# JTB FlexReport Core Documentation

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General information

It’s recommended to install JTB FlexReport on a server or a PC that is running 24 hours per day, for example the license server or one of the license servers you have. For license systems like FlexNet/FLEXlm, JTB FlexReport Core Service must be running to be able to get continuous data recorded.

During trial JTB FlexReport can be installed on a PC. There are cases for example if the servers have no contact with each other when it’s preferable to install JTB FlexReport on two or more servers. In cases like this it’s possible to consolidate the MS Access databases for aggregated reports. SQL Server databases need to be consolidated manually. Otherwise one installation of JTB FlexReport can monitor multiple license servers.

**JTB FlexReport Core** is the mandatory installer. It will create a service named “JTB FlexReport Core Service” used to track and save the usage of network licenses.

**JTB FlexReport Report Service** and **JTB FlexReport Report Client** are separate installers that are required for the reports. JTB FlexReport Report Service is typically installed on the same computer as JTB FlexReport Core. The client can also be installed on the same computer or on other computers that need access to the reports. There is a separate documentation PDF for JTB FlexReport Report Service and Client.

MS Access is not needed to be installed on the server/PC where JTB FlexReport is installed even if MS Access is used as a database backend.

MS Access or SQL Server/SQL Server Express can be used as database backend.

**SQL Server recommendation:**

If you can, use Windows authentication. Windows authentication offers the following security advantages as compared to SQL authentication:

- Accounts are centralized and managed by your Active Directory or local authority store.
- Strong password policies can be controlled and enforced by your domain or local security policy.
- Passwords are not transmitted over the network.
- User IDs and passwords are not specified in database connection strings.

If you use SQL Server authentication, make sure that you use a least-privileged account with a strong password.

**JTB FlexReport SPLM Client** and **JTB FlexReport SPLM Service** are needed to report on SPLM licensed applications and require two separate installations. The SPLM client needs to be installed where the SPLM license server is running. SPLM Service should be installed on the same computer as JTB FlexReport Core.

**JTB FlexReport Process Monitor Client** and **JTB FlexReport Process Monitor Service** are two optional installers for monitoring of usage of most any other application that are not supported by JTB FlexReport Core or SPLM. The Process Monitor Client needs to be installed on all machines to be monitored. JTB FlexReport Process Monitor Service should be installed on the same computer as JTB FlexReport Core. There is a separate documentation PDF for JTB FlexReport Process Monitor.
Installation

Start the installation by unzipping JTBFlexReportCoreSetup_<version#>.Zip to a temporary location and run the Setup.exe file.

Administration user rights are needed.

Make sure that you select the Everyone option in the above dialog box. Otherwise you might get problems to run the program as a service.

Default folder on Windows 32-bit is C:\Program Files\JTB World\JTB FlexReport\nDefault folder on Windows 64-bit is C:\Program Files (x86)\JTB World\JTB FlexReport\n
While installing, the folder Program Files (x86) can’t be changed to Program Files.

When you install JTB FlexReport it is automatically preparing JTBFlexReport.exe to be able to run as a Windows service. After installation the service “JTB FlexReport Core Service” is installed.

On the Windows Start menu, JTB FlexReport folder has JTB FlexReport Config that can be started as well as access to the documentation.
Getting started

**JTB FlexReport Core Service** needs to be running as a Windows service because then it can run without having a user logged on to the server or PC where JTBFlexReport.exe is running. JTBFlexReport.exe is the application that at every specified interval logs a snapshot of the license usage to the database. JTBFlexReport.exe will also be automatically started when the server/PC is started. If JTBFlexReport.exe is crashing the service will restart it as well. Normally you don't run JTBFlexReport.exe manually.

It's strongly recommended for performance reasons to have the main database (JTBFlexReport.NET.mdb) located on the same PC as JTBFlexReport.exe is running. The service normally doesn't have access to other locations. This does not apply if SQL Server is used where the SQL Server can be anywhere in the network.

After the installation is ready run **JTB FlexReport Config** from the Start>Programs>JTB FlexReport menu or “JTB FlexReport Config.exe” in the installation folder (by default in C:\Program Files\JTB World\JTB FlexReport alternatively C:\Program Files (x86)\JTB World\JTB FlexReport).

You need a permanent or trial license to be able to log data to the database. See License Activation button.

On the General tab press **Configure Database** and specify database to use.

If you want to be able to report on FlexNet licenses, click on the **FlexNet tab** and fill in “Licenses to report on”. Or select any of the other license servers of your choice. Let the service run for a minute or two and check that JTBFlexReport2.htm is showing the data correctly. JTBFlexReport2.htm can be opened from the HTML tab.

If that works you should be able to create a report with the JTBFlexReport Report Client (Report Client on the General tab). To be something to look at it needs data for several hours or days.

If that doesn't work can you try to locate JTBFlexReport.log file in the temporary folder %ALLUSERSPROFILE%\JTB World\JTB FlexReport and send it (zipped) to us. (path is found on the Advanced tab)

For JTB World support to be able to track other issues you can activate a debug log file in JTB FlexReport Config>Advanced>Debug log creation. Restart the JTB FlexReport Core service. Let the service run for at least 2 times the minutes your interval is set to (default is 10). A file named JTBFlexReportDebug.log will be created in the temporary folder you have specified (default is %ALLUSERSPROFILE%\JTB World\JTB FlexReport). If there is a JTBFlexReport.log file send it as well. Zip and email the log files you have. When you are ready deactivate the debug log creation and restart the JTB FlexReport Core service.
License activation

At bottom left of the JTB FlexReport Core Configurator click on “License Activation”.

After purchase has been done or to extend a trial period, send the computer number that shows in the dialog box to JTB World at info@jtbworld.com to receive the Activation Key.

If a trial is activated, text to the right of the button will show how many days are left of the trial.
Create or import to SQL Server database

This only applies if SQL Server is used for the main (backend) database.

Easiest access is on the General tab of JTB FlexReport Core Configurator.

Or run ConvertAccessToSql.exe that is located in the installation folder. Run it as administrator.

Create

Do not just manually create a database in SQL Server unless the correct script is used, otherwise the needed tables and indexes will not be created.

The SQL Server database is either created with the “Create SQL DB” tool and Create DB button or using the Create SQL File button to create the script that can be run within Microsoft SQL Server Management Studio.

To create a database select server name and give the database a name in Database Name and select authentication settings. No need to enter anything in Select Access Database>Database Name to just create the database. Click on Create DB. Alternatively click on Create SQL File.
**Authentication and database connection**

Select the authentication and SQL Server Name. If needed press Load SQL Servers and select Server Name. Enter the name of the database to be created in the Databases field.

Sometimes the Server Name is not populated and needs to be added manually. For example SQL Server Express sometimes needs to be added manually like this `.\sqlexpress` or `(local)`\sqlexpress if the instance name is sqlexpress.

To list existing databases click on Load DB Names.

**Create database**

Select server name and give the database a name and select authentication.

Click on Create DB.

**SQL Server database permissions**

The database needs 'db_backupoperator', 'db_datareader' and 'db_datawriter' permissions.
Steps to create a new SQL user

1. Right click the 'Login' folder inside 'Security' which is directly under the Server.
2. Select 'New Login'
3. In General tab: Enter the Login name and respective credentials to it.

4. In User Mappings:
   
a. Select the database you want to access in the 'User mapped to this login' section
   
b. Select the default schema for the respective database by clicking the '...' button.
c. Select 'db_backupoperator', 'db_datareader' and 'db_datawriter' permissions in the 'Database role membership'.

5. In Securables:
   a. Click the 'Search' button, 'Add Objects' dialog box will appear.
   b. Select the 'The Server: serverName' option, and press Ok.
c. Then grant the 'Connect SQL' permission in 'Permission for: serverName' section.

6. In Status: Make sure you've assigned the 'Enabled' for Login and 'Grant' for Permission
Some users have found these steps needed to take:

It is pretty much the same as above instructions. The only thing different was create a new Active Directory group, add in the service account created and server (Computer Account) that JTB FlexReport is installed on. Then in the SQL Management console add this group with the permissions provided above.

On the server JTB FlexReport is installed on, log on using the service account to configure.
Manual import from Access to SQL Server

This requires that the database first is created on SQL Server using “Create SQL DB” in JTB FlexReport Config.

Microsoft SQL Server Management Studio also needs to be installed.

Multiple databases can be imported and consolidated this way.

Run “Import and Export Data (32-bit)” or right click on the database and select Tasks>Import Data.

Make sure to specify Microsoft Access as source from which to copy data and browse for the MDB file.

Specify destination, server name, authentication and database.

Make this selection to copy data.

Select all tables to import.

Select the row for tblAppName and click on Edit Mappings...

Check “Enable identity insert” and click on OK.
Edit also the mappings for tblAppName, tblGroups, tblHostDetails, tblHostGroups, tblProjects, tblServerNames, tblUserDetailedLog and tblUserDetails and enable identity insert.

Click next and then check "Run immediately" and click on Finish.

Warnings can typically be ignored but errors need to be solved. If errors check the messages.

Sometimes strange errors can happen where it simply helps to import the tables one by one or a few at a time.

