Quality Crafting

How to Install

These are instructions for installing Quality Crafting v3.0.0+ on your server WITHOUT migrating data from a previous version. If you wish to migrate data from an old version, see the Upgrading from Previous Version section.

1. Download and install the UiEngineFramework plugin. This plugin is now **REQUIRED** to use Quality Crafting. This plugin is available on the Quality Crafting page on codefling.
2. Download and install the Quality Crafting plugin.

3. Run your server (if it is not already running), you should see that the plugin is loaded in the server console.
4. (Optional) Assign any admin groups the "qualitycrafting.admin" permission.
5. (Optional) Review the generated config file located at oxide/config/QualityCrafting.json to see if there are any changes you would like to make. See the configuration section for what each config value does.
    a. Reload the plugin after making any config changes
6. (Optional) Check out the Tables section to balance any features to fit your server's needs.

Upgrading from Previous Version

READ THIS BEFORE UPDATING! THIS IS VERY IMPORTANT IF YOU WANT TO KEEP YOUR PLAYER CRAFTING SKILLS DATA!
With version 3, everything is new. The plugin, the config, the features, and even the data. This means that by default, all player data is lost! I highly recommend upgrading from version 2 to version 3 for a fresh wipe or if you do not mind having your player's reset their crafting skills.

If you don't care about importing player data and want to do a clean install. You can skip this section!

Migrating Player Data

If you really want to keep your crafting skills, there is an **experimental** option available to migrate your data. I **strongly** recommend backing up your data folder first though.

If you want to attempt to migrate your data from quality crafting v2 to v3, do the following steps:
- Make sure you have quality crafting **v2.1.5** installed**,** if you do not have that exact version installed, download and install it.
- Once installed, under the oxide\data\QualityCrafting directory you should see an ImportData.json file. If you see this, you can proceed with the following steps.
- Now install the latest version of quality crafting version 3, please note that once installed all the player skill data will be empty at first. We must manually import the data.
- To manually import the data, use the command "/qc playerdata import". You must have admin permissions to use this command. You will see a confirmation message telling you to type this command again to confirm. Type the command once more and you should see a message telling you the number of successful imports.
- Skills should now be imported. Something to note is that some *levels may be different* than they were previously. This is normal because some experience points may translate to different levels in this new version.
- If you are happy with the import then you can save your server and continue enjoying the plugin. If you are not, I recommend restoring the backup of your data and deciding if you want to upgrade at this time or not.

Existing Quality Items

The plugin will try its best to load existing quality items and convert them into the perk based system. Essentially it will assign them random perks that make sense for its quality level. It's an experimental feature, so there might be some issues if you are in this scenario which is another reason why I recommend installing version 3 on a freshly wiped server!

Features in Version 3

Quality Crafting v3.0.0 will be a complete rewrite of quality crafting that fixes problems present in previous versions as well as introduces new features and UI. This version will continue to be free, however a paid expansion will also be available at a later date that introduces even more functionality. All features listed in this document are available in the free version!

Perk System

Perks are a new addition in version 3 and replace the old system of flat stat upgrades. In the free version of quality crafting there will be 4 perks that correspond to the stat modifiers that were present in the previous version. See more in the Perks section.

Improved Overlays

The performance of the "quality stars" overlays have been dramatically improved and the functionality has been streamlined. More events will now trigger the stars to appear, so there is less need to manually click on the quality button. In fact, the quality button is now optional and can be disabled in the config without missing out on functionality.

In addition, the inspect button has been removed completely. Now, to inspect an item simply click on the quality stars on the item.

Performance

Improving performance was a big goal of this rewrite, especially regarding GUI updates. Which is why a UI plugin was written specifically to provide easier and fast ways of drawing the UI.

New Graphics

All the GUI elements have been redesigned including the skills menu, notifications, and inspection screens.

More Customization

More configuration options are now available as well as being able to fine tune the xp, and quality rates for all items. Instead of editing these values in the config, there are now CSV files that can be modified to adjust these values on a per level basis. I'd recommend opening these files in a program such as excel or sheets, which will also allow you to apply formulas if you have experience with that sort of thing. If not, you can also manually edit the values in the table with these applications.

