UHC Configuration File

The UHC Configuration file is a file that is read before the game starts up and that allows modders to define which UHC Patch features should be loaded and to extend or change hardcoded properties that can't be generalized just by pure coding, like farming animations, proper market behavior, maximum population capacity and so on...

By default, it should be located at *<AoE3 Path>\Startup\uhc.cfg* . The location of the UHC configuration file can be changed by setting a different location while installing the patch or changing the value of the offset *0x00865083* in the age3y.exe after applying the patch.

An example UHC Configuration File can be found at the *Documentation\Examples\ Configuration File* folder in the files included with this release.

File Structure

The UHC Configuration File should follow the following structure:

```
multiValueProperty1 Value1 Value2 ...
singleValueProperty=Value3
structProperty ItemA Value1A Value2A ...
patchSetting1
...
```

As for UHC Patch v1.5+, colons (":") should not be used to denote properties and the name of some properties have been changed. The Patcher should be able to do the necessary changes, but, in case it doesn't, the file will have to be manually edited.

Each one of the available properties of the UHC Configuration Files belongs to one of the following categories:

- **Multi-value properties:** Accept a finite set of items and are used to assign a property (or a set of properties) to the given set of items, which may represent units or civilizations.
- **Single-value properties:** Accept only one value and are used to assign a particular value to one of the settings of the patch or of the game itself. Those properties are denoted by an equal ("=") sign, that explicitly indicates that a single particular value should be read and assigned to that property, as seen in the example code above.
- **Struct properties:** Used to define properties that require more than one argument per item
- **Patch Settings:** Enable a particular setting or option of the UHC Patch, and are usually set in the UHC Configuration File by the UHC Patcher.

Supported Properties

Multi-value properties:

- **enableFarmAnim**: Defines the (additional) buildings in which settlers would walk through it while gathering a resource from it, like AoE3 Mills and Plantations.
- **rectFarmAnim**: Defines the (additional) buildings which would have a behaviour similar to the rectangular Farms of the TWC civilizations.
- **marketUnits**: Defines which (additional) buildings should support a proper market behaviour.
- **asianCivs**: Defines which civilizations should get export UI, plus support wonder age up.
- **nativeCivs**: Defines which civilizations should get the fire pit UI, plus support council age up.
- **tacticSwitching**: Defines the (additional) buildings that should support tactic switching through ProtoUnitCommands, like the Factory and the Rice Paddy do, in the original game.
- **twoScoutCivs**: Defines the (additional) civilizations which should support setting two explorer/monk names upon the creation of a new Home City.

Single value properties:

- **basePop**: Defines the maximum base population to be used by the game. If it's not set, the default value is 200.
- **extraPop**: Defines the maximum extra population to be used by the game. If it's not set, the default value is 50.
- **deckCardCount**: Defines the maximum possible number of cards in a deck. If it's not set, the default value is 25.

Struct properties:

- **farmingRadius**: Defines the maximum area in which villagers should be able to walk, while gathering resources from particular buildings defined in the *enableFarmAnim* property. Every item assigned to this property should follow the following format:

  ```
  farmUnitIndex areaWidth areaHeight
  ```

  Where:
  - **`farmUnitIndex`** should be replaced by the index of a building whose maximum farming area will be changed in the *enableFarmAnim* property
  - **`areaWidth`** should be replaced by the width of the new maximum farming area in the X axis
  - **`areaHeight`** should be replaced by the height of the new maximum farming area in the Z axis
- **attackTypeIcons**: Assigns UI icons and stringtable IDs to existing attack types in the game. Every item assigned to this property should follow the following format:

  ```
  attackType stringID iconPath
  ```

Where:

- **`attackType`** should be replaced by the name of an attack type
- **`stringID`** should be replaced by the string table ID to be assigned to the aforementioned attack type
- **`iconPath`** should be replaced by the path to the icon to be assigned to the attack type, which should be relative to the art directory and should not contain any spaces

- **explorerUnits**: Defines units which should receive custom explorer or monk names and/or should deliver a knockout message once they are killed, in case they are heroes. Every item assigned to this property should follow the following format:

```
unitName explorerNameType msgStringID
```

Where:

- **`unitName`** should be replaced by the unit name of an unit in the protoy.xml
- **`explorerNameType`** should be replaced by **1**, to make all instances of this unit use the first explorer/monk name set in the HC creation screen, **2**, to make them use the second explorer/monk name, or **0**, to make them retain their original names.
- **`msgStringID`** should be replaced by the stringtable ID for the knockout message

Patch settings:

- **noAILimit**: 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).
- **customRevolutionBanners**: Allows new revolutions to have banners above the revolutionary's portrait in the Revolution UI.
- **ignoreRegistryPath**: 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.
- **enableAllTeams**: Enables team options 3 and 4 for Single Player and Multiplayer games.
- **removeFameRestriction:** Allows the usage of the Fame Resource in ProtoActions, like AutoGather and ModifyGather, and also enables proper displaying of Fame, Experience and Shipment costs in the politician screen and HC cards.
- **customSyscalls**: Allows the UHC Patch to load and register custom syscalls implemented through plugins.
- **customCheats**: Allows the UHC Patch to load and register custom cheats implemented through plugins.

Notes

After enabling the custom Revolution Banners option in the configuration file used by the UnHardcode 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.

If the option to extend the maximum amount of teams is enabled in the configuration file, in order to make the new 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>
```

After the following entry:

```
<dropdown>$$36145$$Team ?</dropdown>
```

In every `<gadget name="mpsetup-playerX-team" ... >` entry in both of the *data\uiMPGameSetupPage.xml* and *data\uimpesogamesetuppage2.xml* files, where "`X`" refers to all player numbers from 1 to 8. You can find versions of those files with the necessary edits in the *Documentation\Examples\Team Limit* folder in the files included with this release.

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.