



DARKEST HOUR

EUROPE '44-'45

v6.0.0

Change Log

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Gameplay

Additions

Obstacles

Achtung! Barbed wire obstacles are now impassable to infantry! But fear not, vehicles can trample them and Combat Engineers can cut a path with their new wire cutters! (Tanks can also run over many fences now, too!)

New Spawning System

We have **completely** overhauled how you get to the battle! No more stumbling through clumsy spawn room doors or guessing where your team's deployment vehicles are!

We have created a brand new interface that replaces the role selection screen; on this screen you can select your role, weapons, spawn location and even what vehicle to spawn!

Attrition

Attrition is a new gameplay concept that emphasizes objective control and reinforcements. Attrition can have a continuous drain on the reinforcements of the team with the fewest controlled objectives; the greater the advantage, the faster the reinforcements will drain!

Currently featured on Lutremange, Kommerscheidt, Vieux and La Monderie.

Deploy Vehicles

Deploy Vehicles (DVs) have been updated and are now a much more intuitive and integral part of the battlefield! DVs are selectable as spawn points on the map in the spawn menu, so you know exactly where you're bringing the fight to!

Changes

- Default field-of-view increased from 80 to 90 [\[35c1376\]](#)
- Increased mantling (climbing) speed by 25% [\[fab15a7\]](#)
- Slightly increased the falling speed required to cripple legs [\[35b6aa3\]](#)
- Backblast from anti-tank rockets no longer damage the shooter [\[7add6b4\]](#)
- Different rules now apply when teams run out of reinforcements
 - If an attacker runs out of reinforcements, the round time is reduced to 1 minute
 - If there is no defender and either team runs out of reinforcements, the round time is reduced to 1 minute
 - If attrition is enabled, the side that runs out of reinforcements first loses
- Weapon Drops
 - Ammunition is now included in weapon drops, instead of being in a separate pouch
 - Weapons will no longer drop when player is killed with obliterating damage [\[bdf015a\]](#)
 - Weapons no longer drop when player is killed while in a vehicle [\[f0855f3\]](#)
 - Dropped weapons no longer possess an otherworldly glow [\[0a0a952\]](#)

- Dropped grenades now spread out on the ground [\[d70580b\]](#)
- The following items can now be explicitly dropped (will not drop upon death):
 - Binoculars [\[59e5fce\]](#)
 - Colored Smoke Grenades [\[081e8a9\]](#)
- Dropping a weapon no longer automatically switches to another weapon [\[914e48c\]](#)
- Resupply Areas
 - Infantry weapons will now be resupplied over time [\[216798f\]](#)
 - Vehicle weapons will now be resupplied over time [\[c0e60a8\]](#)
 - Resupply areas no longer distribute grenades [\[b36772a\]](#)
 - Resupply areas no longer distribute satchels [\[0b07d26\]](#)
- Melee
 - Hit detection improved [\[bdcdd79\]](#)
 - Attacks can be performed faster [\[bdcdd79\]](#)
 - Reduced attack “charge-up” times
 - Reduced attack damage [\[bdcdd79\]](#)
 - Attacks to enemies’ backs inflict more damage [\[8860a7d\]](#)
- Infantry Stamina
 - Changing stances now drains stamina [\[220a74d\]](#)
 - Prone diving now drains stamina [\[220a74d\]](#)
 - Raised overall stamina by 60% [\[f6a7e4b\]](#)
 - Reduced stamina drain while mantling [\[ed04bf2\]](#)
- Weapon Sway & Bob
 - Weapons will bob and sway as you shoulder the weapon
 - Reduced weapon bob when moving while sighted [\[c19ef42\]](#)
 - Sway is now affected by stamina [\[de98b5d\]](#)

Fixes

- Fixed bug where players who picked up an anti-tank weapon could sometimes not be resupplied or reloaded by teammates [\[98\]](#)
- Fixed bug/exploit where players could spawn as an enemy role [\[151\]](#)
- Radios
 - Fixed bug where Axis Artillery Officers were able to call artillery strikes from a Commonwealth Radio Operator’s radio [\[36\]](#)
 - Fixed bug where Radio Operators would be awarded points for denied artillery strike requests [\[37\]](#)
 - Fixed exploit where Artillery Officer could call down multiple simultaneous artillery strikes from a Radio Operator’s radio [\[18\]](#)
 - Fixed bug where multiple “zombie” radios could display on the map [\[187\]](#)
 - Fixed rare bug where artillery officers would not be able to use a radioman’s radio [\[222\]](#)
 - Fixed bug where radiomen were unable to switch weapons [\[336\]](#)

