Altair License Server 2025.0.0 Release Notes and Highlights

Introduction

The installer supports upgrading a previous installation by migrating data or creating a new installation. Simply start the installer and answer the questions.

PLEASE READ THESE RELEASE NOTES BEFORE RUNNING THE INSTALLER.

Installer

The installer can either create a fresh installation or upgrade a previous installation. If the installer detects a running or installed server, it will try to use that configuration. That is the best approach, as you can only have one running server on a machine. By not properly upgrading a running server you may cause issues in the configuration. **If upgrading an installation, you should allow the installer to create a new directory and copy over your configuration and license files. Please see the section titled "Known Issues and Additional Information" for important upgrade information.**

Running the installer is straightforward. Simply execute the appropriate installer package and follow the instructions. The command line options to the installer are listed below:

-DNO_ROOT=t will allow you to install as a non-admin user. It will NOT however install the needed scripts and/or services for automatic startup, or update current ones.

If you wish or need to install the server without having root or admin privileges add –DNO_ROOT=t to the command line. Using this option will not install the service on Windows or startup scripts on Linux/Unix that launches the server on boot.

Please see the section on Windows Specific Issues regarding changes in how to install the license server as a service on Windows.

-DPROXY_CHECK=0 will prevent the installer from checking the URT proxy settings and assume there is no proxy needed. This was added for some systems that are not connected to the Internet causing long delays during the install. If set to '0' then the check is not done, and the config file is written such that it assumes there is no proxy. The user/admin may have to modify the alus.conf to get reporting functioning correctly.

-i console   The installer supports both GUI and console installs. The default mode is GUI. If you wish to run in console mode, run the installer with following option: -i console. On some platforms you may receive an error when running the installer in console mode about X11 graphics libraries etc. If this happens you need to unset the environment variable DISPLAY in your shell before invoking the installer.

almutil and almutil_gui

Almutil is available in command line (CLI) and graphical (GUI) forms on supported platforms. These tools provide several useful options for using and administering the Altair Licensing system both with server and client installations. Please see the tabs within the GUI or run almutil -help for more information on capabilities.

When using almutil for borrowed licenses, please use the version that was supplied with the clients you are using.   There have been some occasional issues if you use a non-matching version.   For HyperWorks installations you can find them on the client in HYPERWORKS_HOME/security/bin/PLATFORM/

If you copy almutil GUI to another location, you will also need to copy liblmx-altair.dll (for Windows)

Transactional Log Files

There have been several new fields added at the end of the transactional log files since 11.0.   One of the more useful ones is a field containing the name of the application that created the checkout. For example, you can look at HyperWorks or GlobalZone and also know which application it was from without having to find the matching tracking feature checkout.   See the Full Installation guide for more information.

Server Configuration File

There are several new options available in the server config file since 11.0.   This file is altair-serv.cfg by default. Please see that file, or sample_config.cfg for more information.

One of the more useful options allows for automatic rotation of the server's log files by setting LOGFILE_ROTATATE_INTERVAL to "day", "week", or "month".   Look in either altair-serv.cfg (if a new install) or sample_config.cfg for all available options.

There is now an option to limit the network interface(s) to bind to as well, using TCP_BIND_ADDRESS.

Automated Reporting

The URT tool now supports NTLM proxy authentication.   See the file alus.conf for setting the variables needed to use this.   While this support has been added, there still may be customer configurations that are not supported.

During installation the installer will try to configure and start the URT automatically.   If successful, automatic reporting will be set up and no further action or notification is required or provided.   If the auto configuration fails, the installer may ask you for proxy information and/or have you agree to manual usage reporting and/or setup.   If you are having issues with the proxy or connection in general see the Installer section regarding -DPROXY_CHECK

Transactional Log Parser

The transactional log parser is now included with the distribution.   The script to run it is in the bin directory of the install location (parser.sh or parser.bat).   See the Parser User Documentation for more details.   The parser parses the transactional log files and creates a csv file to use for analysis with Microsoft Excel or other tools.

Client Compatibility

The Altair License Server is compatible with HyperWorks as well as all other Altair and Partner Products that support 12.0 and above licensing.

