



TSM Studio Server and TSM Studio Operational Reporting

Table of Contents

Disclaimer	3
What is Operational Reporting?.....	4
Getting Started	5
Custom Summary	8
Adding your own items to the Custom Summary	10
Activity Log Filter	12
Scheduling Operational Reports	13
Operational Reporting Status	16
Updates to Operational Reporting	17
Using the Operational Report Viewer	18
Operational Report Viewer Security	20

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What is Operational Reporting?

This document covers both TSM Studio Operational Reporting and TSM Studio Server Operational Reporting. Whilst the functionality of both are the same the interface to navigate to the features is slightly different. These differences will be highlighted in the documentation.

Operational Reporting offers a set of pre-packaged reports that can be run daily to access the Operational Health of your TSM Server's.

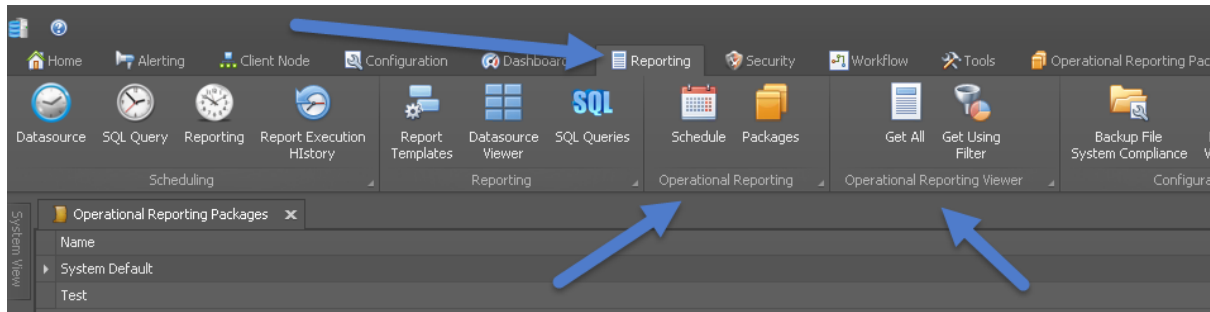
Operational Reports can be published to a number of locations including via Email (either as a PDF attachment or as embedded HTML), saved on a directory on the server and/or stored in the Operational Reporting database to be viewed using the Operational Reporting Viewer.

Although the reports are pre-packaged their look and feel can be totally customized to the way you want them to look using the in-built report designer.

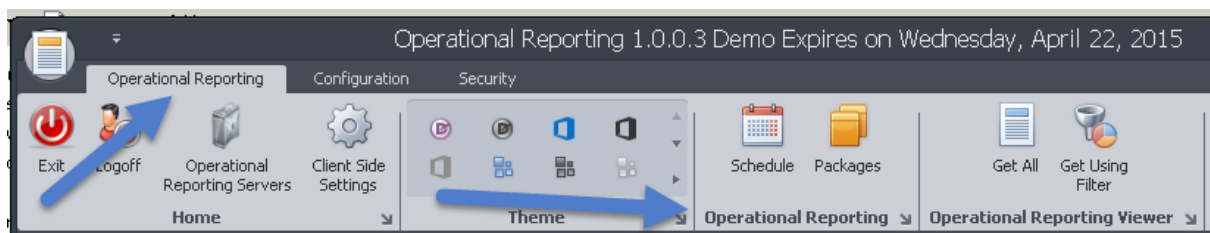
All the pre-packaged sections are in a package named "System Default", this package cannot be modified and will be updated with each subsequent release. The System Default can be used as a base to create your own packages.

Getting Started

After logging into TSM Studio Server, Operational Reporting is accessed from the Reporting Tab as shown here



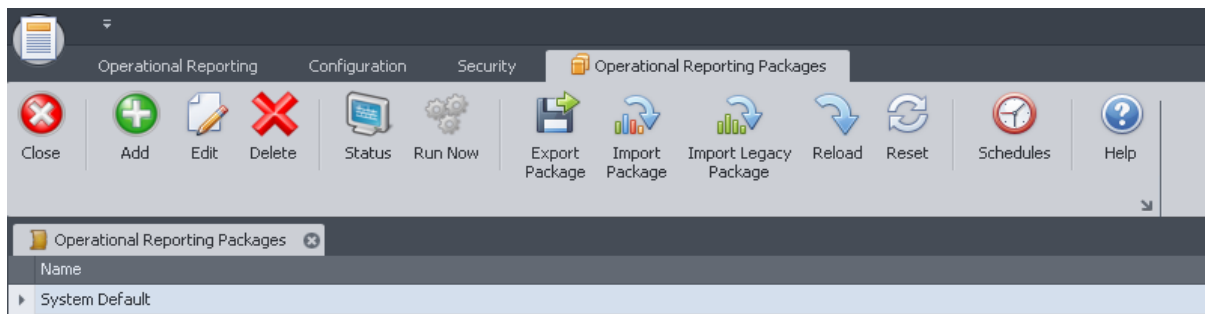
For TSM Studio Operational Reporting functional is found on the Operational Reporting tab as shown here



The first step in using Operational Reporting is to create a Package. A Package consists of all the available report sections, each package can be customized individually and can be scheduled and published independently.