- Resupply Areas
 - Fixed exploit where infantry could instantly refill their currently loaded magazine by visiting a resupply point [\[82\]](#)
 - Fixed exploit where vehicle hull machine-guns could instantly refill their currently loaded magazine by visiting a resupply point [\[315\]](#)
- Fixed bug where “fade-to-black” effect could be circumvented by having a low HUD opacity setting [\[215\]](#)
- Fixed exploit that allowed players to remove weapon bob [\[241f818\]](#)
- Fixed exploit that allowed players to fire over cover without ever being seen [\[6da79ae\]](#)
- Fixed perceived exploit allowing players to call multiple simultaneous artillery strikes [\[371\]](#)
- Fixed bug where explosion or impact effects would sometimes not be seen by a player in a vehicle
- Fixed inconsistent water splash effects from projectiles, especially for players in vehicles
- Fixed bug where smoke clouds would persist into start of a second round or if game round was re-started by an admin

Vehicles

Additions

- The following vehicles now have snow variants:
 - M36 Jackson [\[1ac5f4a\]](#)
 - Jagdpanther [\[c2c9606\]](#)
 - StuG III Ausf. G (No side skirts) [\[3bcb8bb\]](#)
- The following vehicles can now have schürzen (side skirts):
 - Panzer V (Panther)
 - Jagdpanzer V (Jagdpanther)
- All vehicle machine-guns now have a HUD reload progress indicator [\[87\]](#)
- All vehicles now have rider positions
- Sd.Kfz. 234/1 cannon now has a mixed magazine (AP/HE cycle) [\[1045b50\]](#)
- Added back the transport (high occupancy) versions of the GMC and Opel Blitz [\[6b1792d\]](#)

Changes

- New system for improved hitbox detection on exposed operators of vehicles - basically exactly the same as infantry players, following any position and pose of the player
- Complete remake of turret collision, all tank turrets now have a collision mesh
- Open top turrets can now be subject of small arms fire or grenades [\[340\]](#)
- Changes to crew damage system when vehicles are penetrated to simulate shrapnel and round bouncing around in vehicle:
 - In turretless vehicles, all crew members have a chance of being killed [\[162\]](#)
 - In turreted vehicles, hull penetration has a small chance of killing the commander [\[282af28\]](#)
 - In turreted vehicles, turret penetration has a small chance of killing the driver and/or hull gunner [\[282af28\]](#)
- Players can no longer fire while transitioning between viewpoints [\[8\]](#)
- Players can no longer fire while looking through periscopes [\[51\]](#)
- Players can no longer change positions while transitioning between viewpoints [\[50\]](#)

- Tank Crewmen can now crew the following vehicles: [\[50fde74\]](#)
 - M8 Greyhound
 - Sd.Kfz 234/1
 - Sd.Kfz 234/2
- Sd.Kfz. 234/1 cannon spread increased [\[bd952c5\]](#)
- Sd.Kfz. 234/1 hinged mesh guards on top of turret now stop grenades but not bullets
- Players can no longer enter vehicles that are on fire [\[79\]](#)
- Players can no longer operate enemy light vehicles [\[e8c2e48\]](#)
- Players will no longer receive a "Waiting for Additional Crewmembers" message when entering vehicles [\[131\]](#)
- Changed Sf14 periscope magnification to proper magnification [\[147\]](#)
- Players will now exit vehicles to proper locations (eg. commanders will exit out turret hatches, riders will exit off of sides etc.)
- Besa machine-gun optic modified to be easier to use [\[30\]](#)
- When operating vehicle turrets, player's' view will now move with the rotation of the turret [\[166\]](#)
- Removed sparking emitter and grinding sound for wheeled vehicles when driving on rough terrain [\[275\]](#)
- Adjusted Sd.Kfz 251 and M3 Halftrack turn capabilities and speeds
- Darkened texture on M3 Halftrack and improved snow whitewash variant
- Reduced climbing ability and increased speed of GMC & Opel [\[e01e58b\]](#)
- Adjusted Firefly front armor slope and thickness values [\[65d8fe8\]](#)
- Destroyed vehicles now use a material overlay instead of a separate texture
- Tank fires now spread more slowly through the vehicle [\[146\]](#)
- Commander's view now turns with the turret
- The position and pose of every vehicle occupant has been adjusted to give best 'fit'
- Positions in which binoculars are used now require a player to actually have binoculars [\[e9364ce\]](#) and they are now actually visible to other players [\[351\]](#)
- StuG III Ausf. G and StuH 42 machine-guns can now only be reloaded when unbuttoned
- Reloads on all vehicle machine-guns except coaxial now pause if the player exits or moves to an ineligible reloading position, like a cannon reload
- 105mm smoke rounds (StuH 42 and Sherman 105mm) now have a bigger smoke effect
- Higgins boat ramp now blocks small arms fire

