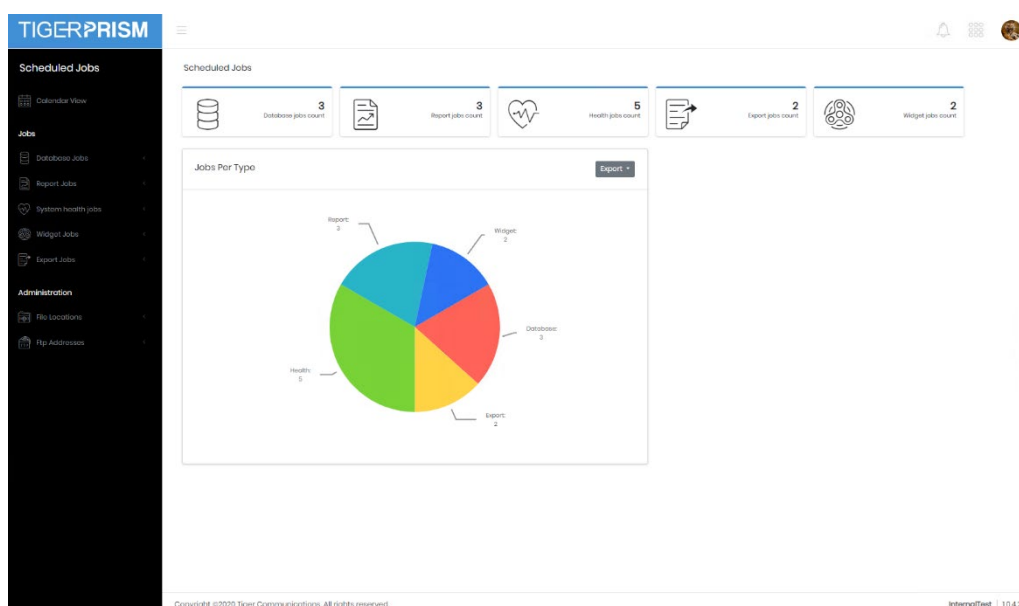


Scheduled Jobs

Overview

Prism's scheduler can automate many tasks. From ensuring that the latest report information is generated and sent overnight to maintaining database indexing or checking if CDR Sources are still sending data the schedule service can handle most jobs.

The Scheduled Jobs landing page shows a breakdown of the various jobs that have been configured to run.

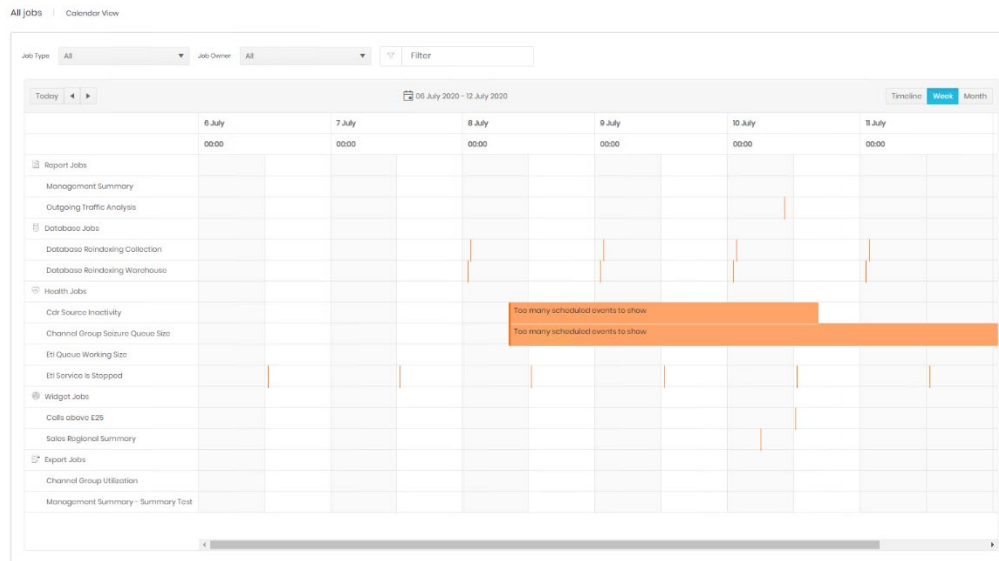


From this you can see that there are five basic types of scheduled job:

- Report/Export – Any of Prism's reports or exports can be set to run.
- Widget – Analytics widgets can be set up to run on a scheduled basis, providing an alternative to reports or a regularly updated flat file for import or analysis elsewhere.
- System Health – System Health jobs are specialised tasks relating to CDR receipt or processing. These can flag up potential problems quickly.
- Database – Another specialised set of tasks, these relate to the SQL database and do not always need to be configured.

Calendar View

The first option on the menu is calendar view. This will show a timeline of all scheduled jobs that are due to run in the future.



Jobs can be filtered down by type and owner at the top of the page. There is also a text filter which is based at the jobs' names.

The bar below that shows the current date (or date range) displayed, and has controls to move forwards or backwards, as well as switch to a different time scale. The calendar can be adjusted to show an ongoing timeline or a week or month at a time.

Each job is represented in its own row, and each run is shown by a marker at the time of execution. The marker will expand to represent an estimation of the run time as Prism learns from previous runs. If a job is running too frequently to be displayed easily the row will display a message instead.

Clicking the name of a report will open the job's configuration page.

Jobs by Type

No matter which type of job you are configuring much of the configuration is common.

Calendar View

The calendar views for each type work in the same way as the main section [calendar](#). The filtering options are reduced to just the job name, and only one type of job is displayed.

Search

The search page for each job type displays all active and suspended reports in a grid. For standard grid controls see common features.

Widget Jobs | Search

Status	Status name	Job Priority	Name	Description	Is Scheduled	Using this time zone	Next Execution Due Local	Is Suspended
Not Executed	Not Executed	Low	Calls above £25	enwawarwar	✓	(UTC+00:00) Dublin, Edinburgh, Lisbon, London	10/07/2020 12:15	×
Not Executed	Not Executed	Low	Sales Regional Summary	ggg	✓	(UTC+00:00) Dublin, Edinburgh, Lisbon, London	10/07/2020 08:00	×

1 - 2 of 2 items

Create

Each job type has a wizard for creation, and each is slightly different.

Report Jobs

Report jobs have a lot of configuration, and the wizard runs to 10 steps.

Report

Step one determines the module used (e.g. Telephony, Office 365) and which report is to be run.

Report Jobs | Create

1

2

3

4

5

6

7

8

9

✓

Report

Details

Schedule

Target Data

Batch

Parameters

Success Notification

Failure Notification

Delivery Options

Completed

Report Selection

Module*

Telephony

Report category*

Management

Report*

Departmental Cost Summary

Next

Details

Step 2 gives the option to set an easily identifiable name and a description for the job. Here you can also set the language and priority of the job. Most of the time the defaults for both of these are fine to use.

Report Jobs | Create

Details

Name*
Departmental Cost Summary for SE Region Sales

Job Priority*
Low

Language*
English

Description
DCS to go to all Branch Sales Managers in the SE region

< Previous Next >

Schedule

This step is common to all job types and determines when the job begins to run (1), when it ends (2), how frequently it runs (3) and at what time of day (also 1). In the example below is a job due to run for the first time on 1st July 2020. It will repeat on the 1st of each month and will run indefinitely. In the plan at the bottom (4) can be seen the timings of the next executions based on the current settings.

