for same reason.
 - **Installing**
 - Leveled Item injection. Injection will occur upon installation to the following lists:
 - LGND_PossibleLegendaryItemBaseLists_GunGroupHigh,
 - LGND_PossibleLegendaryItemBaseLists_GunGroupLow,
 - LGND_PossibleLegendaryItemBaseLists_SpecialGuns, LLI_Gunner_Auto,
 - LLI_Gunner_SemiAuto_Boss, LLI_Raider_Auto, LLI_Raider_Weapons_Boss,
 - LL_Vendor_Weapon_GunGeneralStore, LL_Vendor_Weapon_GunSpecialty.
 - **Important**
 - **Uninstalling mod in the middle of the playthrough will result in broken records. Start a new game if removing.**
 - Weapon itself is script-injected into level item lists that expect leveled items to choose from when spawning. Spawning issues for Gunners, Raiders, and Legendaries can occur. **Individual testing required, especially on Xbox where it is more difficult to test.**
 - Aim Model is set up as Deliverer's Aim Model while there is an Aim Model in the code. It just is not set on the weapon. PC players wishing to use the Aim Model created for the weapon will need to make adjustments in the Creation Kit or xEdit, and is a quite simple fix.
 - **Patch Warnings**
 - Patch required for mcgFemaleWalk
 - **Versions**
 - There are two Glock 19x mods available by two different porters. It is the same gun with the same data file name. One is an all in one replacer of the 10mm and Deliverer and the other is just the weapon, but has replacer patches. One can save mod slots by using the port by LKilgore14 if one wants to replace all. Both mods have the same problems as the original NexusMods mod. See *Important* and *Warnings* for more information.
 - There are three replacer versions that require this mod as a master. The AIO includes both other replaces so determine which mod best fits your load order. These replacers should not be used with LKilgore's version of this mod. That mod already replaces 10mm and Deliverer.
 - **Warnings**
 - Base game level list injection provided by Far Harbor addon for Legendaries not used. Weapon itself is script-injected into legendary lists rather than use base game scripting from the DLCs to safely inject. Legendaries are not set up the same way as normal level lists. PC players who know their way around quests can do a simple fix for themselves prior to playing. Xbox Porter will need to fix if straight port and add either Far Harbor or Nuka World as a master to make use of the appropriate DLC Legendary scripting for safe injection.
 - Creation Kit generates editor warnings when opening mod for inspection where animations are concerned on both subgraph data records. Biped Object names were not added. However, this may be issue only with Editor and not the mod. If animations are weird while playing, author will need to update the subgraph data records.
- SREP Redux (Nadie2283)
- Addons/Patches
 - Alternative Mods

- Compatibility/Known Conflicts
 - Conflicts with WM Service Rifle
 - See Xbox description for bugs
- **Installing**
 - **Uninstalling mod in the middle of the playthrough will result in broken records. Start a new game if removing.**
 - Leveled Item List Injection. Installed to the following lists:
- **Patch Warning**
- **Requirements**
- **Warnings**
 - Base game level list injection provided by Far Harbor addon for Legendaries not used. Legendaries are not set up the same way as normal level lists. PC players who know their way around quests can do a simple fix for themselves prior to playing. Xbox Porter will need to fix if straight port and add either Far Harbor or Nuka World as a master to make use of the appropriate DLC Legendary scripting for safe injection.

CRAFT²⁴ YOUR OWN²⁵

Framework/Overhaul

- Visible Weapons
 - Mod will not work alone, this is a framework for Weapon Apparel
 - Armorsmith Extended (full version), Visible Weapons Part 2, and Holstered Weapons by Azar are three mods that will work with this mod. Place these below.
 - NOTE: Listed here for use with Armorsmith. Adjust as needed for your load order.
- Visible Weapons Part 2
 - New Weapon Apparel
 - NOTE: Listed here for convenience. Will not work without Visible Weapons.
- Legendary Modification
 - **Alternate Mods**
 - Equipment and Crafting Overhaul
 - Armor and Weapons Crafting Overhaul
 - **Warning**
 - Causes crashes due to multiple issues, too old for use with Creation Club/Current build of Fallout 4 on all platforms

The sections listed below may be adjusted for your own load order. It is generally advised to start your armor and weapons mods with Armorsmith and UCO if using AWKCR. It is based on other mods in your load order and you'll need to test each mod for lag or crashing in AWKCR's weaponsmith/armorsmith workbenches/the vanilla workbenches prior to committing to a playthrough.

²⁴ 4-30-2022: I forgot I was doing this section.

²⁵ 3-22-2022: This section needs to be re-worked. Please continue to use your best judgement when ordering and use the Framework Template - basic for guidance. If you have any questions, please see us on the Parent Server. We can look at things under the hood to confirm.

Chemistry Bench

Purely craftable armors and weapons that are added to the Chemistry bench only - no cell edits.
These may or may not be compatible with AWKCR keywords or level list entries for those keywords.

- Papa's Blessed Beans
 - **Installing**
 - Install with armors
- Birthday Suit
 - Armor that looks like underwear, hands not included so player can wear hands
 - EVB body
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with alternate underwear mods like EVB Alternate Underwear by Crimsomrider
 - **Installing**
 - Install with armors
 - **Warning**
 - More or less broken, use at your own risk
- Balls of Steel (Ammo)
 - Crafted at Chemistry Bench
 - PS4 and Xbox
 - **Installing**
 - Install with other chemistry bench
- Whisper's Institute Jumpsuit
 - Built in Chemistry bench
- SuperMutantMilkArmor
- DMJ Remix (Dave's Mom's Jeans)
 - Clothing craftable under Utility in the chem bench
 - Vanilla only; not compatible with CBBE
- Shirtless Outfits Add-ons
 - See [\[RELZ\] Shirtless Outfits by Guidion](#) for all Add-ons and to choose which Master you need
 - Not compatible with CBBE
- HUNTERS SHIRTS AND FATIGUES
 - Craftable under Utility in the chem bench
- JACK'S DESERT RANGER HELMET
 - Craftable under Utility in the chem bench
- PLUNKET'S DUSTER
 - Craftable under Utility in the chem bench
- Shirt and Fatigues
 - Craftable under Utility in the chem bench
- Wubilyu's Western Wear
 - Craftable under Utility in the chem bench
- COMBAT UTILITY PACK
 - Contains own section in chem bench

- Use caution when using with too many other mods that also add their own section; too many sections can overload the chemistry bench and cause issues with crafting
- HalfGasMask
 - Adds to level lists
- Dog Combat Armours by Ghouls0Rules (Ported by Chucksteel)
 - There are two versions. One version adds to level lists; the other version does not. Choose which works for your playstyle and load order
- Provisioner Backpack
 - Adds one for Strong too
 - Craftable under Utility
- Tactical Flashlights
 - **NOTE:** AWKCR/AE version does not work on consoles. It is outdated and not compatible with current AWKCR/AE on Bethnet. It causes crashing in the Armorsmith workbench.
- GRENADE AND MINE PACK
 - Adds additional grenades and mines to the chem bench
 - Adds own sections for these mines and grenades; use caution when using with other mods that also add their own section; too many sections can overload the chemistry bench and cause issue with crafting
- Crimsomrider's Katana
- TorchAndLantern
- PortableMinutemenArtillery
 - Must complete Old Guns
- RedRocketLauncher
- Craft Vault 88 Cure (Ash1597)
 - PS4
 - **Alternative Mods**
 - Numerous (there were many when mods first came out)
 - **Compatibility**
 - Cure will be duplicated if you download a mod that promises the same thing. Choose one or the other.
 - **Installing**
 - Install with pure crafting mods with craftable objects in the Chem station

Armor Bench (wearable weapons, full armors, does **not** linings/mods)

- Holstered Weapons by Azar
 - New Weapon Apparel
 - NOTE: Listed here for convenience.
- Dread Headgear Pack V1d
 - Adds to cell, do not use any other mods that make changes to the Crater of Atom in the Glowing Sea
- Holsters and Sheaths - Visible Weapons (Weapon Mods Fix)
 - Requires Visible Weapons
 - **Requires Reinitializing Visible Weapons to work properly.**

- ~~How to: Hard Save, Disable Visible Weapons, Load game and make another Hard Save, Re-enable Visible Weapons and this patch~~
- ~~See mod description for more details ('clean save' is Reinitializing Mod)~~
 - **'Clean Save' reinitializing a mod is a bad modding practice, is not considered a safe way to update, and therefore this mod is not recommended for safe gameplay.**
- ~~Starting Point only. May need to load after Armorsmith or other weapons mods to be fully functional. More testing is required.~~
- Glock19x - Fuman Visible Weapon (tinez421)
 - **Requirements**
 - Ardent117's Glock 19x
 - Visible Weapons
 - Holsters and Sheaths - Visible Weapons (Weapon Mods Fix)
 - **Warnings**
 - Meshes are higher poly than recommended for Xbox. FPS issues may occur in crafting menu and while adventuring.

Power Armor Bench

Power armor is a furniture object that is also a container.

- Power Armor Nuka-Cola And Quantum As Paints - Also Unlocks Vim Paints [XB1]
 - Probably not compatible with any other mod that unlocks the same paints
 - REQUIRES Far Harbor and Nuka World
- Power Armor Frame Crafting & Moving: Season Pass Version
 - Not necessary (unless you want the paints) when using with Scrap that Settlement! Can move Power Armor with that mod enabled.
 - Unsure of Compatibility with Power Armor Nuka-Cola And Quantum As Paints - Also Unlocks Vim Paints [XB1]; have not tested yet - recommending choosing one or the other.

Robot Bench

Robots are built Actors. All Robot workbench mods require Automatron.

- Capital Wasteland Robot Pack
- AutomatronWheelLegs
 - Uninstallation drug is located under Drugs at Chem station
 - DO NOT REMOVE MID PLAY without taking chem, you will permanently break your Robot Workbench. There is no fix for the Robot Workbench.
 - NOTE: You may permanently damage the leveled lists if uninstalling mid-play. Uninstalling is not recommended unless you no longer intend to use the save
- AutomatronSecuritron
- AssaultronNukaSpaceSuitArmor
- AutomatronClapTrap
- M's AutomatronPartsCollection
 - Do not remove mid play without taking chem
 - Uninstallation drug is located under Drugs at Chem Station

- Scripted level list injection - parts appear on automatron
- NOTE: You may permanently damage the leveled lists if uninstalling mid-play. Uninstalling is not recommended unless you no longer intend to use the save
- AutomatronSDTank
 - Do not remove mid play without taking chem
 - Uninstallation drug is located under Drugs at Chem Station
 - Scripted level list injection - parts appear on automatron
 - NOTE: You may permanently damage the leveled lists if uninstalling mid-play. Uninstalling is not recommended unless you no longer intend to use the save
- Live Action Handy
 - There are two versions - PreWar and Post War
 - Use a mod to disable lens flare if the lights are too bright
- Mr. Handy Plasma Guns

New Workbenches

New crafting benches (NOT AWKCR) that are built in the settlement menu and add your armors/weapons

- Craft Armor
 - Takes place of AWKCR - armor only
 - **Installing**
 - Install in Craft your own
 - **Compatibility/Known Conflicts/Overrides**
 - AWKCR
 - Other crafting mods
 - Armors requiring AWKCR not compatible
 - Mods requiring AWKCR not compatible
 - **Requirements**
 - Requires Standalone Workbenches
 - Automatron, Far Harbor, Nuka World
 - **Warning**
 - **Cheat Terminal Infinite Loop Work-around:** Do not use Cheat Terminal's Infinite Items cheat with this mod. Due to how scripting works, there is no fix for the conflict there. See NexusMods sticky post for full information.
- Craft Clothing
 - Takes place of AWKCR - clothing only
 - **Installing**
 - Install in Craft your own
 - **Compatibility/Known Conflicts/Overrides**
 - AWKCR
 - Other crafting mods
 - Armors requiring AWKCR not compatible
 - Mods requiring AWKCR not compatible
 - **Requirements**
 - Requires Standalone Workbenches

- Automatron, Far Harbor, Nuka World
 - **Warning**
 - **Cheat Terminal Infinite Loop Work-around:** Do not use Cheat Terminal's Infinite Items cheat with this mod. Due to how scripting works, there is no fix for the conflict there. See NexusMods sticky post for full information.
- Craft Power Armor
 - Takes place of AWKCR - Power Armor only
 - **Installing**
 - Install in Craft your own
 - **Compatibility/Known Conflicts/Overrides**
 - AWKCR
 - Other crafting mods
 - Power Armors requiring AWKCR not compatible
 - Mods requiring AWKCR not compatible
 - **Requirements**
 - Requires Standalone Workbenches
 - Automatron, Far Harbor, Nuka World
 - **Warning**
 - **Cheat Terminal Infinite Loop Work-around:** Do not use Cheat Terminal's Infinite Items cheat with this mod. Due to how scripting works, there is no fix for the conflict there. See NexusMods sticky post for full information.
- Craft Weapons
 - Takes place of AWKCR/Armorsmith - weapons only
 - **Installing**
 - Install in Craft your own
 - **Compatibility/Known Conflicts/Overrides**
 - AWKCR
 - Other crafting mods
 - Weapons requiring AWKCR not compatible
 - Mods requiring AWKCR not compatible
 - **Requirements**
 - Requires Standalone Workbenches
 - Automatron, Far Harbor, Nuka World
 - **Warning**
 - **Cheat Terminal Infinite Loop Work-around:** Do not use Cheat Terminal's Infinite Items cheat with this mod. Due to how scripting works, there is no fix for the conflict there. See NexusMods sticky post for full information.
- Wearable Backpacks and Pouches
 - Adds crafting bench to settlement menu to craft the wearables.
- AnimalArmors
 - Requires Far Harbor and Nuka World
 - Adds 'tanning rack' to craft armors
- SuperMutantClothes
- Cigarette in Mouth
 - Adds crafting bench to settlement menu to craft smokables to wear as face armor

- Not compatible with Smoke-able Cigarettes and Cigars without patch. Cigarettes and Cigars are required as a crafting item. The formlist of Smoke-able Cigarettes keeps that from happening.
- TsukijiCart
 - Adds new bench to settlement menu
 - Craftable TsukijiCart to ride
- Tumbajamba's Power Armors
 - Adds crafting workbench to settlement menu.
- The Mobile Mechanic
 - Benches are crafted in the Chemistry Bench

Armor and Weapon Keywords Community Resource Addons

Note: The following armors and weapons require AWKCR in order to function

- Armorsmith Extended Framework
 - **Alternate Mods**
 - DLC plug-ins load directly below mod
 - AE has TWO versions. Use this version ONLY if you don't want to use the full version. Do NOT use both versions together.
 - Does not add uniques
 - Required by many/most clothing and armor mods
 - **Requirements**
 - AWKCR (Armor and Weapons Keywords Community Resource) REQUIRED for use
 - **Warning**
 - Xbox version not updated with Creation Club weapon skins
 - If you have purchased CC weapon skins, be sure to also add UCO to your load order - NOTE: you may lose some functionality to any modified vanilla weapons (you'll lose the modifications)
 - Search for up-to-date vanilla weapons modifications if you do not wish to use UCO to provide the CC patch
- Armorsmith Extended Full Version
 - DLC plug-ins load directly below mod
 - Required by many/most clothing and armor mods
 - Use FRAMEWORK version if you only want to use Armorsmith for OTHER mods. Do NOT use both versions together.
 - Required by many/most clothing and armor mods
 - Adds unique clothing and armors
 - AWKCR REQUIRED for use
 - Not updated with CC weapon skins
 - If you have purchased CC weapon skins, be sure to also add UCO to your load order - NOTE: you may lose some functionality to any modified vanilla weapons (you'll lose the modifications)
 - Search for up-to-date vanilla weapons modifications if you do not wish to UCO to provide the CC patch
- UCO: Unified Clothing Overhaul (Base Game) (ANDREWCCX)

- Mod Author has very helpful FAQ
- PS4 USERS: Should go below STS, but above Freecrafter (if using)
- REQUIRES AWKCR to function; plan playthrough and mod load order accordingly
- Per mod author: NOTHING should go beneath UCO series except Freecrafter
 - Crimsomrider's clothing works better if placed below UCO
 - If using other clothing mods, they may have to be placed below. For example, Crimsomrider's clothing mods go below UCO.
- Has Season Pass Version. If you have ALL DLCs, use that version and not the separate plug-ins
- Has separate plug-ins for Far Harbor, Automatron, Nuka World, Vault-Tec, and Pip-boy
- If issues with armor bench occur, place UCO and other mods below it, dead last in order
- Updated for Creation Club
 - Note: if you run this below any weapons mods that modify vanilla weapons, you will lose the modifications; otherwise you will lose the Creation Club weapon skins
- UCO Pipboy Color Swap Enabler (ANDREWXCX)
 - UCO Base Game required
 - READ ALL DOCUMENTATION THOROUGHLY before installing this mod! There are very specific instructions on how to use this mod in the description so that you do not accidentally drop or unequip your Pipboy.
 - After Official Patch 1.10 - NO LONGER REQUIRED/Obsolete
- Wasteland Ranger Outfit
 - AWKCR REQUIRED for use
 - May need to adjust LO to below Armorsmith
 - Not compatible with CBBE
- Tough Traveller Outfit 2
 - AWKCR REQUIRED for use
 - May need to adjust LO to below Armorsmith
 - Not compatible with CBBE
- Mercenary Pack
 - AWKCR REQUIRED for use
 - Armorsmith Extended REQUIRED for use
 - Must be loaded AFTER AE
 - Mod author is no longer modding
 - B-90 cosmetic
 - Known issue with rebel backpack not lining up properly with player character
 - Body will not be in same shape but compatible with CBBE - no skin shows for female character
- Clothing of the Commonwealth
 - Adds to the level lists of Raiders, Gunners & Settlers
 - AWKCR REQUIRED for use
 - Armorsmith Extended REQUIRED for use
 - Not compatible with CBBE
- Tomb Raider Accessories by Crimsomrider
 - Renamed Crimsomrider's Accessories
 - AWKCR REQUIRED for use
 - Armorsmith Extended REQUIRED for use
- The Forsaken Institute Assassin

- AWKCR REQUIRED for use
- Armorsmith Extended REQUIRED for use
- Not compatible with CBBE
- Assaultroness by Crimsomrider
 - AWKCR REQUIRED for use
 - Armorsmith Extended REQUIRED for use
 - Not compatible with CBBE
- Femshepping's Ports - Leahlilith's
 - AWKCR REQUIRED for use
 - Armorsmith Extended REQUIRED for use
- The Phantom of Far Harbor
 - AWKCR REQUIRED for use
 - Armorsmith Extended REQUIRED for use
 - Not compatible with CBBE
- Tomb Raider Outfits by Crimsomrider
 - AWKCR REQUIRED for use
 - Armorsmith Extended REQUIRED for use
 - **No longer available on Bethesda.net**
- Modular Leather Armor
 - AWKCR required
 - Adjust as necessary when using UCO; may need to load prior to UCO for full functionality
 - Not compatible with CBBE
- CBBE Vanilla Clothing Pack
 - If not using CBBE all in one
 - Note: CBBE body may also need to go below as does EVB

New Recipes

Includes mods that add categories to the crafting stations, adjust recipes, and add new recipes

- Crafting Rearranged
 - **Alternative Mods**
 - Cheat Terminal (shipment function)
 - Cheat Room (shipment function)
 - **Compatibility/Known Conflict/Overrides**
 - While not a 'conflict', mods that have ammo crafting are redundant with this mod. Choose one or the other.
 - Immersive Gameplay
 - **Installing**
 - Mod author has load order template for players if using only their mods: [template](#)
 - Install with crafting mods
 - **Requirements**
 - Automatron, Far Harbor, Nuka World DLC
 - Stand Alone Workbenches

- Useful Technical Documents - Legendaries
 - **Alternative Mods**
 - Better Stores (V81 cure)
 - **Compatibility/Known Conflict/Overrides**
 - While not a conflict, Better Stores also allows for crafting the Vault 81 Cure
 - **Installing**
 - Install with crafting mods
- Meal, Combat, Individual (MRE Precursor) And Beef Jerky
 - Mod is specifically designed for Survival Players
 - **Alternative Mods**
 - Military MREs
 - Emergency Field Rations (remade for survival)
 - Meals Ready To Eat (quest required)
 - Meals Ready to Eat (no quest required)
 - **Installing**
 - Install with craft your own
 - **Requirements**
 - Not exactly required: Survival Mode
 - Nuka World
- REUSEABLE CAMPING
 - Contains own section in chem bench
 - Use caution when using with other mods that also add their own section; too many sections can overload the chemistry bench and cause issues with crafting
- RidingGiddyupButterCup
 - Craftable under Utility in Chem Station
 - Scripted, do not uninstall midplay
- The Good the Bad and the Ugly
 - Adds new section to Chem Bench (Vault-Tec Equipment)
 - Adds new drug under Drug
 - Adds Targeting HUDs craftable at Power Armor Station for all vanilla armors
 - Per mod author: Does not work on ash or goo piles and does not work on Bethesda-placed corpses
- Balanced and Craftable Ammunition
 - Adds an ammo category in the chem bench
 - May not be compatible with AWKCR which adds its own ammo workbench; test prior to using on main character
- Wild Plants, Drinks & Chems for Settlements
 - There are two versions - one for DLC and one for without season pass. Choose one or the other.
- New Recipes Far Harbor - By DiscoLando
 - Adds 60 plus food items to the cooking station using ingredients from the base game and Far Harbor
 - **Caution:** Does add these items to vendor and leveled lists directly
 - Mod is no longer supported.
- New Recipes Far Harbor VIS support - By DiscoLando

- Adds 60 plus food items to the cooking station using ingredients from the base game and Far Harbor
- **Caution:** Does add these items to vendor and leveled lists directly
- Mod is no longer supported.
- Freemaker (ANDREWWCX)
 - There are TWO versions of this. One is the “Season Pass” which includes all assets from vanilla and all DLCs; other is the Base Component. You will need to determine which you need. Base Component has DLC Plug-ins for you, if you have some DLCs but not all.
 - Mod author has very informative FAQ regarding this mod. You can find a link in the mod description. Be sure to read it very carefully before downloading mod.