Statistics

Replacing the leaderboard is a statistics panel that tracks a wide range of measurements regarding crafting.

Tracking Improvements

Before, you could only track Category levels, but now you can track any crafting skill you want, including Item levels. Categories are now also tracked by default (this is configurable).

You can track an item or a category from the skills menu. Click on either an item row or category panel in order to track it. Once tracked, the panel should be highlighted.
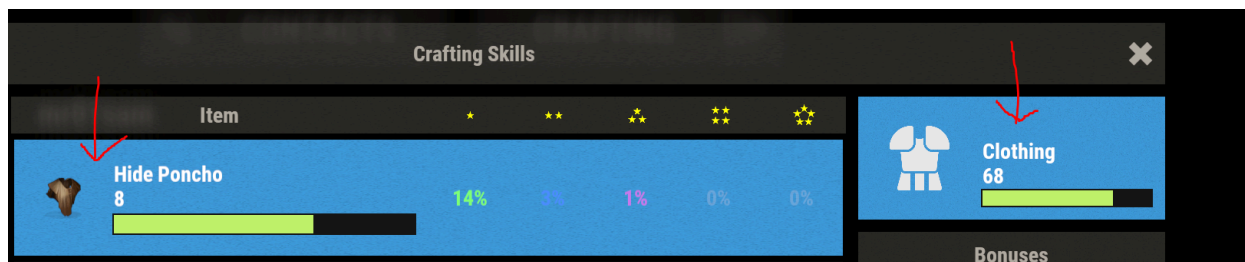

Room to Grow

Another big improvement in version 3 is that the plugin is designed to be extendable. This means that other plugins, official or community made, can be written to work with quality crafting and add new functionality.

Perks

Perks are a replacement to the static stat upgrades of previous versions of quality crafting. The goal of them is to add more variety to items and make the gameplay more interesting. In the free version of Quality Crafting v3 there are 4 perks available.
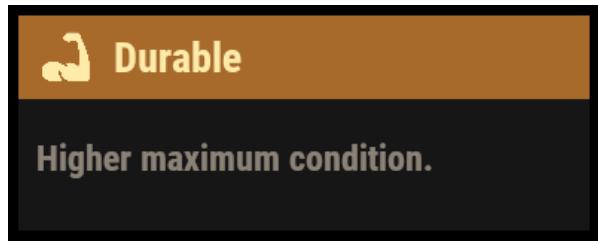
Lethal

Increases the damage dealt by this item. Each rank increases the damage bonus. Applicable for Melee, Firearms, and Tools.
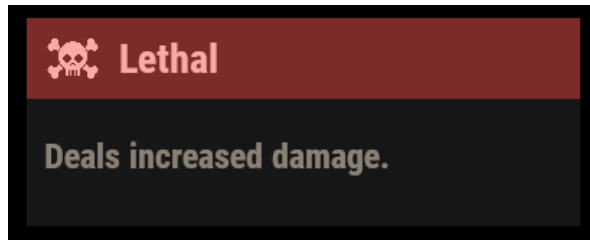

Durable

Increase the maximum condition of the item, causing it to last longer. Each rank increases the max condition bonus. Applicable for Melee, Firearms, Tools, and Clothing.

Efficient

You will extract more resources per hit from nodes when you harvest them. Each rank increases the amount that is extracted. Please note this does NOT give you more resources in total. You will still get the same total amount of resources per node, but you will extract them faster. Applicable for Melee and Tools.
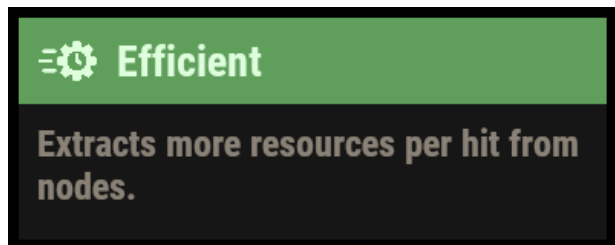
Plated

When wearing an item with this perk you will have increased *physical* damage resistance on the area it covers. This only protects you from physical damage such as stabbing, biting, and bullets. It does not give you any additional resistance to things like temperature, radiation, or explosions. Each rank increases the resistance amount. Applicable only for Clothing.

