Welcome.

Thank you for playing Shadow Empire™! We are always looking for ways to improve your gaming experience. For the latest information on the game, please go to the Matrix Games web site at matrixgames.com.

Below you will find the latest and greatest information on Shadow Empire™. Information in this document supersedes that in the official game manual.

Troubleshooting:

Ensure that your system meets the minimum system requirements. These are found in the game manual. Also, ensure that you have the latest video and sound drivers available for your system and that you have upgraded to the latest version of DirectX from Microsoft. The vast majority of reported problems are resolved by upgrading all drivers and DirectX to the latest versions.

If you are still experiencing problems with the game, please use our Help Desk at matrixgames.com/helpdesk or post in the Shadow Empire™ Support Forum at matrixgames.com/forums. Please provide as much detail on your issue as you can.

To obtain optimum game performance, close all other applications before beginning a game.

Asterix (*) at end of item means it requires a new game start to go into effect.

Change History:

v1.20.00 – 21st March 2023

- Fixed glitch where you could keep declaring war with artillery attack mode (atherys)
- Properly showing current AI moving during AI moves realtime history in left corner (kopjeagga)
- Added Oceania testing Credits to Credits (if you want your real name there instead of alias or if I forgot somebody important or even less important (not necc yourself, but maybe also an other tester that deserved to be in the Credits) you can always ping me or mail me at vic@vrdesigns.net)
- The Planet Size now flag now stays applied while you flip through the different tabs. (battlemode)
- Increased the AI calculation speed concerning Oceans analysis (about time!)
- Fixed plenty of crashes reported due to same issue with Advice option turned on with Oceania, should work now! (Battlemode/Voker/others)
- QA of the Zoning Algorithms done. Sea Hexes can no longer join land hexes (it happened in some very specific circumstances). Zones don't keep resetting and renaming (happened rarely, but horrible). Nonaligned capturing a City doesn't result in chaos anymore. City Level of Zone now automatically upgrades to 1 if a Port is present (this already happened with Makeshift Port, but it now also happens if for example City is taken and just a port in your hand on the island remains). (Big thanks to kopjeagga for saves catching the bug(s) in full glory)
- Tuned down frequency of Alliance request by MTH, also requires relation >50 now. So it does not bug you if you do not even like them (or vice versa (depends on the POV))
- Made some fixes to the Trade algorithms (Voker)
- Improved AI Trading algorithm for buying construction Items need and workshopping of Machinery (which will improve the speed of AI Asset construction which had been lagging behind a bit on Oceania maps especially)
- Improved AI Overseas expeditions & war declarations algorithm to take better into account where it can actually reach (and stop more cases of AI staying stuck on starting island)
- Improved AI Force Ratio calculator for Ocean Planets. Should result in the AI feeling more safe from imminent obliteration (since a lot of Zones now potentially border with Naval Transport possibility)

- Improved Zone Economy management for Ocean Planets. Especially constructing Assets in Core Zone and not on abandoned Island under same SHQ or with no Populace (ecoLevel<=1 should not be considered)
- AI can now Merge Zones, which is bloody necessary with the Zone creation around Maritime Invasions.
- Fixed the wrong naming of Hex Perks as Rivers *
- Fixed issue with MTH Leader replacement having borked name
- Fixed issue/crash with Asset/Zone dropped in lake somehow
- Fixed issue with MTH Split Stratagem
- The AI is now better progressing through its internal Stages of economic development.
- The AI is redistributing some Items now from its less important item pools (to avoid deadlock situations)
- Improved AI Trading algorithm for buying construction Items need and workshopping of Machinery (which will improve the speed of AI Asset construction which had been lagging behind a bit on Oceania maps especially)
- AI now also prefers buying Rare Metals if price of Machinery is too high
- When in Alliance you'll get more offers of Recruit MTH Leader a bit longer *
- Added a "Resource Rumours" Stratagem for your Secret Service Council that you can play on coastal Zones to obtain possible info on undiscovered resources, discovered resources, hex perks and treasures. You select the target Zone you want the info on and your Secret Service will target the MTH that is most likely to have relevant information on this Zone and find informants. *
- Fixed small glitch that caused all possible Pirates to activate at the same time (now separate rolls for each potential Pirate Minor)
- Planets with high rainfall have some more erosion now. *
- AI that starts landlocked will now build port(s) to get any Maritime adventure kickstarted once Regime reaches coast.
- Added River names to the map. *
- Reduced # of human players and start zones options on smaller Ocean Planets (xlarge stays same) *
- Added code to prevent Naval combat message making no sense (more ships sunk than engagingelver)
- Fixed a small FOW glitch in "map known" mode (on the name of some Hexes you could not know) and removed some rare City map labels that were showing up partially (because actual hex obscured)
- If you block a Zone from sending ALL items to SHQ it still sends it excess Stockage Points now.
- Fixed exploit where you could still sell water (when super abundant) 1st turn
- Tethys Class bit more water
- Random Planet Class now also spawns Oceanialike Planets
- Hydroid Class a bit more fragmented
- Fixed calculations for topMTH (an invisible variable that tells events which MTH your doing most interaction with) (elver thanks!), this was generating faulty decisions (with wrong MTH) (could take 2 turns with this subversion to completely reset wrong behaviour)

- Fixed some events where rebels where spawning on top of enemy units (while possible to avoid)
- Fixed the support rebels (minor diplomacy event) to make sure combat ensures if rebels popup on top of enemy units
- If Tech Start 4+ (or difficulty beginner) you get 20% income tax at start of game
- MTH AIs go to war earlier again (it had become way to rare for them do so)
- Fixed some weird ship construction surpluses for AI
- Fixed some weird (buggy!) combat results for naval battles. Was a bit of a mess, should be good now. Keep an eye on it if you see anything weird!
- AI will try to buy a bit more shares in MTHs
- AI will try to be a bit more creative with its Influence Points spending
- Switch the Card pics around for MTH Fate Stratagems*

- Bug fix in the actual Logistical Points calculations for Transport Contracts, It was doing quite a lot of wrong calculations. Went over everything meticulously and the calculations now seem to work as promised with 1.12t. But please keep a close eye on if the Logistical Points given under difficult circumstances (not enough port points) makes sense.
- Fixed a Crash during AI Processing (Peter)
- Fixed a Crash during AI Processing (Eric)
- Fixed labels on MTH Report simple map with missing labels if partial
- Makeshift Port now repairs itself too
- AI fix. It now picks closer landing sites (with MTHs it is actually in communication with as well)
- AI pays bit more for Transport Contracts now
- AI fix where it would sometimes screw up and get multiple Makeshift Ports on the same Hex
- AI better invasion support especially for supporting multiple footholds on a continent
- Fixes in AI Transport Contract targets
- Fixed the MTH Contracts Reports that was wrongly getting updated by Preview Logistical Layer
- Increased the probability of MTH Leaders to show up in nominations a LOT ! (if you have alliance)
- Fixed the Alliance rules on MTH Leader relation degradation.
- Fixed MTH Alliance Review Decision (thanks Elver!) *
- Added a second MTH Recruit Decision if you really need a lot of MTH Leaders to keep your side of the Alliance deal
- MTH Alliance advantages start kicking in a bit earlier now
- MTH Overview Report fixed color coding/ sorting issue + renamed the columns + added recon level on MTH + the MTH recon rules are now fully respected concerning Ships + Zones info.
- High Tech Industry & Private Oil Well Assets now also count towards promises (Industry , Mining Levels respec.)
- Made quite a big repair to the assigning of Vegetation types to cold Zones. Expect vegetation to pop up more towards the poles now.
- Fixed a glitch in the AI SHQ removing and adding code that could cause a flipflop situation to occur
- Fixed the issue with Budget %s when 1st Council is added (Das)
- Fixed bug with Force Majeure rules deleting contracts
- Fixed a thingy with bad setup of Airforce/ Oceania Flags in Planet Gen causing a bug on first turn execution.
- Added 3 special Oceania Fate Cards: Change of Heart (1FP), Stock Emission (2FP), Maritime Breakup (3FP)
- Improved MTH Contracts Overview and made Transport Contract entries clickable.
- Once clicked you have the option to RENEW or CANCEL the Contract.
- Added Force Majeure rules for MTH canceling the Contract because of loss of Target Sea Zone.
- MTH visibility and 1 Recon Point on known Sea Hexes is now coherent with Partial FOW mode (and the other modes)
- Fixed a rare first turn crash due to MTH labels on map (previous subversion)
- Glacier islands now get different names
- Reduced the number of sea battles quite a lot, especially for less aggressive MTHs. This will give you much more time to observe and react to changing MTH areas.
- Contract execution Ship shortages now calculated on the basis of ALL Contracts instead of just the current player's Contracts.
- Modifying Ship Shortage rule now for less Logistical Points used due to Inadequate Port Points on Contract
- Port Points are now "consumed" based on the actual Logistical Points that are possible (due to limited Port Points on other side) for a Contract and not its optimal Logistical Points. The Ship shortage rule also takes into account how much actual Logistical Points are going to be used (and not the ideal)
- Fixed some glitches in the Logistical Points calculations for Transport Contract execution
- Some final fixes for FOW on MTHs and Partial FOW mode. You can now always see all MTHs in Partial FOW mode. It's more consistent that way.
- You get a Vidcom notification when a Transport Contract is about to expire. (and also if there is any

Force Majeure event)

- Changed the Auction bidding algorithm so that everybody bids "blind", this is done to avoid the later bidders to have an advantage.
- Transport Contracts no longer work if you lose the Source Hex, but they don't get canceled automatically either (and loosing target hex is okay)
- The initializer messages are no longer shown in Reports.

- Fixed grassy Mountains appearing in areas to cold or dry
- Fixed forested snow mountains sprite transitions with low snow mountains (masterfile update!!!)
- The new +50 DIFF for some Minor Regime Stratagems for Land Border in #153 was showing the wrong Preview Diff. Fixed now.
- Fixed bug where airforce was still like half active if you unflagged Airforce in Planet Settings
- Fixed air attack modifier for Forested Mountain Landscape Type. Is now 50%, just like regular Forest.
- Expansionist Rating properly shown with Elder change message*
- Added MTH Icons + names on main map
- Reorganized the Planet Class selection window to support more Planets without much scrolling
- Added Planet Class: Artica, which is cold and has notable ice caps
- Added Planet Class: Tethys, which is hot and tends to be labyrinthine
- Added Planet Class: Hydroid, which is small but with liquid water
- Made it more easy to see Unit Weight at a glance when MTHs are active
- Your own Infuence Points are now displayed in MTH Report
- Showing Port Points for Destination + Source Hexes during Transport Contract negotiations now.
- Added some more Transport Destination Hexes when invading small Islands, or narrow SeaLand connections, to always have some choice where to invade
- Planets without using Oceania Feature (or without Seas) will no longer have access to MTH Liason Task and Port Asset Types *
- MTH Mauraders that you chase away will no longer drop troops (the one ship remark) *
- MTH Buy IP edge case fixed (MTH no longer had contact with Zone due to other events)
- Fixed issue with some delegated decisions concerning MTHs
- Fixed FOW with the MTH Overview Report (was showing MTHs you should not know yet)
- Fixed FOW with the individual MTH Reports (that were showing when they shouldn't)
- Not showing Temp, Rain, Scav for Sea Hexes anymore (in line with info disclosed in Strategic Map and hiding some unpolished planet gen calculations that could break immersion)
- MTHs now earn 100 Credits per Pirate Unit transported.
- History Classes Haven of Calm and Sever Violence impact MTH aggression rating, piracy attitude and MTH Feat chance for Former Pirate and Maritime Imperialists
- Beginner Difficulty Level halves the prices for Contracts with MTH
- Extreme Difficulty Level increases those prices with +50%
- MTH Leader with low relation that's completely dissatisfied will leave instead of mounting a rebellion (MTH alliance related)
- Double checked but on Beginner the Metal deposit should always show up.. get me a planetgeneration autosave if this is not the case
- Offer Protection, Offer Client, Propose Peace, Unification, Annexation are now more difficult if you do NOT have a land border with the Regime the Stratagem is being played on.
- Added the ability to sign an Alliance with an MTH (must have >50 relation and Transport Contract running with it). An Alliance will severely reduce prices, but… you'll need to take the MTHs Leaders on board in your Cabinet, SHQ and Zones. Their Leaders are maybe young and eager but not the best ones you could get elsewhere. However… this provides you with an escape if you cannot afford the Credits to use the MTHs services.
- Added MTH Feats. Each MTH now has one of 12 different MTH Feats to give it some more uniqueness and replaybility.
- The MTH Profiles were already linked to special Decisions, but they now all also have a "small" other effect.

- Everything has interesting mouse overs in the MTH Report (if you have at least 1 share in it)
- MTH now have a status between them, which can be War or Status Quo. It takes a low relation (and or a lot of aggression rating for an MTH to go to war with another MTH). The other side can also offer peace again. This will result in less MTH wars unless Major Regimes start influencing.
- Many fine tunings to MTH combat , dividends, shipbuilding algorithms, trade.
- There is much log to be read in the MTH report if you have at least 1 share in it.
- MTHs now have a Trade Policy towards Majors. Normally: Fair, but with lower relation can become Abuse or Stranglehold (increase of sell price, decrease of buy price)
- Implemented special trade rules for MTH (Greed Rating impacts prices, Trade Policy impacts prices, Port Points limits to absolutely qty traded, Reduced MTH<>MTH trading because difficult to transfer on the highsea)
- Fixed glitches with the Stratagem Minimap+Seas+FOW that was blending MTH into known but 0 recon land areas (David)
- Reduced chance for Pirate invasions a bit and limited the cumulative number of them (on lower difficulty levels), also giving the player an initial breather with Pirate chance being 0% on round 5 or lower and slowly ramping up to full chance towards round 15
- Quite some finetuning to AI Influence Point usage and Auction bidding, these effects are logged as well (as always 1 share needed to read the logbook of the MTH)
- Fixed initial MTH setup at game start where some splitoffs started with 0 inventory, or only 1 MTH would start on a map with really a lot of Sea Zones, no more!
- Fixed a glitch in scenario init of scripting that was 50% of the time blocking some stories from triggering
- Fixed a rare glitch with Trade if very poor Traders had zero items of a specific Item to start with.
- Fixed some rounding error with Trade Item Inventory, that caused it to lose items of which it had very low stocks.
- Fixed the nonsplitting of Trade Areas once a Regime gets split in half (or similar).
- Some more polish done to the new MTH Report. Sort of final state now. Though some extra specific statistics will be added in the upcoming weeks. Note that this Report has good mouse over support.
- Fixed crash with Airforce generated game upon start
- Fixed big glitch in MTH Dividend payments. Should be payed normally now and process logged as well.
- Fixed two separate glitches in the AI algorithm that (often) caused it to not venture out to other islands (or just with 1 unit) due to recent adherence to MTH rules change for AI Majors. It was trying to target Islands that were not necc accessible by its MTHs. Major AI is now properly invading again!
- Plenty of finetunings done. Especially to the naval battle & shipbuilding algorithms. All considerations are logged as well now (but you need to be in comm and ideally shareholder)
- Big remake of the MTH Reports that now has a nice layout, some info graphics and even some tabs and more information available to browse (be a shareholder though to get all the info) (this new MTH report is not fully finished yet, especially trade needs to be fleshed out still)
- Fixed AI bug that caused it to very often not produce any Regular Troops anymore!
- Fixed that recurring recruit bug for good (got scrambled by the IP sales decision) *
- Fontus Class riverlake mess is really solved this time I think.
- Especially the Thalassa Class has no much more chance to have many separated islands (instead of very long ridges)
- Plenty of small fixes to MTH related calculations

- Added completed Asset constructions to the Construction Overview Report
- Fixed glitch with autoreplacement swapping of robotic with regular forces equipment
- Fixed a Trade Reporting glitch with imports/exports (that did not match up)
- Fixed a bug with the spy calculations (got way too high the more spies there were! Big bug. Big thanks to GazBot & co)
- Between 1130 Zone Recon Points you start having 10 Hex Recon Points on Hexes of Zone, at 30 all

Hexes will have 10 Recon Points"

- Between 31100 Zone Recon Points you start having 100 Hex Recon Points on Hexes of Zone, at 100 all Hexes will have 100 Recon Point
- Spies will be more prone to capture if they are more numerous, linear effect… will be hard to keep like 10 spies in a Zone now.
- Also remember there are some antiespionage ops going on. Having security in Zone, having traditional culture, having a Zone Gov with good Covert Ops Skill !
- Capped maximum Factions to 9 and gradual decrease of new Factions appearing once you already have a lot
- Improved Planet Generation tectonic plate placement leading to more interesting Planets
- Pull System fix for Assets Pull Points of Zones without their own Logistical Asset
- Pull System fix for SHQ being located on Zone City without own Logistical Asset
- Fixed exploit in Raise Troops with less than 50% (BlueTemplar)
- Dropped the transfer rule where 0 AP unit is not allowed to send transfers if it has not move/attacked.
- Reduced erosion effects a bit (except for geologically dead planets)
- Reworked some height algorithms, height now also displayed in black during generation (and white shows rain mm)
- Reworked rain effect on river formation (to hot planets had weird effect)
- Reworked river flow once more, result is even better
- Fixed some AI turn crashes (like LockBitmap) due to versight with previous subversions
- Added 9 MTH Decisions that correspond with Profiles. Each MTH has a specific Profile and a specific Decision subset. In practice this means your favorite MTH will drag you towards its favorite Profile, resisting will lead to relation degradation and other side effects.
- Added the base functionality for Minor Regime Pirates that can get MTH help to land on the shores of Majors. Effect should be quite light on easy diff, but more heavy on higher difficulty levels. You can also Influence the MTH on its Piracy Attitudes.
- Better MTH Decision quantity pacing (see recruitment decision issues on forums)
- Improved AI taking into account Victory Conditions better on Island maps*
- Sea Critters now properly retreat instead of surrender
- Sea Critters will perform much better when you attack them on the seas (higher hitpoints* + chance to turn KILLS into RETREATS)
- Fixed some MTH Decisions that were probably not showing up (consistently) due to a scripting error (it concerns: share buyback, offer share, MTH asks for more capital
- Fixed an issue with Sea Critters with aquatic movement entering land as well
- Fixed glitch with Beware Regime decision in influencing of MTH
- Fixed glitch with Zone creation around surrounded Asset (that was not a port!)
- Zones at City Level 0 (yes this can happen when reconquering ports) will automatically upgrade to City Level 1 once 1000 pop in Zone
- Improved AI diminishing relations (especially on harder victory) when a certain player is getting closer to victory conditions *
- Improved AI diplomatics by allowing it to use "Provocation" Stratagems when in COLD mode. Sometimes it would want to go to war but could get stuck with a too high relation level. *
- For Proton users having crashes on startup since subversion N: The engine can now read the 2nd line of the direct2d.txt file, make sure the 2nd line says "false". If this is the case some more advanced D2D functions will not be used. The cause of the bug was the fact that Proton could not use (some) "Direct2D Effects". Especially the AtlasEffect I think. I am planning to expand on using those Direct2D Effects in the future, so this is something to monitor, and any info on what Effects exactly are supported and not supported by Proton/WINE would be welcome, since I am really a Windows man.
- Fixed some mouse overs of Tabs giving the wrong FShortkey in their description.
- Added Corporate Tax income to Treasury Report
- Fixed glitch where scientific coop could give you a groupName instead of an actual Tech
- Fixed another glitch with the Model calculations concerning vehicles that are immobile (due to

      engine weight ratio)
- Fixed a glitch in Planet Generation with some flora hexes on lifeless Planet *

