



DISTANT WORLDS LEGENDS

MODDING GUIDE

Distant Worlds Legends – Modding Guide

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Introduction

Much of the content in Distant Worlds can be modified, allowing you to customize your game experience.

Want to add your own alien races to the game? Maybe you want to predefine your own characters that appear in the game? Do you have some custom ship pictures you want to use in the game? Or maybe you just want to hear different music while playing the game? All of these changes are possible in Distant Worlds.

This document describes which content you can customize, and explains how to do it.

Themes

A theme contains a full set of customized content, including images, alien races, characters, music, etc. You can switch between all of the themes on your computer from the “Change Theme” screen on the Main Menu.

Themes are stored in their own folder, with subfolders for specific types of content.

A finished theme should be placed in its own folder under the Customization folder. The theme will then be available for selection from the “Change Theme” screen in the game.

Listed below are all of the types of resources that can be customized in a theme:

- Alien races (races folder)
- Empire policy (policy folder)
- Dialog for each alien race (dialog folder)
- Custom predefined Characters (characters folder)
- Ship and Base pictures (shipImages folder)
- Alien race pictures (raceImages folder)
- Character pictures (characterImages folder)
- Troop pictures (troopImages folder)
- Empire flag symbols (flagShapes folder)
- Star system names (systems.txt)
- Ship design names (designs.txt)
- Random Character names (agentNames.txt)
- Player ship names per type (shipNames.txt)
- Music (music folder)

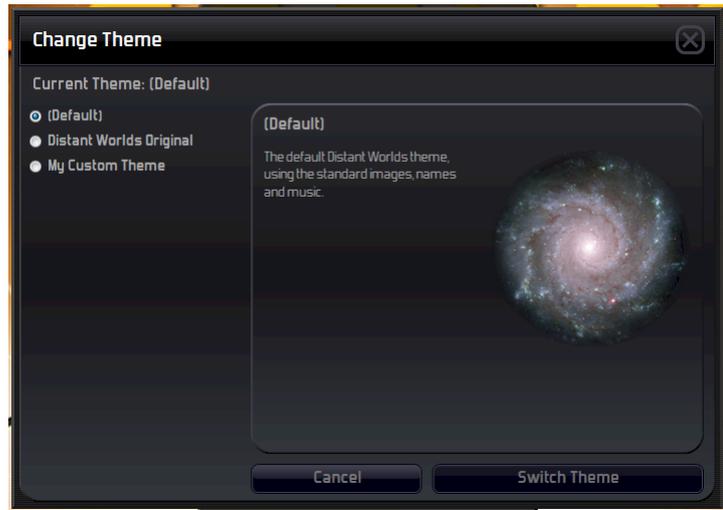


Figure 1. Change Theme screen

Name	Type	Size
characterImages	File folder	
characters	File folder	
dialog	File folder	
flagShapes	File folder	
music	File folder	
policy	File folder	
raceImages	File folder	
races	File folder	
shipImages	File folder	
troopImages	File folder	
about.png	PNG File	99 KB
about.txt	Text Document	1 KB
agentNames.txt	Text Document	3 KB
biases.txt	Text Document	0 KB
designs.txt	Text Document	5 KB
races.txt	Text Document	6 KB
shipNames.txt	Text Document	1 KB
systems.txt	Text Document	6 KB

Figure 2. Theme folders and files

Theme Description

To introduce your custom theme in the Change Theme screen, you may optionally include some descriptive files in the root of your theme folder.

To display some introductory text describing your theme, include the file **about.txt**. The text in this file will appear when your theme is selected in the Change Theme screen.

You may also add an image to accompany your description. To do this, include a PNG image file named **about.png**. This image will be displayed to the right of your introductory text.

Most Items Optional

Note that most customizable items are optional – i.e. you only need to supply the items that you want customized, all other items will be loaded from the default resources. Thus it is possible to customize a single image, while loading the remaining images from the default Distant Worlds images.

This principle holds true for most other items: customized name text files, etc. You do not need to customize everything to have a valid theme. Just customize what you want to change.

Exceptions to this are files in the **rac**es, **policy** and **characters** subfolders. You must explicitly define all of the alien races that you want in your theme. This means that for each alien race you must include the following:

- a race file in the **rac**es folder
- an empire policy file in the **policy** folder
- optionally, a set of predefined characters in a file in the **characters** folder

To achieve this, you may find it helpful to copy some of the existing race, policy and character files from default Distant Worlds game installation. You can copy these files to your theme subfolders and then modify them as needed.

Customizing Images

The following images can be customized in your theme:

- Ships and Bases
- Alien races
- Characters
- Troops
- Empire Flag Shapes

All images should be stored as PNG image files (Portable Network Graphics). Image backgrounds should be set to full transparency. To improve performance, the usage of partial transparency (variable-level alpha channel) within images should be kept to a minimum.

You can also customize the flag symbols used for empires. Place your custom empire flag symbol files in the **flagShapes** folder. Flag symbols should be either WMF or EMF files (Windows meta-files).

Ship and Base Pictures

Customized ship or base images should be placed in their own ship family subfolder under the **shipImages** folder. Thus there can be subfolders named “family0”, “family1”, etc – mimicking the structure found under the images\units\ships folder.

Each image should be named by its ship- or base-type, e.g. destroyer.png, explorationship.png, mediumspaceport.png, etc.

Only supply the images that you want to customize – you do not have to supply a complete family of images. Any missing images will fall-back to the default Distant Worlds ship images for that family.

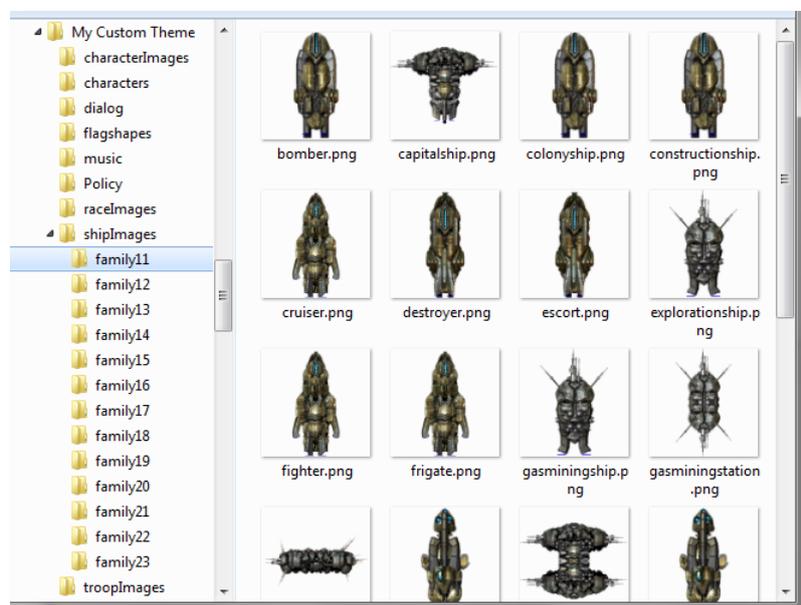


Figure 3. ShipImages folder

If you add completely new ship image families then ensure that the sequence of folder names retains a continuous series of numbers. For example if you add a new ship image family folder named “family26”, you must also have folders named “family25”, “family24”, “family23”, etc – all the way back to “family0”.

Size and Shape

All images for ships and bases should be perfectly square in shape, i.e. the width and height should be the same length. This will ensure proper appearance when rotating the image.

Ship and base images should be less than 300 pixels per side, i.e. up to 300 x 300 pixels wide and high.

Engine Exhaust

Some colors have special meaning when used in ship and base images.

Pure blue (RGB 0,0,255) is used to indicate the location of engines on the ship, allowing engine exhaust to be displayed when the ship is moving. Paint a pure blue line (single-pixel width) on the ship to indicate the location of each engine.

Running Lights

Pure yellow (RGB 255,255,0) is used to indicate the location of 'running' lights on the ship or base. Paint a single pixel of pure yellow anywhere on the ship or base to indicate where a flashing light should appear.

Alien Race Pictures

Customized alien race images should be placed in the **raceImages** folder under your custom theme.

Alien race images should be named "Race_0.png", "Race_1.png", etc. You do not have to supply all alien race images in your theme. Any missing images will fall-back to the default Distant Worlds race images from the images\units\races folder.

All alien race images should be perfectly square in shape, i.e. width and height should be the same length. These images should ideally be at least 200 pixels wide and high, with the head and shoulders filling most of the frame.

Character Pictures

Characters predefined in a character file (characters folder) can use images stored in the **characterImages** folder under your custom theme.

Character images can have any name, but must be PNG image files. Ideally character images should have transparent backgrounds, although this is not required.

All character images should be perfectly square in shape, i.e. width and height should be the same length. These images should ideally be at least 200 pixels wide and high, with the head and shoulders filling most of the frame.

Troop Pictures

Customized troop images should be placed in the **troopImages** folder under your custom theme.

Troop images should be named “Troop_0.png”, “Troop_1.png”, etc. You do not have to supply all troop images in your theme. Any missing images will fall-back to the default Distant Worlds troop images from the images\units\troops folder.

Troop images can be any size or shape, and each individual troop image can have a different size or shape from other troop images.

Customized Name Files

Various sets of names in the game can be customized.