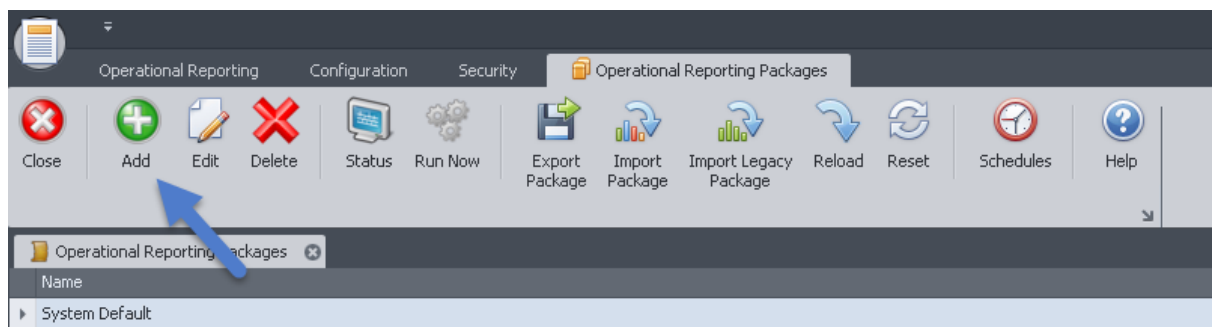


To create a package select the Packages icon from the menu, this will open the following window

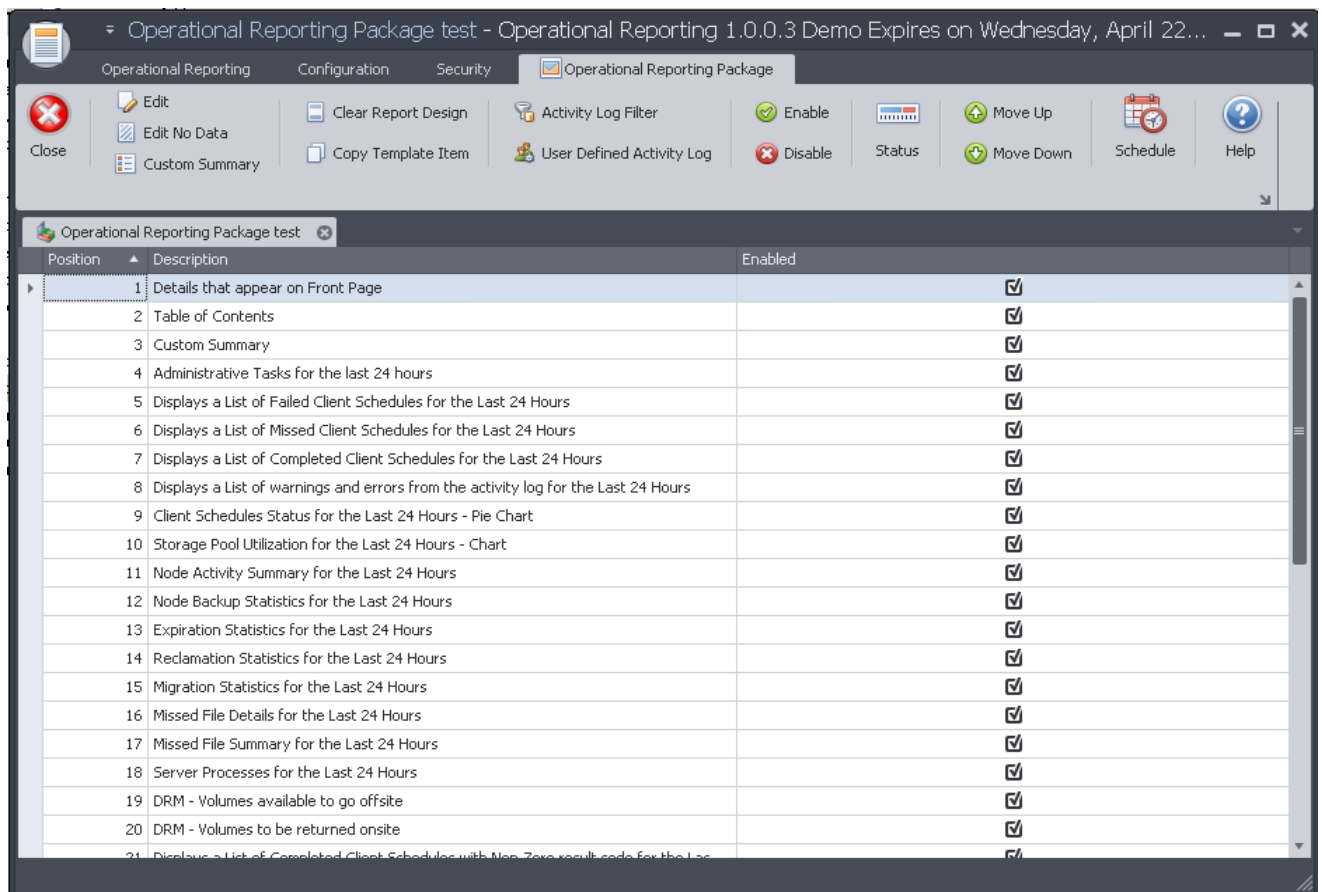


Make a copy of the "System Default" package. This is done by adding a new package using the "System Default" package as the template.

Note: The System Package cannot be updated and will be overwritten on each upgrade.

A screenshot of the 'Add Operational Report' dialog box. It has a dark background and contains the following fields: 'Name' with the value 'Package1', 'Description' with the value 'The is a new package', and 'Copy Operational Report Items From' with a dropdown menu showing 'System Default'. At the bottom, there are three buttons: 'Ok' (with a green checkmark icon), 'Cancel' (with a red X icon), and 'Help' (with a blue question mark icon).

The new Operational Reporting package will now be created and the following dialog will be displayed showing all the available sections (also known as package items or sections) for this operational report.



Each section can be edited in the report designer and modified as required. Sections can be disabled so that they will not appear in the report. Also the position of each section can be changed using the "Up" and "Down" arrows on the toolbar.

Please see our getting started with the report designer on how to use the "Report Designer" to modify report sections.

