OpenEnterprise Report Scheduler Reference Guide (V2.83)
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1 Report Scheduler

1.1 Report Scheduler Overview

The Report Scheduler publishes, distributes and purges OpenEnterprise Reports. The Report Scheduler's User Interface informs the user of its current state and past actions it has performed.

The Report Scheduler is a server based task and is supposed to run under the control of the Session Manager. Therefore, when the Report Suite is installed on its own, the Session Manager, and a configured Session is also installed.

1.2 Running the Report Scheduler

By default the Report Scheduler will connect to RTRDB1, if available. In addition, the database can be specified on the command line with the switch:

\[\text{--s [dataservice]}\]

E.g. To connect to oeserv1:rtrdb1, the following command line would be used: ReportScheduler --s oeserv1:rtrdb1. The gap between the --s and the dataservice name is optional.

Once it has connected to a database it locates the one and only object stored in the ReportScheduler table. If the Report Scheduler object cannot be located in the database, then the Report Scheduler runs using its own defaults. These will be set to the same values as the defaults defined in the OEReporting Schema and written back to the ReportScheduler table, thus creating the required entry.

Note: It is expected that on a multiple database system, Reports would be set up on just one system e.g. the Corporate system. Setting up Reporting on more than one database in a multiple database system will require the duplication of configuration.

1.3 Report Scheduler Interface

The Report Scheduler's Interface provides three pages that keep you informed about its Status, Report Statistics and Report Scheduler related Events.

- Status Page
- Statistics Page
- Events Page
- Menus

1.3.1 Status Page

The Report Scheduler's Status page informs the user of the current state of the Report Scheduler. It displays database connection status, licensing status, Report objects found and the last error encountered.
1.3.1.1 Side Menu Bar

This menu bar provides access to any of the Report Scheduler's information pages. Click on the name of the page in this menu to view it.

1.3.1.2 Status Group

This group of controls provides information on the status of the Report Scheduler and the Report configuration it finds.

1.3.1.3 Database Name

The name of the OpenEnterprise database which contains the Reporting configuration.

1.3.1.4 Database State

Indicates whether the Report Scheduler is connected to the OpenEnterprise database.

1.3.1.5 License Status

Indicates the status of licensing for the OpenEnterprise Reporting Suite on the Server.

1.3.1.6 Report Objects List

The list of Report related objects found within the OpenEnterprise database.

1.3.1.7 Last Error

This group of controls provides information on the last error encountered by the Report Scheduler.
1.3.1.8  Error Occurrence Time
The date and time (in local time) that the last error occurred.

1.3.1.9  Error Description
A description of the last error encountered by the Report Scheduler.

1.3.2  Statistics Page
This page displays a list of Report statistics, such as the number of schedules run and the number of errors that have occurred.

![Report Scheduler - Statistics](image)

1.3.2.1  Side Menu Bar
This menu bar provides access to any of the Report Scheduler's information pages. Click on the name of the page in this menu to view it.

1.3.2.2  Event Counter Window
A list of statistics showing various runtime counters, such as the number of schedules run and the number of errors that have occurred. The following table lists the counters that will be provided and what they will do.

<table>
<thead>
<tr>
<th>Counter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schedules Run</td>
<td>Number of schedules that have been started.</td>
</tr>
<tr>
<td>Reports Attempted</td>
<td>Number of Report publishing attempts.</td>
</tr>
</tbody>
</table>
### Report Schedule

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Successes</td>
<td>Number of Reports that have been successfully published.</td>
</tr>
<tr>
<td>Report Fails</td>
<td>Number of Reports that have failed to fully publish.</td>
</tr>
<tr>
<td>Reports Purged</td>
<td>Number of Reports that have been purged.</td>
</tr>
<tr>
<td>All Errors</td>
<td>List of all errors that have occurred</td>
</tr>
</tbody>
</table>

#### 1.3.2.3 Reset Counts

Resets all of the counts in the Event Counter window to zero. A Reset Confirmation dialog will be displayed before the reset to give you a chance to cancel the operation.