These name files generally contain simple comma-delimited values. Each file contains specific instructions for customizing its contents. Simply copy the original files from the root game folder into the root of your customized theme folder and edit these copies with your desired values.

Customizable name files include the following:

- **systems.txt:** used to assign star system names when generating a new galaxy. If there are insufficient names, then they will be reused, but with suffixes like “Major”, “Minor”, etc.
- **designs.txt:** default names for new military ship designs. Multiple sets of names are present in the file – one set per line. Each alien race is assigned one of these name sets using the value “Design names index” in their race file in the races folder.
- **agentNames.txt:** First and last names for randomly generated characters. These are arranged by alien race family – the first line contains a comma-delimited list of first names, the second line contains a comma-delimited list of last names.
- **shipNames.txt:** optional set of comma-delimited names used to name each new ship or base in the player’s empire. The names are arranged by ship- or base-type, e.g. Escort, Frigate, ExplorationShip, MiningStation, etc.

Music

Music can be customized by adding MP3 files to the **music** subfolder under your custom theme.

If at least two MP3 music files are present in the music subfolder then these music files will be used instead of the default Distant Worlds music.

You can place as many MP3 files in this folder as desired – they will be played in random order. To specify which music file is played as the theme, name the file “DistantWorldsTheme.mp3”.

Note that the music files must be in MP3 format, no other format files will be played (WMA, MIDI, OGG, etc).

Alien Races

You can customize the alien races in Distant Worlds by adding files to the **races** subfolder.

The existing races folder contains files that define all of the default races in Distant Worlds. Copy one of these files into your customized theme folder and then edit this copy to create your own customized alien race.

Each race file records all of the details for a single race.

Each line contains separate name-value pairs. The left-most part of the line has the name, then a tab

and semi-colon, then the value.

Each value in the race file is described in detail below:

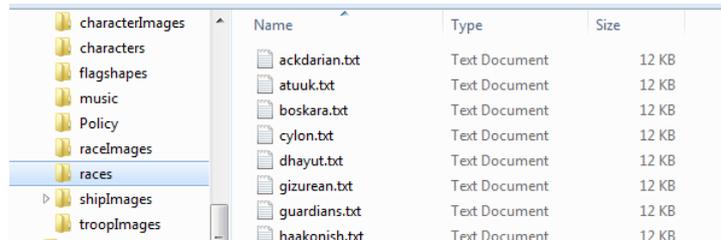


Figure 4. Races folder

Name	Description
Name	Name of the race
PictureIndex	Index of the picture used for this race from race pictures contained in images\units\races\ folder or customization\YourTheme\raceImages\ folder
RaceFamily	Family of the race 0=Humanoid, 1=Ursidian, 2=Insectoid, 3=Reptilian, 4=Amphibian, 5=Rodent, 6=Machine
ReproductionRate	The default rate of annual population growth. This rate is also modified by other external factors. Valid range from 1.0 to 1.5
Intelligence	The intelligence level of the race. Normal = 100. Valid range from 50 to 150
Aggression	The aggression level of the race. Normal = 100. Valid range from 50 to 150
Caution	The caution level of the race. Normal = 100. Valid range from 50 to 150
Friendliness	The friendliness level of the race. Normal = 100. Valid range from 50 to 150
Loyalty	The loyalty level of the race. Normal = 100. Valid range from 50 to 150
DesignsPictureFamilyIndex	Index of default ship pictures used for this race from ship pictures contained in images\units\ships\ folder or customization\YourTheme\shipImages\ folder. Valid range is 0 to 50. Ensure that a matching ship image family folder exists for the specified index
DesignNamesIndex	Index into default ship design names from the designs.txt file. Valid range is 0 to 50. Ensure that a matching design name set exists for the specified index
ShipMaintenanceSavings	Percentage rate of savings on maintenance costs for ships

	and bases. Valid range from 0 to 100.
TroopMaintenanceSavings	Percentage rate of savings on maintenance costs for troops. Valid range from 0 to 100.
ResourceExtractionBonus	Percentage rate of speed increase for all mining operations. Valid range from 0 to 100.
WarWearinessAttenuation	Percentage rate of reduction in war weariness. Valid range from 0 to 100.
SatisfactionModifier	Percentage rate of happiness bonus at colonies. Valid range from 0 to 100.
ResearchBonus	Percentage rate of speed increase for research. Valid range from 0 to 100.
EspionageBonus	Percentage rate of skill bonus for all intelligence missions. Valid range from 0 to 100.
TradeBonus	Percentage rate of bonus for colony income. Valid range from 0 to 100.
OverallShipDesignFocus	What this race focuses on when designing new ships and bases. Note that this focus can be overridden by Empire Policy settings. 0=Balanced, 1=Speed/Agility, 2=Power, 3=Efficiency
TechFocus1	Which technologies this race focuses on when choosing new tech to research and when designing new ships and bases. Note that this focus can be overridden by Empire Policy settings. 0=None, 1=Beams, 2=Phasers, 3=Rail Guns, 4=Torpedoes, 5=Bombard Weapons, 6=Missiles, 7=Area Weapons, 8=Ion Weapons, 9=Fighters, 10=Armor, 11=Shields, 12=Reactors, 13=Main Thrust Engines, 14=Vectoring Engines, 15=HyperDrives, 16=Hyper Disruption, 17=Construction, 18=Damage Control, 19=Targetting, 20=Countermeasures, 21=Sensors, 22=Medicine, 23=Recreation
TechFocus2	Which technologies this race focuses on when choosing new tech to research and when designing new ships and bases. Note that this focus can be overridden by Empire Policy settings. 0=None, 1=Beams, 2=Phasers, 3=Rail Guns, 4=Torpedoes, 5=Bombard Weapons, 6=Missiles, 7=Area Weapons, 8=Ion Weapons, 9=Fighters, 10=Armor, 11=Shields, 12=Reactors, 13=Main Thrust Engines, 14=Vectoring Engines, 15=HyperDrives, 16=Hyper Disruption, 17=Construction, 18=Damage Control, 19=Targetting, 20=Countermeasures, 21=Sensors, 22=Medicine, 23=Recreation
NativePlanetType	Native planet type for this race. The race can naturally colonize this type of planet 0=Continental, 1=MarshySwamp, 2=Desert, 3=Ocean, 4=Ice, 5=Volcanic
SpecialComponent	Special race-specific technology that this race has access to 0=None, 1=Death Ray (Super Weapon), 2=Devastator Pulse (Super Weapon), 3=Super Laser (Super Weapon), 4=StarBurner (Engine), 5=TurboThruster (Engine), 6=Swift Vector (Vectoring Engine), 7=Megatron (Shields),

	8=NovaCore (Reactor), 9=VelocityDrive (HyperDrive), 10=ShadowGhost ECM (Countermeasures), 11=Shaktur FireStorm (Torpedo Weapon), 12=High Density Fuel Cell (Fuel Storage), 13=S2F7 RepairBot (Damage Control), 14=PulseWave Cannon (Beam Weapon), 15=Raptor Targetting System (Targeting)
SpecialGovernment	Special government style 0=None, 1=Technocracy, 2=HiveMind, 3=MercantileGuild, 4=UtopianParadise, 5=Way of the Ancients, 6=Way of Darkness, 7=Corporate Nationalism
PreferredStartingGovernment	Which government this race prefers to start the game with 0=No preference, 1=Technocracy, 2=HiveMind, 3=MercantileGuild, 4=UtopianParadise, 5=Way of the Ancients, 6=Way of Darkness, 7=Despotism, 8=Feudalism, 9=Monarchy, 10=Republic, 11=Democracy, 12=Military Dictatorship, 13=Corporate Nationalism
Expanding	Indicates whether this race will colonize new planets or not (Y/N). Set this to 'N' to create a static empire that does not colonize
CanBePirate	Indicates whether this race can be a pirate faction or not (Y/N)
Playable	Indicates whether this race can be selected by the player as their empire's race at start of game or not (Y/N)
PeriodicChangeInterval	Number of years between change to racial characteristics (defined below), 0=no periodic changes
PeriodicChangeLength	Number of years that changes to racial characteristics last (defined below), 0=no periodic changes
PeriodicFactorsGrowth	Periodic change to growth rate (i.e. growth rate when periodic changes are active). Valid range from 1.0 to 2.0
PeriodicFactorsAggression	Periodic change to aggression level (i.e. aggression level when periodic changes are active). Valid range from 50 to 200.
PeriodicFactorsCaution	Periodic change to caution level (i.e. caution level when periodic changes are active). Valid range from 50 to 200.
PeriodicFactorsFriendliness	Periodic change to friendliness level (i.e. friendliness level when periodic changes are active). Valid range from 50 to 200.
PeriodicChangeCycleEvent	Race event that occurs during change cycle: 0=None, 1-28=events (see Appendix: Race Event Types)
ShipSizeFactorCivilian	Resize factor for maximum civilian ship sizes. This means that civilian ships can be built either larger or smaller than normal. Valid range from 0.7 to 2.0
ShipSizeFactorMilitary	Resize factor for maximum military ship sizes. This means that military ships can be built either larger or smaller than normal. Valid range from 0.7 to 2.0
DisallowedResearchArea1	Technology area that this race cannot research 0=None, 1=Torpedoes, 2=Missiles, 3=Area Weapons, 4=Ion Weapons, 5=Fighters, 6=Armor, 7=Hyper Disruption, 8=Sensors
DisallowedResearchArea2	Technology area that this race cannot research