Custom Summary

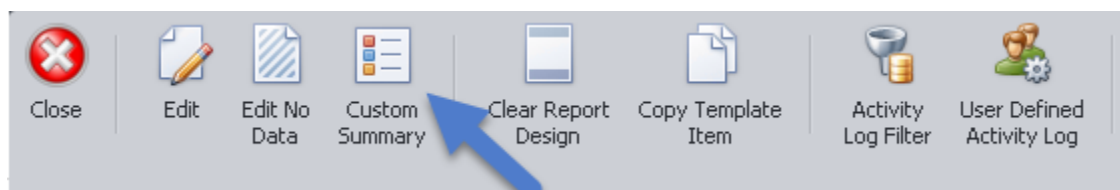
Each Operational Reporting package has a section named "Custom Summary" which produces output in the Operational Report as follows

Custom Summary

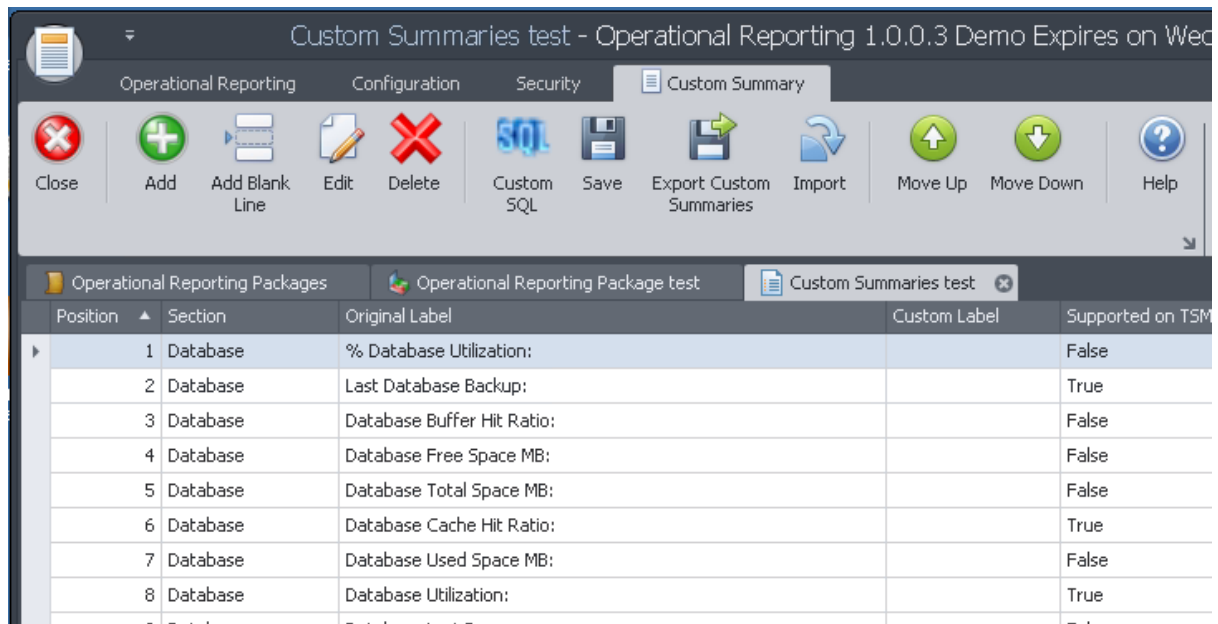
Item	Result
Last Database Backup:	2/10/2011 1:00:04 PM
Database Cache Hit Ratio:	99.80
Database Utilization:	37.80
Log Utilization:	0.70
Max Log Utilization:	5.90
Drive Paths Offline:	0
Drives Offline:	0
LB0.1.0.3 Drive Count:	10
Total Drives:	10
Library Paths Offline:	0
Total Scratch Volumes:	4
LB0.1.0.3 Scratch Volume Count:	4
Total Nodes:	24
AIX:	0
Celerra:	0
Linux64:	0
Linux86:	0
NetWare:	0

Please note: this is only a small area of this section for display purposes only. The actual Custom Summary contains a lot more entries

Each line on the custom summary can be enabled\disabled as desired. Editing of the "Custom Summary" section is done using the "Custom Summary" button on the toolbar.

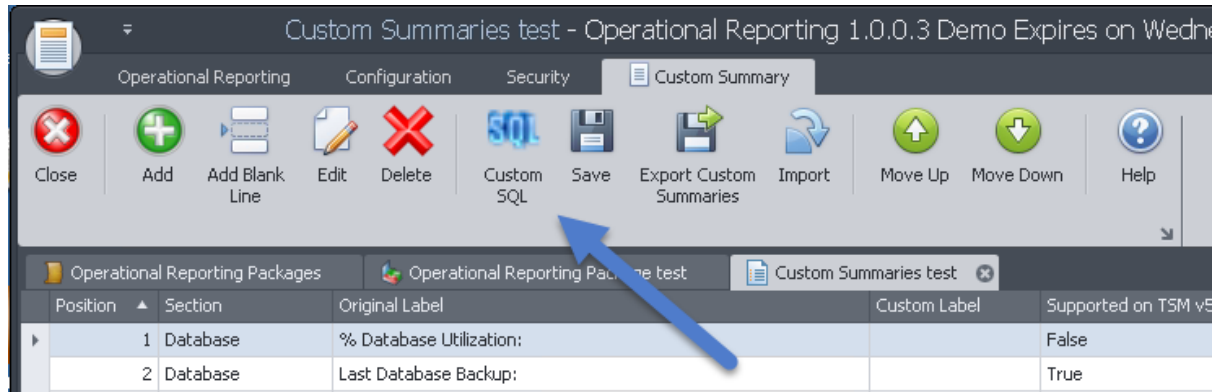


This will display the following dialog where each line of the custom summary report can be removed, the order changed or the label that appears in the operational report changed.



