# License Statistics v5.14 Release Notes

License Statistics version 5.14 includes the enhancements and fixes detailed below. Most of these improvements were made in response to customer feedback. For more information on how we incorporate customer feedback into our development process, see Customer-driven development. For information about activating your License Statistics license, see Activating a License Statistics license on Windows or Activating a License Statistics license online.

## (i) Performance

This release is a result of our hard work to improve License Statistics performance in terms of the number of servers, features and users it is possible to monitor. We achieved these improvements by making changes in data structure and application architecture and by reducing the number of technologies used (which will be continued in future releases for easier maintenance and higher stability). It's also expected that the amount of resources required to run License Statistics will decrease.

Details about the changes introduced in this release are given below. For larger installations, we strongly recommend testing the upgrade procedure before running License Statistics v5.14 in production. If you have any questions or problems, please contact X-Formation Support.

#### Database Structure

This release significantly modified the database structure. Make sure you follow the License Statistics upgrade procedure, especially:

- Create a backup of the License Statistics database in case of any issues with the data migration.
- Use the new configuration file (xflicstat.cfg) delivered with License Statistics, and adjust it to your needs instead of copying your
  previous configuration file to the new installation.

## SQL Console

Due to significant changes in database structure, we are not able to deliver backward compatibility for custom queries saved in SQL Console. Saved queries may stop working after upgrading to License Statistics v5.14, and they will have to be removed or adjusted to accommodate the new structure.

### Configuration file

Renaming of the REPORTSERVER\_PORT key to CORE\_HTTP\_PORT is a breaking change in xflicstat.cfg. License Statistics won't start if this configuration key isn't changed.

#### Enhancements

#### License Statistics v5.14 includes the following enhancements.

lssue #	Description			
New data	New database structure			
LICSTAT -14327 LICSTAT -14104 LICSTAT -13025	<ul> <li>Made significant performance improvements in terms of:</li> <li>report generation</li> <li>increased maximum number of monitored license servers, features and users</li> <li>reduced resource consumption (less CPU, memory and storage capacity required for larger application setups)</li> </ul>			
LICSTAT -14106 LICSTAT -13820 LICSTAT -12715 LICSTAT -10995	Redesigned data aggregation system to gain report performance improvement.			
LICSTAT -13024	Changed the method of executing migrations by one component instead of two.			
LICSTAT -12573	Migrated from old sampling-based data structure to new event-based data structure.			

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LICSTAT -12062	Removed all database views, triggers and stored procedures.						
LICSTAT -12048							
LICSTAT -11931							
Improved	application architecture						
LICSTAT -14381	Separate Java components were merged into single multi-module Java component to reduce resource consumption and simplify maintenance.						
LICSTAT -14251	Old components New component						
LICSTAT -10973	<ul> <li>api.jar</li> <li>core.jar</li> <li>parser.jar</li> <li>querytool.jar</li> <li>report.jar</li> </ul>	• core.jar	• core.jar				
LICSTAT -14381	Made changes in configuration file (xflicstat.cfg):   Renamed key:   RepORTSERVER_PORT to CORE_HTTP_PORT (default 8060)  Removed keys:  MYSQL_CONNECTION_SHARE_CORE  MYSQL_CONNECTION_SHARE_REPORT  RPCSERVER_PORT  CORE_SERVICE_PORT  DENYLOG_FEATURE_VERSIONING						
LICSTAT -14235	Former C++ code respor	sible for query	ing, parsing and analyzing data	a from License Servers was re	e-designed and re-implemented in Java.		
LICSTAT -13342	Separate C++ libraries were rewritten to single multi-module Java component to reduce technological stack and simplify architecture.						
	Old components	New component					
	<ul> <li>libxflicstat_core.sc</li> <li>xflicstat_core.dll</li> </ul>	• core.ja	ar				
Parser ad	ljustments						
LICSTAT -14849	Implemented stricter xsd structure for custom license server:						
	Attribute name	Required	Previously allowed values	Currently allowed values			
	EXPIRES	No Any string		<ul> <li>Empty string</li> <li>"permanent"</li> <li>A date in the format: YYYY-MM-dd</li> </ul>			
	CHECKOUT_TIME	Yes	Any string	A date in the format: YYYY-MM-dd HH:mm			
	BORROW_EXPIRE_TIME	No	Any string	A date in the format: YYYY-MM-dd HH:mm			
LICSTAT	Unified algorithm for pars	sing Reserved	and Borrowed licenses, regard	less of license manager type:			
-14400							
I ICOTAT	Note: Previously, reserved licenses were considered as used for FlexNet License Manager, but were not considered used for LM-X, Custom and DSLS						
LICSTAT -14377 LICSTAT -13656		ed licenses we	re considered as used for Flex	Net License Manager, but wer	re not considered used for LM-X, Custom and DSLS		
-14377 LICSTAT	license managers.			• · ·	re not considered used for LM-X, Custom and DSLS		
-14377 LICSTAT -13656 LICSTAT	license managers.	rsing results ad	cross all supported license mar	• · ·			
-14377 LICSTAT -13656 LICSTAT -12884 LICSTAT	license managers. Introduced consistent pa Introduced feature versio	rsing results ac	cross all supported license mar et import parser.	nagers compatible with previou			