- Fixed preview logistical mode individual assets in tandem with Oceania
- Fixed an AI CTD with an AI SHQ in a Zone without a City (EA)
- Sea Critters less often (semi) amphibic on lower difficulty modes *
- Fixed some AI SHQ spamming
- Tuned down Fontus Planet Class swampiness & lake spam a bit
- Slight nudge to Logistical Pull System in some odd cases where traffic signs were wrongly preventing Pull Points being placed for Units (Battlemode Ben)
- Tidy up logic added for some Former Governor cases
- Fixed a skill reporting glitch during Combat
- Fixed issue where a Faction could sometimes be without a Leader (generating some glitchy decisions in some cases)
- Fixed crash with some Mods that removed Stratagems Event Pictures
- Fixed small Model Design issue with immobile equipment (like immobile assault guns/tanks)
- Fixed small Model Design issue with quad normal (notadv) MGs
- Fixed error in Annexation Stratagem logic *
- Fixed some change profile Faction Demands
- Fixed some missing Zone Names (said Unknown)
- Fixed some glitches with supply subtab when ammo + energy being delivered to Unit
- Fixed recon calculations on Zone and Regimes (for Stratagem play, where the Hexes where visible but player did not have minimal recon on Zone nor Regime)
- Fixed issue with double Auctions
- Fixed issue with history icons (air landing + amph landing)
- Fixed issue with AI doing amphibious landings on targets it was not at war with
- Fixed issue with Strategic Transfer not using the best naval connection
- Put fallback in place for unsupported Direct2D functionality (Wine issue)
- Improved Asset Logs to also include the formula's for Bonuses, Tech improvements and Planetary Stats. Not very detailed, but at least the effects are logged and on top of that the raw formula has been made accessible through a mouse over.
- Further speed Improvements of the AI and Processing
- Fixed a major glitch with Air Bridge damage being set way to low
- Fixed a nasty coding issue that was miscalculating Strategic Transfers path finding if Air Bridges could be involved
- Fixed a last 1 mention in the Military Details Reports.
- Redid the layout of the Military Details Report to be more readable.
- Tech test… The initial game cinematics have been D2D accelerated. Not impressive, but the fades between the images should be noticeably smoother. Please do let me know if this is the case or not. This is not the main goal of this change, as it is really mostly about testing this acceleration tech and if it causes any errors on any systems. If all works well I could use this approach to attack rendering bottlenecks in other parts of the game in the future.
- Speeded up the general engine drawing speed a bit (if not using DPI)
- ASAP Fixes of reported crashes (Michal, Greg, EA) (other issues will be addressed next week)
- Added the Aquatic Critters.* Some of them (semiamphibic) will be able to enter coastal land Hexes and some will even be even be able to go further inland (fullamphibic). They however can never enter mountainous hexes. (on the todo list is still to make them impact Logistical Points, especially if close to your Ports; and the ability to pay MTHs to hunt them; and their ability to sink MTH ships that are on shipping lanes close to them)
- MTH Contracts are now taken into account with Logistics Preview Mode + in the Contract Overview Report
- The Stratagem Explore Contract has been renamed Information Exchange Contract *
- The Stratagem Recon Contract has been added. The Recon Contracts are similar, but more expensive. They do an even better job on revealing Sea Hexes (2x better job versus at least 3x

the cost). The Recon Contracts prime use is to gain better Recon on the coasts of the Sea Zone targeted. An Information Exchange Contract will get you 5 Recon Points on Coastal Hexes and 2 further inland. A Recon Contract will get your 20 recon Points on Coastal Hexes, than 5 further inland and then once again 2 further inland. On top of that any Port Hex will provide the MTH (and thus you) with a whopping 100 Recon Points, 20 further inland, 5 even further inland and then 2 even further further inland) *

- The Logistics Preview Mode also shows the Port Points that will be used (and so does the Current Logistics Points mode for those used at start of turn.
- Declare War Stratagem now seperate for Minor and Major Regimes to avoid confusion. Also renamed them Minor War and Major War.*
- Fixed Fontus Class (and others) to not skip on Marine life is not using Water Solvent for its lifeforms
- Fixed varying marriage proposal decision (Elver) *
- Also fixes the same issue for Advisor offered by MTH Decision *
- Fixed a small layout glitch in Help > Planetary Info
- Fixed garbled report over new MTH Elder *
- Fixed sometimes changing portrait of MTH Elder in topright of Decision
- Fixed faulty MTH Contracts Report (was showing enemy contracts)
- Reworked Minimum Recon, You now always have 1 Recon on Coastal Hexes if you know a Sea Hex next to it.
- Finetuned the AI valuation of different Island invasion possibilities (some AIs got stuck on small island with huge continent next to them)
- Finetuned the AI not assigning too much forces to invade/take small Islands
- Finetuned the AI not to skip on big core island still not conquered
- Minor War always available at easy/regular (Elver)
- All MTH Stratagems are now properly and only generated by the Economic Council (2 were generated elsewhere before felt confusing) *
- Population buying Free Folk to join them now sends those Credits to the Traders (that organized and facilitated the Items necessary)
- Small but wrong mouse over for roll prediction thingy is fixed, based on report for Waste disposal Incident Decision, should also help with some other similar Decisions (kojusoki)
- Borders are back during Apocalypse Phase of Planet Generation (was disrupted during a recent beta patch)
- Very very probably fixed some doubled text in Vidcom (EA)
- Fixed some inconsistencies with Planet clicking in Planet choice setup screen (nsf). You can now always click the Planet as well as the button.
- Hiding shareholders from MTH Overview if you do not have the recon on those Majors yet (nsf)
- Black hexes will now show "Unknown" in Zone Tab (Elver)
- On especially easy+regular AI Expansion is a bit slower now (as it is not using Councils and Stratagem generation, I have to manually tune this a bit when it can play which Stratagem)
- Made some adjustments to the MTH behavior in buying ships when needed (they should now expand quicker to keep up with Demand (if they have the Credits))
- Fixed 1 titled report on Asset damage during combat (Elias)
- Fixed 1 entry in Military Details Reports, replaced by "battlegroups" (Elias)
- Strategic Transfer ensures at least 1 Recon Point on the target Hex. This preserves the effect of absent recon, but allows combat to be added to the history log if it occurs. (Elias)
- Increasing the Weight for Transport + Explore Contract to be generated as Stratagems
- Made some last adjustments to Traders investing in each other
- Fixed a crash when you stopped history bar during AI play and kept it like that until AI fully executed
- Fixed a glitch where Minors without any Zone, but still with Units, could go completely inactive while you are fighting them
- Fixed issue with too high Recon Points with Heavy Tank and Tank Destroyer *
- Fixed glitch with vegetation appearing on Planets that should not have it (or not that level) *
- Upped the amount of Credits Traders will spent during trading with other Traders (was to tight and some of them were not buying enough)

- Introduced an extra rule to the price negotiation mechanism between Traders where much higher local asking price than selling local price will result in some serious discounts as the buying Traders know there is too much of a surplus with the sellers to start buying at their own internal market price. (Voker)
- Speeded up AI processing up like 1030% while in the Game Loop Window (not looking at moves while they come in)
- Speeded up AI processing concerning its economic calculations, could result in a final total speed improvement of 10%
- 10%
- Improved the AI processing concerning its BP investments, could result in a final total speed improvement of 10%
- Improved the AI processing concerning the simplest of move matrices used and could result in a final total speed improvement of 10%
- Improved the core AI Front processing with some serious caching operations and could result in a final total speed improvement of 40%
- All together we might have halved processing time, at least for the fast AI, but similar results expected for the other AI speed settings.
- Improved AI's prediction of possible combat outcomes concerning the equipmentused weights (combat matrix related)
- AI now better taking into account the possible combat effects of armor vs gun mm matrix and the armor type vs weapon type matrix
- AI now better takes into account Profile Combat Bonus
- AI now better takes into account obvious effects of core Posture Stratagems
- AI now better takes into account the Skill modifiers of the various Commanders (it makes a guess to enemy's skill levels)

- AI improvements for better moving/spreading out over multiple Islands. Touching on many aspects and fixing a lot of unwanted AI behavior. Still not fully there, but it is much better than before.
- Repaired the leader count used with Demands
- Fixed a crash with AI algorithm (concerning an empty Zone) (Elver)
- MTH Quarrels decisions now also impact relation with MTH *
- A new MTH leader will remember your previous support when he/she comes to power and that will give a boost to your relation (* sort of)
- Fixed some serious glitches (putting the level to high or always keeping it at 50) in relation (with MTH) effects of the MTH Decisions *
- Less expansionist MTHs now save up more Credits (instead of buying ships)
- MTH Buy IP Decision now really fixed (yes it actually was not) *
- Less big Lakes and more small Oceans in their place now *
- *=new scenario start necc
- Fixed a glitch with the location name showing in the selected Hex info sidebar of the Hex illustration if you did not have sufficient recon.
- Improved Strategic Movement hex mouse over info (next to landscape type illustration) to show whole trajectory possible even if to much weight points with Units, also coloring this info red if weight>logistical points. Minimal 1 Logistical Points needs to be present on Hex of Unit however.
- AI improvements and glitch fixes concerning choice of Formation Type
- AI improvements concerning moving forward in unopposed territory with slow moving Units
- Fixed the sometimes initially wrong page numbering of paginated tables in Reports.
- Fixed a possible crash with the Target SubTab in Stratagems Tab (Elias)
- Fixed special case Trade issue when certain Item completely depleted with a Trade Area
- Finetune to Trade where rounding to zero is replaced by random chance to go to zero
- Removed the display cap on Recon Points to 400 during Combat as higher values than 400 are actually necessary to have complete effectiveness against troops in a Hex that start combat with Cover Points.
- Fixed the poor AI still paying Colonists (not being placed) for founding New Zone (delivered without

      initial Colonists since quite a few versions)
- Fixed a setup glitch with Leader of Minor not having a title*
- Fixed the Advice window sometimes popping up upon loading game/new game when it is turned off
- Reverted a recent rendering optimization (because it was probably causing ghost Tabs with some beta testers)
- Cross Fertilization research cost diminished by factor of 10 (Thrake) *
- Converting Rail Station to HS without the Tech is no longer possible (Elver)
- Fixed a glitch with wrong effect of lowering Leader salaries (Emx77)
- Found glitch with negative gov production modifier being slightly to high (Emx77), but decided to keep it like this and update manual soon that gov modifier varies between +25 and 50

- Fixed last remaining issue with Stratagems showing "not valid" when initially opened (Christian)
- Improvements to Planet Generation concerning the dynamics between Mountains and Tectonic Plates leading to more varied maps
- Improved flora placement during Planet Generation better taking into account the temperature & rain
- Apologies. I have been a bit to hasty with 1.12g as it turns out.
- Fixed crash with Mini Map during Planet Generation
- Fixed crash with Stratagems
- Fixed issue with duplicate Stratagems not showing properly initially
- Fixed bug with Demands asking you to conquer a Sea Hex (xxzard)
- Fixed bug with table coloring persisting with other tables (Voker57)
- Fixed bug with MTH buying IP could be influenced (Voker57) *
- Adjusted AI to better take into account probable enemy opposition when choosing an Island for invading (will go for weaker ones first)
- Adjusted AI to assign less Units to Garrison duty (important to succeed with light weight invasions)
- Adjusted AI to not assign Units to a front overseas without actually being assigned to that Island for transport.
- Adjusted AI to deal with change in ideal landing X,Y and not sending troops back to original island
- Adjusted AI to go for more Troops (50% more) to take out Island defenders
- Adjusted AI to not switch invasion Hex due to getting confused about initial no Zone (before Makeshift Port constructed)
- Reduced the price modifier for shipping costs if MTH has (much) more offer than demand; still steep price rise, but less than before
- Stopped MTHs investing Credits in Trade Areas (landbased Traders)
- Fixed AI algorithm for MTH buying ships, was not doing this enough
- Fixed AI algorithm for paying dividends, was not doing this enough
- The above few points will make it easier to keep buying Transport Contracts without the price going up to much
- when MTH buys ships the Credits spent now reenter the monetary loop through Trade Areas bordering the MTH seas (weighted for pop+freefolk+worker).
- Fixed AI algorithms concerning selling goods not needed and shortage calculations on islands in relation to the need for Credits to buy Transport Contracts => should lead to more selling to Traders and thus more Credits for Major AI to purchase Transport Contracts and others.
- AI now taking into account if it is trying to transport heavy Units that need more Logistical Points (especially with amphibious invasions)
- AI now adapting size of Formations it raises to take into account their weight
- AI now thinking twice before sending artillery first during amphibious operations
- Fixed calculation of ships used by AI for execution contracts (and determining price point of new contracts)
- Fixed Skill Roll mouseovers (Cassini)
- Fixed glitch with Unit Supply where pickup point at same hex as SHQ still needed Logistical Points
- Fixed crash with turn processing (Karl)
- Concerning the UI Stratagem Tab : Diminished the data caching for the Stratagems from per category to per Stratagem. This should give a small speed decrease with a small Stratagem

count, but a big speed increase with lots of Stratagems. (Cassini)
- Speeded up the drawing of the various minimaps (Strategic Map, Stratagem targets). Big improvement especially in big games.
- Major AI revised selling to Traders algorithm (was selling to little)
- Fixed a bug with multiSHQ AIs buying too much Food from Traders
- Population in an economic endstate situation (nothing to build) start spending excess Credits to buy Luxury Products with Traders (improving Happiness)
- Fixed some last Trade Report issues (showing too much qty's being reported and Trade Report on own Regime not showing stuff)
- Fixed skill roll mouse over for Regime Feat Skill Bonus and made more precise the mouse over for Regime Feat Stat Bonus effect on skill roll. (Cassini)
- Reduced the perround reduction of Skill Usage Points a bit if they are very low. (KeepStay)
- Transferring Items from Zone to SHQ (or other way around) when SHQ is on the Zone City Hex will be without logistical constraint now. Same if it concerns SHQ to SHQ where both are on the same Hex. (Elver)
- Fixed an issue that seriously limited trade with larger multizone Regimes, to the exclusion of trade between certain Regimes (Voker57)
- Improved trade algorithm concerning total volume passing from one side to another
- Improved trade algorithm and prioritize better deals over lesser (albeit good) deals
- Improved trade algorithm to not spend all its Credits trading with other Traders
- Improved trade algorithm to only start buying above a certain perceived price gain
- Improved trade algorithm by taking tariffs better into account to avoid making Trade Areas making dumb deals
- Improved trade algorithm concerning the CommerceBonus effects. These now play less of a role concerning misleading other Trade Areas (though can still influence perceived and real price with up to 25% if commerce bonus +200% versus area with no bonus at all), they now play a role in the actual price struck (between the buy price of trade house A and the sell price of trade house B). all being equal price = (buy price + sell price)/2… but if house A commerce bonus +100% then it results into price = (buy price*2 + sell price)/3. At bonus +200% then it results into price = (buy price*3 + sell price)/4… the reverse is of course also possible. This should give a nice boost to the usefulness of the Commerce Profile as it now should make your Traders more rich.
- Trade areas now only invest in other Trade Areas (credits transfer) if really low Credits there (in future still have to add some mechanic here to make it pay back for investing traders)

v1.12.01.05 – 22nd February 2023

Changelist for Oceania 1.12t (#154)
- Added 3 special Oceania Fate Cards: Change of Heart (1FP), Stock Emission (2FP), Maritime Breakup (3FP)
- Improved MTH Contracts Overview and made Transport Contract entries clickable.
- Once clicked you have the option to RENEW or CANCEL the Contract.
- Added Force Majeure rules for MTH canceling the Contract because of loss of Target Sea Zone.
- MTH visibility and 1 Recon Point on known Sea Hexes is now coherent with Partial FOW mode (and the other modes)
- Fixed a rare first turn crash due to MTH labels on map (previous subversion)
- Glacier islands now get different names
- Reduced the number of sea battles quite a lot, especially for less aggressive MTHs. This will give you much more time to observe and react to changing MTH areas.
- Contract execution Ship shortages now calculated on the basis of ALL Contracts instead of just the current player's Contracts.
- Modifying Ship Shortage rule now for less Logistical Points used due to Inadequate Port Points on Contract
  - Port Points are now "consumed" based on the actual Logistical Points that are possible (due to limited Port Points on other side) for a Contract and not its optimal Logistical Points. The Ship shortage rule also takes into account how much actual Logistical Points

are going to be used (and not the ideal)

- Fixed some glitches in the Logistical Points calculations for Transport Contract execution
- Some final fixes for FOW on MTHs and Partial FOW mode. You can now always see all MTHs in Partial FOW mode. It's more consistent that way.
- You get a Vidcom notification when a Transport Contract is about to expire. (and also if there is any Force Majeure event)
- Changed the Auction bidding algorithm so that everybody bids "blind", this is done to avoid the later bidders to have an advantage.
- Transport Contracts no longer work if you lose the Source Hex, but they don't get canceled automatically either (and loosing target hex is okay)
- The initializer messages are no longer shown in Reports.

Changelist for Core 1.12t (#154)

- Fixed grassy Mountains appearing in areas to cold or dry
- Fixed forested snow mountains sprite transitions with low snow mountains (masterfile update!!!)
- The new +50 DIFF for some Minor Regime Stratagems for Land Border in #153 was showing the wrong Preview Diff. Fixed now.
- Fixed bug where airforce was still like half active if you unflagged Airforce in Planet Settings
- Fixed air attack modifier for Forested Mountain Landscape Type. Is now 50%, just like regular Forest.

v1.12.01.04 – 20th February 2023

Changelist for Oceania 1.12s (#153)

- Expansionist Rating properly shown with Elder change message*
- Added MTH Icons + names on main map
- Reorganized the Planet Class selection window to support more Planets without much scrolling
- Added Planet Class: Artica, which is cold and has notable ice caps
- Added Planet Class: Tethys, which is hot and tends to be labyrinthine
- Added Planet Class: Hydroid, which is small but with liquid water
- Made it more easy to see Unit Weight at a glance when MTHs are active
- Your own Infuence Points are now displayed in MTH Report
- Showing Port Points for Destination + Source Hexes during Transport Contract negotiations now.
- Added some more Transport Destination Hexes when invading small Islands, or narrow SeaLand connections, to always have some choice where to invade
- Planets without using Oceania Feature (or without Seas) will no longer have access to MTH Liason Task and Port Asset Types *
- MTH Mauraders that you chase away will no longer drop troops (the one ship remark) *
- MTH Buy IP edge case fixed (MTH no longer had contact with Zone due to other events)
- Fixed issue with some delegated decisions concerning MTHs
- Fixed FOW with the MTH Overview Report (was showing MTHs you should not know yet)
- Fixed FOW with the individual MTH Reports (that were showing when they shouldn't)
- Not showing Temp, Rain, Scav for Sea Hexes anymore (in line with info disclosed in Strategic Map and hiding some unpolished planet gen calculations that could break immersion)
- MTHs now earn 100 Credits per Pirate Unit transported.
- History Classes Haven of Calm and Sever Violence impact MTH aggression rating, piracy attitude and MTH Feat chance for Former Pirate and Maritime Imperialists
- Beginner Difficulty Level halves the prices for Contracts with MTH
- Extreme Difficulty Level increases those prices with +50%
- MTH Leader with low relation that's completely dissatisfied will leave instead of mounting a rebellion (MTH alliance related)
- Double checked but on Beginner the Metal deposit should always show up.. get me a planetgeneration autosave if this is not the case
- Offer Protection, Offer Client, Propose Peace, Unification, Annexation are now more difficult if you

do NOT have a land border with the Regime the Stratagem is being played on.

Changelist for Oceania 1.12r (#152)
- Added the ability to sign an Alliance with an MTH (must have >50 relation and Transport Contract running with it). An Alliance will severely reduce prices, but… you'll need to take the MTHs Leaders on board in your Cabinet, SHQ and Zones. Their Leaders are maybe young and eager but not the best ones you could get elsewhere. However… this provides you with an escape if you cannot afford the Credits to use the MTHs services.
- Added MTH Feats. Each MTH now has one of 12 different MTH Feats to give it some more uniqueness and replaybility.
- The MTH Profiles were already linked to special Decisions, but they now all also have a "small" other effect.
- Everything has interesting mouse overs in the MTH Report (if you have at least 1 share in it)
- MTH now have a status between them, which can be War or Status Quo. It takes a low relation (and or a lot of aggression rating for an MTH to go to war with another MTH). The other side can also offer peace again. This will result in less MTH wars unless Major Regimes start influencing.
- Many fine tunings to MTH combat , dividends, shipbuilding algorithms, trade.
- There is much log to be read in the MTH report if you have at least 1 share in it.
- MTHs now have a Trade Policy towards Majors. Normally: Fair, but with lower relation can become Abuse or Stranglehold (increase of sell price, decrease of buy price)
- Implemented special trade rules for MTH (Greed Rating impacts prices, Trade Policy impacts prices, Port Points limits to absolutely qty traded, Reduced MTH<>MTH trading because difficult to transfer on the highsea)
- Fixed glitches with the Stratagem Minimap+Seas+FOW that was blending MTH into known but 0 recon land areas (David)
- Reduced chance for Pirate invasions a bit and limited the cumulative number of them (on lower difficulty levels), also giving the player an initial breather with Pirate chance being 0% on round 5 or lower and slowly ramping up to full chance towards round 15
- Quite some finetuning to AI Influence Point usage and Auction bidding, these effects are logged as well (as always 1 share needed to read the logbook of the MTH)
- Fixed initial MTH setup at game start where some splitoffs started with 0 inventory, or only 1 MTH would start on a map with really a lot of Sea Zones, no more!
- Fixed a glitch in scenario init of scripting that was 50% of the time blocking some stories from triggering

Changelist for Core 1.12r (#152)
- Fixed a rare glitch with Trade if very poor Traders had zero items of a specific Item to start with.
- Fixed some rounding error with Trade Item Inventory, that caused it to lose items of which it had very low stocks.
- Fixed the nonsplitting of Trade Areas once a Regime gets split in half (or similar).