Adding your own items to the Custom Summary

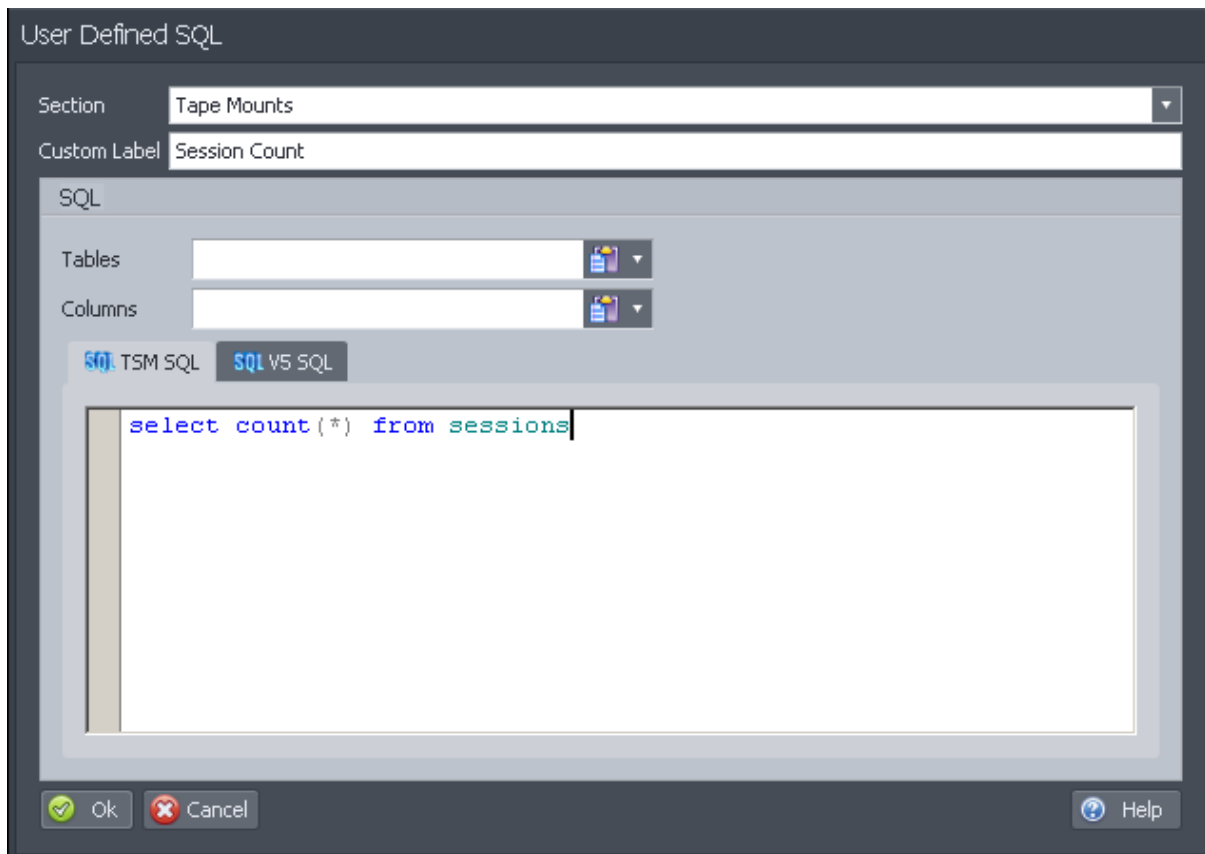
From the custom summary toolbar or context menu, select the "Custom SQL" button



This will display a list of all currently defined custom SQL.

Click the Add Button to add a new custom SQL definition

The following dialog will be displayed



The image shows a 'User Defined SQL' dialog box. It has a title bar 'User Defined SQL'. Inside, there are two text input fields: 'Section' with the value 'Tape Mounts' and 'Custom Label' with the value 'Session Count'. Below these is a section titled 'SQL'. Inside this section, there are two input fields for 'Tables' and 'Columns', each with a dropdown arrow. Below these are two tabs: 'SQL TSM SQL' (selected) and 'SQL V5 SQL'. The main text area contains the SQL query: `select count (*) from sessions`. At the bottom, there are 'Ok' and 'Cancel' buttons, and a 'Help' button with a question mark icon.

Section a section within the Custom Summary to add the new item, To Add a new section simply type it in to the sections field

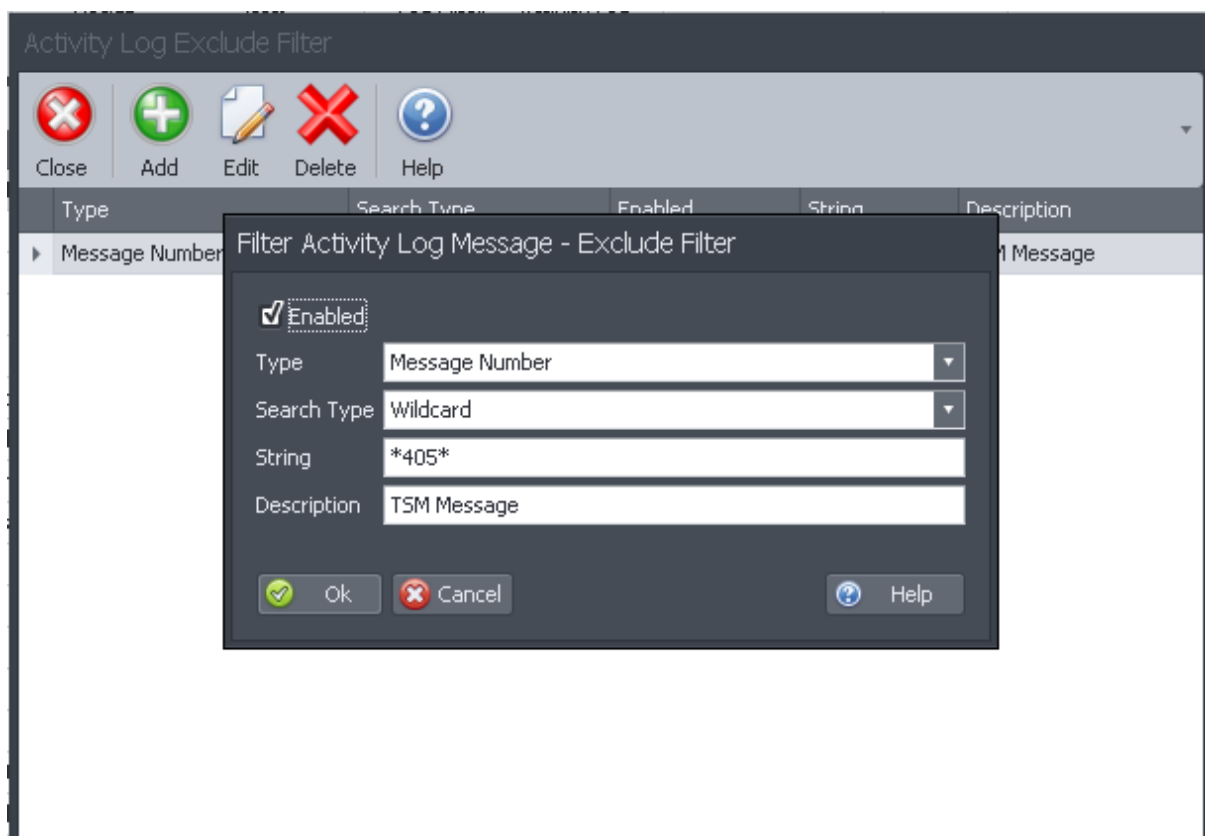
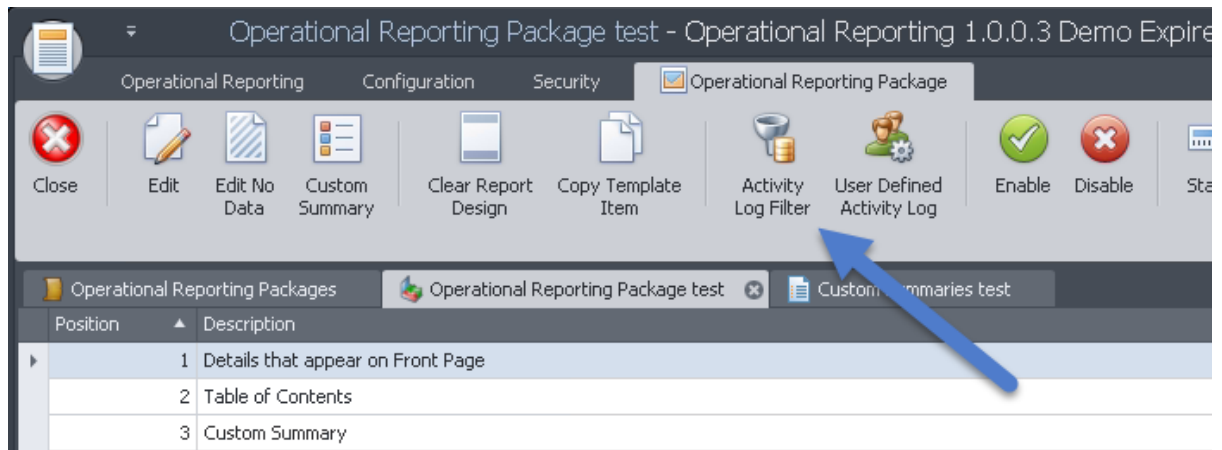
Enter the Custom label for this item.