Officially Supported Platforms:

Platform		Package Name
OS	**Architecture**	
Windows 7, 8.1, 10, 11, Server 2008R2, 2012, 2016, 2019, 2022	x86_64	`altair_licensing_<version>.win64_x64.exe`
RHEL 7, 8, 9	x86_64	`altair_licensing_<version>.linux_x64.bin`
CentOS 7, 8	x86_64	`altair_licensing_<version>.linux_x64.bin`
SLES 11, 12, 15	x86_64	`altair_licensing_<version>.linux_x64.bin`

Resolved Issues and Enhancements

Issues fixed in 2025.0.0:

- Switch to year based versioning
- Removed unused vcredist package from installer
- Removed or reorder references to X-Formation in server console output at the request of X-Formation. The prominence of the X-Formation company brand had led to a few customers contacting them instead of Altair for support.
- Added additional logging while setting up network receiver on Windows
- Fixed issue where URT component may enter an infinite loop after encountering a malformed transactional log file in some rare circumstances
- Removed support for macOS due to continued issues with Install Anywhere and lack of demand. If you would be interested in a server package on macOS being made available please contact Altair support or your account manager so we can guage demand.

Issues fixed in 15.5.0:

- Updated included Java Virtual Machines to Amazon Corretto 11.0.20.1
- Updated libxml2 to version 2.11.5, used by Almutil (GUI)
- Fixed issue with Almutil (GUI) where the version number in the license usage tree view may be incorrectly displayed for some locales
- Fixed issue where Almutil (GUI) was not properly signed on macOS
- Fixed issue where server may not start on Apple Silicon based machines
- Fixed issue where transactional log parser would not properly handle columns with values greater than INT_MAX
- Enhanced hostid tab in Almutil (GUI) to elide extremely long hostids.
- Fixed issue in Almutil (GUI) where about dialog text did not display correctly on some configurastions with UHD displays
- Enhanced Almutil (CLI) to include a -test option for -a1auth, this will display some information about managed licensing configuration detected and test the configured authorization token if found
- Fixed issue where previous licenses may not be migrated during upgrade installation depending on options chosen during installation

Issues fixed in 15.2.0:

- Fixed issue where installer may hang installing the JRE on Windows
- Fixed issue where installer may truncate license file if installing over an existing ALM installation
- License server binaries are now digitally signed on Windows and macOS
- Support added for RHEL 9
- Dropped support for macOS 10.x and added support for 12 and 13

Issues fixed in 15.1.0:

- Fixed issue where search for license files with .dat or .lic extension was case insensitive
- Fixed issue where lmx-serv binary was not following the same resolution path for ALUS_CONF_FILE as the vendor library
- Changed installer to move the license selection dialogs to the end of the installation process. This change will improve the checks we can make to the administrators selections and reduce unnecessary installation failures
- Updated documentation section for stopping the service to reflect switch to systemd in 15.0.0
- The Windows installer is now digitally signed
- Included JRE updated to Amazon Corretto 11
- Fixed issue where CPU utilization may be higher than expected when very few clients are connected to the server

Issues fixed in 15.0.0:

- Added decay tables for AutomationBatch licensing
- Added decay table for BatchMesher licensing
- Added support for license activation
- Updated license log format to 1.0.3
- Updated Transactional Log Parser to handle format 1.0.3
- Fixed issue where documentation referenced Altair Connect
- Fixed issue when using limits and borrowing at the same time
- Fixed issue where documentation for uninstalling license server was incorrect
- Fixed issue where server can crash in HAL mode on newer Linux distros due to glibc changes
- Added ability to suppress server hostname, OS, and version in transactional logs
- Ensure that when APA features are present they match Serial Number of Altair Units preventing customers from merging APA features with non-APA licenses
- Fixed issue where documentation referenced deprecated manual upload method for usage data
- Added support for systemd on applicable platforms
- Fixed issue where default altair-serv.cfg referenced features not supported by Altair
- Fixed issue where upgraded transactions can report the incorrect amount used when carried over to subsequent days
- Removed dependency on log4j

Issues fixed in 14.5.1:

- Added decay tables for new SolverHPC licensing
- Added decay tables for new SolverInApp licensing
- Fixed issue that prevented some users from running the graphical installer on Windows

Issues fixed in 14.5.0:

- Decay functionality can now use tracking feature name to derive decay algorithm
- Improve handling of borrow records in transactional log parser
- Change date display in Almutil GUI to be ISO 8601

- Improve handling of long running upgrade transactions in transactional log parser
- Add support for solidThinking Units in transactional log parser
- Add support for new platforms (SLES 15, RHEL/CentOS 8, Windows Server 2019)
- Fix issue where server startup time was missing in transactional logs on Windows
- Switch bundled JRE to Amazon Corretto 8

Issues fixed in 14.0.6:

- Minor enhancements to the decay subsystem.