![Reset Confirmation Dialog](image)

#### 1.3.2.4 Last Reset

Indicates the time and date (in local time) when the last reset occurred.

#### 1.3.3 Events Page

The Events Page shows of the activities the Report Scheduler is performing. Filters can be applied to the event list according to event type, category or object.
1.3.3.1 Side Menu Bar

This menu bar provides access to any of the Report Scheduler's information pages. Click on the name of the page in this menu to view it.

1.3.3.2 Event Type

Click this drop-down list to filter the Event list by event type. Event types can be Information, Warnings or Errors.

1.3.3.3 Event Category

Click this drop-down list to filter the Event list by event category. Event categories describe the particular area the event relates to e.g. Database, Report, Schedule etc..

1.3.3.4 Event Object

Click this drop-down list to filter the Event list by specific object. This would include a particular Report or Schedule etc that a line in the Event list refers to.

1.3.3.5 Event List

The Event list contains a chronological list of events. The number of events displayed depends on the 'Maximum Events' setting on the Scheduler's Property dialog.

1.3.3.5.1 Event Properties

Select and event and right click to reveal the context menu, then select the 'Properties' item.
You can then view the Event Properties in the information box.

![Event Properties](image)

1.3.3.5.2 Refreshing the Event List

When new events have arrived a flag icon appears just above the Event List to signal a refresh is needed. You can either refresh the list by right clicking on it and selecting the Refresh option from the context menu:

- or you can click on the Flag icon that appears in the top right corner of the Event List:

![Refresh](image)

1.3.3.5.3 Event Types

Events are split into three types: Information, Warnings and Errors.

1.3.3.5.3.1 Information

Events that happen in normal operation e.g. triggering of a schedule, successful publishing of a Report.
1.3.3.5.3.2 Warnings
Something that can happen under normal configuration but might require the user’s attention, such as possible configuration errors (e.g. overwriting a file on an FTP server).

Any major error that occurs on the system e.g. not being able to connect to the database, not being able to find the Report Template XLS file.

1.3.3.5.4 Sorting
It is possible to perform a manual sort on any of the columns in the list by clicking on the header. Repeatedly clicking on the same column header will result in the sort switching between ascending to descending.

1.3.4 Menus
There are three menu options available on the Report Scheduler's menu bar.

- File Menu
- Tools Menu
- Help Menu

1.3.4.1 File Menu
The File menu contains only one option - Exit. This will close the Report Scheduler.

1.3.4.2 Tools Menu
The Tools menu has a Properties option. When selected, the Report Scheduler's Property page will be opened.

1.3.4.3 Help Menu
This menu provides access to the whole of the Report Scheduler's Help file through the 'Help' option.

It also has an 'About Report Scheduler' option. This will open a dialog that contains two tabs. The first tab provides information on the OpenEnterprise version and build numbers, the second provides support contact information.
1.4 Properties Dialog

The Report Scheduler's Property dialog enables you to configure how it manages the publishing of Reports.

![Properties Dialog]

1.4.1 Simultaneous Reports

Un-check this box to stop the Report Scheduler triggering Reports simultaneously. By default simultaneous reports are allowed.

It is possible that a schedule may be triggered whilst the Report Scheduler is still executing the previous publish operation.

Therefore, to prevent too many queries acting on the database at any one time, it is possible here to only allow one report to be published at a time.

When a report has been delayed, it will be allowed to run once the current running report has finished.

1.4.2 Abort Report Interval

A timeout value (in minutes) that specifies how long reports can take to retrieve and publish data for before they are aborted.

Some reports may never return from querying the database because of very large historical queries. When this is the case, a timeout value prevents the Report Scheduler from being delayed for an indeterminate period waiting for such a report.
When a report is aborted an error will appear in the Report Scheduler Event Log (on the Events Page) and the next pending Report (if any) will be started. The report abortion will also be journalled in the OpenEnterprise Event History.

1.4.3 Show Report When Publishing

By default Excel will be run hidden, but it may be configured to run visibly when Reports are being published by checking this box.