Add the SQL for this item, if the SQL is different from TSM v5 to V6 and above then type the different SQL Queries in the relevant box. If the SQL Query is the same for all version then just type it into the V5SQL and it automatically be used on all versions of TSM.

Note: Operational Reporting will only display the first value returned by the SQL Query

Activity Log Filter

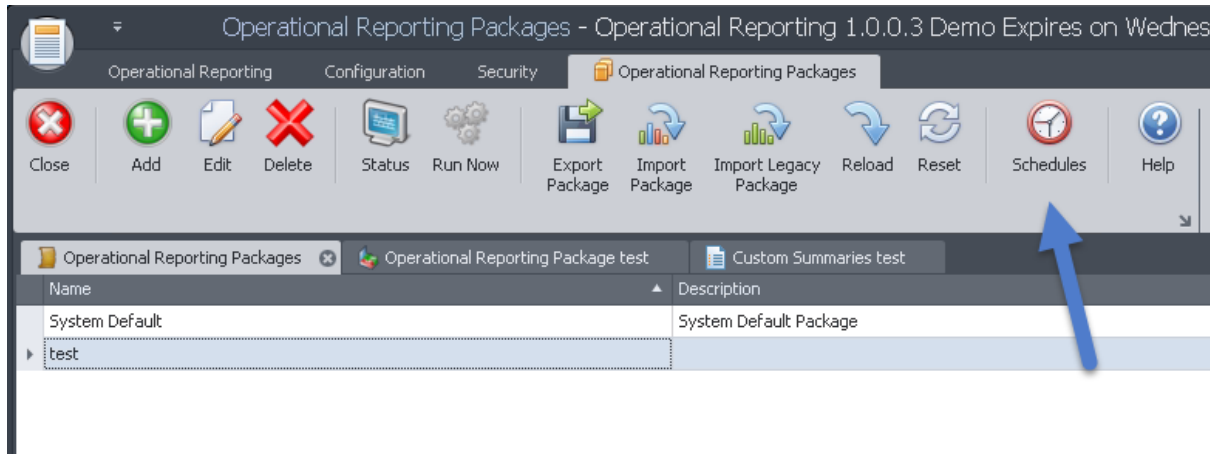
The Activity Log section of the Operational Report can be filtered to remove messages that are not required on the report. To filter activity log messages use the “Filter Icon” on the toolbar.