Plated

Increased physical damage resistance.
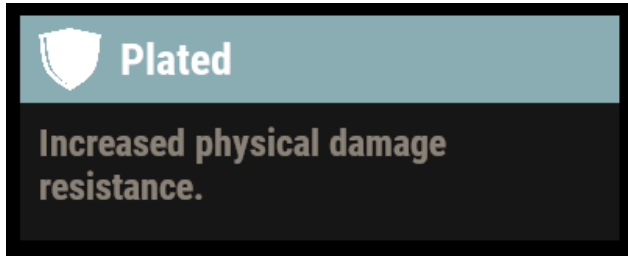
Permissions

- qualitycrafting.admin
  - Allows use of quality crafting admin commands, assign this to your admin group.

Commands

- /qc
  - Displays the list of all quality crafting admin commands
- /skills
  - The default command to show the skills menu (configurable)

Configuration

Refer to this section if you are editing the config file located at oxide/config/QualityCrafting.json in your server directory.

- **Version**:
  - Do not edit this.
- **Options**:
  - **PreventUselessPerks**:
    - If true then perks will not appear on items that can't benefit from them. For example, Durable will not appear on items that do not have durability.
  - **SaveOnServerSave**:
    - If true then this plugin will save whenever your server is configured to save. Do NOT set this to true if you have your server save super frequently like every 1 minute. If you do this, there will be performance issues.
  - **ResetDataOnMapWipe**:
    - If true then all player data will be automatically cleared when a new map is created or when the force wipe occurs.

- **Perks**:
  - **ImageUrl**:
    - The image that is displayed for a perk. Can be an asset sprite path or a URL to your own hosted image.
  - **Color**:
    - Color that corresponds to a perk.
  - **Modifier**:
    - This property allows you to adjust how effective this perk is per rank. For example, if the perk is Lethal, and the Modifier is set to '20'. Then a weapon with that perk will do 20% more damage per Lethal rank. See the perk descriptions for what each rank increases.
  - **MaxRank**:
    - This is the limit that a crafted item can naturally have for this perk. For example, if the perk is Durable, and MaxRank is set to 3, then a crafted item can never achieve a Durable rank higher than III. If its a 4 or 5 star item, it might have 3 ranks of Durable, but it will also have 2 ranks of some other perk(s). Perks applied manually through a command can bypass this limit.
  - **Weight**:
    - This will allow you to adjust how likely this perk is to appear on crafted items. It is relative to the other perk weights. So if all perks are set to Weight=1, then they will all be equally likely. If you were to then set one of those perks to Weight=2, then that perk will be twice as likely as the others. You can also set Weight=0 to make it so this perk will never appear on crafted items. It can still appear if this perk is manually applied through a command.
- **Categories**:
  - **Enabled**:
    - If true then this crafting category will be enabled. Otherwise it will be disabled for the features of this plugin.
  - **ImageUrl**:
    - The image URL for a category.
  - **TrackedByDefault**:
    - If true then this category will appear as tracked by default for new players.
- **ItemLeveling**:
  - **Table**:
    - Name of the table file for the leveling curve located within the oxide/data/QualityCrafting/v3 directory on your server.
  - **XpGainedForItemWorkbenchTier**:
    - The amount of XP gained when crafting an item for each workbench tier 0-3. An item that does not require a workbench is the first number, and an item that requires a tier 3 workbench is the 4th number.
- **CategoryLeveling**:
  - **DuplicationChancePerLevel**:

- ■ The chance a player has of duplicating an item they craft per category crafting level. For example, if set to 0.01, then this chance will increase by 1% for each category crafting level that player has.
  - ○ **CraftingSpeedIncreasePerLevel**:
    - ■ The speed increase of crafting per category crafting level. For example, if set to 0.1, then the speed will increase by 10% for each category crafting level that player has.
  - ○ **Table**:
    - ■ Name of the table file for the leveling curve located within the oxide/data/QualityCrafting/v3 directory on your server.
  - ○ **XpGainedForItemWorkbenchTier**:
    - ■ The amount of XP gained when crafting an item for each workbench tier 0-3. An item that does not require a workbench is the first number, and an item that requires a tier 3 workbench is the 4th number.
- ● **QualityTiers**:
  - ○ **Table**:
    - ■ Name of the table file for altering quality craft chances located within the oxide/data/QualityCrafting/v3 directory on your server.
  - ○ **SingleStarImageUrl**:
    - ■ URL image for a single quality star. These are the horizontal stars that appear in the inspection screen.
  - ○ **ImageUrls**:
    - ■ List of image URLs for each quality level 1-5. These are the stars that appear overlayed on items in the inventory.
  - ○ **RarityColors**:
    - ■ List of colors for each quality level 1-5.
- ● **SkillsMenu**:
  - ○ **OpenMenuCommand**:
    - ■ The command players can use to open the skills menu in addition to the HUD button.
  - ○ **ShowStatistics**:
    - ■ If set to true then crafting statistics will be tracked for your players and displayed in their skill menu screen. Otherwise this area will be empty in the skills menu.
- ● **Tracking**:
  - ○ **MaxTrackedItems**:
    - ■ The max number of items or categories that a player can track at one time. Set to 0 to disable the tracking feature.
  - ○ **X**:
    - ■ The horizontal position. Negative is to the left, positive is to the right. Zero is is the CENTER of the screen.
  - ○ **Y**:
    - ■ The vertical position. Negative is down, positive is up. Zero is is the BOTTOM of the screen.

- **InventoryOverlay**:
  - **ShowClothingModifiers**:
    - If true then clothing resistance modifiers will appear in the inventory overlay screen.
  - **QualityStarsSizeScale**:
    - Allows you to adjust the scale size of the quality stars overlay on inventory items. Note that if this is too big then players will not be able to move items correctly.
  - **InspectionBannerImageUrl**:
    - The image URL for the background image under the item name on the inspection screen.
- **HudButtons**:
  - **QualityButton**:
    - **Show**:
      - If true this button will be showned on the player HUD. Otherwise it will be hidden.
    - **IconUrl**:
      - The sprite asset path or image URL for this button.
    - **Color**:
      - The color of this button.
    - **ShowText**:
      - If true this button will shown text underneath it. Otherwise there will be no text.
    - **TextSize**:
      - Font size of the text if shown.
    - **Size**:
      - Pixel width and height of the button.
    - **X**:
      - The horizontal position. Negative is to the left, positive is to the right. Zero is is the CENTER of the screen.
    - **Y**:
      - The vertical position. Negative is down, positive is up. Zero is is the BOTTOM of the screen.
  - **SkillsButton**:
    - **Show**:
      - If true this button will be showned on the player HUD. Otherwise it will be hidden.
    - **IconUrl**:
      - The sprite asset path or image URL for this button.
    - **Color**:
      - The color of this button.
    - **ShowText**:
      - If true this button will shown text underneath it. Otherwise there will be no text.

- ■ **TextSize**:
  - ■ Font size of the text if shown.
- ■ **Size**:
  - ■ Pixel width and height of the button.
- ■ **X**:
  - ■ The horizontal position. Negative is to the left, positive is to the right. Zero is is the CENTER of the screen.
- ■ **Y**:
  - ■ The vertical position. Negative is down, positive is up. Zero is is the BOTTOM of the screen.
- ● **Notifications**:
  - ○ **Enabled**:
    - ■ If true then notifications will show when crafting quality items.
  - ○ **PlaySfx**:
    - ■ If true the notifications will play a sound.
  - ○ **X**:
    - ■ The horizontal position. Negative is to the left, positive is to the right. Zero is is the CENTER of the screen.
  - ○ **Y**:
    - ■ The vertical position. Negative is down, positive is up. Zero is is the BOTTOM of the screen.

Data Files

As of version 3.0.0, all future data files will be stored in oxide/data/QualityCrafting/v3. Notice they are all in the v3 folder! Any files not in the v3 folder are old files that will no longer be used! You can decide yourself if you want to keep or remove the old files that are not present in the v3 folder.

Tables

Some configuration settings are not stored in the config file because they are too big to store there. Instead, they often can be found here as .csv files, which are files that represent data tables and can be loaded into and edited by applications such as Excel or Google Sheets.

