JTB FlexReport Report Service and Client

Table of Contents

nstructions3
Report Service installation4
TB FlexReport Service Configurator5
Client installation
TB FlexReport Client Configurator
ITB FlexReport Client9
How to quickly create a report9
Ribbon tips9
Report Settings tab9
Select Date10
Preset Values11
Time Frame11
Report Settings12
Interval12
Multiple in One Chart12
Multiple in One Chart
Multiple in One Chart
Multiple in One Chart
Multiple in One Chart12Multiple report13New tab13Include concurrent overlap usage13Differences13
Multiple in One Chart12Multiple report13New tab13Include concurrent overlap usage13Differences13Color13
Multiple in One Chart12Multiple report13New tab13Include concurrent overlap usage13Differences13Color13Borrowed line13
Multiple in One Chart12Multiple report13New tab13Include concurrent overlap usage13Differences13Color13Borrowed line13Hide Issued Lic13
Multiple in One Chart12Multiple report.13New tab13Include concurrent overlap usage13Differences13Color13Borrowed line13Hide Issued Lic13Fill effect13
Multiple in One Chart12Multiple report13New tab13Include concurrent overlap usage13Differences13Color13Borrowed line13Hide Issued Lic13Fill effect13Denials14
Multiple in One Chart12Multiple report13New tab13Include concurrent overlap usage13Differences13Color13Borrowed line13Hide Issued Lic13Fill effect13Denials14Highlight today14
Multiple in One Chart.12Multiple report.13New tab.13Include concurrent overlap usage13Differences.13Color.13Borrowed line.13Hide Issued Lic.13Fill effect.13Denials.14Highlight today.14Create Date Time14
Multiple in One Chart12Multiple report13New tab13Include concurrent overlap usage13Differences13Color13Borrowed line13Hide Issued Lic13Fill effect13Denials14Highlight today14Summation14

	Favorites15
	Duplicate and Multiply the Time
	Tools16
	MinMaxAvg17
	Feature Server tab
	Detailed tab19
	Hours chart tab
	List report21
	Auto Reports tab25
	Export tab29
	Drilldown list
	Tools tab
	Style40
	Application menu41
	Quick Access Toolbar
Sai	nple reports45
	Monthly chart on a per day basis45
	Monthly chart as a continuous line46
	Chart as a continuous line including borrowed usage and with interval set to 1 day
	Denials showing on charts
	Stacked line
	Stacked Line with multiple features in one chart51
	Stacked percentage with fill effect52
	MinMaxAvg showing Max, Min, Avg used licenses and Standard deviation
	Histogram
	Unique users chart showing how many different users were using the feature per selected interval .57
	Multiple feature groups are selected as well as multiple servers and plotted in the same chart59
	Hours per user60
	Hours per feature per user61
	A whole quarter but with interval set to 1 day63
	Multiple chart with one chart with all features and then one chart per feature in separate tabs64
	Database discrepancy

Lis	st Reports	66
	Used Licenses	67
	Borrowed Licenses	68
	Used and Borrowed Licenses	68
	Min/Max/Avg Usage	69
	User Groups	71
	Host Groups	72
	Denied Requests	73
	Raw data Report	74
	Raw Sampled data Report	74
	Pinged Host Report	75
	Features List Report	75
Misc	ellaneous questions answered	77
W	hy are there dips in the charts?	77
Ho	ow to move the JTB FlexReport Report Service installation to another server?	78
Ho	ow to move the JTB FlexReport Report Client installation to another machine?	78
W	hat discrepancies in the reports should I be aware of?	78
Ot	her tips and tricks	80

Instructions

JTB FlexReport Report Service and JTB FlexReport Report Client provide reporting functionality of JTB FlexReport.

The Service and Client installations do not include the functionality to record license usage. You need to have JTB FlexReport Core software installed for that purpose. Optionally JTB Process Monitor is needed.

It is recommended to install the JTB FlexReport Report Service on the same machine as JTB FlexReport Core is installed on and if MS Access is used, install on same machine as the main database JTBFlexReport.NET.mdb (default name) is located.

The JTB FlexReport Report Client can be installed on the same machine as the Report Service or it can be installed on one or many clients or PCs.

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.

Report Service installation

.NET Framework 4.6 or later required.

The Report Service (JTB FlexReport Report Service) can be installed on a server or on the same Server/PC as the client. It is recommended to install it on the same machine as JTB FlexReport Core, especially if an Access database is used as backend database.

The recommended, default and most common option is having windows service running on the server with static IP, another option is by having an IIS Hosted service (ISS service installer is available upon request). If the service and the client are on different machines you need to use a static IP instead of the machine name or the machine name must be found from the client machine. The IP or server name (of the machine where JTB FlexReport Report Service is installed) should be used to configure both the service and the client.

Run JTB FlexReport Service <version> Setup.exe.

At the end of the installation the Service Configurator will optionally show up. You can configure it during the installation or later.

JTB FlexReport Service Configurator

Service Configurator is found in Windows Start Menu>All Programs>JTB FlexReport Service> JTB FlexReport Service Configurator or run JTB FlexReport Service Configurator.exe in the JTB FlexReport Service folder. Typically in this folder:

32-bit OS: C:\Program Files\JTB World\JTB FlexReport Service

64-bit OS: C:\Program Files (x86)\JTB World\JTB FlexReport Service

It is also available to start from JTB FlexReport Core Configurator (JTB FlexReport Config) on the General tab.

General Configuration tab

Click on License Activation and activate JTB FlexReport unless it is already done in JTB FlexReport Core.

Decide to use SQL Server or MS Access as database. This depends on what database is used in JTB FlexReport Core.

You might need to specify the static IP instead of the server machine name. Note that this IP or name should be for the machine where the JTB FlexReport Service is installed.

Use port number 2003 and 2004 as first choice or increment it higher. The two services need to run on different ports.

Make sure the ports selected are open through firewalls.

Browse for the MS Access database (normally named JTBFlexReport.NET.mdb) or configure the SQL Server settings. Use the button Load SQL Servers to update the list of SQL Servers. Use Load DB Names button to update the list of Database Names. 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.

Notice that if the MS Access database is located on another server/computer you need to give the user that runs the service rights to access other computers on the network. UNC path should be used instead of mapped folder. How this is done is described in the JTB FlexReport Core documentation.

Update DB is usually only needed after upgrading from an older version than version 11.

Click on Configure.

Click on Start Services. This starts the services "JTB FlexReport Report Service" and/or "JTB FlexReport Sampling Service" and/or "JTB FlexReport Auto Report Service".

Take note of the "server machine" name or IP, and the ports in "Running On Port" as it is needed when configuring the client.

Optionally test the connection and the service engine using the two separate buttons.

An error message about "The remote name could not be resolved: 'localHost'" can indicate a Host name problem that needs to be fixed, a workaround is to use the IP address. It can also be a conflict with a VPN client. Try disable the VPN client and try if it works. Disabling the use of a pac file whilst connected to the domain can also help. A pac file is a script file that is used to automatically configure LAN settings.

Sampling to Cache

To improve performance of reporting on the raw data "JTB FlexReport Sampling Service.exe" runs as a Windows service and updates the raw data to a format that the reports quicker can make use of. This is normally done automatically every 30th minute. The lower Precision Value the more correct result but the longer the sampling will take and the larger the cache temp table will be. If MS Access is used as back end database the cache will be saved in a separate database with the suffix "-temp.mdb" containing the UserDetailedLogTemp table. If SQL Server is used there is a table named UserDetailedLogTemp that holds this cache data.

If SQL Server is used, 'db_backupoperator' and 'db_owner' permissions in the 'Database role membership' are needed for JTB FlexReport Sampling Service to do its work.

"Sampling All Records" can be used if you want to change "Precision Value". You don't have to keep the Service Configurator open during sampling as it can take quite a while if there is lots of data to process. But if it is kept open a dialog box will tell when the sampling is ready. Here are the services showing up among Windows Services.

Name	Description	Status	Startup Type	Log On As
🆏 JTB FlexReport Auto Service	Automatical	Running	Automatic	Local System
🥋 JTB FlexReport Core Service		Running	Automatic	Local System
🥋 JTB FlexReport Report Service	Provides dat	Running	Automatic	Local System
🥋 JTB FlexReport Sampling Service	Sampling da	Running	Automatic	Local System

If you want to have the service running with lower priority, select **Process Priority**.

Tables like **tblTemp**FeatureServer needs to be populated by the Report Service once per hour. These temp tables are used as a cache to substantially speed up the start of the Client and make selections of items like Features, Servers, etc. to work. This means that if a new Feature or other item is added it can take up to 2 hours before it can be seen in the Report Client and the Client also needs to be restarted. Manually using Update DB will update the Temp tables too.

Email Configuration tab

Only needed if email with reports needs to be sent. Specify email settings to have the ability to get automatically created reports by email. Use it together with the <u>Auto Reports tab</u> in the client.

You may need to contact your email server admin or manager to learn what settings to use.

The "To" email here is only used for sending the test email. Further configuration needs to be done in the client as different reports can be sent to different emails.

When ready and/or before pressing "Send test email" press "Configure email".

JTB FlexReport Service Configurator						
General Configuration Email Configuration						
	Email settings					
From:						
To:						
SMTP:						
User name:						
Password:						
SMTP port:	Use default credential					
This server re	quires an encrypted connection (SSL) Configure email Send test email					

Client installation

.NET Framework 4.6 or later required.

The client can be installed on any server or PC that have network contact with the server or PC where the Report Service is running. The client can also be installed on the same computer as the service.

Run JTB FlexReport Client <version> Setup.exe.

JTB FlexReport Client Configurator

Run JTB FlexReport Client Configurator from Windows start menu or run "JTB FlexReport Client Configurator.exe" located in the installation folder.

Typically in this folder:

32-bit OS: C:\Program Files\JTB World\JTB FlexReport Client

64-bit OS: C:\Program Files (x86)\JTB World\JTB FlexReport Client

It is also available to start from JTB FlexReport Core Configurator (JTB FlexReport Config) on the General tab.

In the client configurator add the server name or IP and ports that the Report Service uses. If unsure check in the JTB FlexReport Service Configurator what ports the settings are.

(Ø JTB FlexReport Client Configurator − □ ×								
	JTB FlexReport Client Configurator								
	Service Type Service Type Self Hosted Service								
	JTB FlexReport Service Engine Server Name / IP Address ACERLAPTOP								
	JTB FlexReport Report Service Running On Port 2003								
	JTB FlexReport Auto Service Running On Port 2004								
	Configure Test Service Engines Exit								

JTB FlexReport Client

Start the client application from Windows start menu or run "JTB FlexReportClient.exe" located in the installation folder.
Typically in this folder:
32-bit OS: C:\Program Files\JTB World\JTB FlexReport Client
64-bit OS: C:\Program Files (x86)\JTB World\JTB FlexReport Client

It is also available to start from JTB FlexReport Core Configurator (JTB FlexReport Config) on the General tab.

How to quickly create a report

Start by selecting Report Type from the Report Settings tab.

Then select a Date Range.

Optionally select other Report Settings.

Depending on Report Type select the appropriate tab and make further selection there. If only feature and server data should be included in the report typically use the Feature Server tab. For reports filtered on users or hosts and other combinations use the Detailed tab. For hours charts use the Hours Chart tab.

Press the Generate Report button.

See sample reports and settings <u>here</u>.

Ribbon tips

Click on a Ribbon tab if the Ribbon is minimized to show that Ribbon tab.

Double click on a Ribbon tab to switch between minimized and maximized Ribbon.

The whole Ribbon can be resized in height to make it easier to select from list boxes.

Report Settings tab

	Report		JTB FlexReport		- 0
Report Settings Feature Server Detailed Auto Reports	Export Drill down list				
Time Frame 00:00-23:59	💌 🗖 Enable Manual Time Frame	Interval 60 minutes	Color Fill effect	💡 Favorites 👻	Data Label
Month Report					
Week Report		Multiple Report Hide Issued Lic	Highlight today	Make Favorite	Max Usage
Preset Values Last 30 days		Created DateTime			_
2017-09-17 is the oldest date available 2018-04-24 is the	newest date available	Report Type PerDay	Generate Report	Manage Gallery	
		(inspect of pro-			Axis control
Date Range			Report Settings	Favorites	Tools

Here you start by specifying the date range and time frame to be used for the reports.