Shadow Empire Oceania changelist for v1.12q2:
- Some more polish done to the new MTH Report. Sort of final state now. Though some extra specific statistics will be added in the upcoming weeks. Note that this Report has good mouse over support.
- Fixed crash with Airforce generated game upon start
- Fixed big glitch in MTH Dividend payments. Should be payed normally now and process logged as well.
- Fixed two separate glitches in the AI algorithm that (often) caused it to not venture out to other islands (or just with 1 unit) due to recent adherence to MTH rules change for AI Majors. It was trying to target Islands that were not necc accessible by its MTHs. Major AI is now properly invading again!
- Plenty of finetunings done. Especially to the naval battle & shipbuilding algorithms. All considerations are logged as well now (but you need to be in comm and ideally shareholder)

Shadow Empire Oceania changelist for v1.12q:
- Big remake of the MTH Reports that now has a nice layout, some info graphics and even some tabs and more information available to browse (be a shareholder though to get all the info) (this new MTH report is not fully finished yet, especially trade needs to be fleshed out still)
- Fixed AI bug that caused it to very often not produce any Regular Troops anymore!
- Fixed that recurring recruit bug for good (got scrambled by the IP sales decision) *
- Fontus Class riverlake mess is really solved this time I think.
- Especially the Thalassa Class has no much more chance to have many separated islands (instead of very long ridges)
- Plenty of small fixes to MTH related calculations

Shadow Empire (core) changelist for v1.12q:
- Added completed Asset constructions to the Construction Overview Report
- Fixed glitch with autoreplacement swapping of robotic with regular forces equipment
- Fixed a Trade Reporting glitch with imports/exports (that did not match up)
- Fixed a bug with the spy calculations (got way too high the more spies there were! Big bug. Big thanks to GazBot & co)
- Between 1130 Zone Recon Points you start having 10 Hex Recon Points on Hexes of Zone, at 30 all Hexes will have 10 Recon Points"
- Between 31100 Zone Recon Points you start having 100 Hex Recon Points on Hexes of Zone, at 100 all Hexes will have 100 Recon Point
- Spies will be more prone to capture if they are more numerous, linear effect… will be hard to keep like 10 spies in a Zone now.
- Also remember there are some antiespionage ops going on. Having security in Zone, having traditional culture, having a Zone Gov with good Covert Ops Skill !
- Capped maximum Factions to 9 and gradual decrease of new Factions appearing once you already have a lot
- Improved Planet Generation tectonic plate placement leading to more interesting Planets
- Pull System fix for Assets Pull Points of Zones without their own Logistical Asset
- Pull System fix for SHQ being located on Zone City without own Logistical Asset
- Fixed exploit in Raise Troops with less than 50% (BlueTemplar)
- Dropped the transfer rule where 0 AP unit is not allowed to send transfers if it has not move/attacked.
- Reduced erosion effects a bit (except for geologically dead planets)
- Reworked some height algorithms, height now also displayed in black during generation (and white shows rain mm)
- Reworked rain effect on river formation (to hot planets had weird effect)
- Reworked river flow once more, result is even better

Shadow Empire (core) changelist for v1.12p3:
- Fixed a crash (Elver)

Shadow Empire (core) changelist for v1.12p2:
- Fixed some AI turn crashes (like LockBitmap) due to versight with previous subversions

Shadow Empire Oceania changelist for v1.12p:
- Added 9 MTH Decisions that correspond with Profiles. Each MTH has a specific Profile and a specific Decision subset. In practice this means your favorite MTH will drag you towards its favorite Profile, resisting will lead to relation degradation and other side effects.
- Added the base functionality for Minor Regime Pirates that can get MTH help to land on the shores of Majors. Effect should be quite light on easy diff, but more heavy on higher difficulty levels. You can also Influence the MTH on its Piracy Attitudes.
- Better MTH Decision quantity pacing (see recruitment decision issues on forums)
- Improved AI taking into account Victory Conditions better on Island maps*

- Sea Critters now properly retreat instead of surrender
- Sea Critters will perform much better when you attack them on the seas (higher hitpoints* + chance to turn KILLS into RETREATS)
- Fixed some MTH Decisions that were probably not showing up (consistently) due to a scripting error (it concerns: share buyback, offer share, MTH asks for more capital
- Fixed an issue with Sea Critters with aquatic movement entering land as well
- Fixed glitch with Beware Regime decision in influencing of MTH
- Fixed glitch with Zone creation around surrounded Asset (that was not a port!)
- Zones at City Level 0 (yes this can happen when reconquering ports) will automatically upgrade to City Level 1 once 1000 pop in Zone

Shadow Empire (core) changelist for v1.12p:
- Improved AI diminishing relations (especially on harder victory) when a certain player is getting closer to victory conditions *
- Improved AI diplomatics by allowing it to use "Provocation" Stratagems when in COLD mode. Sometimes it would want to go to war but could get stuck with a too high relation level. *
- For Proton users having crashes on startup since subversion N: The engine can now read the 2nd line of the direct2d.txt file, make sure the 2nd line says "false". If this is the case some more advanced D2D functions will not be used. The cause of the bug was the fact that Proton could not use (some) "Direct2D Effects". Especially the AtlasEffect I think. I am planning to expand on using those Direct2D Effects in the future, so this is something to monitor, and any info on what Effects exactly are supported and not supported by Proton/WINE would be welcome, since I am really a Windows man.
- Fixed some mouse overs of Tabs giving the wrong FShortkey in their description.
- Added Corporate Tax income to Treasury Report
- Fixed glitch where scientific coop could give you a groupName instead of an actual Tech
- Fixed another glitch with the Model calculations concerning vehicles that are immobile (due to engine weight ratio)
- Fixed a glitch in Planet Generation with some flora hexes on lifeless Planet *

Shadow Empire Oceania changelist for v1.12n:
- Fixed preview logistical mode individual assets in tandem with Oceania
- Fixed an AI CTD with an AI SHQ in a Zone without a City (EA)
- Sea Critters less often (semi) amphibic on lower difficulty modes *
- Fixed some AI SHQ spamming
- Tuned down Fontus Planet Class swampiness & lake spam a bit

Shadow Empire (core) changelist for v1.12n:
- Slight nudge to Logistical Pull System in some odd cases where traffic signs were wrongly preventing Pull Points being placed for Units (Battlemode Ben)
- Tidy up logic added for some Former Governor cases
- Fixed a skill reporting glitch during Combat
- Fixed issue where a Faction could sometimes be without a Leader (generating some glitchy decisions in some cases)
- Fixed crash with some Mods that removed Stratagems Event Pictures
- Fixed small Model Design issue with immobile equipment (like immobile assault guns/tanks)
- Fixed small Model Design issue with quad normal (notadv) MGs
- Fixed error in Annexation Stratagem logic *
- Fixed some change profile Faction Demands
- Fixed some missing Zone Names (said Unknown)
- Fixed some glitches with supply subtab when ammo + energy being delivered to Unit

Shadow Empire Oceania changelist for v1.12m:
- Fixed recon calculations on Zone and Regimes (for Stratagem play, where the Hexes where

visible but player did not have minimal recon on Zone nor Regime)
- Fixed issue with double Auctions
- Fixed issue with history icons (air landing + amph landing)
- Fixed issue with AI doing amphibious landings on targets it was not at war with
- Fixed issue with Strategic Transfer not using the best naval connection
- Put fallback in place for unsupported Direct2D functionality (Wine issue)

Shadow Empire (core) changelist for v1.12m:
- Improved Asset Logs to also include the formula's for Bonuses, Tech improvements and Planetary Stats. Not very detailed, but at least the effects are logged and on top of that the raw formula has been made accessible through a mouse over.
- Further speed Improvements of the AI and Processing
- Fixed a major glitch with Air Bridge damage being set way to low
- Fixed a nasty coding issue that was miscalculating Strategic Transfers path finding if Air Bridges could be involved
- Fixed a last 1 mention in the Military Details Reports.
- Redid the layout of the Military Details Report to be more readable.

Shadow Empire Oceania changelist for v1.12k2:
- Tech test… The initial game cinematics have been D2D accelerated. Not impressive, but the fades between the images should be noticeably smoother. Please do let me know if this is the case or not. This is not the main goal of this change, as it is really mostly about testing this acceleration tech and if it causes any errors on any systems. If all works well I could use this approach to attack rendering bottlenecks in other parts of the game in the future.
- Speeded up the general engine drawing speed a bit (if not using DPI)
- ASAP Fixes of reported crashes (Michal, Greg, EA) (other issues will be addressed next week)

Shadow Empire Oceania changelist for v1.12k:
- Added the Aquatic Critters.* Some of them (semiamphibic) will be able to enter coastal land Hexes and some will even be even be able to go further inland (fullamphibic). They however can never enter mountainous hexes. (on the todo list is still to make them impact Logistical Points, especially if close to your Ports; and the ability to pay MTHs to hunt them; and their ability to sink MTH ships that are on shipping lanes close to them)
- MTH Contracts are now taken into account with Logistics Preview Mode + in the Contract Overview Report
- The Stratagem Explore Contract has been renamed Information Exchange Contract *
- The Stratagem Recon Contract has been added. The Recon Contracts are similar, but more expensive. They do an even better job on revealing Sea Hexes (2x better job versus at least 3x the cost). The Recon Contracts prime use is to gain better Recon on the coasts of the Sea Zone targeted. An Information Exchange Contract will get you 5 Recon Points on Coastal Hexes and 2 further inland. A Recon Contract will get your 20 recon Points on Coastal Hexes, than 5 further inland and then once again 2 further inland. On top of that any Port Hex will provide the MTH (and thus you) with a whopping 100 Recon Points, 20 further inland, 5 even further inland and then 2 even further further inland) *
- The Logistics Preview Mode also shows the Port Points that will be used (and so does the Current Logistics Points mode for those used at start of turn.
- Declare War Stratagem now seperate for Minor and Major Regimes to avoid confusion. Also renamed them Minor War and Major War.*
- Fixed Fontus Class (and others) to not skip on Marine life is not using Water Solvent for its lifeforms *
- Fixed varying marriage proposal decision (Elver) *
- Also fixes the same issue for Advisor offered by MTH Decision *
- Fixed a small layout glitch in Help > Planetary Info
- Fixed garbled report over new MTH Elder *
- Fixed sometimes changing portrait of MTH Elder in topright of Decision

- Fixed faulty MTH Contracts Report (was showing enemy contracts)
- Reworked Minimum Recon, You now always have 1 Recon on Coastal Hexes if you know a Sea Hex next to it.
- Finetuned the AI valuation of different Island invasion possibilities (some AIs got stuck on small island with huge continent next to them)
- Finetuned the AI not assigning too much forces to invade/take small Islands
- Finetuned the AI not to skip on big core island still not conquered
- Minor War always available at easy/regular (Elver)
- All MTH Stratagems are now properly and only generated by the Economic Council (2 were generated elsewhere before felt confusing) *

Shadow Empire (core) changelist for v1.12k:
- Population buying Free Folk to join them now sends those Credits to the Traders (that organized and facilitated the Items necessary)
- Small but wrong mouse over for roll prediction thingy is fixed, based on report for Waste disposal Incident Decision, should also help with some other similar Decisions (kojusoki)
- Borders are back during Apocalypse Phase of Planet Generation (was disrupted during a recent beta patch)

Shadow Empire Oceania changelist for v1.12j:
- Very very probably fixed some doubled text in Vidcom (EA)
- Fixed some inconsistencies with Planet clicking in Planet choice setup screen (nsf). You can now always click the Planet as well as the button.
- Hiding shareholders from MTH Overview if you do not have the recon on those Majors yet (nsf)
- Black hexes will now show "Unknown" in Zone Tab (Elver)
- On especially easy+regular AI Expansion is a bit slower now (as it is not using Councils and Stratagem generation, I have to manually tune this a bit when it can play which Stratagem)
- Made some adjustments to the MTH behavior in buying ships when needed (they should now expand quicker to keep up with Demand (if they have the Credits))

Shadow Empire (core) changelist for v1.12j:
- Fixed an AI crash caused with 1.12i (Hagen)
- Fixed 1 titled report on Asset damage during combat (Elias)
- Fixed 1 entry in Military Details Reports, replaced by "battlegroups" (Elias)
- Strategic Transfer ensures at least 1 Recon Point on the target Hex. This preserves the effect of absent recon, but allows combat to be added to the history log if it occurs. (Elias)
- Increasing the Weight for Transport + Explore Contract to be generated as Stratagems
- Made some last adjustments to Traders investing in each other

Shadow Empire (core) changelist for v1.12i:
- Fixed a crash when you stopped history bar during AI play and kept it like that until AI fully executed
- Fixed a glitch where Minors without any Zone, but still with Units, could go completely inactive while you are fighting them
- Fixed issue with too high Recon Points with Heavy Tank and Tank Destroyer *
- Fixed glitch with vegetation appearing on Planets that should not have it (or not that level) *
- Upped the amount of Credits Traders will spent during trading with other Traders (was to tight and some of them were not buying enough)
- Introduced an extra rule to the price negotiation mechanism between Traders where much higher local asking price than selling local price will result in some serious discounts as the buying Traders know there is too much of a surplus with the sellers to start buying at their own internal market price. (Voker)
- Speeded up AI processing up like 1030% while in the Game Loop Window (not looking at moves while they come in)

- Speeded up AI processing concerning its economic calculations, could result in a final total speed improvement of 10%
- Improved the AI processing concerning its BP investments, could result in a final total speed improvement of 10%
- Improved the AI processing concerning the simplest of move matrices used and could result in a final total speed improvement of 10%
- Improved the core AI Front processing with some serious caching operations and could result in a final total speed improvement of 40%
- All together we might have halved processing time, at least for the fast AI, but similar results expected for the other AI speed settings.
- Improved AI's prediction of possible combat outcomes concerning the equipmentused weights (combat matrix related)
- AI now better taking into account the possible combat effects of armor vs gun mm matrix and the armor type vs weapon type matrix
- AI now better takes into account Profile Combat Bonus
- AI now better takes into account obvious effects of core Posture Stratagems
- AI now better takes into account the Skill modifiers of the various Commanders (it makes a guess to enemy's skill levels)

Shadow Empire Oceania changelist for v1.12h:
- AI improvements for better moving/spreading out over multiple Islands. Touching on many aspects and fixing a lot of unwanted AI behavior. Still not fully there, but it is much better than before.
- Repaired the leader count used with Demands
- Fixed a crash with AI algorithm (concerning an empty Zone) (Elver)
- MTH Quarrels decisions now also impact relation with MTH *
- A new MTH leader will remember your previous support when he/she comes to power and that will give a boost to your relation (* sort of)
- Fixed some serious glitches (putting the level to high or always keeping it at 50) in relation (with MTH) effects of the MTH Decisions *
- Less expansionist MTHs now save up more Credits (instead of buying ships)
- MTH Buy IP Decision now really fixed (yes it actually was not) *
- Less big Lakes and more small Oceans in their place now *

Shadow Empire (core) changelist for v1.12h:
- Fixed a glitch with the location name showing in the selected Hex info sidebar of the Hex illustration if you did not have sufficient recon.
- Improved Strategic Movement hex mouse over info (next to landscape type illustration) to show whole trajectory possible even if to much weight points with Units, also coloring this info red if weight>logistical points. Minimal 1 Logistical Points needs to be present on Hex of Unit however.
- AI improvements and glitch fixes concerning choice of Formation Type
- AI improvements concerning moving forward in unopposed territory with slow moving Units
- Fixed the sometimes initially wrong page numbering of paginated tables in Reports.
- Fixed a possible crash with the Target SubTab in Stratagems Tab (Elias)
- Fixed special case Trade issue when certain Item completely depleted with a Trade Area
- Finetune to Trade where rounding to zero is replaced by random chance to go to zero
- Removed the display cap on Recon Points to 400 during Combat as higher values than 400 are actually necessary to have complete effectiveness against troops in a Hex that start combat with Cover Points.
- Fixed the poor AI still paying Colonists (not being placed) for founding New Zone (delivered without initial Colonists since quite a few versions)
- Fixed a setup glitch with Leader of Minor not having a title*
- Fixed the Advice window sometimes popping up upon loading game/new game when it is turned off

- Reverted a recent rendering optimization (because it was probably causing ghost Tabs with some beta testers)
- Cross Fertilization research cost diminished by factor of 10 (Thrake) *
- Converting Rail Station to HS without the Tech is no longer possible (Elver)
- Fixed a glitch with wrong effect of lowering Leader salaries (Emx77)
- Found glitch with negative gov production modifier being slightly to high (Emx77), but decided to keep it like this and update manual soon that gov modifier varies between +25 and 50

Shadow Empire (core) changelist for v1.12g3:
- Fixed last remaining issue with Stratagems showing "not valid" when initially opened (Christian)
- Improvements to Planet Generation concerning the dynamics between Mountains and Tectonic Plates leading to more varied maps
- Improved flora placement during Planet Generation better taking into account the temperature & rain

Oceaniarelated changelist for v1.12g2:
Apologies. I have been a bit to hasty with 1.12g as it turns out.
- Fixed crash with Mini Map during Planet Generation
- Fixed crash with Stratagems
- Fixed issue with duplicate Stratagems not showing properly initially

Oceaniarelated changelist for v1.12g:
- Fixed bug with Demands asking you to conquer a Sea Hex (xxzard)
- Fixed bug with table coloring persisting with other tables (Voker57)
- Fixed bug with MTH buying IP could be influenced (Voker57) *
- Adjusted AI to better take into account probable enemy opposition when choosing an Island for invading (will go for weaker ones first)
- Adjusted AI to assign less Units to Garrison duty (important to succeed with light weight invasions)
- Adjusted AI to not assign Units to a front overseas without actually being assigned to that Island for transport.
- Adjusted AI to deal with change in ideal landing X,Y and not sending troops back to original island
- Adjusted AI to go for more Troops (50% more) to take out Island defenders
- Adjusted AI to not switch invasion Hex due to getting confused about initial no Zone (before Makeshift Port constructed)
- Reduced the price modifier for shipping costs if MTH has (much) more offer than demand; still steep price rise, but less than before
- Stopped MTHs investing Credits in Trade Areas (landbased Traders)
- Fixed AI algorithm for MTH buying ships, was not doing this enough
- Fixed AI algorithm for paying dividends, was not doing this enough
- The above few points will make it easier to keep buying Transport Contracts without the price going up to much
- when MTH buys ships the Credits spent now reenter the monetary loop through Trade Areas bordering the MTH seas (weighted for pop+freefolk+worker).
- Fixed AI algorithms concerning selling goods not needed and shortage calculations on islands in relation to the need for Credits to buy Transport Contracts => should lead to more selling to Traders and thus more Credits for Major AI to purchase Transport Contracts and others.
- AI now taking into account if it is trying to transport heavy Units that need more Logistical Points (especially with amphibious invasions)
- AI now adapting size of Formations it raises to take into account their weight
- AI now thinking twice before sending artillery first during amphibious operations
- Fixed calculation of ships used by AI for execution contracts (and determining price point of new contracts)

Shadow Empire (core) changelist for v1.12g:

- Fixed Skill Roll mouseovers (Cassini)
- Fixed glitch with Unit Supply where pickup point at same hex as SHQ still needed Logistical Points
- Fixed crash with turn processing (Karl)
- Concerning the UI Stratagem Tab : Diminished the data caching for the Stratagems from per category to per Stratagem. This should give a small speed decrease with a small Stratagem count, but a big speed increase with lots of Stratagems. (Cassini)
- Speeded up the drawing of the various minimaps (Strategic Map, Stratagem targets). Big improvement especially in big games.
- Major AI revised selling to Traders algorithm (was selling to little)
- Fixed a bug with multiSHQ AIs buying too much Food from Traders
- Population in an economic endstate situation (nothing to build) start spending excess Credits to buy Luxury Products with Traders (improving Happiness)
- Fixed some last Trade Report issues (showing too much qty's being reported and Trade Report on own Regime not showing stuff)

