

1 Description

OmniView4CTF essentially replaces the standard UT99 HUD with a broadcasting-friendly one for streaming 5v5 CTF games, both NW and IG. It shows all the important information in a concise and minimalistic way while also offering customization options to a degree as well as some automation features.

2 Main Features

- Score, remaining game time and flag carrier's name (user selectable) displayed top center.
- User selectable optical clues for when a flag is not on its stand.
- Chat and quick console top left with separate kill feed top right and user-changeable font size.
- In-built shorter and easier readable kill feed messages (user selectable and customizable).
- User selectable on-screen score board featuring two color schemes on the left with highlighting of the spectated player as well as the flag and amp carrier(s).
- User selectable on-screen item timer for amp(s) and belt(s) on the right with team colors for icons if there is more than one item of the same kind present.
- Health and armor displayed bottom center with dynamic icons and optical clue for low health.
- Possibility to directly switch from free camera to viewed player (user selectable).
- Automated horizontal turning of camera in 3rd person view while keeping user selected vertical camera angle (user selectable).
- User selectable option to automatically switch view to flag carrier.
- Working player numbers for easy switching using the game's native NumPad key-binds.
- In-game menu for real-time changes to the settings while a game is running.

3 Usage

3.1 Requirements

OmniView4CTF is made for and tested with [Unreal Tournament 469b](#) running in full screen.

OmniView4CTF was made for an in-game resolution of 2560x1440. It scales to and works on 1920x1080 as well. Other resolutions, especially stretched ones, might not work optimally.

The tool is meant for online use. The following must be running on the server for full functionality:

- To display the on-screen score board correctly, SmartCTF is required (tested with [SmartCTF_4E](#)).
- IG+ is needed to display the armor amount (tested with [IG+9](#) [14th December 2021]). This is due to the game (in my opinion falsely) not replicating this information to spectators (see [here](#) for details).
- To show accuracy information, UTStats is required (tested with [UTSAccuBeta4_2](#)).

3.2 Installation and Starting

Copy the .u-, .int- and .ini-files in your game's \System folder. After doing so, you can start the tool from the game's menu. Keep in mind that it needs to be restarted each time the map is changed.

3.3 Settings

a) General remarks

For some of the settings to be accessible in game, OmniView4CTF needs to be running.

The settings are stored in OV4CTF.ini in your game's \System folder and can also be changed there.

The size of the game information (score, clock and so on) on top, the item timer on the right and the player status at the bottom can be adjusted by changing the GUI size in the game's settings.

The on-screen scoreboard on the right won't be affected by this though. It changes size automatically depending on the resolution the game is run at.

b) Overview

On the next page you can find an overview of the HUD followed by a brief description of each option. Some options do not have a corresponding item displayed and only serve to control the behavior of the tool (see letters i to m and s below).

G

E F

G H

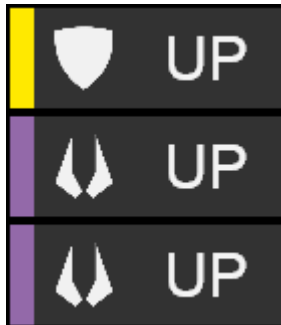
N
to
R

C

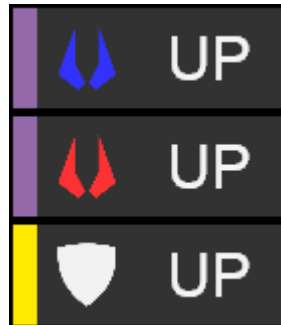
D

c) Show Item Timer (bShowItemTimer) | "On" by default

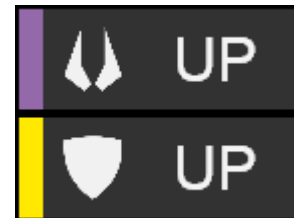
If selected, an on-screen item timer for amp(s) and belt(s) will be displayed on the right. If there's more than one item of the same kind present, the icons will be colored in the color of the team's base the item is closer to. If the game has not yet started (warm up), all item icons are neutrally white colored.



Example of the item timer during warm up with 2 amps and 1 belt.



Example of the item timer after game started with 2 amps and 1 belt.