Before you can generate a report you need to use either of the tabs "Feature Server", "Detailed", "Hours Chart" or "List Report" (depending upon Report Type selected) and make selections there on what to report on.

 Select Date
 2017-12-14
 Time Frame
 00:00-23:59
 Enable Manual Time Frame

 Month Report
 Image: Constraint of the second secon

On the Date Range area specify the date range for your report.

Notice the oldest and newest dates available at the bottom of the date range area.

For Week Reports it is possible to select what week days to include in the reports. This will only work for PerDay, Stacked Line, Stacked Percentage, Histogram, Hours Chart and List Reports report types.



Select Date

This will be used when either of the radio buttons "Month Report" or "Week Report" are used. Select any day within the month or week you want to report on.

Select Date 2017-12-14							
December					• 20	017	F.
	Мо	Tu	We	Th	Fr	Sa	Su
49	27	28	29	30	1	2	3
50	4	5	6	7	8	9	10
51	11	12	13	14	15	16	17
52	18	19	20	21	22	23	24
53	25	26	27	28	29	30	31
	1	2	3	4	5	6	7
Today Clear							

Preset Values

Preset Values	Last 6 month 🔹
2017-09-17 is the	Previous year
	Previous quarter
	Previous month
	Previous week
	This year
	This quarter
	This month
	This week
	Last 12 month
	Last 6 month
	Last 5 month
	Last 4 month
	Last 3 month
	Last 2 month
	Last 30 days
	Last 21 days
	Last 14 days
	Last 7 days
	Last 24 hours

"Preset Values" needs to be used for the automatically created reports but can also be used for manual reports.

Time Frame

This setting is used for PerDay, Stacked Line, Stacked Percentage, Histogram, Hours Chart and List Reports reports only.



Either use the standard time frames from the dropdown or enable the manual setting and select from and to times.

			Enable Manual	al Time	Frame
Time Frame From	08:00	- ×	Time Frame To	16:00	- ×

Report Settings

On "Report Settings" there are several settings that determine how the reports are created. If the Wizard is activated you only see the settings that are available based on the Report Type selected.

Interval	60 minutes	▼ Color	Fill effect					
Multiple in One	Not In Use	- Borrowed	Denials					
Multiple Report Hide Issued Lic								
Created DateTim	ne							
Report Type Continuous Line Generate Report								
Report Settings								

Interval

If a large date range is used like a year an interval of 10 minutes will be too small and generate too many points to reasonable show on a chart so a larger interval can be used. If the data in the database is saved at an interval of 10 minutes and the charting interval is set to 60 minutes the max value in that interval will be used. Selecting interval can also make the chart more readable.

Interval	60 minutes 🔹
Multiple in One	1 minute
	2 minutes
Multiple Report	3 minutes
Created DateTim	4 minutes
	5 minutes
Report Type 🛛 🖁	6 minutes
	10 minutes
	12 minutes
▲	15 minutes
	20 minutes
	30 minutes
	60 minutes
	1 day
	1 week
	1 month
	1 year

Multiple ... in One Chart

If multiple of the items in a list (like the features list) are used they can be plotted as separate lines in the chart or separate bars in the hour chart report type. This option is not available for all Report Types.



Multiple report

When "Multiple Report" is checked and you for example selected multiple features on the Feature Server tab, one report per feature will be generated on a separate tab.

New tab

If this is selected a new tab will be used for the new report instead of replacing the existing report. This can be useful if you want to quickly compare data from one month to another.

Include concurrent overlap usage

If this checkbox is selected the generated report will remove duplicates if there are two or more concurrent usages at the same time. Used also for the database discrepancy reports.

Example of concurrent overlap usage is with data from Process Monitor. Say one session of AutoCAD LT was run between 8:00 and 9:00 and another session was run between 8:30 and 9:30. With the checkbox checked the result would be that 2 licenses was running at 8:45 but when not checked it would report as 1 licenses was running and this also affects the hour charts so in the first place 2 hours are reported and in the second place 1,5 hour.

Differences

Show only the differences. Used for the database discrepancy report only.

Color

Either colors can be used for the charts or they can be in black and white.

Borrowed line

Include a separate line showing the borrowed usage. The borrowed usage is still included in the used line.

Hide Issued Lic

If you don't want to include the Issued Lic line.

Fill effect

Useful for bar charts. For some other reports like Per Day and Continuous Line it can make the report not readable.

Denials

Include denials in the some of the reports. Requires that denials have been saved to the database. For example for FlexNet licenses, by specifying FlexNet debug log files in JTB FlexReport Config. Not all license systems supports denials.

Highlight today

Highlight (line is bolder) the line that is for the current day. Typically used for monthly or weekly charts and PerDay report type.



Create Date Time

Show created date time in report.

Summation

This is for histogram reports when multiple features are selected the license counts are summed up in the calculation. See examples of <u>histogram reports</u>.

Summation can be useful when features and licenses overlap—you may have Building Design Suite Premium, Building Design Suite Advanced, and Architecture Engineering Construction Collection...someone who opens Revit could get any one of the three features depending on what's available.

Interval	10 minutes	✓ Color	✓ Fill effect
Multiple Report	me Summation		
Report Type	Histogram	•	Generate Report
	Repo	ort Settings	

Report Type

Select among the report types available: PerDay, Continuous Line, Stacked Line, Stacked Percentage, MinMaxAvg, Histogram, Unique users, Database discrepancy, Hours Chart and List Reports.

Different Ribbon tabs will show or hide depending on the Report Type.



Favorites

In the Favorites area you can create and access favorites.

Create the report you want to use.

It is recommended to use Preset Values for the date range so it is dynamic.



When a favorite is created it can be accessed and generated by selecting from Favorites



Manage Gallery is used to edit or delete favorites.

Duplicate and Multiply the Time

These checkboxes are available only for List Reports.

Duplicate will include duplicate usage. Normally this should be unchecked.

Multiply the Time when checked will multiply the time with the number of licenses if more than 1 license is taken per checked out features. This is mainly useful for token based features.

Interval	10 minutes	🔽 🗖 D	uplicate	
	Multiply the Time			
Report Type	List Reports	•	Generate Report	
Report Settings				

Tools

Data Label will show data labels for all points or bars in a chart.

Max Usage will show a data label for only the point with highest value in a line.



On Axis control add a custom value or delete an existing value to restore to the default value. Orientation is in degrees.

Axi	s control	
	X - Orientation	<default></default>
	Y - Orientation	<default></default>
	X - Time Span	<default></default>
	Y - Num Span	<default></default>

MinMaxAvg

When the MinMaxAvg report type is selected the MinMaxAvg Setting panel shows up allowing you to select what lines to be showed on the report and for average line the grouping value.

Avg is short for average.

Standard Deviation. Learn more about it at <u>http://en.wikipedia.org/wiki/Standard_deviation</u> or <u>http://www.mathsisfun.com/data/standard-deviation.html</u>.

If the interval is 1 day and the grouping value is 7 you will get the average based on groups of 7 days.

Show/Hide Lines				
🗷 Min	🗷 Max	🗷 Avg		
Standa	rd Deviatio	n		
Avg Grouping				
Avg Grouping Value 1				
MinMaxAvg Settings				

Feature Server tab

Reports on this tab are based on the 'log' table that does not contain any user or host details. Normally this tab should be used for these combinations "Features – Servers", "Features – Server Groups", "Feature Groups – Servers" or "Feature Groups – Server Groups". For JTB Process Monitor and some license systems use the Detailed tab.

Report Settings Feature Server Detailed Auto Reports	Tools	
	Search Filter Width 200	Search Filter Width 178
Features - Servers These reports are based on the 'log' table. Generate Report	AutoCAD AutoCAD Architecture Revit Architecture Suite Revit MEP Suite	<all≥ ServerA ServerB</all≥
Select Group	Features	Servers

Combination drop down

Features - Servers
Features - Server Groups
Feature Groups - Servers
Feature Groups - Server Groups

To select all items in a list like all feature groups it is enough to select <All>.

To select all items that belong to a group select <Unassigned>. In the below example selecting <Unassigned> will select all features that does not belong to any of the groups or in this case FG1.

Search Filter	Width	178 🌲
<all> <unassigned> FG1</unassigned></all>		
-	~	
Featu	re Group)S

Detailed tab

Reports on this tab are based on the 'detailed' tables 'tblUserDetailedLog' and 'tblUserDetailedLogPrev' that contain user or host details. Use <All> to select all items like all User Groups and <Unassigned> to select all items not in a group like all users not belonging to a user group. Normally if the Feature Server tab can be used, it's preferred to use it.

Report Settings Feature Server Detail	ed Auto Reports Tools	
	Search Filter Width 178 🚔	Search Filter Width 178 🚔
Features - User Groups ▼ These reports are based on the 'detailed' tables. Generate Report	<aii> AutoCAD AutoCAD Architecture Revit Architecture Suite Revit MEP Suite</aii>	<all> <unassigned> UserGroupA UserGroupB UserGroupC</unassigned></all>
Select Combinations	Features	User Groups

Select Combinations in the drop down.

Features - User Groups	•
Select	
Feature Groups - Host Groups	
Feature Groups - Hosts	
Feature Groups - Server Groups	
Feature Groups - Server Groups - Host Groups	
Feature Groups - Server Groups - Hosts	
Feature Groups - Server Groups - User Groups	
Feature Groups - Server Groups - Users	
Feature Groups - Servers	
Feature Groups - Servers - Host Groups	
Feature Groups - Servers - Hosts	
Feature Groups - Servers - Users	
Feature Groups - User Groups	
Feature Groups - Users	
Features - Host Groups	
Features - Hosts	
Features - Server Groups	
Features - Server Groups - Host Groups	
Features - Server Groups - Hosts	
Features - Server Groups - Users	
Features - Servers	
Features - Servers - Host Groups	
Features - Servers - Hosts	
Features - Servers - User Groups	
Features - Servers - Users	
Features - User Groups	
Features - Users	
Server Groups - Host Groups	
Server Groups - Hosts	
Server Groups - User Groups	
Server Groups - Users	
Servers - Host Groups	
Servers - Hosts	
Servers - User Groups	
Servers - Users	

Hours chart tab

Use the Report type Hours Chart on the Report Settings tab. Reports on this tab are based on the 'detailed' tables 'tblUserDetailedLog' and 'tblUserDetailedLogPrev' that contain user or host details.

Report on hours used by selecting different combinations like User-Feature or User Groups-Feature.

It is possible to filter out columns of hours for example showing only hours more than specified number.

Report Settings Hours Chart	Auto Reports Tools		
Users Features	Search Filter Width 178 🚔	Search Filter Width 178 🚔	HoursUsed All
Hosts Servers	<all></all>	<all> AutoCAD</all>	From 0
Host Groups Server Groups	User002 User003	AutoCAD Architecture Revit Architecture Suite	To 0
Generate Report	User004 User005	Revit MEP Suite	
Select report type	Users	Features	Hours Setting

Hours Used in the reports includes borrowed hours but it is possible to show borrowed hours also in a separate bar by using the Borrowed checkbox on Report Settings tab. The borrowed usage is still included in the used bar.

Use <All> to select all items like all User Groups and <Unassigned> to select all items not in a group like all users not belonging to a user group.

List report

File Repor	Settings	List Report	Auto Reports	Export	
List Report Type	Used Lic	enses	✓ SI	how Report	s with Groups
Selection	Feature - User - User Group				
Aggregate Interval	Month				
Filter Match Type	Type RegularExpressions 🔹 Enable Data Grouping				
Report Settings					

List Report Type

Select what type of list report to generate.

File	Report S	ettings	List Report	Auto Repo			
List Report Type		Used Licenses 🔹					
Selection		Used Licenses Borrowed Licenses					
Aggregate Interval		Used and Borrowed Licenses					
Filter Match Type		Min/Max/AvgUsage User Groups					
		Host Groups					
		Denied Requests					
		Raw data Report					
Detailed List Re		Raw Sampled data Report Pinged Host Report					
Date		Features List Report					

Show Reports with Groups

To keep the list under selection not too long you can use this checkbox to show reports with or without groups.