Shadow Empire (core) changelist for v1.12f:
- Fixed skill roll mouse over for Regime Feat Skill Bonus and made more precise the mouse over for Regime Feat Stat Bonus effect on skill roll. (Cassini)
- Reduced the perround reduction of Skill Usage Points a bit if they are very low. (KeepStay)
- Transferring Items from Zone to SHQ (or other way around) when SHQ is on the Zone City Hex will be without logistical constraint now. Same if it concerns SHQ to SHQ where both are on the same Hex. (Elver)
- Fixed an issue that seriously limited trade with larger multizone Regimes, to the exclusion of trade between certain Regimes (Voker57)
- Improved trade algorithm concerning total volume passing from one side to another
- Improved trade algorithm and prioritize better deals over lesser (albeit good) deals
- Improved trade algorithm to not spend all its Credits trading with other Traders
- Improved trade algorithm to only start buying above a certain perceived price gain
- Improved trade algorithm by taking tariffs better into account to avoid making Trade Areas making dumb deals
- Improved trade algorithm concerning the CommerceBonus effects. These now play less of a role concerning misleading other Trade Areas (though can still influence perceived and real price with up to 25% if commerce bonus +200% versus area with no bonus at all), they now play a role in the actual price struck (between the buy price of trade house A and the sell price of trade house B). all being equal price = (buy price + sell price)/2... but if house A commerce bonus +100% then it results into price = (buy price*2 + sell price)/3. At bonus +200% then it results into price = (buy price*3 + sell price)/4... the reverse is of course also possible. This should give a nice boost to the usefulness of the Commerce Profile as it now should make your Traders more rich.
- Trade areas now only invest in other Trade Areas (credits transfer) if really low Credits there (in future still have to add some mechanic here to make it pay back for investing traders)

v1.12.01.03 – 22nd November 2022
- Fixed some wrong color shadings and stock numbers in the shares table in the MTH overview report
- Reduced stock price of MTHs in most cases
- Added AI algorithms to use influencePoints also for turning MTH against other Major Regimes and/or MTHs.
- Fixed "error" popup bug and sea only Planet Generation bug (Sam)
- Fixed crash with AI on Planet with lot of Ocean but still all land connected (David)
- Increased mining hexes on Planets with little surface water
- Gaia Planets less likely to have Alien lifeforms, in any case probably less fearsome

Not Oceania specific:

- Fixed skill roll mouse over for Regime Feat Skill Bonus and made more precise the mouse over for Regime Feat Stat Bonus effect on skill roll. (Cassini)
- Reduced the perround reduction of Skill Usage Points a bit if they are very low. (KeepStay)
- Transferring Items from Zone to SHQ (or other way around) when SHQ is on the Zone City Hex will be without logistical constraint now. Same if it concerns SHQ to SHQ where both are on the same Hex. (Elver)
- Fixed an issue that seriously limited trade with larger multizone Regimes, to the exclusion of trade between certain Regimes (Voker57)
- Improved trade algorithm concerning total volume passing from one side to another
- Improved trade algorithm and prioritize better deals over lesser (albeit good) deals
- Improved trade algorithm to not spend all its Credits trading with other Traders
- Improved trade algorithm to only start buying above a certain perceived price gain
- Improved trade algorithm by taking tariffs better into account to avoid making Trade Areas making dumb deals
- Improved trade algorithm concerning the CommerceBonus effects. These now play less of a role concerning misleading other Trade Areas (though can still influence perceived and real price with up to 25% if commerce bonus +200% versus area with no bonus at all), they now play a role in the actual price struck (between the buy price of trade house A and the sell price of trade house B). all being equal price = (buy price + sell price)/2... but if house A commerce bonus +100% then it results into price = (buy price*2 + sell price)/3. At bonus +200% then it results into price = (buy price*3 + sell price)/4... the reverse is of course also possible. This should give a nice boost to the usefulness of the Commerce Profile as it now should make your Traders more rich.
- Trade areas now only invest in other Trade Areas (credits transfer) if really low Credits there (in future still have to add some mechanic here to make it pay back for investing traders)

v1.12.01.02 – 16th November 2022

- Fixed crash with Cults active + MTH Contracts
- Fixed issue with wrong Zone creation upon landing troops on hostile soil with Minor without City and just taking its temporary Zone center (internal thingy, dont ask please)
- Transport Contract to or from a Hex without a port will now give a 75% penalty (or more if rugged hex) instead of 90%.
- Makeshift Ports now cost 250 Credits
- Better explained Makeshift Ports on the Stratagem text, mouseover and preventing Stratagem play if nothing could be build
- Cleaned up UI Zone Tab when confronted with a Zone with 0 Populace (possible now)
- Port Points are now shown in Zone Tab (logistics sub tab)

v1.12.01 – 31st October 2022

- Glaciers on the Planet have a more realistic impact now... Glaciers have much less chance of housing Minor/Major Regimes, no resource Hexes, lower population levels during simulations, less alien wildlife / marauders and no Hex Perks. *
- Sea floor depth calculations much more realistic now (was always a bit on the shallow side)
- You can now transfer Items from SHQ to Zone Inventory or the reverse: from Zone Inventory to SHQ. Use the SHQ Transfer order to do so.
- You can now give the Governor of a Zone the order to supply Units in its Zone if they are missing supplies (not delivered by their SHQ for some reason). This takes place after Zone Production phase and before Zone Returns phase.
- Logistical System Pull Point algorithm has been revised to better function when there are less Logistical Points available than that are needed by Cities,Assets,Units. (it might also have become a tad slower lets keep an eye on this and any other possible complications!) It would be nice if anybody could try a new game with special attention to if the pull points of the logistics system are working well *

- Continued fixing the Posture Stratagems (was not fully done in 1.12b turned out). It should now really apply to all units immediately (or be removed from all units immediately).
- The change of the retreat % by a Stratagem is now immediate for all units (as well as when you remove the posture)
- The weird "no hitpoint attack penalty" for Recon in Force Stratagem has been replaced by "no attack penalty". Textual upgrade requires restart*functional upgrade works on all versions immediately. This Stratagem now works as intended with the 20% retreat penalty working in tandem with the "no attack penalty" providing a powerful (surprise) attack, but one that gets canceled quickly if the going gets tough.
- Fix with renaming Formation Type button being disabled for non army/div
- Fixed S&S Editor again (crashed again for yet another Oceania related thingy, apologies!)
- Bio Fuel production now costs 50% more food.*
- Solar Panel Energy production decreased with 33%.*
- Volcanic Energy Plant production is increased, slightly at low levels, but increasingly more and more at higher levels.*
- Solar Panels production is variable based on solar irradiance of the Planet. Can result in upto 50% or more on cold Planets and upto +50% or more on really hot Planets.*
- Deepcore Gas Extraction production now up to 3 times higher if Planet has really thin crust (say Planets a bit younger than 2 billion years).*
- Methane Synthesis production now up to 3 times higher if Planet has lots of CH4 (say 1.5% or more).*
- Methane Synthesis Tech and Asset now have the correct condition (was linked to CO2 instead of CH4), minimum 250ppm CH4 in atmosphere needed. Things now correspond with Tech description and manual*
- Fixed some formulas concerning Methane in the planetary gasses simulations, its mostly based on decaying organic matter. The less oxygen in the atmosphere, the longer the life on Planet existed (the more natural gas will be released) and the colder it is (reduced microorg. reduction) the more CH4 will be found. *
- Fixed a rather big bug with only Militaristic cultures being chosen on planet generation (republicans and theocrats, etc are back!), even extended the language options used a bit as before for example Militaristic was indeed always germanic language, now it just tends to be ;) *
- Water bodies have more average temperatures and are now having a moderating effect on nearby land hex temperatures. *
- Made a series of algorithm fixes to Traders that were not buying enough at game start since several beta builds. (thx grogheads forums)
- Fixed some Planet Generation with cases of rivers not ending in lake/sea.
- Improved AI estimation of enemy strength based on enemies enemies as well.
- Finetuned Trader algorithms and private item sales and buys.
- Less cases of oversupply of private food/metal/oil to Traders by the Private Economy.
- Irregular demand from the Private Economy for higher tech level stuff at lower tech levels. The fact that nobody can make it, doesn't mean they don't want it. This might well see rising prices of high tech items in the early game.
- Overall increase of commerce between Trade Areas, but not for between major and major without Trade deal.
- Traders in lowpop Zones will try to construct higher stockpiles of goods that are selling well (being the middleman)
- Traders selling to other Traders now haggle better and will make more profits.
- Traders now also consume some Items to keep their operations running, initially just food, oil, metal and water but if Traders are inside a major regime with higher tech level other items might be consumed as well (like rare(4), machines(5), hitech(6), atomics(7)).
- When selling to Traders, Traders will not be inclined to spend all their Credits*
- Traders increase their shop qty if they see they are selling well, trying to supply their clients with higher qty's.
- One of the AI rules is that they are allowed much higher item stocks than human players; I

countered this effect for the AI sales to the Traders weighing in very heavily their actual surplus production that round for their sales.

- Made some minor improvement and fixes to AI algorithm that is moving its forces
- You can now use the replace order to replace human infantry by robotic infantry (this is however not an equipment swap, but a full swap)
- Fixed crash with S&S Editor startup
- Now when you change Posture that changes retreat% it will be changed immediately
- Skill effect on combat is now properly previewed, its calculation method was feeble at best before
- Fixed big oversight with rename Formation Type introduced with 1.12. This is now fixed. You can only rename Custom Formation Types.
- Fixed bug with not being to play for example Plea of Friendship on a regime it should be possible on (probably will fix some other cards to with similar inexplicable not playable behavior)
- Fixed bug that prevented Replacing, Upgrading troops in Unit that was at same hex as SHQ but with 0 Logistical Points available
- Fixed bug with Commerce that was resetting from +++ to + due to rare bug in Corporate Story Module. Poof… that one was hard to find…
- Fixed display and calculation glitch with Supreme Command council repeating for each tasksuppart that more than 100BP is being invested.
- Fixed some beta game crashes (voker57) , related to badly seperated code for new DLC, sorry!
- *=needs to be a newly started game with this version or higher
- Fixed a crash during AI play experienced by all caused with first 1.12 version.
- Reworked rainfall algorithms in general *
- Nudged the rainfall algorithms resulting in slightly drier Planets *
- Added some windshade rules where mountains can block rainfall *
- Added some temperature difference rules on rainfall. As in cold air moving into a warmer area gives less rainfall and warm air moving into a cold area gives more rainfall. *
- Higher windspeed planets will have a lot more fuzziness to their rainfall than low windspeed planets *
- Relatively small lakes/seas have reduced impact on air vapor content * (tradeoff between simulation and game made, but result should be more realistic especially on planets with more water surface)
- AI: Reset OHQs (And independents without OHQ) properly to SHQs if AI territory gets split between several SHQs.
- AI: Fixed some important economic calculations in case of a split between several SHQs
- AI: Fixed a crash with at least one Decision on sending envoys to participate in a celebration (Max)
- Improver Trader behavior concerning buying items from Majors… they'll now offer to buy less of Items that are not really a good investment (Phyroks)
- AI: Fixed bugged judgment on recruits in some cases where there was a split between several SHQs
- AI: Improved flawed calculation when to buy replacement troops or not. We should see much more AI replacement troops arriving now. This might well be quite a big thing in AI effectiveness.
- Free Water for Zones is increased by multiplying the current riverlake gift (5.5.3.2) with the cube root of the number of hex sides . If highest rainfall hex *4 is higher that value is used (used to be average rainfall hex for zone).
- Free Water for Assets (open farm) now gets water for each Areal Hex with rainfall as well (but only a quarter of that received for the core Hex) *
- Finetuned the Vegetation algorithm which was rather often placing forests in hexes where rainfall was really too low for them, even allowing for microclimate conditions. *
- the Light Tank model has been slightly downtuned. It can now maximum use 50mm of armor (instead of 100mm previously).*
- You can now use the mousewheel to scroll the listbox(es) in the REPS tab, STRATAGEM tab, STRATEGIC MAP tab, OOB tab
- You can now rename the Formation Type of a Unit in the Formation Types Overview Report. It

also gives you the experimental option "rename all" which will also attempt to also change the names of the Units already onmap belonging to that Formation Type.

- Removed "drawing type" from Model Management Tab in the Tech SubTab, it is an internal variable that does not need to be shown to player.
- Air combat fix: Thopter, helicopter and VTOL based in the Hex under air attack now actually join the air battle.
- Air combat fix: Doing strategic damage will now always cost ammo.
- Combat fix: Troops killed now lose their part of the supplies in the process
- Combat detail window fix: Some confusing reporting with "0%" modifiers has been removed
- Changed wording for a PBEM Cheat report. Since it could also just be someone playing from different PCs (or having done a reinstall of the game)
- Fixed a combat crash due to excessive number of units on defending hex (burnrate + solops)
- Fixed the faulty underlying AI decisions for creating that excessive number of units of the above error in the first place
- Increased hitpoints for ATGuns, especially if higher callibre guns (more and thicker armour plate) and on top of that doubled their hitpoints if attacked by noninfantry troop types (like tanks for example) due to their deployment mode, rapid counterfire and low profile. This should make ATGuns more interesting to use.
- Trucks/APCs will now be added to Custom OOBs when you are adding Flak Guns or Manpads (elver)
- Fixed some season name typo's in 16 season planet setup *
- Nudged the amount of forced sale items the local Trade House will buy (phyroks)
- You can no longer add Reinforcement Types to a Custom OOB that have not yet seen a trooptype developed
- Fixed mouse for political bonus (phyroks)
- Fixed a crash with a decision on a Regime that no longer existed due to it joining another Major upon declaring war
- Fixed a few typo's (christian / battlemode)
- Added player protection for playing Plea of Friendship on a Regime on which it will have no effect (like the Arachnids)
- Fixed the transfer limit of 3 individuals for the SHQs, you can now transfer the last 3 out as well.
- Fixed major AI bug with 1.11.07 ! Thanks for spotting guys! Apologies for this
- You can now freely switch Airforce flag on/off during Planet Generation (no longer blocked after restart and requireing you to quit the Planet Generation and press new game again)
- Added Unit Weight statistic in the first unit subtab. Could be useful for considering Strategic Movement (which requires 1 Logistical Point per Weight Point)
- Added the much requested Reroll button for the final Planet generation phase
- Added the text of the Stratagems to the mouseovers because in some rare cases there is too much text on the Stratagem.
- Fixed the number of trucks / APCs in the Heavy Motorized/Mechanized OOBs *
- Fixed a number of Decisions where the writer was referring to the title of the leader of another regime using your own title instead of theirs. *
- Really hope to have fixed a number of silent crashes caused with one of the last open beta's; I cannot reproduce crashes anymore; but keep an eye out and keep me posted please!
- Because nonaligned regime is basically in reality "many regimes" your Regime Recon Points no longer result in getting extra Zone Recon Points (you'll need to have actual spy in specific zone)
- Finetuned the Zone algorithm to avoid huge nonaligned Zones in some weird exception cases. *
- Finetuned the workings of the CommerceBonus that was not completely working as I intended and upped its usefulness quite bit for when you are selling to Traders. Commerce Bonus allows your Traders to outwit other Traders when trading with them, resulting in them buying cheap and selling high. Furthermore the higher your Commerce Bonus the lower their margin (the higher their buy price will be) when dealing with you.
- Fixed a glitch with OOB Customization where you were allowed to add reinforcement types not yet available*

- Sped up the reactivity of the multiple choice questions at game start
- Traders now capture some free water (rivers, rain, lakes), like you do, to augment their stocks. This should help avoid the Water price being too high. Your private economy does the same.
- The Traders pricing algorithm has been revised. They were trying to create stockpiles that were plainly too big. They are now trying to maintain more realistic stockpiles. New games will also reflect this in the startup qty's.
- Also the price point when selling to Traders is going to be lower than before if Traders already have enough stockpiles of the Item Type. Traders are now also putting a minimum price cap on really "cheap" items.
- Furthermore when determining the price to buy they make their current inventory count weigh more, especially if they have a lot.
- Overall the Traders will be a lot rougher with you and much less willing to buy Items from you that they cannot sell elsewhere. It will increase the game difficulty.
- Repaired some errors in Trade Reports that was showing false Imports/Exports statistics for your Traders (and Trade data of other regimes)
- Expect some rather serious price swings in ongoing open beta games (towards lower prices for some goods mostly), but this has to be tested, so sorry for any economic shocks.
- Ruins are now named after their old Colonial Zone/City name from before the Dissolution war*
- Some new regime names appear now and then as well, named after their old Colonial history*
- A little more regime name variety as well*
- Created mouse overs for the results of Stratagem play and Decisions if the return text contains the word "roll". If so the latest roll details (since execution) of friendly leaders are displayed in the mouse over. (this new addition will need some open beta testing as the number of scripts that might be executed are huge)
- Planets can now have even slower orbits around their star, leading to more seasons, of increasing severity (due to their length)
- Made some changes to the initial Management Screen settings for Leaders and Assets
- Increased maximum sea surface on Limos Planet Class a bit.
- Further improvements between rivers connecting lakes/seas among others by sometimes creating some flood planes between lakes/seas to allow them to connect.
- Rivers can now be much longer on some Planets, making them feel a bit more impressive and creating interesting maps.
- Fixed a small inconsistency between skill roll predict and final skill roll (relation modifier was added on top of total in preview, while i reality it just modifies the d100 which value will not surpass 100 or go below 1)
- Fixed a small inconsistency between skill roll and prediction where negative effect of 25 of secretary was often not completely taken into account.
- Fixed a (i think) recent discrepancy of qty of enemy troops between bottom interface and trooptype popup (when limited recon and qty guessing)
- Reworked the river systems. Lakes will often communicate water now, depending of course on if this is possible and no hills are blocking this. This gives more realistic and more interesting maps. There were some really weird maps before with for example big rivers ending in tiny lakes just a few hexes from a big ocean.
- Added mouse overs to the Skill Roll preview in Decisions Tab and Stratagems Tab (DasTactic insisting convinced me to improve things at least a little bit). It's the probable calculation at the moment and I think this addition will require some feedback / bug catching before i'll dare to call it "Skill Roll calculation details".
- Fixed some crashes (caused with 1.11.0x open beta earlier) with generating Planets (especially those with big bodies of water).
- Militia Parade event is now randomly called (focus on start game though) *
- Profile change Demands made by Factions should be more rare, but also give you much more time to realize them (double the time at least).
- Tuned down a bit the number of Faction Demands in general, especially when you were refusing a Faction (pissing it off even more and making it more likely to demand more) it would come back a bit too quickly. Delay of renewed hassling now at least doubled.

- Resolved a hard to comprehend issue with oil seemingly disappearing from SHQ. However it was not a bug, it was oil sent out with SHQ tank autoreinforcements to units. I am now logging this kind of complementary item transfers to be included in the SHQ item bar mouseovers.
- Fixed Corporate Board Member Card, it is now giving the correct and immediate relation bonus 5d10*
- Fixed an issue with inter Tradehouse trade not being reported
- Doubled the PP cost for Disbanding an Asset (to make it cost you a bit more to use scorched earth policies
- The Election Report is now truncated for Zones and Military Units (as in the large empires there would be more text than paper available)
- Fixed a bug in story import at start of game causing the issue reported by emx77*
- Fixed some private construction without dirt road reported by Bavarian Kid
- Convert of Rail Stations level II and higher to HS Rail Stations now possible. Doing this costs you a level and will take 1 or more rounds of reconstruction activities. The Convert button can be found in the Assets Bottom Tab.*
- Improved AI behaviour in better defending cities
- Fixed a portrait graphics glitch with some uniforms
- Reduced usage of AI Siege Posture for OHQs low on artillery/infantry
- High Tech Level 1 production worker+energy cost slightly increased
- Fixed a few profile decision glitches in the diplomatic category
- Fixed issue where losing HQs and reforming them could screw up the numbering system of the HQs and could cause HQs to have more than their maximum units
- This open beta is also testing of changes for next major feature Oceans are not inadvertently screwing something up (nothing to see yet! its only testing of behind the hood stuff!)
- Fixed a crash during AI phase (Tortia Tertia)
- Attacking with your full OHQ (including HQ) no longer diminishes the concentric bonus
- Fixed crash during aiTurn (rivers)

v1.11.00 – 06ᵗʰ April 2022

- If AI has been collecting lower quality models after making replacements. This has been addressed and now its SHQ is going to directly deploy the unneeded ones (for repl.troops) in new units.
- AI is now only replacing troops now with newer models if XP is at least 40 as the whole idea in the first place was to retain the XP at the front (and sending the new troops to the older version equipment)
- Some minor AI algorithms concerning replacing troops revised.
- In some cases there will will now be less requests to hire a faction candidate.
- Fixed a crash during "flak front processing" message (starfry)
- Fixed occasions of faulty nato counters in history screen
- Reduced Flak production for AI some further.
- Fixed eternal loop in humanhuman PBEM game (mroll)
- Fixed small glitch with Battlegroup formation from SHQ
- Fixed issue with Strategic Movement caused in earlier v1.10.X open beta
- GPU accelerated ingame DPI scaling added which should speed up a lot playing the game with DPI scaling enabled.
- The DPI scaling done by the GPU is sharper than the previous DPI scaling done by the CPU.
- Sped up the scrolling speed by using shifting direct memory copies within the same map bitmap
- Sped up the scrolling and map clicking speed by not recalculating or redrawing the windows that are overlaid over the map and separating the underlying map drawing and the overdraw (making cacheing possible).
- Fixed bug with Advice window after end turn (Voker57 / thomas)
- Fixed bug with receiving a new leader with a regime profile above 100
- Finetuning Militia equipment improvement in games that last hundreds of rounds (hyveltush)