	0=None, 1=Torpedoes, 2=Missiles, 3=Area Weapons, 4=Ion Weapons, 5=Fighters, 6=Armor, 7=Hyper Disruption, 8=Sensors
DisallowedResearchAreas	Technology area that this race cannot research 0=None, 1=Torpedoes, 2=Missiles, 3=Area Weapons, 4=Ion Weapons, 5=Fighters, 6=Armor, 7=Hyper Disruption, 8=Sensors
AdditionalIntelligenceAgents	Number of extra intelligence agents allowed above normal limit. This also increases the number of intelligence agent characters that this race starts the game with. Valid range from 0 to 5.
ConstructionSpeedFactor	Increase or decrease construction speed. Faster construction speeds can especially affect colonization, allowing fast building of new colony ships. Valid range from 0.3 to 3.0
DefaultPrimaryColor	Main color of empire flag and empire territory Valid color values from 0-19 (See Appendix: Color Values)
DefaultSecondaryColor	Secondary color of empire flag Valid color values from 0-20 (See Appendix: Color Values)
DefaultFlagDesign	Symbol shape on empire flag Valid values from 0-40
HomeSystemName	Name of ancient home system. This is not necessarily the name of the race's starting home system
TroopStrength	Raw strength of new troops for this race. Valid range from 50 to 200.
TroopName	Default troop name, e.g. if 'Strike Battalion' then troops named '1st Strike Battalion', etc
ResourceType	Which resource provides the bonus to this race. 0=None, 1-41=specific resource (See Appendix: Resource Types)
ResourceEffect	The effect of the resource on this race at colonies. 0=None, 1=HappinessBonus, 2=DevelopmentBonus, 3=ConstructionSpeedIncrease, 4=RecruitedTroopStrengthIncrease, 5=ResearchBonusWeapons, 6=ResearchBonusEnergy, 7=ResearchBonusHighTech, 8=PopulationGrowthRate, 9=WarWearinessReduction, 10=IncomeBonus, 11=BaseMaintenanceLowered
ResourceAmount	Amount of resource effect, may be a percentage value HappinessBonus: value from 0-20 DevelopmentBonus: value from 0-20 ConstructionSpeedIncrease: percentage from 0-100 RecruitedTroopStrengthIncrease: value from 0-100 ResearchBonusWeapons: percentage bonus from 0-10 ResearchBonusEnergy: percentage bonus from 0-10 ResearchBonusHighTech: percentage bonus from 0-10 PopulationGrowthRate: percentage from 0-100 WarWearinessReduction: percentage decrease from 0-100 IncomeBonus: percentage from 0-100 BaseMaintenanceLowered: percentage from 0-100
ResourceAppliesOnlyToSource	Specifies whether the resource effect only applies when the resource is naturally occurring at a colony (i.e. mined at the

	colony) (Y/N)
Resource2Type	Which resource provides the bonus to this race. 0=None, 1-41=specific resource (See Appendix: Resource Types)
Resource2Effect	The effect of the resource on this race at colonies. 0=None, 1=HappinessBonus, 2=DevelopmentBonus, 3=ConstructionSpeedIncrease, 4=RecruitedTroopStrengthIncrease, 5=ResearchBonusWeapons, 6=ResearchBonusEnergy, 7=ResearchBonusHighTech, 8=PopulationGrowthRate, 9=WarWearinessReduction, 10=IncomeBonus, 11=BaseMaintenanceLowered
Resource2Amount	Amount of resource effect, may be a percentage value HappinessBonus: value from 0-20 DevelopmentBonus: value from 0-20 ConstructionSpeedIncrease: percentage from 0-100 RecruitedTroopStrengthIncrease: value from 0-100 ResearchBonusWeapons: percentage bonus from 0-10 ResearchBonusEnergy: percentage bonus from 0-10 ResearchBonusHighTech: percentage bonus from 0-10 PopulationGrowthRate: percentage from 0-100 WarWearinessReduction: percentage decrease from 0-100 IncomeBonus: percentage from 0-100 BaseMaintenanceLowered: percentage from 0-100
Resource2AppliesOnlyToSource	Specifies whether the resource effect only applies when the resource is naturally occurring at a colony (i.e. mined at the colony) (Y/N)
Resource3Type	Which resource provides the bonus to this race. 0=None, 1-41=specific resource (See Appendix: Resource Types)
Resource3Effect	The effect of the resource on this race at colonies. 0=None, 1=HappinessBonus, 2=DevelopmentBonus, 3=ConstructionSpeedIncrease, 4=RecruitedTroopStrengthIncrease, 5=ResearchBonusWeapons, 6=ResearchBonusEnergy, 7=ResearchBonusHighTech, 8=PopulationGrowthRate, 9=WarWearinessReduction, 10=IncomeBonus, 11=BaseMaintenanceLowered
Resource3Amount	Amount of resource effect, may be a percentage value HappinessBonus: value from 0-20 DevelopmentBonus: value from 0-20 ConstructionSpeedIncrease: percentage from 0-100 RecruitedTroopStrengthIncrease: value from 0-100 ResearchBonusWeapons: percentage bonus from 0-10 ResearchBonusEnergy: percentage bonus from 0-10 ResearchBonusHighTech: percentage bonus from 0-10 PopulationGrowthRate: percentage from 0-100 WarWearinessReduction: percentage decrease from 0-100 IncomeBonus: percentage from 0-100 BaseMaintenanceLowered: percentage from 0-100
Resource3AppliesOnlyToSource	Specifies whether the resource effect only applies when the resource is naturally occurring at a colony (i.e. mined at the colony) (Y/N)

Condition1Type	Race-specific Victory Condition type 0=None, 1-58=specific condition (See Appendix:Race Victory Condition Types)
Condition1Value	Value used to modify condition, e.g. percentage threshold
Condition1Proportion	Percentage proportion of overall race victory value – all conditions should total to 100%
Condition1AdditionalData	Any extra information required by the specific condition type PlanetTypes: 0=None, 1=Continental, 2=MarshySwamp, 3=Ocean, 4=Desert, 5=Ice, 6=Volcanic CreatureTypes: 0=None, 1=GiantKaltor, 2=SpaceSlug, 3=SandSlug, 4=Ardilus, 5=SilverMist ResearchIndustry: 0=None, 1=Weapons, 2=Energy, 3=HighTech Wonder: 0=None, 1=Universal Hive, 2=Galactic Archives, 3=Lava Palace Resort, 4=Underwater Palace
Condition2Type	Race-specific Victory Condition type 0=None, 1-58=specific condition (See Appendix:Race Victory Condition Types)
Condition2Value	Value used to modify condition, e.g. percentage threshold
Condition2Proportion	Percentage proportion of overall race victory value – all conditions should total to 100%
Condition2AdditionalData	Any extra information required by the specific condition type PlanetTypes: 0=None, 1=Continental, 2=MarshySwamp, 3=Ocean, 4=Desert, 5=Ice, 6=Volcanic CreatureTypes: 0=None, 1=GiantKaltor, 2=SpaceSlug, 3=SandSlug, 4=Ardilus, 5=SilverMist ResearchIndustry: 0=None, 1=Weapons, 2=Energy, 3=HighTech Wonder: 0=None, 1=Universal Hive, 2=Galactic Archives, 3=Lava Palace Resort, 4=Underwater Palace
Condition3Type	Race-specific Victory Condition type 0=None, 1-58=specific condition (See Appendix:Race Victory Condition Types)
Condition3Value	Value used to modify condition, e.g. percentage threshold
Condition3Proportion	Percentage proportion of overall race victory value – all conditions should total to 100%
Condition3AdditionalData	Any extra information required by the specific condition type PlanetTypes: 0=None, 1=Continental, 2=MarshySwamp, 3=Ocean, 4=Desert, 5=Ice, 6=Volcanic CreatureTypes: 0=None, 1=GiantKaltor, 2=SpaceSlug, 3=SandSlug, 4=Ardilus, 5=SilverMist ResearchIndustry: 0=None, 1=Weapons, 2=Energy, 3=HighTech Wonder: 0=None, 1=Universal Hive, 2=Galactic Archives, 3=Lava Palace Resort, 4=Underwater Palace
Condition4Type	Race-specific Victory Condition type 0=None, 1-58=specific condition (See Appendix:Race Victory Condition Types)
Condition4Value	Value used to modify condition, e.g. percentage threshold
Condition4Proportion	Percentage proportion of overall race victory value – all