Show Reports with Groups

Selection

Make a selection depending on type of report.

With "Show Reports with Groups" unchecked.

File	Report S	Settings	List Report	Auto Reports	Export		
List Report Type Used			enses	- Si	now Report	s with Groups	
Selection		Server -	Feature - User	- Host		-	
Aggregate Interval		Feature Feature -	Host				
Filter Match Type Feature Feature Host Server		Feature - Feature - Host Server - F	User - Host User Feature				
Deta	iled List R	Server - F Server - F	-eature - Host Feature - User -	Host			
Detailed List Re Server - Date Server - Server - Server -		Server - F Server - F Server - F	Feature - User - Feature - User - Feature - User	Host - Project Project			s
	001 Mar	User					

With "Show Reports with Groups" checked.

File Report	Settings Li	st Report	Auto Reports
List Report Type	Used License	es	▼ ✓ Show Reports with Groups
Selection	Feature - Ho	st - Host Gr	• voup
Aggregate Interval	Feature - Hos Feature - Use	st - Host Gro er - Host - Ho	oup ost Group
Filter Match Type	Feature - Use	er - User Gro	oup - Host - Host Group
	Feature - Use	er - User Gro	oup - Host
	Feature - Use	er - User Gro	oup
	Host - Host G	iroup	
	Server - Feat	ure - Host - I	Host Group
	Server - Feat	ure Group -	User - Host - Host Group
	Server - Feat	ure Group -	User - Host
	Server - Feat	ure Group -	User - User Group - Host - Host Group
	Server - Feat	ure Group -	User - User Group - Host
	Server - Feat	ure - User - I	Host - Host Group
	Server - Feat	ure - User - I	Host - Host Group - Project
	Server - Feat	ure - User -	User Group - Host - Host Group
	Server - Feat	ure - User - I	User Group - Host
	Server - Feat	ure - User -	User Group - Host - Host Group - Project
	Server - Feat	ure - User -	User Group - Host - Project
	Server - Feat	ure - User - I	User Group - Project
	Server - Feat	ure - User - I	User Group
	User - User G	iroup	

Aggregate Interval

Select if the data in the report should be aggregated or summed up per day, per month, per year or for the Whole Date Range as selected on the Report Settings tab.

Aggregate Interval	Month 👻
Filter Match Type	Day
r mer materi rype	Month
	Year
	Whole Date Range
	BEDOL SEUDOS

Copy to clipboard

Select rows, right click in the grid to copy rows.

Export to Excel

Use the Export tab.

Sorting

Click on the column header to sort on that column. Hold down shift on the keyboard and click on another column to sort on multiple columns.

Server*	Feature *	User H
ServerA	AutoCAD	User008 H
C A	A + CAD	11 000 1

Filter Match Type

Specifies what match style to use when filtering data elements:

Filter Match Type	RegularExpressions -
	Begins With
	RegularExpressions
	Wildcards

• Begins With – Match with the beginning of text entered



• RegularExpressions - Regular Expression matching

▼ ^{Feature}	^I ▼ ^{Feature}	l
utoc	^A.*D\$	
AutoCAD	L AutoCAD	L
	. 01	

• Wildcards - Wildcard matching using * and ? characters

∀ Feature	U
cad	
AutoCAD	Us
AutoCAD	Us

Column Filter

Click on the left of the column header to show the dropdown with various filer options.

User	Host	
Show all		
Show null		
Show not	null	
Custom		-
jtb		-
jtb4		
User001		
User004		
User005		
User006		
User008		
User009		•
UserUbb	Host 185	///

Custom Filter

Click on the filter icon at to left in the grid to show Custom Filter dialog box. Here custom filter expressions can be entered. Click on the ? at the top right of the dialog box to see what operators and functions can be used.

	Date	Server	Feature	User	Host	Hours
7	•					
0	2021-Mar	Custom Eller		U 000	11 1000	90.00
1	2021-Mar	Custom Filter			? X	141.00
2	2021-Mar	Enter custom fi	Iter expression			79.00
3	2021-Mar	Harris 40				42.00
4	2021-Mar	Hours>40				42.67
5	2021-Mar					57.00
6	2021-Mar	Hours > 40				150.67
7	2021-Mar					47.50
8	2021-Apr					66.83
9	2021-Apr	Clear	Apply	ОК	Cancel	60.50
10	2021-Apr				li	322.17

Enable Data Grouping

Group data base on one or multiple columns. Drag the column header to the group area at the top of the grid.

File	Report	Settings								
List Rep	List Report Type Used Licenses									
Selectio	Selection Server - Feature - User - Host -									
Aggrega	ate Interval	Month				•				
Filter M	atch Type	RegularEx	pressions	 Enable Data 	Grouping					
					Generate	Report				
			Report	Settings						
∕ De	etailed List R	eport 😣								
	Drag a colu	mn header h	iere to group b	y that column						
	Date	Server	Feature		User	Host	Hours	Hours & Mins		
V										
▶ 0	2021-Mar	ServerA	AutoCAD		User001	Host097	0.17	0:10		
1	2021-Mar	ServerA	Revit Arc	hitecture Suite	User006	Host184	22.83	22:50		
2	2021-Mar	ServerA	AutoCAD		User008	Host003	24 83	24.50		

After grouping of Feature.

		Date	Server	User	Host	Hours	Hours & Mins
5	7						
	0	+ AutoCAD Archite	ecture				
	1						
•	2	2021-Mar	ServerA	User001	Host097	0.17	0:10
	3	2021-Mar	ServerA	User008	Host003	24.83	24:50
	4	2021-Mar	ServerA	User010	Host008	15.67	15:40

Auto Reports tab

With this functionality you can have reports automatically created as PNG image files at specified recurrence pattern.

Auto Reports can also be used to quickly get access to different saved reports. Just click on the saved report in the Reports List and then go to the Report Settings tab and click on Generate Report. If you don't want to save a lot of image files created, make sure to use a fixed file name and have them created only monthly.

On Report Settings tab the date selection must make use of "Preset Values".

This functionality requires that the JTB FlexReport Auto Report Service is running.

To set up a report start by manually creating the report you like to use. Settings on the Tools tab will not affect the created images.

Report Settings	Feature Server Detailed	Auto Reports Export Drill down list	
Hourly Daily Monthly	Recur every 60 🜩 minute	File Save Path:	AutoCAD
Recurrence Pattern	Hourly Settings	Width 802 Height 1154	Edit Report Delete Report Cancel

When the report is created click on Auto Reports tab and specify the recurrence pattern if the report should be created on an hourly, daily or monthly basis.

Hourly settings allow a report to be created multiple times per hour or day.



Daily settings allow a report to be created at specified days and time.



Monthly settings allow a report to be created on a monthly basis.

Hourly	Auto GenerateTime 15:43
O Daily	● Day 30 🚔 of every month.
Monthly	The First
	Monday 🔽
Recurrence Pattern	Monthly Settings

The Settings panel explained.

File Save Path is a path located where the Auto Report Service is running. You can run this client on any computer but the report file (.PNG) will be created locally on the server.

It is possible to save to a network path (UNC) with some setting changes. JTB FlexReport Auto Report Service needs to be changed so it logs on as another account than the Local System Account. You might need to set "Log on as" to either a user account or another special account with access to the other location. Then for the folder where the images should be saved you need to share the network path with everyone or with a special user with read/write permission level. Finally you can use a UNC path as path where the images will be saved.

If the report should overwrite itself each time, use the fixed file name checkbox. This can be useful if you like to have a web page with the image being updated automatically.

Enter a file name that is the basis for the report file. If fixed file name is not used the file name will have a suffix with the date and time. For example AutoCADperDay (2012-02-13 08.52.12).png where AutoCADperDay is the file name.

Specify also the size for the image.

When ready press Save Settings. If all goes well a PNG file will directly be created based on the settings used.

File Save Path:	
Fixed File Name	Email
File Name :	
Image Resol	ution Save
Width 802 🚔 Hei	ght 1154
	Settings

The report will show up on the **Report List** panel and can also be deleted or edited from there.

Email

Make sure first that email settings are done in the JTB FlexReport Service Configurator><u>Email</u> <u>Configuration</u>.

To get the created PNG files emailed use the Email button and specify the settings of where to send the email and with what subject and content.

	Email settings
	Use for all Auto Reports
То	info@jtbworld.com
Subject	Last 30 days AutoCAD report
Content	
	Cancel Ok

The setting files are saved on the computer where JTB FlexReport Service is installed in this folder: %ALLUSERSPROFILE%\JTB World\JTB FlexReport Service

%ALLUSERSPROFILE% location:

XP: C:\Documents and Settings\All Users

Vista, Windows 7, Windows 8, Windows 8.1, Windows 10: C:\ProgramData

Export tab

This is a contextual tab that shows up when there is a report available to be exported.

Export the current report or all reports to Excel. If a chart is exported the data for the chart will be exported, not the chart.

Export the current report or all reports to images. You will be asked for a folder where the images are saved.

File	Report Settings	Feature Server	Detailed	Auto Reports	Export	Drill do
Saved File 1.xlsx 2.xlsx export.xls IRD Addit JTB test.x	es x tion Sheets xlsx xlsx	Last Use Last Use	d Path (Data d Path (Image	Exported) : C:\U: e Exported): C:\U:	sers\jtb\Do sers\jtb\Do	ocuments ocuments
testrevit.x	dsx	Export to	o Excel ◄	Export Report Ima	ages 🔹	
		Cu	urrent Tab	t data and image	25	
		A	l Tabs	A		

Click on the file in the list to open it.

Drilldown list

This tab is a contextual tab and is only visible when a chart has been created.

In some charts you can click on a point and a drilldown list will show up showing what users that were using licenses at that point in time. If the chart is based on a larger interval like 1 day there might be multiple times that has the same amount of licenses issued but it is the first one found that is showed.

Depending on how the chart was created and based on what settings, the drill down row count might not match the point on the chart. This can also be affected by the precision value set for the sampling in JTB FlexReport Service Configurator. The larger precision value the less accurate this is.

In the list there can be times that are overlapping having same end time as another session is started. In the chart these can be filtered out to nor show duplicate or overlapping usage. Thus there can be a discrepancy.



Tools tab

This tab is a contextual tab and is only visible when a chart has been created.

Changes using this tab only affects the currently showing chart and are not saved.

C	Z F	leport Settings	Feature Server	Detailed	Auto Reports	Export	Drill down list	Tools				
				\sim					Color	Created Date Time	Enable tooltip chan	ge
	$\mathbf{\nabla}$			\sim	- 🥙	- <u>-</u>	- ២	•	Fill effect	Show Data Labels	Auto pop delay (ms)	5000 🌲
Ge	et Valu	e Max Usage	e Hide Line	Color	Zoom/Pan	Move	Reset		Issued Licenses	Show Markers	Reshow delay (ms)	500 🌲
		and and	\sim						Borrowed	Differences	Initial delay (ms)	100 🌲
	\mathbf{r}				•		•	•	Denials			
Da	ta Lab	el Highlight	Isolate	Title	Report Zoom	Axis con	trol Gridline	s	Highlight today			
				Tools					Repo	rt Settings	Tooltip Set	tings

Get value shows information on a point on a line in a dialog box. The result can also be copied to the clipboard

JTB FlexReport X				
Line Name : Date Time :	Used Licenses 2017-12-07 00:00:00			
No of Licenses :	17			
Copy to Clip	board <u>O</u> k			

Show Value add the value directly on the chart for the point you click on.



Show Max usage – shows the highest value for each line in the chart.





Highlight selected line makes the selected line red and bold.

Hide Line – click on a line to hide it.

Isolate selected line and all other lines will be hidden.

Color - Change the color of selected line if you want another color on it. Just click on the button, not on the arrow.



Or click on the arrow to do the following changes.

• Line management

Custom settings can be specified and profiles for them can be saved, applied and used.

Line management Profile test		Issued Licenses Max Used Licenses Max Used Licenses Line Properties Editor
Current Profile : test Line Name Issued Licenses Max Used Licenses	Line Properties <show editor=""> <show editor=""></show></show>	Color: Width: Factor:
Add new Profile Apply Set C	urrent Save Profile Delete	Clos Clos Preview: OK Cancel

Line Color, Width, Factor and Style can be specified for each line.