Fixes

- Fixed various network bugs caused when a vehicle first becomes 'network relevant' to a player, which happens when they first connect or when they spawn or move within network range of the vehicle:
 - vehicle occupants could appear in wrong position or pose
 - open hatches could appear closed
 - an already destroyed vehicle would appear to explode again [\[387\]](#)
 - an already burning tank would not appear to be on fire [\[127\]](#)[\[142\]](#)
 - a destroyed vehicle may still show wheel dust and exhaust effects
 - an empty vehicle but with the engine running would not show exhaust effects [\[140\]](#)
- Fixed bug where tanks could be destroyed by AT shells hitting the commander hitbox (even if not exposed)

- Fixed bug where bullets could kill passengers through the sides of various vehicles [\[344\]](#)
- Gun shields on vehicles should now work as expected
- Fixed problem where several vehicles were immune to blast damage
- Fixed bug where tracers would ricochet off soft-skinned vehicles they penetrated
- Fixed canister shots having no spread [\[2\]](#)
- Fixed camera yaw being limited while unbuttoned in some vehicle commander positions [\[24\]](#)
- Fixed bug where switching to spectator while occupying a vehicle would destroy the currently occupied position [\[87\]](#)
- Fixed visual glitch where treads on some (but not all) tanks would appear to be rotating the wrong way
- A few tanks that had wheels and tracks rotating too quickly have been fixed, but many still remain
- Fixed alpha "smearing" that occurred on many weapon optics [\[65\]](#)
- Fixed bug where infantrymen could not ride a tank if another player occupied the first rider position [\[1\]](#)
- Fixed bug where some rider positions did not have associated HUD icons [\[443a3e3, 54a27c3\]](#)
- Fixed bug where an incorrect message would be displayed when attempting to ride a vehicle that was full [\[75\]](#)
- Fixed bug where rider's camera view would become 'detached' when attempting to switch to a full or ineligible vehicle position
- Fixed so when player gets on a vehicle as a rider, they now start with their view facing the way the rider is facing
- Fixed bug where commander would wave arms in the air when lowering from binoculars
- Fixed bug where other players would see a vehicle mounted machine-gun in the wrong position, as they saw it turning more slowly than the instant turn for the gunner.
- Fixed bug on some machine-gun positions where player would face a random direction after exiting the vehicle
- Fixed bug where first key press to switch round type had no effect
- Fixed bug where bottom-out sound could be heard from across a level [\[276\]](#)
- Fixed bug where players killed out of tanks could cause the tank to move [\[366\]](#)
- Fixed bug where some tanks would shoot themselves with the turret machine-gun [\[402\]](#)
- Fixed bug where M3A1 Halftrack would bottom-out constantly [\[274\]](#)
- Fixed bug where Higgins boat used dirt emitter instead of water [\[9b28ff9\]](#)
- Fixed bug where Higgins boat ramp didn't stop bullets [\[425\]](#)
- Fixed Cromwell driver and hull gunner positions being reversed on the HUD display
- Fixed visual glitches on M36 Jackson turret, where parts of gun mechanism did not pitch with the gun, and screwed up texture mapping on the .50 cal mount
- Fixed problem with several turrets (Shemans, Cromwell, Jackson) where turret was off centre and/or sunk into the hull
- Fixed Jagdpanzer IV/L48 having no spread on smoke round [\[100\]](#)
- Fixed misaligned collision meshes on a variety of tanks
- Fixed bug where destroyed Marder III Ausf. M had blank, black treads
- Fixed visual contradiction where interior view of bren carrier showed Soviet DP-28 machine-gun drum mags