Example of the item timer after game started with 1 amp and 1 belt.

d) Show Health and Armor (bShowHealthArmor) | "On" by default

If set to on, health and armor of the spectated player are displayed bottom center. The icons are dynamically filled according to health and armor amount. If the spectated player's health drops below 50, there will be a visual hint. If the spectated player has the belt, armor amount will be drawn in yellow.

e) Show FC Name on Top (bFC_Info) | "On" by default

The name of the player currently carrying the flag is displayed on top if this is selected. If the game has not started yet (warm up), nothing will be displayed.

f) Effects for stolen flags (iFlagEffects) | "Static" by default

This option controls the way how flags that are not on the stand will be highlighted on top. [None] doesn't show anything additional. [Static] will let the stolen flag's icon blink statically. [Dynamic] will let the stolen flag's icon blink dynamically with the speed increasing the lower the distance of the flag to the enemy's flag stand gets.

g) Larger Font for Chat / Kill Feed (iFontSizeChat & iFontSizeKF) | "Medium" by default

This option lets you change the font size for chat (top left) and/or kill feed (top right) for better readability on stream. [Small] equals the game's standard font size, while [Medium] and [Large] increase it a bit each.

h) Custom Messages for Kill Feed (bMsgLengthKF) | "On" by default

If this option is selected, the standard death messages are replaced by easier readable ones. The messages can be customized in the "Advanced" tab. The reset button in the "Advanced" tab will reset the messages to the defaults of OmniView4CTF, not the game's defaults. If you want to display the default messages of the game (again), just de-select the option all together. If you want to change the messages, you can also do that by editing OV4CTF.ini, which is probably the quicker and easier way. Natively supported by the game are "%k" for the killer's name, "%o" for the victim's name and "%w" for the used weapon.



1234567890 > S N I P E R > Nikita
1234567890 > S N I P E R > Zenith
1234567890 > S N I P E R > Nikita

Example of custom kill feed messages for frags with the sniper rifle as per default settings.

i) Easy Switch to Player from Free Cam (bEasySwitch) | "On" by default

If this option is checked, you can switch to spectating the player you are viewing in free-flight mode just by clicking your [Fire] button. You need to be close enough for the game to display the player's name for this to work.

j) Auto Turn 3rd Person Cam (bAutoAdjustCam) | "On" by default

This feature will automatically turn the camera horizontally based on the spectated player's change of view if there's no user input from the spectator for a certain amount of time. The vertical viewing angle will be kept at what the user last had it set to. This is to accommodate all kinds of FOVs and user preferences by letting the user chose the optimal vertical angle.

k) Delay for Auto Turn 3rd Person Cam After 5s (iAutoAdjustCamDelay) | "3s" by default

Here you can set how long the tool should wait after the last user input before starting to automatically turn the 3rd person camera. [1s], [3s] and [5s] can be selected where the first is rather fast and the last is rather slow with the [3s] representing the middle ground. This setting only has effects if "Auto Turn 3rd Person Cam" is enabled.

l) Auto Switch View to FC (bAutoViewFC) | "Off" by default

If selected, the view will be changed to the flag carrier as soon as a flag is picked up and once the game has started. If the second flag is picked up as well, the focus will stay on the first flag carrier. If the viewed flag carrier dies, the view will be switched to the other one.

If you pair this option together with "Auto Turn 3rd Person Cam" you can achieve full lazy mode where you don't really have to do anything anymore.

m) In-game Menu Key | None by default

This lets you set a key bind to bring up the OmniView4CTF menu in-game. The tool needs to be running for the key bind to work. All the settings you make take immediate effect so you will see what each option does without delay when using the in-game menu. If the key you select to bind is already bound, it will double bind it. Please keep that in mind and select an unbound key if possible.

n) Enable On-Screen Score Board (bScoreBoardState) | "On" by default

If selected, an on-screen score board will be displayed on the left side. Caps, grabs, flag kills and covers will only be shown if greater than 0 to help readability. The list is sorted by player score for each team. The currently spectated player is highlighted. A player carrying the flag will be marked by a little flag icon on the right once the game has started.

o) Show Accuracy Info (bShowAccuracy) | "Off" by default

If set to on, additional accuracy information will be displayed between the efficiency and the score column.

p) Effects for Players with Amp (iAmpEffects) | “Max” by default

This option determines how a player carrying the amp will be highlighted in the on-screen score board. [None] doesn't show anything. [Min] shows a small rectangle behind the score of the player. [Max] colors the amped player's row differently. The colorization decreases roughly according to the time of amp usage left.

Player	Caps	Grabs	FKills	Covers	Frag	Eff.	Score
1234567890					0	0%	0

Example of effect with [Min] selected.

