

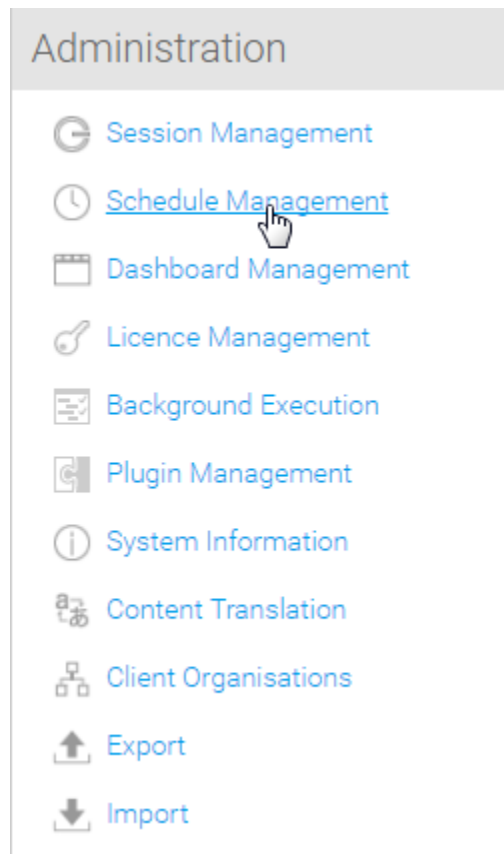
# Schedule Management

- [Overview](#)
  - [Schedule Types](#)
  - [Schedule Icons](#)
- [View Schedules](#)
- [Edit Schedule](#)
- [View History](#)
  - [Recipient List](#)
- [Pause Scheduled Task](#)
- [Run Scheduled Task](#)
- [Delete Scheduled Task](#)
- [Refresh Schedules](#)
- [Task Scheduler Management](#)
  - [Task Scheduler Limits](#)
  - [Updating the Task Scheduler Limit](#)

## Overview

Yellowfin allows user to create scheduled reports. In some instances as the administrator you will want to delete redundant schedule items. From the admin panel you will be able to view and delete all scheduled tasks without the need to open each task individually.

To access the schedule list go to **Administration > Admin Console > Schedule Management**.




## Schedule Types

There are a range of scheduled tasks that can be setup and run in Yellowfin. These include:

- **Broadcast** - push a piece of content out to a specified set of users on a regular basis.
- **Cached Filter Refresh** - update the values in report cached filters on a regular basis.
- **Cached View** - update the data cached in a view on a regular basis.










- **Report** - update the data in a report that has been set up to have its results cached.
- **Report Subscription** - push a report to a specified user on a regular basis.
- **Access Filter** - update the values in an access filter on a regular basis.
- **Third Party** - update data required by third party connectors. Depending on the connector this may also involve loading and transforming data.
- **Signals analysis** - executes a Signals analysis.

## Schedule Icons

Schedule icon	Name	Description
	(never run)	This task has not been executed yet.
	Schedule running	This task is currently running.
	Last run successful	The tasks was last executed successfully.
	Last run failed	This task ran unsuccessfully.
	Schedule paused	This task was paused while it was running, and therefore is not incomplete.
	Schedule paused, last run successful	This task last run successfully, but has been paused, and will therefore not run according to its schedule.


## View Schedules

The schedule list allows you to search, view, edit, pause, run, and delete scheduled tasks.

Search Schedules		Q	All Types	▼	All Status	▼
Type	Schedule	Last Run				
<input type="checkbox"/> 	Access Filter	Australian Filter	13/6/2016 12:00 AM (+10:00)			
<input type="checkbox"/> 	Access Filter	Australian Filter	13/6/2016 12:00 AM (+10:00)			
<input type="checkbox"/> 	Broadcast	Athlete Demographic Spread	31/5/2016 12:00 AM (+10:00)			
<input type="checkbox"/> 	Broadcast	Athlete Demographic Spread	31/5/2016 12:00 AM (+10:00)			
<input type="checkbox"/> 	Report	Athlete	13/6/2016 12:00 AM (+10:00)			
<input type="checkbox"/> 	Report	Invoiced	13/6/2016 12:00 AM (+10:00)			
<input type="checkbox"/> 	Report	Profit	13/6/2016 12:00 AM (+10:00)			
<input type="checkbox"/> 	Report Subscription	Agency Sales over Time	1/6/2016 12:00 AM (+10:00)			
<input type="checkbox"/> 	Third Party Source	Wiki GA	14/6/2016 12:00 AM (+10:00)			
Select All / Deselect All			Run now	Refresh	Delete	