- Fixed visual glitch where the front wheels on the M8 Greyhound could appear to clip through the hull [\[38\]](#)
- Fixed bug where Opel truck would lift slightly off the ground when the driver leaned forward
- Fixed bugged view position when buttoned up in early StuG machine-gun, where player could see through the vehicle
- Fixed bug where external machine-guns would continue playing 'phantom' firing effects if the player moved to an ineligible firing position while holding down the fire key
- Fixed incorrect destroyed vehicle being displayed for whitewashed late StuG
- Fixed bugs where Sherman 75mm would jump to one side when destroyed and Wolverine and Achilles would become bigger

Anti-Tank & Anti-Air Guns

Additions

- 2cm Flakvierling 38
- M45 Quadmount

Changes

- Players can no longer fire while transitioning between viewpoints [\[8\]](#)
- Removed sabotage functionality [\[6edde81\]](#)
- Players can no longer operate enemy anti-tank or anti-air guns [\[e8c2e48\]](#)

Fixes

- Fixed bug where anti-tank guns could be destroyed by a single grenade [\[49\]](#)
- Fixed bug where AT gunners would disappear from the view of other players when they were not that far away
- Fixed 6 pounder and 57mm AT gun trails sinking excessively into the ground
- Fixed Pak 40 collision not turning with the gun, so ending up misaligned
- Fixed 6 pounder muzzle brake not matching color of barrel

Infantry Weapons

Additions

Wire Cutters

Wire cutters can be used to cut wire and open new paths of attack! The wire cutters are assigned to the Combat Engineer on various levels

Changes

- PIAT
 - Increased wall blast radius from 4 meters to 5 meters [\[e646a79\]](#)
 - Can no longer stand up during prone reload
- M1A1 Bazooka
 - Removed "Successfully reloaded" message after manually reloading [\[fa9c1ea\]](#)

- Increased the time needed to put away [\[242\]](#)
 - Reduced wall blast radius from 4 meters to 3 meters [\[e646a79\]](#)
 - Adjust rocket velocity to historical value and adjusted flight coefficient [\[e646a79\]](#)
- Thompson M1A1
 - Rate of fire reduced from 700 to 650 rounds per minute [\[4ceea34\]](#)
 - Improved overall feel and responsiveness [\[4ceea34\]](#)
 - Changed firing audio
- Sten Mark II
 - Rate of fire reduced from 550 to 500 rounds per minute [\[aeae14c\]](#)
 - Improved overall feel and responsiveness [\[aeae14c\]](#)
 - Changed firing audio [\[aeae14c\]](#)
- Nebelhandgranate 39
 - Full name is now displayed when selected rather than the abbreviated name (previously “Nb. 39 Grenade”) [\[27\]](#)
- Allied Smoke Grenade
 - Renamed to “M8 Smoke Grenade” [\[2fae62a\]](#)
- M1 Garand
 - Iron sight firing animations now visually recoil like other weapons
 - Accuracy reduced when firing from the hip [\[df255df\]](#)
- M1 Carbine
 - Accuracy reduced when firing from the hip [\[dc2da31\]](#)
 - Iron sight firing animation is now faster
 - Slightly reduced recoil [\[05530ab\]](#)
 - Slightly decreased accuracy [\[05530ab\]](#)
- Gewehr 41
 - Accuracy reduced when firing from the hip [\[dc2da31\]](#)
- Gewehr 43
 - Accuracy reduced when firing from the hip [\[dc2da31\]](#)
- Browning Automatic Rifle
 - Maximum carryable magazines reduced from 11 to 6 [\[fa2bb03\]](#)
 - Accuracy reduced when firing from the hip [\[412dc9f\]](#)
- Bren Gun
 - Maximum carryable magazines reduced from 11 to 6 [\[87dd7ef\]](#)
 - Now has select fire (single or full auto) [\[0cceb90\]](#)
- Fallschirmjärgewehr 42
 - Maximum carryable magazines reduced from 11 to 6 [\[04b88e3\]](#)
 - Increased recoil while rested and deployed [\[59b1353\]](#)
 - Decreased recoil while in iron-sights [\[603ddb4\]](#)
- Maschinengewehr 34
 - Field-of-view no longer narrows while in hip-fire mode [\[4cfda0f\]](#)
- Maschinengewehr 42
 - Maximum carryable belts reduced from 3 to 2 [\[818fd02\]](#)
- M1919 Browning Machine-Gun
 - Maximum carryable belts reduced from 3 to 2 [\[818fd02\]](#)
- Raketenpanzerbüchse 54 (Panzerschreck)
 - Renamed Panzerschreck to Raketenpanzerbüchse 54 [\[516e5c2\]](#)
 - Increased the time needed to put away [\[242\]](#)
 - Reduced wall blast radius from 4 meters to 3 meters [\[e646a79\]](#)