Player	Caps	Grabs	FKills	Covers	Frag	Eff.	Score
1234567890					0	0%	0

Example of effect with [Max] selected (default).

q) Enable High Contrast Mode (bHighContrastMode) | “Off” by default

If set to on, the on-screen score board will not be colored in the team colors but in different shades of grey. Only at the end of each player's line a small vertical line in red or blue will indicate the team of the player.

Player	Caps	Grabs	FKills	Covers	Frag	Eff.	Score
1234567890					0	0%	0

Example of score board with team colors (default).

Player	Caps	Grabs	FKills	Covers	Frag	Eff.	Score
1234567890					0	0%	0

Example of score board with high contrast mode enabled.

r) Show Player Numbers (bPlayerNumbers) | “On” by default

If selected, the player's numbers will be shown left of their name. Those numbers support changing the view by the corresponding NumPad keys as originally featured by the game out of the box. If you've deleted those default key binds from your User.ini, just add "ViewPlayerNum [#]" again ("NumPad0=ViewPlayerNum 0" etc.).

s) (Advanced) Offset for game info on top (iOBSOffset) | “None” by default

This option lets you select an additional vertical offset from the top for the game information (score, clock and so on) on top so you can show a banner or something in you broadcasting software there. [None] doesn't create any additional offset, while [Small] creates a 25-pixel offset, [Medium] at 50-pixel offset and [Large] a 75-pixel offset, for a resolution of 2560x1440. The offset will be reduced to keep the same ratio of your resolution is lower.

4 Known Limitations and Issues

4.1 General remarks

- The tool works best with an in-game resolution of 2560x1440 (see above). It was tested using XOpenGL and D3D9/D3D11. Compatibility with other renderers is probable but not guaranteed.
- SmartCTF (for the on-screen score board), IG+ (to display the armor amount) and UTStats (for accuracy information) required for full functionality (see above as to why).
- Since OmniView4CTF replaces the default HUD, it will rightfully be flagged by anti-cheat. Only use it as a spectator broadcasting a game and make sure the server's anti-cheat is set to not check spectators.
- OmniView4CTF is made for 5v5 CTF supporting both NW and IG. You will almost certainly run into issues with more than 10 players or with a unsupported game mode.
- Since there are many mods for UT, compatibility can be questionable and is not guaranteed. This also applies if you are using tweaks, especially the ones tampering with textures.

4.2 Specific remarks

- Can very rarely crash the game when the map is switched or on exiting the game while the tool is running.
- Armor amount after a player picks up an armor or changes to the armor amount after the viewed player took damage don't displayed instantly as this info is only updated once every second by IG+ (see [here](#)). Therefore, kindly refrain from conducting any in-depth analysis based on the displayed values.

- “Auto Switch View to FC” isn’t 100% reliable and sometimes not the fastest to switch.
- For the “Dynamic” setting of “Effects for stolen flags” to work properly, both flag stands must have become relevant to you as a spectator. Usually this is the case after a short period of warm up.
- Both the “Static” and “Dynamic” setting of “Effects for stolen flags” start their blinking with the base event for each flag. This means the blinking might not be synchronized when both flags are picked up on different times.
- “ViewPlayerNum 0” rarely not working in warm up mode.
- Game clock might slightly trip when the game transitions to over time.
- Don’t use offline.

Please keep in mind that I’m not really a programmer and even less a u-scripter so therefore other limitations I’m unaware of may apply.

5 Version History

- 1.0 (14th February 2022)
Initial public release.

6 Acknowledgments

Inspired by [UTV by Fnordia and SJ](#).

This work would simply not have been possible without the fantastic help of a certain someone. Immense credits to [ANUSHUNTER5000](#). Thank you so much! ♥

Thanks to Deaod for fixing the display of armor for spectators in IG+ and for pointing me the right way concerning this issue.

Also, thanks to anybody who ever bothered writing a tutorial for, a guide about or a documentation regarding u-script.

Finally, thanks to everybody in [UTCTF.pug](#) for letting me spectate a few games and allowing me to use the test server.

7 License

[CC BY-SA 4.0](#).

8 Contact

Write to [Waylander](#) in [UTCTF.pug’s discord](#) or way@toxik.info to (probably) reach me.

If you’re missing any features, feel free to add them yourself (see “License” above). This might be close to the maximum possible without using a server sided mod though.