Report Jobs | Create

Schedule

☐ Run manually

☒ Schedule this job to

Schedule this job to*
Run Forever

Using this time zone*
GMT Standard Time - (UTC+00:00) Dublin, Edinburgh, Lisbon, London

Initial execution*
01/07/2020 02:00

Execute this job every*
1 Month

Day is overridden: ☐ no

Sample of Next 5 Executions

Execution 1 Wed, 1 Jul 2020 02:00

Execution 2 Sat, 1 Aug 2020 02:00

Execution 3 Tue, 1 Sep 2020 02:00

Execution 4 Thu, 1 Oct 2020 02:00

Execution 5 Sun, 1 Nov 2020 02:00

< Previous Next >

Options

- Run manually (all intervals) – The job is configured but not scheduled to run at all. It can be triggered manually at any time, or edited later to give it an execution schedule if required.
- Schedule this job to (all intervals) – has the options: Run forever, Run once, Run a specified number of time, Run until a specific date. Additional fields are added for the last two to allow for the number of repeats, or the end date.

- **Month end (Monthly option)** – If a job is set to run initially on the last day of a month Prism will adjust for months of differing lengths. To force non calendar months use every 30 days instead.
- **Day is overridden (Quarter Monthly option)** - The report no longer runs on a specific date in the month, rather the first, second, third, or last of a specific day of the week.

Day is overridden ☒

Nth day*

Week day*

- **Days of the week (Day, hour, minute option)** – If set to run every x days the report can be set to avoid certain days. The report below will run only on weekdays.

Execute this job every* Day

Limit executions to the following specific days of the week

All	None	<input checked="" type="checkbox"/> Mon	<input checked="" type="checkbox"/> Tue	<input checked="" type="checkbox"/> Wed	<input checked="" type="checkbox"/> Thu	<input checked="" type="checkbox"/> Fri	<input checked="" type="checkbox"/> Sat	<input checked="" type="checkbox"/> Sun
-----	------	---	---	---	---	---	---	---

Sample of Next 5 Executions Reset zoom

- **Limit subsequent execution hours (Hour and Minute option)** – If running jobs several times a day Prism can be set to only run them during specific hours of the day.

Execute this job every* Hour

Limit subsequent execution hours* -

Target data

This stage determines what data is contained in the report. By default, the target data will cover one interval behind the schedule. If the report runs on the 1st of each month, it will cover the month before. However, this can be tailored to suit the user's needs.

Report Jobs | Create

1 Report 2 Details 3 Schedule 4 Target Data 5 Batch 6 Parameters 7 Success Notification 8 Failure Notification 9 Delivery Options 10 Completed

Target Data

Target is Month period with an offset of Month

Customize the start and end of the 1 Month period

Sample of next scheduled due date and time from 01 Jun 2020 00:00:00 to 30 Jun 2020 23:59:59.

In the example above the report runs for 1 month before the execution date, due to the offset of -1.

Clicking to customise the start and end of the period will show options relating to the targeted period. In the example below a weekly report which runs on Monday mornings shows data for Monday-Friday of the week before. Notice how the timeline chart shows the data which will be included in the next execution, based on the settings currently selected. This allows customised timings to be checked at the time.

Target Data

Target a period with an offset of

Customize Start

The first day of the week is a starting at hours mins secs

Customize End

The last day of the week is a ending at hours mins secs

Sample of next scheduled due date and time from 22 Jun 2020 00:00:00 to 26 Jun 2020 23:59:59.

Mon 22 June 2020	Tue 23	Wed 24	Thu 25	Fri 26	Sat 27	Sun 28	Mon 29
Next Target Period Mon, 22 Jun 2020 00:00:00 to Fri, 26 Jun 2020 23:59:59					Next Execution Due Mon, 29 Jun 2020 02:00:00		

Customize Start

Starting the month on day starting at hours mins secs

Customize End

Ending the month on day ending at hours mins secs

Batch

This step can alter the way a report is run or delivered. A normal report runs, and the whole result is sent to any defined recipients. When a report is batch processed the results are split up per included directory branch and sent to email addresses configured against the organizations in the tree used. This allows a single report execution to deliver specific result sets to many different recipients, instead of configuring many individual reports.