- Panzerfaust
 - Reduced wall blast radius from 4 meters to 3 meters [\[e646a79\]](#)
- Satchel Charges
 - Maximum carryable satchels reduced to 1 [\[5477467\]](#)
 - Removed ability to cook-off [\[76b1b3f\]](#)
 - Adjusted fuse to 15 seconds [\[76b1b3f\]](#)
 - Reduced throw range [\[76b1b3f\]](#)
 - Removed ability to instantly toss [\[76b1b3f\]](#)
 - Adjusted damage modifiers to vehicles to make less effective [\[76b1b3f\]](#)
- Scoped Enfield No. 4
 - Improved scope texture
- Scoped Springfield
 - Improved scope texture
- Scoped Karabiner 98k
 - Improved scope texture

Fixes

- General
 - Fixed bug where third person animations would not play when reloading empty sniper rifles [\[71\]](#)
 - Fixed bug where grenades or satchels would pass through turrets; now they bounce off
- PIAT
 - Fixed third-person player animation issues when crawling [\[35\]](#)
 - Fixed bug where other players would still see empty PIAT after reloading
 - Fixed bug where others players would sometimes see an incorrect message saying PIAT operator needed resupply
 - Fixed bug where after reloading PIAT, the player would see a “new mag is heavy” screen message
- Enfield No. 4
 - Fixed visual bug where shell would not eject when cycling the bolt while iron-sighted [\[69\]](#)
- Enfield No. 4 Scoped
 - Fixed visual bug where shell would not eject when cycling the bolt [\[68\]](#)
- Binoculars
 - Fixed bug where sighting and un-sighting binoculars would permanently lower the field of view [\[35\]](#)
- Bren
 - Fixed some animation sounds that were timed incorrectly
- M1A1 Bazooka
 - Fixed missing third person firing animation [\[108\]](#)
 - Fixed missing third person muzzle flash [\[109\]](#)
 - Fixed bug where loaded rocket would be lost on entering a vehicle
- Raketenpanzerbüchse 54 (Panzerschreck)
 - Fixed missing third person firing animation [\[108\]](#)
 - Fixed bug where loaded rocket would be lost after entering a vehicle

Roles

Changes

- Combat Engineers are now equipped with wire cutters
- Combat Engineers are now equipped with a satchel only on maps where they are required (eg. Breccourt, Dog Green)
- Replaced soft headgear with helmets on some Axis roles [\[8f94970\]](#)
- Deprecated Tank Commander, Reconnaissance Commander and Reconnaissance Crewman roles [\[87a5ee0\]](#)
- All Tank Crewman roles are now equipped with binoculars [\[995f89b\]](#)

Maps

Additions

- Cheneux (Schutze Sepp)
- La Gleize (Schutze Sepp)
- Stavelot (Schutze Sepp)
- Targnon (Schutze Sepp, Biermann, Kashash)

Changes & Fixes

Our level designers have made a **staggering** amount of improvements to many of our levels. The following lists have been shortened for the sake of brevity.

General (All non-legacy levels)

- Levels now use a deploy menu for spawn selection instead of a spawn room
- Levels now have appropriate “end cams” [\[120\]](#)
- Levels have new overviews with a unified style
- Levels now have new loading images
- Levels have bloom removed
- Levels have had reinforcements adjusted
- Improved the collision geometry of many objects
- Fixed many vegetation rendering issues
- Fixed many instances where objects would appear to abruptly pop into view
- Fixed many instances of players being unable to easily enter doors
- Fixed many instances of mis-aligned assets in levels
- Improved many level boundaries

Lutremange

- Comprehensive visual overhaul and improvements
- Added foothills/mountains that change the level’s design
- Replaced the “farm” with a lumber camp
- Added deploy vehicles and removed forward spawning into towns
- Adjusted forward spawn to the lumber camp to be on the outskirts of the level and is protected by minefield
- Adjusted tank loadouts

- Added attrition
- Removed time limit
- Replaced Axis mortars with artillery

Bois Jacques

- Reduced number of mortars to 1 for each team
- Adjusted spawn locations and added some new ones