The table files are located in oxide/data/QualityCrafting/v3/Tables and in that directory you will find 3 files that will be explained in the following sections.
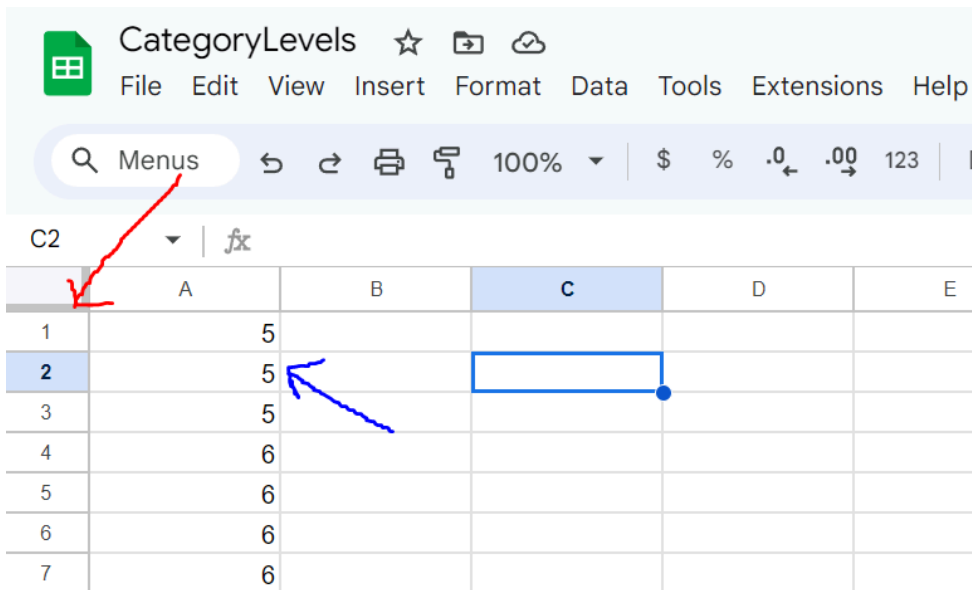
Category Levels

CategoryLevels.csv

This file contains the data that will control the leveling curve for Category level progression. Each row (red arrow) represents a 1-100 level and the column (blue arrow) represents how much XP is required to go from the previous level to the next level.

To edit this file, I recommend opening the csv file in a program like Excel or Google Sheets. However you can also edit it with any text editor like Notepad or Notepad++, but it won't be as nicely formatted.

So in this example, it would take 5 XP to go from level 3 to level 4. It would take another 6 XP to go from level 4 to level 5.

The amount of XP that items grant can be changed in the config file. Editing this table, and the XP gained allows you to modify how quickly players can level their Category level.

