Where to Begin???

There have been soooo many changes since we began work on this, and since the release of the last change log. Most of what we wrote when we first released EFSe (EFS 1.5) still applies, but now there is so much more. Thus, we now have a changelog for our changelog. We are keeping the old changelog in place and adding the new changes (1.52) in the right places.

Strategy

This may be the most ambitious game patch in PC gaming history, happening 25 years after the game launched and completely revamping how the game works. What you cannot see is that the entire game was migrated over to work in Microsoft's Visual Studio development environment, which was first released the year we made EFS :)

We had several key goals for the 1.5 patch (released in 2022 on GOG and Zoom-Platform):
1. Improve stability;
2. Make the game more satisfying for modders by giving them tools like the map editor; and
3. Incorporate feedback from players and modders to remove old gameplay annoyances.

We kept these goals for 1.52 (released in 2025 for Steam, GOG and Zoom-Platform), and added some new ones:
4.   Upgrade the game to run on Linux and in Steam;
5.   Incorporate APIs for things like Steam achievements, and port these to GOG;
6.   Improve the user interfaces (so-called Quality of Life improvements); and
7.   Graphic and color enhancements that can be modified in EFS.ini

Overview

The 1.5 patch is a significant revision of the game, being released as Emperor of the Fading Suns Enhanced. Emperor of the Fading Suns has continued to inspire players not just because of the game itself, but also because of the many great mods fans made for the game. The focus

of the 1.5 patch is to greatly enhance modding capabilities. Expect many more great mods for the game.

One of the most dramatic changes is one of the least seen. The game was initially built using the Watcom development environment, and one of the first things we had to do was migrate it to Visual Studio. Additionally, the 1.5 patch adds:

- Significantly enhanced and added significant modding capabilities. This allows modders to add dramatically more units, technologies, and worlds, and even change game facets like excommunication, sect abilities, ruins, and much more;
- Now includes (and enhances) the EFS map editor;
- Enables players to add custom maps and provides two new galaxy maps: Dark Ages, a smaller galaxy map with about half the planets as the standard galaxy map to allow shorter PBEM games; and Lost Worlds: a larger galaxy map with more than twice the number of planets as the standard galaxy map for players who wish to explore a much larger galaxy
- Enhanced role of religious sects, impacting your unit abilities and population loyalties;
- Enhanced player information on unit and city screens;
- Added House strength as a major factor in diplomacy;
- Streamlined some interface elements, as when the game asks you if you want to unload starship transports when they land on a planet;
- Provided greater and
- Fixed a wide variety of bugs, including a number of multiplayer exploits.

Now, with 1.52, we had to significantly upgrade our old engine, especially for the game to run under Linux and to incorporate the Steam APIs. This also let us support Cloud saves and have the same achievements in Steam and GOG. You can also use our map editor in Steam and Linux, but more about that when we discuss modding.

1.52 User Interface (Quality of Life) Improvements

For many veteran players, these are big ones:

- Add tooltips to menu items, units, unit stats, and unit abilities
- When on the planet map, pointing to a harvestable resource will show its harvesting potential on the hex map for each hex
- Change sound effect and music volumes in-game
- Allows accessing a variety of in-game options from the main screen, with the rest being accessed in EFS.ini
- Use the arrow keys to move the map, which autoscrolls
- Unit movement is smoother and includes missing graphic elements
- Combined movement type unit stacks move together more easily.
- Reduced the number of tutorial messages that can be seen when starting the game
- In-game images save using the PNG format instead of PCX

1.52 Modding Improvements

- Improved color image support (only affects mods right now, as the base game uses the original artwork)

- More capabilities to change internal parameters
- Fix issues with loading unit artwork
- Metal consumption is now shown properly
- The maximum number of Manowitz Volumes can now be expanded to 10 (but only the ones used are shown)
- The Imperial Guard can now be assigned to the Regent and it can also be configured as to whether the Regent only gets the Imperial Guard or if they can assign themselves another Ministry
- The Manowitz volume indices can now be multiple pages
- Increased the width of reading in UNIT.DAT for better readability
- Whether loaned units or cities require upkeep can now be controlled
- Non-standard homeworld names can now be used