La Chapelle

- Adjusted tank loadouts
- Adjusted water visuals and functionality

Hill 400

- Made the first bunker easier to capture (less of a meat grinder)
- Various changes for game flow improvements

Noville

- Comprehensive visual overhaul and improvements
- Extended and improved boundaries
- Added armored vehicles including some big hitters (Tiger vs Hellcat)

Foy

- Comprehensive visual overhaul and improvements
- Three more objectives added to improve the final stages of play
- Fixed exploit allowing players to get on the roof of a building

Freyneux and Lamormenil

- Redesign of objectives and spawning flow
- Reduced fog distance
- Fixed network cuts on forests for optimization
- Fixed exploit where players could fire rounds through some forests
- New armor loadouts more oriented to the Battle of the Bulge
- Reduced round duration
- Reduced reinforcements

Hill 108

- Redesign of objectives and spawns

Carentan Causeway

- Added objective between bridge 3 and 4
- Adjusted spawn locations

Caen

- Slight redesign to objective and spawns
- Bren carriers are deploy vehicles

Dog Green

- Higgins boats are deploy vehicles
- Micro adjustments to objectives and spawns

Raids

- Adjusted tank loadouts
- Objectives are no longer recapturable

Hurtgenwald

- Removed the death wave minefield
- Objectives are no longer recapturable

Juno Beach

- Adjusted objectives at the end
- Adjust spawn locations

Simonskall

- Adjusted spawns
- Adjusted roles
- Some gameplay tweaks

Kommerscheidt

- Added attrition
- Removed time limit
- Removed advanced spawns that were inside objectives
- Removed the North and South objectives
- Added deploy vehicles
- Adjust armor loadouts
- Added some cover for the Allied approach

Brecourt

- Comprehensive visual overhaul and improvements
- Lowered round time to 10 minutes
- Adjusted objectives and spawn design

Vieux

- Added attrition
- Removed time limit
- Adjusted spawns
- Reduced number of objectives
- Adjusted armor loadouts

La Monderie

- Added attrition
- Removed time limit
- Adjusted spawns
- Reduced number of objectives
- Adjusted armor loadouts

Carentan

- Fixed some visual popping

Poteau Ambush

- Adjusted some spawns and vehicle loadout

Bridgehead

- Comprehensive visual, gameplay, and design overhaul
- Extensive resource and network optimizations
- Now completely relies on deploy vehicles for infantry spawning

Stoumont

- Updated visuals
- Increased number of objectives to extend the level
- Adjusted vehicle loadouts
- Adjusted spawns
- Adjusted reinforcements and round time

Legacy Maps

Some long-standing levels do not align with the gameplay and aesthetic direction we want the game to take. Rather than spending the resources to upgrade them to 6.0 standards, we have classified the levels below as “Legacy” maps. These maps are playable, but are not recommended to be put on map rotations.

- Cambes en Plaine
- Ginkel Heath
- Gran
- Vieux Recon
- Wacht am Rhein

Mortars

Additions

- Added directional indicator to the mortar target to indicate the direction of mortar hits that do not fall within the required radius to show on the map [\[dbcfb71\]](#)
- Added approximate range to the target displayed under a mortar target [\[98bab42e\]](#)

Changes

- Mortar Observers can now mark smoke or high-explosive targets [\[dbcfb71\]](#)
- Marked mortar targets now remain if the Mortar Observer is killed [\[eed3219\]](#)
- Increased the distance that mortar shells must land from marked targets to show on the situation map [\[dbcfb71\]](#)
- Reduced mortar target marking interval time from 15 to 5 seconds [\[dbcfb71\]](#)

Fixes

- Fixed bug where changing to spectator while operating a mortar would crash the server [\[12\]](#)
- Fixed bug where players resupplying mortar operators would display an incomplete message [\[73\]](#)

- Fixed bug where deployed mortars would constantly explode when deployed in friendly minefields [\[347\]](#)
- Fixed bug where mortar shell impacts did not realistically affect ragdolls [\[414\]](#)
- Fixed bug where mortar whistling sound would play after round had already impacted [\[d5c7ea7\]](#)