Issues fixed in 14.0.2:

- Added option to omit username/hostname data in licstat.

Issues fixed in 14.0:

- Log parser, when using -single use initialization time of log file as start time instead of midnight
- License server, fixed an issue when using a DONGLE with a lowercase ID string, the server would exit after 10 minutes due to inconsistent case comparisons.
- Core LM-X, fixed an issue where in rare circumstances LM-X could crash while gathering hostids on macOS.
- Almutil, fixed an issue where temporary files would be left in %TEMP%\xf-dll on Windows
- URT, fixed an issue where on error the URT would fail to clean up the scratch directory
- Almutil GUI, when server installation is detected on Windows, add a new tab that displays some basic diagnostic information.
- Log parser, fixed issue where parser could throw out some borrow transactions in log files coming from the HHWU system

Issues fixed in 13.3:

- Updated/added some decay files
- Fixed an issue where the server could say transaction not found on a failed checkout
- Officially Support Windows Server 2016

Issues fixed in 13.2:

- Fixed possible crash in server decay code
- Updated/added some decay files

Issues fixed in 13.1:

- Add support for incorrectly named plist files to gui
- fix gui build on osx to use proper bundle prefix name
- bundle prefix of qt package on OSX is incorrect

- Add Denial info to almutil licstat output
- Server hangs for unknown reason
- Incorrect message in server hooks
- clear icon not showing up in server hostname entry for licstat
- lmx server on windows does not shut down in a timely manner. Causes error 1053 in Services Manager
- Add status display to remote admin tab
- Change default values for borrow in the GUI
- Fully support perpetual licenses (no end date)
- failed checkout rollback can result in "ERROR: Couldn't find previous record for writing transactional log"
- log client failing to retrieve logs from production HHWU
- Transaction logs print incorrect data for used and requested on error vs LMX_SUCCESS
- Parser doesn't print units in use when LMX_NOT_ENOUGH happens
- When LMX LOGFILE_ROTATE_INTERVAL is set to WEEK it creates 2 logs instead of 1
- Print more information if: (Err: 10) HostID does not match license
- A partner would like a way to get effective license path
- Add status command to the altairlmxd init script on linux

Issues fixed in 13.0:

- Try to clarify almutil usage when using HHWU with proxies
- If netlibtoccheckin is called during a borrow then checkin failure shows up in server log
- Read token count to successful checkout in logs
- Server path missing from Error Description with multiple hosts in ALTAIR_LICENSE_PATH
- Parser incorrectly reads older logs (1.0.0)
- Support Dongles on 64bit Linux for server and clients
- Refactor ALSDK logging system
- LMX_SetFeatureListOption will always return LMX_FEATURE_NOT_FOUND when asked to apply to all features
- alm_timet_to_yyyy_mm_dd_hh_mm_tzoffset doesn't work on windows
- Add additional information in ALSDK Debug info
- Begin migration of LMX naming to ALM naming
- Windows lib loading/unloading mutex is invalid
- Add "Qlogic" as a whitelisted virtual adapter
- Users would like either the Server Name or at least the UUID in the confirmation email from the URT server
- There is a typo and an incorrect path in HHWU documentation.
- Print underlying system errors encountered during export/load of inner LMX DLL
- Clients using borrowed licenses do not honor the Version tag of the license for both LM-X and HHWU
- all non XML output from almutil -licstatxml should go to stderr
- HHWU xml export shows enddate of none
- For OSX 10.11 need to fix the launchctl plist to make sure it has a full path vs relative path
- single server in server list isn't saved to disk on Linux x64
- Add multi-select for feature filter in gui
- GlobalZone Feature and Hyperworks Feature mismatch
- Add ability for GUI to export XML version of currently displayed licstat
- add licstat xml output generation to almutil library
- Parser needs to understand new transaction log format with added extended version string
- Have HOSTID list fill in description fields
- Mismatch for ALTAIR_LICENSE_PATH values in error string vs what LMX actually used