After this run JTB FlexReport Service Configurator and configure it against this database and run the sampling service to populate the UserDetailedLogTemp table that is needed for certain reports.
JTB FlexReport Core Configurator

JTB FlexReport Core Configurator (JTB FlexReport Config.exe) is where all settings can be reached and from where reports can be accessed.

Save Settings will save changes done on any of the tabs.
Save Settings and Exit will also save changes and then exit.
Cancel will exit without saving.

General tab

JTB FlexReport can be configured as a Windows service named “JTB FlexReport Core Service” by checking the “Use Service” check box on the General tab. This means that there is no need to have a Windows user account logged in and the logging to the database will still work.

Configure JTB FlexReport as Service is available on the General tab in JTB FlexReport Config.

To start the service click on “Start Service”.
To stop the service click on “Stop Service”.
The service can be stopped, started or restarted also from Windows Services console.
Restarting (stop and start) the service is needed after making settings changes or doing a license activation.
Show or Hide tabs for different license systems can be used to show or hide tabs. It only affects what tabs are seen in the configurator or not.

Database Utilities

The data in this window will be populated automatically when the JTB FlexReport Core Service (JTBFlexReport.exe) has started to harvest data. So you need to wait for a few minutes before anything shows up here.

**Feature** – This is the name of the feature (application or module).

**Description** – If nothing is entered here the Feature is used as a description. Here you can enter your own description to easier identify the application. As an example: the feature 64300ACD_F is actually the AutoCAD package feature. The description has to be used when a feature includes characters : / ? * [ or ]. The description also has to be used when the feature has more than 28 characters. Notice that the Description must be unique for each row unless it is empty. You cannot have two rows with the same description and you cannot have one row with a description that is the same as the Feature name for another row.

Use the Get Feature Descriptions button to fill in descriptions automatically based on [http://jtbworld.com/jtb_flexreport/FlexNetFeatures.xml](http://jtbworld.com/jtb_flexreport/FlexNetFeatures.xml).

Sometimes "Get Feature Descriptions" can be blocked to download the feature description list due to firewall or other security restrictions. Download the FlexNetFeatures.xml file and save it in the JTB FlexReport Core installation folder “JTB FlexReport”.

**NoLog** – Any row that is checked will not be logged into the database. This will save a lot on the size of the database if there are features that don’t have to be logged for some reasons. Changing this checkbox will not affect any existing data in the database but if NoLog is checked you will not be able to report on this feature.
Email Notification Percentage Level – Use a value between 0 and 100. If the feature has 10 licenses and the level is 90% an email will be sent when 9 or 10 licenses are used. Empty the value to not have any email notification.

Email Notification Licenses Left - If the feature has 10 licenses and this value is 1 an email will be sent when 9 or 10 licenses are used. Empty the value to not have any email notification.

If both Email Notification Percentage Level and Email Notification Licenses Left have values the one that first is reached will be used.

Email Notification Denials – Receive emails if licenses are denied for this feature.

Email Notification Licenses Max – Email notifications if license usage is more than the specified number. If Max is 5 and 6 licenses are used you will be notified.

MaxLic – Can be used to manually override the number of issues licenses a feature have. Normally this is not needed. This will be used in the chart reports.

DisplayAsUser – Display as User is an advanced feature where the “display” is used instead of the “user”. When running lmutil.exe lmstat it lists info like this and normally display is not used.

user host display (v2.000) (server/27005 221), start Mon 7/4 10:28

To be able to use the email notifications make the settings on the Notifications tab.

Use the buttons Check All in Current Column and Uncheck All in Current Column to quickly check or uncheck all checkboxes in the current column.
**Servers**

The data in this window will be populated automatically when JTBFlexReport.exe has started to harvest data. So you need to wait for a few minutes before anything shows up here.

**Server Name** – This is the name of the server that uses FLEXlm.

**Server Description** – Here you can enter your own description to easier identify the server. This description is used in various reports.

**MaxLic** – This is rarely needed to be used and will be used by the chart reports. This will be used for available license line if a report is created for only a server.

**Ping Test** – Include this server for ping tests.

To be able to use the ping test make the settings on the Notifications tab.

**Configure Database**

**Database** – Click on Launch Service Configurator button or running ServiceConfigurator.exe.

Start making the choice of database. SQL Server or MS Access.

For **MS Access** browse for the location of the core database. As default with the name JTBFlexReport.NET.mdb. The database should be on the same computer as the service is running.

For **SQL Server** click on Load SQL Servers, then select authentication and FlexReport DB Server. Click on Load DB Names and select Database Name. If needed specify User ID and Password.

Note that first the SQL database needs to be created using Create SQL DB if it's not already existing.

Sometimes the Server Name is not populated and needs to be added manually. For example SQL Server Express sometimes needs to be added manually like this `\sqlexpress or (local)\sqlexpress if the instance name is sqlexpress.

Now click on Configure and after that Test DB Connection to make sure it works.
It’s a good practice to have JTB FlexReport.NET.mdb or the SQL Server database regularly backed up. Backup functionality is not included with JTB FlexReport.

**Group Administrator**
Opens the JTB FlexReport Group Administrator. Read more about it here.

**Database Administrator**
Opens the JTB FlexReport Database Administrator. Read more about it here.

**Create SQL DB**
Opens the tool to create an SQL database. Read more about it here.

**Update DB**
Update DB can be used to manually update the configured database to the latest database structure. This can also be used if you want to update a backup database to be able to run reports on it with the latest report tools. (Database is also normally updated automatically when the service is started.)

Another method to update the database is using JTB FlexReport Database Administration and use Compact the Main Database button.

**Snapshot Interval**
This is the interval between snapshots taken on the license usage and saved to the database. Default is 10 minutes. If you have many features and licenses and users don’t set the time too low because one snapshot can take several minutes and the database will also grow more. If you set the interval too high it decreases the accuracy in the resulting data. Acceptable values are: 1 2 3 4 5 6 10 12 15 20 and 30.

If the interval is changed after the service has been running for a time take a fresh copy of the database JTBFlexReport.NET.mdb and start using that one instead or manually empty the table “log”. Stop the service. Rename “JTBFlexReport.NET.mdb”. Copy “JTBFlexReport.NET (extra empty copy).mdb” and name it “JTBFlexReport.NET.mdb”. Start the service. Or if SQL Server is used the table “Log” needs to be emptied.

**Report Service/Client**
If the Report Service and Client are installed these buttons work as shortcuts to the apps:

- Report Service Configurator – Opens the JTB FlexReport Report Service Configurator
- Report Client Configurator – Opens the JTB FlexReport Report Client Configurator
- Report Client – Opens the JTB FlexReport Report Client

**Process Monitor**
If the Process Monitor Service and Client are installed these buttons work as shortcuts to the apps:

- PM Service Configurator
- PM Client Configurator
- Process Monitor Client
**HTML**

JTB FlexReport HTML Creator is a tool that helps to create HTML dashboard reports based on the Auto Report images that are created with the Report Client.
HTML tab

**HTML report grouped on servers** - HTML report path and name. This is optional. When the field is empty no report is created. This HTML report is a dynamic report. Servers can be expanded or collapsed to show or hide Features and Features can be expanded or collapsed to show or hide users. Use checkboxes to Exclude checked out date and borrow data, Aggregate at top, Black and white, Show reserved licenses or Show user groups (taken from either specified FlexNet options file or the Group Administrator.

**HTML report grouped on features** - HTML report path and name. This is optional. When the field is empty no report is created. This HTML report is a dynamic report. Features can be expanded or collapsed to show or hide users. On the row with user info the server is also seen. Use checkboxes to Exclude checked out date and borrow data, Aggregate at top, Black and white or Show reserved licenses.

**Simplified legacy HTML report** - HTML report path and name. This is optional. When the field is empty no report is created. Use checkboxes to Exclude borrow data or Show reserved licenses.

**HTMLBackup** - Folder for backup copies of the HTML reports. This is optional. When the field is empty no backups are created. This folder can quickly be filled with thousands of files since 1 file per every interval is created. With 10 minute interval 144 files are created each day.

For more details about paths to other servers see [File location on other servers](#).
Notifications tab

The above sample show settings that can be used with gmail. Use SMTP smtp.gmail.com, user name same as your gmail email, password is your email password, SMTP port 587, no default credentials and check “This server requires an encrypted connection (SSL)”.

**From** – Add a valid email address that the notifications will be sent from

**To** – Add one or more email addresses where to send the notifications to. Separate multiple email addresses with commas or semicolons.

**SMTP** – Add a valid SMTP server that can be used to send the emails via.

**User Name** – The user name for the SMTP server.

**Password** – The password for the SMTP server.

**SMTP port** – The port for the SMTP server.

**Use default credentials** – If the test email does not work you can try this option.

**This server requires an encrypted connection (SSL)**

**Send test email** – Press this button to send a test email using the settings above.

**Subject** – This is the subject that will be used on the email notification.

**Interval** – If the value is 1 or more an email will be send at that interval as a minimum if usage threshold has been reached for specified features. Thresholds must be added in the Features form that can be accessed from the Feature button on the General tab. If the interval is lower than the snapshot interval the snapshot interval will be used. For denials of FlexNet licenses the FlexNet tab needs to be used.