1.52 Map Editor Improvements

Let's start with the new menu items - high value for any modder. On the Star Menu, 1.52:

- allows removing the current map with an empty one to start anew
- Improves to the Add / Remove Menu Items to use the Delete Units / Structures dialogs used on the World Map
- Adds the capability to Import / Export the galaxy data from / to CSV files
- Adds the capability to Replace unit or city data using a CSV file

You can also:

- Set Homeworld to set the current planet as a homeworld for a specific player
- Delete – allows deleting planets that is safer than using the Star Map Delete Mode
- Add / Delete Fleets buttons to add / remove fleets of specific players for that planet
- Save All Planets to PNG allows saving every planet map to its own PNG file for the entire galaxy

On the World Menu, you have:

- Add the capability to Import / Export the planet data from / to a CSV file
- Improvements to the Add / Remove menu items

Quality Improvements include:

- Fixed various issues with creating galaxies from scratch
- Relics can be properly added
- Fixed issues with invalid unit Sect or Experience
- Allow more flexibility in the placement of units on the hex map
- Resource Harvesting information can now be shown on the hex map like the main game
- Player Homeworlds are now assignable to planets that have different names than the Historical Galaxy
- Update all Menu Item Hotkeys
- Fix issues with the use of the INI file system
- Notify the user when changes have been made to the Galaxy data when loading a GAL file and the INI file makes changes

- Non-combat units can now be added to maps using RANDGAL.DAT settings

1.52 Fixes

Veteran players will have to get use to this, but players can get out of the B2 Screen when they are the Regent, but must assign all positions before ending their turn

Technologies

1. Tech Maintenance cost is corrected
2. Tech Descriptions – fixed text to update erroneous descriptions
3. Environmental Techs only apply to land-based combat (not space)
4. Fixed issues with the "Researching…" messages in the Manowitz volumes to properly show the technologies listed
5. Improved Church Technology Proscribe / Unproscribe starting values

Combat

1. Fixed various combat bonus display issues
2. Fixed issue when selecting the Feint combat option and it not working
3. Playing out of combat results is significantly improved

Ministries

1. When eliminating a player that controls a Ministry, the Ministry units are properly returned to the Ministry the player controlled
2. When promising a Ministry using diplomacy, the promise is only valid through the next election, instead of the rest of the current game
3. It is now possible to MOD the game to allow the Imperial Guard to be assigned to the regent (see MODding changes below)

Units

1. Movement
    1. Combine movement type stacks can now be properly moved together
    2. Improved user interface
    3. Map autoscrolls at edges
    4. Jump units that are cargo can now be properly cargo chained via the Jump Routes
2. Resolved spotting and camouflage issues
3. Camouflage algorithm improved
4. Spotting algorithm improved
5. Issues with upgrading units resolved
6. Issues with the unit's Sect not being properly assigned resolved
7. Allow Ministry Units to be built by a specific Ministry
8. When upgrading a unit with Cargo, the Cargo is now automatically unloaded
9. Fix potential issues with not being able to unload certain cargo
10. Clergy can now be built
11. Gunships now land safely when running out of fuel, but must be recovered by a transport to be refueled

Ruins

1. Fix various issues with Ruin Unit Generation
2. Fix issues with potential crashes / endless loops with Ruin Unit Generation

Relics

1. Fixed issues with Relics not working properly in certain situations
2. Relics can now be added with the Map Editor (see Map Editor changes below)

Voting

1. A new voting summary has been added

AI

1. Diplomacy
    1. AI no longer accepts the first contract received for multiple requests for the same item, but considers all proposals and chooses the best of those
2. Vau
    1. The Vau can now be activated and savegames now correctly "remember" if the Vau have been activated
    2. Once activated, the Vau now properly expand and can become a major threat
3. Fix issues with AI turns and various issues that could cause crashes or endless loops
4. The AI can now properly collect Firebirds
5. No longer builds water units on land
6. Minor improvement in traveling to other planets
7. The League can now build new Agoras
8. The Church
    1. Can now build new Cathedrals on planets that don't have any
    2. Will send ships to planets that have Cathedrals
9. The starting Symbiot (and Vau) units are now Green instead of Elite Experience
10. Should no longer build roads on ocean hexes
11. Improved AI tech selection during research