Report Jobs |

1

2

3

4

5

6

7

8

9

✓

Report

Details

Schedule

Target Data

Batch

Parameters

Success Notification

Failure Notification

Delivery Options

Completed

Batch Options

☐ Run job as normal

☒ Batch process job

Batch control

Subject*

Importance*

Format

Attached is your monthly summary report.

Parameters

Each report can be configured to run in different ways. These are covered in the Reports sections of the relevant Analyse module. The report itself can be previewed on screen, to ensure that the correct data is being returned.

Success Notification

This step defines how Prism deals with a successful report. There are three options, and any or all can be used in combination.

Report Jobs | Create

- **Email** – A success notification can be sent out to one or more email addresses, with a preconfigured subject and body. This is also the option to notify subscribers without attaching the report itself. Also that batch reports will go to the email addresses defined in the directory, this stage relates only to the notification that the report ran successfully.
- **Ftp Address** – The results file can be uploaded to one or more ftp sites. Destinations are defined in the Administration section, but the choice grid indicates whether existing files will be overwritten or not.

Success Notification

Success Notification

Email **Ftp Address** File Location

	Ftp Address Label	Ftp Address Name	Port	Username	Overwrites E...	Directory
<input checked="" type="checkbox"/>	Tiger	ftp.tigercomms.com	22	tigerengr	<input checked="" type="checkbox"/>	/Testing/

- **File Location** – The results file can be uploaded to one or more file shares. Destinations are defined in the Administration section, but the choice grid indicates whether existing files will be overwritten or not.

Success Notification

Success Notification

Email Ftp Address **File Location**

	File Location Label	File Location Path	Overwrites Existing File
<input type="checkbox"/>	Matts Server 2020	\\matts-server-2020\prism\reports	<input checked="" type="checkbox"/>

Failure Notification

If the job fails for any reason (please note that a report finding no data is not a failure to run) then the subscribers defined here will receive a notice by email.

Report Jobs | Create

Failure Notification

Email

To: admin@prismssystem.com

A subject: Failed To Run Report Job: "Departmental Cost Summary for SE Region Sales"

Importance: Low

Format: B I U [Rich Text Editor Icons]

Failed To Run Report Job: "Departmental Cost Summary for SE Region Sales"

< Previous > Next

Delivery Options

This stage in setup determines in which file format the results are generated, whether the results are emailed out with the success notification, and what filename the results should be given.

Report Jobs | Create

Delivery Options

Report format: PDF

File is archived: NO

Archive size limit*: 10

File is emailed: YES

File name template*: <Report_Name> generated on <Generated_On_Date> for <Date_Range_Start> to <Date_Range_End>

< Previous > Next

If the file is emailed it will go to all subscribers defined in the success notification. If not, users will need to log in to Prism to find the results file for the specific execution, unless the results are being sent to a file or ftp location. Prism archives a number of results files, removing the eldest to make way for newer executions.

The File name template is built from a combination of typing and using the token picker on the right.

Insert FileName Template Token ✕

Token	Description
<Report_Name>	Report Name
<Date_Range_Start>	Date Range Start
<Date_Range_End>	Date Range End
<Generated_On_Date>	Generated On Date
<Generated_On_DateTime>	Generated On DateTime
<DateTime_Of_Execution>	DateTime Of Execution
<File_Order_Number>	File Order Number

Insert
Cancel

Completed

The last stage shows a summary of all steps for final confirmation before the job is created.

Export Jobs

Export scheduling has 9 steps. Many of which are identical to the Report Job equivalent.

Export

The first step is to choose the export query that will be executed.

Export Jobs | Create

1

Export

2

Parameters

3

Details

4

Schedule

5

Target Data

6

Success Notification

7

Failure Notification

8

Delivery Options

✓

Completed

Definition

Category*

Incoming

Query*

End Point Responses

> Next

Parameters

As with Reports each export can be configured to run in different ways. These are covered in the Exports sections of the relevant Analyse module. The export itself can be previewed on screen, to ensure that the correct data is being returned.

Details, Schedule, Target Data, Success Notification, Failure Notification

There are all identical to the Report steps above.

