



## User Guide

### Robot Schedule for Insite 1.14



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# About Robot Schedule

Robot Schedule is an advanced job scheduling software for IBM i (i5/OS) running on IBM Power Systems (System i, iSeries). It automates common operator duties including job scheduling and batch job management. Schedule jobs based on time patterns or in reaction to events on any IBM i in a network. In any scenario, Robot Schedule runs jobs as directed, freeing your operators to concentrate on other tasks and making them more productive. Robot Schedule offers:

- Job scheduling software
- Batch job management system
- Audit reports for SOX compliance
- Enterprise job scheduler

## Accessing Robot Schedule

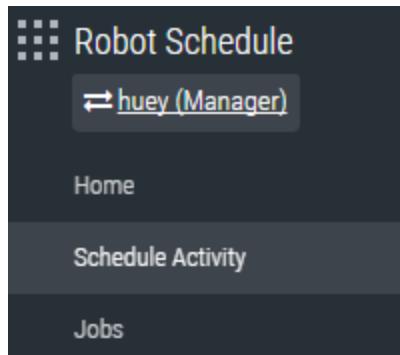
You can access Robot Schedule in three different ways:

- Through the Robot Schedule instance installed on the IBM i.
- Through the Robot Schedule Explorer on a PC.
- Through Robot Schedule for Insite.

This user guide explains how to use Robot Schedule for Insite.

## Select System

The default system for your Robot Schedule for Insite session determines what data is displayed on many of the pages and dashboards. You can quickly see which system is the default by looking at the Robot Schedule menu.



To change the default system:

1. Click the system name under the Robot Schedule menu.
2. On the Select System window, click the system you want to use.  
If the system you want is not in the list, you may not have assigned a profile to it.

## Robot Schedule for Insite Homepage

The Robot Schedule for Insite displays the following:

- The [Robot Schedule Summary](#) for the system you've selected.
- The [Job Activity Summary](#) for all systems that have assigned profiles.

In the Navigation Pane, click **Home** in the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it.

## Job Activity Summary

The Job Activity Summary gives you information about the systems that you've assigned profiles to, and the jobs on those systems. The information is similar to what you'll see on the Good Morning Report. However, with the Job Activity Summary, you can see the data from several systems, all on one page.

To open the Job Activity Summary, click **Home** under the Robot Schedule menu.

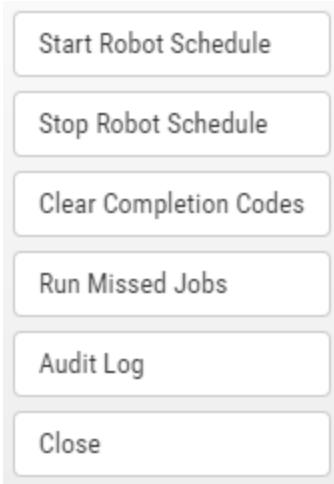
### Things to know and do:

- Click a button to select how much data to display. You can choose from **6hr**, **12hr**, **24hr**, and **48hr**. For example, if you select **12hr** you'll see data from the previous 12 hours for each system (based on each IBM i system's current time).
- Click  **Refresh** to refresh the data in the display.
- Name: The system name and the ASP group it's installed in is displayed in the table.
- Status: The Status for each system is displayed as  ACTIVE,  INACTIVE, or  UNKNOWN. A status of Unknown indicates that Robot Schedule is starting or stopping, or that Robot Schedule ended when the subsystem was ended.
- Jobs, Normal, Abnormal, and Error: The total number of jobs that completed is displayed in the Jobs column. That number is then split into the number of jobs that completed normally (Normal), completed abnormally - such as terminations (Abnormal), or where there was an error on submit (Error).
- Outside Run Time: The number of jobs that deviated from their average run time by more than the defined percentage (set in the [Preferences](#)).
- Outside Forecast: The number of jobs that deviated from their forecasted start time by more than the defined number of minutes (set in the [Preferences](#)).

Job Activity Summary								6hr	12hr	24hr	48hr
Name	Status	Jobs	Normal	Abnormal	Error	Outside Run...	Outside Fore...				
HS4 *SYSBAS	 ACTIVE	1,436	1,433	3	0	0	0				
HS5 *SYSBAS	 ACTIVE	2,489	2,487	2	0	0	1				
LIL *SYSBAS	 ACTIVE	224	175	47	2	5	13				
TRIS *SYSBAS	 ACTIVE	701	701	0	0	0	0				

### Actions you can take:

Click  **Show Actions** for any system to open the menu. The available options are described below.



- Select **Start Robot Schedule** or **Stop Robot Schedule** to [start or stop Robot Schedule](#) on the system.