1.4.4 Run Missed Schedules on Startup

Check this box to ensure that when the Report Scheduler starts up, it will run all reports that were missed since the last time it ran. The default setting is for the Report Scheduler to not run any missed reports on startup.

If the Report Scheduler is stopped in the middle of running a schedule and then restarted with this box checked, that schedule will be re-run in its entirety.

Note that when the scheduler is restarted there could potentially be a lot of missed schedules queued to run. To avoid a large hit on the database it may be necessary to add delays to the schedules by using the 'Delay' attribute in the Report table, and/or prevent simultaneous reports from running by un-checking the 'Allow more than one report to run at the same time' box on this dialog.

1.4.5 Report Template Customization

An OpenEnterprise Report Template is a Microsoft Excel spreadsheet that has been 'customized' to run the OpenEnterprise Report Plugin. The customization procedure is what enables OpenEnterprise Report Templates to be created within an Excel spreadsheet.

Report Templates configured using previous versions of OpenEnterprise Reporting may need to be updated. The options in this drop-down list allow the user to specify how OpenEnterprise Reporting handles the customization of Report Templates that have been defined in the database using previous versions of OpenEnterprise.

When you click on the default option, the full list of options is displayed.

1.4.5.1 Check Versions and Customize if Necessary

This is the default option. The Report Scheduler will check if the Report Templates in the database have been customized using the current procedure, and will customize any report templates that need to be updated.

Each customization update will be recorded on the Events page of the Report Scheduler.

1.4.5.2 Do not Check Versions and do not Customize

The Report Scheduler will not check if the Report Templates have been customized according to the current procedure and, therefore, will not update any old Report Templates.

This option should be selected when no old format reports exist (or are likely to exist). This will prevent the Report Scheduler from validating the customization which may result in a performance improvement when a large number of reports are configured.
Note that in order to run a Report created using OpenEnterprise V2.61 or earlier, the associated Report Template must have its customization updated.

1.4.5.3 Check Versions but do not Customize

The Report Scheduler will check if the Report Templates have been customized according to the current procedure, but will not perform any updates. Instead, an error message will be written to the Report Scheduler's Events page for each report template that is not properly customized.

Note that in order to run a Report created using OpenEnterprise V2.61 or earlier, the associated Report Template must have its customization updated.

1.4.6 Maximum Events

The maximum number of events stored in memory at any one time defaults to 1000. That number can be changed here.

When this number has been reached and a new event arrives, the oldest Event will be deleted from the list in order to make way for the new one. Note that the Event List does not update itself automatically.

Changes will only be seen in the Event List when you refresh it by selecting the 'Refresh' option from the Event List context menu, or clicking on the Flag icon that appears above the top right hand corner of the Event List when new events have taken place.

1.4.7 Log File Options

Events can be stored in a Log file in addition to being displayed on the Events page of the Report Scheduler. When logging to a file is enabled, events will also be outputted to a file called ReportScheduler.csv. This will be located in the directory Report Scheduler is running in. There are three options in this list:

1. **No Log File** - No Log file will be created. Events will just be displayed in the list on the Events Page of the Report Scheduler. Events that are overwritten after the Maximum Events value is exceeded will be lost.

2. **Single Log File** - A single Log file will be created. This will be added to as each new event is recorded. A single file may become very large in time, so it will need to be managed accordingly.

3. **New Log file each day** - This option will produce a new log file every day. Each file will be named ReportScheduler_<DATE>.csv. <DATE> will be in the format YYYYMMDD (year, month day). In this mode, files will be kept for a configurable number of days. The number of days can be specified by the 'Keep for' box in the To File group box. This is only enabled when the 'File Per Day' mode is currently selected.

Report Properties Dialog

1.4.8 OK Button

Click here to close the Scheduling Properties dialog, saving any changes made.

1.4.9 Cancel

Click here to close the Scheduling Properties dialog without saving any changes made.

1.4.10 Help

This button opens the Report Scheduler help at the correct topic.
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