Delivery Options

The delivery options are similar to those for [Report Jobs Delivery](#) but there are some extra options.

Export Jobs | Create

Export Jobs | Create

1 Export 2 Parameters 3 Details 4 Schedule 5 Target Data 6 Success Notification 7 Failure Notification 8 Delivery Options Completed

Delivery Options

Export format
CSV

1 Limit the rows in the message body of an email to a maximum of*
20
rows

File is emailed
NO

2 Write column header record
NO

3 Separate columns with

4 Deliver as a single file
Split the file 50000 records per file

File name template*
<Export_Name>

- Exports can directly inserted into the success notification email, this insertion can be limited to a preview, or a Top X, by adjusting the number of rows allowed.
- The export itself can have a header row created from field names if required.
- The field separator can be defined
- The file can be split if the results set is expected to be large.

Completed

As usual, the final stage is a summary for confirmation of the settings before creation.

Widget Jobs

Also similar to Report Jobs these have 10 steps.

Module

Choose the Analyse module that the widget is to report on.

Data Source

The data source choices depend on the module chosen

Widget Jobs | Create

Widget Jobs | Create

1 Module 2 Datasource 3 Definition 4 Details 5 Schedule 6 Target Data 7 Success Notification 8 Failure Notification 9 Delivery Options 10 Completed

Datasource

Create a new widget job based upon the following view...

View
Please select one option
Call Logs
Calls
Seizures

Definition

The definition step allows the choice either to use an existing saved widget, or to define a new one. For detail on widget definition see Analytics.

Details, Schedule, Target Data, Success Notification, Failure Notification

These are all the same as for report jobs.

Delivery Options

Widget delivery options are very similar to those for Exports. There is no choice in export file format, widgets are always CSV. Widgets do have an archive setting to limit the number of results files retained.

Completed

The final stage is a summary for confirmation of the job's settings before creation.

Database Jobs

There are three specific database jobs and if these are necessary they will most likely be set up by the installation engineer.

- Data Retention Truncate - This job removes data that is outside the retention setting configured by the system administrator in Prism settings.
- Database Reindexing Collection – Run a reindex task across one of the two SQL databases. The database admin team may already be performing this task and this job should not be set up unless it is required.
- Database Reindexing Warehouse - Run a reindex task across one of the two SQL databases. The database admin team may already be performing this task and this job should not be set up unless it is required.

There are no options for any of these jobs within the scheduling. Details, Schedule, Success & Failure Notification, and Completed steps are all identical to the [Report Job](#) equivalents.

System Health Jobs

System Health jobs each check part of the collection and processing services. As with Database Jobs these will likely be configured by the Tiger engineer.

There are 4 types of health job and each has specific parameters:

- CDR Source Inactivity – Checks for data logged since the job last ran. Typically runs several times per hour. If no data is found for the period a message will be sent to the subscriber list on Success Notification.
- Parameters: Period in minutes to check for call data within; CDR Sources to check on job.
- Channel Group Seizure Queue Size – Prism holds and processes data on channel seizure, if this queue stalls for any reason it can result in missing or inaccurate channel group seizure dashboards and reports. This job sends an email to the Success Notification subscribers if the Queue grows beyond the set limit.
- Parameters: Channel Group Seizure Queue Row Limit
- ETL Queue Working Size – This queue is for call data going into the Warehouse database and may grow in size if something is holding up processing. This job will email subscribers on the Success Notification list if the size exceeds the limit.
- Parameters: ETL Queue Working Row Limit
- ETL Service is Stopped – If the service that processes the above queue is stopped for any reason this job will email the subscribers of the Success Notification list.
- Parameters: None

The wizard for setting up health jobs has Definition and Parameter steps, Details, Schedule, Success & Failure Notifications, and Completed steps are identical to [Report Job](#) equivalents.

Job Detail Page

Each of the Search grids or Calendar Views allows direct access to jobs of the various types.