**Subject urgent** – This is the subject that will be used on the email notification.

**Interval urgent** – If the value is 1 or more an email will be send at that interval as a minimum if servers are unreachable. If the interval is lower than the snapshot interval the snapshot interval will be used.

**Include if server cannot be pinged** – Can be used if you don’t want urgent notifications for ping problems.

**Database size** – You can be notified if the database is becoming larger than the specified value.
After these settings have been done the notifications can be further specified in the Features dialog box.

**Advanced tab**

Temp path – A temporary path where the HTML reports are created and some other temporary files are created. Use this if you have problems with the rights on the HTML file when users try to access it. If specified the debug log and error log will be placed in this folder.

Debug log creation – This is a JTB FlexReport debug log. Creates a detailed debug log that might be requested by JTB World support to solve your problems. This is deactivated automatically once per day to avoid forgetting to deactivate it because it does slow down performance. The debug log can be deleted at any time. To change the location edit the Temp path field.

Timeout – If data is missing or license servers cannot be reached you can try to set the timeout to something. It’s not documented by the company behind FlexNet if this is in microseconds or milliseconds so you have to try. It is probably microseconds so a value of 1,000,000 would be a second.

Ping hosts borrowing at these times – Separate the times with semicolon like this: 9:30;15:30. At these times hosts that are borrowing licenses will be pinged and the result will be saved to the database so reports can be created based on this. See the Report Client > List Report > "Pinged Host Report".

Update active host IPs at these times – To be able to group hosts based on IP specify one or more times separated by semicolons.

Update all host IPs every ___ day at this time ____ – As the host IP can change by time force an update of the IP every other day at the time (or times) specified.

Run the service process JTBFlexReport.exe with low priority.

Normally this is not needed but can be used if there is need to use less CPU.

Do not log detailed usage – data with user and host information is not saved.

Use only to solve problems with multiple daemons in the same license file resulting in incorrect usage.
FlexNet (FLEXlm) tab

These settings are required to be able to report on FlexNet license usage.

Lmutil.exe - Lmutil is the path and file name for lmutil.exe. This is a required and should normally be the installation location of JTB FlexReport Core.

Find Licenses to report on - If you don’t know what to enter here you can begin with pressing the “Find Licenses to report on” button and it will try to find your licenses and add them. This may not find all your servers depending on different factors so you may need to manually add some or all. After entering the licenses to report on don’t press the Find button again.

You can also run lmtools.exe on the respective license server to see what port is used via Server Status>Perform Status Enquiry.

Note that the port 2080 is a common vendor port and should normally not be specified here.

You can also run this from the Windows command line either where JTB FlexReport is installed or where the license server is:

"C:\Program Files\JTB World\JTB FlexReport\lmutil.exe" lmstat -a > c:\testfile.txt

Look in the testfile.txt for rows starting with License server status: followed by port@server

To confirm that it should work run:

"C:\Program Files\JTB World\JTB FlexReport\lmutil.exe" lmstat -a -c port@server > c:\testfile.txt

Change port@server to 27000@server1 or whatever port and server is found and used.

Take a look at the testfile.txt or if not sure send it to JTB World to have it reviewed that it looks OK and without any error messages.
If you have redundant servers or a triad you can add them comma separated:
27000@triad1,27000@triad2,27000@triad3
It is strongly recommended that the “Server Name” column used for the triad.

Consider to add the port to the license file. This is especially needed if you have multiple license services on the same server. Otherwise the port might change when you make changes on the license server resulting in that data is no longer recorded.

See also this blog post: http://blog.jtbworld.com/2011/06/how-to-find-port-used-by-flexnet.html

Test to get current usage – Click on the test button to verify if the specified license server(s) are found.

Licenses to report on

port@server is the TCP/IP port and the license server. This is a mandatory field to be filled out to be able to report on FLEXenabled applications. One or many can be specified.

Notice that multiple port@server needs to go on separate rows. Redundant/triads are separated with commas in the same cell. It is strongly recommended that the “Server Name” column used for the triad.

Server Name – This is not an actual server name so any descriptive name you like can be used as will also be showing in the reports. If this column is empty the server name in port@server will be used, otherwise this value will be used instead to save the data and in reports. When specifying a triad of servers it is strongly recommended to specify a server name. When a domain name and domain is used like for example 27000@server.eu.net it is also recommended to use add a server name to avoid problems where the server sometimes is including the domain name and domain and sometimes not. Another reason the server name can be useful is if a continuous report will be made when the actual server name changes for example after moving the license server from one place to another.

If you have multiple vendors or ports on one server you can also make use of the Server Name and give each a unique name. For example 27000@myserver can be AutoCAD and 27001@server can be AVEVA. Note that if this change is done any old data will still have the old server name.

Description – This is more of a comment column and is not used other than in this grid.

FlexNet Debug Log

If you want to see denials in reports or be notified by email on denials of FlexNet add the FlexNet debug log file locations here. Information taken from the FlexNet debug log is saved in the database.

In JTB FlexReport Config> Features there is a column EmailNotificationDenials that also must be checked for features you want to be notified about.

The fields on Notifications must be filled in and Interval needs to be specified.

If you create the debug log using the OPT file it is often less verbose and is missing some information like date stamps (consider to change this and use lmtools.exe instead):

debuglog +"c:\debug.txt"

There are also other settings that can be used in the OPT file to force it to be even less verbose and totally useless for reporting on.
What seems to work best is to use lmtools.exe and specify **path to the debug log file**. If you don’t want the debug log to be deleted each time the server is restarted, add a + before the path set in lmtools like below:

Consider to start with a new FlexNet debug log file if it grows too much in file size or it will take a lot of time and CPU to process, this is especially true when distributed server groups are used.

If you have redundant servers (triad) you should add the log file to all servers. One can be added on the row where the port@server information is added. The other two can be added on two separate rows where port@server information is empty. Here is an example. Note that Server Name is same for all three rows and Log Group should be empty.

**Log group** — If you use distributed servers where the license requests can fall over from one server to another, add a name or number for this group. This group name must be used for all servers in a distributed server group. In the below example, there is a group named g2 with two servers. Note that the actual Log Group name does not matter what it is just as long as it is the same for all servers in one distributed group.
**Time zone**– This only affects reports on denials and when distributed servers are used. If there is a difference in time between where the debug log is located and where JTB FlexReport is installed you should add the time zone difference here otherwise keep it 0.

Example:

Say there are three servers in three different time zones.
TZ-7 is in time zone GMT -7
TZ-8 is in time zone GMT -8 This is also where JTB FlexReport is installed
TZ-9 is in time zone GMT -9

The logic is then that the time zone difference should be 0 for where JTB FlexReport is installed.

For the server that is one hour before (GMT -7) the time zone difference should be 1 and for the server that is an hour after in time zone GMT -9 the time zone difference should be -1. If this is not correct done you will get a result that is not correct because the time stamps in the log files are according to the local server and when they are consolidated the time zone difference must be taken into account.

**Options File** – The FlexNet options file can be used to show user groups on the HTML report.

**Disable** - This checkbox can be used to disable the current row from being used.

**Re-read** – Click on this button to force the log to be read from the beginning. Normally only used if there was some problem that had to be solved.

To delete rows in the grid click on the left side of the grid so the whole row is selected and press Del on the keyboard.

For more details about paths to other servers see [File location on other servers](#).
LUM tab

If you have IBM LUM licenses these settings should be used.

\[
\begin{array}{|c|c|}
\hline
\text{i4blt.exe location} & \text{Browse for the location of i4blt.exe. It should be on the same computer as “JTB FlexReport Core Service” service is running. You can download i4blt.exe from IBM (IBM License Use Management, ver 4.6.8, FixPack 13 or newer for Windows server).} \\
\hline
\text{i4ls.ini location} & \text{Browse for the location of i4ls.ini. It should be on the same computer as “JTB FlexReport Core Service” service is running. If this is not used you need to add server(s) to the list below.} \\
\hline
\text{Server Name} & \text{As an alternative to using i4ls.ini you can manually specify the server or servers by adding the Server and optionally a Cluster name. i4ls.ini value need to be empty for the manual servers to be used.} \\
\hline
\text{Cluster Name} & \text{If you have say 3 servers in a cluster the Cluster name must be the same for all servers. The Cluster name is just a description so you can make it whatever you want like Cluster 1, Cluster 2, etc.} \\
\hline
\text{Disable} & \text{This checkbox can be used to disable the current row from being used.} \\
\hline
\text{Include product version in the feature name} & \text{is optional if you want to be able to report each version separate or not.} \\
\hline
\text{Expiry HTML report} & \text{HTML report path and name. This is optional. When the field is empty no report is created.} \\
\hline
\end{array}
\]

To delete rows in the grid click on the left side of the grid so the whole row is selected and press Del on the keyboard.