- AI work done on quality of tactical level movements.
- AI work done on reducing the tendency of giving ground in general.
- AI work done of making super aggressive regimes less likely to completely overextend
- AI work done on making the AI more likely to invest more in its current military than in its future military (by economic expansion) if threatened a lot.
- AI work done on making the AI wait a bit longer before constructing bigger units instead of more units.
- AI work done on reducing buying of Flak gun units/replacements at some points. And in general stop buying (much) replacements of troops we have less need of.
- AI stops playing some (often) stupid Stratagems on its OHQs
- AI improved OOB raising order (less chance to stay stuck in infantry formations only)
- AI improvements to moving to correct part of a frontArea
- AI improvements with entrenchment
- AI improvements with encircled troops
- Fixed an issue with Free Folk increasing way too much in some circumstances
- Fixed an issue with a savefile getting to large due to extremely large high node logistical network (game will prune some data now if its logs get too big)
- Fixed issue with Zone assignment upon rebel unit placement during turn (decision result)
- Fixed crash at start of turn calculations with trade (volker)
- Fixed an anomaly with the sliders on some systems
- Fixed an anomaly in the trade reports
- Fixed category of forced sales from private to public in the reporting
- Fixed an anomaly with scientific cooperation (not getting tech points from partner)
- Fixed rare crash during elections with a classbased voting system in place.
- You can now set import & export tariffs on the nonaligned regimes. Can be handy if you want certain items not to leave your Zones or to make a little extra buck!
- Fixed a rare issue with private asset doubling public asset that was delegated
- Fixed a bug with disappearing air units after artillery attack on them
- Fixed an interface glitchy state after asking research decision to a director in the case where no research fields were actually available.
- Fixed crash due to an misconfigured AI Regime SHQ inventory (Alex)
- Fixed glitch where you were not paying PP for Zone Merge
- Fixed ZOC ghosts in multiplayer game where one human player has resigned
- Truck/Rail/HS Rail Station higher levels now have reduced upkeep workers*
- Rail/HS Rail Station higher levels now have reduced construction round for higher levels*
- Truck/Rail/HS Rail Station higher levels now have increased truck/rail point production*
- Some cards like Eager Industrialist will no longer cause double Asset Type to appear when playing on a Zone where the lower level Asset Type in question is in construction.

v1.10.04 – 09ᵗʰ December 2021
- Fixed bug with "New org" while all organizations where already present.
- Fixed crash with MNG>ASSET tab in empire without any Zones left
- Fixed crash during watching AI moves (Veldarr) (caused with a recent open beta)
- Fixed UI issue (caused with a recent open beta)
- Fixed weird multiple sea & glacier/ice lines at south and north edge of map in some cases.
- Fixed crash with random planet creation (caused with earlier open beta)
- Not much else as I want to soon get a stable open beta to make it the new official version
- Fixed crash on changing research target (caused with earlier open beta)
- Fixed crash with first displaying map after load game (caused with earlier open beta)
- Now a mouse over for worker happiness decline due to their salaries being not fully paid
- Also the drop of worker happiness due to not being paid is less steep if the difference between real and promised pay is smaller
- Fixed a potential crash with selecting the message for setting the research target for an organization

- The lava lakes on the minimap are now coloured red *
- Now showing the Customization Points in the Empire Dashboard
- Some map scroll speed improvements (especially in later game up to 33% faster)
- Added option to hide some map aesthetical gfx details to speed up map scroll speed by about 33% extra
- Fixed a rare crash in trade details report
- Fixed a crash when clicking on unit details directly after clicking "1" / hide units
- Blitzkrieg posture mouse over text has been fixed to properly indicate it is 30% on defensive attacks (not 50%) *
- Ultralight aircraft description updated (no rockets + no missiles now properly stated) *
- If no major regimes (left) relevant stratagems will no longer be generated.
- Preventing some 1 entry in the
- Fixed name error "twin heavy mg cupola" to just "heavy mg cupola" *
- Personal shield no longer takes damage if attval < defval, upon final draining of the shield it is killed. But this draining should take way longer now.
- No longer losing artillery unit if attacking from a hex with more than maximum units (16)
- Air HQs now also count for a Factions' power base calculations.
- Bunker no longer counts as a BP producing asset in the demand for more of those assets count
- Updated and fixed antiair values of MG, TwinMG and QuadMG *
- If you declare war on a human that has already surrendered this no longer wakes him up
- Fixed a rare crash (solops)
- Fixed a nonscrolling scroll bar in Management > Models Tab
- Traffic signs are removed now after you lose a hex with them on it
- You can now specify to do no research with the research target decision
- Mining techniques now under applied sciences org *
- No longer possible to build XenoAgri on a planet that got earth life introduced and without prior advanced alien life. *
- Fixed decision text for Zone Merger in cases with nonregime cultures in zones concerned
- Fixed crash with clicking "map" button in the combat setup popup window

v1.09.00 – 23rd April 2021
- Fixed crash with Regime statistics on Happiness and Hunger.
- Fixed glitch with Formation Type operationalization progress in reporting
- Fixed glitch with NATO mode counters and alien lifeforms
- Critical Failure with Gift Stratagems no actually does lose you the Credits you offered. *
- Reduced the AVERAGE number of Alien Minors when Sentient Lifeforms are present.*
- Tactical nuke now consumes a bit more radioactives in combat in some cases due to fixing a rounding glitch *
- Rail, High Speed Rail and Trucks station Worker cost for production have been revised to favorise higher asset levels.*
- Fixed rounding error in ammunition consumption during combat
- Private economy thinks twice now before building open agriculture in a to cold/ to hot/to dry area
- Fixed the bug you couldn't add infantry to a custom Formation Type
- Fixed glitch with flak range for 50mm flak gun *
- Changed the management window display of soft att, hard att to be premultiplied by number of attacks (for better comparability)
- Scrap cards can no longer be played upon nonfriendly zones.*
- Fixed a crash in a round 200+ game
- Assault Guns can now also use 200mm armour*
- AI might have been slowed down by accident in v1.08.04, I made sure 1.08.05 is compiled for optimal AI speed.
- Fixed issue with Friendship Pact and Victory Pact not triggering when a regime is attacked by another. It does from this subversion onward. In the rare cases where you have NonAgr/Friendship/Victory Pact with the aggressed as well as the aggressing side as well you will prefer to support the side that didn't provoke your dilemma.

- In the overview of other regimes report you can now see the details of their relations with other major regimes (basic info at recon 5, all info at recon 10)
- For card graphics modding: The following cards now each have their own .png file: Commercial Gift (523), Estate Gift (524), Bonus (544), Official Gift (545) *
- Fixed an AI issue where it was using Flak (or artillery) in regular attack (even unsupported).
- Fixed a glitch where you could still execute a Stratagem even if it should not be possible due to "no target selected".
- Fixed a problem with robotic infantry replacements not arriving during autoreplacement phase
- Nerfed the Emergency Tax card and it now strictly pays part of the private Credits imposed by you. It also gives more loyalty damage than before.*
- On game start airbases are no longer present if no initial air models are available to player (like on an airless moon for example)*
- When you craft a Stratagem you now are automatically moved out of Scrap Mode to avoid you scrap your new Stratagem by accident. (it happened even to my several times)
- Moons and Planetoids can no longer use Nemesis History Class (they are too small to always allow for the extra territory for the AI) *
- Faction Tech, Admin, Civ level demands now stop if you reach level 8. (impossible otherwise to give)
- Private economy will no longer build the same mine in the same Hex as where a public one was already present. This happened in rare cases involving delegation of public assets to another zone.
- You can no longer unselect "city state" in planet generation settings if it is the only option available.
- Nerfed the fuel/energy production cost of Truck Station, Rail Station and High Speed Rail Station. (it was getting more expensive after level 1 here, which was not the intention; fixed now) *
- Increased the movement cost for regular artillery and antitank gun models (without motorization), Militia version is still foot since they are very light and have improvised engines or traction systems *
- Upgrade and Downgrade Formation now also allows Individual Unit Formations to motorize or demotorize. (especially handy with the new increased artillery costs)
- Will now only get the Customization Decision from Staff Council (and no longer from Supreme Council)
- You can now properly ask your Staff Director to schedule the Customize Decision immediately (if you have the points). There was a glitch.
- You can now also choose to postpone the Decision for Customization when it pops up.
- Fixed the number of trucks/APCs to be added when adding nonmotorized to a motorized/mechanized Formation Type.
- Added customization of Formation Types task to the Staff Council (!)*
- Added some missing calcs from the Model Design Log
- Fixed some design calcs for equipment/troops without armour that got a random variation they shouldn't have been getting
- Private Economy now better looking at available Population when deciding to make a new Asset or Upgrading an Asset.
- Minor nudges to number of deposits for beginner level (and little bit to regular difficulty) *
- Some more hard to exploit rare and metal deposits if playing on regular difficulty or higher *.
- Gas Powered, Gauss and Charged Gauss all moved on Research Group upwards and will thus be available earlier for research. *
- Militia can now be scrapped or mass scrapped (mass scrap will only affect those of the same culture)
- Fixed a rare AI processing crash
- Fixed you could nationalize an Asset in process of upgrade in the management screen
- Fixed glitch where rerolling on planet generation could cause nonalien cultures to trigger alien culture diplomatic events
- Fixed a rare weird crash during AI history play

- Added an asset prod log for Scavenging bonus with "Rich Scavenging Area" rule
- Manpower Rebate rule. Trucks / APCs and Recon Buggies return some manpower back to SHQ after their deployment from the factory (returning mechanics, logistics and factory teams). Defacto thus Trucks use only 20% of stated manpower, APCs and Recon Buggies 33%. (this rule also results in less manpower returned on disband and food consumption) (Militia does not profit from this rule as they are rather inefficient)
- Fear now also has a % chance equal to its score to give 2d10 extra pop happiness reduction points. (at autocracy 40+ this is reduced. At autocracy 60 this is half. At autocracy 80 its reduced to zero)
- Worker happiness is now maximized to 100(fear/2)
- Worker happiness also can be reduced by fear but only by 1d10 if the % materializes. Autocracy has same reducing effect.
- Danger happiness reductions can now be lower if heart profile 40+. At heart 60 the effect is halved and at 80 reduced to zero.
- Robotic forces no longer suffer RETREAT hits during combat (it will be either KILLED or PINNED)
- Robotic forces no longer suffer morale loss during the battles
- Updated autocracy & heart mouse over to reflect those new rules above.
- Gaspowered, gauss, charged gauss rifles/MGs/Twin Heavy MGs/Quad MGs have improved FIREPOWER. This does away with the huge FIREPOWER gap between lasers and the former. Also the mm penetration value of gauss/charged gauss has been increased with respectively +25% and +50%.
- Rare metal production of recycling/demetallization reduced with 33%. Rare metals prod in rare metals min reduced with 25%.
- Rare metal + Radioactive production of the Demetallization Facility now also modified for the Planets Heavy Elements score >100 is more <100 is less. (metal was already adjusted)
- Demetallization Facility IP + Machines construction costs is doubled
- Bit less rare + radioactive deposits created during Planet Generation (especially on >100 heavy element score Planets)
- Some Air Techs will not be discoverable if you are on a Planet with 50 or less mbar of air pressure (near vacuum or vacuum).
- The effect of combat skills: Operational Command, Strategic Command, Tank Tactics, Gun Tactics, Infantry Tactics, Defensive Tactics, Air Tactics, Air Intercept, Air Offensive, Air Ground Attack, Air AntiAir Tactics, Offensive Tactics have been reduced by Half ! I gave this a lot of thought but the Commander impact is just to big. Hence I am reducing it.
- Fixed the nonCity minor disappearing completely when losing its conquered(!) City.
- Power Plant worker need has been halved.*
- Fixed urgent reports which was showing third party characters (like the CEO).
- Added effective strength data to Cult report. (effective strength is adjusted for example for suppression)
- Alien lifeforms now also display their recon value in popup.*
- Alien native portrait that was missing for seasoned and veteran militia fixed.
- More chance to have breathable air on Hydra and Morgana Class Planet.
- Fixed crash in multiplayer game with Stratagem target selecting.

v1.08.01 – 22nd January 2021
- Fixed glitch in Alien Minor Report
- Reduced number of Asset Types eligible for usage in procedural Scrap Stratagems.
- Finetuned downwards the Charismatic Union Chief demands *
- Fixed that Open Contact could be played on Alien natives Minors. *
- Increased difficulty for making Alien natives join you a bit.*
- Fixed some glitches in the Militia growth algorithm.
- Fixed a turn processing crash (related to AI aircraft movement).
- Fixed an issue with Private Economy not seeing it was already producing enough Food. An optimization for speed didn't work out. Removing it for v1.08, will try again with subsequent open

beta's.

- Added Hydra Class Planets, humid with plenty of swamps, rivers and seas. Almost always home to alien lifeforms.
- Added Morgana Class Planets, arid and dry, but with plenty of oasis areas dotted all over these planets.
- Added Minor Alien Regimes functionality for more variety. Native Aliens can now evolve during the Planet Biosphere phase, they'll impact colonization and the aftermath of the Dissolution war as well. 5 Different types are present (like Cephaloids, Reptiloids) and they can use local wildlife as 'cavalry' as well. They'll form their own Minor Regimes and a special kind of diplomacy will be allowed with the Xeno Diplomat Stratagem. They'll also can contact you themselves, like other Minors.
- Fixed new organisation PP cost glitch if continuing from loading a saved game.
- Fixed some glitches with the Corporate story module (fixed some crime impact on corporation as well as better corporate spreading to other zones)
- Fixed bug with credits disappearing due to having only one zone and it being a unincorporated one.
- University production now increases with education tech
- Barracks production now increases with security tech
- Fixed construction cost for High Speed Rail
- Fixed an issue with renamed Unit name not being properly displayed for the Commanders job.
- Went back to speededup build mode, .06 should be faster turn processing than .05/.04 and equal to .03.
- Fixed a small glitch in the QOL score calculations which could cause small temporary decreases in them.
- Fixed model issue with Techs Launcher Optimization and Payload for SAM Launcher
- Fixed model issue with Conventional Guns Optimization and Flak Gun
- Plugged an exploit with scroll bar movement not updating button
- AI should construct tanks with HV guns as well now
- AI now tries to keep movement of Reserve Fronts to their targets more on roads (in order to benefit from potential Strategic Transfer)
- AI now makes use of Strategic Transfers Mode (limited number of units allowed to do this)
- AI now actually plays any Artifact Stratagems it has obtained during game *
- AI now also more interested in constructing Recycling Assets on top of Archeological Finds *
- AI now creates new Zones when they reach a size where if it was subject to administrative strain it would suffer penalties. *
- AI now also rearranges its Zones.
- AI now has more difficulties in general to build roads and especially difficulties to build roads over mountains.
- Cards 31,32,104 now use 31.png, 32.png, 104.png instead of 1.png *
- Cards 546,547,548,549 now use newly added 546.png, 547,png, 548.png, 549.png *
- Added 8 new portrait part graphics (named groupXextrahair) for modders to have no double use between portrait groups. *
- Shared some help documentation for make graphics mod over on: https://docs.google.com/spreadsheets/d/1oDruMJbB6JBPvYaYlxeyCQMj5MWN46tjh6P4WOkN4s /edit?usp=sharing
- Fixed big crash bug caused with 1.07.04
- The glitch corrupted some data and could take a few turns to surface to turn into a bug. Corrupted savefiles due to 1.07.04 play are cleaned up as well.
- Added Very Slow AI speed and made regular Slow mode less slow. See Prefs Tab.
- Fixed bug with Zones losing their SHQs ! Apologies. It was caused in a previous open beta.
- Fixed the missing Stratagem generation info
- Scrap Strats no longer give "Market" Asset (which is an asset still in development and not meant to be given yet)
- Scrap Strats no also can give some Private Mining and Private Farming Assets

- Alien Fauna now makes sound in combat
- Switched back the compilation mode to the one used in 1.07.02 to see if it fixes some weird calculation errors or not.
- Double Artifact Stratagem fixed and also the amount of Artifacts you'll find should be lower due to this fix.
- Several Private Assets including Private Hospital have had their way too high Population need reduced by factor of ten *
- Made some relatively good speed improvements to turn speed. However this also made me change some compilation settings and might give some unwanted bugs, didn't find any, but lets see. Stay aware this is an open BETA. capitals for emphasis.
- Minors with whom you have "unclear" relation can no longer take your locations.
- Fixed a crash when player gets more than 300 stratagems in stock (caused with 1.07.02)
- Nomads when losing a conquered city now are NOT removed from game anymore
- Added possibility to scrap Stratagems and craft new Stratagems (spending Scrap Points) to the game. You can find all new functionality in the Stratagem Tab when you flag "Scrap Mode" in the topright corner. *
- Fixed propper average of attack and hitbonus skill % in Leader blocks in combat results window
- When tolerated equipment is switched for better equipment during replacement troops phase it keeps the soldiers (the xp, rdn, mor) where they are and only switches the equipment.
- MissileLauncher and RocketLauncher and other mechanized Launchers now use the Gun Tactics Skill (instead of Tank Tactics)
- Rail Stations now also profit from LogBonus *
- No longer very occasional n/a skill learning with Leader XP where Leader did not use any skill that turn
- Made fixes to the max logistical % settings for SHQ which were being overly optimistic (euphemism for not sticking to the limits)
- Fixed issue with Deception Skill being wrongly used in the combat mechanics.
- Fixed crash with older version savefiles and trying Strategic Transfer
- Automatic scrapping of most doubled Stratagems after you have more than 300 of them. To prevent too huge piles of Stratagems. *
- Fixed a nasty loss of Credits due to a bug to structural damage caused during battle code.

v1.07.01 – 07th January 2021
- No longer access to RPG Infantry Brigade in Tech 4 start (you'll have to develop a Model + Formation first)
- Road construction at very long distance from SHQ now also possible (was a glitch)
- Reduced XP spending on Resist Influence, Endurance and some other Skills
- Added chance for learning a random skill, not often, but possible. Much more chance if no other skill qualifies for spending XP on.
- Added in some securities for AI to not go overboard with Airbase construction and not produce any aircraft models with to low range either.
- Upgrading and Replacing in same hex and SHQ should now always work, even if logistical points is at 0.
- Fixed a glitch where some Major Stratagems where presented as not accessible due to not the right Faction in Power (unless accessed by Regime Tab in the bottom). This is fixed now.
- Have been making fixes to the AI garrison algorithms, especially for Minors, which were still leaving empty their City in some cases.
- A number of spelling and missing "00" corrections. *
- Fixed a calculation error in Dogfight Modifier during Air Combat.
- Fixed a crash with Management Tab if you had an Asset/Hex Perk at 0,0 hex.
- Fixed glitch with Mot/Mech Storm Grenadier Bat *
- Closed an exploit with Attract Free Folk Stratagem *
- Easier Logistics game variant now also doubles range of Supply Bases (the variant is more consistent like that)

- Fixed quite a major bug that caused "Maximum Storage" not to be transferred to SHQ in some circumstances, which led to some big Item losses in SHQ inventory.
- Made some nudges to Minor AI tactics (both for nonslow and slow AI mode)
- Fixed crash in combat window when doing combat with insane amount of enemy troops
- Fixed some Colonist/Recruits mouseover qty's missing double zero behind 00
- Also fixed some wrong ratio in Replace Popup and Scrap and Upgrade Results
- Diminished HiTech costs for Beam and Plasma Guns *
- Fixed some typo's and spelling errors *
- Unification and Annexation Stratagems are a bit more difficult in general now, but also a bit more variable in difficulty (based on the aggression of the target culture) *
- AI now disbands old equipment piling up in its SHQs.
- A major AI now has 40% chance to always try to keep Airforce in the Air (instead of switching fully to Flak Gun production) *
- Fixed a sort of "hanging" request for Scientific Cooperation by a regime you already refused or at this time are even at war with *
- I speeded up a noticeable interface delay when clicking units a lot in some Militia cases / Units direct under SHQ cases.
- Added protective code for the crash issue with the permissions/virus checker for Steam version MyDocuments access. If system does not support internal savedgames/ directory will now be used.
- Added the relation change logbook entries to the mouseover in the Leader Popup Window
- Added relation changes caused by Leader Feats to the relation change logbook of Leaders
- Fixed a nasty code bug which caused population happiness to malfunction.
- Fixed a glitch that caused Regime Overview Reports to disappear in rare cases
- Rule change: early Fate Stratagems will no longer disappear once you cross to respectively Tech Level 5+ or Culture Level 5+
- Added Max Size an Aircraft can transport through Air Bridge to its detailed popup.
- Added some mouseover improvements for using Strategic Transfer through Air Bridges
- Added some maparrow improvements for using Strategic Transfer through Air Bridges
- Fixed an Air Bridge calculation error were sometimes land connection got preferred. Should be fixed now. But keep an eye on it.
- Scrapping outside Zone was working well, but I have fixed the textual feedback to be a bit clearer.
- Prevented some map clicking when also clicking on a tab in the top
- Made a speed improvement to the slow AI that will hardly or not at all affect its quality of moves
- Beam Gun on Heavy Tank now rendered correctly *
- Veteran Sgt / Lt. will now longer trigger for Air Units *
- Added some protective code to avoid showing wrong DIFFiculty for Provocation Stratagem.
- Fixed an eternal loop "freeze" with Preview Points calcs
- Fixed crash with battlegroup transfers (finally!)
- Repaired the Roaming thieves decision, now targets private Food *
- Decreased Machinery cost for SAM Launchers *
- Fixed effect of Research Bonus on binary Tech advances
- Improved history flow with the battles now showing the original situation + combat results and only in the next step the afterbattle state.
- Air Bridge SFX during turn startup are now really gone
- Fixed Leader Suitability Rating for Airforce Council
- Explosion before Combat with Air Recon gone for good
- Fixed a crash/corruption with Air Bridge calculations when enemy intercept became possible
- Combat sounds with Air Bridge intercept now also muted as you are not seeing their results and they are calculated behind the scenes, so to speak.
- Fixed a glitch for Tactical Nuke weapon, description of tech fixed and can now be used with Automated Turret as well *
- Machinery treasures have less quantity now (was a bit over the top) *
- Moved 5 Linear Weapon Improvement Techs from Military Research Council to Applied Science