LICSTAT -14401	Extended API endpoints for operations on license servers.				
LICSTAT -14380					
LICSTAT -14343					
LICSTAT -14386	Added API endpoints for operations on license server aliases.				
LICSTAT -14336					
LICSTAT -14076					
LICSTAT -14069	Added API endpoint to get status of scheduled tasks (previously requested asynchronous operation).				
LICSTAT -12379	Added API endpoints for operations on features.				
LICSTAT -12378	Added group)		on feature composites (lists of match	ning features on different license servers that are part of the same license server	
LICSTAT -12364	Added	API endpoints for Database M	anagement operations.		
Licensing					
LICSTAT -14468	Improv	ed handling when the License	Statistics license's expiration date of	or limit on monitored users is exceeded.	
LICSTAT -13279		License exceeded scenario	Previous handling	Current handling	
10210	1	Expiration date expires while application is running. (Not applicable to Perpetual license.)	All license servers are disabled. User needs to enable them manually after the license is renewed.	Monitoring of all license servers is turned off, but license servers are not disabled (enabled flag is not changed). After license renewal, license server monitoring is automatically turned on, up to the new license limit. If the maximum number of allowed license servers is fewer than in the previously expired license, then the maximum number of oldest license servers will be turned on.	
	2	Maximum allowed user count from last 14 days was exceeded while monitoring license server.	All data read from license server in current iteration is not saved in database. License server is <b>DISABLED</b> . User needs to enable them manually after the license is renewed.	All data read from license server in current iteration is not saved in database and email notification is sent (if configured). License server is <b>NOT DISABLED</b> . Data from future iterations will be stored if the license allows for it.	
	Note: Licensing rules and types of supported licenses are not changed. All existing licenses remain active on the same conditions as before.				
Additiona	l enhan	cements			
LICSTAT -14860	Added	new email alert for exceeding	License Statistics license's user lim	it.	
LICSTAT -14856		ed calculation of users for Curr mes only).	ent License Usage pie chart on Cu	rrent Users report to match calculation used for licensing (user-host pairs or	
LICSTAT -14822	Extend	led SQL Console with ability to	make queries returning results in a	ddition to SELECT (for example, SHOW or EXPLAIN queries can now be used).	
LICSTAT -14669	Import	ing LDAP User Groups functior	nality no longer creates empty User	Groups.	
LICSTAT -14655	• h	ttps://feedback.x-formation.cor		email templates, GUI, installer, etc.:	
LICSTAT -14645					
LICSTAT -14644					
LICSTAT -14649	EULA	in installer has been updated to	o newest available version.		
LICSTAT -14647					
LICSTAT -14513	Dropped ability to "Remove historical data" using the License Server tab. The entire license server can now be removed using the Administration tab, even if there is no configuration for it.				