## Edit Schedule

By clicking on the name of a task, you can view its schedule details.

Type	Schedule	Last Run
<input type="checkbox"/> Broadcast	Agency Sales by Profitability	2020-04-30 11:24 AM (+10:00)
<input type="checkbox"/> Broadcast	Performance by Region	2020-04-19 11:19 PM (+10:00)
<input type="checkbox"/> Broadcast	Performance by Region	2020-05-13 12:03 PM (+10:00)
<div><div><div>System Administrator 30 Apr 2020</div></div><div>5 Recipients</div></div> <div><div>Schedule: Only once</div><div>Local Time zone: Sydney (+10:00)</div><div>Status: Failure</div><div>Couldn't connect to host, port: localhost, 25; timeout 60000</div><div>Next Scheduled Run: Never</div><div>Delivery Type: Email</div><div>Subject: New</div><div>File Type: HTML</div><div>Send: Always</div><div>Start Date: 2020-04-30</div><div>End Date: Ongoing</div></div> <div>History Edit Pause Delete Run now</div>		
<input type="checkbox"/> Broadcast	Performance by Region	2020-05-13 12:07 PM (+10:00)
<input type="checkbox"/> Broadcast	Performance by Region	2020-05-13 12:24 PM (+10:00)
<input type="checkbox"/> Broadcast	Performance by Region	2020-05-13 4:47 AM (+0:00)

Select All / Deselect All

Run now Refresh Delete

To edit a schedule simply click on the **Edit** button on the task and make the changes you require.



When finished, click the **Save** button to commit your changes.

Details

Type: Report

Run On: Athlete

Schedule

Frequency: Fortnightly

Frequency Code: First

Day of Week: Monday

Task will run every fortnight, on Monday, in the first week of the fortnight

Advanced settings ☐

Save

Cancel

## View History

The **History** button shows previous executions of a scheduled task for the last 30 days. The system tracks scheduled executions which were successful or not. In case of content delivering tasks, such as broadcast reports, a list of recipients is maintained for each execution that tracks which users the content was successfully delivered to and which it was failed to send to. It is also possible to view the error in case of a failed delivery.

### Notes:

- This does not appear for tasks that contain sub tasks, such as Signals

- When upgrading to a version of Yellowfin that introduces this feature, note that any previous task executions prior to upgrading, will not be shown on the history page.

Click on the **History** button to bring up a list of previous runs.

When the popup appears, executions carried out in the last 30 days will appear. Tip: you can change this limit to view executions older than 30 days by using an advanced "hidden" configuration. Click [here](#) to learn more.

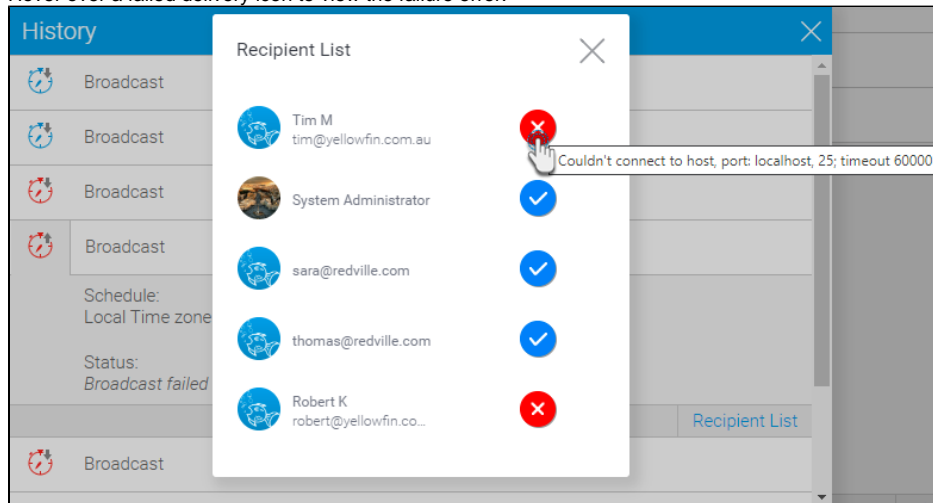
Click on any task execution to expand it and view its details.