- Select **Clear Completion Codes** to [clear all the completion codes](#) for all jobs on the system.

**Note:** Clearing all completion codes makes it look as though no jobs ran that week. Therefore, we recommend you do this only at the direction of Robot Technical Support. If you only need to [clear completion codes for a single job](#), you can do that from the Show Actions menu for a job.

- Select **Run Missed Jobs** to [run the jobs that were missed](#) since a specific date and time.
- Select **Audit Log** to view the [audit log](#) for the system.

## Starting or Stopping Robot Schedule

You can start or stop Robot Schedule on any system to which you've assigned a profile with the appropriate authorities. You do this from the [homepage](#). The current status of Robot Schedule displays in the Status column of the [Job Activity Summary](#) on the homepage.

**Note:** If Robot Schedule is inactive or its status is unknown (because its monitor jobs or RBTSLLEEPER have been ended), it cannot submit the jobs in your schedule.

To start or stop Robot Schedule:

1. Click **Home** under the Robot Schedule menu.
2. Click  **Show Actions** for the system you want to start or stop.
3. Select **Start Robot Schedule** or **Stop Robot Schedule**.
4. If you're asked to confirm your request, select **Yes** to confirm or **No** to cancel.

## Clearing Completion Codes

### Clearing Completion Codes for a Job

If you need to rerun a job that Robot Schedule ran today, you should clear its completion code first. You can clear the code (and rerun the job) from the Jobs list.

Follow these steps:

1. Click **Jobs** under the Robot Schedule menu.
2. Click  **Show Actions** for the job you want. For details on filtering the list and searching for a job, see [Jobs](#).
3. Select **Clear Completion Codes**.
4. Select the days for which you want to clear the completion codes.
5. Click **Clear**.

To run the job immediately, click  **Show Actions** and select **Do Job Now**. For details, see [Do Job Now](#).

To run the job at its next run time, click  **Show Actions** and select **Schedule Override**. For details, see [Schedule Override](#).

See below for instructions on clearing the completion codes for all jobs.

### **Clearing Completion Codes for All Jobs**

Robot Schedule records the completion of each job in its weekly job completion log. It clears its weekly log automatically as its first action each Monday morning (just after midnight). If need be, you can manually clear all completion codes for all jobs for the current week.

**Warning:** Clearing all completion codes resets the job list, so it will look as though no jobs ran that week. Therefore, we recommend you do this only at the direction of Robot Technical Support. Conversely, it is possible to clear completion codes for a single job. See the previous section for details.

#### **Notes:**

- The Clear Completion Codes option does not clear the job completion history, job logs, or reactive job completion codes.
- You can clear the completion codes for an individual job. See the previous section for details.

To clear all completion codes for all jobs for the current week:

1. Click **Home** under the Robot Schedule menu.
2. Click  **Show Actions** for the system you want.
3. Select **Clear Completion Codes**.
4. When asked to confirm the request, click **Clear**.

### **Running Missed Jobs**

Jobs that would have run while the system was shut down are called missed jobs. Robot Schedule lets you run jobs that were missed. You can run all jobs missed since a specific time or choose specific jobs to run.

**Note:** You can use either the Explorer or the IBM i to set up Robot Schedule to automatically run missed jobs using the program AUTOWORK. For details, look in the Explorer or IBM i help.

To run missed jobs:

1. Click **Home** under the Robot Schedule menu.
2. Click  **Show Actions** for the system you want.
3. Select **Run Missed Jobs**.

4. Enter the date and time at which you want Robot Schedule to start checking for missed jobs.
  - Enter today's date: Finds jobs scheduled from the time you chose to the current time.
  - Enter an earlier date: Finds jobs scheduled from the time you chose until midnight of that date. If you need to check for missed jobs on more than one date, enter each date separately.  
**Note:** If you enter a date prior to the current week, be sure to select **Check Completion History** in step 5 so it will check completion history to see whether jobs have run. (Job completion codes are reset on Sunday evening at midnight.)
  - Multiple runs: If a job was scheduled to run more than once on the date you specified, Robot Schedule runs each missed job only once even if it has missed more than one run time. If a multiple-run job has completed once successfully on the date, it is not listed as "missed."
5. Click the **Check Completion History** to "On" to check for a job's completion status. If an entry is found for the date you specified, it won't be considered "missed."  
**Note:** This parameter relies on completion history to perform an accurate check. Purged history records and cleared completion codes can make a job appear to have been "missed" when it actually ran.
6. To run all the missed jobs on this system without first seeing a list of them:
  - a. Click this to "Off."
  - b. click **OK**.
  - c. click **Yes** when asked to confirm your request.
  - d. Skip the rest of the steps in this procedure.