For more details about paths to other servers see File location on other servers.
DSLS tab

Dslicsrv.exe location - Browse for the location of Dslicsrv.exe. It should be on the same computer as "JTB FlexReport Core Service" service is running. Normal default location is C:\Program Files\Dassault Systemes\DS License Server\OS\code\bin. DS License Server (at least License Administration Tool) needs to be installed on this computer.

Licenses to report on

port@server is the TCP/IP port and the license server name. The port is a so called admin port and might be 4084. This is a mandatory field to be filled out to be able to show DSLS usage on the HTML reports.

Server Name – if this column is empty the server name in port@server will be used, otherwise this value will be used instead in reports.

Description – This is more of a comment column and is not used other than in this grid.

Password – If the license server has a password enter it here.

DSLS log folder – Folder where log files are located. This is needed to log denials to the database. Server statistics files (if enabled) and log files are stored by default in:

Windows 7 and Windows Server 2008 R2:
C:\ProgramData\DassaultSystemes\LicenseServer\LogFiles

On UNIX: /var/DassaultSystemes/LicenseServer/LogFiles

A new log file is created each time the license server is started, and also once the size of the active log file exceeds 1MB. Old files can be freely removed or archived.

To delete rows in the grid click on the left side of the grid so the whole row is selected and press Del on the keyboard.

For more details about paths to other servers see File location on other servers.

Disable - This checkbox can be used to disable the current row from being used.

Import of DSLS usage log – Specify name of server and click on Import and browse for the log file to import usage and denials. This is a manual task. For continuous logging specify details in the grid above.

Test to get current usage – press to see if port@server settings works to get current usage.
12D tab

If you have 12D applications that are licensed using the WIBU-KEY you can activate logging here.

<table>
<thead>
<tr>
<th>Server Name</th>
<th>Description</th>
<th>Log file location</th>
<th>Old log file location</th>
<th>Browse</th>
<th>Disable</th>
</tr>
</thead>
<tbody>
<tr>
<td>12Server 1</td>
<td></td>
<td>\12Server1\12D\log</td>
<td>\12Server1\12D\logfile</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12Server 2</td>
<td></td>
<td>\12Server2\12D\log</td>
<td>\12Server2\12D\logfile</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Server name** – This is the name of the server.

**Description** – This is more of a comment column and is not used other than in this grid.

**Log file location** – This is the location of the wibu log files.

**Old log file location** – This is the location of where to move the log files when they are done. Make sure to create this folder first.

**Disable** - This checkbox can be used to disable the current row from being used.

To delete rows in the grid click on the left side of the grid so the whole row is selected and press Del on the keyboard.

For more details about paths to other servers see [File location on other servers](#).

Information about setting up the 12D log files can be found under “...\Documentation\12d Model Usage” on the 12D installation CD or media. Below is a summary from it:

By setting an environment variable in the env.4d file(s) used for your 12d Model sessions, uniquely named .log files can be generated in a specified folder on your network.

For example, by adding the line:

```
usage_log_4d F:\12d model usage
```

to your env.4d file(s), then each time a 12d Model session is run, a .log file will be created in the “F:\12d model usage” folder. This folder, referred to as the `<log file folder>`, can be anywhere on your network and can have any name, but it must be created beforehand, and all 12d Model users must have write-access to it.

Using variable “usage_log_4d”, log files will be generated in the form:

```
<log file folder>\(<dongle> <user> <computer> <time stamp> <process ID>.log)
```

Note that the <time stamp> represents the start time of the 12d Model session in GMT (also known as UTC or Zulu Time).

The .log file generated in the `<log file folder>` for each individual 12d Model session run on your network, contains all the information required about that session. While the session is still running, the log file will be updated at a minimum of every 75 seconds, with the time that the session has been active. At the close of the 12d Model session, the log file is again updated and is set as “completed”.
SLM/RMS tab

To be able to monitor usage of SLM/Sentinel License Manager/Sentinel RMS (by SafeNet) licensed applications specify a server name and log file location and optionally Ismon.exe location.

Ismon.exe – Location of lsmon.exe. lsmon.exe and lsapiw32.dll are needed and can be downloaded from [http://www.safenet-inc.com/sentineldownsloads/](http://www.safenet-inc.com/sentineldownsloads/) For AVEVA default location is C:\AVEVA\AVEVA Licensing System\RMS\Tools\lsmon.exe. If lsmon.exe is specified and there is no “Log file location” specified Ismon.exe will be used.

Server Name – Name of the server. If log file location is specified logging with snapshots using Server Name will not be done.

Description – This is more of a comment column and is not used other than in this grid.

Log file location – location of the log file including the file name. When specified the Server Name will be ignored for the purpose to log usage with help of lsmon.exe. But the Server Name is needed so the data from the log files is saved with this server name.

Disable - This checkbox can be used to disable the current row from being used.

Re-read – Click on this button to force the log to be read from the beginning. Normally only used if there was some problem that had to be solved.

To delete rows in the grid, click on the left side of the grid so the whole row is selected and press Del on the keyboard.

Test button is only used when lsmon.exe is used. It does not test the log file(s).

For more details about paths to other servers see File location on other servers.

Reports based on the Feature Server tab in the report client are not available for SLM.

Q. How do I setup Sentinel/SLM to create the required log file?

A. Google “sentinellm system administrators guide”. Open the PDF and go to “Appendix A – Using Environment Variables to Configure a License Server”, then see “Table A-3: LSERVOPTS Options Summary.

You have to go to into the registry HKEYLM\Software\Rainbow Technologies\Sentinel RMS (this can vary from version to version)\Current Version

Next you have to create a string key called CommandLineOpts

Set the value to -l "path\lserv.log" and restart the sentinel service. This will auto-generate a file in the path folder.

AVEVA Licensing System (ALS) (which is based on Safenet RMS technology) is supported. If the AVEVA XML file (default name is usagelog.xml) that contains user and host names is existing with the same name as the AVEVA log file it will be used to get the actual user and host names.
LM-X tab

**lmxendutil.exe**: If LM-X is running on another computer it is recommended to take a copy of lmxendutil.exe and place it on the same computer as JTB FlexReport Core is installed. Altair HW uses almutil.exe, take copy of this file and rename to lmxendutil.exe.

**Licenses to report on**: This is the TCP/IP port and the license server as in this example: 6200@server. This is a mandatory field to be filled out to be able to report on LM-X enabled applications. One or many can be specified. LM-X's default port is 6200 but could be set to something else.

Redundant/triads are separated with semicolons in the same cell. Make use of the Server Name columns too.

**Server Name** – if this column is empty the server name in port@server will be used, otherwise this value will be used instead in reports. When specifying a triad of servers it is strongly recommended to specify a server name. When a domain name and domain is used like for example 27000@server.eu.net it is also recommended to use add a server name to avoid problems where the server sometimes is including the domain name and domain and sometimes not. Another reason the server name can be useful is if a continuous report will be made when the actual server name changes for example after moving the license server from one place to another.

**Description** – This is more of a comment column and is not used other than in this grid.

**Disable** - This checkbox can be used to disable the current row from being used.

To delete rows in the grid click on the left side of the grid so the whole row is selected and press Del on the keyboard.

**Find Licenses to report on** - If you don’t know what to enter here you can begin with pressing the "Find Licenses to report on" button and it will try to find your licenses and add them. This may not find all your servers depending on different factors so you may need to manually add some or all. After entering the licenses to report on don’t press the Find button again.

**Test to get current usage** – Click on the test button to verify if the specified license server(s) are found.
To be able to monitor usage of Licman licensed applications specify a server name and log file location.

**Server Name** – name of the server. This does not need to match the actual server name but will be used in the database and the reports.

**Description** – This is more of a comment column and is not used other than in this grid.

**Log file location** – location of the log file including the file name.

**Disable** - This checkbox can be used to disable the current row from being used.

**Re-read** – Click on this button to force the log to be read from the beginning. Normally only used if there was some problem that had to be solved.

To delete rows in the grid click on the left side of the grid so the whole row is selected and press Del on the keyboard.

For more details about paths to other servers see [File location on other servers](#).
MathLM tab

Monitorlm.exe: path and file name for this exe. If MathLM is running on another computer it is recommended to take a copy of Monitorlm.exe and place it on the same computer as JTB FlexReport Core is installed.

Servers to report on: This is the license server(s) to report on. This is a mandatory field to be filled out to be able to report on MathLM based applications. One or many can be specified.

Server Name – Name of the server.

Description – This is more of a comment column and is not used other than in this grid.

Disable - This checkbox can be used to disable the current row from being used.

To delete rows in the grid click on the left side of the grid so the whole row is selected and press Del on the keyboard.

Test to get current usage – Click on the test button to verify if the specified license server(s) are found.
**Vertex tab**

This is for Vertex licenses.

<table>
<thead>
<tr>
<th>Port Number</th>
<th>Server Name</th>
<th>Description</th>
<th>Disable</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>server1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>server2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>server3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Nc.exe**: path and file name for this exe. Should be on the local computer.

**Command File**: path and file name for the command file. Should be on the local computer.

**Servers to report on**: This is the license server(s) to report on. This is a mandatory field to be filled out to be able to report on Vertex based applications. One or many can be specified.