## Recipient List

To view the delivery status of each recipient, click on the **Recipient List** button. Another popup will appear, with names of all recipients along with an icon representing the success of delivery.

	Schedule task failed to deliver content to recipient. Hover on this icon to see the error message.
	Schedule task successfully delivered content to recipient.

Hover over a failed delivery icon to view the failure error.



## Pause Scheduled Task

To pause a task simply open it by clicking on the name of a task and click on the **Pause** button.

	Report	Athlete	13/6/2016 12:00 AM (+10:00)
		Schedule:	Fortnightly (First Monday)
		Time of day:	12:00 AM
		Local Time zone:	Sydney (+10:00)
		Status:	Success
		Next Scheduled Run:	27/6/2016 12:00 AM (+10:00)
		<a href="#">Edit</a> <a href="#">Pause</a> <a href="#">Delete</a> <a href="#">Run now</a>	

## Run Scheduled Task

To run a task simply open it by clicking on the name of a task and click on the **Refresh** button.

	Report	Athlete	13/6/2016 12:00 AM (+10:00)
		Schedule:	Fortnightly (First Monday)
		Time of day:	12:00 AM
		Local Time zone:	Sydney (+10:00)
		Status:	Success
		Next Scheduled Run:	27/6/2016 12:00 AM (+10:00)
		<a href="#">Edit</a> <a href="#">Pause</a> <a href="#">Delete</a> <a href="#">Run now</a>	

## Delete Scheduled Task

From the list of scheduled items select the ones you want to delete and click the **Delete** button.

<input type="checkbox"/>		Report	Athlete	13/6/2016 12:00 AM (+10:00)
		Schedule:	Fortnightly (First Monday)	
		Time of day:	12:00 AM	
		Local Time zone:	Sydney (+10:00)	
		Status:	Success	
		Next Scheduled Run:	27/6/2016 12:00 AM (+10:00)	
				<a href="#">Edit</a> <a href="#">Pause</a> <a href="#">Delete</a> <a href="#">Run now</a>

## Refresh Schedules

To refresh schedules, click on the **Refresh** button at the bottom of the list.

Search Schedules		Q	All Types	▼	All Status	▼
Type			Schedule		Last Run	
<input type="checkbox"/>		Access Filter	Australian Filter		13/6/2016 12:00 AM (+10:00)	
<input type="checkbox"/>		Access Filter	Australian Filter		13/6/2016 12:00 AM (+10:00)	
<input type="checkbox"/>		Broadcast	Athlete Demographic Spread		31/5/2016 12:00 AM (+10:00)	
<input type="checkbox"/>		Broadcast	Athlete Demographic Spread		31/5/2016 12:00 AM (+10:00)	
<input type="checkbox"/>		Report	Athlete		13/6/2016 12:00 AM (+10:00)	
<input type="checkbox"/>		Report	Invoiced		13/6/2016 12:00 AM (+10:00)	
<input type="checkbox"/>		Report	Profit		13/6/2016 12:00 AM (+10:00)	
<input type="checkbox"/>		Report Subscription	Agency Sales over Time		1/6/2016 12:00 AM (+10:00)	
<input type="checkbox"/>		Third Party Source	Wiki GA		14/6/2016 12:00 AM (+10:00)	
Select All / Deselect All				Run now	Refresh	Delete

## Task Scheduler Management

All scheduled tasks (such as broadcast reports, scheduled transformation flows, filters, etc.) get added to a queue that is managed by Yellowfin's **Task Scheduler**. However, there is a limit to the number of items that can be added to this queue at a time to stop the system from getting overloaded with too many waiting tasks that use up memory and CPU resources. This limit can be changed from within the web.xml file.

