

## Microsoft Halo PC 1.03 Update

### Release Notes

December 8th 2003, v1.03

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Welcome to the Halo PC 1.03 Update!

This file contains information to about the Halo PC 1.03 Update and the history of Halo PC updates to this day.

### Halo PC 1.03

Halo PC 1.03 is our first update to address some of the most important issues that have arisen since the game was released. Our goal with this patch was to 1) improve the quality of the online experience for gamers and 2) address the most frequent issues gamers run into. This update is also our first opportunity to improve our networking architecture with some of our learnings from our hours of online play. Here is a summary of what's new in Halo PC 1.03.

Note: All updates to the Halo Dedicated Server are documented in the Halo Dedicated Server Readme file, which is available here: [Halo Dedicated Server 1.03 Readme](#)

### Improving the Quality of the Online Experience for Gamers

#### Addressing Team Killing

Servers now have a complete team killing / banning system that should significantly reduce team killing online. The concept is simple: team-kill a number of times and you will automatically be banned from the server for a period of time set by the server administrator. Because team kills can be accidental, the concept of grief also exists: following a team-kill, if you don't team-kill again for a period of time, you are forgiven for your team-kill. These settings are customizable by the server administrator(s) using server console commands.

In addition to the system above, players are no longer penalized for being killed by someone on their team and respawn time penalty for a team-killer is multiplied by the number of teammates he killed, rapidly leading to very long respawn times for team killers.

#### Improving the Quality of the Online Experience

We've made a number of updates and bug fixes to our networking architecture, the most important one being specifically in how we transfer / predict player's movement / position as well as the action of reloading your weapon. While going into the details of these changes is beyond the scope of this document, the result should be a smoother online game experience across the variety of connections to the Internet.

We made the following changes to our user interface:

- \* Servers name now supports 65 characters for dedicated servers and 32 characters for client-hosted servers and now accepts an extended character set.
- \* Chat text length has been extended to 64 characters
- \* In-game scoreboard now displays every client's ping
- \* In-game scoreboard now displays your # of assists
- \* Server port numbers are displayed accurately throughout their range

## Additional Online Multiplayer New Features:

- \* Teams are now persisted for the next game when map cycling occurs
- \* Map Reset: It's now possible to restart the current game without requiring the server to map cycle.
- \* Assault: We now have a timer to keep track of how much time is left to your offense / defense round
- \* Assault: Alongside this timer, we also have an "Offense" and "Defense" indicator to quickly inform you of your role

## Addressing the Most Frequent Issues Experienced by Gamers

Many users have reported problems with Halo PC when using 3rd party software to force the refresh rate of their monitor. We have changed how we handle this situation in our code to seamlessly fall back to the forced refresh rate.

A significant number of reported game crashes are related to an external library called keystone.dll. We have updated this library to address the most common failures. These crashes would usually occur when changing screen resolution, when starting or quitting Halo PC, when chatting in a multiplayer game or when using ALT-TAB to minimize Halo PC and return to Windows.

## Additional Bug Fixes

- \* Halo can now be bound to a specific IP address using the -ip command line argument. (facilitating multiple NIC support for Halo Dedicated Servers)
- \* Halo can now read/write data files to a user specified folder using the -path command line argument. This is particularly useful for Halo Dedicated Servers but also be used for users whose "My Documents" folder is remapped to a UNC path. It is an advanced option and using it will force you to manually move saved games and multiplayer gametypes.
- \* Online Multiplayer: Telefrag message is now appropriately replicated.
- \* Online Multiplayer: Minor fixes to switching teams in kill-in-order games (score will now remain accurate)
- \* Online Multiplayer: Minor fixes to the end of the game state (new players now have to wait for the game to be restarted before being admitted to the server)
- \* Online Multiplayer: Fix for clients flashlight states when joining games
- \* Online Multiplayer: Vehicles won't respawn if they have a projectile (such as a plasma grenade) attached to them. They will wait for the projectile to be removed.
- \* Online Multiplayer: Minor fixes to using teleports for high-latency connections
- \* Sound: Fix for cinematic dialog being cut out on certain cards when enabling Audio Hardware Acceleration in the Audio Settings.

## Halo PC 1.02

With Halo PC 1.02, we are adding support for multiple instances to our dedicated server, enabling us and the community to roll out many more servers for gamers. We are also introducing client support for RCon (Remote Console), allowing dedicated server operators to have control over their servers running in data centers. For more information on the Halo PC Dedicated Server and the Remote Console, please consult the Halo PC Dedicated Server Readme file located here:

## Halo PC Dedicated Server 1.02

We have also released the Halo PC Technical and Performance FAQ, which answers most frequently asked technical questions about Halo PC. This FAQ is located here:

### Halo PC Technical & Performance FAQ

Here is a summary of the changes with Halo PC 1.02:

- \* Halo PC Dedicated Server Support for multiple instances
- \* Halo PC client support for RCon (remote console) to dedicated servers

#### Bug Fixes:

- \* Timedemo doesn't check memory usage consumption with every frame rendered (see Halo PC Technical and Performance FAQ for more info)
- \* After running timedemo, the last saved checkpoint is not altered anymore
- \* Multiple minor bugs fixed in the Halo Auto-Updater application
- \* Fixed an issue in keystone.dll that was causing certain configurations to potentially crash when chatting in multiplayer games
- \* Fixed minor card specific rendering glitches

## Halo PC 1.01

After Halo was released to manufacturing but before it arrived on store shelves, the Halo team discovered a potential crashing issue when playing Halo multiplayer online. In order to guarantee the best possible experience for our customers we have issued an update that addresses this issue. Before you can play Halo multiplayer online you will need to allow this update to install through the auto-install feature of Halo or by running haloupdate.exe from your Halo installation folder.

This is the only issue that was addressed with Halo PC 1.01

## Halo PC 1.00

Initial release of the PC version of Halo

### Technical Support Options

Your first stop for Halo PC technical support should be [www.microsoft.com/games/halo/support.asp](http://www.microsoft.com/games/halo/support.asp)

For all of our support offerings, visit . In Canada, visit <http://microsoft.ca/support>.

To get started, try the following:

- \* For articles targeted at a specific issue, visit the Microsoft Knowledge Base at <http://support.microsoft.com>
- \* To work with a Microsoft Product Support Professional over the internet, submit your issue at <http://support.microsoft.com/directory/onlinesr.asp>

\* For your product's general support policy, visit <http://support.microsoft.com>

Phone Support: Call (425) 637-9308 in the U.S., or (905) 568-3505 in Canada (toll charges may apply). For paid assisted support in the U.S., call (800) 936-5700; in Canada, call (800) 688-7975.

TTY Users: Microsoft text telephone (TTY/TDD) services are available at (425) 635-4948 in Washington State, (800) 892-5234 elsewhere in the U.S., and (905) 568-9641 in Canada.

Worldwide: Support outside the U.S. and Canada may vary. For regional contact details, visit <http://support.microsoft.com/international.aspx>. If there is no Microsoft subsidiary office in your country or region, please contact the establishment from which you obtained your Microsoft product.

Conditions: Microsoft's support services are subject to then-current prices, terms, and conditions, which are subject to change without notice.

Additionally, visit <http://halo.bungie.net/site/halo/features/halopc.html> for access to the Halo PC Technical and Performance FAQ and other useful resources.

You can also log on to the Gearbox Software forums at <http://www.gearboxsoftware.com> to be in touch with other Halo PC users.

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