The detail page for a Job is split into three parts

The screenshot shows the 'Job Detail Page' for a job named 'Management Summary - Summary Test'. The page is divided into three main sections:

- Job Overview (1):** Located on the left, it features a document icon with an arrow, the job name, and a status indicator 'NOT EXECUTED'.
- Configuration Tabs (2):** A horizontal tab bar at the top right includes 'Details', 'Parameters', 'Schedule', 'Target Data', 'Success Notification', 'Failure Notification', 'Delivery Options', 'Summary', and 'Audit'. The 'Details' tab is currently selected.
- Executions Grid (3):** At the bottom, a table lists the job's execution history.

	Execution type	Execution status	Using this time zone	Execution due	Execution start	Duration	Created
	Scheduled	Queued	(UTC+00:00) Dublin, Edinburgh, Lisbon, London	12/06/2020 15:52		00:00:00	12/06/2020 15:53

1. The basic detail of the job and its most recent execution status
2. The configuration of the job. There is a tab here for every step of the creation wizard for the type of job. All of the same options and adjustments are in each tab. Additionally there is an Audit tab which contains the creation and last updated information for the job.
3. The bottom of the page shows the individual executions of this job in a grid. For standard grid controls see common features. Selecting an individual execution does not load a new page but opens the execution details in place of the search grid.

Execution Detail Page

The execution detail shows everything about a single run of a job

The screenshot shows the 'Execution Detail Page' for a specific job run. The page is divided into three main sections:

- Execution Header (1):** At the top, it displays the job name 'Departmental Call Summary' and the execution timestamp '24/07/2020 10:50:33'.
- Information Tabs (2):** A horizontal tab bar includes 'Details', 'Error', and 'Deliveries'. The 'Details' tab is selected.
- Execution Details (3):** The main content area shows various fields for the execution:

Name	Departmental Call Summary	
Description	Departmental Call Summary	
Using this time zone	(UTC+00:00) Dublin, Edinburgh, Lisbon, London	
Execution type	Manual	
Execution status	Success	
Duration	00:00:07.053	
Execution due	24/07/2020 10:50:33	
Execution start	24/07/2020 10:50:35	
Execution end	24/07/2020 10:50:42	
Created by	System Administrator	
Claimed by	Report Scheduler [Thread-1]	
Successful delivery count	1	
Failed delivery count	0	
Files	Departmental Call Summary_Test.pdf	

The name of the job and the time and date of the execution (1), a button to return to the search grid (2) and the three information tabs

Details

Shows scheduling and results information about the execution such as the date and time it was (is) scheduled to run and the current status, when the task started and ended (and the duration of the run), and whether any results were delivered or failed to deliver. If there is a file archived for the execution it can be viewed here (4).

Error

The Error tab shows details of any problems encountered while running the execution. Information in here may immediately shed light on any problems, or may assist the Support team to investigate more complex problems.

Deliveries

This tab shows notifications and file transfers for the execution. Email, ftp and file transfer deliveries are all shown here.

Executions

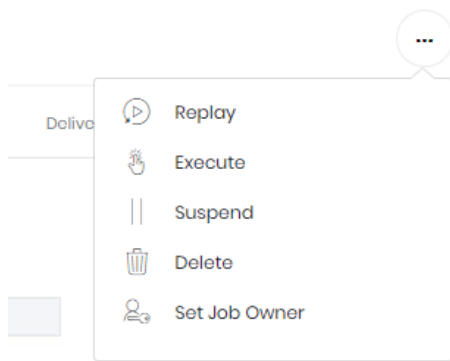
Departmental Call Summary 24/07/2020 10:50:33

Details Error Deliveries

	Delivery status	Address type	Created By	Created	Sent by	Sent
...	Success	Email Address	Report Scheduler	24/07/2020 10:50:41	System Administrator	24/07/2020 10:50:41

Actions

The ellipsis menu has a few more actions in it than in other sections of Prism



- **Replay** – runs an execution identical to the last one. Useful if an identified directory inaccuracy has been resolved.
- **Execute** – Manually start an execution now. This uses all configured settings but runs outside the normal schedule. This is the only way to run a job if the Schedule step was set to “Run Manually”.
- **Suspend** – Leaves a job configured, but on hold until resumed (also from this menu).
- **Delete** – Deletes the job to the recycle bin
- **Set Job Owner** – Allows an existing Job to be given a new owner. This allows system admins to set up jobs and give them to users to maintain, or to reassign scheduled jobs if a user’s role changes.