- user@host string in licstat output (gui and cli) is the same even though two hosts were used.
- Make HHWU understand new extended version string
- make borrow hour box a little wider on windows
- During Installation, Proxy timeout take inordinately long time
- wrong decay item selected on delete/update
- addDecayConfiguration had a useless/ignored argument
- Change Timeout feature to log correct version number instead of version 1
- Add extended version strings and/or numbers.
- User Profile messages do not show up in the transaction log till a checkout/checkin is done
- Ability to resize portions of the licstat tab to make HOSTS sections bigger

Issues fixed in 12.2:

- Build date and time in vendor lib could be more natural looking

- Issue reading license files when mail somehow mangles line endings

- Add license expiration date in normal log file

- URT Client should gracefully exit if the config file path isn't set

- Add space to validateDirectory error message

- Possible issue when checking connection to https proxy

- Implement All the old decay types in HHWU

- Implement Node based decay in HHWU

- Implement Node based decay in LMX servers

- URT client should catch jersey exceptions and give a "friendly error"

- Wrong header added for https proxy server

- Nullpointer and arrayindex exceptions possible in HHWU

- Licensing misspelled in installer when blank license file is chosen

- Lack of newline causes decay sig check to fail

- Need to include the 2010 C++ Microsoft runtime redistributable package

- Transaction rollback for hhwu sets expire_days to -1

- Incorrect version numbers in transaction logs

- Server description on Windows is still 12.1.0

- HHWU thinks decay is happening when it isn't

- Installer doesn't detect previous installs that use launchctl

- Installer claims it couldn't delete the shortcuts from previous install but actually did

- Remove AIX from supported platforms

Issues fixed fixed in 12.1:

- Query license parts (exec/libs) about what version it is

- Add where the license was checked out from into the license logs
- almutil allows HHWU proxy port to be set higher than TCP allows
- Change HHWU disconnected timeout to 30 minutes
- Add licstat functionality to almutil for HHWU
- Possible heartbeat thread issue fixed
- Issue with server keeping track of values when RESERVE is used in config file
- Reservations with checkouts that extend past expire seem to linger in logrolls
- LMX accounting logs are reporting themselves as coming from LMX 444
- Windows server hooks don't read decay files
- Convert server startup to use launchd on OS X instead of old rc scripts etc
- Buffer sometimes not big enough in GetUserGroup() and Getusername() in LMX
- Make server case independent for feature names
- Infrastructure - switch to events on Windows for thread signaling
- Server hooks encounter error checking processing directory on 32-bit Windows
- lic server can balloon in memory usage and licstats take long time or timeout
- Issue with server keeping track of values when LIMIT is used in config file
- Add a feature to almutil -licstat to only print totals
- Server crashed on startup when log file in data/processing
- Denials being reported that didn't happen
- Add printout of details in altair-serv.cfg
- Support dates past Jan of 2038 (64bit platforms only)
- LMX client hangs after being rejected from server
- Problem writing HHWU secure store on 32-bit Windows
- Add ability to specify HHWU or LMX or both for almutil -licstat
- Parser should say what exception happened when one occurs
- Invalid pending files aren't getting moved aside
- Log file readability enhancements

Issues fixed in 12.0.3:
- RESERVE keyword in server config file not working correctly
- Increase max line length in server config file

- Actual number of features column in logs is zero for borrows
- Junk value in "units used at checkin" field for borrow normal return
- Missing hostname in documentation for trans logs
- Buffer sometimes not big enough in GetUserGroup() and Getusername() in LMX
- All remaining HAL peers "freeze" for a period when a peer goes down
- Init scripts kill lmx-serv generically, not just Altair's
- Parser should say what exception happened when one occurs
- Deal with possible bad characters in log files
- Parser can pick up the wrong log close date if there are multiples in the input file
- The parser reports the missing sig from a HHWU log as a failure when it should be n/a
- If the checksum is missing, the parser fails to print all the data (app name)
- Fixed several issues with parsed output
- Units used at check in should be -1 for certain cases