LICSTAT -14490	Introduced information about newest available License Statistics version on page footer. <i>Note: This feature requires an internet connection; otherwise, no information about new versions will be visible.</i>
LICSTAT -14460	Removed functionality of merging two realtime license servers, which was conditionally possible due to an old bug in v4.6.1.
LICSTAT -14342	After making changes to user, host, or license server groups, License Statistics automatically re-generates the reports according to the changes. Note: It typically takes a few minutes before changes are visible on reports using the edited groups.
LICSTAT -13490	Improved label for the Data Removal feature to clarify that the selected day is removed inclusively.
LICSTAT -12940	Improved quality of data presented on Usage Per User report. Max columns for group aggregations are calculated based on maximum concurrent usage, not the sum of user maximum usages.
LICSTAT -12449	Changed Realtime Users Count report to show Denied Users count for the particular date, instead of an incremental sum of historical denials.
LICSTAT -12390	Prevented removing data from current day using the Data Removal feature.
LICSTAT -10995	Changed Usage Per User report data aggregation to delay until end of the first day of running License Statistics. All Usage Per User reports are now automatically available starting the day following the day that the first data was gathered.

# Fixes

License Statistics v5.14 includes the following fixes.

Issue #	Description
LICSTAT-14913	Fixed an issue with inability to import usage from SPLM log file.
LICSTAT-14910	Fixed an issue with invalid link to Current Usage for feature group.
LICSTAT-14875	Fixed an issue with expired features being visible on tooltip on Expiring Features Chart.
LICSTAT-14870	Fixed an issue with misleading text for empty Imported License Servers grid.
LICSTAT-14864	Fixed an issue with filter not working on Feature drop-down list.
LICSTAT-14863	Fixed an issue with error when timeout occurred on one of redundant DSLS license servers.
LICSTAT-14862	Fixed an issue with error when importing FlexNet log file.
LICSTAT-14855	Fixed an issue with error when exporting a report with a large number of columns to PDF.
LICSTAT-14824	Fixed an issue with SQL Console result grid visible for some queries that were returning no output.
LICSTAT-14823	Fixed an issue with failing migration 102.
LICSTAT-14783	
LICSTAT-14816	Fixed an issue with slow rendering of some charts.
LICSTAT-14801	
LICSTAT-14800	Fixed an issue with broken grid pagination on Expiring Features report.
LICSTAT-14782	Fixed an issue with incorrect documentation for Hours Used for Usage Per User report.
LICSTAT-14780	Fixed an issue with inability to add Email Subscription for License Server with one Feature using "All" option.
LICSTAT-14775	Fixed an issue with incorrect date format saved in GUI Preferences for Feature Usage History grid on Dashboard.
LICSTAT-14771	Fixed an issue with too long LDAP connection timeout for authorization and settings verification.
LICSTAT-14768	Fixed an issue with invalid End Date saved for Time Interval settings in GUI Preferences.
LICSTAT-14761	Fixed an issue with misleading text on Current Feature Usage grid when no data is visible.
LICSTAT-14746	Fixed an issue with invalid rounding of values for Feature Utilization.
LICSTAT-14744	Fixed an issue with not closing some open sessions in database on time.
LICSTAT-12145	
LICSTAT-11268	
LICSTAT-14741	Fixed an issue with missing text for empty Feature Usage History grid when Hours Used column is hidden.

LICSTAT-14719	Fixed an issue with stopping application processes.
LICSTAT-12267	
LICSTAT-14615	Fixed an issue with active link to hidden license server on Administration page.
LICSTAT-14488	Fixed an issue with inconsistent support for disabling Realtime Denials.
LICSTAT-14266	Fixed an issue with lack of visible error message for invalid license server configuration.
LICSTAT-14080	Fixed an issue with missing documentation for OLicense and TLM query tools.
LICSTAT-13259	Fixed an issue with missing Last Import Time for some license servers.
LICSTAT-13242	Fixed an issue with some sessions being merged into one on User History report.
LICSTAT-12455	Fixed an issue with inability to call query tool command with specific arguments.
LICSTAT-12291	Fixed an issue with missing file names in installer.
LICSTAT-10302	Fixed an issue with logout on Feature Visibility page when hidden License Server was loaded from GUI Preferences.