**Port Number** – Port number for the license server.

**Server Name** – Name of the server.

**Description** – This is more of a comment column and is not used other than in this grid.

**Disable** - This checkbox can be used to disable the current row from being used.

To delete rows in the grid click on the left side of the grid so the whole row is selected and press Del on the keyboard.
**Venturis tab**

This is for Venturis (TriCad) licenses.

<table>
<thead>
<tr>
<th>Server Name</th>
<th>Description</th>
<th>Log file</th>
<th>Browse</th>
<th>Disable</th>
<th>Re-read</th>
<th>Last Row</th>
<th>Log</th>
</tr>
</thead>
<tbody>
<tr>
<td>venturis1</td>
<td>Live server</td>
<td>c:\venturis\log.txt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>venturis2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Server Name** – name of the server. This does not need to match the actual server name but will be used in the database and the reports.

**Description** – This is more of a comment column and is not used other than in this grid.

**Log file location** – location of the log file including the file name.

**Disable** - This checkbox can be used to disable the current row from being used.

**Re-read** – Click on this button to force the log to be read from the beginning. Normally only used if there was some problem that had to be solved.

To delete rows in the grid click on the left side of the grid so the whole row is selected and press Del on the keyboard.

For more details about paths to other servers see [File location on other servers](#).
**RLM tab**

This is for RLM (Reprise License Manager) licenses. RLM default port is 5054 (prior to RLM version 6 it was 9000).

|r| l| d| r| a| b|
---|---|---|---|---|---|
| port@server | Server Name | Description | Reportlog | Disable | Re-read |
| 5054@rlm | rlm | | | | |
| 9000@blin | Old server | | | | |
| 5054@corner | | | | | |

**rlmutil.exe (or rlmitstat.exe):** path and file name for this exe. If RLM is running on another computer it is recommended to take a copy of rlmutil.exe and place it on the same computer as JTB FlexReport Core is installed. It’s also available for download here: [http://www.reprisesoftware.com/admin/software-licensing-downloads.php](http://www.reprisesoftware.com/admin/software-licensing-downloads.php) You need to run the installer and take note of installation folder to find it.

**Licenses to report on:**

- **port@server** – Used to create HTML reports only. This is the TCP/IP port and the license server as in this example: 6200@server. This is a mandatory field to be filled out to be able to report on RLM enabled applications. One or many can be specified. RLM’s default port is 6200 but could be set to something else.

  Redundant/triads are separated with commas in the same cell.

  If there are 2 or more vendors on the same server each vendor have their own report log but the port is common for all so specify port@server for only one of the rows.

- **Server Name** – if this column is empty the server name in port@server will be used, otherwise this value will be used instead in reports. When specifying a triad of servers it is strongly recommended to specify a server name. When a domain name and domain is used like for example 5054@server.eu.net it is also recommended to use add a server name to avoid problems where the server sometimes is including the domain name and domain and sometimes not. Another reason the server name can be useful is if a continuous report will be made when the actual server name changes for example after moving the license server from one place to another.

- **Description** – This is more of a comment column and is not used other than in this grid.

- **Reportlog** – Used for saving historic usage in database. Location of the RLM reportlog file including the file name. This is a mandatory field to be filled out to be able to report on RLM enabled applications. This should not be the .dlog file.

- **Disable** - This checkbox can be used to disable the current row from being used.

- **Re-read** – Click on this button to force the log to be read from the beginning. Normally only used if there was some problem that had to be solved.

To delete rows in the grid click on the left side of the grid so the whole row is selected and press Del on the keyboard.

**Interval in minutes to automatically read Reportlog** can be set at 1 minute or more.

**Import of RPT (report log)**

The report log can also be imported manually. Specify the port number, it will be used internally in the database and then click on import. The .dlog file can’t be imported.
Test to get current usage — Click on the test button to verify if the specified license server(s) are found.
**RLM ReportLog**

This is how the ReportLog is set up to be created and updated.

The ISV options file is specified on the ISV Line in The License File and can be created using Notepad.

The ISV options file can be located in 3 ways:

- You can specify the ISV options file location on the ISV Line in The License File.
- If no specification is on the ISV line, rlm will look for `<ISV>.opt` (where `<ISV>` is the name of the ISV) in the location with the first license file.
- If there is no options file in either of the first 2 locations, rlm will look for `<ISV>.opt` in the working directory where you started the rlm server.

Syntax: REPORTLOG [+]file_path [std | small | detailed] [auth]

If file_path contains embedded whitespace, it must be enclosed in double quotes.

Example of contents of the options file:

```plaintext
REPORTLOG +c:\rln\reportlog.rpt
```

The REPORTLOG option instructs the ISV server to write a file suitable for usage reporting to the filename file_path. If file_path is preceded with a `+` sign, the new data is appended to the file, otherwise the file is overwritten.

The third (optional) argument specifies the format of the reportlog file. Valid values are:

- `std` - write the standard report log file (the default if this field is not present)
- `small` - a smaller report log file
- `detailed` - write a reportlog that logs checkin/checkout events down to the tenth of a millisecond

The fourth optional argument, if present, specifies that the reportlog is to be authenticated. This parameter should be the string `auth`, and if it is to be used, the third parameter (reportlog format) must be present as well. Note that this parameter is no longer required in RLM v4.0, as all reportlogs are authenticated.

If your server is writing a reportlog, it is important to shut the server down gracefully (ie, don't kill the server, shut it down with the RLM web interface or with an rlmdown command, or via the service controller if running as a Windows service). If you don't do this, the server won't write the final authentication record to the report log, and you will not be able to verify the last section of the report.

For more details about paths to other servers see File location on other servers.
**Ranorex tab**

This is for manual import of Ranorex usage logs into the database. Specify a server name and click on Import.

![Ranorex tab interface](image)

**Altium tab**

This is for Altium licenses.

**Server Name** – Altium server name.

**Description** – This is more of a comment column and is not used other than in this grid.

**Log file location** – location of the Altium file including the file name.

**Disable** - This checkbox can be used to disable the current row from being used.

**Re-read** – Click on this button to force the log to be read from the beginning. Normally only used if there was some problem that had to be solved.

To delete rows in the grid click on the left side of the grid so the whole row is selected and press Del on the keyboard.

For more details about paths to other servers see [File location on other servers](#).

**GHSIm**

This is for GHSIm (Green Hills Software License) licenses.

**Server Name** – GHSIm server name.

**Description** – This is more of a comment column and is not used other than in this grid.

**Log file location** – location of the GHSIm file including the file name.

**Disable** - This checkbox can be used to disable the current row from being used.

**Re-read** – Click on this button to force the log to be read from the beginning. Normally only used if there was some problem that had to be solved.

To delete rows in the grid click on the left side of the grid so the whole row is selected and press Del on the keyboard.

For more details about paths to other servers see [File location on other servers](#).
This is for LSTC-Dyna licenses.

**lstc_qrun.exe** – Full path to lstc_qrun.exe including file name. This is required for usage showing on the HTML reports and for some reports in the Report Client using data from the 'log' table, typically using Feature Server and List Reports tabs.

**port@server** – port number and server name in the format port@server

**Server Name** – LSTC server name.

**Description** – This is more of a comment column and is not used other than in this grid.

**Log file location** – location of the LSTC file including the file name. This is required for some reports in the Report Client using data from the 'tblUserDetailedLog' and 'tblUserDetailedLogPrev' tables, typically the Detailed, Hours Chart and List Reports tabs.

**Disable** - This checkbox can be used to disable the current row from being used.

**Re-read** – Click on this button to force the log to be read from the beginning. Normally only used if there was some problem that had to be solved.

**Interval in minutes to automatically read the log** needs to be set at 1 minute or more to read the log file(s).

To delete rows in the grid click on the left side of the grid so the whole row is selected and press Del on the keyboard.

For more details about paths to other servers see [File location on other servers](#).

---

This is for BETA LM licenses.

**beta_lm_stat.exe** – Full path to beta_lm_stat.exe including file name.

**Server Name** – BETA LM server name.

**Server Name Alias** – If you want to save the data using something else than the Server Name specify it here.

**Description** – This is more of a comment column and is not used other than in this grid.

**Log file location** – location of the BETA LM file including the file name.

**Disable** - This checkbox can be used to disable the current row from being used.

**Re-read** – Click on this button to force the log to be read from the beginning. Normally only used if there was some problem that had to be solved.

To delete rows in the grid click on the left side of the grid so the whole row is selected and press Del on the keyboard.

For more details about paths to other servers see [File location on other servers](#).
**PKit**

This is for PKit licenses.

**Server Name** – PKit server name.

**Description** – This is more of a comment column and is not used other than in this grid.

**Log file location** – location of the PKit file including the file name.

**Disable** - This checkbox can be used to disable the current row from being used.

**Re-read** – Click on this button to force the log to be read from the beginning. Normally only used if there was some problem that had to be solved.

To delete rows in the grid click on the left side of the grid so the whole row is selected and press Del on the keyboard.

For more details about paths to other servers see [File location on other servers](#).

PKit does not hold the number of issued license licenses in the log file but MaxLic can be set for the PKit feature in General>Features dialog box.