	conditions should total to 100%
Condition4AdditionalData	Any extra information required by the specific condition type PlanetTypes: 0=None, 1=Continental, 2=MarshySwamp, 3=Ocean, 4=Desert, 5=Ice, 6=Volcanic CreatureTypes: 0=None, 1=GiantKaltor, 2=SpaceSlug, 3=SandSlug, 4=Ardilus, 5=SilverMist ResearchIndustry: 0=None, 1=Weapons, 2=Energy, 3=HighTech Wonder: 0=None, 1=Universal Hive, 2=Galactic Archives, 3=Lava Palace Resort, 4=Underwater Palace
Condition5Type	Race-specific Victory Condition type 0=None, 1-58=specific condition (See Appendix:Race Victory Condition Types)
Condition5Value	Value used to modify condition, e.g. percentage threshold
Condition5Proportion	Percentage proportion of overall race victory value – all conditions should total to 100%
Condition5AdditionalData	Any extra information required by the specific condition type PlanetTypes: 0=None, 1=Continental, 2=MarshySwamp, 3=Ocean, 4=Desert, 5=Ice, 6=Volcanic CreatureTypes: 0=None, 1=GiantKaltor, 2=SpaceSlug, 3=SandSlug, 4=Ardilus, 5=SilverMist ResearchIndustry: 0=None, 1=Weapons, 2=Energy, 3=HighTech Wonder: 0=None, 1=Universal Hive, 2=Galactic Archives, 3=Lava Palace Resort, 4=Underwater Palace
RaceEvent1Type	Race Event Type 0=None, 1-29=specific event (See Appendix: Race Event Types)
RaceEvent1Frequency	Proportion of time event will be triggered when chance arises, i.e. how frequently the event occurs. Higher values mean more frequently, lower values mean less frequently. Default = 1.0, valid range from 0 to 10.0
RaceEvent2Type	Race Event Type 0=None, 1-29=specific event (See Appendix: Race Event Types)
RaceEvent2Frequency	Proportion of time event will be triggered when chance arises, i.e. how frequently the event occurs. Higher values mean more frequently, lower values mean less frequently. Default = 1.0, valid range from 0 to 10.0
CharacterRandomAppearanceChanceLeader	Random appearance chance for Leader characters: Minimum=0, Normal=1.0, Maximum=5.0
CharacterRandomAppearanceChanceAmbassador	Random appearance chance for Ambassador characters: Minimum=0, Normal=1.0, Maximum=5.0
CharacterRandomAppearanceChanceGovernor	Random appearance chance for Colony Governor characters: Minimum=0, Normal=1.0, Maximum=5.0
CharacterRandomAppearanceChanceAdmiral	Random appearance chance for Fleet Admiral characters: Minimum=0, Normal=1.0, Maximum=5.0
CharacterRandomAppearanceChanceGeneral	Random appearance chance for Troop General characters: Minimum=0, Normal=1.0, Maximum=5.0
CharacterRandomAppearance	Random appearance chance for Scientist characters:

ceChanceScientist	Minimum=0, Normal=1.0, Maximum=5.0
CharacterRandomAppearanceChanceIntelligenceAgent	Random appearance chance for Intelligence Agent characters: Minimum=0, Normal=1.0, Maximum=5.0
CharacterStartingTraitLeader	Default starting character trait for Leaders 0=None, 1-93=specific trait (See Appendix: Character Traits)
CharacterStartingTraitAmbassador	Default starting character trait for Ambassadors 0=None, 1-93=specific trait (See Appendix: Character Traits)
CharacterStartingTraitGovernor	Default starting character trait for Colony Governors 0=None, 1-93=specific trait (See Appendix: Character Traits)
CharacterStartingTraitAdmiral	Default starting character trait for Fleet Admirals 0=None, 1-93=specific trait (See Appendix: Character Traits)
CharacterStartingTraitGeneral	Default starting character trait for Troop Generals 0=None, 1-93=specific trait (See Appendix: Character Traits)
CharacterStartingTraitScientist	Default starting character trait for Scientists 0=None, 1-93=specific trait (See Appendix: Character Traits)
CharacterStartingTraitIntelligenceAgent	Default starting character trait for Intelligence Agents 0=None, 1-93=specific trait (See Appendix: Character Traits)
ResearchColonizationCostFactorContinental	The cost factor for researching Continental colonization. This can be used to increase or reduce the cost of researching colonization for a particular planet type, e.g. the race may be poorly-suited to colonizing a particular type of planet, so the research cost factor is increased. Valid range from 0.2 to 5.0
ResearchColonizationCostFactorMarshySwamp	The cost factor for researching Marshy Swamp colonization. This can be used to increase or reduce the cost of researching colonization for a particular planet type, e.g. the race may be poorly-suited to colonizing a particular type of planet, so the research cost factor is increased. Valid range from 0.2 to 5.0
ResearchColonizationCostFactorOcean	The cost factor for researching Ocean colonization. This can be used to increase or reduce the cost of researching colonization for a particular planet type, e.g. the race may be poorly-suited to colonizing a particular type of planet, so the research cost factor is increased. Valid range from 0.2 to 5.0
ResearchColonizationCostFactorDesert	The cost factor for researching Desert colonization. This can be used to increase or reduce the cost of researching colonization for a particular planet type, e.g. the race may be poorly-suited to colonizing a particular type of planet, so the research cost factor is increased. Valid range from 0.2 to 5.0
ResearchColonizationCostFactorIce	The cost factor for researching Ice colonization. This can be used to increase or reduce the cost of researching colonization for a particular planet type, e.g. the race may be poorly-suited to colonizing a particular type of planet, so the research cost factor is increased. Valid range from 0.2 to 5.0
ResearchColonizationCostFactorVolcanic	The cost factor for researching Volcanic colonization. This can be used to increase or reduce the cost of researching colonization for a particular planet type, e.g. the race may be poorly-suited to colonizing a particular type of planet, so the research cost factor is increased. Valid range from 0.2 to 5.0
ColonyConstructionSpeedFactorContinental	The speed at which new colony ships are built at Continental colonies. This can be used to increase colony ship construction speed at the race's native planet type. Valid

	range from 0.2 to 5.0
ColonyConstructionSpeedFactorMarshySwamp	The speed at which new colony ships are built at Marshy Swamp colonies. This can be used to increase colony ship construction speed at the race's native planet type. Valid range from 0.2 to 5.0
ColonyConstructionSpeedFactorOcean	The speed at which new colony ships are built at Ocean colonies. This can be used to increase colony ship construction speed at the race's native planet type. Valid range from 0.2 to 5.0
ColonyConstructionSpeedFactorDesert	The speed at which new colony ships are built at Desert colonies. This can be used to increase colony ship construction speed at the race's native planet type. Valid range from 0.2 to 5.0
ColonyConstructionSpeedFactorIce	The speed at which new colony ships are built at Ice colonies. This can be used to increase colony ship construction speed at the race's native planet type. Valid range from 0.2 to 5.0
ColonyConstructionSpeedFactorVolcanic	The speed at which new colony ships are built at Volcanic colonies. This can be used to increase colony ship construction speed at the race's native planet type. Valid range from 0.2 to 5.0
ColonyPopulationPolicyGrowthFactorExterminate	Bonus to population growth at a colony when a foreign race is being exterminated through the Exterminate colony population policy. Valid range from 0.2 to 5.0
ImmuneNaturalDisastersAtColonyType	The race can usually avoid natural disasters at specified colony type 0=None, 1=Continental, 2=MarshySwamp, 3=Ocean, 4=Desert, 5=Ice, 6=Volcanic
SpaceportArmorStrengthFactor	Bonus to armor strength for space ports built at colonies. Valid range from 0.3 to 3.0
KnownStartingGalacticHistoryLocations	Number of special historical locations known by the race at the start of the game. Locations include restricted areas like Weapons Testing Ranges, special Research Facilities, secret Supply Depots, etc. Valid range from 0 to 10.
TourismIncomeFactor	Bonus factor to all tourism income at resort bases and other tourist destinations. Valid range from 0.2 to 5.0
FreeTradeIncomeFactor	Bonus factor to all trade transaction fees at space ports, colonies and mining stations. Valid range from 0.2 to 5.0
MigrationFactor	General rate of migration between colonies for this race. Valid range from 0.2 to 5.0
TroopRegenerationFactor	Rate of troop regeneration after taking damage in battles. Valid range from 0.2 to 5.0

Empire Policy

You can customize how each alien race plays the game by adding files to the **policy** subfolder.

The existing policy folder contains files that define how all of the default races behave. Copy one of these files into your customized theme folder and edit this copy to create your own customized empire policy. Alternatively you can edit policy in-game in the Empire Policy screen and then save the policy as a file using the “Save As” button.

Each policy file records the empire policy for a single race.

Each line contains separate name-value pairs. The left-most part of the line has the name, then a tab and semi-colon, then the value.