Interface

Additions

- Completely re-designed the main menu [\[fafa031\]](#)
- Added 'Quick Join' button to main menu that will quickly connect to populated servers [\[9267d19\]](#)
- Added button for a player to change their cache purge delay [\[3d0dac6\]](#)
- Added control profiles to the Settings menu [\[b82b9c2\]](#)
- Added overlay grid to situational map [\[252cfe6\]](#)
- Added disconnect and options button to team selection menu [\[007df90\]](#), [a0f2666\]](#)
- Added time elapsed to the scoreboard [\[a47f982\]](#)
- Added low reinforcement warnings at 50, 25, and 10% [\[76cdeb3\]](#)
- Added map name to scoreboard [\[dc93e2d\]](#)
- Added ROID and button to copy it into the clipboard to the network area on the settings page [\[45bc69c\]](#)

Changes

- Changed display resolution options to include most common primary display resolutions based on [Steam Hardware Survey](#) data
- Changed team message indicator prefix from *PLATOON* to *TEAM* [\[341ed28\]](#)
- Removed location string from TeamSay messages [\[75ca532\]](#)
- Loading Screens
 - Custom levels can now have custom loading screens [\[8dcd12a\]](#)
 - Loading screens now display level author [\[8dcd12a\]](#)
 - Loading screens now display whether a level is official, community or legacy [\[8dcd12a\]](#)
- Satchels no longer show a warning to all teammates when thrown [\[76b1b3f\]](#)
- Removed 3D scope options [\[3e78b39\]](#)
- Situational map can now support 1024x1024 resolution overviews [\[252cfe6\]](#)
- Situational map background adjusted for aesthetic style
- VehicleSay messages can now only be sent when occupying a vehicle [\[246\]](#)
- Changed gamma example screenshot in display settings
- Console death messages now have a delay to match the obituary delay [\[386\]](#)
- Console death messages no longer display vehicle types [\[a6c4f42\]](#)
- Suicide death messages now show in console [\[385\]](#)
- Teams can now see each other's reinforcement values [\[ea6b4df\]](#)
- Vehicle HUD icons are now higher quality and have a consistent style
- Removed IRC and News tabs from the multiplayer browser [\[c548a008\]](#)
- Map vote messages no longer clutter the chat area while vote session is active [\[86f5f95\]](#)

Fixes

- Fixed exploit where players could appear to duplicate map votes [6]
- Removed duplicate entries in Gore Level settings [4]
- Removed duplicate entries in Network settings [4]
- Fixed bug where the HUD would always display the current objective capturer count as 0 while in Axis vehicles [44]
- Fixed speaker icon not displaying over players' heads when using VOIP [20]
- Fixed "has left channel" message from being spammed when a player disconnects [5]
- Fixed bug where having certain weapons would cause the HUD to display that you were receiving resupply when you actually were not [83]
- Fixed bug where players could send empty VehicleSay messages [3]
- Fixed bug where outdated capture bar information could be displayed for players occupying vehicles [39]
- Fixed exploit where players could vote for maps with unbounded frequency [132]
- Fixed bug where "Pioneer" was misspelled in the voice menu [22]
- Fixed bug where a variety of maps had preview images or situation maps that would appear blurry on low-end machines [170]
- Fixed bug where special characters (ß, Ü etc.) would be improperly displayed [169]
- Fixed bug where "You will attempt to spawn as <Role>" message would not honor `bUseNativeRoleNames` [180]
- Fixed a bug where vehicle HUD indicators would overlap [126]
- Fixed some occurrences where players would get "Unknown Steam Errors" (requires a fresh installation or deletion of pre-existing `DarkestHour.ini`) [3cb3bbf]
- Fixed bug where other players' names would display incorrectly or not at all while in a vehicle
- Fixed bug where rotation of compass and player map icon were wrong for a player in a vehicle
- Fixed bugs where hint system could stop working

SDK

Additions

- Changed and added icons for various actors for easier identification
- Levels can now be set to have no time limit [2809f2a]
- Added `DHObjectiveManager` [a2777f6]
- `EST_Custom00` material type is now a special material type that doesn't spawn effects when hit by projectiles [0ef8e5e]

Changes

- Changed objectives to be able to handle spawn point and vehicle pool changes [62976bf]
- Changed objectives to be able to handle objective flow (status changes) [62976bf]
- Levels can now have 32 objectives instead of 16 [0b2a721]
- `MasterObjectiveManager` no longer supported, but can easily be converted to a `DHObjectiveManager`

- Reinforcement levels are no longer influenced by the server's `MaxPlayers` setting [\[d5c8cad\]](#)
- Minefield volumes can now act as no arty volumes as well [\[6464fc1\]](#)