PKit reports are not available with any user and host information, only number of used licenses.
File location on other servers

Normally a Windows service like the JTB FlexReport Core Service cannot access files on other servers. Mapped drives to other servers cannot be used by the service. UNC path or a local drive must be used. One option is to install JTB FlexReport on the server where the log file is located or make a scheduled task that copies the log file to the server where JTB FlexReport is located.

To access log files on other servers than where JTB FlexReport's service is running changing the account the service is running on can be needed in combination with UNC path.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Status</th>
<th>Startup Type</th>
<th>Log On As</th>
</tr>
</thead>
<tbody>
<tr>
<td>JTB FlexReport Core Service</td>
<td>Running</td>
<td>Automatic</td>
<td>Local System</td>
<td></td>
</tr>
</tbody>
</table>

Open Windows Services and look for the JTB FlexReport Core Service and if you have "Log On As" set to "Local System" you can try to change Log On As to the local administrator account instead as the SYSTEM or Local System account does not have network access. You'll need to switch the service to use either NETWORK SERVICE or a network user account or a unique domain user account such that you can access the network drive. After that stop and start the service.

Note that if you use a non-working account JTB FlexReport will stop working. A quick way to see if it works after restarting the JTB service is to first activate the JTB debug log on the Advanced tab and then see if JTB is writing to the log. Another is to check if the JTBFlexReport2.htm is updated at the next snapshot.

You can sometimes use a local user account and add specific required privileges or change system access control list (SACL) entries.

**Unique user account.** You can assign additional administrative privileges to the unique account for which the service is configured, but only if necessary. You should also limit the unique account's group membership to those groups that are required. Unique user accounts should conform to an organizational policy for secure password use. If multiple computers use the same service or related services, the passwords across each unique user account should also be required to be unique.

The **Network Service account** is a special built-in account that has reduced privileges similar to an authenticated user account. This limited access helps safeguard the computer if an attacker compromises individual services or processes. A service that runs as the Network Service account accesses network resources using the credentials of the computer account in the same manner as a Local System service does. The actual name of the account is NT AUTHORITY\NetworkService, and it does not have a password that an administrator needs to manage.

**Domain Administrator accounts** includes the built-in domain Administrator account that you create and use when you first install Active Directory. Try to avoid using this account as it can be a security issue. It includes any other user accounts that you subsequently create and add to the built-in local Administrators group or to the Domain Admins or Enterprise Admins groups. Members of these groups have complete and unrestricted access to the domain and, in the case of the Enterprise Admins group, to the entire forest. You might need to change location to the Corporate Domain, to get the ability to choose the Domain Administrator.

JTB FlexReport Group Administrator

Executable name: Group Administrator.exe

First the database needs to be configured using JTB FlexReport Config.exe.

The application is used to create and manage groups of different types.

Four types of groups are supported: Feature Groups, Server Groups, User Groups and Host Groups. The functionality is similar for all types. Do not use User Descriptions or Host Descriptions as the functionality is not fully implemented yet.

Normally JTB FlexReport needs to be run for a while so that Feature and server names are populated. User and Host names are for obvious reason populated first when users have been using any of the features but they can also be added beforehand.

JTB FlexReport Group Administrator can be used to add/edit/delete Feature and Server descriptions as well as available licenses.

Override Available licenses column makes it possible to set this value to be fixed instead of dynamic and it will be used in the chart reports. Normally it is preferred to leave this and instead use the dynamic functionality.
Feature Group is used to add, edit or delete feature groups. The Feature Group Description and Override Available Licenses are optional.

**Feature Group Name** | **Feature Group Description** | **Override Available Licenses**
--- | --- | ---
Tier A | | 0
| Tier B | |

Feature and Group is used to connect a feature name with a feature group one by one.

**Feature Name** | **Feature Group Name**
--- | ---
54600ACD_2008_0F | Tier A
54800REV$SU_2008_0F | Tier A
55400CIV$D_2008_0F | Tier B
55700REV$YP_2008_0F | Tier A
55900MAP_2008_0F | Tier A
57600ACD_2009_0F | Tier B
59700CIV$D_2009_0F | Tier A
60000REV$YP_2009_0F | Tier A
60100ARCH$DESK_2009_0F | Tier B
List tab usage

To match multiple Features with one or multiple Groups use the Lists tab. Make selection in the lists and then press the Save button.

And with the result after pressing the Save button.

To delete or disassociate/disconnect multiple rows at a time use any of the List tabs. Select in the grid and press Delete.
Host and IP

The Hosts can have the IP added either manually or automatically after specifying times on the Advanced tab.

<table>
<thead>
<tr>
<th>Host Name</th>
<th>Host Description1</th>
<th>Host Description2</th>
<th>Host IPv4</th>
<th>Host IPv6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Host1</td>
<td></td>
<td></td>
<td>172.32.56.10</td>
<td></td>
</tr>
<tr>
<td>Host2</td>
<td></td>
<td></td>
<td>172.101.41.1</td>
<td></td>
</tr>
<tr>
<td>Host3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This show the usage of Wildcard Hosts. Click on the Wildcard Host button. Use the dropdown in the Item Type column to select either Host, HostIPv4 or HostIPv6. Press Enter for a new row.

<table>
<thead>
<tr>
<th>Item Type</th>
<th>Wildcard</th>
<th>Item Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>HostIPv4</td>
<td>192.168.*</td>
<td>HostGroup1</td>
</tr>
<tr>
<td>HostIPv4</td>
<td>192.169.*</td>
<td></td>
</tr>
</tbody>
</table>

None
HostGroup1
HostGroup2
**Wildcard**

The asterisk sign (*) matches zero or more characters, and question mark (?) a single character and can be used anywhere in the Wildcard matching text.

In the example below AB* would match user names like AB, AB1, ABA, ABCD.

AB? would match ABC but not match AB or ABCD.
Update from Wildcards

To immediately see the effect of the wildcards use the button Update from Wildcards. The update will also automatically be done by the JTB FlexReport Core service at each snapshot interval.

With this result showing group names added.

If wildcards are changed the group designation will not be updated/deleted. This is considered to be added as an option for a future version.
Options File

To import settings from a FlexNet Options File use the Read from Options File button.

To import **users only** click on Users tab, User button and then on Read from Options File.

To import **users groups only** click on Users tab, User Group button and then on Read from Options File.

To import **users and users groups** click on User Group Lists tab and then on Read from Options File.

To import **hosts only** click on Hosts tab, Host button and then on Read from Options File.

To import **hosts groups only** click on Hosts tab, Host Group button and then on Read from Options File.

To import **hosts and hosts groups** click on Host Group Lists tab and then on Read from Options File.
**SPLM (SmartPlant License Manager)**

JTB FlexReport SPLM Client and JTB FlexReport SPLM Service are needed to report on SPLM licensed applications and require two separate installations.

You need to install and run the setup.exe from JTBFlexReportSPLMService_(version no here).zip on the computer where you now have JTB FlexReport installed and running. You will get a configurator showing where you specify the path to JTBFlexReport.NET.mdb or whatever database you selected. Click on Configure and on Start Service. Take note of the port number and the server machine name as this is needed to configure the SPLM client.

JTBFlexReportSPLMClient_(version no here).zip needs to be copied to the SPLM server or servers and run setup.exe. In the configurator specify the path to pdlice.exe (local path required) and use the same port and name as in the service configurator. Include also the file name pdlice.exe in the configurator setting. Example C:\path\pdlice.exe. Click on Configure and click on Start. Then click on Exit.

Now if everything goes well you should eventually get SPLM usage added to JTBFlexReport.NET.mdb or whatever database you selected.
Command line usage of JTBFlexReport.exe

JTBFlexReport.exe can be run with an argument pointing to an ini-file. FlexNet and LUM is supported. There is only support for this if MS Access is used as database to hold the feature descriptions. This makes it possible to create different shortcuts to create HTML reports that shows data from different servers or services. As an example 27000@server can be on one HTML report and 27001@server can be on another HTML report. It is also possible to filter out what specific features to include in the report. There is a sample included that is easy to customize. “Sample HTML.vbs” is starting JTBFlexReport.exe using “Sample HTML.ini”. Make sure to edit the last rows in the “Sample HTML.ini” file to point to the licenses you want to show.

This only works if the software is registered on the PC where the script is running. The easiest way is to make an installation of JT FlexReport on the PC and disable the JT FlexReport Core service. Contact us if you want easy deployment for this on multiple clients. The freeware JT FlexReport LT is also an alternative solution.

INI-files

JTBFlexReport.NET.ini is the parameter file used when JTBFlexReport.exe is run in demo mode. It can also be used for other cases if you don’t run JTBFlexReport.exe as a service.

These are the parameters that are accepted in the ini file:

**Execution** - can be set to Quiet, Single, HTML or HTML2.

Quiet should be used if you want it to run continuously.

Single will run once and then close.

HTML or HTML2 will run once and open the HTML report when ready. This is useful if you want to create a shortcut to have available to show the current license usage in HTML format.