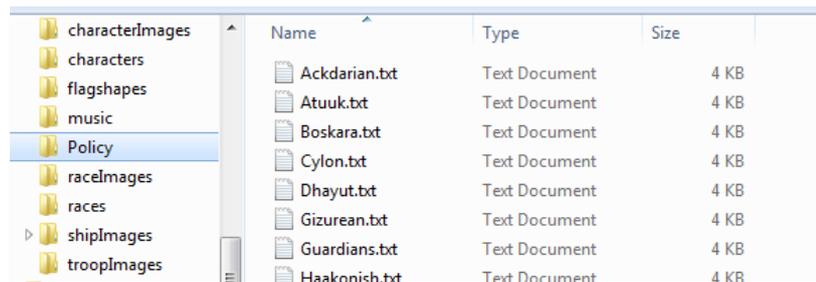


Figure 5. Policy folder

Each value in the empire policy file is described in detail below:

Name	Description
ImmediatelyRecruitNewTroopsWhenColonize	Y/N value
ColonyAllowFacilityCloningFacility	Y/N value
ColonyAllowFacilityFortifiedBunker	Y/N value
ColonyAllowFacilityGiantIonCannon	Y/N value
ColonyAllowFacilityPlanetaryShield	Y/N value
ColonyAllowFacilityRegionalCapital	Y/N value
ColonyAllowFacilityRoboticTroopFoundry	Y/N value
ColonyAllowFacilityTroopTrainingCenter	Y/N value
ColonyAllowFacilityTerraformingFacility	Y/N value
ColonyFacilityPopulationThresholdCloningFacility	Numeric value in millions, e.g. 500 means 500 million
ColonyFacilityPopulationThresholdFortifiedBunker	Numeric value in millions, e.g. 500 means 500 million
ColonyFacilityPopulationThresholdGiantIonCannon	Numeric value in millions, e.g. 500 means 500 million
ColonyFacilityPopulationThresholdPlanetaryShield	Numeric value in millions, e.g. 500 means 500 million
ColonyFacilityPopulationThresholdRegionalCapital	Numeric value in millions, e.g. 500 means 500 million
ColonyFacilityPopulationThresholdRoboticTroopFoundry	Numeric value in millions, e.g. 500 means 500 million

ColonyFacilityPopulationThresholdTroopTrainingCenter	Numeric value in millions, e.g. 500 means 500 million
ColonyFacilityPopulationThresholdTerrafarmingFacility	Numeric value in millions, e.g. 500 means 500 million
DoNotRecruitTroopsUntilColonyPopulationReachesThreshold	Numeric value in millions, e.g. 100 means 100 million
ColonyTaxRateIncreaseWhenAtWar	Y/N value
ColonyTaxRateLargeColony	0=Low, 1=Normal, 2=High
ColonyTaxRateMediumColony	0=Low, 1=Normal, 2=High
ColonyTaxRateSmallColony	0=Low, 1=Normal, 2=High
MilitaryConstructionLevel	0=Low, 1=Normal, 2=High
ConstructionMilitaryCapitalShip	Percentage proportion of military construction for Capital Ships
ConstructionMilitaryCarrier	Percentage proportion of military construction for Carriers
ConstructionMilitaryCruiser	Percentage proportion of military construction for Cruisers
ConstructionMilitaryDestroyer	Percentage proportion of military construction for Destroyers
ConstructionMilitaryEscort	Percentage proportion of military construction for Escorts
ConstructionMilitaryFrigate	Percentage proportion of military construction for Frigates
ConstructionMilitaryTroopTransport	Percentage proportion of military construction for Troop Transports
ConstructionSpaceportLargeColonyPopulationThreshold	Numeric value in millions, e.g. 500 means 500 million
ConstructionSpaceportMediumColonyPopulationThreshold	Numeric value in millions, e.g. 500 means 500 million
ConstructionSpaceportSmallColonyPopulationThreshold	Numeric value in millions, e.g. 500 means 500 million
ConstructionSpaceportMinimumDistance	Minimum distance between spaceports Numeric value in thousands, e.g. 700 means 700 thousand
DiplomacySendGiftsUpToAmount	Numeric value
DiplomacyTradeSanctionsUseBlockades	Y/N value
FleetMilitaryProportionForFleets	Percentage proportion of military ships assigned to fleets
FleetStrikeForceTypicalSize	Typical number of ships in small fleets
FleetTypicalSize	Typical number of ships in large fleets
IntelligenceAllowMissionDeepCover	Y/N value
IntelligenceAllowMissionInciteRevolution	Y/N value
IntelligenceAllowMissionSabotageColony	Y/N value
IntelligenceAllowMissionSabotageConstruction	Y/N value
IntelligenceAllowMissionStealGalaxyMap	Y/N value

IntelligenceAllowMissionStealOperationsMap	Y/N value
IntelligenceAllowMissionStealTechData	Y/N value
IntelligenceAllowMissionStealTerritoryMap	Y/N value
IntelligenceCounterIntelligenceProportion	Percentage proportion of intelligence agents assigned to Counter-Intelligence
IntelligenceUseEspionageAgainstEmpireWhen	0=Anytime, 1=Disliked, 2=No Treaty, 3=Trade Sanctions or War, 4=At War
IntelligenceUseSabotageAgainstEmpireWhen	0=Anytime, 1=Disliked, 2=No Treaty, 3=Trade Sanctions or War, 4=At War
ResearchDesignAutoRetrofit	Y/N value
ResearchDesignOverallFocus	0=Balanced, 1=Speed and Agility, 2=Raw Power, 3=Energy Efficiency
ResearchDesignTechFocus1	0=None, 1=Beams, 2=Phasers, 3=Rail Guns, 4=Torpedoes, 5=Bombard Weapons, 6=Missiles, 7=Area Weapons, 8=Ion Weapons, 9=Fighters, 10=Armor, 11=Shields, 12=Reactors, 13=Main Thrust Engines, 14=Vectoring Engines, 15=HyperDrives, 16=Hyper Disruption, 17=Construction, 18=Damage Control, 19=Targetting, 20=Countermeasures, 21=Sensors, 22=Medicine, 23=Recreation
ResearchDesignTechFocus2	0=None, 1=Beams, 2=Phasers, 3=Rail Guns, 4=Torpedoes, 5=Bombard Weapons, 6=Missiles, 7=Area Weapons, 8=Ion Weapons, 9=Fighters, 10=Armor, 11=Shields, 12=Reactors, 13=Main Thrust Engines, 14=Vectoring Engines, 15=HyperDrives, 16=Hyper Disruption, 17=Construction, 18=Damage Control, 19=Targetting, 20=Countermeasures, 21=Sensors, 22=Medicine, 23=Recreation
ResearchDesignAutoUpgradeFighters	Y/N value
WarAttacksAllowColonyBombardment	0=At every opportunity, 1=Against empires we intensely dislike, 2=Against empires with Diabolical reputation, 3=Never
WarAttacksAllowPlanetDestroying	0=At every opportunity, 1=Against empires we intensely dislike, 2=Against empires with Diabolical reputation, 3=Never
WarAttacksHarassEnemies	Y/N value
TradeWithOtherEmpires	Y/N value
EngageInTourism	Y/N value
NewColonyPopulationPolicyYourRaceFamily	0=Assimilate, 1=Do Not Accept, 2=Resettle, 3=Enslave, 4=Exterminate
NewColonyPopulationPolicyAllRaces	0=Assimilate, 1=Do Not Accept, 2=Resettle, 3=Enslave, 4=Exterminate
ImplementEnslavementWithPenalColonies	Y/N value
HomeworldDefensePriority	Numeric value between 0.5 and 4.0 Normal = 1.0

ColonizeContinentalPriority	Numeric value between 0.5 and 4.0 Normal = 1.0
ColonizeMarshySwampPriority	Numeric value between 0.5 and 4.0 Normal = 1.0
ColonizeOceanPriority	Numeric value between 0.5 and 4.0 Normal = 1.0
ColonizeDesertPriority	Numeric value between 0.5 and 4.0 Normal = 1.0
ColonizeIcePriority	Numeric value between 0.5 and 4.0 Normal = 1.0
ColonizeVolcanicPriority	Numeric value between 0.5 and 4.0 Normal = 1.0
ColonizeRuinsPriority	Numeric value between 0.5 and 4.0 Normal = 1.0
ControlRestrictedResourcesPriority	Numeric value between 0.5 and 4.0 Normal = 1.0
ResearchPriority	Numeric value between 0.5 and 4.0 Normal = 1.0
TradePriority	Numeric value between 0.5 and 4.0 Normal = 1.0
AlliancePriority	Numeric value between 0.5 and 4.0 Normal = 1.0
SubjugationPriority	Numeric value between 0.5 and 4.0 Normal = 1.0
TourismPriority	Numeric value between 0.5 and 4.0 Normal = 1.0
ExplorationPriority	Numeric value between 0.5 and 4.0 Normal = 1.0
WarWillingness	Numeric value between 0.5 and 4.0 Normal = 1.0
BreakTreatyWillingness	Numeric value between 0.5 and 4.0 Normal = 1.0
InvasionOverkillFactor	Numeric value between 0.5 and 4.0 Normal = 1.0
ShipBattleCautionFactor	Numeric value between 0.5 and 4.0 Normal = 1.0
ProtectLeaderAtAllCosts	Y/N value
PrioritizeBuildWonderId	0=None, 1=Universal Hive, 2=Galactic Archives, 3=Lava Palace Resort, 4=Underwater Palace
ResearchIndustryFocus	0=None, 1=Weapons, 2=Energy, 3=HighTech
DefaultMilitaryFleeWhen	1=Enemy Military Sighted, 2=Attacked, 3=Shields at 50%, 4=Shields at 20%, 5=Never

Race Biases

Each alien race can have a preset natural feeling towards each other alien race. These preset biases can be positive or negative. They allow you to represent historical friendliness or animosity, or to show natural affinity of races in the same race family.

These preset biases are defined in the file **biases.txt** found in the root of the theme folder.

The biases.txt file is structured as a series of rows and columns that form a grid. Each row in the file defines the natural bias feelings of one race to each other race.

The structure of each row is defined as follows:

Value	Description
Index Number	The index number that determines which column represents bias values for this race
Race Name	The name of the race for which this row defines bias values. This must match the name of one of the races defines in the races folder
Bias values 1-XX	Each bias value (column) in the row is how the named race feels towards the race matching the index number for the column Note that the minimum bias value is -50 and the maximum is +50

Alien Race Dialog

The default speech of each alien race is supplied in text files in the **dialog** folder. This is the text that appears in conversations with other races initiated from the Diplomacy screen (F5).