Issues fixed in 12.0.2:
- Decrease memory footprint of License Server
- Performance issue on OS-X slower than other platforms
- License Server seems to hang sometimes on start up on Windows
- Two shut down messages printed by lm-x server on exit
- Server hooks starting the urt client more than it should
- Answering no to 'do you have a license' question results in broken default license line
- Server crashes under heavy load (both HAL and Single Servers)
- Server seems to double some transaction log entries
- Some files not moved from pending directory during URT run

Issues fixed in 12.0.1:
- Possibility that there will be 2 items on 1 line in trans logs
- Fix lock file issue

- Incorrect documentation for message transactions
- The ALM_PROJECT string is not included in the LMX logs if the transaction errored
- Missing fields in anon log with messages
- Server does not properly log carry over borrow transaction on server restart, it should
- When a borrow carries over at a midnight log roll, the borrow expire time becomes epoch
- Change error message when the server can't find the alus.com
- The signature field on each line of the trans log is the same on hpux no matter the content
- Borrow return leaves extra messages in the log
- Server may hang when URT runs
- When using units based decay, it counts the first bucket twice
- Some fields in the transaction log restart roll over are wrong
- The SN field in the transaction log is only intermittently written
- RC/RO records not being re-printed in accounting logs after log roll
- LMX server crashes if you try to override directories with environment variables
- Sometimes there are multiple checkouts for HyperWorks in a single 'checkout'
- Issue with Intel Virtual Network Adapters not being recognized as valid host ID
- Log parser must support reprints of RO records after log roll
- URT client overwrites zip file to be sent because of same names
- Log parser will leave reservations open because RE/RN not in transaction logs
- Servers crash and/or hang when using HAL

Known Issues and Additional Information

IMPORTANT:

The license server's default configuration will write a log file named
<installation>/logs/<hostname>.log This log file is appended to when the server restarts, and is not overwritten. The system administrator should monitor this file as all platforms have file size limits that could cause the license server to be shut down due to the log file reaching these file size limitations. The log file should be 'rotated' to maintain a manageable size. See the section above about the new config file setting for automatic log file rotation to help with this.

The URT (Reporting mechanism) will also write and save files in <installation>/data/* Those directories should also be monitored such that saved log files do not fill the systems disk.

All Platforms:

There are several Altair specific changes to the lmx-serv. Please note the following:

1. Do not upgrade lmx-serv with a different version than the one distributed by Altair. This is NOT SUPPORTED and will not work.

2. When performing an upgrade, if you have changed/edited the urt.bat or urt.sh file to modify automatic reporting, the installer will overwrite your version with the standard one. You should make a backup of your version and/or reapply your changes to the new one.

Windows Specific Issues:

If you need to manually add or remove the license service outside of the installer you can use a script in the 'scripts' directory named install_service.bat. This script can be used to install the service, or as a reference on how to do it. You will have to delete the service with the following two commands: sc stop "Altair License Server" and then: sc delete "Altair License Server"

Linux Specific Issues:

Due to a bug in some versions of systemd, when upgrading a previous version of the Altair License Manager. The installer will issue the command:

systemctl daemon-reexec

This will restart systemd. This should not disrupt anything on a running system.

When trying to run the installer from the command line (or console) mode without graphics, the installer may fail. The installer may try to initialize the X window libraries. To work around this problem, make sure the environment variable DISPLAY is unset and provide the "-i console" argument on the command line.

If you have modified the altairlmxd.service unit file to e.g. set rlimits, change the user the daemon is run as, etc. These changes will not persist an upgrade. You will need to re-add your changes and restart the service post-install for the changes to propagate.

macOS specific issues:

Once you download the installer .zip file, you should run it from finder.   Start by double clicking on the .zip file to expand it and then double click the installer it created.   There seems to be some issues if you try to unzip and run from a terminal window.

The installer only supports GUI mode.

The server is installed (by default) in /Applications/Altair/licensing<major.minor> and has been changed to use launchctl for starting and stopping of the license server.   See the installation guide for more details.

Sometimes at the end of installation a dialog box will pop up indicating a problem communicating with iCloud. This is a InstallAnywhere issue and has been reported to Revenera. This dialog can be safely ignored.