NEW SETTLEMENTS AND OTHER BUILDING CHANGES & TWEAKS

Single Cell edits and additional workshops

PENDING REVIEW - most require previsibines rebuilt. Mobile workshops may do better in Gameplay as long as they do not affect previsibines.

- Mobile Workshop - Build and they will come
 - **Alternate Mods**
 - Workshop Anywhere
 - Build Anywhere
 - Simple Camping
 - Amazing Followers Tweaks
 - Conquest
 - **Compatibility/Known Conflicts/Overrides**
 - Don't use with mods that do the same thing
 - **Warnings**
 - Use caution when using with powered objects. Potentially problematic code will delete objects when the workshop is picked up. To prevent any unwanted issues with the power grid, scrap powered objects before moving the workshop. See Whisper's note on [the Parent Server](#). See [Power Grid Corruption](#) for more information on why this is problematic.
- Workshop Anywhere (ANDREWWCX)
 - This mod can also be as high as Vanilla Settlement Changes, depending on your load order.
 - Not recommended to be used with mods that do the same thing, such as Build Anywhere, Mobile Workshop or Conquest. Choose one or the other. You only need one.
 - See mod description and author's FAQ for specific instructions for use
 - **Alternate Mods**
 - Build Anywhere
 - Mobile Workshop - Build and they will come
 - Simple Camping
 - Conquest

- Amazing Followers Tweaks
 - **Warnings**
 - Mod was created before mod authors knew about the power grid. Use caution when using with powered objects. To prevent any unwanted issues with power grid, scrap powered objects before moving workshop. See [Power Grid Corruption](#) for more information.
- Conquest - Build New Settlements and Camping²⁶
 - Obsolete: Mod Author is no longer maintaining mod nor has it been updated since 2016.
 - NOT compatible with Sim Settlements.
 - NOT compatible with many scripted settlement mods, including Workshop+ Framework.
 - USE WITH CAUTION
 - SEE COMMENTS SECTION ON BETHESDA.NET
 - Comes with holotape instructions, but read description thoroughly before downloading. Users familiar with Skyrim's Camping will not have any problems using this mod; camping works very similar to Skyrim version.
 - In order to use Place Anywhere, you have to open Workshop Mode from the Conquest Workshop and not the view button or Start Workshop Mode chem
 - Shipments will not work with Conquest while in player's inventory
 - Shipments cannot be redeemed at a Conquest workshop
 - See [this thread](#) and [this thread](#) for more information about Conquest, Place Anywhere and placing near settlement borders
 - Assigning provisioners - Workshop [Normal behavior](#)
 - Overbuilding issue: Be careful of overbuilding Conquest settlements. If building in an area with frame rate issues already, could lead to game crash. Not due to mod but due to the game trying to process too many textures and limitations within the engine itself.
 - Unlimited settlement budget mods not necessary
 - NOT Compatible with Sim Settlements or current build of game
 - See [this post](#) on the Parent Thread for use with Scrupulous Scrapping and UFO4P 2.04
 - Scrupulous Scrapping should be placed below Conquest - LOAD ORDER IMPORTANT
 - If Scrupulous Scrapping doubles/triples workshop items when assigning a provisioner to a conquest settlement, REMOVE THEM from workshop - could potentially break workshop
 - **Alternate Mods**
 - Build Anywhere
 - Mobile Workshop - Build and they will come
 - Simple Camping
 - Workshop Anywhere
 - Amazing Followers Tweaks
 - **Warnings**
 - Mod was created before mod authors knew about the power grid. Use caution when using with powered objects. To prevent any unwanted issues with power grid, scrap powered objects before moving workshop. See [Power Grid Corruption](#) for more information.
- Build Anywhere
 - Load order independent. Can go anywhere in load order.
 - Mod author has a FAQ at Scrap the Settlement FAQ page in the WIP/RELz forum on Bethnet.

²⁶ 8-5-2019: Use with caution. Obsolete mod.

- Build the ~Fetch Workshop~ in the chemistry workbench. Drop the ~Fetch Workbench~ out of your inventory to set up the Build Anywhere workbench.
- Issues at Boston Airport after Prydwen has been destroyed.
- Not recommended to be used with other mods that do the same thing. Choose one or the other.
- **Alternate Mods**
 - Workshop Anywhere
 - Mobile Workshop - Build and they will come
 - Simple Camping
 - Conquest
 - Amazing Followers Tweaks
- **Warnings**
 - Mod was created before mod authors knew about the power grid. Use caution when using with powered objects. To prevent any unwanted issues with power grid, scrap powered objects before moving workshop. See [Power Grid Corruption](#) for more information.
- Heavens DryLand Settlement
 - Interior not exactly compatible with Commonwealth Visual Overhaul; CVO causes ambient lighting to malfunction and become pitch black. Adding additional light sources make fix issue; not tested
 - Due to the nature of the mod, precombines are disabled in the cell it is located in, so if you overbuild, there may be performance issues
- Robotics Disposal Ground Settlement
 - Made by detour80.
 - Build area border is always visible, whether in or out of Build Mode.
- Robotics Disposal Ground Settlement By Ragoda
 - Port by DMFPROJECTGAMING.
 - Supply Lines to and from the Settlement do not work.
- Atomic World
 - Adds new workspace
 - Conflicts with MoreXplore in 4 cells
 - Does not include precombines in download, brings over cell data
 - Overlaps with Nuka World cell
- Finch Overpass Lift
 - Author has added additional mod that combines this mod with Greygarden Overpass Lift.
- Greygarden Overpass Lift
- Finch Farm and Greygarden Overpass Lift
 - This is a combination of both Finch Overpass Lift and Greygarden Overpass Lift.
 - Uncertain as to compatibility with UFO4P

NEW SINGLE INTERIORS/NEW PLAYER HOMES/NEW DUNGEONS

New Interiors, single areas

Pending review. Heading will remain on spreadsheet for the moment; however, most player homes are new settlements or area edits requiring previsibines rebuilt. Adjust as necessary for previsibines or do not use if no optimization patch. This header was created prior to newer mods that actually rebuilt the previsibines.

- Faction Housing Overhaul (Elianora)
 - Not compatible with Prydwen Player Home
- Prydwen Player Home
 - You don't need to enable until after the Brotherhood of Steel arrive.
 - You will need to collect any junk/collectibles prior to (SPOILER) destroying the Prydwen.
- Welcome to Goodneighbor
- Marlborough Mansion
- Outfield Retreat
- Sanctuary Bunker Player Home
- The Starlight Bus Barricade
- Featherfall House - Player Home
- Maple Manor - Player Home (PS4 Exclusive)
- Pre-war House - Player Home (Settlement Edition)
- Pineneedle Rest - Player Home
- Shezrie's Loft
- Shezrie's Fenway Apartment
- Shezrie's Far Harbor Home
- Honey Breeze Player Home
- Treehouse Player Home
- Oil Rig Player Home
- Aloom's Home Plate Nexus Port
- Kendall Square Apartments Penthouse Including HalluciGen Prototype Items
- Dauntless Submarine Player Home
- US Quincy - Minuteman Player Home
- Wasteland Lair

QUESTS and COLLECTIBLES

Includes NEW fetch quests, cell edits (adding collectibles to), collectibles (including weapons and armor), and other types of quests that usually work better towards the bottom of the load order; as with all mods on this list, test and adjust as needed

New quests, updates to quests, multiple cell edits, exterior edits and additions, collectibles, Beantown Interiors and Tales of the Commonwealth

Note

Quest mods require planning your load order around them due to persistence and scripting. There are other elements involved as well. Most will break the game save if removed in the middle of the playthrough.

New Quests

- Modding for Charity: Trunk's Malfunction
 - **Installing**
 - Instal with quest mods

- The Path of the Psycho
 - **Installing**
 - Install with quest mods
- Hoistway Hideaway - Quest
 - **Installing**
 - Install with quest mods
- Into the Room
 - **Installing**
 - Install with Quest Mods
- Mechanist Omega - An Antagonist Quest Mod
 - **Compatibility/Known Conflicts/Overrides**
 - Navmesh at Robotics Disposal Ground affected for new door, navmesh compatibility patch required for other mods that touch the Disposal Ground (easier to choose only one mod that affects the cell)
 - **Installing**
 - Install with Quest mods/Collectibles
 - **Requirements**
 - Automatron DLC
 - Nuka World DLC
- A Taste of Blues
 - **Installing**
 - Install with Quest mods/Collectibles
 - **Requirements**
 - Automatron DLC
- World to Come - Quest Mod
 - Gives you a Gojira Deathclaw quest to defeat after the main quest
 - **Compatibility/Known Conflicts/Overrides:**
 - Overrides deathclaws
 - **Installing:**
 - Install with quest mods below mods that affect cells listed in description.
 - **Patch Warning:**
 - Will need to be patched for use with enemy death claws
 - May need patch for CCC for Hyde Park (Gunnery vs Minutemen)
 - **Requirements:**
 - Automatron DLC

Collectibles/Exploration - Single Area

- Craftable C-4 Explosives
- Enclave Settlement Kit and Colonel Autumn Duster
 - **Addons/Patches:**
 - Enclave Minutemen [No AR]
 - **Installing:**
 - Install with collectibles/quests, single area
 - **Warnings:**

- Textures appear to be either the incorrect compression or were saved on sRGB image space, and Xbox is not reading them correctly inside the bunker. Work around: clear cache
- Enclave Officers Uniform
 - Adds Enclave Officers Uniform at Crashed Vertibird in Glowing Sea
 - **Addons/Patches:**
 - Enclave Minutemen [No AR]
 - **Compatibility/Known Conflicts/Overrides:**
 - Not designed with CBBE in mind
 - **Installing:**
 - Install with collectibles/new quests, single area
- Enclave Minutemen [AR]
 - Patch for America Rising. See mod description.
 - **Installing:**
 - Install under last mod required
 - **Requirements:**
 - America Rising
 - Enclave Officers Uniform
 - Enclave Settlement Kit and Colonel Autumn Duster
 - Militarized Minutemen (stand alone)
- Enclave Minutemen [No AR]
 - Patch that patches all three mods in Requirements to work together.
 - See mod description.
 - **Installing:**
 - Install under last mod required.
 - **Requirements:**
 - Enclave Officers Uniform
 - Militarized Minutemen (stand alone)
 - Enclave Settlement Kit and Colonel Autumn Duster
- InstitutePowerArmor
 - Adds power armor to cell: rooftop of Fort Hagen
 - **Compatibility/Known Conflicts/Overrides**
 - Do not use with other mods that alter rooftop of Fort Hagen - run below any that do (if the armor is not there, then they are not compatible)
 - Reuses vanilla mesh headlamp addon nodes
 - **Installing**
 - Install with mods that edit single areas
 - Adjust as necessary with other mods that affect same area
 - **Important**
 - Re-uses mesh headlamp addon nodes found in the base game so there may be Pip-Boy or headlamp flickering or lights not turning on at all while playing. There is no way to fix it on Xbox but PC players with Nifskope can.

More Info:

See [Troubleshooting Pipboy and Power Armor Headlamp Lighting Conflicts](#)

- Requirements
- Legate Power Armor By Mr. Mobius
 - Adds power armor to cell near Starlight Drive-in
 - **Compatibility/Known Conflicts/Overrides**
 - Requires individual testing with other mods editing Starlight Drive-in. Cell is close enough to affect settlement.
 - **Installing**
 - Install with mods that edit single areas or with craft your own (depends on other mods in your load order)
 - Adjust as necessary for your load order
 - **Important**
 - Textures large. Plan load order around file size.
- KnightPowerArmor
 - Adds power armor to cell: Nahant Chapel 2nd Floor
 - **Compatibility/Known Conflicts/Overrides**
 - Requires individual testing with other mods editing Nahant Chapel 2nd Floor
 - **Installing**
 - Install with mods that edit single areas
 - Adjust as necessary for your load order
- New Vegas Uniques 01 AER14 Prototype
 - Adds unique weapon via quest
 - **Alternative Mods**
 - New Vegas Uniques Mega Pack
 - **Compatibility/Known Conflicts/Overrides**
 - Not necessary if using New Vegas Uniques Mega Pack or another mod that adds same type weapon
 - **Installing**
 - Install with quest mods, new weapons, or single area edits
 - Adjust as necessary for load order
- New Vegas Uniques 02 Pew Pew
 - Adds unique weapon via quest
 - **Alternative Mods**
 - New Vegas Uniques Mega Pack
 - AEP-7 Laser Pistol and Pew-Pew
 - **Compatibility/Known Conflicts/Overrides**
 - Not necessary if using New Vegas Uniques Mega Pack or another mod that adds same type weapon
 - **Installing**
 - Install with quest mods, new weapons, or single area edits
 - Adjust as necessary for load order
- New Vegas Uniques 03 Q-35 Matter Modulator
 - Adds unique weapon via quest
 - **Alternative Mods**
 - New Vegas Uniques Mega Pack

- **Compatibility/Known Conflicts/Overrides**
 - Not necessary if using New Vegas Uniques Mega Pack or another mod that adds same type weapon
- **Installing**
 - Install with quest mods, new weapons, or single area edits
 - Adjust as necessary for load order
- New Vegas Uniques 04 Esther
 - Adds unique weapon via quest
 - **Alternative Mods**
 - New Vegas Uniques Mega Pack
 - **Compatibility/Known Conflicts/Overrides**
 - Not necessary if using New Vegas Uniques Mega Pack or another mod that adds same type weapon
 - **Installing**
 - Install with quest mods, new weapons, or single area edits
 - Adjust as necessary for load order
- New Vegas Uniques 05 Sprtel-Wood 9700
 - Adds unique weapon via quest
 - **Alternative Mods**
 - New Vegas Uniques Mega Pack
 - The Wild Wasteland
 - **Compatibility/Known Conflicts/Overrides**
 - Not necessary if using New Vegas Uniques Mega Pack or another mod that adds same type weapon
 - **Installing**
 - Install with quest mods, new weapons, or single area edits
 - Adjust as necessary for load order
- New Vegas Uniques 06 Holy Frag Grenade
 - Adds unique weapon via quest
 - **Alternative Mods**
 - New Vegas Uniques Mega Pack
 - Classic Frag Grenades and Mines
 - Atom's Greatness
 - Holy Hand Grenade of Antioch
 - **Compatibility/Known Conflicts/Overrides**
 - Not necessary if using New Vegas Uniques Mega Pack or another mod that adds same type weapon
 - **Installing**
 - Install with quest mods, new weapons, or single area edits
 - Adjust as necessary for load order
- New Vegas Uniques 07 Cleansing Flame
 - Adds unique weapon via quest
 - **Alternative Mods**
 - New Vegas Uniques Mega Pack
 - **Compatibility/Known Conflicts/Overrides**

- Not necessary if using New Vegas Uniques Mega Pack or another mod that adds same type weapon
 - **Installing**
 - Install with quest mods, new weapons, or single area edits
 - Adjust as necessary for load order
- New Vegas Uniques 08 Cz57 Avenger
 - Adds unique weapon via quest
 - **Alternative Mods**
 - New Vegas Uniques Mega Pack
 - Skibadaa Weapons Pack - REDUX
 - Skibadaa Weapons Pack - REDUX Ultra Lightweight version
 - Miniguns Standalone Ultra Lightweight version
 - Miniguns Standalone
 - Capital Wasteland Minigun
 - **Compatibility/Known Conflicts/Overrides**
 - Not necessary if using New Vegas Uniques Mega Pack or another mod that adds same type weapon
 - **Installing**
 - Install with quest mods, new weapons, or single area edits
 - Adjust as necessary for load order
- New Vegas Uniques 09 Golden Glove(s)
 - Adds unique weapon via quest
 - **Alternative Mods**
 - New Vegas Uniques Mega Pack
 - **Compatibility/Known Conflicts/Overrides**
 - Not necessary if using New Vegas Uniques Mega Pack or another mod that adds same type weapon
 - **Installing**
 - Install with quest mods, new weapons, or single area edits
 - Adjust as necessary for load order
- New Vegas Uniques 10 Gehenna
 - Adds unique weapon via quest
 - **Alternative Mods**
 - New Vegas Uniques Mega Pack
 - Classic Melee Pack
 - **Compatibility/Known Conflicts/Overrides**
 - Not necessary if using New Vegas Uniques Mega Pack or another mod that adds same type weapon
 - **Installing**
 - Install with quest mods, new weapons, or single area edits
 - Adjust as necessary for load order
- New Vegas Uniques 11 Fist of Rawr + Bonus
 - Adds unique weapon via quest
 - **Alternative Mods**

- New Vegas Uniques Mega Pack
 - **Compatibility/Known Conflicts/Overrides**
 - Not necessary if using New Vegas Uniques Mega Pack or another mod that adds same type weapon
 - **Installing**
 - Install with quest mods, new weapons, or single area edits
 - Adjust as necessary for load order
- New Vegas Uniques 12 Annabelle
 - Adds unique weapon via quest
 - **Alternative Mods**
 - New Vegas Uniques Mega Pack
 - T6M's Pump-shotgun v2 (added as Legendary mod)
 - **Compatibility/Known Conflicts/Overrides**
 - Not necessary if using New Vegas Uniques Mega Pack or another mod that adds same type weapon
 - **Installing**
 - Install with quest mods, new weapons, or single area edits
 - Adjust as necessary for load order
- New Vegas Uniques 13 Chance's Knife
 - Adds unique weapon via quest
 - **Alternative Mods**
 - New Vegas Uniques Mega Pack
 - **Compatibility/Known Conflicts/Overrides**
 - Not necessary if using New Vegas Uniques Mega Pack or another mod that adds same type weapon
 - **Installing**
 - Install with quest mods, new weapons, or single area edits
 - Adjust as necessary for load order
- New Vegas Uniques 14 Medicine Stick
 - Adds unique weapon via quest
 - **Alternative Mods**
 - New Vegas Uniques Mega Pack
 - **Compatibility/Known Conflicts/Overrides**
 - Not necessary if using New Vegas Uniques Mega Pack or another mod that adds same type weapon
 - **Installing**
 - Install with quest mods, new weapons, or single area edits
 - Adjust as necessary for load order
- New Vegas Uniques 15 YCS/186 Gauss Rifle
 - Adds unique weapon via quest
 - **Alternative Mods**
 - New Vegas Uniques Mega Pack
 - Creation Club Prototype Gauss Rifle + Fixpack Creation Club Prototype Gauss Rifle
 - **Compatibility/Known Conflicts/Overrides**