To customize dialog for an alien race in your theme, add your own dialog subfolder under your custom theme. Then for each alien race you wish to customize, add a

new dialog file named after the race, e.g. human.txt.

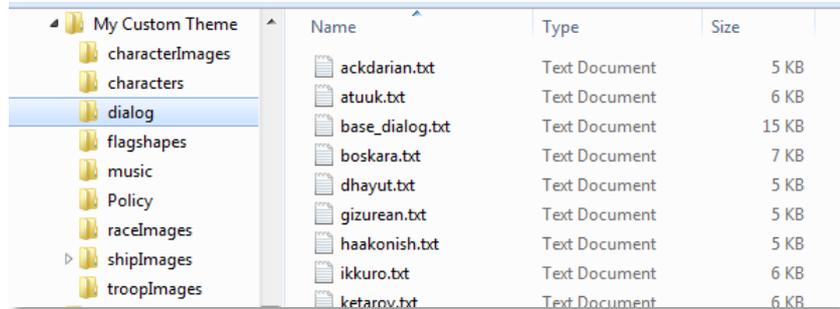


Figure 6. Dialog folder

The file **base_dialog.txt** in the default game dialog folder contains all of the conversation messages used in the game for each race. This file can serve as a useful template for making your own custom dialog files. Simply copy the base_dialog.txt file to your theme's dialog folder, rename it for your new alien race, and then modify the messages for your race.

Note that all messages in dialog text files are optional – if you omit a message then the alien race will fall-back to using the matching message from the base_dialog.txt file.

Characters

You can predefine characters for each alien race by adding files in the **characters** subfolder.

The existing characters folder contains files that define starting characters for all of the default races. Copy one of these files into your customized theme folder and edit this copy to create your own customized set of characters.

Each character file records the predefined characters for a single race.

Each line in the file records all of the details for a single character. The distinct values in the line are separated by commas. These values are defined as follows:

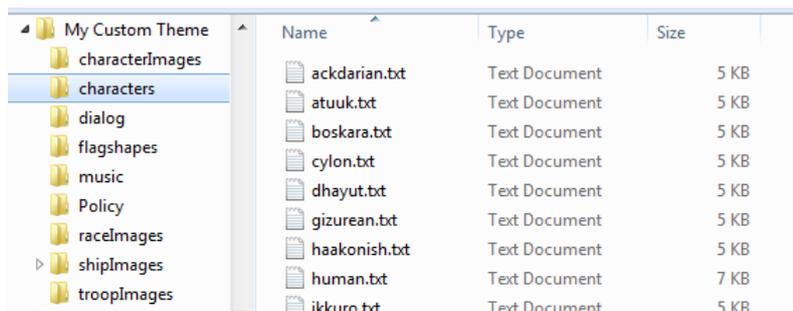


Figure 7. Characters folder

Value	Description
Appearance Order	The order that this character appears in the game relative to other characters. A value of zero (0) means that the character is present at the start of the game. Note that characters of different roles are generated in random order in the game, so a General with appearance order of 5 may appear before a Scientist with an appearance order of 3. In other words, appearance order is only strictly applied to characters within the same role
Name	The name of the character
Role	The type of character, selected from one of the following values: 1=Faction Leader, 2=Ambassador, 3=Colony Governor, 4=Fleet Admiral, 5=Troop General, 6=Intelligence Agent, 7=Scientist
Picture Filename	Optional name of image file used to represent this character. Only PNG image files are supported. The filename should include the file type suffix (.png). The image file itself should be placed in the characterImages subfolder (i.e. customization\THEMENAME\characterImages\). If no image is specified then the appropriate race image will be used
Race Override	Optional name of the race for this character, if different from the default race for the file. Name must match a race name found in the races folder
Skill Type 1	A character skill type, appropriate to the character role 0=None, 1 to 43=specific skill type (see Appendix: Character Skills)
Skill Level 1	The level of the skill defined above. Should be set between -100 and +100
Skill Type 2	A character skill type, appropriate to the character role 0=None, 1 to 43=specific skill type (see Appendix: Character Skills)
Skill Level 2	The level of the skill defined above. Should be set between -100 and +100
Skill Type 3	A character skill type, appropriate to the character role 0=None, 1 to 43=specific skill type (see Appendix: Character Skills)

Skill Level 3	The level of the skill defined above. Should be set between -100 and +100
Skill Type 4	A character skill type, appropriate to the character role 0=None, 1 to 43=specific skill type (see Appendix: Character Skills)
Skill Level 4	The level of the skill defined above. Should be set between -100 and +100
Trait Type 1	A character trait that modifies the characters skill levels. The selected trait should be appropriate to the character role. Note that you should not specify opposing positive and negative traits, e.g. Paranoid and Trusting 0=None, 1 to 93=specific trait type (see Appendix: Character Traits)
Trait Type 2	A character trait that modifies the characters skill levels. The selected trait should be appropriate to the character role. Note that you should not specify opposing positive and negative traits, e.g. Paranoid and Trusting 0=None, 1 to 93=specific trait type (see Appendix: Character Traits)
Trait Type 3	A character trait that modifies the characters skill levels. The selected trait should be appropriate to the character role. Note that you should not specify opposing positive and negative traits, e.g. Paranoid and Trusting 0=None, 1 to 93=specific trait type (see Appendix: Character Traits)

Appendices

Appendix: Race Event Types

Code	Name	Event Description
0	NO EVENT	Used to specify no race event
1	A Fine Vintage	One year Happiness bonus to all colonies that produce Nephys wine
2	Darkhul	Devastating attack from sea monster at an Ocean colony
3	The Great Hunt	Troops trained at colonies are stronger than normal
4	Suppressed Knowledge	Current research project progress set back
5	Shakturi Artifact	Advances progress of current weapons research project
6	Warrior Wave	One year bonus to troop recruitment speed and strength at colonies
7	Swarms	New troop transport full of troops appears in orbit around your capital
8	Crazed Cannibalism	Population reduced at a colony
9	Metamorphosis	During a periodic race change cycle, one of your characters gains or loses a character trait
10	Strength In Numbers	Small ships have lower maintenance costs for one year
11	Xenophobic Riots	Population policy of one colony changed to Exterminate foreign races for a period
12	Xenophobia	Cannot use Assimilate population policy at any colony for one year
13	Destiny	A character gains a new character trait
14	Natural Harmony	A colony has an improvement to its natural quality
15	Security Concerns	A character is removed and replaced with a new Intelligence Agent
16	Never Surrender	War weariness level reduced for your empire
17	Scientific Breakthrough	Free crash research project initiated for current research project
18	Forced Retirement	Your Leader or a Colony Governor is replaced by a new character
19	Todash Galactic Championships	One year development bonus for all colonies and lower war weariness
20	Historical Knowledge	Uncover secret galactic history location
21	Isolationists	All diplomatic relations with other empires have their 'first contact' penalty reset to maximum
22	Grand Performance	One year Diplomacy bonus with another empire
23	Friends In Many Places	Contact with a new empire or reveal of territory map of another empire
24	Lucky	Avert a natural disaster at a colony
25	Supreme Warrior	A great Troop General character appears
26	Death Cult	Exterminate population policy enforced for one year at a colony
27	Creative Reengineering	Free crash research in a current research project
28	Predictive History	For one year: avert natural disasters at colonies, more accurate targeting in ship battles, better counter-

		intelligence, development bonus at all colonies
29	Historical Discovery	Research boost when explore ruins

Appendix: Race Victory Condition Types

Progress towards reaching each type of race victory condition is measured in several different ways:

- Absolute – the condition must be met completely. Meeting the condition earns 100%, failing to meet it earns 0%
- Proportional – progress towards meeting the condition is measured proportionally, e.g. if the condition requires controlling all 3 of the largest ocean colonies in the galaxy, controlling 1 of them earns 33%
- Ranked – progress towards meeting the condition is measured by comparing which empires have best met the condition. Progress is then awarded based on empire ranking.

