

# 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 drop your *age3y.exe* to the *UHC Patcher* executable. You'll be prompted about which patches you want to apply or not.

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)

## 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 *AI3*, by default)
- **Revolution Banners:** Allows new revolutions to have banners above the revolutionary's portrait in the Revolution UI.
- **Unlimited Population:** Removes the hardcoded 200 population limit and the 50 extra population limit.
- **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.
- **Deck Card Limit:** Extends the maximum possible number of cards in a deck to 40.
- **UHC Configuration File:** Makes the game read a configuration file, in which other hardcoded properties that can't be generalized could be extended. For more information, please refer to the "UHC Configuration File" document.

## 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. Thus the banners for the original revolutions will not show up, since they are named in a different convention. To fix this, you need to extract them, rename them and put them in the right directories.

After applying the “UHC Configuration File” patch, two files will be created at the root of your AoE3 installation: *uhc\_wrapper.dll* and *uhc.dll*. Those files are required for the proper functionality of the Configuration File feature and **must** be distributed with your mod files, when you release it.

## 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 and to JustTesting1234, for providing the code for the memory codecave patching functions.

## Changelog

### 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