- Change Title Color
- Change Axis Text Color
- Chart background This is for the area within the chart. If the colors are different it will be gradient.
- Background This is for the area around the chart. If the colors are different it will be gradient.

And to save the colors as your standard there are the following options.

- Save background colors as standard
- Save title colors as standard
- Save axis colors as standard

Title is useful if you want to add a custom title for the report.

Zoom/Pan – use your mouse left click and make a rectangle from top left to bottom right in the chart to zoom in. Click one time with the left button to zoom out or make a rectangle from right to left to zoom out a bit.



The result after zooming in:



Chart Zoom acts on the chart area so you can adjust the size of it.

Move



- Move Chart relocate the chart
- Move other items

Allow you to move the Legend, X-axis, Y-axis, Title, Date Time and No of Licenses individually.

Move other items ×		
Move	Legend 🗸	
Horizontal margin	Legend X - axis	
Vertical margin	Y-axis Title Date Time	
No of Licenses		

Axis controller

Allow you to make changes to the axis text.

Ax	s control Gridlines	
	X - Orientation 45	
	Y - Orientation 0	
	X - Time Span 1	ŀ
	Y - Num Span	
1	X - Hor. Align Right 🚽	
-	X - Ver. Align Top 🔹	
	Y - Hor. Align Right 🛛 🗸	
	Y - Ver. Align Center 👻	

Reset

Most changes can be reset All at the same time or individually.


Gridlines



Besides being able to change the appearance of the grid lines you can set the chart to be viewed in 3D.



The trick to get the depth of the lines is to click on "Fill effect" twice.

Chart Tooltip Settings

Enable tooltip change						
Auto pop delay (ms) 5000 📮						
Reshow delay (ms) 500 📥						
Initial delay (ms) 100 🖨						
Tooltip Sett	tings					

• When **enable tooltip change** is checked a tooltip shows when you hold the cursor above a point on a line.



- Auto pop delay is in milliseconds how long the tooltip will show.
- **Reshow delay** is in milliseconds how long before showing another tooltip when you move the cursor.
- Initial delay is in milliseconds how long before the tooltip will show up.

Chart Settings



Toggles the settings on the currently visible chart.

- Color
- Fill effect
- Issued Licenses
- Borrowed
- Denials
- Highlight today
- Create Date Time
- Show Data Labels

Show or hide the data labels



• Show Markers

Show or hide the markers



• Differences Used for the database discrepancy report only.

Style

Select your preferred color theme.

First select the base style Black, Blue or Silver. Then you can select a custom color that will adjust this style further.



Application menu

Copy report image to clipboard.

Reports can be saved/exported to file and printed.

Close current or all reports.

Determine if the mouse wheel should scroll among the tabs or not.

Determine if the Ribbon should be hidden automatically.

Auto Filter: This applies to simplify making selections in the list boxes of features, servers, users, hosts, etc. Note: If the database is large and with many rows in the tables this can cause the Client to take a long time to open so you might want to disable this feature for this reason.

Use Wizard: The Wizard is activated by default and makes it easier to make selections of settings by hiding those that are not available depending on report type selected.

Play sound when ready: If you want to hear when the report(s) is ready.

Copy Report
Save Report Ctrl+S
Print Ctrl+P
Print All Ctrl+Shift+P
Close Ctrl+W
Close All Ctrl+Shift+C
Mouse Wheel Tab Scroll
Autohide Ribbon
Auto Filter
🗹 Use Wizard
Play sound when ready
🛛 E <u>x</u> it

Save Report opens up this dialog box making it possible to save to different image formats.

Size					
🔽 Use control di	mensions	Width:	1059	- A-	
		Height:	684	<u>^</u>	
Options					1
Bits per pixel:	32 bpp	•			
Image format:	BMP - Windo	ws Bitmap		•	
Quality (JPEG):	EMF - Enhan Exif - Exchan GIF - Graphic CO - Windov JPEG - Joint PNG - Portab TIFF - Tag Im	ced Windows geable Image is Interchang vs icon image Photographic ile Network G nage File Fom	s metafile e File e Forma format Experts iraphics nat	Gr	
Chart Print Manager	-		Clo)se	
Chart Print Manager Installed printers: Send To Irientation: Landsca	OneNote 2007			ose ▼ Copie	s: 1
Chart Print Manager Istalled printers: Send To Irientation: Landsca Paper	OneNote 2007			JSE ▼ Copie	s: 1
Chart Print Manager Installed printers: Send To Irrientation: Landsce Paper Size: Letter	OneNote 2007			JSE ▼ Copie	s: 1
Chart Print Manager Installed printers: Send To Internation: Landsca Paper Size: Letter Source: Default tray	OneNote 2007 pe •			Copie	s: 1
Chart Print Manager Installed printers: Send To Irientation: Itandocc Paper Size: Letter Source: Default tray Margins (inches) Lett: 1.00	OneNote 2007			Copie	s: 1
Chart Print Manager nstalled printers: Send To Drientation: Lendsce Paper Size: Size: Letter Source: Default tray Margins (inches) Lett: Lett: 1.00 ÷ Top: 1.00 ÷	OneNote 2007			Copie	s: 1
Chart Print Manager Installed printers: Send To Intertation: Lendsca Paper Source: Source: Default tray Margins (inches) Left Left 1.00 ÷ Top: 1.00 ÷ Right: 1.00 ÷	OneNote 2007			▼ Copie	s: 1
Chart Print Manager Installed printers: Send To Drientation: Landsca Paper Source: Source: Default tray Margins (inches) Left: Left: 1.00 ÷ Top: 1.00 ÷ Bight: 1.00 ÷	OneNote 2007			Copie	s: 1
Chart Print Manager nstalled printers: Send To Drientation: Landace Paper Size: Size: Letter Source: Default tray Margins (inches) Lett: Lett: 1.00 ÷ Right: 1.00 ÷ Bottom: 1.00 ÷ Settings Print grayscale Print background frame Automatic quality scale	OneNote 2007			Copie	s: 1
Chart Print Manager nstalled printers: Send To Drientation: Landocz Paper Size: Letter Source: Default tray Margins (inches) Lett: 1.00 ÷ Lett: 1.00 ÷ Settings Print grayscale Print background frame Automatic quality scale Quality scale: 1.00 Scale 2d objects: 1.00	OneNote 2007				s: 1
Chart Print Manager Installed printers: Send To Paper Iardisca Size: Letter Source: Default tray Margins (inches) Iardisca Lett: 1.00 ÷ Top: 1.00 ÷ Right: 1.00 ÷ Point prayscale Print background frame Print background frame Automatic quality scale: Quality scale: 1.00 Update preview char Verview char	OneNote 2007				

To be able to export all chart tabs to images see the Export tab.

Quick Access Toolbar

Use the arrows to move among multiple reports that have been created.

The Ribbon can be minimized and maximized also by right-clicking on the arrow to the right in the Quick Access Toolbar (QAT).



Command can be added to the Quick Access Toolbar



Click on the arrow on QAT to access these options.



About dialog box shows besides versions information on the connection settings and database.

About JTB FlexReport	×
JTB FlexReport	
Server: windows10	
Report Service Port: 2003	
Auto Service Port: 2004	
DB Type: MS Access	
DB Path: D:\firman\JTB FlexReport\Sample Database	
DB Name: JTBFlexReport.NET-Sample.mdb	
Main DB Size: 19.73 MB	
Temp DB Size: 69.94 MB	
JTB FlexReport Client version: 2020.8.0	
JTB FlexReport Service version: 2020.8.0	
Copyright © 2020 JTB World Inc.	
	ОК

Show Alert will activate that the dialog box is shown when there is a need to select further data from other tabs.

Sample reports

Monthly chart on a per day basis



Select Report Type PerDay. Select Month Chart radio button and any date within the month you want to include in the report. Use lower interval than 1 day.

Use in combination with the Feature Server or Detailed tab.



Monthly chart as a continuous line

	U	Report Set	ings	Feature Server	Detailed	Hours Chart	List Reports	Auto Reports	Export	t Drill down list	Teels			
d	select D	ate 2	012-03	-01 📑 🖬	Frame 00:0	0-23:59	Enabl	e Time Frame	nanua	Interval	60 minutes	Color		Fill effect
4	Mont	h Chart		Tim	Frame From		× Time Fram	e To 💠	×	Multiple in One	Not in Use	 Borrowei 	d	Denials
	Wee	k Chart								Multiple Chart	New chart in	new tab 🔲 Hide Is	sued Lic	Highlight today
	Pres	et Values			From	2011-09-17 🗖	🕂 To 2012-	04-24 🔫 🌻		Created Date	ime 🔲 Include o	oncurrent overlap u	sage	Differences
	2011-09-	17 is the old	lest date	e available	20	012-04-24 is th	e newest date av	railable	6	Report Type	Continuous Line		~	🗸 Generate Chart
													<u></u>	
					Date Ra	ange					Re	port Settings		E.

Select Report Type Continuous Line. Select Month Chart radio button and any date within the month you want to include in the report. You can also select month using Preset Values dropdown or From and To dates. Interval can be any interval larger than how the sampling interval or snapshot interval is set.

Use in combination with the Feature Server or Detailed tab.

Optionally use checkboxes like Color, Borrowed, Hide Issued Lic, Fill effect, Denials.





Chart as a continuous line including borrowed usage and with interval set to 1 day

Report Type used is Continuous Line. A custom date range has been used and Interval set to 1 day.

Use in combination with the Feature Server or Detailed tab.

Borrowed usage is still included in the Max Used Licenses line.

Frame 06:00-18:00 💌 🗏 Enable Time Frame manual	Interval 1 day 🔽 Color
Frame From 08:00 🗙 Time Frame To 16:00 🗙	Multiple in One Not In Use 🔽 Borrowed
	Multiple Chart I New chart in new tab Hide Ma
● From 2008-09-01 💭 To 2008-11-01 💭	Include concurrent overlap usage
2009-01-30 is the newest date available	Report Type Continuous Line





Denials showing on charts

Select Date	2008-06-11 🚔 🗸		
Month Chart			
Interval	1 day	 Color 	Fill effect
Multiple in One	Not In Use	 Borrowed 	Denials
Multiple Chart	New chart in new	v tab 📃 Hide MaxLic	Highlight today
Include concur	rent overlap usage	Created DateTime	
Report Type	Continuous Line	· [🚧 Generate Chart

Use the Denials checkbox on the Report Settings tab together with the Continuous Line report type.

The points Denials are showing how many denials happed that day.

The points for DeniedUsers show how many different users had denials that day.

Denials is only available for Flex-enabled features and when having added FlexNet debug log in JTB FlexReport Config>Properties.

Use in combination with the Feature Server or Detailed tab.



Used licenses - Features: Application3

Here is another example of chart showing denials.



Stacked line

Select Date	2008-06-11 🚔 🗸	Time Frame	06:00-	18:00	-
Month Chart		Time Frame F	From	08:00	×T

Select Report Type Stacked Line.



Use in combination with the Feature Server or Detailed tab.

Used licenses - Features: Application1; Date range: 2008-06-01 to 2008-06-30; TimeFrame: 06:00-18:00



Stacked Line with multiple features in one chart

To create this chart select Report Type "Stacked Line", interval 1 day or higher, "Multiple...in One" set to Features.

Use in combination with the Feature Server or Detailed tab.

This can be useful if you are phasing out one version and starting to use a new version at a company and want to follow the progress for the users to switch using version.

Report Settings F	eature Server	Detailed Ho	ours Chart	List Reports	Auto Reports	Expor	t Drill down list	Tools			
Select Date 2013-12-1	6 🖃 🌩 Time Fi	rame 00:00-23	3:59	- Enable	Time Frame n	nanual	Interval	1 day	-	Color	Fill effect
Month Chart	Time Fra	ame From :	- ×	Time Frame	To :	* X	Multiple in One	Features	-	Borrowed	Denials
Week Chart	© Week Chart						Multiple Chart New chart in new tab Hide Issued Lic Highlight tod			Lic 🔲 Highlight today	
Preset Values Last 2 month OFrom 2013-09-17 To 2014-04-24 To 20						Differences					
2013-09-17 is the oldest date available 2014-04-24 is the newest date available Report Type Stacked Line Chart											
		Date Range	е					Rej	port Se	ettings	Fa

Then select multiple features.