- Not necessary if using New Vegas Uniques Mega Pack or another mod that adds same type weapon
 - If choosing to use the Creation club Prototype Gauss Rifle, the Fixpack by KungFuMan will bring stats to that of this rifle. It will not save a slot but if you've already made a purchase, you can add the fix pack instead of this mod for similar effects and weapon.
 - **Installing**
 - Install with quest mods, new weapons, or single area edits
 - Adjust as necessary for load order
- New Vegas Uniques 16 The Humble Cudgel
 - Adds unique weapon via quest
 - **Alternative Mods**
 - New Vegas Uniques Mega Pack
 - **Compatibility/Known Conflicts/Overrides**
 - Not necessary if using New Vegas Uniques Mega Pack or another mod that adds same type weapon
 - **Installing**
 - Install with quest mods, new weapons, or single area edits
 - Adjust as necessary for load order
- New Vegas Uniques 17 Mysterious Magnum
 - Adds unique weapon via quest
 - **Alternative Mods**
 - New Vegas Uniques Mega Pack
 - **Compatibility/Known Conflicts/Overrides**
 - Not necessary if using New Vegas Uniques Mega Pack or another mod that adds same type weapon
 - **Installing**
 - Install with quest mods, new weapons, or single area edits
 - Adjust as necessary for load order
- New Vegas Uniques 18 Paciencia
 - Adds unique weapon via quest
 - **Alternative Mods**
 - New Vegas Uniques Mega Pack
 - **Compatibility/Known Conflicts/Overrides**
 - Not necessary if using New Vegas Uniques Mega Pack or another mod that adds same type weapon
 - **Installing**
 - Install with quest mods, new weapons, or single area edits
 - Adjust as necessary for load order
- New Vegas Uniques 19 Love and Hate
 - Adds unique weapon via quest
 - **Alternative Mods**
 - New Vegas Uniques Mega Pack
 - **Compatibility/Known Conflicts/Overrides**

- Not necessary if using New Vegas Uniques Mega Pack or another mod that adds same type weapon
 - **Installing**
 - Install with quest mods, new weapons, or single area edits
 - Adjust as necessary for load order
- New Vegas Uniques 20 Weathered 10mm Pistol
 - Adds unique weapon via quest
 - **Alternative Mods**
 - New Vegas Uniques Mega Pack
 - **Compatibility/Known Conflicts/Overrides**
 - Not necessary if using New Vegas Uniques Mega Pack or another mod that adds same type weapon
 - **Installing**
 - Install with quest mods, new weapons, or single area edits
 - Adjust as necessary for load order
- Makeshift Homes

Collectibles/Exploration - Multi-Area

- Atlas Summit Redux By MrColonelMustard (ported by CrayonKit - official port)
 - **Installing**
 - Install with other quests/collectibles with multiple areas affected
- New Vegas Uniques Mega Pack
 - Each weapon has a mini quest to find the item
 - **Addons/Patches**
 - New Vegas Uniques 14: Medicine Stick
 - New Vegas Uniques 15: YCS/186
 - **Alternative mods**
 - The other New Vegas Uniques by Captain-Ultima
 - See New Vegas Uniques by Captain-Ultima individual entries for other alternatives
 - **Compatibility/Known Conflicts/Overrides**
 - Self-contained except for area edits for quests
 - **Installing**
 - Install with other quests/collectibles with multiple areas affected
 - **Important**
 - As of version 2.2, quests rebuilt from scratch (2019), very old load orders from 2019 will need to be redone since quests have changed. "Clean install" is not a good modding practice. Treat all mods as DLC to avoid save game issues and creating bugs in the save.
 - Nexus version contains 20 weapons? Bethesda's description is very unclear. Individual testing required to see if 20 weapons included in Xbox version.
 - Xbox file size. Plan load order around file size. Textures are large.
 - Collectible weapons are moddable at weapons bench after you locate them
 - According to Bethesda page, included weapons are as follows:
 - AER14 Prototype
 - Pew Pew
 - Q-35 Matter Modulator

- Esther
- Sprtel-Wood 9700
- Holy Frag Grenade
- Cleansing Flame
- CZ57 Avenger
- Golden Glove
- Gehenna
- Fist of Rawr
- Annabelle
- Chance's Knife
- The Humble Cudgel
- Mysterious Magnum
- Paciencia
- Love and Hate
- Weathered 10mm Pistol
- **Requirements**
 - Bethesda version does not specify if DLCs are required
 - Nexus version has different versions for various DLCs
- PAWA - Collectibles Addon
 - This is an addon to PAWA
 - See Mod Author's FAQ for more details
 - **Compatibility/Known Conflicts/Overrides**
 - Tested against 230+ mods including Beantown Interiors, Drunken Gnomes, and Integrated Commonwealth
 - Edits Power Armor OMODs - Let Mod Author know if you've discovered an incompatible mod so that he can make a patch (if there is a PC version)
 - Move as necessary if power armor collectibles overlap with another mod's edits
 - **Installing**
 - Install after PAWA
 - Install lower in the load order with mods that affect multiple areas
 - Install above Drunken Gnomes (full)
 - **Requirements**
 - Requires PAWA (Power Armor Wasteland Adventures)
- PAWA - AWKCR 4.+ Patch
 - This patch fixes the mistake in 4.0 so that PAWA can run properly.
 - **Compatibility/Known Conflicts/Overrides**
 - Not necessary if you are still using AWKCR 3+ (Valdakil's version)
 - **Installing**
 - Install below AWKCR
 - Install below PAWA
 - Install below PAWA Collectibles Addon
 - **Requirements**
 - AWKCR 4+ (Gambit's version)
 - PAWA (Power Armored Wasteland Adventures)

➤ The Wild Wasteland

- Adds additional items and locations to the world in multiple places
- **Alternative mods**
 - New Vegas Uniques Mega Pack
 - New Vegas Uniques 05 Sprtel-Wood 9700
- **Compatibility/Known Conflicts/Overrides**
 - Not recommended to use New Vegas Uniques Mega Pack or Sprtel-Wood 9700 since The Wild Wasteland adds a weapon by the same name. New Vegas Uniques is modular, so Mega pack not required when using this mod
 - Overlaps in some of the same places as Beantown Interiors and has header compatibility issues. Not compatible with Beantown Optimization Patch (rebuild BT's precombines against The Wild Wasteland if using Beantown)
 - Possible conflict (unconfirmed on Xbox) with South of Sea. Architect's Basement may be affected. Not recommended to use both at the same time unless you know your way around the Creation Kit to move navmesh and doors
- **Installing**
 - Install above Beantown if no BT Optimization Patch
 - Install with Beantown and rebuild BT Optimization patch if using
 - If no Beantown, install with multiple area edits low in the load order, but above PRP
- **Important**
 - Notes on Bethesda page indicate mod author would like bug reports if bugs are found
 - Notes on Nexus indicate that MA is aware of South of Sea conflict but does not have time to make a patch and is no longer playing FO4
- **Patch Warning**
 - Requires patch for VIS/VIS-G or other junk/armor/etc
 - Requires patch for South of Sea
 - Requires patches (probable navmesh patches) for mods that edit the same areas new locations are
- **Warnings**
 - Plan load order around file size and world edits, treat as world overhaul on Xbox and only use this as your major world edit should you decide to use. Mod adds a lot for the rather small file size (considering how many records are added)

➤ MoreXplore

- Adds additional locations
- Requires fixes before use
- **Addons/Patches**
 - PC only: SS2 and moreXplore - powell family relocated (does not say anything about fixing deleted navmesh in description)
 - PC only: Optimization Patches Collection has a patch (read instructions and data to see if it is updated/will work with your load order)
- **Alternative mods**
 - People Live In... series by Glitchfinder
 - The Wild Wasteland
 - Sims Settlements 2
 - Commonwealth Underground

- **Compatibility/Known Conflicts/Overrides**
 - Has several cells in which overlap with Commonwealth Underground
 - Navmesh conflict with commonwealth Underground
 - Not compatible with navmesh at POIRJ16 (vanilla cell)
- **Installing**
 - Install before PRP/ rebuild against latest PRP
 - Install after rebuilding the precombines or look for a PRP patch or similar
 - Install with mods that disable the precombines
 - Install after fixing navmesh error
 - (Guys, this mod needs TLC, fix before playing with or use another mod. I'm trying to be nice/diplomatic. The mod author did not have to make it.)
- **Important**
 - Deleted navmesh requires mod author to fix. Xbox players are unable to fix.
 - PC players with modding skills can use tutorial to fix navmesh deletion and build precombines against latest PRP build or look for patch for both issues
- **Patch Warning**
 - Requires precombine patch to rebuild precombines in areas affected by moving objects
 - Requires either patch for navmesh deletion or complete rebuild of area in actual mod
 - DLC patches required for updated precombines (Nuka World, Far Harbor) if using all DLC.
- **Requirements**
 - Navmesh deletion must be fixed or crash can occur
- **Warnings**
 - No precombines included in download.
 - Precombines disabled at
 - 0x0000DBFD (cell 5,1). Two items in the precombines moved, which affects a 3x3 cell grid around the affected area. (Thanks, Bethesda.)
 - 0x0000D94A POIRJ16 (14, 23). Navmesh also deleted. Crashes can occur due to navmesh deletion
 - 0x0000D92B (cell 14, 24). Navmesh also deleted. Crashes can occur due to navmesh deletion
 - 0x0000E0AE, 0x0000E252, 0x0000E275, 0x0000E0AB, 0x0000E0CB, 0x0000DFD7, 0x0000E821, 0x0000E5B8 (cells 14, -5; 23,-19; 23, -20; 17, -5; 16, -6; -25, 16; -17, -31; -11, -13) VISI, RVIS, and PCMB removed from header (does not have precombine/previs data at all)
 - 0x0000DE4C "AASynLocationFortExtTwo (Hillside Fort Location)" (cell -25, 14), Landscape height records altered disabling the precombines as well as moving static objects in the precombines. Navmesh also deleted. Crashes can occur due to navmesh deletion
 - 0x0000DE4D (cell -26, 14), Landscape height records altered disabling the precombines as well as moving static objects in precombines
 - 0x0000DE6D "AASynLocationFortExtOne (Hillside Fort Location)"(cell -25, 13), Landscape height records altered disabling the precombines as well as moving static objects in the precombines. Navmesh also deleted. Crashes can occur due to navmesh deletion

- 0x0000DE6E (cell -26, 13), Landscape height records altered disabling the precombines as well as moving static objects in precombines
- 0x0000DE6A, 0x0000DE88 (cells -22, 13 and -19, 12), one object moved that was in precombines which turns off optimization for 3x3 cell grid around area
- 0x0000DE6B “AASynLocationSailingClub (Boston Sailing Club)”, Landscape height records altered disabling precombines as well as static objects moved
- 0x0000DE6C, 0x0000DE8C, 0x0000E544 “AASynLocationHermitExt (Harry’s Place Location)”, 0x0000E4FD, 0x0000E4FE (cells -24, 13; -23, 12; -27, -9; -22, -7; -23, -7) same as above
- 0x0000E543, 0x0000E564, 0x0000E565, 0x0000E4DC, 0x0000E4DD, 0x0000E4FF (cells -26, -9; -26, -10; -27, -10; -22, -6; -23, -6; -24, -7) Landscape height records altered disabling precombines

➤ Rsiyo's Location Pack

- Adds additional locations
- **Alternative mods**
 - People Live In... series by Glitchfinder
- **Compatibility/Known Conflicts/Overrides**
 - Previs File Stamp override between Rsiyo’s Location Pack and moreXplore at cell 0x0000DFD7 (-24, 2). moreXplore completely removes VISI, RVIS, and PCMB data in this cell. Flicker or other visual bugs may be present if using both.
 - Cell header differences between Rsiyo’s Location Pack and moreXplore at moreXplore’s Sailing Club Location (Sailing Club has navmesh deletion so use with Rsiyo’s could result in crash upon cell loading into memory)
 - Navmesh may need to be looked at by mod author in regards to Nuka World DLC at cell 0x0000DF32 (cell -24, 7). Players experiencing issues there may have all DLCs. A DLC patch for the navmesh is advised to mitigate possible issues.
- **Installing**
 - Clean with xEdit to remove ITMs that disable the precombines prior to installing
 - Use xEdit to manually delete CloudDistance06_O_50 (accidental wild edit) from Persistent cell
 - Install after MoreXplore (not advised to use both together, but hey, it’s your game. :P)
 - If using as is: Install with mods that disable/rebuild precombines
 - Install before Previsibines Repair Pack
- **Important**
 - Should be cleaned with xEdit prior to use (or wait for mod author to do it - or file bug report to politely inform them). What appear to be accidental ITMs also disable the precombines for two cells.
 - Manual deletion with xEdit is required for wild edits. This cannot be fixed for Xbox without Mod Author approval or them fixing it themselves and reuploading a new version to use
- **Patch Warning**
 - DLC patch for previs timestamp required for Nuka World DLC. Place above PRP with hope that it has patched cell 0x0000DFD7 (-24, 2) or create yourself before using.
- **Warnings**
 - Possible accidental wild edit on LvlScavenger template, which is referenced 25 times in base game. Other mods that need this record will need to be placed below Rsiyo’s to

override for their hard edits to show up unless mod author cleans mod or temporary compatibility patch is used (by temporary: you will need a new game if patch is no longer necessary).

- Identical to master records at cell 0x0000DFD7 (cell -24, 2). Unfortunately this accidental ITM caused the precombines to be disabled in this cell.

➤ Crowded Commonwealth

- Adds new locations, created prior to Nuka World, Creation Club and before precombines were widely known.
- Requires fixes before use
- **Alternative mods**
 - People Live In... series by Glitchfinder
- **Compatibility/Known Conflicts/Overrides**
 - Possible header incompatibility with Creation Club Hellfire Power Armor at cell 0x0000D484. Visual flickers could occur. A compatibility patch would fix any flickers.
- **Installing**
 - Requires xEdit to clean, fix, and the CK to complete fixes
 - Rebuild the precombines in areas where land height has changed
 - Install with scrap mods/multiple area edits that disable/rebuild precombines
 - Install above Previsibines Repair Pack or build precombines against PRP
- **Important**
 - Clean with xEdit to remove ITM CloudDistant04_25 (FormID 0x0020B028) from persistent cell
- **Patch Warning**
 - Needs DLC patches for Precombines for several Creation Club Creations
- **Warnings**
 - The cells that have disabled precombines are too numerous to list here. There are 207 overridden forms listed in xEdit.

➤ Plenty O' Exploration

- Adds additional locations in Concord
- Created prior to Nuka World, Creation Club, and before precombines (especially edits that affect land height) were known
- **Alternative mods**
 - People Live In... series by Glitchfinder
- **Compatibility/Known Conflicts/Overrides**
 - Compatible with Beantown
 - Not compatible with Concord+ or mods that touch Concord area
- **Installing**
 - Install with quests - multiple area edits or scrap mods/mods that disable/rebuild the precombines
 - Install above Previsibines Repair Pack, PRP may override doors
- **Important**
 - Mod is discontinued and marked as obsolete by mod author on NexusMods. It was left up because people enjoyed it.
- **Patch Warning**

- Requires patch for Minutemen Watch Towers
 - Requires Optimization patch for area with land height edit
 - May require previsibine patch/header patch for Creation Club items
 - May require patch for Previsibines Repair Pack, individual testing required. Mod much, much older than PRP.
- **Warnings**
 - Land height edit. No precombineds included in download
- Commonwealth Underground
 - Addons/Patches
 - Alternative mods
 - Compatibility/Known Conflicts/Overrides
 - Navmesh conflict with MoreXPlore²⁷. Not advised to use both together.
 - Installing
 - Install with quests/world edits with multiple locations
 - F4SE Warning
 - Important
 - Patch Warning
 - Requirements
 - Versions
 - Warnings
- Lexington Interiors
 - Starting point only.
 - If using Beantown Interiors Project: place above. Beantown has a holotape patch
 - There may be overlap with this mod's previs.
 - Regenerates Previs. Load order is imperative so that mods below do not turn off optimization. Individual testing required.
- The Beantown Interiors Project
 - Large Quest/Exploration/Junk Mod. Adds new locations to nearly all the Commonwealth and DLC areas.
 - Large quest mod. Plan load order around. Touches many places on the map.
 - "Lite" version available for PS4 that doesn't contain external assets (there is no optimization on PS4, download and use with caution. Stable, light load orders only. Save often.)
 - **Addons/Patches**
 - Beantown Interiors Menus
 - Beantown Interiors Optimization Patch
 - **Alternative mods**
 - People Live In... series by Glitchfinder
 - Other mods that do the same thing
 - Drunken Gnomes - The Gnomepocalypse
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with PRP Lite Lexington

²⁷ 09-20-2023 - See entry for moreXPlore for navmesh information

- Created before Previsbine Repair Pack²⁸/Boston FPS Fix
 - Not really compatible with STC, but STC is not really recommended anyway²⁹
 - Not entirely compatible with Lexington Interiors³⁰, however there is a holotape available. It will not fix any previsibine flickers while using both together.
 - Compatible with PAWA, Plenty O' Exploration, and Stumble Upon Interiors³¹
- **Installing**
 - If using scrap mods, install in scrapping.
 - If not using scrap mods, install with multiple area edits and do not use other multiple area edits on console.
 - Must be run ABOVE Scrap That Settlement (STS); Must be run BELOW STC (wedge BI in between if using STS and STC together)
- **Important**
 - This was one of the first mods to add new locations and the first mod on Xbox to rebuild the precombines for use. Be sure to thank the mod author for such an important first mod. Mod author was instrumental in porting over 600 mods to Xbox and was one of the only mod authors teaching people how to mod at the time.
- **Patch Warning**
 - Requires precombines to be rebuilt for use on Xbox One (and possibly Xbox Series). It has too many cells disabled to use without significant drops in framerate. Framerate loss on last gen is not sustainable for longterm use.
 - BI has an "Optimization Patch" that rebuilds the precombines
- **Warnings**
 - Due to the extensiveness of the locations and requirement of the optimization patch, plan your load order around this mod if using
- Beantown Interiors Menus
 - New script-injected menu for BI's building collectibles
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with Workshop Rearranged's Beantown Patch
 - **Installing**
 - Install AFTER The Beantown Interiors Project
 - **Important**
 - Mods are for the long haul. Even though there is a uninstall chem, it is never advised to uninstall workshop mods (or any mods) in the middle of a playthrough and continue on the same save.
 - **Requirements**
 - The Beantown Interiors Project
- Beantown Interiors Optimization Patch
 - **Alternative mods**

²⁸ 09-20-2023 - See entry for Previsbines Repair Pack and read information about Xbox/Lite Version to make load order determination. Individual testing required. Please report flickers to the Parent Thread so we can update this information. Thank you.

²⁹ 09-20-2023 - See entry for Scrap That Commonwealth (STC)

³⁰ 09-20-2023 - See Lexington Interiors entry

³¹ 11-10-2019: See entries for specific placement of mods with Beantown.

