

AoE3 UnHardcode Patch

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Summary

The AoE3 UnHardcode is a project started by AoE3 Modders to investigate, research and eliminate the hardcoded issues, also known as "no-nos", which are faced by many modders, like the AI amount limit, in example.

This patcher will change your AoE3:TAD .exe to apply the code needed to eliminate those limitations. Right now, it only eliminates some of those limitations, but, as the development of the project progresses, this patcher shall be updated.

How to use

To use it, just extract all files to any folder and either drop your *age3y.exe* to the *UHC Patcher* executable, or open the Patcher executable and find the *age3y.exe* of your AoE3 installation manually. You'll be able to choose which patch options you would like to enable from the interface of the patcher, before applying the patch.

Even though the Patcher will work regardless of the directory in which it is located, we recommend extracting the patcher and its required files to the main AoE3 installation (usually *C:\Program Files\Microsoft Games\Age of Empires III* for CD installations and *C:\Program Files\Steam\SteamApps\common\Age of Empires III\bin* for Steam-based installations), since, this way, the patcher will detect the main executable used by your AoE3 installation automatically

The settings of the UHC Patch are defined in a configuration file, which should be located, by default, at *<AoE3 Path>\Startup\uhc.cfg*. For more details and information, please refer to the "UHC Configuration File" document.

Available Patches

- **AI Limit:** Removes the hardcoded 14 AI/Civilization limit by making the game read all .personality files in the from the AI directory defined in the .exe (which should be *AI/3*, by default)
- **Revolution Banners:** Allows new revolutions to have banners above the revolutionary's portrait in the Revolution UI.
- **Ignore Registry Path:** Makes the game read the AoE3 files from the folder in which the AoE3 .exe is located, instead of looking for a working path in the registry.
- **Team Limit:** Enables team options 3 and 4 for Single Player and Multiplayer games

Notes

After applying the "Revolution Banners" patch, the game will load the banner for a Revolution from the path `Art\ui\ingame\politicians\REV_banner_<techname>`, in which `<techname>` would be the name of the technology used by a Revolution, without the "XPRevolution" prefix, but, unlike previous versions of the patch, the original revolutions will retain their original banner paths.

After applying the "Team Limit" patch, in order to make those teams options show up in Multiplayer lobbies, you'll have to add the following xml entries:

```
<dropdown>$$36143$$Team 3</dropdown>
<dropdown>$$36144$$Team 4</dropdown>
```

To every `<gadget name="mpsetup-playerX-team" ... >` entry in the `data/uiMPGameSetupPage.xml` where "X" refers to all player numbers from 1 to 8.

While the new teams work flawlessly in Single Player, in multiplayer, if any player selects any of the new teams, only this player will see what he or she selected correctly, but the game will detect the new team(s) correctly once the game starts. Original teams aren't affected by this bug, and it isn't present in Single Player.

Credits

Special thanks to Tilanus Commodor for providing us with feedback and with the icon that has been used for the patcher; to Adam, for providing us his feedback and input; to JustTesting1234, for providing the code for the original memory codecave patching functions and to the ESOC team, for providing us with feedback and for testing the "Team Limit" Patch.

Changelog

1.5

- A brand-new plugin system, which allows the implementation of custom patches, syscalls and cheats has been implemented. Refer to the "UHC Plugin System" for more information.
- The patcher now has a proper graphical user interface
- The code of both DLLs has been merged into one single UHC.dll.
- All patch options are now defined in the configuration file of the UHC Patch
- The patch configuration file format has been changed. Refer to the "UHC Configuration File" document for more information.

- The bug that prevented the basePop configuration file property from working properly has been fixed
- The option to add more native civilizations no longer removes the native properties of XPSPC civilization

1.4

- Support to new civilizations with the same features of the Native civilizations (Fire Pit UI and Council/Five Politician Aging Up) has been added through the *NativeCivs* property of the UHC Configuration File. More information about it can be found at the “UHC Configuration File” document.
- Game won't start if the UHC Configuration File patch was applied, but no configuration file exists or if it could not be loaded.

1.3

- Three new properties have been added for the UHC configuration file: *AsianCivs*, *BigButtonCivs* and *NotBigButtonBlDs*. More information about them can be found at the “UHC Configuration File” document.
- Fixed the bug that would allow all buildings to have proper Market behaviour, if there were no valid cfg files or no valid entries in the *MarketUnits* property.

1.2

- The bug that would cause the game to fail to load UHC.dll in some systems has been fixed

1.1

- The patches Unlimited Population, Ignore Registry Path and Deck Card Limit have been added.
- A bug was fixed in the AI Limit patch
- Support for the UHC configuration file has been added

1.0

- Initial release