Report Settings Feature Server Detailed Hours Chart	List Reports Auto Reports Export Drill do	wn list Tools
	Width 243	Width 243 🚔
	<al></al>	<all></all>
Features - Servers	AutoCAD	ServerA
These reports are based on the 'log' table.	AutoCAD Architecture Revit Architecture Suite Revit MEP Suite	ServerB
Select Group	Features	Servers

Below are the multiple features stacked on top of each other with each feature as a separate line.



Used licenses - Features: AutoCAD,AutoCAD Architecture,Revit Architecture Suite,Revit MEP Suite - Servers: ServerA, ServerB Date range: 2013-10-16 to 2013-12-16; Time Frame: 00:00-23:59

Stacked percentage with fill effect

Select Date	2008-06-11 🚔 🗸	Time Frame	06:00-	18:00	-
Month Chart		Time Frame	From	08 : 00	×T

Select Report Type Stacked Line and the Fill effect checkbox.

Interval	10 minutes	Color	Fill effect			
Multiple in One	Not In Use	Borrowed	Denials			
Multiple Chart	New chart in n	ew tab 📃 Hide MaxLic	Highlight to:			
Include concurrent overlap usage Created DateTime						
Report Type	Stacked Percenta	ge 🔽 📔	🗸 Generate C			

Use in combination with the Feature Server or Detailed tab.



Used licenses - Features: Application1; Date range: 2008-06-01 to 2008-06-30; TimeFrame: 06:00-18:00

MinMaxAvg showing Max, Min, Avg used licenses and Standard deviation

Select Date 2009-01-01 🚑 🗸

Month Chart

Select Report Type MinMaxAvg and then select what lines to show or hide in the MinMaxAv Settings area. Use a larger interval like 1 day is recommended.

Interval	1 day 🔽	Color	Fill effect		Show/Hide Lines
Multiple in One	Not In Use 📃	Borrowed	Denials		Min 🗹 Max 🗹 Avg
Multiple Chart	New chart in new tal	b 🔲 Hide Issued Lic	Highlight today		Standard Deviation
Created DateT	ime 🔲 Include concurr	ent overlap usage	Differences	2	Avg Grouping
Report Type	MinMaxAvg	•	Generate Chart	A	vg Grouping Value 1
	Report Se	ettings	Ex.		MinMaxAvg Settings

Use in combination with the Feature Server or Detailed tab.



Used licenses - Features: Application1

Histogram

Select Date Range and Report Type Histogram.

File	Report Settings	Feature Server	Detailed	Auto Reports	Export	Drill down list
		Time Frame	06:00-18:	00 🔽	Enable M	lanual Time Frame
Month	Report					
Week F	Report 📝 Monday	🖌 Tuesday 🖌 We	dnesday 🗔	/ Thursday 🔽 Fri	day 🗌 Sa	turday 🗌 Sunday
OPreset	Values	2019-10-24 🔹	÷ To 20	19-11-26 🔹 韋	-	
2019-11-2	0 is the oldest date a	available	2019-	11-20 is the newes	t date avail	able
			Date Range	•		
			_			
Interval	10 minut	es 🗸 🗸	Color	✓ Fill effect		
Multipl	e Report					
Create	d DateTime 📃 Sur	nmation				
Report Ty	pe Histogram	-		Generate Rep	ort	
		Report Settings				

Use in combination with the Feature Server or Detailed tab.

Summation checkbox determines if multiple features are summed or not.

This example below shows that 100% of the time at least 1 license was used. 72% of the time at least 2 licenses was used, etc.



HistoGramChart: Features: Application1; Date range: 2009-01-01 to 2009-01-31



Multiple features without summation selected.

Histogram Chart - Features: A,B - Server: S Date range: 2019-10-24 to 2019-11-26



In this case both feature A and B have the same usage so when summation is used this is the result.

File Repo	rt Settings	Feature Server	Detailed Auto	o Reports	Export	Drill do	wnlist	Tools			
				Sea	arch Filter	Width	178 🛟	: Se	earch Filter	Width	178 🌲
Features - Server	s	•			>			<a S</a 	41>		
These reports are	e based on th	e 'log' table.									
			Generate Repo	ort							
		Select Group			F	eatures				Servers	
/ Histogram C	ihart 😣				<u>۰</u> ۳	A					



Unique users chart showing how many different users were using the feature per selected interval

Select Report Type Unique users.

This example is created using Interval 1 day.

Use in combination with the Feature Server or Detailed tab.

Select Date 2009-02-11 * *	Time Frame 00:00-23:59	💌 🔲 Enable Time Fran	ne manual	Interval	1 day	👻 🔽 Cole
Month Chart	Time Frame From :	🗙 Time Frame To 🛛 :	×	Multiple in One	Not In Use	💌 🗏 Bori
Week Chart				Multiple Chart	New chart in ne	ew tab 📃 H
Preset Values Previous month	From 2009-02-11	то 2009-02-11 茾 т		Include concurr	rent overlap usage	Created
2008-06-01 is the oldest date available	e 2009-01-30 is th	ne newest date available		Report Type	Unique users	-



Unique Users - Features: Application1

And here per 1 week interval.



Multiple feature groups are selected as well as multiple servers and plotted in the same chart

When multiple are selected like this and Multiple...in One is "Feature Groups" the data will be aggregated.

Report Settings Ferature Server Detailed Hours Chart List Reports Auto Reports	
Select Date 2012-10-26 Time Frame 06:00-18:00	Interval 60 minutes C
Month Chart Time Frame From : Time Frame To : ***	Multiple in One Feature Groups 🔽 🔲 B
Week Chart	Multiple Chart New chart in new tab
○ Preset Values Last 24 hours ▼ ○ From 2012-09-17 ▼ To 2013-04-24 ▼ ▼	Created DateTime Include concurrent ov
2012-09-17 is the oldest date available 2013-04-24 is the newest date available	Report Type Continuous Line -
Date Range	Report Settings

Use in combination with the Feature Server or Detailed tab where one or many feature groups and servers can be selected.

	Width 243 🜩	Width 243 🜩
Feature Groups - Servers	<unassigned> AppGroup1 AppGroup2 AppGroup3</unassigned>	Server 1 Server 2 Server3 Server4
Generate Chart	I	1
Select Group	Feature Groups	Servers

The feature groups will each have one usage line aggregated for all selected servers.





Hours per user

Select Report Type Hour Chart in Report Settings and use in combination with Hours tab. Hours Used includes borrowed hours. Borrowed hours can be showed separately if needed but Hours Used will still include the borrowed hours.



To see one bar per user make use of Multiple ... in One on the Report Settings tab. The same is true for other combinations as well. If Not In Use is selected the time will be aggregated.



HoursChart: Hours per user; Date range: 2009-01-01 to 2009-01-31; TimeFrame: 00:00-23:59



Hours per feature per user

Select Report Type Hour Chart in Report Settings and use in combination with Hours tab.

When using **Multiple Report** in combination with **Multiple ... in One**. If for example Multiple **Features** in One is used.

File	Report Settings	Hours Chart	Auto Reports	Export Drill down	list Tools	;				Style
		Time Frame	00:00-23:59	- Enabl	e Manual Tin	ne Frame	Duplicate Usage	•	✓ Color	Fill effect
O Month F	Report						Multiple in One	Features	- Borrowe	d Denials
Week F	Report 📝 Monday	✓ Tuesday ✓ We	dnesday 📝 Th	ursday 🖌 Friday 📝	Saturday 🗸	Sunday	Multiple Report	New Tab		
Preset	Values ● From	2020-09-01 💌	‡ To 2021-0	04-04 🔫 🌩			Created DateTin	me		
2020-01-0	1 is the oldest date a	available	2021-05-2	1 is the newest date a	vailable		Report Type	Hours Chart	•	Generate Report
			Date Range					R	Report Settings	

Select Features and Users on the Hours Chart tab.

File	Report Settings	Hours Chart	Auto Reports	Export	Drill down list	Tools
✓ Users	✓ Features	Se	arch Filter Wi	dth 178	Search Filte	r Width 178 🜩
Hosts	Servers	<a< th=""><th> ></th><th></th><th><all></all></th><th></th></a<>	>		<all></all>	
User G	roups 📃 Feature	Groups Us	er001		AutoCAD	
Host G	roups 🗌 Server G	iroups Us Us	er002 er003		AutoCAD Ar Revit Archit	chitecture tecture Suite
	Generat	e Report Us	er004 er005		Revit MEP S	Suite
	Select report type		Use	s		Features

The first chart will show hour for each Feature.









Continuous Line for a whole quarter with interval set to 1 day

A Continuous Line Report Type, with interval set to 1 day used in combination with the Feature Server or Detailed tab. When using a longer time period like a quarter it is best to use a larger interval like 1 day or more. Issued Line checkbox is unchecked.



Used licenses - Features: AutoCAD,AutoCAD Architecture,Revit Architecture Suite,Revit MEP Suite - Servers: ServerA, ServerB

Multiple chart with one chart with all features and then one chart per feature in separate tabs

Use the Multiple Chart check box and optionally in combination with the Multiple...in One dropdown.

Use in combination with the Feature Server or Detailed tab.

			Report Settings	Feature Server Gro
Interval	1 day 💽 Col	or		Width 243 🖨
Multiple in One	Features 💌 🗖 Bor	rowed	Application 1	
Multiple Chart	New chart in new tab	lide MaxLic	Application2 Application3	
Include concur	rent overlap usage 🔲 Created	I DateTime	Application4 AutoCAD 2010	
Report Type	Continuous Line			
	Report Settings		Feat	ures

MultiFeaturesInOne Application1 Application2 Application3



Database discrepancy

Compares data in the table Log and tables tblUserDetailedLog and tblUserDetailedLogPrev. Purpose with the report is to identify discrepancy between these tables.

File Report Settings Feature Se	rver Detailed Export Drill down list	Tools			
			Interval	1 day 👻	
O Month Report					
◯ Week Report			New Tab		
Preset Values Last 14 days	From-To		Include concu	rrent overlap usage Differe	ences
2020-09-17 is the oldest date available	2021-04-24 is the newest date avail	able	Report Type	Database discrepancy 👻	Generate Repo
	Date Range			Report Settings	
				···· ^	
					△
Database discrepancy r	eport 😣				

	Database disci	cpancy report w						
	Server	Date	Feature	Issued Licenses	Used1	Used2	Borrowed1	Borrowed2
Þ	ServerA	2021-01-04 09:00:00	64300ACD_F	150	0	1	0	0
	ServerA	2021-01-03 13:00:00	64300ACD_F	150	0	1	0	0
	ServerA	2021-01-04 10:00:00	64300ACD_F	150	0	1	0	0
	ServerA	2021-01-04 15:00:00	64300ACD_F	150	0	1	0	0
	ServerA	2021-01-04 19:00:00	64300ACD_F	150	0	1	0	0

List Reports

Make selection of date range and interval.

Duplicate and Multiply the Time are normally unchecked.

Report Settings List Report Auto Reports					
Select Date 2017-12-14 Time Frame 00:00-23:59 Enable Manual Time Frame	Interval 10 minutes Duplicate				
Month Report	Multiply the Time				
💿 Week Report 🕼 Monday 🕼 Tuesday 🕼 Wednesday 🕼 Thursday 🕼 Friday 🕼 Saturday 🕼 Sunday	Report Type				
Preset Values From					
2017-09-17 is the oldest date available 2018-04-24 is the newest date available					
Date Range	Report Settings				

Select List Report tab and make selections

Report Sett	ings List Report Auto Reports
List Report Type	Used Licenses
Selection	User - Host
Aggregate Interval	Day
	Generate Report
	Report Settings

When ready press Generate Report.