Council *
- Treasure Hoard Stratagem, AI giving you discovery and other similar events/instances will now NOT give certain techs that will be of no use because you do not have the earlier techs or because planetary conditions are not met. Did a manual pass tech by tech and it should be done right this time. *
- Fixed older game starts played with 1.06.02 or higher that were getting weird skill growth due to the newly added personality modifiers on skill choice in 1.06.02.
- When establishing Air Bridges with the Air Bridge order they now limit you to the initial Air Bridge mission maximum range (which might be below optimal due to lack of AP or Rdn)
- A little bit more consequences from playing the Ask for Help Stratagem (to often). Also tuned down the amount of Credits you can ask for. (could be excessive in later game)*
- Fixed AI air unit relocation mechanism that was not using full range of its aircraft causing some to get stuck in airbasisolated areas.

v1.06.09 – 10ᵗʰ December 2020
- Design of Air Models… Hitpoints last formula part is now +25 instead of +1d50. Much more consistent with the rules like this.
- Added a "usertestmode.txt" file which is by default set to false, but can be set to true. This allows user access to toggle on modes that generate all Stratagems and start the game with all Techs and all Models. Great for the curious and the graphics modders.
- AI is now properly spreading its Flak out, instead of sometimes piling it all in the same piece of frontage
- Revised algorithm determining Armour & Weapon choices for tanks. AI should build more competitive models now.
- Also addressed an overbuilding of AA guns issue spotted by Das.
- Added a "nodrawnofocus.txt" file which is by default set to false, but can be set to true to see if we can tackle the crash with alttabbing / window minimizing.
- Reduced frame rate for intro cinematics.
- Improved AI production choices.
- Fixed the 4K+ first time automatic DPI 200% added with 1.06.07. It is working as intended now.
- Fixed an glitch that caused the Protectorate Stratagem difficulty to be way too high, and the Client Stratagem difficulty be too low.
- Fixed a crash during turn processing and AI moving. It was related to AI Air Units HQs algorithms. This patch will fix things.
- Suitability rating no longer takes into account the Relation or any oneoff bonuses created by Shadow Advisor/Spy

Technical/Engine
- Added protective code to try to prevent rare crash with minimizing the application crashing
- Forced the game application to use US culturelocale which will prevent some rare crashes with some system languages.
- First time someone with 4K resolution or higher without having any DPI or resolution overrule applied runs this version or higher it will put DPI to 200%. This is to provide new users with a larger font by default.

Gameplay and rules
- Added a flag to the Model Management Window to hide Obsolete Models
- Added a line of advice in Planet Overview in the HELP topic on Aircraft Engines.
- Amorphous Alien Fauna Feat mouse over improved to show that there is a chance the rule is in effect. *
- The Stats for Alien Fauna shown in the Popup are now the real values after direct impacting Fauna Feats have been considered. *
- Amorphous Alien Fauna Feat no longer used for Beginner games *
- Have reduced the base (before Fauna Feat) Hard Att/Def values for the Critters if they are relatively small (a 30 meter monster has enough kinetic force to not be impacted by this reduction) *

- Made some other fixes and adjustments as well to Alien Fauna Stat calcs, their offensive stats will be a bit higher than before and there will be much better correspondence between the auxiliary offensive and defensive scores during Planet Generation and the final Critters on the map. *
- Some very minor adjustments to some GR equipment*
- Dismissing a candidate for a job bug fixed. It was corrupting the data of who leads a Faction.
- Fixed a bug in the script interpretation with negative values at start of formula (fixing an issue with sometimes diplomacy difficulty being too high)
- Made some speed improvement to script interpreting
- Maximum Size is now considered for Strategic Transfers using Air Bridges *
- Maximum Size calculation has been adapted to take into account the size of the Cargo Space instead of the Size of the Aircraft. sqrt(average Cargo space / 1000) = Maximum Size. *
- Also Size is now set for Militia forces *
- Increased Weight for Air Models (no repercussions at all just aesthetics... for now..) *
- Added possible Protests by the Population against perceived too highIncome Tax, they will mostly trigger when you have high
- Income Tax versus low Government Profile. But other problems will make the population sensitive to high Income Tax as well.
- Up to 10% you should always be fine whatever happens. It is really meant as a counter balance to player raising Income Tax really high 40%,50%,60% without going all out on Government Profile. *

*=requires new game start with this version

v1.06.05 – 02nd December 2020
- The levels of Alien Critters could still go up to far. Capped them at lower difficulty levels. Max level 3 Feats at Beginner, Max level 4 Feats at Regular.
- Made some adjustments to the difficulty levels for playing various Minor Diplomacy Stratagems. It has become quite a bit harder to make Peace by Stratagem with Minors now.
- Added code to prevent a rare crash when clicking on a Troop type Illustration in the bottom for its detailed statistics popup
- Fixed some very imprecise mini map clicking as well as not centered minimap in the target subtab of the Stratagem Tab.
- Made Alien Life a bit less dangerous (and less reproductive) on the lower difficulty settings, especially Beginner. On regular difficulty it will only be slightly easier. *
- Nudged a detailed combat rule quite a lot: Counter attacks diminish in strength after having done more than twice the number of attacks the individual can do.
- The Alien Critters max attacked variable was misconfigured. Has been fixed. Expect better results combatting them even for running games. *
- Fixed a graphics glitch in 2nd+ page of defenders in combat results.
- Added extra protective code to prevent the Stratagem crash (was due to Units being destroyed and invalidating the memory of previous unit selection numbering).
- Fixed a small bug with Advanced Sensors that was not being applied correctly.*
- Fixed the aircraft engine efficiency techs not being applied to higher engine counts.*

v1.06.03 – 30th November 2020

Attention: In order to play the new Air Forces addition you'll need to flag "Air Forces enabled" in the PLANET GENERATION setup page.

Full changelist
- Fixed issue with battle calcs for Amorphous and Trapper Alien Fauna Feats, which were not triggering.
- Population migration from one Zone to another now logarithmically capped starting lightly from 2.5% of emigration source zone population and limiting it to an extreme maximum of 15% (before Exposure rules taken into account, because those could lead to much higher emigration).. This to avoid too sudden and too extreme shifts in Population between Zones.

- I am diminishing the effect of the reward value of salaries for Workers, Leaders and Soldiers based on income tax & sales tax settings. In short if you have high income tax (and to some degree high sales tax as well) there will be less incentive for the Population to work for those Credits. Quite a big nudge and fixes a lack of punishment of excessive high income tax rates.. (requires game restart if not started game with a recent v1.05beta)
- Soldier salary effect is now compared with weighted pop and worker salaries instead of an average without taking their numbers into account. (requires game restart if not started game with a recent v1.05beta)
- I increased the difficulty of raising Income Tax and capped it at a maximum (but still whopping) 80%. *
- Added option in Prefs Tab (subtab called 'game') to switch on/off Slow AI moves during game
- Switched of some of the more fancy AI calculations if NOT using the slow AI
- Added some small general optimizations for AI Speed
- Fixed AI road spaghetti issues. The AI now cleans up a bit every 4 rounds. Don't expect miracles, but the worst road nightmares will be fixed up. If you are running this beta in an existing game keep a sharp eye out if it is working as intended please.
- Added an "Easy Logistics" optional flag that doubles the Logistical Range and Points of your Assets. *
- XP spending on Skills is now much more varied and partly depending on the personality of the Leader *
- Payload optimization TECH now also has a positive impact on Bazooka firepower (and Armour Piercing Eff. already had) (and Manpad as well by the way!)*
- Recoded AI air production choices which was sticking with the original 1st version
- Fixed quality level settings for air for AI
- Helped AI with maximization of Items rules
- Fixed AI issue that caused it to not build SAM Launchers
- VTOL engines now has Turbojet Tech as a prereq *
- You now need the Turbojet Tech for its 4 engine variant (oversight fixed) *
- Small 10% improvement to AI speed (every effort helps, right?)
- Fixed dogfight bonus in combat calculations
- Fixed an issue with in some cases a piece of vital front being void of frontline for the AI calcs. Caused weird retreats in some circumstances. No longer!
- Fixed initial Air Models with Tech Level 4 start, they'll have a bit more range now*
- AI will now first go for developing a bomber aircraft before switching to fighter/recon helicopters or thopters
- Added Motorized AT OOB*
- Added Mech AT OOB*
- Added Motorized Flak OOB*
- Added Motorized Manpad OOB*
- Added Mechanized Manpad OOB*
- The AI was still building mixed heli/thopter/airplane Units, should be stopped for good now.
- Solved a nasty screwup for the AI where it could run out of supply network due to huge Zones it can acquire
- Fixed a negative range issue with some helicopter configurations
- Did some long AI game tests (will do some more for day 1 patch)
- Spend a lot of time qualityassuring the formulas that make the Air Models to make sure they work as intended in the different air pressure & gravity combinations that are possible.
- Saying "negative!" to a nonviable design will now allow you to redesign it (with in yellow highlighted your previous choices)
- Adjusted maximum ground speed calculations by completely rewriting them and using a separate critical ground speed variable.
- Adjusted maximum range calculation to only to take a (now also smaller hit) if the atmosphere is in fact thicker than the gravity (added drag) to compensate for the much more efficient motors and lift in such an atmosphere.

- Engine Efficiency now has more impact on the force generated per fuel unit. It is also displayed now when you are making your design choices.
- Values in different Gravity/Air Pressure combinations seem reasonable now… But keep in mind that if Gravity > Air Pressure it is seriously limiting the range of Aircraft.
- Reworked the AI Flak Unit production and movement completely
- Flak is spread over Assets/Cities and Units according to a threat analysis
- The threat analysis can also impact the priority production of extra flak will get
- Flak units will now try to find an optimum between staying safe and also covering as many friendly units as possible.
- Gave the AI some slight troops production cost bonuses to help compensate for the added complexity with air and flak. But only getting pronounced on hard and higher.
- Fixed a alwayscrash during AI processing caused with beta16
- Nothing else, but I am halfway to reworking some AI Air and Flak placement algorithms
- Air Recon no longer starts with explosion
- When you now redesign an Aircraft Model (negative command at end) the previous choices you made will be indicated with a † symbol and highlighted in yellow to help you finetune your design.
- Adjusted the initial free model algorithms to even grant you initial air model (and unit) under difficult circumstances (like lower air pressure than gravity)
- Added an extra check to avoid UNCLEAR relation Minors to take Asset hexes from you
- Finetuned maximum distance in Air Model calculations better taking into account the double edged sword of air pressure… which one the hand makes the propeller/jet engines work better, but on the other hand gives more air resistance to movement. Leading to often some higher fuel consumption rates as well, which is a good thing for balance.
- Finetuned very low air pressure effects on Air Model calculations.
- Included some linear/logarithmic maximizers for some extreme conditions for the Air Models.
- Decreased the Firepower vs Ground for the various weaponry, except rockets
- Though the speed of sound is lower in lower air pressure i am allowing for higher critical speeds when the air pressure gets really low since the effect of passing any sound barrier in like 100mbar atmosphere will be much less violent.
- Improved description for various Air Model Types also showing their equipment level maximums and minimum airbase level.
- You only and exclusively need propellor tech now for ultralight model type discovery. This fixes something i broke in earlier beta. You'll be able to discover air model types now with propellor tech researched. * (this requires a game restart however)
- Fixed the game setup "use Air Forces" flag. If not flagged it is now really NOT used. Before it caused a corrupted game to start without this flag. Big thanks to Bulldog for spotting the elephant bug in the room.
- Fixed a crash I just introduced with beta15 when watching map generation during setup.
- Removed the hiddenforplayer maximum range bonus of 25% on creation
- Maximized the maximum range of Aircraft to 40 Hexes using a semilogarithmic decrease algorithm after a range of about 12 Hexes.
- Improved the maximum speed calculation for new Air Model designs. *
- Improved the critical speed limit to make some differentiation for aerodynamics <50. *
- Removed some upkeep skill checks for Air Units
- Fixed Air Skills which now depend on War Stat (instead of Cha Stat) *
- Fixed a typo with propeller in tech types *
- You can now also call your Air Force Research Council to change its research
- Added Tech PreReq is the mouseovers of the Techs in the Management Tech Window. Was about time right?
- Aliens with Burrower Faua Feat have better defense against air attack now *
- High Altitude Air Models have lowered Recon Points
- Fixed issue with Air research when both Councils present and still a leftover air tech research project with the Military Research Council (you can keep it now)
- For Management Air Models overviews I Moved Air Combat Mods for Round1,2 to the Popup to

make space for showing the Horsepower:Weight Ratio and if the design is in theory hypersonic and aerodynamic rating.

- You can no longer initiate an Air Bridge to a target Hex with inadequate Airbase Level
- Air Bridges without adequate Airbase Levels will not execute anymore
- Stopped Air OHQ emptying out troops if they have been classed as Obsolete, swapping for better with SHQ is allowed.
- New Air OHQ will no longer use obsolete quality troops (otherwise it will disband directly after)
- Added on map Airbase symbols
- Fixed crash with Leader OHQ Skills inspection in Reports
- Fixed issue with too often only maritime alien fauna present with Planet Generation
- New Alien Fauna behaviour Feats and their impact in movements now implemented *
- New Alien Fauna reproduction implemented *
- This concludes the new functionality for the Alien Fauna (except for fixes of course)
- HV Guns Tech now available at Tech Level 4 start *
- No longer Solitary + Social combi for Alien Fauna *
- No longer allowing to assign Air OHQ to another OHQ
- Fixed a crash with Missing HQ subtab
- Fixed a setup problem (caused in earlier beta) for PBEM games where initial armies where always maxed out
- Added Alien Fauna subspecies introduced for more diversity *
- Added Fauna Feats for more diverse combat and interaction *
- Fixed some graphic format issues for some Alien Fauna (there are 100s so some glitches snook in)
- In Raise Formation we have hidden Air Formations you do not yet have the Air Models for
- Can now develop your discover your first Air Model with something else than Propellor Engine (finding more advanced tech for example) *
- Added a visual green/red block and Airbase level for each aircraft subformation in a formation so you can quickly see if you have an issue.
- Fixed a crash related to Airbridge execution
- Airfield still in construction no longer enables that Airbase Level (next turn goes into effect)
- Blocked Decisions giving Unit Feats from triggering for Air Units
- No longer possible to Raise nonVTOL Aircraft Formations on Hexes with inadequate or no Airfield Level
- Fixed double log creation for Air Models for Model Design Log *
- Fixed issue with not allowing building Air Base in same Hex as Truck Station *
- AI got some improvements, but it also made it slower. So I added a flag that allows you to chose speed or better operational unit movement when setting up your planet *
- Fixed an issue with max ground speed that was sometimes to low and made it impossible to get a viable model designed (fixed for new models only)
- Fixed a crash due to faulty AI Air algorithm (round 30)
- Fixed missing SFX with some air attacks
- Fixed to low ammo usage in combat
- Increased ammo stockage with 50% for air units *
- Air Units should no longer get Unit Feats *
- Fixed an issue with Rocket Engine aircraft graphics (that were missing the frame graphic) *
- Once you have the Air Research Council present the Military Research Council will no longer try to Discover Air Techs (or allow you to research the discovered ones)
- Fixed spelling error with "ultalight" *
- Tech requirement for Heavy and Very Heavy Rocket Engines now enforced *
- Fixed bug in PBEM game with Godfather leaving and corrupting another leader stats
- Fixed a glitch in the effects on relations when shuffling budget
- Fixed spelling of propeller engine *
- Fixed a crash during turn processing related to Air Bridges
- Fixed some wrongly named graphic files for Alien Fauna *

- Fixed faulty description for Airbase Asset. *
- Tech Level 5 + Air Forces start now provides an initial Airbase Level 3. *
- Fixed calculation error with the attack values of aircraft designs versus ground targets (was too powerful) *
- Fixed a layout issue in Aircraft Design orders
- Fixed max ground speed preview during Aircraft Model Design
- Fixed the Air Force Research Council which was not working *
- Fixed a missing medium graphics for light aircraft model type *
- Fixed a big problem with Air and buying Replacement Troops (either at Unit or for SHQ).
- Fixed description for different Air Roles during Aircraft Model Design.
- Added Air Forces (Extra manual chapter PDF included) *
- Added much more varied Alien Fauna graphics *
- Some improvements made to the operational military AI
- Fixed SHQ not being charged of Items cost like Fuel when delivering Troops for new to be raised Formation
- Upon Declare War you lose Trade and Research deals and any embassy will close
- Fixed tohigh costs for Upgrades (more than predicted by the interface)
- PBEM game setup will now not ensure all players have the same size of starting armies.
- Fixed a bug introduced with beta8 that was causing Zones to be Lost/Gained due to Strategic Transfer
- Fixed max armour description and choice for med and heavy tank *
- Fixed a militia with not enough troops glitch (in later game)
- Fixed a glitch in the Trooptype popup for the Qty of partially hidden enemy troops
- Fixed a crash with Rebel Decision (probably due to latest beta versions)
- Fixed a newly caused crash with Model creation and inspection
- Fixed a crash during AI turn (due to combat modifier exceeding 30 different ones)
- Fixed some errors in the statistics in the Stats tab concerning Unit logistics (I think.. i think. if the issue still persists please send a savegame to vic@vrdesigns.net)
- Fixed a glitch where you could not transfer
- Fixed a bug in the casualties inflicted statistics (stats tab)
- Fate and Artifact Stratagems now also playable on Secretary *
- Provocation and some others should display correct difficulty when targeting a human played regime now
- Methane Synthesis plant now needs water as well *
- Fixed a crash with end turn
- Fixed the graphicsAlt directory feature
- Behind the scenes code changes for future features, just testing nothing goes haywire with these being present. Just stating this to be complete in these change lists. Don't expect any issues.
- Fixed an error with mass upgrade caused with 105beta5
- Changing HQ of an OHQ causes 15% Readiness loss for all Units in the OHQ
- Changing HQ of an Independent Unit causes 30% Readiness loss.
- For modding: If the GraphicsAlt directory is present in the core directory (where .exe resides) and a graphic from the Graphics directory is also present in this GraphicsAlt directory it will be used instead of the original graphic. This allows using graphics mods without replacing artwork. Might need some more testing. Why? Mostly needed for future of SE.
- Fixed a glitch with resolution change (or PBEM game where players have different resolutions) with the title bar in the topright moving to strange places.
- Vidcom artwork displayed at lower resolutions than HD is now scaled (unless it is used to render for example Stratagem Cards or Tech discoveries, etc..). Its nice for lower res users to see more of the graphical imagery.
- Fixed a bug with Resigning in 3+ PBEM game (added first in beta4b private build)
- Fixed mouseover for reassigning independent Unit from one OHQ to another.
- Fixed a glitch where an AI could research Techs in a Tech Group it had not mastered yet
- Fixed a bug that was caused with v1.05beta2 that was blocking replacement troops from arriving

in many circumstances

- Fixed a bug with ageing not always working as intended
- Permanently fixed the false "0% close combat" combat detail mention that I said I fixed earlier
- Fixed a glitch with the Training Stratagem and XP growth
- Fixed an issue with edge case logistical points (just enough) and a resulting troops upgrade glitch
- Fixed a crash during turn processing related to a Zone that lost its City, but that still exists.
- Fixed a small glitch in % of Raise Formation
- Fixed a loophole where you could upgrade/replace/scrap Militia Troops
- Fixed listbox glitch in Asset Management Tab not sorting Zones for SHQ selected.
- Fixed a faulty Logistical Preview when switching between Assets in Preview Mode.
- Fixed a glitch in the Transfer (SHQ > SHQ) Order
- Updated No Retreat Posture text *
- Removed Indep Quad MG Formation Type, as normal MG Formation Type can be used for it. *
- Adjusted 3 militia events for their Militia Profile change *
- Major that is out of game will no longer show up in the Regimes Reports.
- Fixed a loophole with making Zones tiny to funnel Rebel Unit placement (they might be outside Zone now as well)
- Fixed Arachnid weak attacks due to nonintended calibre Matrix effects *
- Reforming a missing OHQ now will set its SHQ to the one that is used by its remaining Units
- Irrespective of SHQ used (determined by Zone where you are reforming missing Unit/OHQ) you can restore any OHQ / Unit.
- You can now also reform a missing OHQ as a "blank" container.
- Fixed a faulty application of the negative effect of No Retreat Stratagem in the first combat round.
- Fixed a bug with direct load of game and the miniMap bugging out if you had not first looked at an Asset graphic
- Fixed a wrong cost being charged (compared to shown) for (Mass) Upgrade of Troops.
- Scientific Pact can no longer give you Techs that you do not have the prereq for.
- Fixed the 15% Battlegroup attack penalty occurring in the wrong circumstances
- Fixed an issue where Seniority Points could drop below 0 for a Leader in the Reserve Pool, lowest points will now be 0.
- Fixed a Logistics glitch where the refocus count wasn't always working as intended
- Fixed a Logistics glitch where after a number (of blocked or not) crossroads the Logistical Points would just stop advancing.
- When raising a missing Unit it is now also possible to raise it "blank" meaning without Troops inside it. This will allow the replacement troops to fill it up the next turn (or allow you to manually buy replacement troops)
- Fixed a combat log issue (calcs where fine) with (very) close combat mentions
- Fixed a log issue with the governor skill % bonus (which was overstated in the log)
- Fixed a crash during AI move (surprise combat for AI)
- Units with more than 4 logistics items and a logistical warning label will have layout issue fixed now
- Diminished the social environment conditions effect for Eternity Cult
- Take my candidate decision should occur less often (though it occurs more often with low relation factions, this is intentional, as they want something back from you)
- The faction request to go to war with unaligned will not happen anymore
- Increased initial Food for each Army you start the game with
- Increased initial Farms if many Armies at start of game
- Increased initial Farms if hightech level equips player with Biofuel Asset at start of game
- Logistical Extension production now visible in Asset Type Popup
- Fixed a crash in the history window
- Fixed number of Cult followers not decreasing when low % of followers and being persecuted
- Upgrade costs for equipment improved
- Fixed issue with SHQ Leader ending up in limbo when SHQ is disbanded