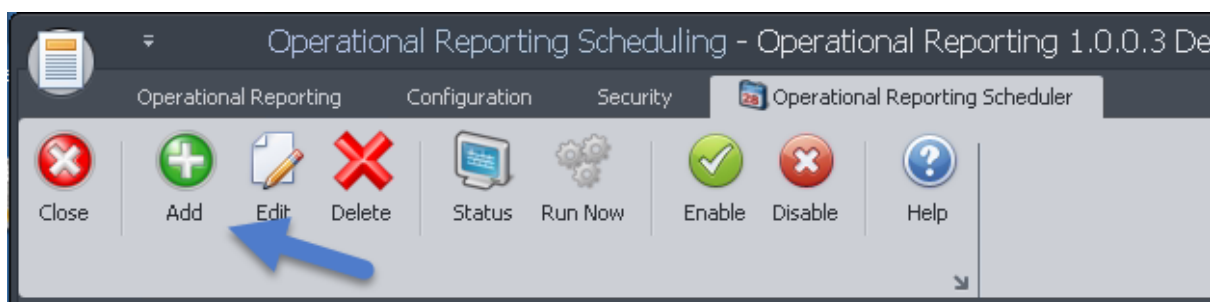
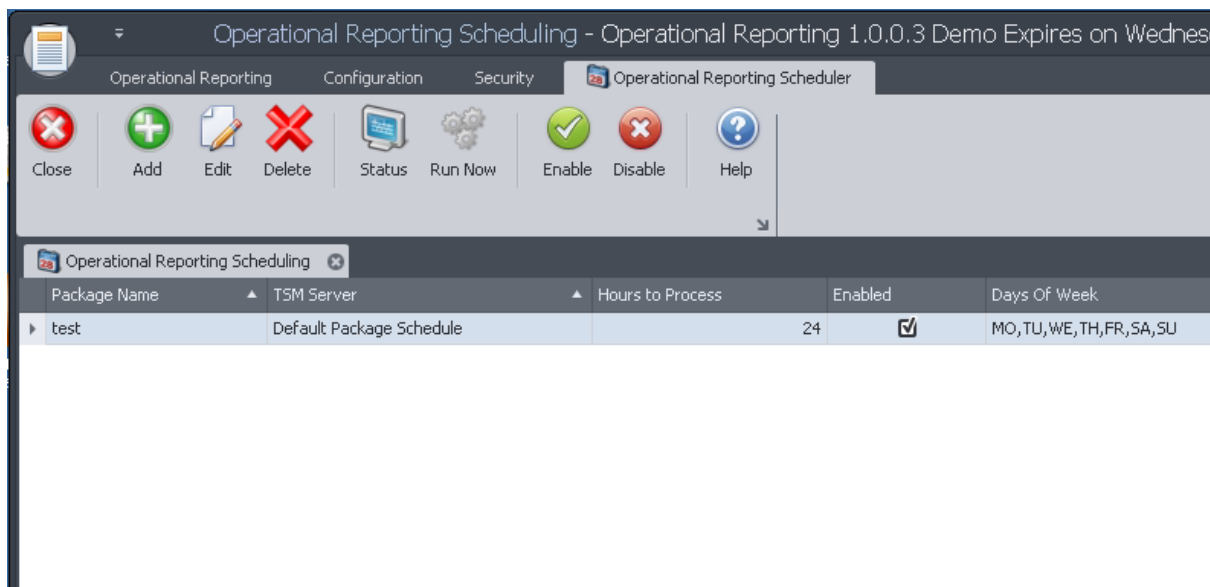
Use the Activity Log Filter to remove messages by message number or message text. A number of filter options are available.

Scheduling Operational Reports

To schedule an Operational Report select the "Schedule" option from the toolbar.



The following dialog is displayed showing the currently setup schedules.



Select the Add icon from the toolbar

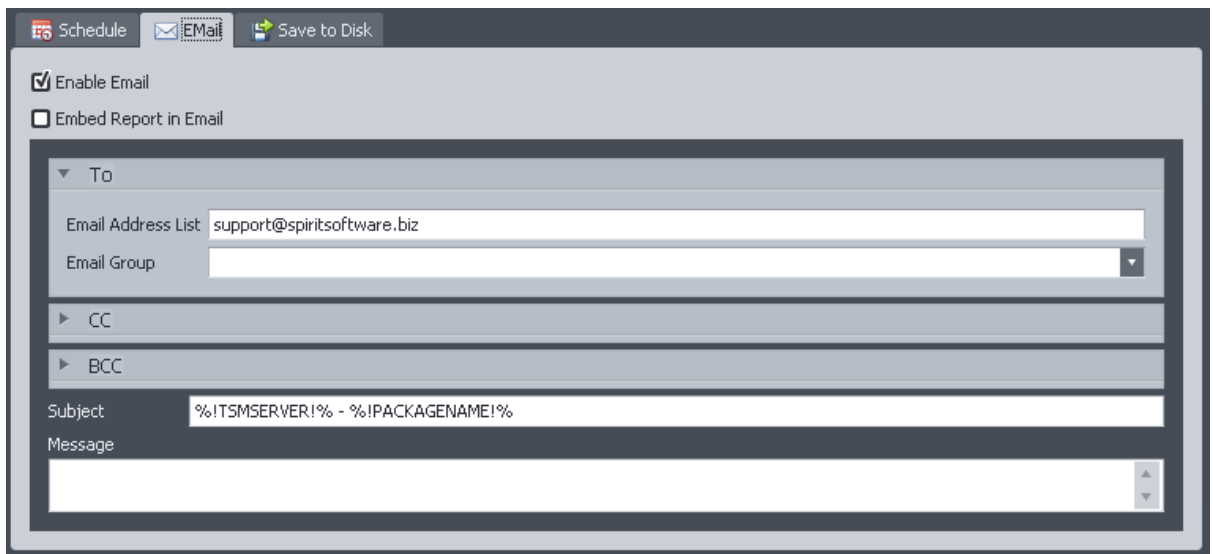
The screenshot shows the 'TSM Server Operational Reporting Schedule' dialog box. At the top, there is a title bar. Below it, the 'Enabled' checkbox is checked. The 'TSM Server' dropdown is set to 'Default Package Schedule'. The 'Package' dropdown is set to 'test'. The 'Process Data for the previous (Hours)' spinner is set to 24. The 'Store Generated Report in Database' checkbox is checked. Below these are three buttons: 'Schedule' (with a calendar icon), 'E-Mail' (with an envelope icon), and 'Save to Disk' (with a floppy disk icon). The 'Schedule' button is active. Below the buttons, there are checkboxes for each day of the week: Mon, Tue, Wed, Thu, Fri, Sat, and Sun, all of which are checked. Below the day checkboxes is an 'Execution Time' spinner set to 17:33:00. At the bottom of the dialog are 'Ok', 'Cancel', and 'Help' buttons.

Each TSM Server can be scheduled separately for each package or a default package can be created for each package. Any TSM Server that does not have its own schedule will use the default schedule setup for this package. Each schedule can be enabled\disabled. A disabled schedule will not run.

Choose the days that the Operational Reporting package can run for the selected TSM Server and the time of day to run.