Crashes

1. Fixed issues with Cargo and Spotting
2. Fixed issues with PBEM Messaging
3. Fixed issues with upgrading units and crashes
4. Fixed potential AI crashes when they were trying to land space units
5. Fixed various issues with Rebellions and crashes

Exploits

1. Fixed an infinite money exploit

Game Restarts

1. Fixed issues with restarting the game and the technology list
2. Fixed issues with restarting the game and player scores

Other

1. Fixed issues with saving planet maps to PNG files
2. When generating Random Galaxies, the Imperial Fleet now get units added to their Homeworld (Tethys for the Historical Galaxy)

1.5 Game Changes

Modding Changes

- The Game's Start Year is MODable in EFS.INI
- Add all starting options to efs.ini
- Add more tech columns to TECH.DAT & UNIT.DAT
- Implements New Owner Needed Column for Techs & Expands Owner Groups for MODding
- Only Display City Maintenance if >0
- Implement plague fixes and moddability
- MODable Combat Weapon Order / Phases
- Add all starting options to efs.ini [#440](#440)
- Adds Difficulty Level for Randomly Generated Units
- Implements Galaxy INI File System for Overriding Galaxy Parameters

Map Editor Changes

- Fix Map Editor Unit Dialog Display with Long Unit Names
- Map Editor Add Random Button to Unit Dialog
- Map Editor: Add World Menu Items for Adding / Removing Structures / Units
- Map Editor Right Click Unit - Use Unit's Stats
- Map Editor: Units placed in structs default to its owner/sect
- Fixing moving planets & map tiles
- Map Editor Fixes JumpGates Not Showing Immediately
- Map Editor - Fixes issues with changing a planet's coordinates and the unit list becoming unsorted
- Implements Galaxy INI File System for Overriding Galaxy Parameters
- Adds tLvl-awareness to Random Maps
- Add Delete All JumpGates to the Map Editor File Menu
- New Map Editor Save All Scenarios
- Adds "Are You Sure" Message to Map Editor Exit
- Confirms Execution of New Map Editor Options via OK / CANCEL Message
- New lost worlds galaxy
- Map Editor: Add options to generate or remove fleets in the entire galaxy
- Allows map editor to use difficulty level settings for random map creation
- Map Editor Hive / Vau City Owner defaults to Symbiot / Vau

Specifics

Implemented enhancements:

- Implements Missing Sect Rebellion Bonuses
- Update Unit / Build Dialog to Include More Stats
- Orbiting Units are Considered for Garrison Strength
- Fix Unit Interface So That Move All Units Message Appears Only After All Units Have Been Moved
- Adds Armor Factors to City Info Display's Sect Line
- Update Unit Stat Display for Structure's Unit Armor Factor & AGILITY.DAT
- Automatically Sentries a New Cargo Pod
- Fixes Naval / Underwater Appearing in Land-Locked Ruins & Ruin QA Improvements
- Externalize Rank into EFS.INI
- Adds Turn Off Tutorial CheckBox to the Tutorial Dialog
- Adds Display of Energy & Exotica to Resource Lists
- Changes the behavior of attacking adjacent hexes via TERRCOST.DAT att…
- Adds Missing PLAYER.TXT Files for Random Structure Placement
- Adds Map Editor Structure / Unit Menu Items to the Star Map File Menu
- Add contract information to acceptance/rejection messages
- Ensures that at least 1 of a resource is given as a ruin gift
- Implements Proscribed Technology Difficulty Level System
- Increases Sect Info Width for Cathedrals when Showing Planetary Sect Information
- Adds tLvl-awareness to Random Maps
- Fix not being able to capture non combatant with Naval Transport
- Naval -> Land can capture non Combat Units
- Allows Naval -> Land & Land -> Naval Combat Even If Units Can't Move There
- Units that can move on water can be unloaded there
- Adds Colorization for Altered Statistics
- Add Dynamic ruins
- Dynamic Rebels & Other Minor Fixes
- Implement AI configurations in PlayerTable.DAT
- Moving Mixed Movement Types Averages their Movement if Set in EFS.INI
- Add more tech columns to TECH.DAT & UNIT.DAT
- Implements New Owner Needed Column for Techs & Expands Owner Groups for MODding
- Update City Maintenance & Producing Unit Message
- Only Display City Maintenance if >0
- No Rebellions for cities or units are allowed on Byzantium Secundus until the Emperor has been Declared
- Implements Sect Loyalty Bonus
- Update EFS.INI - volume parameter comments
- Prevent switching away from transport group after loading cargo
- Modify tech proscribing chances by Patriarch's sect
- Implement plague fixes and moddability
- Add new sects leaders bitmaps
- Rework ministry selection AI, make it take the most powerful ministry
- Updates Change Sect Dialog for All 7 House Sects
- Allows Setting of Sound Volume in the Game via EFS.INI
- Adds Combat Timers to EFS.INI
- Update information on the church diplomacy based on spy locations
- Increase planet limit to 160
- Add high quality random number generator
- Add json representation of .res files with a conversion script
- Giving a Unit as a Ruin Gift is now tLvl-aware