- Fixed issue with weird number with walkout decision with critical success roll
- Fixed abuse of SHQ Commander Trade Skill
- Fixed issue with Branching Rules not counting correctly (logistics)
- Fixed issue with 0 weight Items for Unit Supply costing Logistical Points.
- Replacement Troops will no longer be send to a Unit in a Hex where they'll not be able to move out off
- When a single Asset is selected it will show its range not necc. As it will finally be deployed as other Assets might serve certain Pull Points first (before this Asset will serve Pull Points). Or in other words the preview range of a certain Asset is shown as if this would be the only Asset to serve all Pull Points.
- Fuel transfer bug when transferring GR Troops from SHQ to Battlegroup fixed
- Extra insurance added that AI Majors asleep (no units, no zones) get their relations with minors reset to peace.
- Fixed an issue where your Fate Pack could have less than 4 Stratagems (due to doubles already present), this will no longer happen.
- Factions that are open to the Nonaggression, Mutual Defense and Victory Pact in theory are Corporatists, Realpolitikers, Doctrinists and Humanists. (before this was not the case with Victory Pact) *
- Losing your secretary due to Defection will no longer leave his/her slot open and will now longer result in a 1 1 statement, but a new secretary instead.
- Fixed a crash in a round 170 game related to a Leader Feat

v1.05.00 – 29th July 2020
Highlights
- Pull Points added to the Logistics System
- History Classes added to game Setup
- Updated Manual (rules & grammar)

Full changelist
- Mining Overview Report added *
- Archeology Overview Report added *
- Construction Overview Report added *
- Name labels for lakes and seas are back (they disappeared somewhere during the patches) *
- It is now possible to have a world where the survivors start with alien farming. But it should still be relatively rare. *
- Fixed selling Pop to Slaver to properly pay you. *
- Switched off Metrics as I have enough info gathered for now
- Fixed a bug with disappearing Assets (due to AI code containing a bug and deleting the wrong ones)
- Fixed issue with Asset Construction Dirt Road only going to closest Rail (without road). Will now be build all the way to the first road with Logistical Points
- No longer allowing you to build Wind Traps if rain scarcity is level 4 (no water at all in atmos)
- Fixed an issue with SHQ Troops disappearing if insufficient LIS points to Raise Formation
- Changing Quality Levels for OHQ in Model Management Tab will now also make all subordinate Units to that OHQ compliant to that setting.
- Suitability rating was still wrong in the bottom part of the UI for the Commander. (OHQ & SHQ mixed up)
- Some textual fixes
- No longer possible to transfer zero weight items between SHQs if 0 Logistical Points on trajectory.
- Public Production Penalty applied to production that produces feeble quantity and thus suffers much larger penalty due to rounding up or down errors gets randomized chance if penalty is applied or not.
- Fixed a silent crash (no error message) with round 440 game
- Fixed a crash with beta9 related to the logistics calculations
- Slaver event and choosing declare war will now actually declare war *

- AI Regime Feats now go with the same rules as for the human player. Including the minimum number of rounds you'll have to wait before having a chance to get the Regime Feat.
- Games started with Beta10 will NO longer have the stopatnextLogistical Asset rule from Beta9. Instead of stopping the spread of their Logistical Points they'll be REFOCUSED at the next Logistical Asset. This Logistical Refocusing will diminish their Logistical Points but reset their APused to 0. Formula is refocused Logistical Points are diminished with currently used AP / maximum AP range and for the 1st refocus with a further 25% , for the second refocus with 50% and for the third and final refocus with 75%. This way there is less depleted runners on the map (good for pull) and it is still possible to have overlap (good for ease of play and realism).
- Pull Points algorithm now first considers the possible reach of your Logistical Assets before choosing trajectories from the Hex with the Pull Points to its SHQ (or Zone City in case of Assets).
- Fixed still buggy Asset Pull Points causing too high demands by faulty addition.
- Fixed an issue with Unit Pull Points as well.
- Lot of sweat and effort with plenty of pesky Logistical details to get it as good as possible
- In order to get the Logistics system more comprehensible I added a rule change. Once a runner from one logistical Assets encounters another logistical Asset it stops there. This is the only sane way to avoid the big majority (almost total) of the problem cases where a runner from a far away Asset would remove Pull Points that would cause a more nearby Asset to not use them. Furthermore it makes the network more comprehensible as there is less runners per hex in large networks now. * (requires new game start with beta9 for not to disrupt older games in progress)
- Units pick up supply as far downstream the Logistics network as possible now as long as pickup will still be at 100%
- Fixed a bug in the Preview mode when switching between Preview Asset and general Preview related to rail.
- Fixed QOL Bonus which was applied double the stated value
- Fixed a crash found in a round 400+ game
- Several smaller textual and typo fixes
- Fixed Raise Formation problems notably when SHQ Troops were involved.
- Fixed issue with Alien crops temperature rules, which was buggy especially with below zero temperature plant life. *
- Added an Alien Crops details report in the Help Subtab of the Reps Tab detailing its temperature tolerances. *
- Fixed bug where you could build another Asset of same kind in the same Hex as one that was delegated.
- Fixed a bug caused with v.104beta6 where using Violent history could cause human player to be set to an AI Culture Group. It breaks some events that place Units. *
- The combination of Siwa class + Alien Life History Class was causing bad atmospheres and high biohazard levels (DasTactics). Is fixed now.
- Fixed a glitch in the Pull Logistics with to much Pull Points being requested in some directions (caused by Asset Pull overdoing preserving existing points on trajectory)
- Fixed Spotters Unit Feat… It now actually will work only with artillery instead of only with infantry. *
- Fixed another disappearing sidebars issue when you pressed "No more orders" for a New Model Decision.
- No longer showing agricultural fields during Colonization Planet generation phase if Domed Farms are used
- Added code to put back those Leaders not KIA with their HQ destruction in the Reserve Pool.
- AutoMG Formation now available without need for the Tech Robotic Infantry *
- Fixed a glitch with Faction having a shifting Profile
- Fixed still missing robotic infantry graphic (double check this time) *
- Fixed issue with Replacements not being returned to SHQ
- Should more often have Siwa class Planets with no RHL. (perfect atmosphere for humans)
- Logistics: No more branching increase if pull goes in single direction on a road fork.
- Rail and Truck Traffic Sign will not stop Logistics Points running towards Pull Points anymore. Pull

Traffic Signs will.
- Fixed double food consumption glitch caused in beta6
- Fixed an issue with Logistics where auto Pull Points from Cities were higher (and correct) with Preview than in actual execution at start of turn.
- Fixed 0 hp with immobile models (autoMG / autoTurret) (requires making new Model to go in effect)
- Bazooka Model is available without RPG Tech now
- Fixed issue with "Haven of Peace" and Farmer regimes without Cities appearing.
- Big one. Added History Classes to Planet Generation to allow players some variants to regular Planet Generation. Many options to explore here.
- Model development costs no longer takes into account unfinished Models
- Opened up REPLACE troops in a SHQ as well now
- Repaired The Hero of the Nation Stratagem *
- Fixed Bureaucratic Bonus not being applied to BP production *
- Fixed a number of small glitches with Logistics
- Fixed effect of Accomplished Envoys, Martial Tournaments and Administrative Competence
- The Public Production penalty reverting to either 50% or 0% now is only used for Assets in construction.
- Fixed a graphic glitch with right bar reappearing when Tabs open in very low resolution screen (that should hide the right tab to make place for the Tab itself)
- Added a 75% DPI mode that simulates having a larger screen. Obviously at the cost of some render speed and graphic fidelity, but it might be useful to some low resolution screen players.
- Fixed a possible glitch in Raise Formation quality levels not initially selected
- Fixed some mouse overs there too
- In higher difficulty levels Minors do not have the AI combat bonus against a Major AI.
- Radiation symbols on map are now coloured. Green = RAD level 1 or 2. Yellow = RAD level 3 = Blue = RAD level 4, Pink = RAD Level 5 Light Red, RAD Level 6 Heavy Red = RAD level 7 or higher.
- Sealed Road construction over existing Dirt Road now only 60% of the cost.
- Rail next to existing Road or Road next to existing Rail only 50% of the cost.
- Stopped normal Minor Militia spawning on a Hex that they cannot move out off (was notably issue with Minors without city on high mountain planets) *
- Rare case, but still: Xeno Farming with plants with non Water solvent will not require water to farm now.
- Soil Demetalization Facility will now also produce some Radioactives Items.
- Also fixed Alien Plants ideal temperatures calculation if using a different solvent than water.
- The Pull trajectory to its source now only uses Traffic Signs that apply for pull.
- Hero of the Nation cannot be played again on same Leader
- Improved mouseovers for SHQ Inventory better showing if there would have been a shortage for delivery of Item to Units
- Fixed issues with the penalty on AP or combat if low on Fuel or Ammo
- Public Production Penalty % below 50% now gets a roll where the effect is upped to 50% penalty for an Asset if you roll 1d50 below or equal to the Production %, if you roll above 0% penalty is applied.
- Cycling Units no longer includes Units that maybe didn't move or attack but which have 0 AP.
- Added WHY remarks to the Unit Supply subTab for Unit having less Supply than requested. Possible reasons that will be mentioned: PickupPoint to far away, Not enough LP on road between pickup point and SHQ, Not enough Items in SHQ inventory, SHQ Logistical point use limit reached.
- Added Color codes to the Unit Supply subTab button now shows the % of of requests that was delivered. White = 100%, Greenish >=75% , Yellow >= 50%, Blue=> 25%, Red < 25%. To give a quick signal that even though the Unit might have had 100% present of what it needed to consume there
- Fixed issue with Custom Pull Points not working if Automatic Points disabled

- Limit Production now also limits Asset auto Pull Points.
- Fixed issue with Auto Asset Pull Points not taking branching into account
- Added the option to distinguish between Additive Custom Pull Points and Overruling Pull Points.
- Added the option to set a Hexbased order if the Traffic Signs apply to Truck Logistics, Rail Logistics or Pull Points (or a combination)
- Fixed a glitch with the Suitability Rating for SHQ Commanders in the bottom part of the interface
- Fixed problem with Logistical Bonus not being applied to Asset Production
- Fixed a glitch with setting the age when rolling Leaders
- Should have improved rare issue where map wouldnt be able to scroll completely visible to the bottom
- Fixed intermittent crash with Mystic Priest in combat
- Reduced Corporate anticrime taking Credits from godfather a bit
- Made efficiency of anticrime ops from Corporate depended on the percentage of control they have over the private economy
- Fixed at least partially, but probably completely, the disappearing sidebars issue if click on a popup opening element in the Reports or Decision tab.
- Victory is now declared if you have more than 50 Victory Score and 2nd place has at least 25 Victory Score less than you. Is now in line with manual as well.
- With Raise Formation and using SHQ Troops the Popup is now showing ITEM% and TROOP% as the percentage of the total Formation you can raise, either by using preproduced SHQ Troops or by newly constructed (or a mix). This way you are not blocked raising a Formation if you have for example no Items but 50% of Troops already in SHQ.
- Board Member Stratagems can now also be played on the Director executing them *
- Upped Rain mm limit for receiving free Ice Mine on higher development levels
- Fixed a faulty mixup with a Corporate CEO "leaving you" which is not possible (but harmless glitch)
- Thanks for all the feedback.
- Wanted to make two points.
- First the system has not been simplified, just an extra tool to manage it has been added to the toolbox. If you want you can play the game exactly the same as before the Pull Points were added to the toolbox by just not using the "Pull Points tool".
- Secondly I gave it a lot of thought and I concluded (for now) the Traffic lights system and the Pull Points should be interconnected and NOT be presented as two separate systems. This will lead to less confusion and Players can always choose to use only one or only the other or choose to mix them. I just feel it is more coherent like this.
- Traffic Signs now also affect the Pull Point trajectories
- Some other minor nerfs to Pull Points
- Trains now spread LP before Trucks
- Fixed glitch with to many Logistical Points being sent towards Pull Points (first bug that got reported)
- Asset Pull Points are now only applied to the trajectory if current Pull already applied is below what they need
- City Pull is now [previous turn pickup request] + [current predicted delivery to zone request]
- The event where you got Free Folk or Adventurers on a distant Hex will now be made less distant if possible. Remember it is always possible to refuse to take this choice. Also will try to avoid to close ones. But it will not always be possible due to the randomness of the map.
- Made some small fixes to Dissolution War calculations to make the numbers add up better. However do not forget that over hundred of years many children are born as well, total casualties can be higher than the initial population. *
- Minors with a City now start with a Private Truck Station. Which will help you when taking over a Minor. *
- Fixed Item % (and Troop%) preview calculations in Raise Formation popups.
- Fixed coding present in some messages in the decision archive (from next round forward)
- Fixed a history map glitch after you conquered a Zone

- Fixed minimap in history map not working well (or with delay causing artifacts)
- Fixed some other minor map glitches in history mode as well
- Blocked clicking on enemy hex in the combat selection popup
- Fixed a 1 glitch in Treasure Found text
- Fixed glitch with Slave Trader not paying up *
- Mystic Priest Unit Feat fixed.. Will now have salvage effect with KILLS *
- Policy Speech, Faction Candidate and Faction Demand not clicking anything and ending turn is no longer possible *
- Fixed Storm Grenadier OOBs (they are Inf + Art + Pz) *
- Fixed a code showing in text issue for decisions with Unrest/Danger… *
- Increased randomness for Stratagems given by Factions
- Added Pull Point systems for the Logistics
- You need to start a new game with this beta2 to try them out (wanted to minimize risk to disrupt running games)
- By default automatic Asset, Unit and City Pull Points are used. You can however switch these automatic points off in the Traffic Signs Popup
- You can place Custom Pull Points on any Hex you like and they will be added to any automatic Pull Points
- Hexes with Pull Points trace a path to either their City (Assets) or to their SHQ (Units, Cities)
- These paths will favor roads without traffic signs leading to them (so for some edge cases you can discourage use of a certain road)
- When Logistic Points find a branch in the Road they'll first serve any Pull points that have been traced to their City/SHQ through that branch
- The Pull systems is logged and can be studied in the Logs of the Traffic Signs Popup
- On map in current LP view only the Custom Pull Points are shown in green.
- On map in history LP view the Pull Points used at start of turn calculations are shown in gray.
- On map in preview LP view the Pull Points as they'll probably be automatically placed + your Custom Pull Points are shown in pink.
- On top of the Hex total Pull Point info block is shown a small red bar if Asset Pull Points are present, green if Unit Pull Points are present and blue if City Pull Points are present and black if Custom Pull Points are present.
- The City Pull Points are based on previous turn delivery requests + pickup requests
- The Unit Pull Points are based on the weight in supply they'll request
- The Asset Pull Points are based on the minimal logistics points needed for them to operate without penalty
- You can also place a Custom Pull BLOCK on a Hex which nullifies any automatic requests of that Hex.
- This will require some fine tuning.
- Field Training Stratagem will now only be played if little enemies around.
- Added rules to not allow random event based gifting of Methane Synthesis, Deep Core Mining and Water Atmospheric Recomposition if the Planet does not have the right variables.
- Added protection code for Assets being placed without road connection at game start
- Fixed a Stratagem mouse over inconsistency on who's going to execute the Stratagem
- Fixed 3rd party Leaders founding new Factions and some other related minor glitches with those kind (and dead/left leaders)
- Changed the way Supply Bases are giving extension. They now only give extension points upto the point normal action points have already been used. This makes them function as actually intended. Will only be in effect with games started with v1.04beta1 *
- The calibre and weapon matrices were not being implemented as combat modifiers. Major oversight indeed. They will from this version on forward. Be careful when continuing with this beta as it might change the odds in your favor or disadvantage in especially mid to late game.
- Tuned the soldiers losses where they had the upper hand in eventbased fighting.
- In eventbased fighting with troops and security staff the Security Assets can now also lose levels.
- Hurting the Syndicate in a specific Zone by attacking them and causing them to be reduced to

close to 0 crews will now mean their hidden bases have also been dismantled and it will cause a big cut in the capital of the syndicate. *

- Fixed mouse over. Algae vats do not profit from crossfertilization.*
- Fixed 0 key for Guard, if not yet pressed 8 or 9.
- Fixed some small glitches
- Fixed a bug where Food delivered by Militia to Zone inventory was reported as given, but where it actually was not being added
- Fixed a minor glitch where the Recruits + Colonists transferred from Zone to SHQ where being fed in Zone and after transfer in their SHQ as well. Now they will only be fed in SHQ.
- You can now pass to the 2nd Raise Formation window even if you do not have the PP available for raising the Formation (for inspection purposes)
- Major Regime without Zones or Units is now put to sleep (in future version I want rebels to be able to revive a Major Regime) and relations with Minors reset (so some blockages for minor diplomatics are removed concerning this major). Also it is removed from the S.MAP regime list if no hexes left on map and from TARGET STRATAGEM tab if asleep.
- And Majors without Zones will be removed from the Regimes Reports.*
- Added a cap to Incr Sales Tax, inc Income Tax, Incr Import Tariff, Incr Export Tariff stratagems. Max tax is 100%.
- Buggy maximum 50mm armour now *
- Increased Buggy size from 2 to 3 to make cost for armour go up a bit *
- "Loyal AI" no longer going to emergency hostility if getting close to losing the game
- No longer losing Stratagems in some cases with dip/spy stratagems where you lost the previous level of the stratagem and that caused a higher level to disappear.
- Natural relation point Job Prestige factor less depended on Ambition now

v1.04.00 – 26th June 2020
- Fixed the glitch where a Regime was getting like 10x the Rebel Unit per turn. Was caused by faulty duplicate regime records. Is fixed. And running games will be fixed as well (for future turns of course)
- Fixed a glitch with Red Hex Border Marker being shown in normal Map mode where you were attacked by nonaligned in the previous turn.
- Fixed glitch in Unit target selection in the Stratagem Tab where some people could not click the last item in the list.
- Fixed Upgrade/Downgrade bug concerning MG Infantry Brigade/Corps/Army *
- Multi Zone start has received plenty of extra checks to favorite the Zones being close. Having Zones without rail/road between them should be near impossible now. (and was already very rare)
- Fixed a glitch with BP above 100 in 1 task being capped in the wrong way. You can now effectively assign more than 100 BP to a single task.
- Fixed some glitches in the Org Task Progress Reports
- Tuned down the Resign exploit. Now costs 3PP to resign and the maximum relation gain is +1.
- The Ancient Archive Stratagem now can also give you Techs from the Tech Groups you do not yet have access to, but that have a connection with a Tech Group you do. More powerful again now after previous down tuned.
- Forced March Posture now only 10% readiness instead of 20%. *
- Fixed the graphic for forested mountain that did not colorize well with different vegetation colours (due to color of sunlight and type of flora).
- Fixed the faulty divisional NATO counter with X symbol for one with XX symbol.
- Fixed processing turns crash due to Leader leaving a Cult
- Fixed some minor text glitches with 1 hex name for treasure and "" for job name.
- Fixed correct % display (or rounds feat still needs to be highest) for gain Regime Feat in Management Screen
- Fixed logging glitch on round 1 with Unit Food consumption
- Fixed a crash opening the OOB Tab
- Fixed nasty bug with cancellation of Model Design causing the next version to be based on a

phantom Model (that was cancelled)