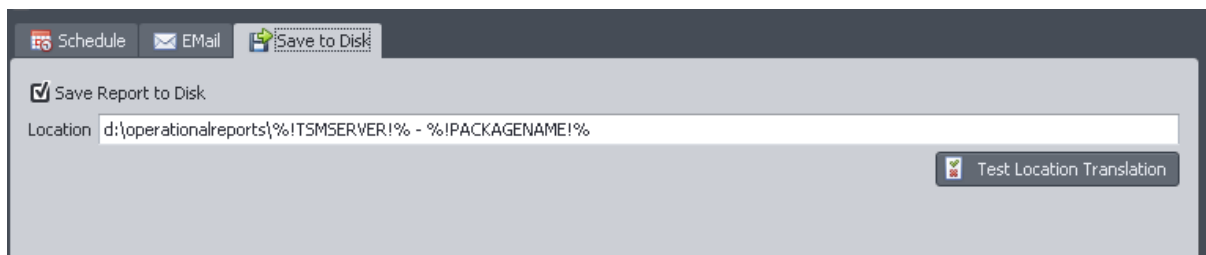
Check the Store Generated report in Database option to have the Operation Report stored in the TSM Studio Server database. Operational Reports stored in the TSM Studio Server database can be viewed using the Operational Report Viewer.

Operational Reports can be published via email or saved to disk.



The screenshot shows the 'Email' tab selected in the top navigation bar. The 'Enable Email' checkbox is checked, while 'Embed Report in Email' is unchecked. Under the 'To' section, the 'Email Address List' field contains 'support@spiritsoftware.biz' and the 'Email Group' field is empty. The 'CC' and 'BCC' sections are collapsed. The 'Subject' field contains the substitution string '%!TSMSEVER!% - %!PACKAGE!%'. The 'Message' field is empty. The 'Schedule' tab is also visible in the top bar.

Choose the Email tab and choose the recipients and the subject. The subject field may contain a number of substitution strings. Press the help button on this dialog for the complete list. Check the Enable check box to enable Email publication.

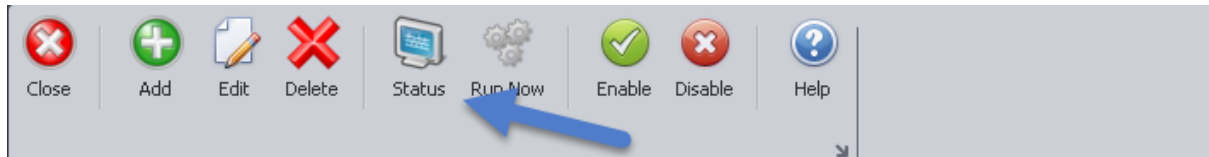


The screenshot shows the 'Save to Disk' tab selected in the top navigation bar. The 'Save Report to Disk' checkbox is checked. The 'Location' field contains the path 'd:\operationalreports\%!TSMSEVER!% - %!PACKAGE!%'. A 'Test Location Translation' button is located to the right of the location field. The 'Email' and 'Schedule' tabs are also visible in the top bar.

Use the repository tab to choose saving to disk. Check the "Save Report to Disk" to enable this publication method. Type in the location on the TSM Studio Server where the reports will be saved to. A number of string substitutions are available press the help button for a complete list.

Operational Reporting Status

Operational Reporting status can be viewed from the initial Operational Reporting dialog.



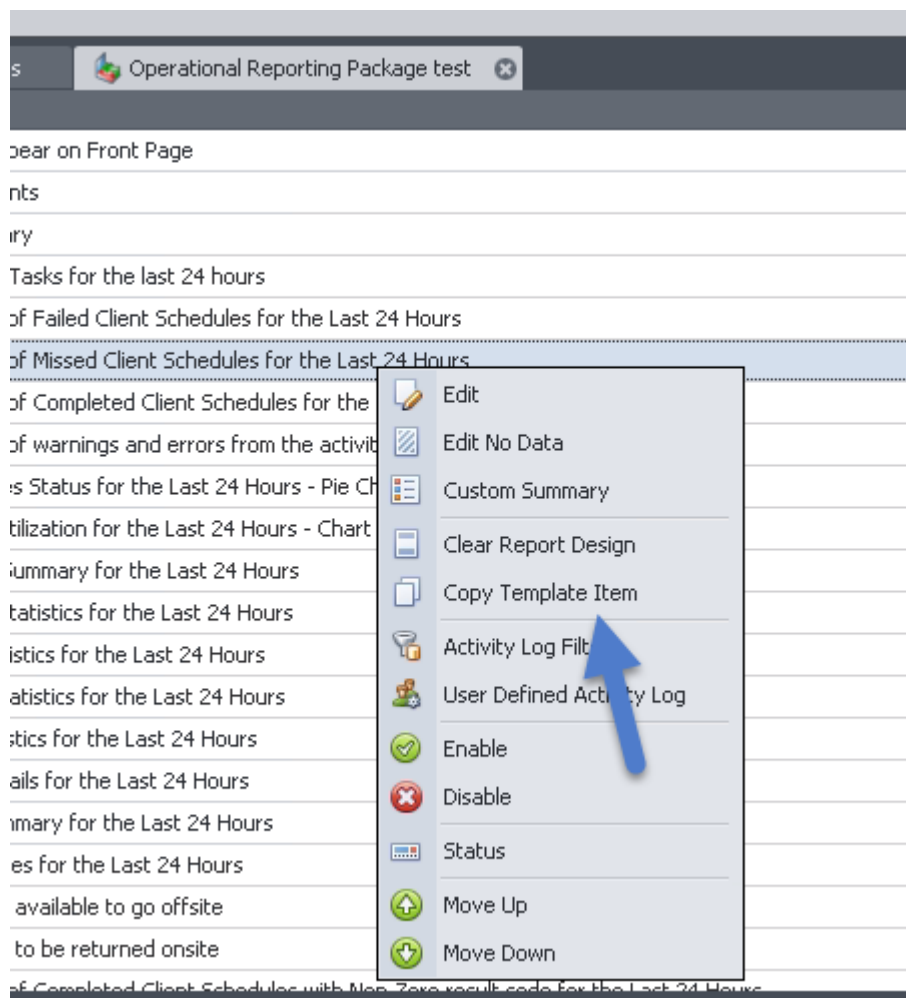
This will show the status of currently running and the last completed Operational Report.