Detailed List Report 3								
Date	Server	Feature	User	UserGroup	Host	HostGroup	Hours	Hours&Minu
2017-12-01	ServerA	AutoCAD	User008	UserGroupA	Host003	HostGroupA	5.66	5:40
2017-12-01	ServerA	AutoCAD	User010	UserGroupA	Host008	HostGroupB	3.66	3:40
2017-12-01	ServerA	AutoCAD	User011	UserGroupA	Host011	HostGroupB	0.33	0:20
2017-12-01	ServerA	AutoCAD	User014	UserGroupA	Host215		8.33	8:20
2017-12-01	ServerA	AutoCAD	User025	UserGroupA	Host070		0.16	0:10
2017-12-01	ServerA	AutoCAD	User043	UserGroupB	Host101		1.00	1:00
2017-12-01	ServerA	AutoCAD	User048	UserGroupB	Host195		23.83	23:50
2017-12-01	ServerA	AutoCAD	User059	UserGroupB	Host292		1.16	1:10
2017-12-01	ServerA	AutoCAD	User081		Host014	HostGroupB	3.49	3:30
2017-12-01	ServerA	AutoCAD	User089		Host006	HostGroupA	7.33	7:20
2017-12-01	ServerA	AutoCAD	User090		Host001	HostGroupA	0.16	0:10
2017-12-01	ServerA	AutoCAD	User091		Host029		0.16	0:10
2017-12-01	ServerA	AutoCAD	User105		Host125		0.50	0:30
2017-12-01	ServerA	AutoCAD	User107		Host201		7.99	8:00
2017-12-01	ServerA	AutoCAD	User120		Host142		0.16	0:10
2017-12-01	ServerA	AutoCAD	User124		Host174		1.66	1:40
2017-12-01	ServerA	AutoCAD	User125		Host096		9.33	9:20
2017-12-01	ServerA	AutoCAD	User136	UserGroupC	Host245		2.66	2:40
2017-12-01	ServerA	AutoCAD	User149	UserGroupC	Host085		11.49	11:30
2017-12-01	ServerA	AutoCAD	User160	UserGroupC	Host080		8.00	8:00
2017-12-01	ServerA	AutoCAD	User165	UserGroupC	Host136		1.99	2:00
2017-12-01	ServerA	AutoCAD	User171	UserGroupC	Host274		6.16	6:10
2017-12-01	ServerA	AutoCAD	User177	UserGroupC	Host257		0.83	0:50
2017-12-01	ServerA	AutoCAD	User185	UserGroupC	Host275		0.50	0:30
2017-12-01	ServerA	AutoCAD	User199	UserGroupC	Host268		19.66	19:40
2017-12-01	ServerA	AutoCAD	User206	UserGroupC	Host235		0.16	0:10
2017-12-01	ServerA	AutoCAD	User208	UserGroupC	Host021	HostGroupC	0.66	0:40
2017-12-01	ServerA	AutoCAD	User211	UserGroupC	Host200		8.66	8:40
2017-12-01	ServerA	AutoCAD	User214		Host188		10.66	10:40
2017-12-01	ServerA	AutoCAD	User235		Host082		1.83	1:50

Used Licenses

This report is only shows usage, not including any borrowed usage of licenses.

Use Selection to determine what columns to see.

File	Report	Settings	List Report	Auto Reports	Export	
List Repor	rtType	Used Lic	enses		•	•
Selection		Server -	Feature - User -	Host		•
Aggregate	Interval	Server -	Feature - User - I	Host		
		Server - Server - Server - Server - Feature	Feature Group - Feature - User Feature - Host Feature - User - Host	User - Host		
		Feature -	- User - Host			•
		Feature	1103(
		User				
		Server - Server -	⊦eature - User - I Feature - User - I	Host - Project Project		

Example of report:

Li	st Report Type	Used Licenses 🔹			Preview Report	Print Report	Export to Excel		
Se	election	Server - Feature - U	ser - Host	-				<u> </u>	
Ag	ggregate Interval	Day	Day						
				Generate Report					
		Report S	ettings		1	Print and Export Repo	orts		
Detailed List Report 3									
_	Demica Listin	chour 🗠							
	Date	Server	Feature	User	UserGroup	Host	HostGroup	✓ Hours	Hours & Min
•	Date 2020-03-20	Server ServerB	Feature AutoCAD	User User175	UserGroup UserGroupC	Host Host256	HostGroup	 Hours 23.83 	Hours & Min 23:50
•	Date 2020-03-20 2020-03-20	Server ServerB ServerA	Feature AutoCAD AutoCAD	User User175 User083	UserGroup UserGroupC	Host Host256 Host005	HostGroup HostGroupA	 Hours 23.83 23.83 	Hours & Min 23:50 23:50
•	Date 2020-03-20 2020-03-20 2020-03-21	Server ServerA ServerB	Feature AutoCAD AutoCAD AutoCAD	User User175 User083 User175	UserGroup UserGroupC UserGroupC	Host Host256 Host005 Host256	HostGroup HostGroupA	 Hours 23.83 23.83 23.83 	Hours & Min 23:50 23:50 23:50
•	Date 2020-03-20 2020-03-20 2020-03-21 2020-03-22	ServerB ServerB ServerB ServerB	Feature AutoCAD AutoCAD AutoCAD Revit MEP Suite	User175 User083 User175 User175 User149	UserGroupC UserGroupC UserGroupC UserGroupC	Host Host256 Host005 Host256 Host085	HostGroup HostGroupA	 Hours 23.83 23.83 23.83 23.83 23.83 	Hours & Min 23:50 23:50 23:50 23:50 23:50
•	Date 2020-03-20 2020-03-20 2020-03-21 2020-03-22 2020-03-22	E Server ServerB ServerA ServerB ServerB ServerB	Feature AutoCAD AutoCAD AutoCAD Revit MEP Suite AutoCAD	User User175 User083 User175 User149 User175	UserGroupC UserGroupC UserGroupC UserGroupC UserGroupC	Host Host256 Host005 Host256 Host085 Host256	HostGroup HostGroupA	 ✓ Hours 23.83 23.83 23.83 23.83 23.83 23.83 23.83 	Hours & Min 23:50 23:50 23:50 23:50 23:50 23:50
•	Date 2020-03-20 2020-03-20 2020-03-21 2020-03-22 2020-03-22 2020-03-22 2020-03-22 2020-03-22	ServerB ServerB ServerB ServerB ServerB ServerB ServerA	Feature AutoCAD AutoCAD AutoCAD Revit MEP Suite AutoCAD AutoCAD	User User175 User083 User175 User149 User175 User083	UserGroupC UserGroupC UserGroupC UserGroupC UserGroupC	Host Host256 Host005 Host256 Host085 Host256 Host256 Host005	HostGroupA HostGroupA HostGroupA	 ✓ Hours 23.83 23.83 23.83 23.83 23.83 23.83 23.83 23.83 	Hours & Min 23:50 23:50 23:50 23:50 23:50 23:50 23:50

The List Report Type "User" aggregates the effective time the user used any feature to give a total time for that user no matter what server/feature used.

Example:

Server A, Excel 9:00 – 12:00 Server A, Notepad 12:00 – 13:00 Server B, Notepad 11:00 – 13:00 Server A, Skype 14:00 – 15:00

The above is 5 hours of usage, not including any duplicate usage.

Borrowed Licenses

This report is only including borrowed usage of licenses.

Use Selection to determine what columns to see.

List Report Type	Borrowed Licenses					
Selection	Server - Feature - User - Host 🔹					
Aggregate Interval	Server - Feature - User - Host					
	Server - Feature Group - User - Host					
	Server - Feature - User					
	Server - Feature					
	Feature - User - Host					
	Feature - User					
	A					

Example of report:

List	ReportType	Borrowed Licenses -			Preview Report	Print Report	Export to Excel		
Sel	ection	Server - Feature - User - Host 🔹							
Agg	regate Interval	Day		-					
				Generate Report					
		Report	t Settings			Print and Export Repo	rts		
	Detailed List Re	eport 🕴					A	• •	
	Date	Server	Feature	User	UserGroup	Host	HostGroup	Hours	Hours & Min
F	2020-05-21	ServerA	AutoCAD	User228		Host037		16.16	16:10
	2020-05-21	ServerA	AutoCAD	User246		Host145		16.16	16:10
	2020-05-21	ServerA	Revit	User019	UserGroupA	Host060		16.16	16:10
	2020-05-21	ServerB	AutoCAD	User195	UserGroupC	Host263		16.16	16:10
	2020-05-21	ServerB	Revit MEP Suite	User067		Host071		16.16	16:10
	2020-05-21	ServerB	Revit MEP Suite	User206	UserGroupC	Host079		16.16	16:10

Used and Borrowed Licenses

This report is including used and borrowed usage of licenses.

Use Selection to determine what columns to see.

List Report Type	Used and Borrowed Licenses -	
Selection	Server - Feature - User - Host 🔹	
Aggregate Interval	Server - Feature - User - Host Server - Feature Group - User - Host Server - Feature - User Server - Feature - Host Server - Feature Feature - User - Host	
	Feature - User Feature - Host Feature Server - Feature - User - Host - Project Server - Feature - User - Project	•

Example of report:

List Report Type	Used and Borrowe	d Licenses	•	Preview Report	Print Report	Export to Excel		
Selection	Server - Feature -	User - Host	•					
Aggregate Interval	Day		-					
			Generate Report					
	Report	t Settings		1	Print and Export Repo	orts		
Detailed List R	eport 😣					<u> </u>	• •	
Date	Server	Feature	User	UserGroup	Host	HostGroup	Hours	Hours & Min
2020-06-19	ServerA	AutoCAD	User135	UserGroupC	Host252		17.49	17:30
2020-06-18	ServerA	AutoCAD	User135	UserGroupC	Host252		23.83	23:50
2020-06-17	ServerA	AutoCAD	User135	UserGroupC	Host252		23.83	23:50
2020-06-16	ServerA	AutoCAD	User135	UserGroupC	Host252		23.83	23:50
0000 05 45								

Min/Max/Avg Usage

This report is to show minimum, maximum and average usage of licenses.

Aggregate options:

List Report Type	Min/Max/Avg Usage				
Selection					
Aggregate Interval	Server Sum Per Month Concurrent				
	Day				
	Month				
	Year				
	Per Day Per Server				
	Per Month Per Server				
	Per Year Per Server				
	Server Sum Per Day				
	Server Sum Per Month				
	Server Sum Per Year				
	Server Sum Per Day Concurrent				
	Server Sum Per Month Concurrent				
	Server Sum Per Year Concurrent				

Day (max/min no matter on what server or time)

Month (max/min no matter on what server, day or time)

Year (max/min no matter on what server, month, day or time)

Per Day Per Server (max/min per server per day)

Per Month Per Server (max/min per server per month)

Per Year Per Server (max/min per server per year)

The below 3 are not based on concurrent time and are rarely useful.

Server Sum per Day (max/min per day of any time on each server and then summed)

Server Sum per Month (max/min per month of any time on each server and then summed)

Server Sum per Year (max/min per year of any time on each server and then summed) The below 3 are based on concurrent times and are similar to when the chart is created. Server Sum per Day Concurrent (max/min per day of sum at all concurrent times) Server Sum per Month Concurrent (max/min per month of sum at all concurrent times) Server Sum per Year Concurrent (max/min per year of sum at all concurrent times)

Example data:

Time	Server	Feature	Licenses	Max - Day	Max - Per	Max - Server	Max - Server
			in use		Day Per	Sum per Day	Sum per Day
					Server		Concurrent
8:00	S1	F1	5				13
	S2	F1	8	8	8	8	
8:10	S1	F1	6		6	6	11
	S2	F1	5				
8:20	S1	F1	3				10
	S2	F1	7				
8:30	S1	F1	4				9
	S2	F1	5				
Per Day				8	S1: 6	14	13
					S2: 8		

Example of report:

List Report Type Selection Aggregate Interval	Min/Max/Avg Usage		▼ ▼ Generate Report	Preview Report	Print Report	Export to Excel
	Report Set	tings		P	rint and Export Repo	orts
Detailed List R	eport 😣					4
Date	E Feature	Total	MaxUsed	MinUsed	AvgUsed	STDDV_Used
2020-03-19	AutoCAD	150	3	2	2.36	0.48
2020-03-19	AutoCAD	15	3	3	3	0
2020-03-19	Revit	21	2	2	2	0
2020-03-19	Revit MEP Suite	20	1	1	1	0
2020-03-20	AutoCAD	150	2	2	2	0
2020-03-20	AutoCAD	15	3	3	3	0
2020-03-20	Revit	21	2	2	2	0
2020-03-20	Revit MEP Suite	20	1	0	0.29	0.46
2020-03-21	AutoCAD	150	16	2	6.72	4.93
2020-03-21	AutoCAD	15	6	3	3.78	1.15

User Groups

This report is showing usage per user group.