To see a list of the missed jobs before running them:

  - a. Click **Display list of missed jobs** to "On."
  - b. Click **OK**.
  - c. Continue with the rest of the steps below.
7. On the Jobs Missed page:
  - To run all the jobs on the page, click **Run all missed jobs**.
  - To run one missed job, click  **Show Actions** for it and select **Run Job**.
  - To run several missed jobs, check the box by each job you want to run. Then, click **Run Job** at the top of the page.

## Audit Log

Robot Schedule auditing creates a log of modifications made to your job schedule. Every job addition, change (including override codes), and deletion is included in the log. The name of the user who made the change and the time and date of the change also displays. Use the audit log to document your job schedule and help comply with privacy laws and legislation, such as Sarbanes-Oxley (SOX) and HIPAA.

**Note:** When Robot Schedule is inactive, all transactions are queued and are not posted to the audit log. When Robot Schedule becomes active again, the monitor job, ROBOTAUDIT, records the changes to the audit log.

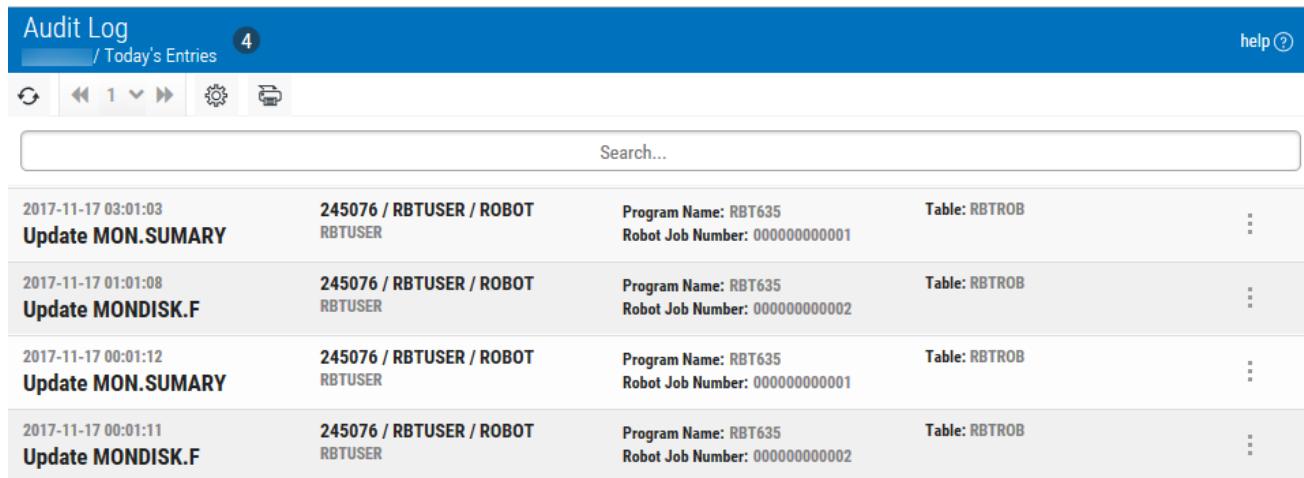
### Viewing the Audit Log

To open the audit log:

1. In the Navigation Pane, click **Home** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it.
2. Click  **Show Actions** for the system you want.
3. Select **Audit Log**.

### Things to know and do:

- The total number of records is at the top of the page.
- Click  **Refresh** to refresh the display.
- Click the page number and select the page you want to view. Or, click the previous and next arrows.
- Click  **Print** to view the Audit report in HTML format. (**Note:** You may have to disable your pop-up blocker in order to view the report.) You can then print it using your browser's print function.
- Start typing in the Search field to find a specific entry. It will find everything that contains what you're typing. See [Sorting and Filtering](#) below to learn how to filter your search.