### Task Scheduler Limits

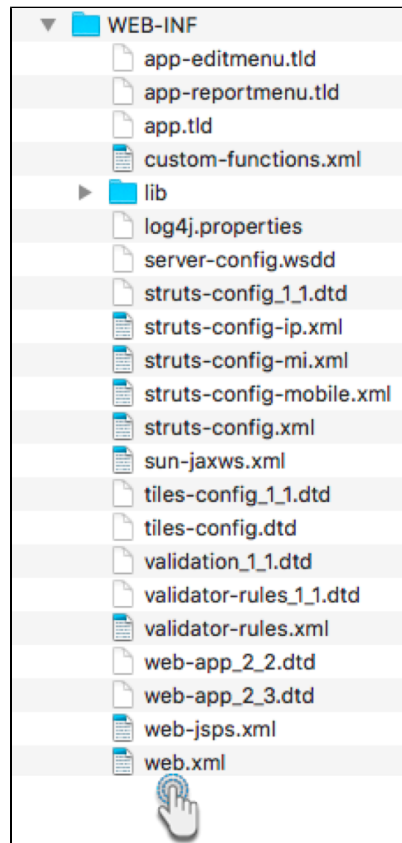
Before updating the limit, let's learn more about how the Task Scheduler behaves:

- The Task Scheduler wakes up every minute, and looks for tasks that need to be run.
- If it's the right time to run a task, it gets submitted to the queue. If there are free threads, the tasks get removed from the queue and start running.
- When all task threads are busy, tasks stay queued until there's a free thread to run. By default, 5 threads can run at the same time. (This **thread limit** can be changed through the web.xml file.)
- If the queue is full then tasks are rejected and cannot run. In this case, a warning is sent to the log. By default the **queue size** is 20, but this can also be changed in web.xml.
  - This is an indication that too many tasks are trying to run at once or tasks are too slow to complete.
  - The user can increase memory and CPU on the server to allow more tasks to run by changing the configuration. (That is, adding a larger queue, and increasing the thread size.)
  - The user can change their scheduled tasks to not attempt to run so many tasks at the same time, for example, stagger them throughout the day rather than all at once on midnight.
  - The next time the task scheduler wakes up an attempt will be made to queue the task again, as tasks might be have finished freeing up resources.

## Updating the Task Scheduler Limit

Follow these steps to change the Task Scheduler's thread and queue limits:

1. Access the `Yellowfin/appserver/webapps/ROOT/WEB-INF` directory.
2. Open the **web.xml** file.



3. Scroll to the section on Task Scheduler. This is what it looks like in the file.

```
<!-- Task Scheduler Values -->
<!-- Uncomment these values if you want to customise the behavior of the task scheduler

    TaskSchedulerThreads:           The number of tasks that can run concurrently
                                     Default: Default 5

    TaskSchedulerMaxThreadQueue:    The maximum number of tasks allowed to be waiting to be executed,
                                     if all threads are currently being used. If the value is set below
                                     the number of threads, the system will always allocate at least the same
                                     number of slots in the queue as there are threads.
                                     Default: 20

<init-param>
  <param-name>TaskSchedulerThreads</param-name>
  <param-value>5</param-value>
</init-param>
<init-param>
  <param-name>TaskSchedulerMaxThreadQueue</param-name>
  <param-value>20</param-value>
</init-param>
-->
```

4. Uncomment the *init-param* tags from this section.
5. You can then edit the default number of tasks that can be executed concurrently, by changing the value of the **TaskSchedulerThreads** parameter, and the maximum number of tasks that can be added to the queue at a time, by updating the value of the **TaskSchedulerMaxThreadQueue** parameter.
6. Save the file. Your queue and thread limits will be updated accordingly.