- New "Dark Ages" 21-Planet Galaxy Map
- Adds Scenario Data for Standard Galaxy
- Remove progress of current research when striking a requirement
- Allow placement of naval units in coastal cities in Map Editor
- Add search function to City Info screen
- Fixes Display of Sects Info for Church Diplomacy
- Prevent attacks on completely hidden fleets
- Increase maximum lines in messages to 10
- Changes Like & Loyalty Based on House Tax, Tithe Skim, & Unit Pay Settings
- Church excommunication like is now MODdable
- Adds new efs.ini default parameters
- Move save games to rewritten file dialogue
- Use system double click time for unit double click
- Forbid emperor declarations during election years
- Prevent nobles in orbit of Byz2 from being able to vote
- Increase max amount of techs to 999
- Increase max TLVL to 12
- Better support for multiple monitors
- Rewrite file and directory selection menu to support mods
- Avoid closing "Send message" dialogue and erasing the message if no response
- Remove tech progress if all labs researching it are destroyed
- Adds City Cost to Build City Screen
- Add flock settings to unit.dat
- Remove research progress if the last lab is captured
- Stop warning about lost tech progress if no progress was made
- Add tithe skim & rebellion
- Add all spies, submarines and stealth ships to byz2 combat
- Adds Timed Messages section to EFS.INI
- Implement sects & clergy
- Make structure armor MODable
- Implement Turns2bld column in STRBUILD.DAT
- Implement Credits cost column in STRBUILD.DAT
- Enable loading of custom galaxies
- Add moddable healing bonuses
- Add automatic saving of random galaxies / save turn to GAL file at end of turn
- Update AI tech striking behavior
- Add moddable noble & officer loyalty/agility/accuracy bonus
- Make most weapons do small damage to structures
- Let air units refuel on transports
- Rewrite AI behavior regarding unit construction, consider mods
- Add Chiclet Icons
- Add modding configuration
- Add Kind, Owner, Disband columns to UNIT.DAT
- Remove crawler restriction on pts unit
- Unload units from space transports when attacked on land
- Add moddable % of resources returned after cancelling construction
- Only Show Player's Hearts if Allied
- Make Vau activation tech moddable in EFS.INI
- Psy Unit can now attack aboard Space Carriers
- Allow space bombardment of empty cities and unexplored tiles
- Use TARGET.DAT for AI Ranged Space targeting

- Add Random Like to Starting Players
- Streamline excessive confirmation messages
- Damage updates unit health every phase
- Allow player scores beyond 100 turns
- Do not zero out movement points when automatically loading units onto a Naval Transport
- Add animation length multiplier to EFS.INI
- Only units involved in combat gain experience
- Make Delta hexes treated as land hexes
- Make Player Treaties moddable via DAT file, start rebels at war with Church & Leagu
- Scenarios now work in the Map Editor
- Move GALAXY.GAL to the GAL Folder
- Increase unit limit to 999
- Switch to ffmpeg to play animations
- Upscale videos, switch to ffplay