Operational Reporting Scheduling		Operational Reporting Status								
Package Name	TSM Server Name	Running	Last Start Time	Last End Time	Current Status	Last Run Successful	Email Successful	Repository Successful	Last Error	Number of Runs
test	Spirit Software Serv...	False	06-Apr-15 17:3...	06-Apr-15 17:3...	Finished	True	False	True		1

Updates to Operational Reporting

From time to time new sections will be added and updates to the report templates will be made to Operational Reporting. This updates will only be applied to the System Default package.

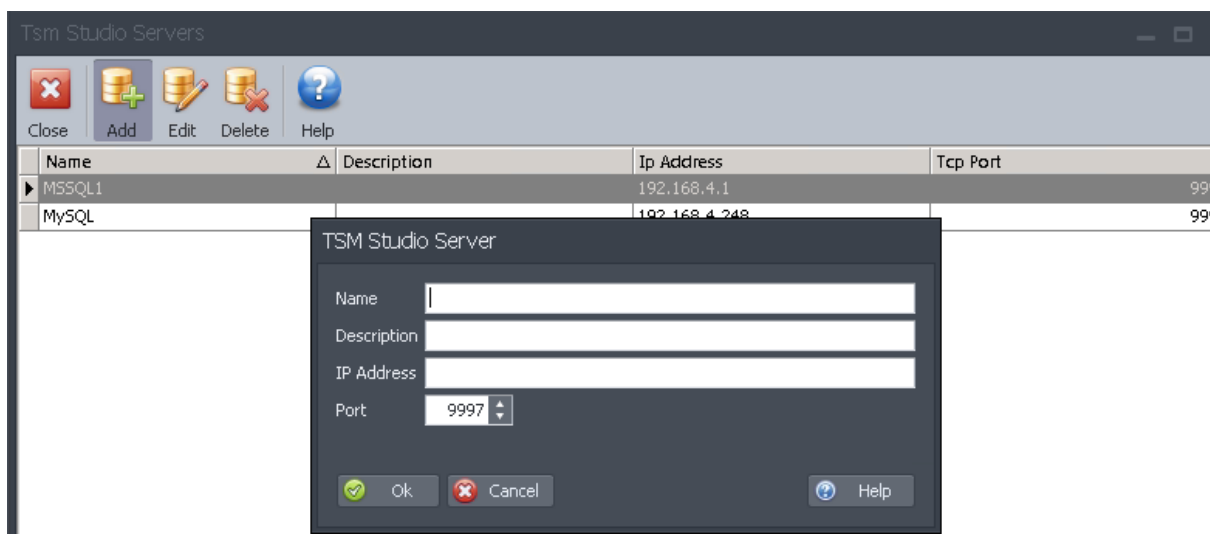
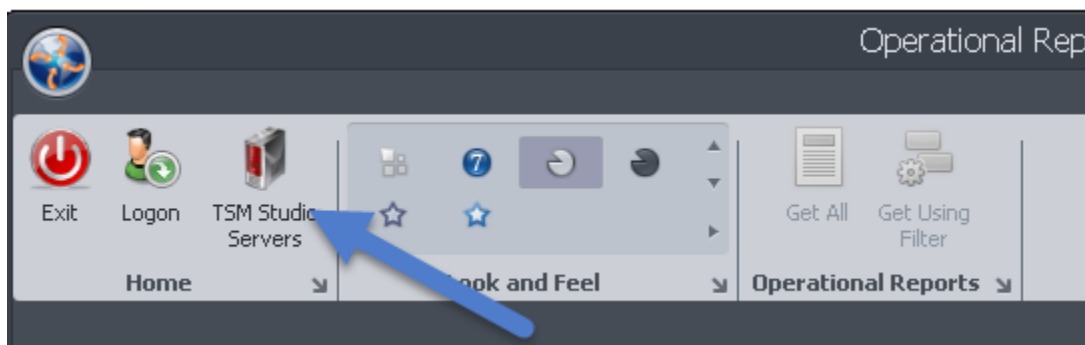
To add these new updates in your own packages. Open the package and use the copy template item to bring in the updates



Using the Operational Report Viewer

The Operational Report Viewer provides an interface for viewing Operational Reports stored in the TSM Studio Server database. Users can be defined within TSM Studio Server that have only access to the Operational Reporting Viewer and cannot login to TSM Studio Server using TSM Studio.

Firstly setup a connection to TSM Studio Server using the TSM Studio



Enter a unique name and the IP address and TCP port used by TSM Studio Server

Logon to the TSM Studio Server using the Logon button on the Ribbon.

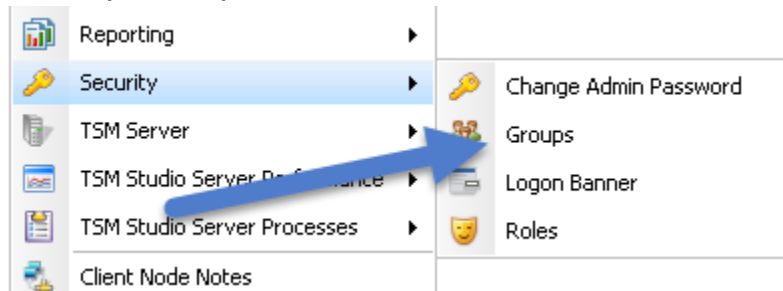
To retrieve the reports using the "Get All" or "Get Using Filter" options from the Ribbon.

Once the list is retrieved double click on the report to view or select the report and press the "View" button

Operational Report Viewer Security

By default TSM Studio Server admins have access to the Operational Report Viewer. To limit users to only have access to the Operation Report Viewer create a security group using the builtin Operational Reporting Viewer role.

1. Goto Security→Groups



2. Create a new Group

3. Select the Operational Reporting Viewer Role

4. Add the Windows Groups that should access to this role (One group per line)