Example:

```
Execution=Quiet
```

**HTML** - HTML path and name. This is optional.

Example:

```
HTML=c:\Program Files\JTB World\JTB FlexReport\JTBFlexReport.htm
```

**HTML2** - HTML path and name. This is optional.

Example:

```
HTML2=c:\Program Files\JTB World\JTB FlexReport\JTBFlexReport2.htm
```

**HTMLBackup** - Folder for backup copies of the HTML reports. This is optional. This folder can quickly be full of thousands of files since 144 files are created each day.

Example:

```
HTMLBackup=c:\Program Files\JTB World\JTB FlexReport\htmlbackup
```

**Linger** - Log borrow usage.

Yes or No are valid values.

Example:

```
Linger=yes
```

**MDB** - MDB log folder path. This is a required parameter.
Example:

```
MDB=c:\Program Files\JT B World\JT B FlexReport\JT BFlexReport.NET.mdb
```

**Open** - If Open is yes the HTML report will be opened if the execution is set to HTML. This is optional.

Example:

```
Open=no
```

**Lmutil** - Lmutil is the path and file name for lmutil.exe. This is a required parameter to report on FlexNet licenses.

Example:

```
Lmutil=c:\Program Files\JT B World\JT B FlexReport\lmutil.exe
```

**Lmstat1** - Lmstat is the TCP/IP port and the license server as in this example: 27000@server. This is a required parameter to report on FlexNet licenses. One or many can be specified.

Example:

```
Lmstat1=27000@server1
Lmstat2=27001@server1
Lmstat3=27000@server2
```

**IncludeFlexNetFeatures** – Use this to filter out what FlexNet features to include.

Example:

```
IncludeFlexNetFeatures=64300ACD_F; 85730ACD_2012_0F; 85731ARCHDESK_2012_0F
```

**IncludeLUMFeatures** – Use this to filter out what LUM features to include.

Example:

```
IncludeLUMFeatures=CATIA Analysis Add-on; WPE-ENOVIA VPM Workpkg Exchange
```

**LUmI4bltExe** - path and file name for i4blt.exe. This is a required parameter to report on LUM licenses.

Example:

```
Lumutil=c:\LUM\i4blt.exe
```

**LUMI4lsIni** - path and file name for i4ls.ini. This is one optional parameter to determine what servers to report on for LUM licenses.

Example:

```
LUMI4lsIni=C:\LUM\i4ls.ini
```

**LUMServer1** - This is one optional parameter to determine what servers to report on for LUM licenses. One or many can be specified.

Example using only server name:

```
LUMServer1=MyServer
```

Or by also specifying cluster

```
LUMServer1=ServerA@Cluster1
LUMServer2=ServerB@Cluster1
LUMServer3=ServerC@Cluster1
```

**LUMIncludeProdVer** - LUM Include product version in the feature name. Use yes or no as value.

Example:

```
LUMIncludeProdVer=yes
```
Merge Databases

If you need to have JTB FlexReport installed on multiple servers and want to merge the MS Access databases for the reports to get a total view of the usage this can be achieved.

This can be useful for large companies with multiple servers, slow or bad or no connection between the servers.

Extract the JTBFlexReportMergeDBs.zip file in the installation folder and read the instructions in the readme file.

JTB FlexReport Config > Update DB can be used to update the database definition to the latest if you plan to keep using an old database. Sometimes this update is not able to solve all problems. A more thorough method for MS Access databases is using JTB FlexReport Merge DBs <version number>.zip, extract JTBFlexReportMergeDBs - manual start.mdb and follow the instructions in the .txt file. This can solve bloating databases due to missing or incorrect indexes.

To merge SQL Server database contact JTB World for a script.

JTB FlexReport Database Administration

When working on the main backend database stop the JTB FlexReport Core Service in JTB FlexReport Config and start it when ready. It is recommended to stop all other JTB services during this time as well. After deleting or moving data it is recommended to run JTB FlexReport Service Configurator and click on Clear followed by Sampling All Records in the Sampling to Cache area.

JTB FlexReport Database Administration is useful to compress or compact the database. The database table tblUserDetailedLog will also be purged from data that not really needed. It can be useful to do this on a regular interval like every month or every 3:rd month when the database starts to get too large. You should try to keep the size below 500 MB.

To delete data click on the Delete checkbox on the right side first. This will change the Move button to a Delete button.

When MS Access is selected the main database is typically the same database as have been specified in the JTB FlexReport Core Configurator using the Configure Database button. Default name is JTBFlexReport.NET.mdb.

Compact button will also delete all rows in Log where UsedLic=0 if you select “Delete rows with 0 licenses used".
When MS Access is used it is recommended to run this tool directly on the same server or PC where you have the Main Database.

You can move data or delete data from the database.

Right click in the features/applications list to check or uncheck all checkboxes.

“Log data” is mostly used for the chart reports and “Detailed Log data” is used for the list reports and for some of the chart reports (typically when user or host information is used).

Update information button will update the information about file size, oldest and newest dates and the features list.

**FlexNet/FLEXlm license file**

If you don't specifically add the TCP/IP port number to the license file it can change. Typically this does not happen if you have one license file on the server but if you have several the port number can be switched depending on what order the services are started. This can result in that the data stops being logged to the database. It’s recommended that you enter the port to the license file it it’s not already there. To find the current used port you can use lmtools.exe and check for it using Perform Status Enquiry as earlier described.

The format of the SERVER line in the license file is:

SERVER host hostid [port]
Example:

SERVER my_server 17007ea8 27000
or
SERVER my_server 17007ea8 TCP:27000

It is recommended to use a port number in this range (at least for Autodesk licenses): 27000-27009. Use lmtools.exe and stop and start the service.

When the port is not correct you may get this error: Error getting status: Cannot connect to license server system. (-15,10:10061 "WinSock: Connection refused")

See also this blog post: [http://blog.jtbworld.com/2011/06/how-to-specify-port-to-be-used-by.html](http://blog.jtbworld.com/2011/06/how-to-specify-port-to-be-used-by.html)

**System Requirements**

.NET Framework 4.0 or later - [http://www.microsoft.com/net/Download.aspx](http://www.microsoft.com/net/Download.aspx)

Operating system – Windows 10, Windows 8.1, Windows 8, Windows 7, Windows Vista, Windows 2008 Server, Windows Server 2008 R2, Windows Server 2012, Windows Server 2016. FLEXlm or FlexNet can be installed and run on other operating systems like UNIX or Linux and it is possible to report usage from but JTB FlexReport must run on a Windows OS. 32-bit and 64-bit is supported.

SQL Server or SQL Server Express is optional to use for the backend database. Versions from 2005 and newer are supported.

**Resolve problems and some tips & tricks**

Send an email to info@jtbworld.com describing your problem.

Useful information to solve and identify the problem is a detailed description of the problem.

Operating System version.

Error messages.

Looking at Windows Task Manager>Processes you should see JTBFlexServ.exe running and every 10:th minute (or selected interval) JTBFlexReport.exe
Check also the Event Viewer>Application Log and look for JTB FlexReport and see what it says.

Look also if the service “JTB FlexReport Core Service” is running by checking Administrative Tools>Services

Look for the JTBFlexReport.log file in the temporary folder. Try %ALLUSERSPROFILE%\JTBAWorld\JTBApFlexReport or %TEMP% or look for the value of the system environment variables TMP or TEMP and look in that folder. The folder can easily be access from JTB FlexReport Config>Advanced tab.

Take useful screenshots if possible. (Tip is to use Alt+PrintScr and paste to a Word document or into an email or even better use a screen capture software and save to for example a PNG file, in Windows 8 and newer press the Windows button on the keyboard together with PrintScr button and the screenshot will be saved to \Pictures\Screenshots folder)

You can activate a debug log file in JTB FlexReport Config>Advanced tab>Debug log creation. Restart the service. Let the service run for at least 20-30 minutes. A file named JTBFlexReportDebug.log will be created in the temporary folder (Default location is %ALLUSERSPROFILE%\JTBAWorld\JTBApFlexReport. Could also be the same as the system environment variable TMP or TEMP. Most often it's possible to get there by entering %temp% in the address field in Explorer). Check also c:\windows\temp. Send JTB World this file zipped. Deactivate the debug log when finished. Restart the service.

If and when you restart your FlexNet/FLEXlm server or service it can be good to know that the status will be incorrect if lmutil.exe or lmtools.exe is used.

If the user has an application running and restarting the license server or just the license service the following can happen:

USER1 HOST1 HOST1 (v1.000) (HOST1/27000 103), start Sat 1/19 08:24

Restarting server or service and it will not pick up that a license actually still is in use and it will look like the license was checked out just after the server restart notice also how the license handle can change.

USER1 HOST1 HOST1 (v1.000) (HOST1/27000 101), start Sat 1/19 12:26

It affects the report like this one jtbflexreportHTML2.htm where used hours are showed and it is the same with borrowed licenses that you cannot fully rely on when the license was borrowed:

user1@c1539 Checked out license at 2007-04-28 06:33  Hours used: 2:52

If you get this Application Error: “The application failed to initialize properly…” you might need to adjust the .NET security settings. The below is for .NET Framework 1.1 but for 2.0 it should be something similar. Let us know if you run into it.