- PRP Lexington (technically but you need the full Beantown patch for it to work with Beantown. So. There's that.)
 - **Compatibility/Known Conflicts/Overrides**
 - Unsure of compatibility with Plenty O' Exploration, Lexington Interiors³², and Stumble Upon Interiors - individual testing required. Works fine with PAWA.
 - More than likely will need to be rebuilt against PRP to be able to be used
 - Not compatible with PRP Lexington
 - **Installing**
 - Install after Beantown Interiors Project
 - Install below STC
 - Install above STS
 - **Requirements**
 - The Beantown Interiors Project
- Drunken Gnomes - The Gnomepocalypse
 - Just the locations of BI's Gnomes without the additional locations or extra junk/magazines
 - **Alternative mods**
 - The Beantown Interiors Project
 - **Compatibility/Known Conflicts/Overrides**
 - Possible header issue with previsibines or Creation Club DLC
 - Full version is standalone and conflicts with Beantown Interiors Project
 - **Installing**
 - Full: standalone. Place above scrap mods or mods that disable/rebuild the precombines with mods that alter multiple areas
 - Lite: requires assets from The Beantown Interiors project (not really 'lite' if using BI, due to BI and BIOP sizes). Install after The Beantown Interiors Project and any patches
 - **Requirements**
 - Lite requires Beantown Interiors Project
 - **Versions**
 - Placement with scrapping mods varies between versions
 - Drunken Gnomes - The Gnomepocalypse (Full)
 - Drunken Gnomes - The Gnomepocalypse (Lite)
 - **Warnings**
 - Gnomes persistent. Do not uninstall in the middle of a playthrough. The fuckers stick. 😊
-
- Subway Runner
 - If using Beantown Interiors Project: place below.
- NCR Veteran Armor
 - Addon node conflict with Storyteller T49 Power Armor and Enclave X02 Power Armor (load order will not affect conflict or fix - they contain the same value on their armors for glowing lights - only one set of addon values can be present in a game, just like face tints) See [Troubleshooting Pipboy and Power Armor Headlamp Lighting Conflicts](#) for more info
 - Individual testing is required for use with Creation Club content that occurs near the same area.
- Stand Alone Construction Power Armor

³² 5-14-2020: Previs (optimization) rebuilt with Lexington Interiors. Individual testing with other mods required.

- Adds collectible power armor to multiple locations
- **Compatibility/Known Conflicts/Overrides**
 -
- **Installing**
 - Install with multiple area mods or quest mods
 - Adjust as necessary for load order
- The Collector: Bobbleheads
 - Legacy Status: Mod has not been updated since prior to Nuka World; however, objects are persistent and should not affect DLC areas. This mod was created prior to updates to the Creation Kit for Creation Club.
 - **Compatibility/Known Conflicts/Overrides**
 - Deleted reference in VaultTecOffice01 (Vault-tec Regional HQ) - do not use with mods that touch VaultTecOffice01 without cleaning first
 - PC: not compatible with F4SE
 - Not compatible with Unofficial Fallout 4 Patch
 - Xbox: Not compatible with current build of game due to packaged F4SE/base game scripting
 - Not compatible with mods that touch bobblehead references
 - **F4SE Warning**
 - Archive contains vanilla base game scripting. (Due to mod's age, it is expected. Clean and repackage archive and clean mod prior to use.)
 - **Installing**
 - Prior to use: PC players, use xEdit to manually remove edits to Cell > Block 9 > Sub-Block 3 0001B0F7: TerminalBroken01 00054E62 and 000474BB COCMarkerHeading and Worldspace > Commonwealth > Persistent 00092098 HitDoorLg01Load
 - PC players, extract
 - **Requirements**
 - Cleaning required for use
 - PC players will need to repackage the BA2 with latest CK for your own game to clean. You will need to know basic-advanced modding in order to do this - instructions go beyond this guide's purpose. MA is no longer active. (do not upload without MA permissions)
 - **Warnings**
 - **Non-unique Name:**
 - The plugin name for this mod is simply questmod.esp. If there is another mod of the same name it could cause issues with the in-game manager. A mod name has to be unique or it will be overwritten by another mod and "Operation Not Completed" happens. Mod authors, please use unique file names.
 - **Identical to Master Records:**
 - Single ITM on persistent load door at VaultTecOffice01 (Vault-Tec Region HQ)
 - Single ITM on temporary reference COCMarkerHeading (does not affect gameplay - only affects mod authors wanting to edit the cell)
 - **Deleted Reference/Disabled Precombines;**

- Disabled precombines in VaultTecOffice01. Deleted reference TerminalBroken01 0054E62. (affects gameplay and visuals for console players. PC, easy 10 second fix for you).

New Quests with New Companions

➤ The Danse Dilemma

- Large quest mod. Consider this mod a vanilla quest overhaul.
- **Alternative Mods**
 - Subversion
- **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that change the faces of Danse, Maxson, Haylen, Brandis, or Rhys
 - Not compatible with SKK Fast BoS
 - Not compatible with mods that alter the Faction record for BoS
 - Compatible with Subversion; however, it is not really recommended to run both together. Danse Dilemma has issues and overwrites vanilla quests NPCs rather than make new forms
- **Installing**
 - Install with Vanilla quests and work down if issues. Test with test character.
 - Installation is determined by other mods in your load order
 - Ideally, The Danse Dilemma really should be run from Vanilla Quests but it greatly depends on your load order. It has several bugs to factions that will cause Danse to attack the brotherhood even after 'his' ending wherein he is the commander of the brotherhood. (eternal, unstoppable firefight)
- **Patch Warning**
 - Hard edits to NPCs and vanilla quests require patching for use with mods that touch the same characters and quests
- **Warning**
 - Does not carry over bugfixes from UFO4P
 - Hard edits to Maxson, Danse, Haylen, Brandis, and Rhys
 - Requires patching for use with mods that alter Danse
 - Mod needs to be updated to current build of game and with unofficial patch.
 - Random faction issues with Danse and other members of the BoS
 - Hard edits to vanilla quests

➤ Tales of the Commonwealth

- Large quest mod. Plan load order around. Touches many places on the map. Adds new companion(s)
- **Addons/Patches**
 - PC only: Optimization Patches Collection
- **Compatibility/Known Conflicts/Overrides**
 - Flickering/visual issues may occur if using with mods that rebuild the previsibines, due to header not matching. Only by rebuilding the previsibines will the flicker disappear.
- **Installing**

- Install with quests/multiple area edits
 - Install below mods that change Followers.pex/Followers quest
- **Important**
 - Previsibine Repair Pack may make the bowling alley disappear; however place Tales above so the updated previs within Previsibine Repair Pack will have precedence to use as an 'optimization patch'. If bowling alley disappears or the door disappears, move below but note the previs issue and be prepared for slight sluggish-ness in the area.
 - Individual testing required when using Previsibine Repair Pack/Beantown/Beantown Optimization Patch
- **Requirements**
 - All 6 original "Season Pass" DLC/G.o.t.Y.
- **Warnings**
 - Disables precombines/previs near Easy City Downs
 - Do not uninstall in the middle of a playthrough. Mod is too large + persistent references.
- The Machine and Her
 - Large quest mod. Plan load order around. Many places around the map this mod touches.
 - **Compatibility/Known Conflicts/Overrides**
 - Do not use with mods that use the same radio frequencies as they could keep the radio stations from playing
 - A.G.N.I.S. radio frequency: 106.989998
 - Agnis Radio frequency: 107.5
 - Agnis Radio frequency: 105.5
 - Navmesh edits to many places on map. Plan load order around.
 - **Installing**
 - Install with quest mods, radio mods, or new companion mods
 - Install below mods that make edits to Kessler world reference
 - Install below mods that make edits to Mirelurk at Lake Quannapowitt
 - Install below mods that make edits to Abernathy farm
 - Where this mod falls is dependent on other mods in your load order
 - **Patch Warning**
 - Requires navmesh patch to work with other quest mods in certain areas on the map
 - Requires Dark Face Glitch Fix to work properly on Xbox. Unfortunately new faces the way the MA set things up do not work on Xbox right.
 - **Requirements**
 - Automatron
 - Far Harbor
 - Nuka World
 - **Warning**
 - Do not uninstall in the middle of a playthrough. Mod too large + persistent references. Plan your load order around.
- Ellen, The Cartographer³³
 - New companion

³³ 2-12-2020: I can see this being incompatible with the CC "Gunners vs Minutemen" - theJeepDriver

- **Compatibility/Known Conflicts/Overrides**
 - Possible incompatibility with Creation Club Content - Gunners vs Minutemen
- **Installing**
 - If purchasing Creation Club: wait until after “Ruined Dreams” to purchase CC. Gunners from CC are not scripted to ignore Ellen.
 - Install with Quest mods, New Companions, or world edits
 - Install below mods that make changes to Followers.pex/Followers.psc
 - Where mod is installed is determined by other mods in your load order

WEAPON AND ARMOR MODIFICATIONS

These are weapon overhauls, replacers, or mods such as barrels, ammos, receivers, etc.

Framework/Overhaul

- Equilibrium
 - Updates vanilla weapon mods
 - Alternative Mods
 - **Compatibility/Known Conflicts/Overrides**
 - AWAD - Automatic Weapons Are Dangerous
 - AWKCR
 - Better
 - Mods that touch
 - **Installing**
 - Install near end of load order under weapon modifications

Replacer

- MWR - Glock 19x - 10mm Replacer (FX0x01)
 - **Alternate mods**
 - Glock 19X MWR Version (FX0x01, ported by Lkilogore14)
 - **Requirements**
 - Glock 19x - Pistol (FX0x01, ported by LandoCummando)
- MWR - Glock 19x - Deliverer Replacer (FX0x01)
 - **Alternate mods**
 - Glock 19X MWR Version (FX0x01, ported by Lkilogore14)
 - **Requirements**
 - Glock 19x - Pistol (FX0x01, ported by LandoCummando)
- MWR - Glock 19x - AIO (FX0x01)
 - **Alternate Mods**
 - Glock 19X MWR Version (FX0x01, ported by Lkilogore14)
 - **Requirements**
 - Glock 19x - Pistol (FX0x01, ported by LandoCummando)
- MWR - Glock 19x - 10mm Pistol Replacer - Keep LL
 - **Requirements**

- Ardent117's Glock 19x³⁴
 - MWR - Glock 19x - Deliverer Replacer - Keep LL
 - **Requirements**
 - Ardent117's Glock 19x
 - MWR - Glock 19x - AIO - Keep LL
 - **Requirements**
 - Ardent117's Glock 19x
 - Stainless Steel .44 Revolver Skins
 - Rertextures .44 Revolver
 - **Compatibility/Known Conflicts/Overrides**
 - Adjust as necessary if using UCO. This mod may need to go above it to take advantage of the .44 legendary swap.
 - **Important**
 - Though this is a texture mod, those that use AWKCR and Armorsmith may have compatibility issues if you run this with the rest of your re-textures mods - this mod uses the updated weapons materials OMOD added by official patch 1.10.6+
 - **Installing**
 - Where mod falls is dependent upon other mods such as AWKCR, UCO, ECO, or other such vanilla weapon overhauls
 - Install with visual mods that rertextures .44 and adjust as necessary

Armor Bench

- Unlock Ballistic Weave

Weapon Bench

- Large Reflex Sight For Laser Rifle And Musket By OreKugiArsenal - Apam [XB1]
 - Mesh replacer
 - **Compatibility/Known Conflicts/Overrides**
 - Incompatible with other mods that replace the reflex sight for lasers and muskets
 - **Installing**
 - Where mod falls is dependent upon other mods
 - Install with visual mods that replace textures/meshes
 - Install under laser rifle replacers/stats updaters
- 5.56 Combat Rifle
 - ALL .45 combat rifle receivers changed to 5.56 - not compatible with mods that change .45 receivers - mod author overwrote vanilla forms instead of creating new
 - Adjusts level lists - unsure of compatibility with other level list alterations
 - Requires further testing
- See-Through-Scopes
 - Adjust as needed for your weapon mods, this file may need to come before it.
 - There are add-ons for Nuka World and Far Harbor.

³⁴ 12-14-2021: As of this writing, I am unable to find Ardent117's version of Glock 19x for Xbox players. The mod has been pulled from Nexus. Unsure why mod was ported. Can the porter contact me? I do not bite.

- There are two versions. Weapons that have not been updated for the newest version may need to be used with the older version or retired from use if crashing occurs.

Weapon Sound/Animations

- Tactical Reload Framework
 - Animation overhaul
 - **Addons Patches**
 - DLC weapons
 - Vanilla weapons
 - See through scopes patch
 - TR Expansion for ECO
 - **Compatibility/Known Conflicts/Overrides**
 - Weapons mods that do not have the framework as a master
 - Animations that edit 1st person root behavior
 - Animations that edit reload
 - Vanilla weapon overhauls that have not added the framework as a master
 - mcgFemaleWalk
 - **Important**
 - Overhaul, do not use with other weapons animations overhauls
 - If ini file is available change IsHolderVisibleOnNPCs from 1 to 0; if crashing still occurs discontinue use
 - PC players submit Buffout 4 log to Collective Modding if unknown crash occurs with this mod enabled and you have exhausted all other troubleshooting methods
 - **Installing**
 - Install below Equipment and Crafting Overhaul
 - Install above TR Expansion for ECO
 - May need to go below weapons with Weapon Animations, it depends on the weapons you've chosen
 - **Warning**
 - Causes crash with incompatible weapons held by players and NPCs
 - Causes unknown crashing when used with any type of animation mod during combat - sometimes without updated animations

Ammo

- Reanimation Pack For Combat Shotgun And Rifle
 - Make sure this is below any mods that affect Combat Rifle or Combat Shotgun, otherwise can be run as high as Visual, Atmospheric, and Textural Mods - adjust as necessary to your own load order
 - Modifies and adds OMODs for Combat Rifle and edits damage modifiers; do not use with other mods that directly modify the combat rifle
 - Modifies and adds OMODs for Combat Shotgun and edits damage modifiers; do not use with other mods that directly modify the combat shotgun
 - Place below Immersive Gameplay, if you want to use both (but you will lose all edits IG makes to the combat rifle and shotgun)

- NOTE: When using animations mods, they are RACE edits. If a mod author overwrites vanilla forms, you will not be able to use any other animation or idle mods.
- Reanimation Pack For SubmachineGun
 - Needs to go below any mods that affect the Submachine Gun; otherwise can be run as high as Visual, Atmospheric, and Texture Mods - adjust as necessary to your own load order
 - Modifies and adds OMODs for Submachine Gun and edits damage modifiers; do not use with other mods that directly modify the submachine gun
 - Place below Immersive Gameplay, if you want to use both (but you will lose all edits IG makes to the submachine gun)
- Realistic Ammo Weight & Cost
 - Not compatible with VIS or sorting mods that affect Ammo
 - Ammo **overhaul**
-

LANDSCAPE AND GRASS

(tentative placement of category header)

Several NexusMods landscape mods have been ported to Xbox that are required to be above mods that touch precombine data, such as regenerating meshes and previs recalculations or breaking it and not recalculating previs. If the world edit mod does not have precombine data or does not touch precombine data, landscape and grass must go after (End of Load order or finicky mods). Testing for each load order is required; inquire about it in the Parent Thread if you are having difficulty. Some landscape mods will NOT work with certain mods and certain, older mods with previs disabled will NOT work with some landscape mods. Most landscape mods can be safely placed in Visual, Atmospheric, Textures without issue to mods below.

See AndrewCX's article: [Understanding precombines, previs and why mods that disable them can cripple game performance](#) for more information.

Because this section is so fluid and based solely on player load order, no examples can be provided for starting placement.

General (tentative³⁵) load order placement for landscape³⁶ mods (not considered full overhauls*) ported recently:

- [under construction - precombines are a bitch to find load orders for]

* full overhauls have traditionally been run at the bottom of the load order because the majority do disable the optimization system OR rebuild the optimization system and provide LOD in order to maintain visual consistency and must override any changes to the exterior above. Overhauls generally will not work to their fullest this high in the load order. Mods that make changes to grass, such as No Twigs, need to run below those overhauls so that the edits No Twigs make show through; however, if the overhaul recalculates previs, No Twigs will need to run above and may not work at all based on data edited in the overhaul. Thus: conflict.

³⁵ 11-25-2019: This may change as more mods are added. Please join the discussion. Every load order is different.

³⁶ 5-14-2020: per Arthmoor: landscape height changes and anything attached to landscape data on a cell turn off the optimization system for that cell + the uGridsToLoad distance

- Boston Natural Surroundings
 - Foliage/tree adder. Adds trees and other foliage with different models
 - **Alternative Mods**
 - Simple Green
 - Other foliage Mods
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with other mods that add new trees
 - Not compatible with Simple Green
 - Not compatible with scrapping mods
 - **Installing**
 - Install near end of load order
 - **Patch warning**
 - Requires patch for use with scrap mods
 - **Requirements**
 - All 6 DLCs
 - **Versions**
 - There are several versions to choose from. Select only one.
- Overgrowth
 - foliage/tree replacer. Replaces all trees and ferns in game with different models by replacing the full reference records.
 - **Alternate Mods**
 - SimpleGreen
 - Other Foliage mods
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that touch Fanuil Hall
 - Not compatible with mods that add trees
 - Not compatible with Far Harbor DLC
 - Not compatible with Nuka World DLC
 - Not compatible with scrapping mods; scrapping mods are looking for the original model/record
 - **Installing**
 - PC: Add Far Harbor and Nuka World DLCs as masters and regenerate Previs and Precombines for entire load order prior to using.
 - Xbox: Not recommended if you have all DLC or CC. Use at your own risk, if you do. No version for DLC to update previs/precombine records - visuals across cell boundaries may not work properly + optimization system across large areas of game world is disabled
 - PS4: Not recommended. Use alternate mod
 - **Patch Warning**
 - Requires patch for use with scrap mods
 - Requires patch for precombines
 - **Warnings**
 - Mod created before much known about the optimization system.

- There is no version to update previs/precombines with Nuka World or Far Harbor (there are previs/precombine updates to the Commonwealth that all world edit mods that touch the optimization system must be aware of and take into consideration)
- Previs/Precombines require regeneration for use on PC



SCRAPPING, TERRAIN, PRECOMBINES REBUILT

Scrapping mods are available but not advised to use on console. Mods that were created prior to a good understanding of how the Optimization System worked are not recommended. Check the dates of all mods and their creation dates, if ported.

The majority of the scrapping mods available require the precombines and previs to be re-generated. Regeneration of the optimization system is not available for console nor can it be done if using the .INI edit: *bUsePrecombinedObjects=0*.

PC players: Regenerate the precombines and previs before using unless using a mod like Raze My Settlement or the mod author says that you do not have to. If you have to use the .INI edit *bUsePrecombinedObjects=0*, the Optimization System is turned off *globally*, and it destabilizes the game. **Console players:** this .INI edit is a dangerous edit and will break your game. Study any ports that offer scrapping and do not use ports of mods that use this. There are only three known scrapping mods that are generally safe for console use: Scrap That Settlement (STS), Raze My Settlements, and Clean My Settlement REDUX.

Disabling the precombination system across the game cripples game performance. Once performance goes, so does the Papyrus Virtual Manager, which controls quests, triggers, AI, and other systems. Some people call this “script lag.” Once the VM slows, the game slows and things eventually stop working.

See [Optimization System Conflict Resolution](#)

See AndrewCX’s article: [Understanding precombines, previs and why mods that disable them can cripple game performance](#) for more information.

[Per chucksteel](#): Disabling the precombination system as single cells edits still affect the game but not as bad as disabling the entire system.

Interior - Single

Interior - Multiple

- Enhanced Lighting and Effects
 - **Addons/Patches**
 - Optimization Patches Collection - ELFX (not available for Xbox)
 - **Alternate Mods**
 - Calamity Weathers Interiors
 - **Installing**

- PC: Rebuild the precombines before playing or download and override with Optimization Patches Collection to clean mod of all bad cell edits
- Xbox: Not recommended without cleaning; not recommended without optimization patch; too many light sources for OG Xbox
- PS4: Not recommended, there is no way to regenerate precombines for cells
- **Warning**
 - Disables precombines by moving static candles and light sources in many cells

Exterior - Single Area

- Sanctuary Lives Again

Exterior - Multiple area

- Wasteland Illumination
 - Adds lights to exteriors
 - **Alternative Mods**
 - Illuminated Billboards
 - **Compatibility/Known Conflict/Overrides**
 - Load above Previsibines Repair Pack
 - **Patch Warning**
 - Needs header patch for Previsibines Repair Pack if flickers happen
 - **Installing**
 - Install with mods that add things to the world
 - Install above scrap mods
 - Install above Previsibines Repair Pack
- Scrap all the things
 - Not compatible with other scrapping mods
 - Unsure if a global or singular occurrence of disabled precombination system. Possibly global. See [this](#) thread on visual detection of precombines on console where the mod was studied in detail for more information. The original thread where this mod was studied was closed by Bethesda.net moderators (fighting, naming, and shaming). NOTE: Material swaps are not easy to detect on consoles, some world edit mods are designed to blend seamlessly in the world, such as mods that replace houses or trees.
 - Abandoned mod. Use at your own risk.
- NEBAS
 - Not compatible with other scrapping mods
 - Does not have as many scrapping lists as STS - Scrap That Settlement!
 - Unsure if a global or singular occurrence of disabled precombination system.
 - Unsure of compatibility with Conquest
 - Unsure if any issues with Starlight or Jamaica Plain, did not use long enough to do a thorough test and character had not yet discovered Jamaica Plain.
 - Abandoned mod. Use at your own risk.
- STC - Scrap That Commonwealth! -Base
 - **WARNING: Nuka World Add-on is NOT compatible with Freefall 4 (PS4) or Junkmaster (Xbox). Using them together will crash the game and require a complete re-install of**

Fallout 4 and your mods. ~~The mod authors are looking into the issue; but choose one or the other for the time being.~~ MA's are no longer updating and have retired the Nuka World Add-on.