The following structure is used:

- best empire(s) that have met the condition earn 100%
- second-place empires earn 50%
- third-place empires earn 33%

Code	Race Victory Condition	Value, Additional Data and Explanation	Progress Type
0	NONE	Used to indicate no selected victory condition	
1	Control Your Homeworld	Retain control of your empire's starting colony	Absolute
2	Control X% of all Y colonies in the galaxy	X is any percentage value and Y is a planet type: 0=None, 1=Continental, 2=MarshySwamp, 3=Ocean, 4=Desert, 5=Ice, 6=Volcanic	Proportional
3	Control the X largest Y colonies in the galaxy	X is any whole number value and Y is a planet type: 0=None, 1=Continental, 2=MarshySwamp, 3=Ocean, 4=Desert, 5=Ice, 6=Volcanic	Proportional
4	Control the most Ruins in the galaxy	Control the most ruins in the galaxy by colonizing planets or moons with them	Proportional
5	Have the Largest Population in the galaxy	Your empire has the largest total population	Proportional
6	Have the Happiest Population in the galaxy	Your empire's colonies have the highest average happiness	Proportional
7	Control the most Homeworlds in the galaxy	Home worlds means starting colonies for each empire. Control as many of these as possible by taking over other empire's homeworlds	Ranked
8	Own the largest Capital Ship in the galaxy	Largest capital ship as measured by ship size	Ranked
9	Have the most Spaceports in the galaxy	Includes count of all small, medium and large space ports	Proportional
10	Have the most Mining Stations in the galaxy	Includes count of all mining stations and gas mining stations	Proportional
11	Have the most Resort Bases in the galaxy		Proportional
12	Destroy the most enemy		Proportional

	ships and bases in the galaxy		
13	Destroy the most enemy troops in the galaxy		Proportional
14	Destroy X times more enemy ships and bases than you lose	X is any numeric value. If X is 1 (one) then simply destroy more enemy ships or bases than you lose	Absolute
15	Destroy X times more enemy troops than you lose	X is any numeric value. If X is 1 (one) then simply destroy more enemy troops than you lose	Absolute
16	Destroy the most Creatures by Type	Creature Types as follows: 0=None, 1=GiantKaltor, 2=SpaceSlug, 3=SandSlug, 4=Ardilus, 5=SilverMist	Proportional
17	Lose the fewest ships and bases in the galaxy		Ranked
18	Lose the fewest troops in the galaxy		Proportional
19	Carry out the highest number of successful Intelligence Missions in the galaxy		Proportional
20	Intercept the most enemy Intelligence Missions in the galaxy		Proportional
21	Conquer the most enemy colonies		Proportional
22	Exterminate or Enslave the most people in the galaxy		Proportional
23	Enslave other races at your colonies: X% of your empire's population	X is any percentage value	Proportional
24	Build specific galactic Wonder	Wonder Types as follows: 0=None, 1=Universal Hive, 2=Galactic Archives, 3=Lava Palace Resort, 4=Underwater Palace	Absolute
25	Keep your empire's Leader alive		Absolute
26	Have the most Scientists in the galaxy		Proportional
27	Have the most experienced Admiral in the galaxy	Admiral experience is measured by total level of all skills	Ranked
28	Have the most experienced General in the galaxy	General experience is measured by total level of all skills	Ranked
29	Perform the Least Research in the galaxy	Research amount is calculated by total cost of all projects researched, traded or stolen	Proportional
30	Perform the Most Research in the galaxy	Research amount is calculated by total cost of all projects researched, traded or stolen	Proportional
31	Have the most Completed Research Branches in the galaxy	A completed research branch means that all of the projects in a research area are completed, e.g. all Construction technology	Ranked

32	Have the most Completed Research Branches in the galaxy by Industry	Research Industry Types: 0=None, 1=Weapons, 2=Energy, 3=HighTech A completed research branch means that all of the projects in a research area are completed, e.g. all Construction technology	Ranked
33	Earn the highest amount of Trade Bonuses in the galaxy		Proportional
34	Earn the most Tourist Income in the galaxy		Proportional
35	Earn the most Trade Income in the galaxy		Proportional
36	Have the highest Private Revenue in the galaxy		Proportional
37	Control X location(s) supplying Restricted Resources	X is any whole number Restricted resources include: Korabbian Spice, Loros Fruit, Zentabia Fluid	Proportional
38	Have the largest military in the galaxy	Largest military is measured by total size of all an empire's military ships	Proportional
39	Have the largest military amongst non-allied empires	Non-allied empires means empires that you do not have a Mutual Defense Pact or Protectorate with. Largest military is measured by total size of all an empire's military ships	Proportional
40	Have the most troops in the galaxy		Proportional
41	Have the most troops amongst non-allied empires	Non-allied empires means empires that you do not have a Mutual Defense Pact or Protectorate with	Proportional
42	Make Mutual Defense Pacts with X% of all empires in the galaxy	X is any percentage value	Proportional
43	Make Free Trade Agreements, Mutual Defense Pacts or Protectorates with X% of all empires in the galaxy	X is any percentage value	Proportional
44	Start the fewest Wars in the galaxy	This means wars that you initiate, not wars that other empires declare on you	Ranked
45	Break the fewest Treaties in the galaxy	This means treaties (Free Trade Agreements, Mutual Defense Pacts or Protectorates) that you break via cancellation, trade sanctions or war. This does not include treaties that are ended by the other empire	Ranked
46	Have the fewest Treaties in the galaxy	This means have the least Free Trade Agreements, Mutual Defense Pacts or Protectorates in the galaxy. This only applies to current treaties and does not	Ranked

consider past treaties			
47	Spend the most time at War in the galaxy		Proportional
48	Spend the least time at War in the galaxy		Proportional
49	Subjugate the most empires in the galaxy	This includes both current and past subjugations	Proportional
50	Have the longest-lasting Mutual Defense Pact in the galaxy		Proportional
51	Have the longest-lasting Free Trade Agreement in the galaxy		Proportional
52	Explore the most systems in the galaxy		Proportional
53	Explore X% of the galaxy	X is any percentage value	Proportional
54	Mine the most Luxury resources in the galaxy		Proportional
55	Mine the most Strategic resources in the galaxy		Proportional
56	Build the most Military ships in the galaxy	This includes all military ships that your empire constructs, whether they exist now or not	Proportional
57	Build the most Civilian ships in the galaxy	This includes all civilian ships that your empire constructs, whether they exist now or not	Proportional
58	Build the most Bases in the galaxy	This includes all bases of any sort that your empire constructs, whether they exist now or not	Proportional

Appendix: Character Skills

Code	Skill	Applies To
0	NONE	
1	Diplomacy	Leader, Ambassador
2	Colony Income	Leader, Governor
3	Trade Income	Leader, Ambassador, Governor
4	Tourism Income	Leader, Ambassador, Governor
5	Colony Corruption Reduction	Leader, Governor
6	Colony Happiness	Leader, Governor
7	Population Growth Rate	Leader, Governor
8	Mining Rate	Leader, Governor
9	Troop Recruitment Rate	Leader, Governor, General
10	Military Ship Construction Speed	Leader, Governor
11	Civilian Ship Construction Speed	Leader, Governor
12	Colony Ship Construction Speed	Leader, Governor
13	Facility Construction Speed	Leader, Governor
14	Weapons Research	Leader, Scientist
15	Energy Research	Leader, Scientist
16	High Tech Research	Leader, Scientist
17	Espionage	Leader, Ambassador, Intelligence Agent
18	Counter-Espionage	Leader, Ambassador, Intelligence Agent
19	Sabotage	Intelligence Agent
20	Concealment	Intelligence Agent
21	PsyOps	Intelligence Agent
22	Assassination	Intelligence Agent
23	Military Ship Maintenance Savings	Leader
24	Military Base Maintenance Savings	Leader, Governor
25	Civilian Ship Maintenance Savings	Leader
26	Civilian Base Maintenance Savings	Leader, Governor
27	Troop Maintenance Savings	Leader, Governor, General
28	War Weariness Reduction	Leader, Governor
29	Targeting	Admiral
30	Countermeasures	Admiral
31	Ship Maneuvering	Admiral
32	Fighters	Admiral
33	Ship Energy Usage	Admiral
34	Weapons Damage	Admiral
35	Weapons Range	Admiral
36	Shield Recharge Rate	Admiral
37	Damage Control	Admiral
38	Repair Bonus	Admiral
39	Hyperjump Speed	Admiral
40	Troop Ground Attack	General
41	Troop Ground Defense	General
42	Troop Experience Gain	General
43	Troop Recovery Rate	General

Appendix: Character Traits

Code	Trait	Effects	Applies To
0	NONE		
1	Paranoid	Increased Counter-Espionage Reduced Diplomacy, Colony Happiness	Leader, Ambassador, Governor
2	Trusting	Reduced Counter-Espionage Increased Diplomacy, Colony Happiness	Leader, Ambassador, Governor
3	Peace Through Strength	Increased Troop Recruitment Rate, Military Ship Construction Speed Reduced Colony Happiness	Leader, Governor
4	Pacifist	Reduced Troop Recruitment Rate, Military Ship Construction Speed Increased Colony Happiness	Leader, Governor
5	Expansionist	Increased High Tech Research, Colony Ship Construction Speed	Leader, Governor
6	Isolationist	Increased Weapons Research Reduced Colony Ship Construction Speed	Leader, Governor
7	Diplomat	Increased Diplomacy	Leader, Ambassador
8	Obnoxious	Reduced Diplomacy	Leader, Ambassador
9	Famous	Increased Colony Happiness, Tourism Income	Leader, Ambassador, Governor
10	Disliked	Reduced Colony Happiness, Tourism Income	Leader, Ambassador, Governor
11	Good Administrator	Increased Colony Income	Leader, Governor
12	Poor Administrator	Reduced Colony Income	Leader, Governor
13	Bean Counter	Increased Colony Corruption Reduction Reduced Colony Happiness	Leader, Governor
14	Generous	Reduced Colony Corruption Reduction Increased Colony Happiness	Leader, Governor
15	Engineer	Increased High Tech Research, Civilian Ship Construction Speed	Leader, Governor
16	Luddite	Reduced High Tech Research, Civilian Ship Construction Speed	Leader, Governor
17	Free Trader	Increased Trade Income, Civilian Ship Construction Speed	Leader, Ambassador, Governor
18	Protectionist	Reduced Trade Income, Civilian Ship Construction Speed	Leader, Ambassador, Governor
19	Environmentalist	Increased Population Growth Rate Reduced Mining Rate	Leader, Governor
20	Industrialist	Reduced Population Growth Rate Increased Mining Rate	Leader, Governor
21	Inspiring Presence	Slowly increases the skills of all other characters at the same location or in the same fleet	Leader, Ambassador, Governor, Admiral, General, Scientist, Intelligence Agent
22	Demoralizing	Slowly decreases the skills of all other characters at the same location or in the same	Leader, Ambassador, Governor, Admiral,