Use Selection to determine what columns to see.

List Report Type	User Groups 🔹	
Selection	User Group 👻	
Aggregate Interval	User Group	
	Min Max Avg	

Example of User Group selection:

List Report Type User Groups Selection User Group Aggregate Interval Per Day Generate Report			Previe Previe e Report	w Report Print Report	Export to Excel				
Report Settings					Print and Export Reports	s 	- A		
	Detailed List Re	port 😣							
	Date	Feature	UserGroup	 Hours. 	Hours Borrowed HH:MM	Hours Used H	ours Used HH:MM	Hours Total	Hours Total HH:MM
Þ	2020-03-30	AutoCAD Architecture	UserGroupC	40.4	9 40:30	61.80 61	1:50	102.29	102:20
	2020-04-11	AutoCAD		36.1	5 36:10	47.60 47	7:40	83.76	83:50
	2020-04-12	Revit MEP Suite		31.8	3 31:50	54.10 54	4:10	85.93	86:00
	2020-04-22	Revit MEP Suite		31.6	5 31:40	49.41 49	9:30	81.07	81:10
	2020-03-25	AutoCAD		28.8	3 28:50	41.77 41	1:50	70.60	70:40
	2020-03-26	AutoCAD Architecture	UserGroupC	25.6	5 25:40	23.83 23	3:50	49.49	49:30
	2020-04-01	AutoCAD Architecture	UserGroupC	25.6	5 25:40	44.28 44	4:20	69.94	70:00
	2020-03-20	Revit Architecture Suite	UserGroupB	23.8	3 23:50			23.83	23:50
	2020-03-20	Revit Architecture Suite	UserGroupA	23.8	3 23:50			23.83	23:50
	2020-03-20	AutoCAD Architecture	UserGroupC	23.8	3 23:50	23.83 23	3:50	47.66	47:40

Example of Min Max Avg selection:

File R	eport Settings	List Report	Auto Reports	Export				
List Report Typ	be User Gro	oups		•				
Selection	Min Max	Avg		-				
Aggregate Inte	rval Per Mont	th		-				
Generate Report								
Report Settings								
Detailed List Report 8								
Date Y	E Feature		UserGroup	Max usage	Min usage	Avg usage	Standard deviation	
2020-Mar	Revit MEP S	Suite	UserGroupC	5	1	1.9	1.1	
2020-Mar	Revit MEP S	Suite	UserGroupB	6	1	2.1	1.1	
2020-Mar	Revit MEP S	Suite	UserGroupA	5	1	1.7	1	
2020-Mar	Revit MEP S	Suite		11	1	3.3	2.4	
2020-Mar	Revit Archit	tecture Suite	UserGroupC	2	1	1	0.1	
2020-Mar	Revit Archit	tecture Suite	UserGroupB	3	1	1.1	0.3	
2020-Mar	Revit Archit	tecture Suite	UserGroupA	5	1	1.6	1	
2020-Mar	Revit Archit	tecture Suite		12	1	4	2.8	
2020-Mar	AutoCAD A	rchitecture	UserGroupC	9	2	3.9	1.1	
2020-Mar	AutoCAD A	rchitecture	UserGroupB	2	1	1	0.2	
2020-Mar	AutoCAD A	rchitecture	UserGroupA	3	1	1.2	0.4	
2020-Mar	AutoCAD A	rchitecture		3	1	1.1	0.4	
2020-Mar	AutoCAD		UserGroupC	10	1	3.3	2.1	
2020-Mar	AutoCAD		UserGroupB	7	1	2.3	1	
2020-Mar	AutoCAD		UserGroupA	5	1	1.5	0.7	
2020-Mar	AutoCAD			15	1	3.4	2.6	
				_				

Host Groups

This report is showing usage per host group.

File	Report Settings		List Report	Auto Reports	Export				
List Report Type		Host Groups							
Selection		Host Group 🗸							
Aggregate Interval		Host Group							
		Min Max Avg							
					Generate	Report			

Example of Host Group report:
List Report Type	Host Groups		Preview F	Report Print Report E	Export to Excel			
Selection	Host Group		•					
Aggregate Interval	Per Day		-					
		Generat	e Report					
	Report Settings			Print and Export Reports				
/ Detailed List R	eport 😣				A A			
Date	E Feature	HostGroup	× Hours Borrowed	Hours Borrowed HH:MM	Hours Used	Hours Used HH:MM	Hours Total	Hours Total HH:MM
2020-04-07	Revit Architecture Suite		1.83	1:50	42.62	42:40	44.45	44:30
2020-04-10	AutoCAD Architecture		1.83	1:50	23.83	23:50	25.66	25:40
2020-04-11	Revit Architecture Suite		1.83	1:50	61.10	61:10	62.93	63:00
2020-04-21	AutoCAD Architecture		0.66	0:40	71.90	72:00	72.56	72:40
2020-03-19	Revit MEP Suite				6.83	6:50	6.83	6:50
2020-03-19	AutoCAD	HostGroupA			6.83	6:50	6.83	6:50
2020-03-20	Revit MEP Suite				6.83	6:50	6.83	6:50
2020-03-20	AutoCAD	HostGroupA			23.83	23:50	23.83	23:50

Example of Min Max Avg report:

	File Report S	Settings	List Report	Auto Reports	Export			
Lis	st Report Type	Host Gro	oups		•			
Se	election	Min Max	Avg		•			
Ag	Aggregate Interval Per Day				•			
					Generate Report			
					· · ·			
			Report Setti	ngs				
	Detailed List R	eport 😣			<u> ~</u>	<u>۸</u>		
	Date	E Feat	ure	Host Group 🔷	Max usage	Min usage	Avg usage	Standard
Þ	2020-01-31	Auto	CAD	HostGroupC	3	1	1.4	0.5
	2020-01-30	Auto	CAD	HostGroupC	1	1	1	0
	2020-01-29	Auto	CAD	HostGroupC	1	1	1	0
	2020-01-28	Auto	CAD	HostGroupC	3	1	1.4	0.7
	2020-01-27	Auto	CAD	HostGroupC	2	1	1.4	0.5
	2020-01-26	Auto	CAD	HostGroupC	2	1	1.4	0.5
	2020-01-25	Auto	CAD	HostGroupC	4	1	1.2	0.6
	2020-01-24	Auto	CAD	HostGrounC	4	1	1.6	0.7

Denied Requests

This report is showing denial of licenses. Denials by one user/host/feature combination that happens shortly after each other are grouped and show at what time the first denial happened and the last denial happened and the Denials column shows the number of denials. If a license was found within 10 minutes after the last denial the License Found column shows Yes.

Example of report:

Li	st Report Type	Denied Requests		-	Preview Report	Print Report	Export to Excel	
Se	election			-				
A	ggregate Interval	All		•				
				Generate Report				
		Report S	ettings		Pri	nt and Export Reports		
	Detailed List R	eport 😣					۵ ····· ۵	
	Date	UserName	HostName	Feature	FirstDenial	SecondDenial	License found	Denials
Þ	2020-02-03	User003	Host167	AutoCAD	2020-02-03 14:03	2020-02-03 14:04	No	3
	2020-02-03	User004	Host221	AutoCAD	2020-02-03 13:58	2020-02-03 14:02	No	3
	2020-02-03	User003	Host167	AutoCAD	2020-02-03 13:55	2020-02-03 14:01	No	2
	2019-10-05	User003	Host167	AutoCAD	2019-10-05 14:03	2019-10-05 14:04	No	3
	2019-10-05	User004	Host221	AutoCAD	2019-10-05 13:58	2019-10-05 14:02	No	3
	2019-10-05	User003	Host167	AutoCAD	2019-10-05 13:55	2019-10-05 14:01	No	2

Raw data Report

This report is showing the raw data from tables tblUserDetailedLog and tblUSerDetailedLogPrev. This shows the start and end date/time for each license usage.

Example of report:

List Report Type Selection Aggregate Interval	Raw data Re	port	Generate F	Preview Report	Print	Report	Export to Excel				
	F	Report Settings			Print and Ex	port Report	ts				
Detailed List R	eport 😣						2	<u> </u>			
Date	Server	ServerDes	Feature	FeatureDescription	User	Host	Start	End	Minutes	Hours	BorrowEnd
2020-04-23	ServerA		64300ACD_F	AutoCAD	User222	Host190	2020-04-23 05:32	2020-04-23 12:20	408	6.80	
2020-04-23	ServerA		64300ACD_F	AutoCAD	User248	Host072	2020-04-23 05:39	2020-04-23 05:50	11	0.18	
2020-04-23	ServerA		64300ACD_F	AutoCAD	User248	Host072	2020-04-23 06:03	2020-04-23 06:20	17	0.28	
2020-04-23	ServerA		64300ACD_E	AutoCAD	licer248	Host072	2020-04-23 08:32	2020-04-23 09:00	28	0.47	

Raw Sampled data Report

This report is showing the raw data from table UserDetailedLogTemp. This shows the sampled start and end date/time for each license usage. If the sampling service is used UserDetailedLogTemp is populated based on data from tblUserDetailedLog and tblUserDetailedLogPrev.

Example of report:

	List Report Type Selection Aggregate Interval	Raw San	npled data Report	Genera	Preview T te Report	Report Print Report	Export to Excel.				
			Report Settings			Print and Export Rep	orts				
	/ Detailed List R	eport 😣					<u> </u>				
Г	Date	^	Server	ServerDescri	Feature	FeatureDescription	User	Host	Licenses	ID	ProjectID
	2020-05-20 09	:10:00	ServerA		64300ACD_F	AutoCAD	User135	Host252	1	16883	0
	2020-05-20 09	:10:00	ServerA		64300ACD_F	AutoCAD	User228	Host037	1	16860	0
	2020-05-20 09	:10:00	ServerA		64300ACD_F	AutoCAD	User246	Host145	1	16861	0
	2020-05-20 09	:10:00	ServerB		65300ARCHDESK_F	AutoCAD Architecture	User175	Host256	1	16865	0
	2020-05-20 09	:10:00	ServerB		65300ARCHDESK_F	AutoCAD Architecture	User195	Host263	1	16866	0
	2020-05-20 09	:10:00	ServerB		65200REVSYP_F	Revit MEP Suite	User206	Host079	1	16863	0
	2020-05-20 09	:10:00	ServerB		65200REVSYP_F	Revit MEP Suite	User226	Host065	1	16864	0
	2020-05-20 09	:10:00	ServerA		65900REVITS_F	Revit Architecture Suite	User019	Host060	1	16859	0
	2020-05-20 09	:10:00	ServerB		65200REVSYP_F	Revit MEP Suite	User067	Host071	1	16862	0
10	2020 05 20 00		Company		C42004 CD E	Auto CAD	User DAC	Line and AT	4	10001	0

Pinged Host Report

If correctly set up in JTB FlexReport Config hosts (computers) borrowing a license can be monitored to see if they are connected to the network and maybe should return the borrowed license earlier.

Example of report:

List Report Type	Pinged Host Report		•	Preview Report	Print Report F	xport to Excel	
Selection	Report						
Aggregate Interval							
		G	enerate Report				
	Report Settin	ngs		Pri	nt and Export Reports		
Detailed List R	eport 🗵					A A	
CheckedOutD	ate 🗉 Server Name	User Name	User Host	Feature	FirstOnline	LastOnline	BorrowedUntil
2019-02-01	ServerA	User001	Host001	64300ACD_F	2019-02-01 10:00	2019-02-01 10:00	2019-02-28 00:00

Example of Raw Report showing all borrowed licenses and PingResult showing OK if you they cash be pinged, otherwise ERR.