- Sister mod to Scrap that Settlement (STS)
- Not compatible with other scrapping mods (OTHER THAN Scrap that Settlement! Which contains this mod's scrap lists).
- Does not have the scrap lists to get the scrap from items when scrapping. Scrap lists are contained in Scrap That Settlement.
- Joint mod by 3lric and Tim-timman.
- DLC Plug-ins MUST go below in order shown. Scrap That Settlement MUST go below this mod. Scrap that Settlement add-ons can go in any order below Scrap that Settlement.
- Starting position only. If need be, move to the bottom of your load order.
- In order to be able to scrap outside vanilla borders, you MUST have Build Anywhere or another workshop enabler like Workbench Anywhere.
- SCRIPTED
- Mod is no longer being updated and is officially retired. Unsure of compatibility with Creation Club world edit mods. Unsure if hard edits or scripted for scrapping. Use at your own risk.
- Scrap That Commonwealth - Automatron Add-on
- Scrap That Commonwealth - Far Harbor Add-on
- Scrap That Commonwealth - Vault-tec Add-on
- Scrap That Commonwealth - Nuka World Add-on
 - **WARNING: Not compatible with Freefall 4 (PS4)! Using this Add-on with Freefall 4 will cause your game to crash in the menu and you will have to re-install FO4 and your mods.**
 - **WARNING: Not compatible with Junkmaster (Xbox). See warning for Freefall 4**
 - MA's are no longer updating and have retired the Nuka World Add-on. Use at your own risk.
- STS - Scrap That Settlement!
 - Sister mod to Scrap that Commonwealth
 - Mod has plug-ins for DLCs that will need to run after the base component; choose plug-ins based on DLCs you have installed
 - Mod also has All-in-One DLC version; choose either the AIO OR the Base + individual DLCs. You do NOT need all.
 - Not the mod's fault per se, but plug-in for Automatron may have crash issues due to everything going on in a limited space. The machine can only process so much at once. Be aware of that prior to using at the Mechanist's Lair. Mod author has done all he can to keep crashes to a minimum.
 - Due to issues within Automatron, it is currently only recommended to use the Base and use the individual addons as needed.
 - Read description and mod author's FAQ prior to downloading; **incorrect load order will cause scrapped items to reappear.** There are also instructions and tips for using Automatron plug-in at Mechanist's Lair.
 - Using with Scrap that Commonwealth and Build Anywhere will enable the player to literally scrap the Commonwealth. :)
 - Load order DEPENDENT. Must go beneath Scrap that Commonwealth if using both mods.
 - Starting position only. If need be, move this and Scrap the Commonwealth to the bottom of your load order.

- The mod author has not said how this mod is set up. When used *without* STC there are no player reports of instability. Due to issues with STC, especially in light of STC no longer being updated, it is recommended that only STS be used instead of both unless building only one settlement at a time per save, which is recommended for massive builds.
- Legacy Mode: Mod is no longer being updated and is officially retired.
- Scrap that Settlement! Extras! Living and Dead!
 - Add-on to Scrap that Settlement
- SPS - Settlement Prep & Scrap (Transit Center)
 - Compatible with STS, STC, and Conquest
- Snappy Scrap (NexusMods port)
 - Unsure of compatibility with STS. Only one player has provided feedback for the document- it appears to be but requires a convoluted enabling and disabling between the two mods - and I have not tested this mod personally.
 - Replaces houses with Snappy Housekit houses so that they can be scrapped.
 - Mod author of Snappy Housekit released this mod on PC as a courtesy after they used it for testing Snappy Housekit. See NexusMods mod page comments for details.
 - Per mod author, mod is set up like “other scrapping mods”. Use at your own risk.
- Raze that Settlement
 - Scripted. Do not uninstall mid-play.
 - Use at your own risk.
 - Requires Workshop Framework
 - Vanilla scrap lists used.
 - Not compatible with other scrap mods.
 - Starting point only. Unsure of compatibility with Beantown Optimization patch
 - Does not touch the optimization system.
- Scrap Everything - Ultimate Edition
 - **Alternative Mods**
 - Any other scrap mod
 - Dangerous mod. Use at your own risk.
 - Console players are not advised to use due to complete removal of the optimization system.
 - No load order assistance is provided for Buffout 4 logs if this mod is in your load order
- We Can Live In: Poseidon Energy Turbine Settlement
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that affect the same area
 - Not compatible with mods that rebuild previsibines in same cell
 - **Important**
 - Rebuilds precombines
 - Mod author is currently active, if issues occur, they need to know about it (politely inform them of bugs)
 - **Installing**
 - Install above Previsibines Repair Pack
 - Install with mods that rebuild precombines
 - **Requirements**
 - Automatron DLC
 - Wasteland Workshop DLC

- Poseidon Energy Can Have Radar Transmitter
 - **Installing**
 - Install in Vanilla quest edits or below We Can Live In: Poseidon Energy Turbine Settlement
- We Can Live In: Natick Substation Settlement
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that affect the same area
 - Not compatible with mods that rebuild the precombines in the same location
 - **Important**
 - Rebuilds precombines
 - Mod author is currently active, if issues occur, they need to know about it (politely inform them of bugs)
 - **Installing**
 - Install above Previsibines Repair Pack
 - Install with mods that rebuild the precombines
- We Can Live In: Nahant Red Rock Settlement
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that affect the same area
 - Not compatible with mods that rebuild the precombines in the same location
 - **Important**
 - Rebuilds precombines
 - Mod author is currently active, if issues occur, they need to know about it (politely inform them of bugs)
 - **Installing**
 - Install above Previsibines Repair Pack
 - Install with mods that rebuild the precombines
- We Can Live In: North Point Park Settlement
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that affect the same area
 - Not compatible with mods that rebuild the precombines in the same location
 - **Important**
 - Rebuilds precombines
 - Mod author is currently active, if issues occur, they need to know about it (politely inform them of bugs)
 - Bunker Hill and North Point Park close enough to communicate and have memory issues if both are built heavily. Xbox and PC potato chips: Build light at both or only pick one to build in.
 - **Installing**
 - Install above Previsibines Repair Pack
 - Install with mods that rebuild the precombines
- We Can Live In: Rock Island Settlement
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that affect the same area
 - Not compatible with mods that rebuild the precombines in the same location

- **Important**
 - Rebuilds precombines
 - Mod author is currently active, if issues occur, they need to know about it (politely inform them of bugs)
 - Warwick and Rock Island are close enough to communicate and have memory issues if both are built heavily. Xbox and PC potato chips: Build light at both or only pick one to build in
- **Installing**
 - Install above Previsibines Repair Pack
 - Install with mods that rebuild the precombines
- People Live In: Dark Hollow Pond
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that affect the same area
 - Not compatible with mods that rebuild the precombines in the same location
 - **Important**
 - Rebuilds precombines
 - Mod author is currently active, if issues occur, they need to know about it (politely inform them of bugs)
 - **Installing**
 - Install above Previsibines Repair Pack
 - Install with mods that rebuild the precombines
- People Live In: Roadside Pines Motel
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that affect the same area
 - Not compatible with mods that rebuild the precombines in the same location
 - **Important**
 - Rebuilds precombines
 - Mod author is currently active, if issues occur, they need to know about it (politely inform them of bugs)
 - **Installing**
 - Install above Previsibines Repair Pack
 - Install with mods that rebuild the precombines
- People Live In: Unmarked Raider Camps
 - **Compatibility/Known Conflicts/Overrides**
 - Not compatible with mods that affect the same area
 - Not compatible with mods that rebuild the precombines in the same location
 - **Important**
 - Rebuilds precombines
 - Mod author is currently active, if issues occur, they need to know about it (politely inform them of bugs)
 - **Installing**
 - Install above Previsibines Repair Pack
 - Install with mods that rebuild the precombines
- Goodneighbor View
 - **Installing**

- Install after Better Goodneighbor
 - Install with mods that rebuild the precombines
- Goodneighbor View - Better Goodneighbor Patch
 - **Installing**
 - Install after Goodneighbor View
 - **Requirements**
 - Goodneighbor View
 - Better Goodneighbor
- Boston FPS Fix
 - This mod is not currently compatible with GoTY/DLC versions of the game or the Unofficial Patch.
 - This mod is not compatible with Far Harbor DLC on Xbox.
 - Has been updated into Previsibine Repair Pack.
 - **Alternate Mods**
 - Previsibine Repair Pack
- Previsibine Repair Pack
 - Updated version of Boston FPS Fix
 - Optimization System repair, precombine mesh and previs update. See [Precombines](#), Previs, and Load Order for as to why this mod is important if using mods that disable the precombines or if you are on Xbox OG or Xbox One S.
 - **Alternate Mods**
 - None
 - **Important**
 - Repairs precombines and provides bug fixes where applicable
 - If scrapping 'turns off' in places where repaired, the precombines were broken there
 - **Installing**
 - Install under all world edit mods
 - **Requirements**
 - Unofficial Fallout 4 Patch
 - All 6 DLC/Season Pass/GoTY
 - **Versions**
 - Xbox has different areas repaired to cut down on file size

BOTTOM OF LOAD ORDER (as well as finicky mods)

- Universal Missing Menus (DarthWayne)
 - This is for accidentally uninstalling a workshop menu and breaking the formlist that holds that menu. It will not prevent Power Grid Corruption.
 - You do not have to download this until you actually need it. It will only take up room in your 150 limit.
 - **Alternative mods:**
 - Settlement Menu Manager
 - Settlement Menu Manager offers an alternative. If you are already using SMM, this mod is obsolete.

- **Installing:**
 - Install only if you are not using Settlement Menu Manager and only if you have accidentally removed a workshop menu
 - Install at bottom
- **Important:** Do not uninstall workshop mods. See Power Grid Corruption for more information.
- **Warnings:** This mod will revert menus to vanilla state and may break other mods.
- **TreyM's LUT Framework**
 - Two versions (one for vanilla weathers, one for NAC - Natural Atmospheric Commonwealth)
 - Has plugins for DLCs
 - TreyM is no longer modding due to fallout and drama between TreyM and the MA of NAC. No support is provided for this mod.
 - Place below weather and lighting edits.
- **TreyM's LUTs**
 - ONLY USE ONE
 - Requires TreyM's LUT Framework
- **Scrupulous Scrapping**
 - Is NOT a scrapping mod; changes the components and weights of vanilla Junk
 - Mod has not been updated since prior to September 2016 on Bethesda.net; July of 2016 on NexusMods - no DLC junk included
 - **Junk overhaul**
 - Place below Conquest if using. See [this post](#) and [this post](#) on the parent thread for more information on troubleshooting if having issues with Conquest.
 - There are issues with using with Conquest: LOAD ORDER IMPORTANT
 - If placement is incorrect, causes doubling and tripling of items in the workshop with provisioner assigned; not removing items in the workshop could cause workshops to crash
 - Place below Valdakil's Item Sorting if using
 - NOTE: You will not have sorting tags on junk items if using with VIS junk (either version, weightless or vanilla weights)
 - Place below Workshop Rearranged if using
- **Busty**
 - Works best when run after Clothing and Armor mods; however, if any issues occur, run lower
 - Body morph extender for use with EVB, Vanilla, and CBBE. NOT the same as Busty EV Body replacer. Busty EV Body Extender contains its own body and is not compatible with CBBE (see Character Models if wishing to use an EV Body).
 - Must be placed below Mods that contain new bodies.
 - Race mod
- **Cheat Terminal (NexusAU/Gir489)**
 - Comprehensive cheat mod
 - **Alternate Mods**
 - Any other cheat mod
 - **Important**
 - Totally portable without world edits. Other terminal buildable in workshop for more advanced options not accessible via pip-boy due to terminal script limitations.

- Mod author source code is available for review; submit bugs or improvements at mirror site (Note: MA has been banned from Nexus without a way to contact other than mirror site)
 - Adds holotape on install
 - **Conflicts**
 - Only use one Cheat Mod
 - **Conflicts with Craft Armor and Craft Weapons by Bionicyardiff. See Craft Weapons and Craft Armor entry for more information.**
 - **Warning**
 - As with all cheat mods, use most of the cheats at your own risk.
 - Do not use the 'Infinite Items' cheat or any like it. There are too many mods that conflict with the scripting and the placeholder object in your inventory. It will cause an infinite loop which can lead to a game crash. Only PC can keep from crashing if the computer is strong enough, but the save will not be recoverable after the loop begins. See Craft Weapons and Craft Armor since those mods use the same scripting.
 - **Installing**
 - Install under weapons mods. Mod has inter-mod communication scripting to look for DLC and mod-added weapons and other items.
 - Per mod author: Last in order.
- Always Clear Weather for the Commonwealth, Far Harbor, Nuka World
 - There are **SEVERAL DIFFERENT VERSIONS** - choose ONLY ONE
 - Commonwealth only, Commonwealth/Far Harbor, Commonwealth/ Far Harbor/Nuka World; others with and without Time Scale changes
 - Plan playthrough accordingly and download correct mod; adjusting time scale can have adverse effects on quests
 - Some versions are meant only to be enabled while building and disabled when not in use. Read the directions in the mod description.
- Place Anywhere (registrator2000)
 - Incompatible with mods that modify the Workshop and ExamineConfirmMenu interface files
 - Mod has on-off switch. **Toggle "Master Control" off in Settings Menu prior to disabling mod**
 - Per mod author: safe to disable during mid-play
 - Load AFTER Locksmith and toggle Master Control off in settings menu to use Locksmith's options
 - Not exactly compatible with Looks Mirror or PWR - Power Water Resources Vol. 1. Toggle "Master Control" off in settings menu prior to using the full functions of those mods.
 - Not exactly compatible with Anyone Can Fill a Bottle! Toggle "Master Control" off in settings menu to access ACFaB's functionality.
 - Not exactly compatible with Locky Luke's Locky Boom - Toggle "Master Control" off during exploration to use Locky Boom's options.
 - **Starting point only.** If issues occur, move lower until issues no longer persist. YMMV with this mod. FYI - I have ALL DLCs. ~~EDIT 3/1/2017: Using Conquest - this mod works best after Conquest and near bottom of load. Updated LO worksheet to reflect.~~
 - ~~○ Does work with Conquest, but you must use the Conquest workshop and not the menu chem, the view button workshop menu option, or the grab and drop menu option. Check the parent thread~~

~~or the mod author's RELZ thread for more information. Also check out CordlessVII's Skyscraper build video: https://youtu.be/pZLNAd7EC_g for using Place Anywhere with Conquest.~~

~~○ If using Conquest, see notes under Conquest~~

○ **As of 8-2-2019 does not appear to have compatibility with Conquest. Choose one or the other.**

➤ Copypasta

- Mod has bugs, however works as advertised.
- Instructional video on YouTube [here](#).
- Mod author is no longer updating or modding

➤ Remove Level Requirement for Perks

- REQUIRES ALL DLCs
- Use with caution
- Not all Perks have their level requirements removed; see mod page for details
- Per mod author: place at bottom of load order. Test to adjust.

➤ SIC Settler Identity Card (Mikado35) **No longer Available**

- **If using with Conquest:** Does not appear to work when settlers are summoned with beacon, even if settlers are moved to another settlement; HOWEVER, if you name a settler from a vanilla settlement and THEN move them to your Conquest settlement, they will keep their SIC name, but you will not be able to use the Falsified Identity Card to rename them once they've been reassigned to your Conquest settlement
- **If using Better Settlers:** place beneath for best results

GAMEPLAY OVERHAULS

The following is just a list with notes and not to be used as a 'load order'. It is placed outside the Framework so that readers will know what to look for when planning load orders that feature gameplay overhauls. That said, there are a number of mods here that *are* bottom of the load order because of their complex architecture.

NOTES AND WARNINGS:

- Plan your load order AROUND the Overhaul, not the other way around. These mods are generally DLC-sized and the load order MUST be planned.
- **Do NOT use more than one Gameplay Overhaul.** There is no way to manage the load order conflicts if you do. Consoles do not have access to debug functions nor do we have access to make our own patches.
- Read ALL documentation prior to installing and enabling. Be aware of any changes prior to them being made.
- NEVER uninstall a Gameplay Overhaul in the middle of a playthrough and continue on the same save. The save is irreversibly broken after uninstallation due to the amount of changes a Gameplay Overhaul makes.
- Install prior to Game Start. NEVER install a Gameplay Overhaul after the start of a game unless the mod author specifically says it is ok to do so. These types of mods usually make too many edits in cells that do not respawn to be of any use to the player if installed after game start.
- DO NOT USE other mods with Gameplay Overhauls unless the mod author has a list of compatible mods to use with their mod. Gameplay Overhauls usually are **stand-alone All-in-One Mods** and others will generally break the overhaul.

- NOTE: Not all mods listed here will remain as they are after download. Some are master files and are designed to jump to the top of your load order.
- Have fun!
- Crafting76
 - Author has Discord. Recommend joining that if you have any questions.
 - Overhauls HUD - do not use with HUD mods not recommended by author
 - Overhauls Gameplay
 - Overhaul Crafting, including chems, weapons, armors
 - Overhauls weapons, armor
 - Not compatible with any other crafting mod
 - Requires patches for chems, ammo, and other items
- MAIM 2
 - Author has Discord. See Nexus page for link. Recommend joining that if you have any questions.
 - Has mod requirements. See mod page.
 - There are two versions ported by 2 different people.
- Sims Settlements
 - OVERHAULS SETTLEMENT SYSTEM
 - **ESM** - this mod is a Master plugin file. It will jump to the top of your load order
 - Compatible with UFO4P and Workshop Framework
 - Sim Settlements Conqueror takes 2 hours real time of staring at the floor in the vault upon startup; created for high-end PCs; low-end PCs and consoles use extreme caution
 - Has addons
- Junkmaster
 - **ESM** - this mod is a Master plugin file. It will jump to the top of your load order; anything below will override it and could cause many issues if there's a major conflict. It is listed here to keep all Gameplay Overhauls together.
 - NOT COMPATIBLE WITH STC NUKA WORLD
 - Mostly Standalone. Incompatible with a lot of mods - see mod page for details
 - MA team has a Discord server - PC version is located there
 - OVERHAULS ENTIRE GAME - DLC-sized content
 - Double-check on mod page for UFO4P compatibility
 - AWKCR no longer required; AWKCR more than likely now incompatible - double check on mod page or discord server
- The World is Dying
 - OVERHAULS VANILLA WEAPONS, PERKS, LEVELED ITEM LISTS, AND CONSUMABLES
 - See mod description for more details
 - Compatible with NPC Accuracy Adjustment if NPCAA is run below
- War Never Changes
 - Upgrade of Brutality
 - Incompatible with a lot of mods - see NexusMods page for details
 - OVERHAULS PERKS, SURVIVAL MODE AND ENTIRE GAME - Do NOT use with other mods, especially those that touch any perks, HC_Manager or HC_ManagerScript, or Sorting Mods
 - DLC-sized content

- Workshop Rearranged may have an updated patch for Xbox; check Bethesda.net for details or ask on the WR mod page for a link
- Immersive Gameplay
 - Be sure to read all instructions, tips, tricks, etc. the mod author gives prior to downloading and enabling.
 - STANDALONE. Incompatible with a lot of mods.
 - OVERHAULS SURVIVAL MODE - do not use with other mods that touch HC_Manager or HC_ManagerScript
 - DLC-sized content
 - This mod makes changes to EVERY aspect of the game
 - NOT Compatible with Scrapping mods
 - Mod Author has extremely informative changelog and patch list at <http://reddit.com/r/FO4ImmersiveGameplay/>
 - Patches (some can be used as standalones if not using Immersive Gameplay):
 - Dismemberment - An Immersive-Gameplay Patch Or Standalone Feature
 - Move to Category 2 if using as a standalone feature
 - To see a list of standalone features and patches, do a search on bethesda.net for “Immersive-Gameplay” without the quotations
 - Start your test play with patches that are standalones in Category 2, 6 or 8. Start high and adjust as necessary.
- Project X Mods - Unofficial DLC
 - OVERHAULS ENTIRE GAME - do not use with other mods, it will break the overhaul
 - Not compatible with UFO4P or UCO and many other mods
 - Localized. Game engine believes the mod to be DLC. Do NOT remove in the middle of the playthrough.