- Fixed a Model stat calculation bug that was not properly reading the actual Base Design value resulting in too low Armour, Weapon and Engine Design scores.
- Fixed the weird history bugs with Orange counters and some disappearing units (especially after just loading a game)
- Fixed Mountain % count in final Planetary Generation report (it was not counting grassy/forested and snowy mountain hexes)
- Fixed preview of Fuel use in Model Designer
- At Recon Level 5 on a Zone you now get to see its neighboring Zones (1 hex recon point on Zone's border Hexes added)
- Road Demolition now also clears Traffic signs
- Fixed again the New Model calculations. It was working almost as intended but Engine/Weapon/Armour Design was not using an earlier higher score if it had a low roll. Fixed this now. *
- Secretary can now be paid a salary too
- Did some QA on the mouse overs of the Diplomatic Stratagems. *
- Fixed an issue with Regimes without Leaders and Units appearing. I think this appeared in v1.03beta1. Good we catch this before the patch goes public :) Should be working as intended again with this version. *
- Fixed issue with recon glitch on enemy City
- Fixed a rule that never properly worked: Other Regime's Cities are not showing up with 1 Recon on Hex if they are within range 4 of your Hexes. This is because they block founding of new City/Zone within that distance.
- Fixed Archeology Stratagem *
- Fixed issue with Rebels getting victim to their own earlier rebel's manpower still present in conquered Zone
- Fixed a minor glitch in the Colonization History. Low rain was causing excessively little natural Pop growth. *
- Fixed a rare crash with "Strat" button on Regime bottom pane.
- Fixed glitch with Task priority sliders not doing exactly what they were supposed to do.
- Sped up some start of turn calculations (notably players with high stratagem count where being slowed down)
- Cult membership should go back to max 100%
- Fixed governor keeping to many reserves for construction of asset that is already partly finished.
- Fixed the Soldier salary setting decision that I broke in beta 2.
- Fixed faulty presence of 2 Bureaucratic Offices (construct finished of course) in same City… delete lowest on game load.
- Also fixed cause of those 2 bureaucratic offices. If you now conquer as Command Bunker/HQ/Palace it will only become a bureaucratic office if none yet present or level is higher and in that latter case it will replace the bureaucratic office.
- Fixed bug caused by clicking on Hide Units and then clicking on a Subunit of a previously already selected Unit
- Fixed a glitch i caused yesterday with 103beta3 concerning the Stratagem speedup. It was to brutal and caused issues, seems especially in multiplayer games. Fixed now. Including for running games. This might lead to some Stratagem loss in some cases though.
- Fixed glitch with Skill Log report with Admin Roll for Supreme Command Council *
- Fixed glitch with execution of Archeology Stratagem
- Fixed maxstack preview in battle window to always being minimal 100
- Fixed a logging issue where Leader suffered two relation effects but only one was logged
- Fixed glitch with text in CEO asks for tax reduction
- Fixed issue with Stratagem Categories not being selectable if player had more than 1000 stratagems.
- Fixed a number of minor issues in layout, list sorting, spelling
- Fixed some extreme case layout issues in the combat select window (not perfect yet, but at least

not overflowing)

- Fixed glitch where you could use Group Move to enter territory of other Regime without declaring war
- Fixed a miss calculation with AdminStrain with delegated Assets
- Profiled a bit the Logistics Calculations (but still more needs to be done here)
- Profiled a bit the Scripting Interpreting Calcs
- Did some other profiling to improve turn speed as well
- Fixed issue with Windows Form not using correct mouse location (if you play in Windowed mode please check I didn't actually break anything)
- Avoided crash in Windowed Mode if size of window and DPI would result in game below minimum screen size
- Fixed glitch with too high militia numbers (glitch occurred on higher difficulty settings mostly)
- Fixed broken "Supreme Leader Day" Stratagem. *
- Concerning Rail Logistics. The quickest route between two Rail capable Cities now takes into account All/100% Block Traffic Signs.
- Added "Unification" and "Annexation" Minor Dip Stratagems
- Fixed CAS for a Minor that joins you. It should start at 0.
- Fixed the mess caused in Stratagems (causing crashes) in v1.03beta3. You might lose some Stratagems or have some weird swaps due to this however, but it should allow you to continue game.
- Think I might have fixed for good (ehem..) the varying and semirandom history map glitches in the AI moves screen (orange units glitch)
- Think I fixed the weird results with the 89 keys and Units going to Guard mode without being told so. It was probably an integer overflow issue that is fixed now.
- Tuned down the Fuel Cost quite a bit for the heavier engines in big size models *
- Added in an AI loyalty to a high relation with another Regime. It is partly depended on victory score difference and a little randomness, but mostly on the Faction in power in the AI Regime. Expansionist, Corporate and Crusaders have low loyalty. Federalist, Realpolitik and Humanist have high loyalty. This should allow for some more enduring relations with major AIs. But never be sure of it of course! *
- Fixed scripting glitch (not sure if introduced with v1.03beta5 scripting profiling, but probably) with faulty calculations of Credits (and some other formulas)
- Fixed weighting errors in events with Major Regimes causing some that should have appeared less to appear more. *
- Tech Fields that are missing a prerequisite condition for discovery are no longer shown as discoverable in the Tech Management Window
- Fixed glitch with lowering / hiring Worker salaries. You are not advised to exploit here again.
- Fixed Model Type Tree in Management window correctly showing Walkers need Heavy Tank, and not Medium Tank
- You can now play nonaggression/friendship/victory pact on Human players as well *
- Major AI at war even if it does not want to be at odds with you will now start cancelling science and trade deals anyway (if those are still in place) *
- Effect of multiple Leader Feats on same Stat or Skill is now actually shown in the Char Popup.
- Fixed small textual glitch in Senator Extradite Decision *
- Fixed a faulty concentric attack bonus calculation when HQ itself was involved.
- Added a special soundtrack for the Planet Generation phase
- Replaced the 4th women voices who was too shrill sometimes. It hurt the ears so to speak.
- Number of fine tunings to decisions. Minor stuff. But needed a small fix here and there anyway. *
- Fixed glitch with 0 BP assigned to Task in Org
- Fixed nomenclature with a bonus, now called "Public Industrial Bonus" and applies only to Industry, Heavy Industry and HiTech Industry. *
- Public Prod Penalty now has a round of delay, so it is always used.
- Fixed Public Prod Penalty not writing with Cult effects
- Fixed a glitched Report due to temporary no secretary

- Now no longer Asset Construction on a Hex that got conquered the same turn (just like those are illegal for road construction)
- Fixed a lot of nonfully written out (user friendly) variables in mouseovers
- You can no longer build HS Rail Station and Rail Station in the same Hex *
- Fixed wrong graphic for HS Rail higher than level I *
- Secretary Skill Roll 25 now shown when playing Stratagems
- Fixed a glitch with some Diplomatic Decisions where 1 Profile change was not applied
- Made some modifications to the Planet Generation system to allow Planets with larger preDissolution War populations.
- Removed the faulty mouse overs caused with v1.03beta7
- Fixed an AI loop (caused by glitch in raise formation code)
- Fixed a glitch where having a minor as Protectorate or Client state did not actually switch the Clear Relation switch *
- Fixed a glitch where failing annexation would NOT lead to war*
- Fixed graphics glitch with Hex Selected with Zone border drawing.
- Fixed losing SHQ if you used it for attack
- Less often sending metrics on Decisions (getting to much records)
- Light Walker now uses Twin MG instead of Howitzer as a weapon type *
- SHQ Troops now properly taken into account for determining % of troops you can raise with Raise Formation order.
- You can now always get to the second window of Raise Formation, even if you don't seem to have 50%. (maybe a different Model will have lower costs for example)
- Weird highlighted hexes fixed in Strategic/Stratagem mini map when playing with Partial FOW mode
- Some other glitches with Partial FOW mode fixed as well
- Fixed for good the Unit cycling issues
- Fixed glitch with disappearing Artifacts after turn of 0 production
- Fixed log glitches with Cults
- Reduced publicProdPenalty from Eternity Movement
- Fixed missing robotic infantry sprites (with Armour)
- Some minor tunings
- After the 4th branching (not counting the source) logistics "runners" will suffer AP penalties. (5th branch=10 ap, 6h = 40, 7th=90, 8th=160, etc...)
- Improved the speed of the Logistics calculations a lot.
- Rail Logistics => 5pts per Hex * (instead of 2)
- Truck Logistics on Sealed => 7pts per Hex * (instead of 5)
- Increased speed of Logistics calculations a lot
- Increased speed of opening Asset Tab in Management Screen quite a bit
- Annexation/Unification card can be only played once on a regime per turn now *
- Fixed wrong mouse over on Word with Policy speech
- Fixed Field Training Stratagem giving wrong penalty to infantry in attack *
- Medal of Merit can be played by Director on himself/herself.
- Move Type of Unit (as shown, there was now actual rule problem) now based on "Rocky" landscape and not on sanddunes. (go to next turn for fix to be affected)
- Fixed the sprite displayed on counters in some cases
- Fixed crash on clicking on nonexisting arti target hex and then clicking in the bottom interface
- Fixed a similar crash as with artillery with Strategic Transfer
- Fixed order of Zone Recon Points => Recon Points on Hex to an earlier point so that it is taken along in Demand resolution
- Light Mechanized Armour Assault Corps is back * (Army and Brigade were there, but not the Corps)
- Missing soldier graphic with Personal Shield is fixed *
- Multiple artifacts no longer the same ones

- Fixed a glitch where Infantry with Personal Shield would retreat if no nonshielded compatriots left (a rule that should only applies to Shield Generator)
- Administrative Strain will decline a bit faster
- Tuned down the effect of Thieves a bit. Also made all 3 decisions lead to Credits loss here (the nonintervention led to food loss). Also taking number of Zones in Regime into account in calculation now.
- Added protection for Draft Stratagems, now only usable at minimum 10point loyalty Zones.
- Hid some exposed variable changes when making decision concerning internal ai variables.
- Finetuned the old Militia General event
- Fixed branching count being off by 1
- Added branching count to logs
- Logistics Rail Points increased a little bit
- Logistics Trucks Points decreased quite a lot
- Level III Private Transport Hub Increased Truck Points
- Rail Points cost to 4 AP (was 5AP in beta10)
- No longer Demands for QOL levels above 100
- Fixed not completely fixed Hex Count for Demands
- Fixed glitch with not having PP to raise Formation
- Fixed minor textual glitch with nomenclature Public Industrial Bonus Points
- Fixed a minor 1 Lis Points textual glitch in Raise Formation
- Fixed a glitch if OHQ got destroyed/removed that needed Commander
- Improved AI Logistics speed
- Tuned the branching rule for Logistics to have less effect if Traffic Signs in place.
- Fixed harassed by Anima cult relation drops
- Fixed Hex Perk not giving 1PP
- Fixed limit to 80 of Pop Hap. Bonus not being enforced
- Minor glitch in minor strike return text fixed (inv)20% unrest instead of10%. *
- Support Faction and Ask for Help now can only be played once as well on any Major (per round)
- Delay for Militia to use your equipment was not properly taking the 30round delay into account. Is fixed.
- Militia units will no longer consider your Model motorbikes as infantry.
- Counter attacks limited in combat calculations
- Scavenge Points will now more easily go to zero in final exploitation phase
- Governors now only execute Zone Stratagems that were not generated by an Organization (Fate, Faction)
- Fixed some regime coloring issues/glitches in history view
- Weird centering of history view should be gone now
- Added security code to avoid the rare "Atlantis" issue (city in sea)
- Fixed Minors (that normally have a City) being removed after single City loss still survive in nonCity Zone. Now they only survive if they have a second Zone with a City, a Zoneless City does not count.
- Fixed wrong mining penalty textual issue for Mines on snow/ice hexes.

v1.03.00 – 12th June 2020
- Blocked AI from making double construction (for good now, v102beta2 didn't quite do the job yet)
- Double checking if AI is making a valid construction choice added
- Double checking if Private Economy is making double construction
- (Farm/Mine) added
- AI will now take the hint if a Dip Stratagem didn't work on another AI and take a pause trying to improve relations*
- Overall the AI should be less schizophrenic (which it was in some cases) concerning what kind of relations it wants.*
- Reduced the ideal size of army and workforce for the AI in the mid to late game, but only on Beginner level. It was a bit too challenging now after all the AI improvements over the last month.

- Fixed a rare crash with opening the Management Window
- Added some protection code to prevent a rare crash with the Management Window
- Right click in cinematics no longer allowed. Fixes skipping through initial questions possibility
- Fixed disappearing Resource icon glitch on Hex after conquest (by Minor with no Zone).
- Finetuned the 9 "Call To X" Stratagems. Their effects are now maximized to avoid too big results in large AI Zones.*
- Fixed faulty Tech Level 4 + Initial Armies start concerning the Rocket Launcher unit which the game tried to give but was not available due to lack of the relevant Model. Is now an Independent Artillery that is given.
- Fixed glitch with buggy new Faction names ("1") also for running games
- Fixed possibility to go through rebel units with strategic transfer
- Fixed a logistics point cost glitch with Raise Formation and some others
- Fixed empty response on choosing "No change" when discussing the different Cults
- Added a protection for a weird crash in the Items tab (due to a Zone with no City)
- Private Construction (credits only) will no longer depend on LIS connection (production after construction will)
- Private Asset if still in connection with City, but no LIS, will only suffer half the lack of LIS penalty (Public Assets suffer full penalty)
- Mining Level had a glitch with production. Fixed. Expect some lower income in lower easeofmininglevel mines.
- Strategic Map no longer shows depleted Resource Hexes
- Strategic Map now differentiates between unexploited and exploited Resource Hexes
- Have been phasing out the usage of the term "LIS" and replaced it by "Logistical Points"
- Fixed that famous map displacement glitch (after combat)
- Fixed some very minor glitch in Logistics calculations
- In the Logistics layer Initial and Current Points parts of roads between 2 nodes that have lower Logistical Points than both nodes will be highlighted in yellow and points shown as well
- Blocked AI from making double builds (problem caused with v1.01betas)
- Fixed the actual cost of Railroad construction which was still on old high level and causing huge depletion of resources. (problem caused with v1.01betas)
- Fixed glitch with the maximum stack points not being increased with concentric attacks
- Fixed glitch with the "REPLACE / MASS REPLACE" button not being available
- Tracked a rare glitch with a Rebel Regime founding a new Minor Regime and its Units not being properly transferred potentially causing weird nonfriendly Units on your Hexes. Fixed now. Any such occasions remaining in your current game will be cleaned up by this patch as well.
- Corporate Taxes were actually being paid, but NOT being logged in the Corporate Report. Now they will show up there as well.
- Removed Obsolete Models from the Replacement Troops window
- Increased the cost of the Ancient Archive Fate Stratagem from 2 FP to 4 FP *
- Decreased the cost for the Chemical Team and Drone Team Fate Stratagems *
- Ancient Archive and other random Tech picks are now limited to Tech Groups you have access too. I am sorry some people liked this, but it was really more overpowered than intended.
- Propose Peace now possible from Relation 25 (was 35) *
- Returned ability of AI to give Credits but limited its repetition potential *
- Added the "Ouverture" Diplomatic Stratagem which you can use to increase Relation with power you are at war with. Difficulty is easy when the Regime in question doesn't like to continue the war. *
- Fixed another AI crash
- Did extra QA work on AI Diplomatic Stratagem usage with Humans as well as other AIs*
- Fixed a crash during BG transfer in a very specific case (for good this time)
- Only Monitor Tank can use Tactical Nuke*

*=requires a new game start to go into effect

v1.02.00 – 8th June 2020

- Adjusted the interest of AI for building Hydroponics
- Fixed a less informative label on the unit counters after upgrade/downgrade Formation Type (Saros)
- AI improvements related to allocation of OHQs to Fronts
- AI improvements related to consistency of Front areas
- Fixed Model Statistics glitch that caused antiinf % and AT % to get switched around. (Saros)
- Zone now keeps less reserves if it is for an Asset that is on reduced production or construction percentage (Shards)
- Fixed glitch with partial construction % set and actual progress of that construction
- Fixed glitch with automatic worker recruitment and asset in partial production
- Fixes Sound Volume slider
- Severely tuned the Difficulty for Major Diplomatic Stratagems, though there remain some impossible rolls if the AI Major in question is just not willing at all to accept *
- Fixed a glitch in the application of the Skill Bonus by Leader Feats
- Fixed a glitch with failed rolls on raising or lowering taxes & tariffs *
- AI will no longer give you Credits while at war *
- When constructing roads to a Hex just one Hex away from the start it will always go as "the bird flies". In some rare cases this is useful.
- Unit movement now also goes as the "bird flies" if the distance is just 1 Hex. In some rare cases this is useful or even crucial to avoid likely surprise combat.
- Fixed a crash during a Compare Leader in the Leaders Popup
- Reduced the chance for a Decision to be communicated through Metrics by a factor of 10.
- Fixed 2 different rare crashes in the Stratagem Tab
- Made a minor fix in the usage of Commerce Bonus inside the inter Trade House trades.
- Fixed the inability to use Expel Diplomats to break final level of diplomatic contact level*.
- Increased initial Energy generation for Tech5 start *
- Fixed the Jetpack OOB/TOE *
- Increased speed for 200% DPI setting enormously
- You can now no longer nationalize a Private Asset that is just in the process of being upgraded
- Fixed an AI crash!! (Carson)
- Fixed a crash with transfer of troops from one battlegroup to another, fully emptying the first one (Saros)
- Fixed a glitch with the left side of the Staff Council task progress on operationalization of a new OOB was wrong
- Fixed a glitch with the renaming of Models (* in some cases)
- Fixed a bug with Minors building up to many Units and at the same time causing very long AI processing times (Che)
- Game now stops sound if you ALTF4 / endtask
- Reduced the militia growth for some minors from killing freefolk and pop, especially if they have units with low subunit count.
- Fixed glitch where a "nonCity" regime would surrender after losing a city they conquered (Slavers, nomads, etc...)
- Added a bit more Food for game starts with initial Armies present *
- Fixed a crash with Hex Perks on the 0,0 Hex
- "Recruit Talent" stratagem now actually ensure a younger Leader to be recruited *
- Fixed a crash during Combat setup with Ranged Fire
- Fixed a glitch with the Civilization Level dropping to zero
- Fixed faulty mouseovers concerning maximum storage transfers to SHQ on round 1
- Improved the Mouse Overs with a tolerance mode of 20 pixels so you do not have to keep the mouse perfectly still
- Added the generation of a planet generation save in your saved games directory. Which if you like you could rename and share with others. Or use to restart a Planet you found interesting.
- Fixed an AI "leader ageing" crash (BvG)
- Better garbage cleaning of some detailed log reports (data thing behind the hood)

- Fixed a crash with a start turn crash (Chris)
- Fixed crash with Artifact being generated in a Scav Asset that got upgraded to a higher level at the same time
- Fixed a crash with clicking on the Strat button in the bottom interface
- Increased free Water storage points with the amount of free Water (rivers/rain/sea) the Zone receives.
- Fixed issue with Electric Engine not being selectable for new Models designing
- Nonaligned forces (alien critters/marauders) do NOT take the first turn anymore.
- If nosaving during game + passwords enabled in a multiplayer game, you'll get "possible" cheat messages if a player replays his/her turn.
- Autocombat setting in prefs now saves properly
- Fixed another AI crash with a tortured AI regime
- Lifted the 2player limit on the "Unclassified" Planet starts
- Improved historyview representation of friendly rebels attacking somewhere
- Improved history map by putting a selection graphic around the Hex where a history step is actually happening.
- Fixed a crash related to disappeared Trader Houses
- Fixed a crash related to the resolving of a faulty Demand on taking a Hex that did not exist. Also fixed such a demand being given in the first place.
- Some minor spelling and typo repairs
- Fixed overflow of attdef total list in combat setup popup
- Reduced the extremity of the costs for Rail through difficult landscapes (except high mountains). Stays high, but at least it is possible to construct now if you save up.

v1.01.01 – 4th June 2020
- Initial Release