Fixes

- Fixed some Tiger I vehicle factories having no mesh visualization [\[26\]](#)

Audio

Additions

- Victory Music
 - United States
 - The Army Goes Rolling Along
 - Blood on the Risers
 - When Johnny Come Marching Home
 - Yankee Doodle
 - British Commonwealth
 - British Grenadiers
 - God Save the Queen
 - O Canada
 - Scotland the Brave
 - Germany
 - Deutschland lied
 - Fallschirmjäger lied
 - Florian Geyer lied
 - Panzer lied
 - Preussens Gloria
 - Marcha Erika

Changes

- Removed the screaming sound when a player disconnects during the post-game vote [\[9943c59\]](#)
- Reduced hull machine gun volume on various Axis armor [\[186\]](#)
- Reduced volume of helmet *ping* sound from melee attacks [\[bdcdd79\]](#)
- Increased volume on track/wheel sounds on treaded vehicles [\[4534232\]](#)
- Changed engine sound radius on all treaded vehicles for network optimization [\[87ecfa7\]](#)
- Can now reduce voice receive volume to 0.0 instead of 1.0 in audio settings [\[d766b62\]](#)
- Shell impacts now properly play both an impact sound and an explosion sound [\[476c560\]](#)

Fixes

- Fixed bug where machine-guns would sometimes continue firing after the round ended [\[57\]](#)
- Fixed bug where victory music would sometimes not play after round ended [\[63\]](#)
- Fixed bug where infantry melee hit sounds could be heard from extreme distances [\[96\]](#)

Controls

Additions

- Added ability to change mouse polling rate from input section [\[7309898\]](#)
- Added optional factors for sensitivity reduction when iron sighting and using optics [\[b54e8e8\]](#)

Changes

- Changed some default controls that confused players and caused issues
 - Tab changed to Show Scoreboard (non toggle)
 - F2 changed to Map Vote Menu
 - F3 changed to Communication Menu
 - Numpad-Minus changed to Communication Menu
 - Unbound Minus and Equals (Previous functionality often confused players)
- Changed how sensitivity works (no longer determined by field-of-view) [\[b54e8e8\]](#)

Fixes

- Fixed bug where settings on Input and HUD tabs would not saved or display correctly while on a server [\[11\]](#)

Client Commands

Additions

- Added `CommunicationMenu` command to bring up communication menu (where you can block/mute players) [\[2edc5a5\]](#)

Changes

- The `ListPlayers` console command now copies the information into the clipboard so you can paste it into a text editor [\[45bc69c\]](#)

Server Administration

Additions

- Added `bSessionKickOnSecondFFViolation` server variable that, when enabled, automatically kicks friendly-fire offenders for the remaining duration of a level when the offender was already kicked once for a friendly-fire violation. [\[1db9bf2\]](#)
- Added `bUseSwapVote` server variable that adds a `[Swap Teams and Restart]` option to the vote menu when enabled [\[bf9d0ed\]](#)
- Added `SwapTeams` admin command to swap the current teams and restart the round [\[0f60001\]](#)
- Added `SetRoundTime` admin command so admins can easily change the time remaining from console [\[11c245d\]](#)

Stability & Optimization

This update, we have focused a significant amount of effort towards increasing client and server stability. What this should mean is more stable netplay, lower load times, less memory usage, faster runtime performance and *significantly* fewer client crashes.

Large Address Aware

- Windows users now run a modified `RedOrchestra.exe` that is “large address aware”; this eliminates crashes to desktop caused by the engine running out of memory.

Network Improvement

- Significantly decreased network cost of vehicle passengers
- Adjusted vehicle sound radius to stop certain vehicles to be network relevant to everyone no matter what
- New vehicle spawning system that allows us to remove unused vehicles from maps, reducing costly network overhead for each vehicle removed
- Removed the unnecessary and obstructing ammo pouches from dropped weapons
- Eliminated need for replication of attached bullet snap actor

Less Memory Usage and Reduced File Size

- Compressed dozens of textures that were stored in an uncompressed format
- Reduced sizes of dozens of needlessly large textures
- Replaced many destroyed vehicle textures with shader materials
- Eliminated LOD meshes where they were not applicable
- Eliminated many duplicated assets in levels and packages

Increased Runtime Performance and Improved Load Times

- Added mipmaps to a variety of textures that did not have them but should have
- Countless script optimizations
- Eliminated hundreds of script warnings