Note: The following mods are technically overhauls and listed here because their mod authors suggest they be the very last in the load order. If you are not using one of the above Gameplay Overhauls, list them in Bottom of Load Order if you need to post your load order on the Parent Thread. Thank you.

- Full Dialogue Interface
 - Does not appear to work above any other mods that alter any quests.
 - Unconfirmed reports of not working with certain ini edits. More testing required.
 - LOOKUP FAILED! text will occur loading screens if not using the patch for current game updates
 - Note for PC players: Unconfirmed reports that using a different dialogue extender, such as Extended Dialogue works much better than FDI due to FDI's patches for the current updates not being created or maintained by the original author
 - Not compatible with Sim Settlements 2. See SS2 wiki for more info.
- LOOKUP FAILED - Full Dialogue Interface Patch
 - Must be updated with every new official patch
 - Must be used with Full Dialogue Interface
 - Required for Full Dialogue Interface to function properly
- Start Me Up (tinyManticore, ported by chucksteel)³⁷

³⁷ 8-2-2019: Moved to gameplay overhauls. It is a dialogue and quest overhaul and one version requires Full Dialogue Interface.

- Requires [XB1] [English] Full Dialogue Interface (NewDialog English Translation/Port)
- There are THREE versions. One that requires Full Dialogue Interface, one that does not, and normal prompts. Choose the one that works best for your playthrough.
- Requires new game.
- Not compatible with SKK Fast Start Mods
- Has patches for DLCs
- Has spouse spawn issues. Abandoned mod.
- Start Me Up (tinyManticore)
 - Abandoned mod. Use Start Me Up Redux instead.
- Start Me Up Redux (tinyManticore, Dashboarderian, ported by oddlittleturtle)
 - Two versions broken into 6 different plugins on Bethesda site, one version requires [XB1] [English] Full Dialogue Interface (NewDialog English Translation/Port)
 - Requires new game.
 - Has patches for DLCs
 - Spouse spawn issue fixed. Updates on-going.
 - See [website](#) for more detailed information
- Start Me Up Redux (Dashboarderian)
 - Spouse spawn issue fixed
 - Has patches for DLCs and other mods
 - Two versions, XDI recommended rather than FDI
- No Main Quest
 - Requires an alternate start mod (e.g. Start Me Up, Another Life, etc.)
 - Breaks the guests “Out of Time” and “Jewel of the Commonwealth” to prevent the remainder of the Main Quests from starting.
 - Moves Preston and the other Quincy survivors out of Concord.
 - Preston and Nick Valentine are not available as companions.
 - The Institute is not joinable.
 - Mod description states it changes the Time “from 20 to 8.” *Per thejeepdriver: “I checked the Time Setting via Cheat Terminal; setting shows Time is still at 20. Needs more testing to verify.” Do not play with the time setting lowered.*
 - Not fully compatible with Beantown Interiors or STS. Place above both mods for full functionality of said mods.
 - Not compatible with mods that alter Preston, Nick, or Marcy and Jun Long.
 - Not compatible with SKK Fast Start Mods
 - Not compatible with mods that alter the Institute
 - Not compatible with Sim Settlements 2
- Freecrafter
 - Cheat mods that give you all perks at once are not compatible with this mod
 - Mod author has very informative FAQ. Read FAQ before downloading.

APPENDICES

Appendix A: Analysis of a Load Order

Mod Load Order Spotlight

More Smarter Companions

NOTE: "Mod Load Order Spotlight" originally written for the Parent Thread Dec 15, 2017. Modified for this document. [Link to post at Bethesda.net community forums.](#)

Mod Tested and Scrutinized:

More Smarter Companions

More Smarter Companions is a **companion combat overhaul**.

After using the mod on Xbox and then studying the mod in FO4Edit and comparing it with other companion mods I want to use, I've found that I was not using this mod to its fullest. I've since corrected this on my Xbox, but I haven't corrected the load order listed in my sig or on the load order document. I'm hoping to get a few hours this weekend to update... well everything. xD I've promised a few people a couple of mods and wanted to continue to test my survival combat tweaks mod though so I get to wait for the Creation Kit to load for most of the weekend. We'll see how much time I have left after that.

Since More Smarter Companions makes direct edits to the companions, and not by script-injecting the edits like the Automatron DLC injects keyword edits to Codsworth to make him moddable, it cannot be used with any mods that change anything about any of the characters. It gives companions new attack styles and perks by making new Combat Style form ids among other edits, including their base weapons - either by giving them a new base weapon or editing their base weapon. The new combat styles make each companion more unique than they were. It also changes the distance followers follow and increases the distance between you and them when you bump into them. This game setting is the easiest to override so always ask what the distance if you use another tweak mod/overhaul that says 'put at bottom'.

How to use this mod to its fullest extent with other companion mods:

Note: I will be happy to test others, these are just the ones I'm using for my Xbox load order. Let me know, and I'll add to this.

First, console players cannot use it with mods that alter the faces. Not without a compatibility patch for each edited companion. All aspects of an NPC file are on the same 'character sheet' within the Creation Kit. So you can either have unique faces or you can have companions with unique fighting styles and their own set of perks and buffs.

More Smarter Companions vs. Moddable Robot Settlers

Both make direct changes to Codsworth's character sheet. You can use both together, however to use More Smarter Companions to its fullest and have Codsworth's aggro AI set to "Cautious" (where he doesn't get in the way of your shots), More Smarter needs to be below Moddable. Using it this way means there is a chance that the script-injection from the Automatron DLC will not function properly and add back the keywords to make him moddable however. Going up against bloatflies in Sanctuary with a level 4 character fresh out of the vault and a couple of personal combat tweaks to all insects and their combat styles caused Codsworth to flee in terror and scream, "Help me!" Suffice it to say, he did not get in the way.

I accidentally broke my level lists so have not been far enough to check and see if the Automatron script inject is actually going to work doing it this way. It should, but those who add More Smarter after Automatron has already begun may have issues since the script-injection quest is set to only run once at start up.

TL;DR - Load order:

- Moddable Robot Settlers
- More Smarter Companions Mod

Run both on a new game without other companion edit mods, and Automatron's script-injection should allow Codsworth to be moddable at the robot workbench. It may be hit or miss if running on a game that's already started and/or your character is over level 15 and the Automatron quest has already begun.

More Smarter Companions vs. Nick Valentine's Day

Nick Valentine's Day changes Nick's race so you can change his clothes. It also gives him a new, unique companion gun. It's this unique gun that will not show up if you run Nick Valentine's Day above More Smarter Companions. If you run the mods vice versa, you lose all the new perks and combat styles that is added by More Smarter Companions.

TL;DR - Load Order:

- Nick Valentine's Day
- More Smarter Companions Mod

More Smarter Companions vs. The Danse Dilemma (Face Maxson) vs. Get Danse Out of His Power Armor

Note: Get Danse Out of His Power Armor has a PC equivalent, but I could not find the exact mod by the same author.

The Danse Dilemma adds cut dialogue and after his personal quest allows you to either duel Maxson for control of the Brotherhood of Steel, exile Danse, or convince Danse to join the Railroad or Institute.

You can use both together, for a price. In order for The Danse Dilemma to function properly and not derp at inopportune times, you will lose the new perks and Combat Style added by More Smarter Companions. The Danse Dilemma attaches an additional script to Danse's character sheet that is needed for the end of the quest. Otherwise you will need a compatibility patch.

You can offset his vanilla combat style by either attempting to use Cheat Terminal to convince Danse to strip get out of his power armor or using the mod conveniently named Get Danse Out of His Power Armor. The Cheat Terminal method does not appear to work on Xbox for some reason, so YMMV. Get Danse Out of His Power shouldn't make any changes to his character sheet. It should only edit his COMDanseTalk script to give additional dialogue options. If it alters COMDanse, however, then you will have a conflict. To be safe: Run Get Danse Out of His Power between More Smarter and Face Maxson.

TL;DR - Load Order:

- More Smarter Companions
- Get Danse Out of His Power Armor
- The Danse Dilemma

If you want to use with Keep Radiants in the Commonwealth:

- More Smarter Companions
- Get Danse Out of His Power Armor
- Keep Radiants in the Commonwealth
- The Danse Dilemma

Using Keep Radiants in the Commonwealth in this manner keeps Face Maxson functional but you will lose two Railroad radiant quests edits that keep the radiants of those quests in the commonwealth.

To sum up, in order to use the above mods to their fullest extent and only lose some functionality:

- Moddable Robot Settlers
- Nick Valentine's Day
- More Smarter Companions
- Get Danse Out of His Power Armor
- Keep Radiants in the Commonwealth
- The Danse Dilemma

Companion mods that do not conflict with the above and can go either above or below: Pet-Feed-Call Dogmeat, More Companion Slots: Human + Robot + Dogmeat

Appendix B: PC-Related Load Order Management

[Appendix B is still under construction - do not use tutorials until they are complete]

Important Software

Many of these tutorials require the use of two programs, the Creation Kit, the official modding tool by Bethesda, and xEdit, third-party software with roots dating back to TESIV:Oblivion.

- Installation instructions for the [Creation Kit](#) are located at the Creation Kit Wiki.
- Installation instructions for [xEdit](#) are located at the Creation Kit Wiki.

If you have never opened the Creation Kit, the windows will be all over your screen and is very intimidating at first. See [Creation Kit Interface](#) for setting up your Creation Kit window screens.

NOTE: The interface for Fallout 4 looks the same as Skyrim (and Fallout New Vegas) with a few exceptions. Unfortunately, Fallout 4's official [Editor Interface](#) wiki page has not been updated by the community. FO4's community is unfortunately very fractured and does not use a centralized source of information other than the questionable methods at Nexusmods.

You may wish to change the shortcut data of the Creation Kit to target the executable.

For example: **Target:** "C:\Steam\steamapps\common\Fallout 4\CreationKit.exe"

Scope and Intention

It is outside the scope of these tutorials to go in-depth into Creation Kit usage. If you want to learn modding, you can find a list of helpful tutorials under Videos at the Creation Kit Wiki: [Tutorials](#). Even though the wiki is community-updated, it is not recommended to use modding tutorials not found on the official wiki or the links listed in [Useful Links](#). The most trusted sources of information is that of AFK Mods, the official Creation Kit Wiki, modding forum links listed in Useful Links, and the Bethesda.net Creation Kit forums.

The intention of these mod load order tutorials is for personal and privately used patches. Use them to patch your specific load orders. Never upload a patch to any website without the original mod author/mod authors' consent. Game modifications are software plugins that belong to the creator of the modification.

Conflict Resolution

Cleaning mods of identical to masters records

How to patch two conflicting mods with xEdit

How to Clean A “Dirty” Mod using xEdit

TES5Edit, SSEEdit, and FO4Edit are all the same program. You can use the same .exe for each game by simply renaming it, and it can be run from any directory on your computer. Windows 10 players should use best judgement when installing to program files as UAC may prevent the program from running properly.

Things You Need To Know Before You Start

- Basic navigation in xEdit

Required Software

[FO4Edit \(xEdit\) 4.0+](#)

Mod Cleaning Best Practices

Only do this if you know what you’re doing. You will need to know how to navigate xEdit. If you have never used xEdit before see the Tome of xEdit for more comprehensive documentation.

Only clean one at a time. xEdit is not set up in such a way to allow multiple files to be cleaned at once.

Do not use versions prior to version 4.0.0. Unfortunately, versions prior to 4.0 were decoded incorrectly in regards to OMOD records. Versions 4.0+ are recommended and supported. See [Warnings, Cautions and Other Considerations](#) for more information.

The cleaning methods of versions 4.0+ are slightly different from previous versions. They are now streamlined and automated.

Make a note of the amount of records cleaned and of any errors in the messages window. See Software “Bugs” and You on how to report any errors to a mod author. Due to bad modding practices carried over from Skyrim regarding the removal of master files incorrectly with xEdit, some older mods may have errors in them. Be polite to mod authors. There is a lot of bad information out there, the Creation Kit will sometimes leave behind ITMs, and inexperienced mod authors may unknowingly use bad modding practices.

Version 4.0.0 and 4.0.1

Manual

1. Make a backup of the plugin you wish to clean so that you can revert if you need to
2. Run FO4Edit
3. Select the checkbox of the plugin you wish to clean.
4. Once the plugin and any masters have loaded into FO4Edit, select the plugin you wish to clean.
5. Right click to bring up the menu.
6. Select Apply Filter For Cleaning.
7. Select the plugin again and right click to bring up the menu.

8. Select Remove Identical to Master Records
9. When the 'Messages' tab on the right side of the screen has run its course, it will tell you how many records have been cleaned.
10. Exit the program making sure that the checkbox to save the plugin is selected. The process is complete.

Command Line - Quick Auto Clean

Does not ask to save file.

Set up:

1. Make a copy of the FO4Edit *shortcut* on your desktop.
2. Rename the shortcut to FO4Edit - Cleaning
3. Right click FO4Edit - Cleaning > Properties
4. In the 'Target' field add the following line: `-quickautoclean`
5. Click Ok.

Cleaning:

1. Make a backup of the plugin you wish to clean so that you can revert if you need to.
2. Run FO4Edit - Cleaning.
3. Select the checkbox of the plugin you wish to clean.
4. When the 'Messages' tab on the right side of the screen has run its course, it will tell you how many records have been cleaned.
5. Exit the program. The process is complete.

Command Line - Quick Clean

Asks to save file.

Set up:

1. Make a copy of the FO4Edit *shortcut* on your desktop.
2. Rename the shortcut to FO4Edit - Cleaning
3. Right click FO4Edit - Cleaning > Properties
4. In the 'Target' field add the following line: `-quickclean`
5. Click Ok.

Cleaning:

1. Make a backup of the plugin you wish to clean so that you can revert if you need to.
2. Run FO4Edit - Cleaning.
3. Select the checkbox of the plugin you wish to clean.
4. When the 'Messages' tab on the right side of the screen has run its course, it will tell you how many records have been cleaned.
5. Exit the program making sure that the checkbox to save the plugin is selected. The process is complete.

Version 4.0.2

1. Make a backup of the plugin you wish to clean so that you can revert if you need to.
2. Make a copy of FO4Edit.exe

3. Rename the new copy FO4EditQAC.exe
4. Run FO4EditQAC.exe
5. Select the checkbox of the plugin you wish to clean.
6. When 'Messages' tab in the right side of screen has run its course, it will say, "Quick Clean Mode Finished."
7. Exit FO4EditQAC. The process is complete.

How to Patch Two Conflicting Mods with xEdit

Originally posted to the Parent Thread [June 1, 2019](#). Modified for this document. Note: It was not until after I posted that I had remembered that the patch for Workshop Rearranged moved the Master Plan to a new place under the Structures menu, and I made an edit to the post adding more information to replace Workshop Rearranged's custom Master Plan menu. This is just to be used as an example on how to patch the records. You can also find more examples on the Creation Kit Wiki and the Tome of xEdit.

Game modifications patched are properties of their respective owners and are used as an example to help others.

Required Software

[FO4Edit \(xEdit\) 4.0+](#)

Things You Need To Know Before You Start

- Basic navigation in xEdit 4.0+

Plugins Used In Example

- Workshop Rearranged by D81/Ignoble Steward
- The Master Plan by Ethreon

Remove patches for Workshop Rearranged and Master Plan. We're going to create a new one just for you.

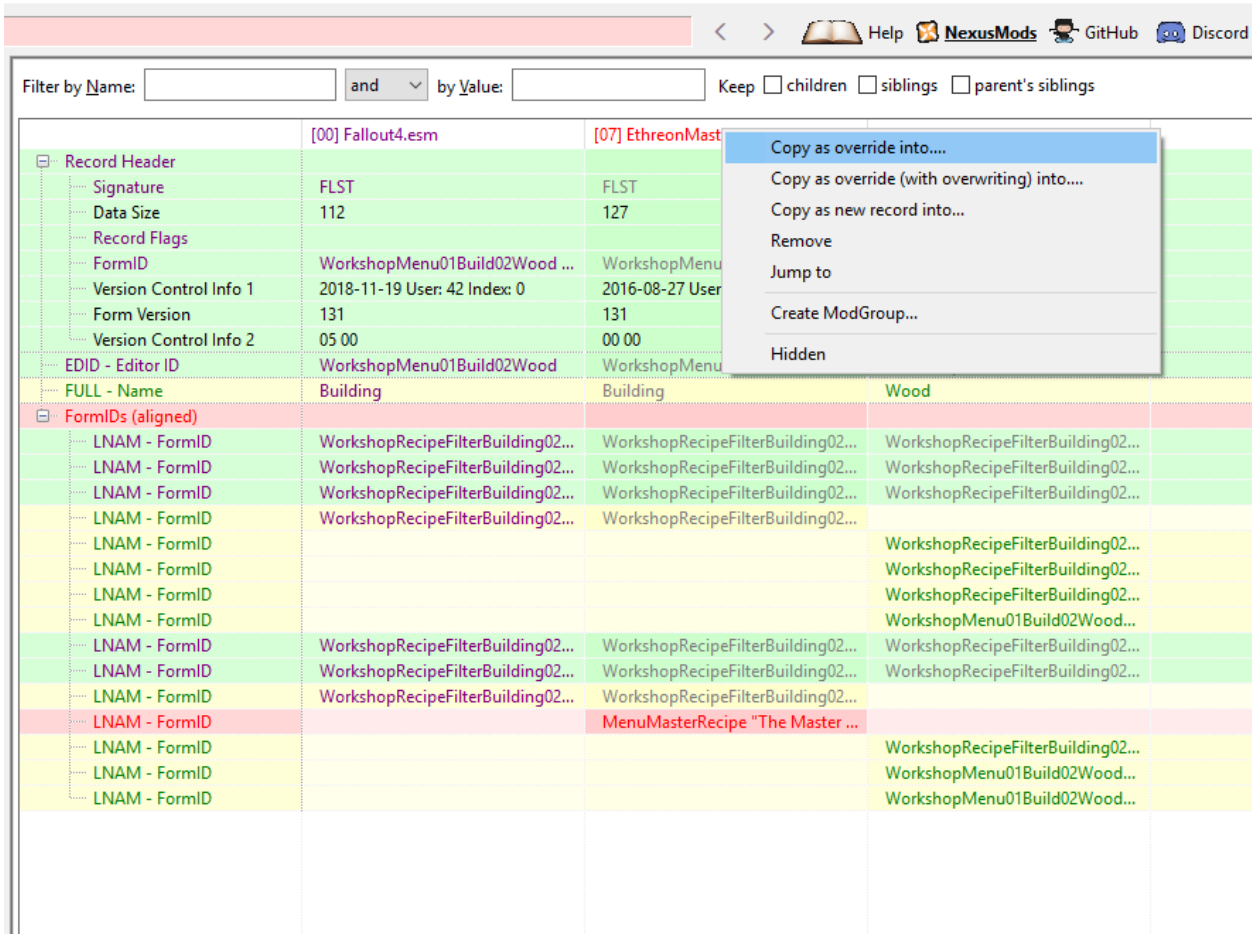
In xEdit, you'll need to do the following:

Load *EthreonMasterPlan.esm* and *workshoprearranged.esp*

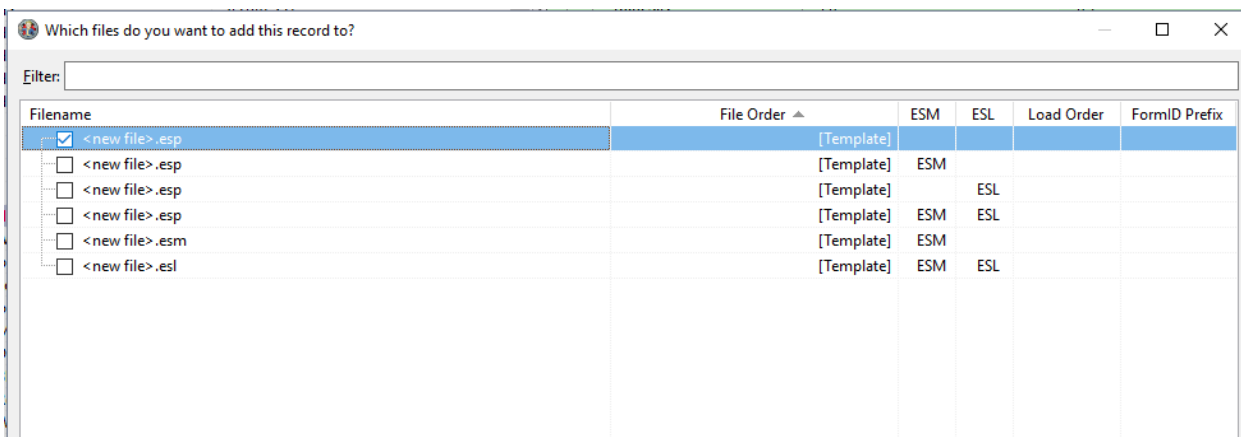
FormID ▲	EditorID	Name
⊕ [00] Fallout4.esm	<ESM> <Localized>	7EF99D79
⊕ [00] Fallout4.exe		
⊕ [01] DLCRobot.esm	<ESM> <Localized>	D69027EA
⊕ [02] DLCworkshop01.esm	<ESM> <Localized>	47BAE27E
⊕ [03] DLCCoast.esm	<ESM> <Localized>	F1F28026
⊕ [04] DLCworkshop02.esm	<ESM> <Localized>	83ABC821
⊕ [05] DLCworkshop03.esm	<ESM> <Localized>	E0089FBB
⊕ [06] DLCNukaWorld.esm	<ESM> <Localized>	43D25C56
⊕ [07] EthreonMasterPlan.esm	<ESM>	5C4AF0CD
⊕ [08] workshoprearranged.esp		39B750E4

Under *EthreonMasterPlan.esm* find **FormIDList**.