Lis	st Report Type	Ping	ed Host Rej	port			-	Prev	iew Report	Print Repo	rt Export to
Se	lection	Raw	Report				-				
Ag	gregate Interval						-				
						Generate R	eport				
			Rep	ort Settings					Pr	int and Export F	Reports
2	Detailed List R	eport	8								
	CheckedOutDa	ate	Server	Feature	User	Host	Linge	erDate	LicHandle	PingDate	PingResult
۲	2019-02-01		ServerA	64300ACD_F	User002	Host002	2019-	02-16	7	2019-02-02	ERR
	2019-02-01		ServerA	64300ACD_F	User001	Host001	2019-	-02-16	8	2019-02-01	ERR
	2019-02-01		ServerA	64300ACD_F	User001	Host001	2019-	-02-28	5	2019-02-01	ОК

Features List Report

The "Features List Report" is useful to find information on what data exists in the database for each feature. The dates for the date 'A' columns are from the 'log' database table and the dates for the date

'B' columns are from a union of the database tables 'tblUserDetailedLog' and 'tblUserDetailedLogPrev'.

'A' is used for reports created with the Feature Server tab and the Detailed tab.

'B' is used for reports created with the Detailed tab and Hours Chart tabs where users or hosts are involved.

The Count columns show how many rows of data there is for each feature.

Features List Report 😣									
Features	E FeatureNameDescription	First date A	Last date A	CountA	First date B	Last date B	CountB	ServerName	ServerNameDescription
64300ACD_F	AutoCAD	2019-09-17 14:50:00	2020-08-31 23:50:00	49680	2019-09-17 14:50:00	2020-08-24 13:50:00	7131	ServerA	ServerA
65300ARCHDESK_F	AutoCAD Architecture	2019-09-17 14:50:00	2020-08-31 23:50:00	49680	2019-09-17 14:50:00	2020-05-21 16:20:00	2084	ServerB	ServerB
65900REVITS_F	Revit Architecture Suite	2019-09-17 14:50:00	2020-08-31 23:50:00	49680	2019-09-17 14:40:00	2020-05-21 16:20:00	3898	ServerA	ServerA
65200REVSYP_F	Revit MEP Suite	2019-09-17 14:50:00	2020-08-31 23:50:00	49680	2019-09-17 14:50:00	2020-05-21 16:20:00	3778	ServerB	ServerB

This report can be previewed and printed with "Report Preview".

A custom report can be created with "Create Grid Report", printed or exported to PDF or an image file.

Miscellaneous questions answered

Why are there dips in the charts?

The reason for this can be that the interval is set too low for the data that exists in the database.

You might have specified JTB FlexReport to save data with a 20 minute interval and you try to create the chart with a 10 minute interval.

In this example the database mostly contain data with an interval of 10 minutes, but for some reasons like lack of server connections there are sometimes data missing and resulting in dips like this.



The solution is to increase the interval for the chart creation and it will look better.





How to move the JTB FlexReport Report Service installation to another server?

Install JTB FlexReport Report Service on the new server. You can optionally copy all .config files in the JTB FlexReport old folder to the new location as this will keep your database configurations or run JTB FlexReport Service Configurator and make sure all settings are ok and then configure and start the services.

The setting files are saved on the computer where JTB FlexReport Service is installed in this folder and can be moved to the new server:

%ALLUSERSPROFILE%\JTB World\JTB FlexReport Service

%ALLUSERSPROFILE% location: XP: C:\Documents and Settings\All Users Vista, Windows 7, Windows 8, Windows 8.1, Windows 10: C:\ProgramData

How to move the JTB FlexReport Report Client installation to another machine?

If you want to avoid re-configuring, first create the folders like you already have it on the existing server.

Default location is:

For the folder below copy all .config files.

C:\Program Files (x86)\JTB World\JTB FlexReport Client

Run Regedit and export and import these registry keys: HKEY_CURRENT_USER\Software\JTB World\JTB FlexReport Client

HKEY_LOCAL_MACHINE\SOFTWARE\JTB World\JTB FlexReport Client HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\JTB World\JTB FlexReport Client

Now run the JTB FlexReport Client installer.

Favorites data is saved in this folder on the client: %LOCALAPPDATA%\JTB World\JTB FlexReport Client\Gallery For example: C:\Users\jtb\AppData\Local\JTB World\JTB FlexReport Client\Gallery These can be made backup of or be copied to another computer if need be.

What discrepancies in the reports should I be aware of?

Data that is saved to the "log" table is saved at the snapshot interval specified in JTB FlexReport Config. Say you have an interval of 10 minutes. The charts might show that you have not reach your maximum usage but still you have found that licenses have been denied.

Here is an example showing why.

11:30 49 licenses are used.11:40 49 licenses are used.11:50 48 licenses are used.

But it might happen that at 11:35 50 licenses were used. Because of the interval setting you will not see this in reports based on the "log" table.

On the other hand, the data saved into tblUserDetailedLog and tblUserDetailedLogPrev saved data on a lower level with both start and stop time for each user using a license. As there are much more data in these tables it will take much longer time to produce reports based on them, but it might show a slightly more correct picture of the usage.

But reports based on the detailed logs can also in some cases show too much usage because the time when a license is returned (checked in) to the license server is not known. Example. Say a license is checked out at 11:30 and it is checked in at 11:57. If the snapshot setting is at 10 minutes the time is saved as 12:00 instead of 11:57. Because of this you might find that when data is aggregated to find concurrent licenses used based on the detailed logs compared to the log table there is a discrepancy. It can even result in a chart showing that more licenses are used than what you have.

There is a second interval that is used for the detailed tables. It is a sampling interval that can be anything from 1 minute up to 60 minutes but not lower than the snapshot interval. The lower sampling interval the more correct result but the time to produce the reports will take longer. Usage between 11:30 and 11:34 will not be sampled if the interval is 10 minutes as the time is rounded to nearest half of the interval.





And here is a chart created using the Detailed tab. Notice how the number of licenses used exceeds the number of licenses available. Normally if only feature and server info should be reported on it is best to use the Feature Server tab whenever possible.



Hours reported using the hour chart report type is not making use of the Interval on the Report Settings tab. It is only using the sampling interval specified in JTB FlexReport Service Configurator. The lower interval the more correct result. Example: A license is used between 8:16 and 9:49. If the sampling interval is 10 minutes it will create a usage between 8:10 and 9:40. It is rounding down the start time to nearest value rounded by the interval, in this case from 8:16 to 8:10 and the end time from 9:49 to 9:40. But if the sampling is at 1 minute the result will be between 8:16 and 9:49. Conclusion is that to lower the sampling interval for best accuracy and especially if applications are used for quite short time (less than 30 min) per session. In case like this it is also recommended to lower the snapshot interval in JTB FlexReport Config to lower than the default 10 minutes.

Other tips and tricks

In case of errors there are different log files created that can be sent to JTB World for further investigation. "Program Files (x86)" below is "Program Files" on 32-bit Windows.

Client: %localappdata%\JTB World\JTB FlexReport Client\Logs and/or the installation folder that by default is C:\Program Files (x86)\JTB World\JTB FlexReport Client

Service: %programdata%\JTB World\JTB FlexReport Service and/or %ALLUSERSPROFILE%\JTB World\JTB FlexReport Service\Logs and/or the installation folder that by default is C:\Program Files (x86)\JTB World\JTB FlexReport Service To get more data in some of the service logs this can be done.

```
Edit this file in Notepad.
C:\Program Files (x86)\JTB World\JTB FlexReport Service\JTB FlexReport Chart Service.exe.config
Change this row
<level value="INFO" />
Into
<level value="DEBUG" />
```

Same can be done with JTB FlexReport Sampling Service.exe.config and JTB FlexReport Auto Chart Service.exe.config.

After that run reports of let services run for some time and send logs to JTB World.

If you get the error "Cannot open database"<database name" requested by the login. The login failed. Login failed for user 'NT AUTHORITY\ANONYMOUS LOGIN'." To add a Windows Authentication user use NT AUTHORITY\SYSTEM as login name. JTB services are by default running using the "Local System" account. Change them to run with an account that has access to the SQL database. Another solution is to use SQL authentication connection.

JTB FlexR	eport X
(į)	Cannot open database "JTB" requested by the login. The login failed. Login failed for user 'NT AUTHORITY\ANONYMOUS LOGON'.

The database needs 'db_backupoperator', 'db_datareader' and 'db_datawriter' permissions for the SQL Server database.

Try to use port 2003, 2004 or ports in a series after that. The ports should match between Service and Client Configurators.

Check the Windows Event Viewer for any Application or System errors being logged that are related to JTB FlexReport.

If Test Service Engine gives this error: "The Remote Name Could Not Be Resolved: 'localHost'" and if the Event Viewer has this event (Event ID: 15005 Source: HTTP) you can try to change the port number to next number. Typically try port numbers from 2000 and up. This is also a message that might come up: "Unable to bind to the underlying transport for 0.0.0.2000. The IP Listen-Only list may contain a reference to an interface which may not exist on this machine. The data field contains the error number."

"Service connection Failed. The request failed with HTTP status 504: Unknown Host." might show while starting the Configurator. Use IPV4 address or edit the Windows host file.

Try to use IP number instead of host name for the JTB Report Service or Process Service.

Make sure to use the name or IP of the machine in the service configurator where JTB FlexReport Service is installed. The same should be used in the client configurator.

Make sure that there is no firewall blocking any of the JTB FlexReport exe files or ports used. It might be needed to add exceptions for the exe files and the port used.

Check if the service is running in Windows Services.

Make sure that the service address is the same in all the config files in the installation folders for the Service and Client: "JTB FlexReportClient.exe.config", "JTB FlexReport Sampling Service.exe.config" and "JTB FlexReport Service Configurator.exe.config". The address can be for example: http://MyServer:2000/Service

To test from the client if it has contact with the server service you can in the installation folder 'JTB FlexReport Client' locate JTB FlexReportClient.exe.config and locate near the end of the file this row: <endpoint address="http://MyServer:2000/Service". Now try to enter the address in a web browser and see if there are any problems to access the service or not. You can also try to ping the actual server.

Using netstat -o in command prompt window will help to identify ports that are used on the machine. Sometimes the port configured is already used and to solve the conflict you need to change the port in the configuration on the server and the client.

If test of service engine gives this error "Please start the Service before testing. The remote name could not be resolved: 'localhost'' and/or if the Windows Event Viewer with Event Source: JTBFlexReportWCFService has this error it is an indication that an older .NET Framework version is installed or that it needs reinstall. 3.0 or newer is needed. It might help to use IP address or fix the host name problem.

Event error description: Service cannot be started. System.Configuration.ConfigurationErrorsException: Configuration system failed to initialize ---> System.Configuration.ConfigurationErrorsException: Unrecognized configuration section system.serviceModel.

Auto Filter: This applies to simplify making selections in the list boxes of features, servers, users, hosts, etc. Note: If the database is large and with many rows in the tables this can cause the Client to take a long time to open so you might want to disable this feature for this reason.

If the reports that are using the Details tab or the Hours Chart tab only works partly or not at all it could be because the data sampling is not done or has stopped. Make sure the JTB FlexReport Sampling Service is running and if needed activate it in JTB FlexReport Service Configurator. It can be needed to press the "Clear" button followed by "Sampling All Records" then wait some time. If the database is large it can take some hours. One more thing you can check is that the JTBFlexReport.NET-temp.mdb database is not close to 2GB in size. In that case you can try to delete it and then re-sample the data. If the size after some time gets close to 2GB again you will need to start with a new core database or backup and delete some old data before re-sample again.

Favorites data is saved in this folder on the client:

%LOCALAPPDATA%\JTB World\JTB FlexReport Client\Gallery

For example: C:\Users\jtb\AppData\Local\JTB World\JTB FlexReport Client\Gallery

These can be made backup of or be copied to another computer if need be.

Auto report settings files are saved as XML files in this folder:

C:\ProgramData\JTB World\JTB FlexReport Service

Q. Why is the Client slow to start?

A. It can be because of the Auto Filter. See the main application menu for its checkbox. If the database is large and with many rows in the tables this can cause the Client to take a long time to open so you might want to disable this feature for this reason. Version 2020.11.0 and newer does not have this problem.

Q. Why is it taking several minutes to create reports?

A. It could be due to a very large database or it might help to just restart the server.

Q. How can I check the size of the SQL Server tables?

A. Run SQL Server Management Studio (SSMS).

Right click on the database

Navigate to Reports > Standard Reports > Disk Usage By Table

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.