Control Panel>Administrative Tools>Microsoft .NET Framework 1.1 Wizard>Adjust .NET Security
Choose “Make changes to this computer” | Next
Click “Local Intranet”
Slide the trust level to “Full”

If you want to allow users access to the HTML report and you have issues with the right or access to the file for the user the following solution might help you.

Set another path to where the HTML file is created on the server. It should not be on a mapped drive.
JTB FlexReport Config>Advanced tab>Temp path
In Windows Vista and newer versions of Windows if you have not disabled UAC it can be a good idea to place the database JTBFlexReport.NET.mdb in %ALLUSERSPROFILE%\JTB World\JTBFlexReport that could be something like C:\ProgramData\JTB World\JTBFlexReport

If you have a license server triad (redundant solution) only point JTBFlexReport to one of the servers or add them separated with commas if FlexNet and with semicolons if LM-X. Make use of the Server Name column (it does not need to be an actual server name, any descriptive name works).

Recommendation, do not change the snapshot interval without also starting with a new database.

Problems to uninstall JTBFlexReport?
Make sure you have administrator rights.
Stop the JTBFlexReport Core Service.
You can also try the hard way:
Run cmd.exe
net stop "JTBFlexReport Core Service"
sc delete "JTBFlexReport Core Service"
Now try to uninstall.
Sometimes a restart of the computer is needed before being able to install again.

If you get this error when installing. Try to uninstall and then install again.
“Error 1001. The specified service already exists”

If there is problem with LUM reports this might help.
You must just insert the hostname and the IP of the LUM server(s) in the host table of the local machine where JTBFlexReport is installed.

Only if the borrow time is more than 5 minutes it is logged because some vendors always have an automatic borrow time of 5 minutes or less for their licenses. (This time can be changed on request if needed)

Q. How do I move the JTBFlexReport Core installation from one server to another?

A. First install JTBFlexReport on the new location. Optionally copy the database. If you have made other customizations of INI, VBS files or the like you can copy them as well. You can optionally copy all .config files in the JTBFlexReport old folder to the new location as this will keep your database configurations.

If you want to bring with you the settings in JTBFlexReport Config you can export and import HKEY_LOCAL_MACHINE\SOFTWARE\JTB World\JTBFlexReport Core registry key. On 64-bit OS the location is HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\JTB World\JTBFlexReport Core.

Run JTBFlexReport Config and check all settings. Configure the database, click on General tab and on Configure Database button.
Press License Activation in Config and follow instructions.
If it was some versions between the old and the new JTBFlexReport it is a good idea to click on the Update DB button on the General tab in JTBFlexReport Config. If SQL Server database is used you might need to use the update script “JTBFlexReport SQL create and copy db version <version>.txt” found under https://jtbworld.com/jtbflexreport#download.
Start the service from the General tab.
Make sure to test that the new server includes everything you need and that it works before deleting it from the old server.
Verify that the HTML file(s) are updated as expected and eventually that new data shows up in reports after a while.

Q. What is JTBFlexReport.NET-temp.mdb or the table UserDetailedLogTemp and why is it growing so fast?

A. If MS Access is used as back end database the cache will be saved in a separate database with the suffix “-temp.mdb”. If SQL Server is used there is a table named UserDetailedLogTemp that holds this cache data.

UserDetailedLogTemp is created by the Sampling service that is configured in JTB FlexReport Service Configurator and is affected by the precision value where a smaller value makes the table UserDetailedLogTemp grow quicker but on the other hand a larger value makes the reports created based on UserDetailedLogTemp to be less accurate.

UserDetailedLogTemp is created based on data in tblUserDetailedLog and tblUserDetailedLogPrev. If one row in tblUserDetailedLog contains usage between 8:00 and 9:00 and the precision value is 10 minutes there will be created 6 rows of data for the times 8:00, 8:10, 8:20, 8:30, 8:40 and 8:50. So if there are usage of licenses that runs for days, weeks or months a lot of rows will be created.

The “-temp.mdb” database can be compressed with MS Access or the database/table can be recreated using “Sampling All Records” in JTB FlexReport Service Configurator. The mdb file is limited to 2GB in size.

The Database Administrator can be used to move or delete old data in a mdb file and there are scripts available to download on the product website for usage with SQL Server.

You can also delete it and it will be recreated when configuring the main database in the Configurator.
Q. How can I compact an MS Access based database that is very large?

A. Stop all JTB services during this process.

It might help to run JTB FlexReport Config>General>Update DB.

Or try Compact & Repair using MS Access.

If the database is too large (typically 2GB) it cannot be compacted the normal way. The easiest thing is to start with a new empty database after taking backup of the original database.

"JTBFlexReport.NET (extra empty copy).mdb" is an empty database that is available in the installation folder and can be used for this purpose. Stop the JTB services. If your main database is named "JTBFlexReport.NET.mdb", rename it or delete it, then copy "JTBFlexReport.NET (extra empty copy).mdb" and name it "JTBFlexReport.NET.mdb". Now start the JTB services again. After that delete JTBFlexReport.NET-temp.mdb and then use "Sampling All Records" in JTB FlexReport Service Configurator.

Sometimes it can work to import tables in a large or corrupted database into an empty database.

If the temp database (Default name is JTBFlexReport.NET-temp.mdb) is too large or close to 2GB you can try to compact it using the method above. You can also delete it and it will be recreated when configuring the main database in the Configurator. Otherwise try Compact & Repair using MS Access. Note that JTBFlexReport.NET-temp.mdb is create and updated by the JTB FlexReport Sampling Service and its size is partly depending on the sampling value interval as set in JTB FlexReport Service Configurator. If you have a lot of features, users and/or data for a large date period it can also grow quick and you might need to use "JTBFlexReport Database Administration" and move or delete data alternatively migrate the MS Access database to SQL Server.

You can also use "JTBFlexReport Database Administration" and move or delete data. It will make the main database smaller and after that you can "Sampling All Records" in JTB FlexReport Service Configurator.

For versions older than version 11: Run the Detailed Report MDB from JTB FlexReport Config>General>Update DB. End by using the Compact the Main Database button. Then click on "Compact linked and current database".

Q. How do I start with a new database?

A. Run "JTB FlexReport Config" and stop the service. It might also be needed to stop other JTB services that are running.

Then find out what the current main database you have is. Run "JTB FlexReport Config" and click on "Launch Service Configurator" button. If the name is "JTBFlexReport.NET.mdb", locate the corresponding temp database that is having the -temp extension. In this case "JTBFlexReport.NET-temp.mdb". This -temp database can safely be deleted as it is recreated by the sampling service based on the main database.

If you have created groups in the Group Administrator or have added feature or server descriptions or other things in JTB FlexReport Config>Features or Server you run JTB FlexReport Config>Database Administrator and move or delete data (log data and Detailed Log data). Use a larger date range that what exists in the database. End by using the Compact the Main Database button.

Otherwise you need an empty database to start with. In the “JTB FlexReport” folder there is a file named “JTBFlexReport.NET (extra empty copy).mdb” that is an empty copy of the database. On https://jtbworld.com/jtb-flexreport#download below other downloads there is “JTBFlexReport.NET.mdb <version>.zip” that can be downloaded. If you want make a backup of the main database, rename it or delete it. Either take a copy of “JTBFlexReport.NET (extra empty copy).mdb” and rename it to “JTBFlexReport.NET.mdb” or use the downloaded empty database and put in the same folder as the old one was.
Run “JTB FlexReport Config” and start the service. If you stopped other JTB services, start them. After a little while click on either Features or Servers and verify that these are populated. You can also check the HTML reports or any other reports later on.

Q. Is there a way that we can validate or confirm that the data is being imported correctly and completely?
A. There are several ways you can double check the data.

You can compare different kind of (HTML, list and chart reports) reports to see if they provide a consistent and expected result. Check hours used per day per user, etc.

Check the HTML report. See the HTML tab in JTB FlexReport Config. This can easily be compared with the result you get if you run lmtools.exe on the license server and make a status inquiry.

You can also spot check a certain user and compare with what you find in the FlexNet debug log. JTB FlexReport is not using this log currently for usage, only for denials. So for this reason there will be some discrepancy simply because the usage is recorded via snapshots taken at regular intervals.

You can launch the monitored software yourself and let it run for a while and then check that it shows up as expected in different reports.

You can also look directly in the database. Usage is saved in the “log”, tblUserDetailedLog, tblUserDetailedLogPrev tables. UserDetailedLogTemp is a cache table that the Sampling service populates based on tblUserDetailedLog, tblUserDetailedLogPrev tables.

Q. Why is the user name in reports showing the host name or computer name?
A. You have in JTB FlexReport Config>Features dialog box checked DisplayAsUser checkbox for one or more features.

Q. I get an error like “The table tblDeniedUserLog contain duplicates resulting in database size and performance issues.” using Update DB. How can I remove the duplicates?
A. If the database is MS Access you can make use of JTBFlexReportMergeDBs.zip that is in JTB FlexReport folder. If SQL Server database is used you might need to use the update script “JTB FlexReport SQL create and copy db version <version>.txt” found under https://jtbworld.com/jtb-flexreport#download.