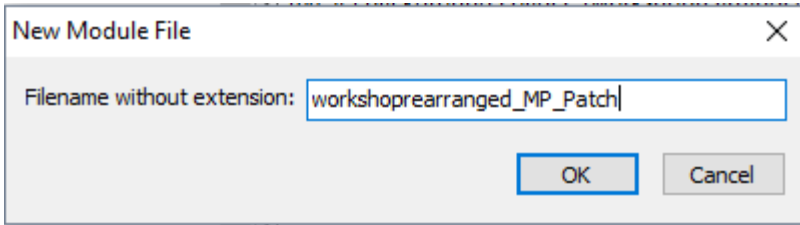
Under **FormIDList** look for the red-highlighted **WorkshopMenu01Build02Wood**. This is the wood menu.



Click the first checkbox on the menu that pops up. We're creating a new patch .esp (do NOT select any other files).



Name your new plugin. Do not use an extension. In this example, I've named it *workshoprearranged_MP_patch*. If you intend to merge other patches into this one, you can name it anything you like as long as it is unique.

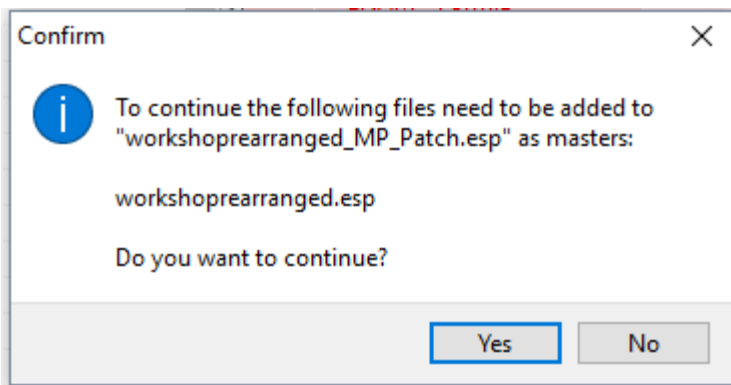


Once the new plugin is made, a new column will appear in **WorkshopMenu01Build02Wood**. Only the menu from the Master Plan is there right now. It's time to merge WR into it. Drag the red-highlighted words into the next column and delete the ones that are not necessary so that it matches WR but also contains The Master Plan's menu.

Filter by Name:	[00] Fallout4.esm	[07] EthreonMasterPlan.esm	[08] workshoprearranged.esp	[09] workshoprearranged_MP_P...
Record Header				
Signature	FLST	FLST	FLST	FLST
Data Size	112	127	163	127
Record Flags				
FormID	WorkshopMenu01Build02Wood ...	WorkshopMenu01Build02Wood ...	WorkshopMenu01Build02Wood ...	WorkshopMenu01Build02Wood ...
Version Control Info 1	2018-11-19 User: 42 Index: 0	2016-08-27 User: 0 Index: 0	2018-01-02 User: 0 Index: 0	None
Form Version	131	131	131	131
Version Control Info 2	05 00	00 00	05 00	00 00
EDID - Editor ID	WorkshopMenu01Build02Wood	WorkshopMenu01Build02Wood	WorkshopMenu01Build02Wood	WorkshopMenu01Build02Wood
FULL - Name	Building	Building	Wood	Building
FormIDs (aligned)				
LNAM - FormID	WorkshopRecipeFilterBuilding02...	WorkshopRecipeFilterBuilding02...	WorkshopRecipeFilterBuilding02...	WorkshopRecipeFilterBuilding02...
LNAM - FormID	WorkshopRecipeFilterBuilding02...	WorkshopRecipeFilterBuilding02...	WorkshopRecipeFilterBuilding02...	WorkshopRecipeFilterBuilding02...
LNAM - FormID	WorkshopRecipeFilterBuilding02...	WorkshopRecipeFilterBuilding02...	WorkshopRecipeFilterBuilding02...	WorkshopRecipeFilterBuilding02...
LNAM - FormID			WorkshopRecipeFilterBuilding02...	WorkshopRecipeFilterBuilding02...
LNAM - FormID			WorkshopRecipeFilterBuilding02...	WorkshopRecipeFilterBuilding02...
LNAM - FormID			WorkshopRecipeFilterBuilding02...	WorkshopRecipeFilterBuilding02...
LNAM - FormID			WorkshopMenu01Build02Wood...	WorkshopMenu01Build02Wood...
LNAM - FormID	WorkshopRecipeFilterBuilding02...	WorkshopRecipeFilterBuilding02...	WorkshopRecipeFilterBuilding02...	WorkshopRecipeFilterBuilding02...
LNAM - FormID	WorkshopRecipeFilterBuilding02...	WorkshopRecipeFilterBuilding02...	WorkshopRecipeFilterBuilding02...	WorkshopRecipeFilterBuilding02...
LNAM - FormID	WorkshopRecipeFilterBuilding02...	WorkshopRecipeFilterBuilding02...	WorkshopRecipeFilterBuilding02...	WorkshopRecipeFilterBuilding02...
LNAM - FormID		MenuMasterRecipe "The Master ...		MenuMasterRecipe "The Master ...
LNAM - FormID			WorkshopRecipeFilterBuilding02...	WorkshopRecipeFilterBuilding02...
LNAM - FormID			WorkshopMenu01Build02Wood...	WorkshopMenu01Build02Wood...
LNAM - FormID			WorkshopMenu01Build02Wood...	WorkshopMenu01Build02Wood...

xEdit will ask you if you want to add

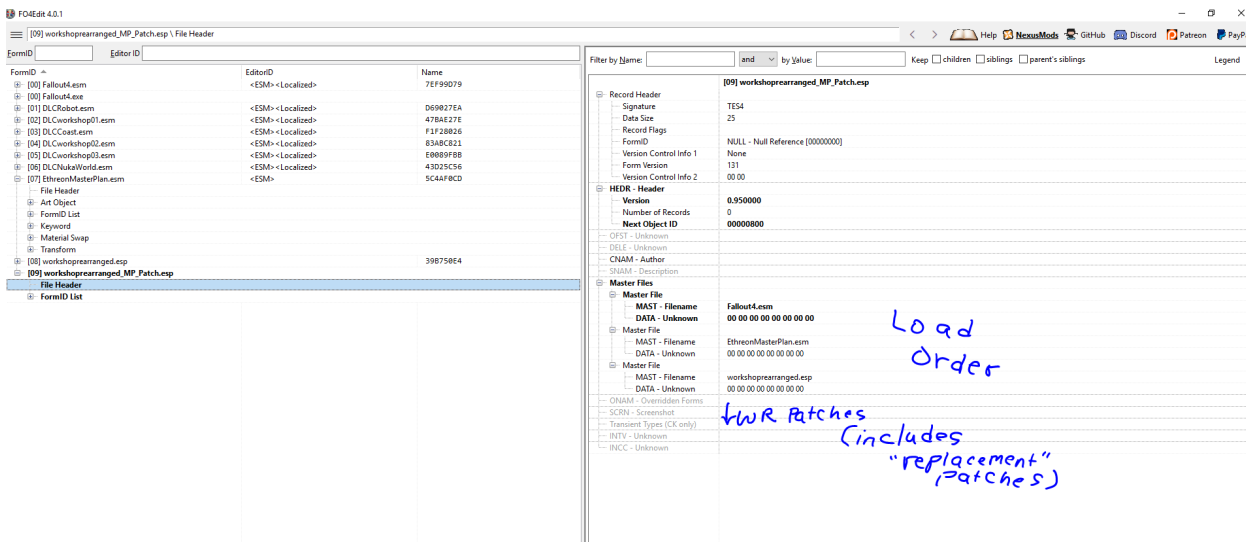
workshoprearranged.esp as a master. Say Yes.



When you finish, the menu will look like this:

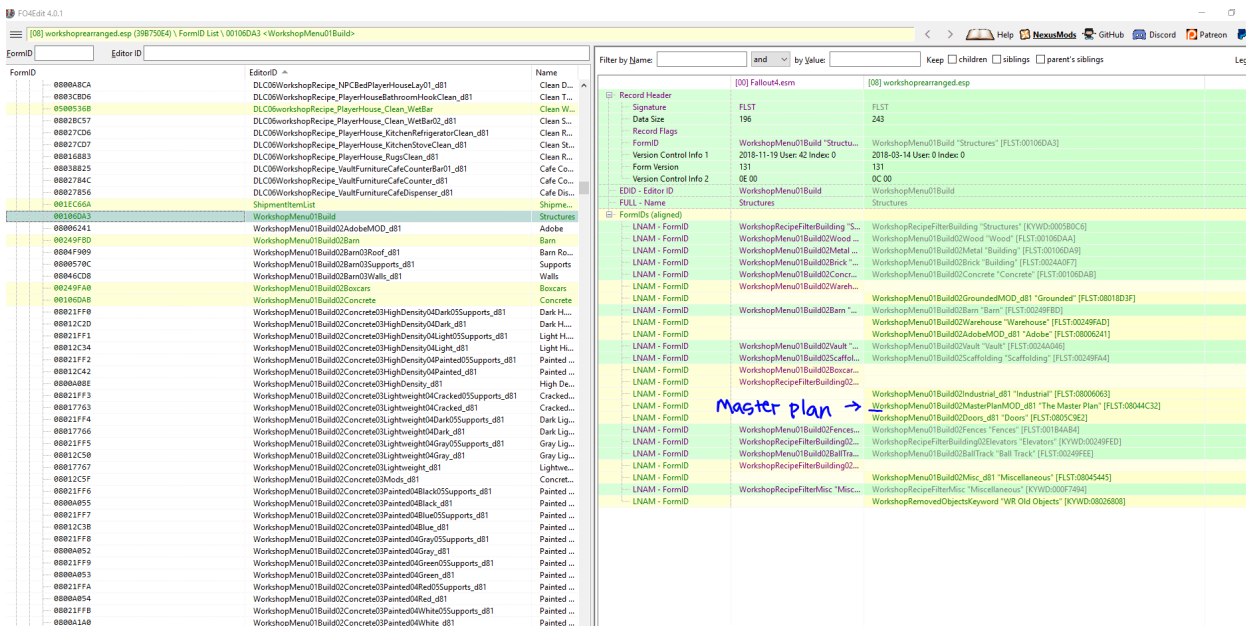
Filter by Name:	and	by Value:	Keep <input type="checkbox"/> children <input type="checkbox"/> siblings <input type="checkbox"/> parent's siblings	Legend
[00] Fallout4.esm	[07] EthreonMasterPlan.esm	[08] workshoprearranged.esp	[09] workshoprearranged_MP_Patch...	
Record Header				
Signature	FLST	FLST	FLST	FLST
Data Size	112	127	163	127
Record Flags				
FormID	WorkshopMenu01...	WorkshopMenu01Build02...	WorkshopMenu01Build02Wood "Wood" [FLST:...	WorkshopMenu01Build02Wood "Wo...
Version Control Info 1	2018-11-19 User: 4...	2016-08-27 User: 0 Index: 0	2018-01-02 User: 0 Index: 0	None
Form Version	131	131	131	131
Version Control Info 2	05 00	00 00	05 00	00 00
EDID - Editor ID	WorkshopMenu01...	WorkshopMenu01Build02...	WorkshopMenu01Build02Wood	WorkshopMenu01Build02Wood
FULL - Name	Building	Building	Wood	Wood
FormIDs (aligned)				
LNAM - FormID	WorkshopRecipeFi...	WorkshopRecipeFilterBuild...	WorkshopRecipeFilterBuilding02Wood "Wood" ...	WorkshopRecipeFilterBuilding02Woo...
LNAM - FormID	WorkshopRecipeFi...	WorkshopRecipeFilterBuild...	WorkshopRecipeFilterBuilding02Wood03Prefab...	WorkshopRecipeFilterBuilding02Woo...
LNAM - FormID	WorkshopRecipeFi...	WorkshopRecipeFilterBuild...	WorkshopRecipeFilterBuilding02Wood03Floor "...	WorkshopRecipeFilterBuilding02Woo...
LNAM - FormID	WorkshopRecipeFi...	WorkshopRecipeFilterBuild...	WorkshopRecipeFilterBuilding02Wood03FloorC...	WorkshopRecipeFilterBuilding02W...
LNAM - FormID			WorkshopRecipeFilterBuilding02Wood03FloorM...	WorkshopRecipeFilterBuilding02W...
LNAM - FormID			WorkshopRecipeFilterBuilding02Wood03FloorN...	WorkshopRecipeFilterBuilding02W...
LNAM - FormID			WorkshopMenu01Build02Wood03Walls_d81 "W...	WorkshopMenu01Build02Wood03...
LNAM - FormID	WorkshopRecipeFi...	WorkshopRecipeFilterBuild...	WorkshopRecipeFilterBuilding02Wood03Roof "...	WorkshopRecipeFilterBuilding02Woo...
LNAM - FormID	WorkshopRecipeFi...	WorkshopRecipeFilterBuild...	WorkshopRecipeFilterBuilding02Wood03Stairs "...	WorkshopRecipeFilterBuilding02Woo...
LNAM - FormID	WorkshopRecipeFi...	WorkshopRecipeFilterBuild...		
LNAM - FormID		MenuMasterRecipe "The ...		MenuMasterRecipe "The Master Plan...
LNAM - FormID			WorkshopRecipeFilterBuilding02Wood03Doors_...	WorkshopRecipeFilterBuilding02W...
LNAM - FormID			WorkshopMenu01Build02Wood03Supports_d81...	WorkshopMenu01Build02Wood03S...
LNAM - FormID			WorkshopMenu01Build02Wood03Misc_d81 "Mi...	WorkshopMenu01Build02Wood03...

Your load order for the patch is this:



Any replacement patches for any mods that you are using that includes WR as a master will need to go below WR. For example, Old World Radio has a replacer that replaces OWR.esp with the same name but with WR as a master.

Addendum: In this example, and because I derped and forgot that WR had been updated to include the Master Plan in the Structures Menu instead of the Structures - Wood menu, we are going to be using Ethreon's version of the patch instead of D81/Ignoble Steward. If WR updates, you'll need to remove this patch we made and just use Ignoble Steward's patch.



Now, find **WorkshopMenu01Build**. We're going to copy this into our new patch plugin and delete a menu from it.

[08] workshoprearranged.esp (39B750E4) \ FormID List \ 00106DA3 <WorkshopMenu01Build>

FormID	Editor ID	Name
0800A8CA	DLC06WorkshopRecipe_NPCBedPlayerHouseLay01_d81	Clean D...
0803CBD6	DLC06WorkshopRecipe_PlayerHouseBathroomHookClean_d81	Clean T...
0500536B	DLC06workshopRecipe_PlayerHouse_Clean_WetBar	Clean W...
0802BC57	DLC06workshopRecipe_PlayerHouse_Clean_WetBar02_d81	Clean S...
08027CD6	DLC06WorkshopRecipe_PlayerHouse_KitchenRefrigeratorClean_d81	Clean R...
08027CD7	DLC06WorkshopRecipe_PlayerHouse_KitchenStoveClean_d81	Clean St...
08016883	DLC06WorkshopRecipe_PlayerHouse_RugsClean_d81	Clean R...
08038825	DLC06WorkshopRecipe_VaultFurnitureCafeCounterBar01_d81	Cafe Co...
0802784C	DLC06WorkshopRecipe_VaultFurnitureCafeCounter_d81	Cafe Co...
08027856	DLC06WorkshopRecipe_VaultFurnitureCafeDispenser_d81	Cafe Dis...
001EC66A	ShipmentItemList	Shipme...
00106DA3	WorkshopMenu01Build	Structures
08006241	WorkshopMenu01Build02AdobeMOD_d81	Adobe
00249FBD	WorkshopMenu01Build02Barn	Barn
0804F909	WorkshopMenu01Build02Barn03Roof_d81	Barn Ro...
0800570C	WorkshopMenu01Build02Barn03Supports_d81	Supports
08046CD8	WorkshopMenu01Build02Barn03Walls_d81	Walls
00249FA0	WorkshopMenu01Build02Boxcars	Boxcars
00106DAB	WorkshopMenu01Build02Concrete	Concrete
08021FF0	WorkshopMenu01Build02Concrete03HighDensity04Dark05Supports_d81	Dark H...
08012C2D	WorkshopMenu01Build02Concrete03HighDensity04Dark_d81	Dark H...
08021FF1	WorkshopMenu01Build02Concrete03HighDensity04Light05Supports_d81	Light H...
08012C34	WorkshopMenu01Build02Concrete03HighDensity04Light_d81	Light Hi...
08021FF2	WorkshopMenu01Build02Concrete03HighDensity04Painted05Supports_d81	Painted ...
08012C42	WorkshopMenu01Build02Concrete03HighDensity04Painted_d81	Painted ...
0800A08E	WorkshopMenu01Build02Concrete03HighDensity_d81	High De...
08021FF3	WorkshopMenu01Build02Concrete03Lightweight04Cracked05Supports_d81	Cracked...
08017763	WorkshopMenu01Build02Concrete03Lightweight04Cracked_d81	Cracked...
08021FF4	WorkshopMenu01Build02Concrete03Lightweight04Dark05Supports_d81	Dark Lig...
08017766	WorkshopMenu01Build02Concrete03Lightweight04Dark_d81	Dark Lig...
08021FF5	WorkshopMenu01Build02Concrete03Lightweight04Gray05Supports_d81	Gray Lig...
08012C50	WorkshopMenu01Build02Concrete03Lightweight04Gray_d81	Gray Lig...
08017767	WorkshopMenu01Build02Concrete03Lightweight_d81	Lightwe...
08012C5F	WorkshopMenu01Build02Concrete03Mods_d81	Concret...
08021FF6	WorkshopMenu01Build02Concrete03Painted04Black05Supports_d81	Painted ...
0800A055	WorkshopMenu01Build02Concrete03Painted04Black_d81	Painted ...
08021FF7	WorkshopMenu01Build02Concrete03Painted04Blue05Supports_d81	Painted ...
08012C3B	WorkshopMenu01Build02Concrete03Painted04Blue_d81	Painted ...
08021FF8	WorkshopMenu01Build02Concrete03Painted04Gray05Supports_d81	Painted ...
0800A052	WorkshopMenu01Build02Concrete03Painted04Gray_d81	Painted ...
08021FF9	WorkshopMenu01Build02Concrete03Painted04Green05Supports_d81	Painted ...
0800A053	WorkshopMenu01Build02Concrete03Painted04Green_d81	Painted ...
08021FFA	WorkshopMenu01Build02Concrete03Painted04Red05Supports_d81	Painted ...
0800A054	WorkshopMenu01Build02Concrete03Painted04Red_d81	Painted ...
08021FFB	WorkshopMenu01Build02Concrete03Painted04White05Supports_d81	Painted ...
0800A1A0	WorkshopMenu01Build02Concrete03Painted04White_d81	Painted ...
08021FFC	WorkshopMenu01Build02Concrete03Painted04Yellow05Supports_d81	Painted ...
0800A056	WorkshopMenu01Build02Concrete03Painted04Yellow_d81	Painted ...
0800A051	WorkshopMenu01Build02Concrete03Painted_d81	Painted ...
08021FFD	WorkshopMenu01Build02Concrete03Rusty04Supports_d81	Rusty C...