Fixed bugs:

- Fix Various Cargo-Related Issues & More
- Fixes Crash on Save Game Load with Invalid Cargo
- Fix Dead Bombarder Use of Deallocated Memory
- Fix Naval Unload Crash
- Fixes Naval Units in Land-Locked Wells for Random Galaxies
- Fixes Text Overlap Issue with Display of Armor Factors
- Fix Vau Planet and Alien Ruin on Water Hex Issues
- Fixes Reported Rebellion Issues
- Fix Non-Secure PBEM Save Game Issue
- Fixes Broken PTS Retaliation
- Map Editor World Map Shows Stack Count Correctly
- Adds Missing I2 Sect Bonsues to Unit Dialog
- First Cut at Fixing Broken AI Partisans
- Fixes the Sidebar Not Updating the Planet in the Unit Production Queue
- Fixes Incorrect Specification for Show Tutorials in EFS.INI
- Fix Drag Chiclet Icon Issue with New Place
- Fixes Issue with Cargo Pods Not Able to Move with New Combined Move Set to 1 in EFS.INI
- Continuously Loop Through Save Game Dialog Until PBEM Save Game is Properly Selected
- Fixes Multiple Sceptor Votes
- Fixes 524 & Deletes Cargo to Prevent Invulnerability
- Fix crash when deleting units from group finder
- Fix Prevent Unloading Cargo onto Unmoveable Terrain for MODders
- Fix Cargo Pod Exploit with New Combined Average Move
- Fix Building City on Delta Hex is Okay
- Fix crash at house screen when money is negative
- Fix movement when one tile would take the whole turn
- Ensure Singularity Ruin Gift Scaling for Max Relics in Game
- Fixes Ice (TYPE2) & Jungle (TYPE3.TXT) being swapped for Random Map Generation
- Fix AI not accepting contracts where you give more than half of your treasury
- Fix being able to attack your own ministry units in space, but not attack enemy ministry units with yours #496Fix Jump Gates Moving when Moving Planet

- Removes "like" from consideration when doing house diplomacy
- Fix money count not updating after autobuy during unit building
- Fix being able to have a treaty with yourself
- Fix AI not rejecting offers asking for more than 2/3rds of their money
- Fix cargo pods being created on ocean hexes with ships when trading
- Update Movement, Camouflage, & Spotting to floating point values
- Fix for 0 MP Space Units Grouped with >0 MP Units Move to Planet
- Clarify the difference between autosaves in the .ini
- Fixes Incomplete Re-Ordering of Planets when Deleting a Planet
- Fix AI Using Non-combatants as Combatants
- Fixes Declining Boarding Naval Transport Illegal Move
- Fixes Empty City Text Overlap
- Fix Dragging Units not tLvl-aware
- Fixes Cities Too Easily Damaged and Major Bug with Reading AGILITY.DAT
- Fix alt key becoming stuck from alt+tab
- Fix Map Editor Selection / Display of All Sects
- Prevent disbanding naval units at resource markers
- Fix group finder not updating planet information on next/prev
- Fix tax slider incrementing 3 times faster
- Makes despotism reduce research amount as intended
- Fix being able to unload cargo onto resources in ocean tiles
- Tech is done researching at 0 remaining points
- Disable "build units" and "raze city" buttons on resource markers
- Fix Combat on Byz2 Message
- Fix extra resources from structures at the map edges
- Routing didn't check the owner of an empty city
- Players Going to War with Themselves
- Fix resource counts for units of different TLVLs
- When Loading a Galaxy sets techType to -1 so that AI will Research Tech in That Lab
- Fix health of units shown incorrectly during combat
- Prevent war with unspotted Vau units
- Fix attack options and city defense being applied to both attack & defender
- Fix targets not being picked according to their Rank in combat
- Fix Contracts Asking for Money
- Fix game existing when loading a missing save file
- You can no longer buy resources from the League when at war with them
- Fix Players being able to give maps of planets they haven't explored
- Fix Issues with Save Game Dialog
- Fix saving/loading Proscribed Technologies