Administration

File Locations

File share locations available for scheduled jobs to deliver to are defined here.

File Locations | Manage

File Location Label	File Location Path	Overwrites Existing File	Use Count	
Central Prism Share	\\TCT-PRISM1\Prism2020_WS\inbox	✓	1	

When a share is added or edited and saved Prism will attempt a connection to the directory. If it cannot reach the location a message will be displayed, and the page will remain in edit mode.

File Location Label	File Location Path	Overwrites Existing File	Use Count	
New Share	\\newshare\shares	<input type="checkbox"/>	0	
Central Prism Share	<div>Directory does not exist</div>	✓	1	

Shares may only be destroyed if their use count is 0.

FTP Locations

FTP locations available for scheduled jobs to deliver to are defined here.

Ftp Addresses | Manage

Ftp Address Label	Ftp Address Name	Port	Username	Password	Confirm ...	Overwrites E.	Directory	Use Count	
Tiger	ftp.tigercomms.com	22	tigerengr	****	****	✓	/testing/	1	

When an FTP location is added or edited and saved Prism will attempt a connection. If it cannot reach the server a message will be displayed, and the page will remain in edit mode.

Ftp Addresses | Manage

Ftp Address Label	Ftp Address Name	Port	Username	Password	Confirm ...	Overwrites E.	Directory	Use Count	
NowFTP	ftp.new.com	22	Joe	*****	*****	<input type="checkbox"/>	/now/	0	
Tiger	<div>Invalid FTP address path</div>		tigerengr	****	****	✓	/testing/	1	

FTP Addresses may only be destroyed if their use count is 0.

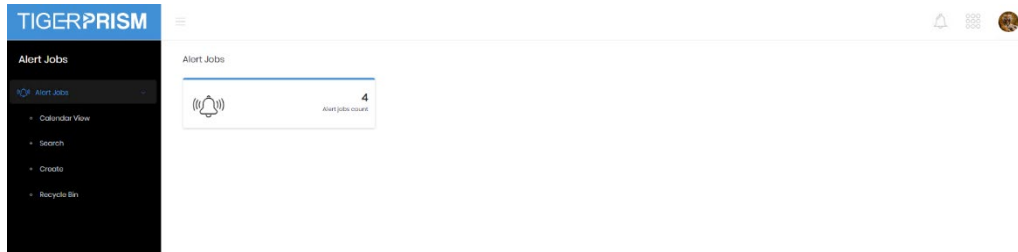
Alert Jobs

If Prism has the alerting module configured there is another type of scheduled job. This has its own tile, and jobs do not appear on the Scheduled Jobs calendar view.

Prism can monitor data in the background, sending out alerts or reports only when certain criteria have been met. At the simpler end notifying users if emergency services have been

called from the campus, or if a call over a certain cost has been made. More complex alerting can also be configured. For example, setting an alert if the total cost of international calls on a specific tariff within the current calendar month reaches a certain threshold, perhaps to alert users before bundled minutes are exceeded.

The Alert Jobs home page shows the number of configured jobs



The Calendar View, Search and Recycle Bin options work in exactly the same way as for other [scheduled jobs](#).

Creation works in exactly the same way as [widget jobs](#). Alert jobs use widgets to define their criteria.

The difference between an alert job and a normal widget job is when it delivers results. An alert job will not send a success notification if the execution has zero results.

Additional Creation Options

Widget and Alert Jobs can be created from their own Analytics pages using the calendar or alert icons.



These will bypass the module choice, data source and definition stages.