Filter by filename:

[00:54] Background Loader: finished

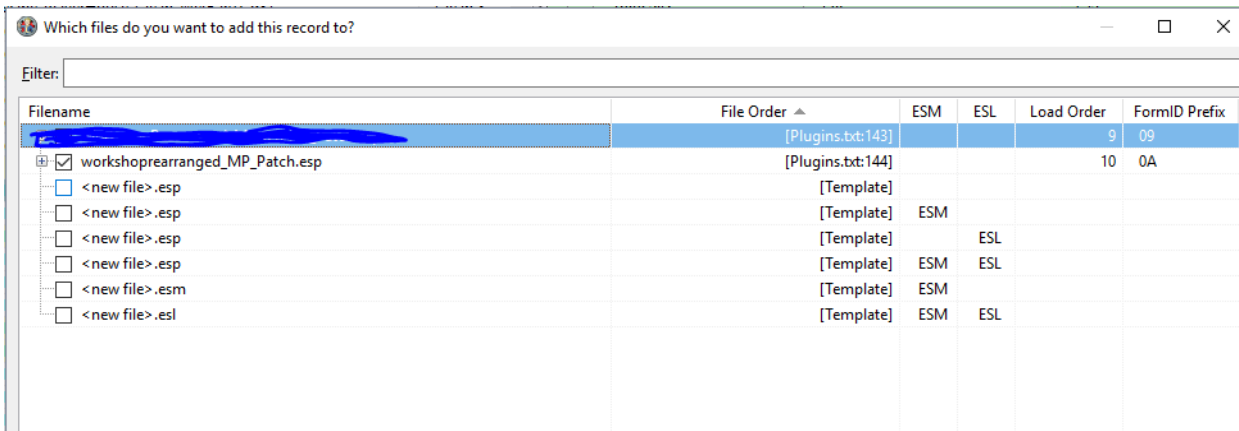
Right click on workshoprearranged.esp and "Copy as override into..."

Filter by Name: and by Value: Keep children siblings parent's siblings

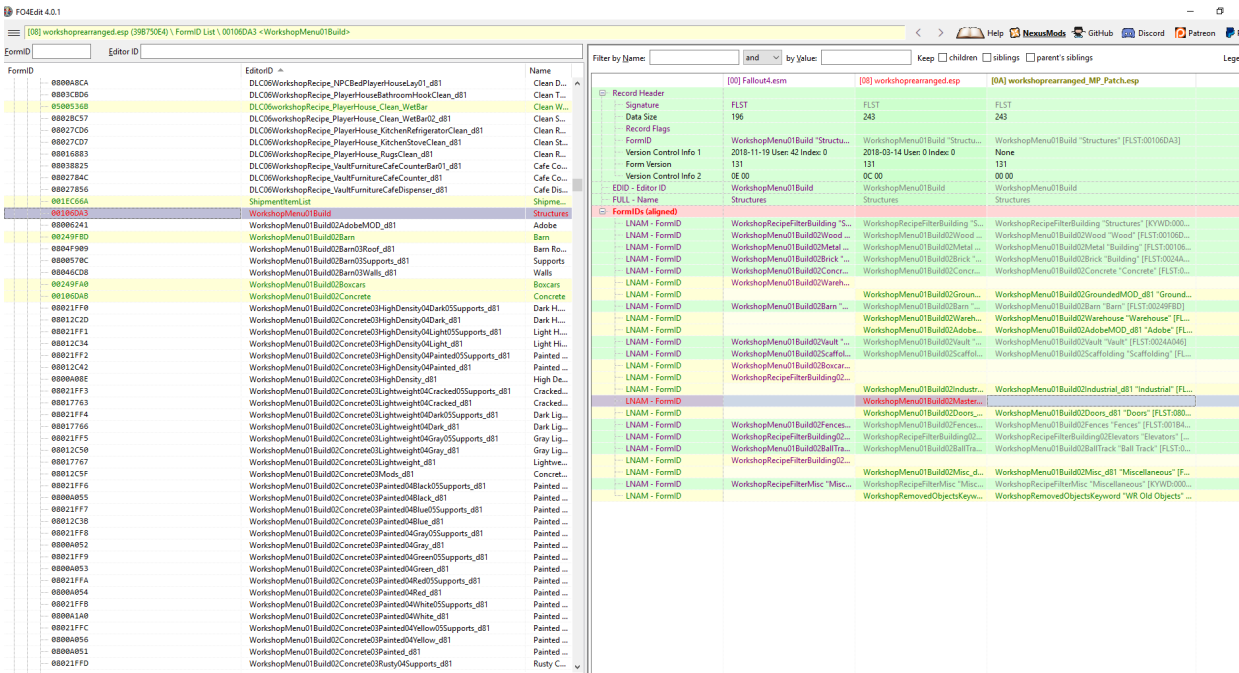
	[00] Fallout4.esm	[08] workshoprearranged.esm
Record Header		
Signature	FLST	FLST
Data Size	196	243
Record Flags		
FormID	WorkshopMenu01Build "Structu...	Workshop
Version Control Info 1	2018-11-19 User: 42 Index: 0	2018-03-14
Form Version	131	131
Version Control Info 2	0E 00	0C 00
EDID - Editor ID	WorkshopMenu01Build	WorkshopMenu01Build
FULL - Name	Structures	Structures
FormIDs (aligned)		
LNAM - FormID	WorkshopRecipeFilterBuilding "S...	WorkshopRecipeFilterBuilding "Structures" [KYWD:0005B0C6]
LNAM - FormID	WorkshopMenu01Build02Wood ...	WorkshopMenu01Build02Wood "Wood" [FLST:00106DAA]
LNAM - FormID	WorkshopMenu01Build02Metal ...	WorkshopMenu01Build02Metal "Building" [FLST:00106DA9]
LNAM - FormID	WorkshopMenu01Build02Brick "...	WorkshopMenu01Build02Brick "Building" [FLST:0024A0F7]
LNAM - FormID	WorkshopMenu01Build02Concr...	WorkshopMenu01Build02Concrete "Concrete" [FLST:00106DAB]
LNAM - FormID	WorkshopMenu01Build02Wareh...	
LNAM - FormID		WorkshopMenu01Build02GroundedMOD_d81 "Grounded" [FLST:08018D3F]
LNAM - FormID	WorkshopMenu01Build02Barn "...	WorkshopMenu01Build02Barn "Barn" [FLST:00249FBD]
LNAM - FormID		WorkshopMenu01Build02Warehouse "Warehouse" [FLST:00249FAD]
LNAM - FormID		WorkshopMenu01Build02AdobeMOD_d81 "Adobe" [FLST:08006241]
LNAM - FormID	WorkshopMenu01Build02Vault "...	WorkshopMenu01Build02Vault "Vault" [FLST:0024A046]
LNAM - FormID	WorkshopMenu01Build02Scaffol...	WorkshopMenu01Build02Scaffolding "Scaffolding" [FLST:00249FA4]
LNAM - FormID	WorkshopMenu01Build02Boxcar...	
LNAM - FormID	WorkshopRecipeFilterBuilding02...	
LNAM - FormID		WorkshopMenu01Build02Industrial_d81 "Industrial" [FLST:08006063]
LNAM - FormID		WorkshopMenu01Build02MasterPlanMOD_d81 "The Master Plan" [FLST:08044C32]
LNAM - FormID		WorkshopMenu01Build02Doors_d81 "Doors" [FLST:0805C9E2]
LNAM - FormID	WorkshopMenu01Build02Fences...	WorkshopMenu01Build02Fences "Fences" [FLST:001B4AB4]
LNAM - FormID	WorkshopRecipeFilterBuilding02...	WorkshopRecipeFilterBuilding02Elevators "Elevators" [KYWD:00249FED]
LNAM - FormID	WorkshopMenu01Build02BallTra...	WorkshopMenu01Build02BallTrack "Ball Track" [FLST:00249FEE]
LNAM - FormID	WorkshopRecipeFilterBuilding02...	
LNAM - FormID		WorkshopMenu01Build02Misc_d81 "Miscellaneous" [FLST:08045445]
LNAM - FormID	WorkshopRecipeFilterMisc "Misc...	WorkshopRecipeFilterMisc "Miscellaneous" [KYWD:000F7494]
LNAM - FormID		WorkshopRemovedObjectsKeyword "WR Old Objects" [KYWD:08026808]

View Referenced By (1) Messages Information What's New

Check the checkbox beside the name of your patch and click ok. (I had another file loaded in xEdit.)



Delete **WorkshopMenu01Build02MasterPlanMOD_d81 "The Master Plan" [FLST:08044C32]**. It will turn the category red. For purposes of this tutorial, that is ok. We are overriding the original menu with our own edit.



Save your patch by exiting xEdit. You have now created a new patch. If you are still missing your menu, load all settlement mods and look at the FormIDLists for any other red.

Load Order Optimization

Performance improvements and load order management using BA2 archives

Load Order Management and Performance Improvements by Archiving Loose Files

Archiving Best Practices

Only do this if you know what you're doing.

The simplest way to archive your files is simply to download from Bethesda.net. They are required to be packaged there for a reason. Archiving through Archiver 2 is the hardest method as it requires the end player to know where each mod's files are located in the data folder.

Know what a loose file is.

Loose files are texture, mesh, material, interface, music files, etc. used by Fallout 4. Loose files are read unintelligently by the game and sometimes out of order. When using archive invalidation, loose files override data within .BA2 files. Whichever file is newest takes priority over the older files. See³⁸

Know what format to use and name your archives.

Archives must contain the name of the mod or they will not be detected. "Textures" format is used for .DDS texture files. Texture archives are named NameOfMod - Textures.BA2. "General" format is used for everything but textures. General archives are named NameOfMod - Main.BA2.

Know what can and cannot be archived.

When using Archiver2, certain files will return errors if they cannot be archived. Files with the following extensions cannot be archived with Archiver2: .bink, .bik, .json, .ini. **Note:** Do not archive anything in the `Data\Tools\BodySlide` folder. BodySlide sliders are utility files, not game files. Dynamic link library files (.DLL) can be archived by Archiver2, but it is not necessary as they contain all the necessary data for the mod and should not be touched. Initialization files are not necessary to archive.

Merge your loose files to one or more blank plugins if downloading several loose-file only.

You only need one or two blank plugins and the extension may be .esp or .esl. You must know your load order in order to determine which will work for you. Note: .esl extension is not recommended in the event you need to override a mod low in your load order.

More Info:

[Using BAIN and Archive.exe to Package a Skyrim Mod](#) - for the basics. Archive 2 has a different interface.

Required Software

- [Creation Kit](#)
- [Archive 2](#)
- [Notepad++](#)

³⁸ 9-29-2019: link to AFK mods no longer working

Things You Need To Know Before You Start

- Basic navigation of Creation Kit
- Basic navigation of Archive 2
- Basic text editor use

Archive 2 Packing

Only use this method if you know what you are doing.

1. Create a new folder on your computer.
2. Manually download any files that are not archived and place them in the new folder, making sure that the new files have a data folder. `New Folder\Data` You'll be
3. Navigate to Archive 2 and launch it. `\\Steam\steamapps\common\Fallout 4\Tools\Archive2`
4. Select File > New to bring up the Archive Settings Menu.
5. Choose the type of format.
6. Select File > Archive
7. Select Add Files (you may also batch archive by selecting Add Folder.)
 - a. Note: To remove an accidental selection, select the entry and hit the delete key. A prompt will appear.
8. Select File > Save As
9. Name the new archive the same name as your mod. Example: `myMod - Main.BA2` (if archiving textures: `myMod - Textures.BA2`)

Archive List Creation

Manually download any files that are not archived and place them in your data folder.

`\\Steam\steamapps\common\Fallout 4\Data`

Important: Be sure that all files have gone into their appropriate folders or the Creation Kit will not detect them.

Note: Leave the zip/rar/z7 file open for reference when archiving

Launch Notepad ++

Compare the zipped contents and create a text file in the following format:

```

1  [
2      "Data\Meshes\SCOL\oltVault81.esp\CM0004B419.NIF",
3      "Data\Meshes\SCOL\oltVault81.esp\CM0004B230.NIF",
4      "Data\Meshes\SCOL\oltVault81.esp\CM0004B24A.NIF",
5      "Data\Meshes\SCOL\oltVault81.esp\CM0004B123.NIF",
6      "Data\Meshes\SCOL\oltVault81.esp\CM00035A99.NIF",
7      "Data\Meshes\SCOL\oltVault81.esp\CM00035A91.NIF",
8      "Data\Meshes\PreCombined\0002A728_11E66B13_OC.NIF",
9      "Data\Meshes\PreCombined\0002A728_1B23620A_OC.NIF",
10     "Data\Meshes\PreCombined\0002A728_2F90657A_OC.NIF",
11     "Data\Meshes\PreCombined\0002A728_334F0E10_OC.NIF",
12     "Data\Meshes\PreCombined\0002A728_3B641931_OC.NIF",
13     "Data\Meshes\PreCombined\0002A728_9557DEFF_OC.NIF",
14     "Data\Meshes\PreCombined\0002A728_AE593958_OC.NIF",
15     "Data\Meshes\PreCombined\0002A728_AE98B787_OC.NIF",
16     "Data\Meshes\PreCombined\0002A728_Physics.NIF",
17     "Data\Vis\Fallout4.esm\0002A728.uvd",
18     "Data\SCRIPTS\OVEx81\V81RefAliasOnLoadScript.pex"
19 ]

```

Name the file after the name of the plugin for easy reference using the `.achlist` extension. For example: `myMod.achlist`

Creation Kit Archiving - Method A

Manually download any files that are not archived and place them in your data folder.

\\Steam\steamapps\common\Fallout 4\Data

Important: Be sure that all files have gone into their appropriate folders or the Creation Kit will not detect them.

Note: Leave the zip/rar/z7 file open for reference when archiving

Launch the Creation Kit.

Select File > Data and choose the plugin. Make sure it is set to active.

Select File > Create Archive

Remove all files in Required files for altered forms pop up menu. You will be repopulating the list manually.

Select Add and compare the zipped file against you data folder.

Once you have added the appropriate files, select Import List...

Once the list has populated, confirm that the paths are correct.

Select Pack File.

Name

Creation Kit Archiving - Method B

Manually download any files that are not archived and place them in your data folder.

\\Steam\steamapps\common\Fallout 4\Data

Be sure that all files have gone into their appropriate folders or the Creation Kit will not detect them.

Launch the Creation Kit.

Select File > Data and choose the plugin. Make sure it is set to active.

Select File >

Visibility Optimization Conflict Resolution

Regenerating Previs Timestamps

Conflict Resolution for Multiple Cell Edits

How to Improve Performance by Returning Game Previs to Vanilla

[section still under development - do not use instructions until sections are complete]

This tutorial has two distinct parts. You'll be examining the mod in xEdit first and then updating the vanilla timestamp on each cell record in the Creation Kit. Do not do this without first making a backup of the mod you'll be patching. This will be a direct edit to the mod for your personal use. When a mod updates, you'll need to do this over if the mod author has not patched the cell you do.

Required Software

[Creation Kit](#)

[FO4Edit \(xEdit\) 4.0.1](#)

Things You Need To Know Before You Start

- Basic navigation in xEdit 4.0.1
- Basic navigation in Creation Kit

Mod Examination in xEdit 4.0.1

Important: Any brackets [] around record data found in xEdit means one of two things: The Precombined References *are* disabled, or the Precombined References *were* disabled. If the mod you have downloaded has a Precombines folder containing the new meshes and a Vis folder containing the new visibility graph, then the precombined references were disabled but regenerated. See [How to Return Game Previs to Modded State](#) if you think you need to update the visibility graph of a plugin with a Precombines folder.

Clean the Mod

1. Run FO4Edit.exe
2. Select the checkbox of the plugin you wish to examine. Make note of the plugin's master files for later.
3. Use the cleaning method in [How to Clean A Dirty Mod using xEdit](#) to clean any ITM records. Keep xEdit open after cleaning. (If using the auto-clean method of version 4.0.2, reopen the plugin you just cleaned with FO4Edit.exe.)

Examination - World Spaces

1. Expand the Worldspace menu. NOTE: If the mod you are using has more than one master file, the Commonwealth worldspace will highlight as red and may be ignored.
2. Expand the block, sub-block, and finally the worldspace cell you wish to examine.
3. Make note of the cell name (FULL - Name) and cell Editor ID (EDID).

Examination - Interior Cells

1. Expand the Cell menu.
2. Expand the block, sub-block, and finally the cell you wish to examine.
3. Make note of the cell name (FULL - Name) and cell Editor ID (EDID).

Program Exit

Exit the program making sure that the checkbox to save the plugin is selected. This stage is complete. Move on to the next stage.

Updating the Visibility Timestamp Using Creation Kit Version 1.10.130.0

1. Load the plugin by selecting File > Data...
2. On the popup menu, select Fallout4.esm and the plugin you wish to update.
3. Set the plugin to Active.
4. Navigate to the Cell View Window.
5. Check 'Filtered Only' and 'Selected Only'
6. Load the Commonwealth worldspace from the drop down menu.
7. In the x, y boxes, add the coordinates of the cell you copied from xEdit and click 'go'.
8. Right Click the cell to bring up the menu.
9. Click Update Precombine/Previs Timestamp.
10. Save the file and exit the Creation Kit then check the mod in game to confirm edits.
11. No .uvd file will be created. You are now using the .uvd file from the vanilla game.
12. Enter the game and confirm changes on a **test** character.

How to Update the Visibility Optimization for Your Load Order

[still under development]

Required Software

[Creation Kit](#)

[FO4Edit \(xEdit\) 4.0+](#)

Things You Need To Know Before You Start

- Basic navigation in xEdit 4.0.1
- Basic navigation in Creation Kit

Appendix C: Bethesda.net archived posts

Parent Thread - [First Post](#)

Contributor's Bethnet Accounts - oddlittleturtle, [thejeepdriver](#), [MrFox1701](#)

Willyb9 is not an editor to this document but Willy was one of the first people to help out when I first asked waaay back in 2016/2017. Thank you, Willyb9.

Precombines - ANDREWGX

Modding FAQs - ANDREWGX

Uploading Guidelines - gstaff/cartogriffi

Workshop Menus - Crayonkit

Appendix D: Xbox One Technical

How to Transfer Fallout 4 from an older Gen Xbox to Series S|X without having to redownload

How to Transfer Fallout 4 from an older Gen Xbox to Series S|X without having to redownload

[under construction. Do not use instructions until complete.]

This tutorial requires the use of an external harddrive. The transferal is fairly seamless. Note that you will need to redownload any mods after syncing your save data.

Transfer Best Practices

Things You Need To Know Before You Start