Item Levels

ItemLevels.csv

This file contains the data that will control the leveling curve for individual Item level progression. This table works the same as the Category Levels table, so refer to that for instructions on how to edit it.
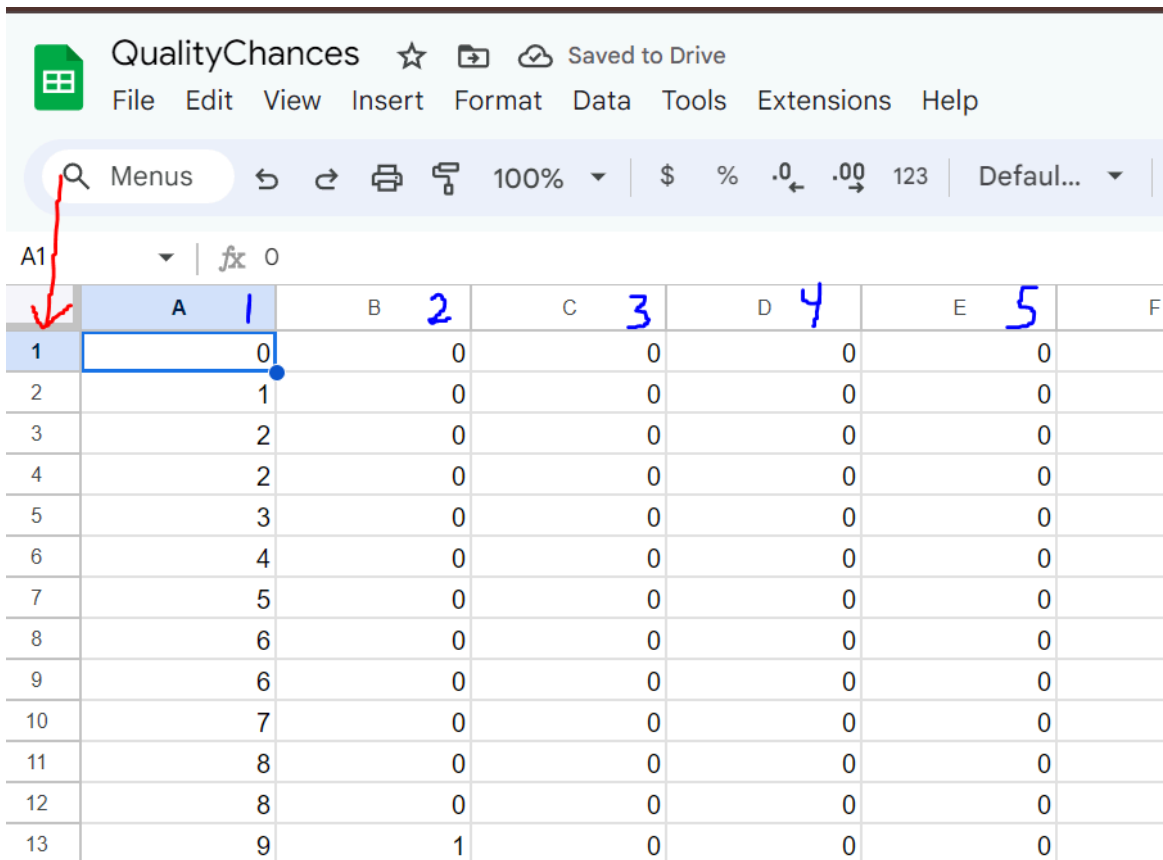
Quality Chances

QualityChances.csv

This file contains the data that determines what quality level an item can be when crafted. The rows (red arrow) represent the ITEM level (not category level) of the player. And the blue numbers represent each quality level from 1 star to 5 star items.

Each number in each cell represents the percent chance that a player has to craft that item. In this example, at level 13, the player has a 9% chance to craft a 1 star item and a 1% chance to craft a 2 star item and a 0% chance to craft a 3, 4 or 5 star item.

Higher qualities are prioritized when crafting. So if you have a 90% chance to craft a 5 star item, and a 10% chance to craft a 4 star item. They will never craft a 3, 2, 1 or 0 star item regardless of what the chance for those tiers are.

To edit this file, I recommend opening the csv file in a program like Excel or Google Sheets. However you can also edit it with any text editor like Notepad or Notepad++, but it won't be as nicely formatted.

	A **1**	B **2**	C **3**	D **4**	E **5**	F
1	0	0	0	0	0	
2	1	0	0	0	0	
3	2	0	0	0	0	
4	2	0	0	0	0	
5	3	0	0	0	0	
6	4	0	0	0	0	
7	5	0	0	0	0	
8	6	0	0	0	0	
9	6	0	0	0	0	
10	7	0	0	0	0	
11	8	0	0	0	0	
12	8	0	0	0	0	
13	9	1	0	0	0	

QualityChances ☆ 🔗 ☁ Saved to Drive

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FAQs

Q: How do I see the quality level of the items in my inventory?
A: The quality stars will appear whenever the container they are in is "refreshed" you can move an item to refresh it OR you can click the Quality "info" button to manually refresh them.

Q: How do I view my crafting skill levels?
A: Open your inventory and then click the Skills XP button OR use the command "/skills" to see the menu.

Q: Does this work with skins?
A: Yes, and it works with the Skinner plugin as well.

Q: I get the error "Requested value 'Gunsmithing' was not found" when I install the plugin
A: If you are installing v3 for the first time, you must delete your old config and lang files for QualityCrafting first.

Q: It says I need the plugin UiEngineFramework. Where can I get that?
A: You can download that plugin within the description section on the codefling page for Quality Crafting.