		fleet	General, Scientist, Intelligence Agent
23	Organized	Increased Military Ship Construction Speed, Civilian Ship Construction Speed, Colony Ship Construction Speed	Leader, Governor
24	Disorganized	Reduced Military Ship Construction Speed, Civilian Ship Construction Speed, Colony Ship Construction Speed	Leader, Governor
25	Health Oriented	Increased Population Growth Rate, Colony Happiness Reduced Colony Income	Leader, Governor
26	Labor Oriented	Reduced Population Growth Rate, Colony Happiness Increased Colony Income	Leader, Governor
27	Spiritual	Increased Colony Happiness Reduced Diplomacy	Leader, Ambassador, Governor
28	Logical	Reduced Colony Happiness Increased Diplomacy	Leader, Ambassador, Governor
29	Good Strategist	Increased Troop Maintenance Savings, Military Ship Maintenance Savings	Leader, Governor
30	Poor Strategist	Reduced Troop Maintenance Savings, Military Ship Maintenance Savings	Leader, Governor
31	Uninhibited	Increased Colony Happiness Reduced Colony Corruption Reduction, Diplomacy	Leader, Ambassador, Governor
32	Measured	Reduced Colony Happiness Increased Colony Corruption Reduction, Diplomacy	Leader, Ambassador, Governor
33	Addict	Reduced Colony Corruption Reduction, Diplomacy	Leader, Ambassador, Governor
34	Sober	Increased Colony Corruption Reduction, Diplomacy	Leader, Ambassador, Governor
35	Courageous	Increased War Weariness Reduction, Troop Recruitment Rate	Leader, Governor
36	Weak	Reduced War Weariness Reduction, Troop Recruitment Rate	Leader, Governor
37	Tolerant	Increased Trade Income, Diplomacy	Leader, Ambassador, Governor
38	Xenophobic	Reduced Trade Income, Diplomacy	Leader, Ambassador, Governor
39	Eloquent Speaker	Increased Colony Happiness, Diplomacy	Leader, Ambassador, Governor
40	Poor Speaker	Reduced Colony Happiness, Diplomacy	Leader, Ambassador, Governor
41	Corrupt	Reduced Colony Corruption Reduction, Trade Income, Tourism Income	Leader, Ambassador, Governor
42	Lawful	Increased Colony Corruption Reduction, Trade Income, Tourism Income	Leader, Ambassador, Governor
43	Lazy	All existing skills reduced	Leader, Ambassador, Governor, Admiral,

			General, Scientist, Intelligence Agent
44	Energetic	All existing skills increased	Leader, Ambassador, Governor, Admiral, General, Scientist, Intelligence Agent
45	Linguist	Increased Diplomacy, Tourism Income	Ambassador
46	Tongue Tied	Reduced Diplomacy, Tourism Income	Ambassador
47	Technical	Increased Military Ship Construction Speed, Civilian Ship Construction Speed, Colony Ship Construction Speed, Facility Construction Speed	Governor
48	Non Technical	Reduced Military Ship Construction Speed, Civilian Ship Construction Speed, Colony Ship Construction Speed, Facility Construction Speed	Governor
49	Good Tactician	All existing skills increased	Admiral, General
50	Poor Tactician	All existing skills reduced	Admiral, General
51	Strong Attacker (Space)	Increased Targeting, Ship Maneuvering, Weapons Damage	Admiral
52	Poor Attacker (Space)	Reduced Targeting, Ship Maneuvering, Weapons Damage	Admiral
53	Strong Defender (Space)	Increased Countermeasures, Ship Maneuvering, Shield Recharge Rate	Admiral
54	Poor Defender (Space)	Reduced Countermeasures, Ship Maneuvering, Shield Recharge Rate	Admiral
55	Drunk	All existing skills reduced	Admiral, General
56	Tough Discipline	All existing skills increased	Admiral, General
57	Lax Discipline	All existing skills reduced	Admiral, General
58	Local Defense Tactics	Increased Targeting and Countermeasures when fleet is near a colony or base of your empire	Admiral
59	NOT IMPLEMENTED		
60	Good Logistician (Space)	Increased Ship Energy Usage Savings	Admiral
61	Poor Logistician (Space)	Reduced Ship Energy Usage Savings	Admiral
62	Natural Leader (Space)	Increased Weapons Damage, Damage Control, Targeting, Countermeasures	Admiral
63	Skilled Navigator	Increased Hyperjump Speed	Admiral
64	Poor Navigator	Reduced Hyperjump Speed	Admiral
65	Strong Attacker (Ground)	Increased Ground Attack Strength	General
66	Poor Attacker (Ground)	Reduced Ground Attack Strength	General
67	Strong Defender (Ground)	Increased Ground Defense Strength	General
68	Poor Defender	Reduced Ground Defense Strength	General

	(Ground)		
69	Good Logistician (Ground)	Increased Troop Maintenance Savings	General
70	Poor Logistician (Ground)	Reduced Troop Maintenance Savings	General
71	Natural Leader (Ground)	Increased Ground Attack Strength, Ground Defense Strength, Troop Recruitment Rate, Troop Experience Gain	General
72	Good Recruiter	Increased Troop Recruitment Rate	General
73	Poor Recruiter	Reduced Troop Recruitment Rate	General
74	Careful Attacker	Reduced Ground Attack Strength Increased Ground Defense Strength, Troop Recovery Rate	General
75	Reckless Attacker	Increased Ground Attack Strength Reduced Ground Defense Strength, Troop Recovery Rate	General
76	Double Agent	Reduced Espionage, Counter-Espionage, Sabotage, Concealment, PsyOps, Assassination	Intelligence Agent
77	Creative	Increases the chance of a critical research success or failure	Scientist
78	Methodical	Decreases the chance of a critical research success or failure	Scientist
79	Foreign Spy	Significantly increases the success rate of other empires 'Steal Tech' espionage missions against your empire	Scientist
80	Patriot	Significantly decreases the success rate of other empires 'Steal Tech' espionage missions against your empire	Scientist
81	Ultra Genius	Increases the research output of your empire	Scientist
82	Uninhibited (Intelligence)	Reduced PsyOps, Concealment	Intelligence Agent
83	Measured (Intelligence)	Increased PsyOps, Concealment	Intelligence Agent
84	Addict (Intelligence)	Reduced Espionage, Counter-Espionage, Sabotage, PsyOps, Concealment	Intelligence Agent
85	Sober (Intelligence)	Increased Espionage, Counter-Espionage, Sabotage, PsyOps, Concealment	Intelligence Agent
86	Courageous (Intelligence)	Increased Espionage, Counter-Espionage, Sabotage, PsyOps, Concealment, Assassination	Intelligence Agent
87	Weak (Intelligence)	Reduced Espionage, Counter-Espionage, Sabotage, PsyOps, Concealment	Intelligence Agent
88	Tolerant (Intelligence)	Increased Concealment Reduced Counter-Espionage	Intelligence Agent
89	Xenophobic (Intelligence)	Increased Counter-Espionage Reduced Concealment	Intelligence Agent
90	Eloquent Speaker (Intelligence)	Increased PsyOps	Intelligence Agent
91	Poor Speaker	Reduced PsyOps	Intelligence Agent

	(Intelligence)		
92	Corrupt (Intelligence)	Reduced Espionage, Counter-Espionage, Sabotage, PsyOps, Concealment, Assassination	Intelligence Agent
93	Lawful (Intelligence)	Increased Counter-Espionage Reduced Espionage, Sabotage, PsyOps, Concealment, Assassination	Intelligence Agent

Appendix: Color Values

Code	Color
0	Navy
1	Blue
2	Light Blue
3	Aqua
4	Dark Green
5	Green
6	Light Green
7	Lime Green
8	Yellow
9	Orange
10	Red
11	Brown-Red
12	Dark Brown
13	Brown
14	Tan
15	Purple
16	Violet
17	Plum
18	Pink
19	Light Pink
20	White
21	Khaki
22	Deep Pink

Appendix: Resource Types

Code	Resource Name
0	NONE
1	Emeros Crystal
2	Nekros Stone
3	Osalia
4	Dilithium Crystal
5	Helium
6	Argon
7	Krypton
8	Tyderios
9	Hydrogen
10	Silicon
11	Steel
12	Aculon
13	Chromium
14	Lead
15	Gold
16	Iridium
17	Polymer
18	Carbon Fibre
19	Caslon
20	Loros Fruit
21	Megallos Nut
22	Falajian Spice
23	Korabbian Spice
24	Ekarus Meat
25	Nepthys Wine
26	Rephidium Ale
27	Wiconium
28	Vodkol
29	Questurian Skin
30	Bifurian Silk
31	Caguar Fur
32	Terallion Down
33	Dantha Fur
34	Aquasian Incense
35	Natarran Incense
36	Zentabia Fluid
37	Ilosian Jade
38	Otandium Opal
39	Jakanta Ivory
40	Ucantium Pearl
41	Yarras Marble