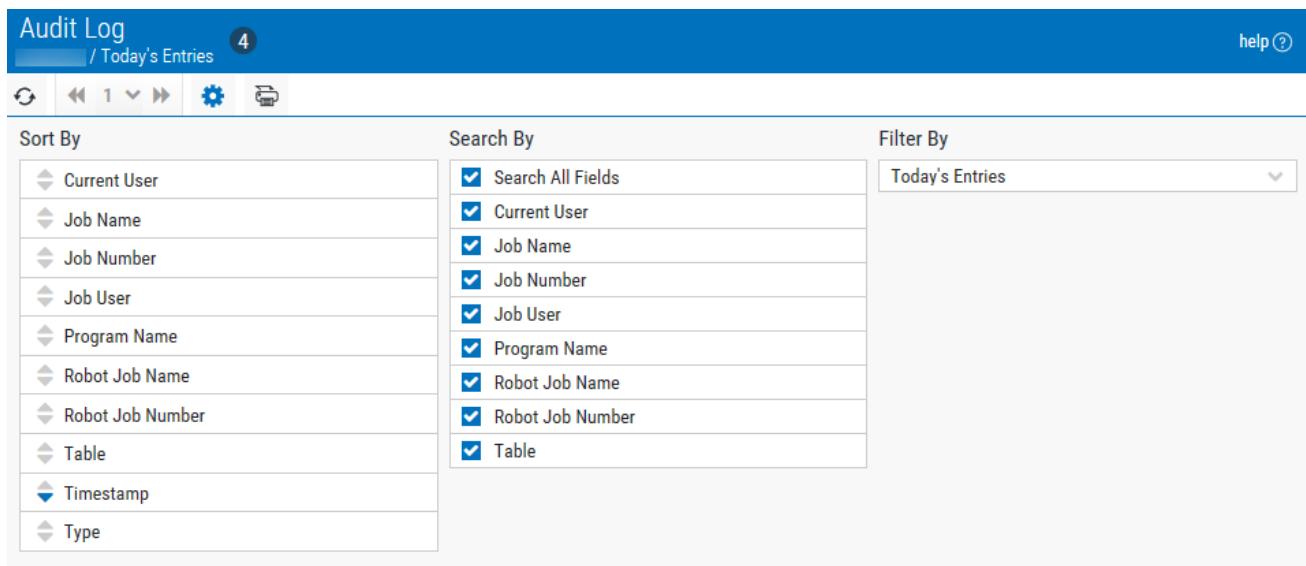
The screenshot shows the 'Audit Log' interface. At the top, there is a blue header bar with the title 'Audit Log' and a link to '/ Today's Entries'. On the right side of the header is a 'help (?)' link. Below the header is a toolbar with icons for Refresh, Back, Forward, Page Number (set to 4), Settings, and Print. A search bar labeled 'Search...' is positioned above the main table. The main area displays a table of audit log entries. Each entry includes a timestamp, an action name, a user name, program details, a table name, and a three-dot ellipsis button for more options. The entries listed are:

Date	Action	User	Program Name	Table	More
2017-11-17 03:01:03	<b>Update MON.SUMARY</b>	245076 / RBTUSER / ROBOT RBTUSER	Program Name: RBT635 Robot Job Number: 000000000001	Table: RBTROB	⋮
2017-11-17 01:01:08	<b>Update MONDISK.F</b>	245076 / RBTUSER / ROBOT RBTUSER	Program Name: RBT635 Robot Job Number: 000000000002	Table: RBTROB	⋮
2017-11-17 00:01:12	<b>Update MON.SUMARY</b>	245076 / RBTUSER / ROBOT RBTUSER	Program Name: RBT635 Robot Job Number: 000000000001	Table: RBTROB	⋮
2017-11-17 00:01:11	<b>Update MONDISK.F</b>	245076 / RBTUSER / ROBOT RBTUSER	Program Name: RBT635 Robot Job Number: 000000000002	Table: RBTROB	⋮

### Sorting and Filtering the Audit Log View

You can choose how to sort the audit log entries, and can filter the list to reduce the number of entries. You can also specify what types of data will be searched when you do a search.

1. Click  **Settings**.



Sort By	Search By	Filter By
Current User	<input checked="" type="checkbox"/> Search All Fields	Today's Entries
Job Name	<input checked="" type="checkbox"/> Current User	
Job Number	<input checked="" type="checkbox"/> Job Name	
Job User	<input checked="" type="checkbox"/> Job Number	
Program Name	<input checked="" type="checkbox"/> Job User	
Robot Job Name	<input checked="" type="checkbox"/> Program Name	
Robot Job Number	<input checked="" type="checkbox"/> Robot Job Name	
Table	<input checked="" type="checkbox"/> Robot Job Number	
Timestamp	<input checked="" type="checkbox"/> Table	
Type		

2. Select how you want the lists sorted (Sort By). Click your selection again to change the sort order to  ascending or  descending.
3. Select whether to **Search All Fields** or specific fields.
4. Select the filtering you want used. You can choose to see **All** the entries, or you can select a specific type.
5. Click  **Settings** to close the settings.

## Audit Log Details

Click any audit log entry (or click  **Show Actions** and select **Details**) to view details about the entry, such as the original value and the new value.

## Robot Schedule Summary

The Robot Schedule Summary gives you a snapshot of the current status of Robot Schedule and its jobs. The information is similar to what you'll see on the [Status - Robot Schedule dashboard widget](#).

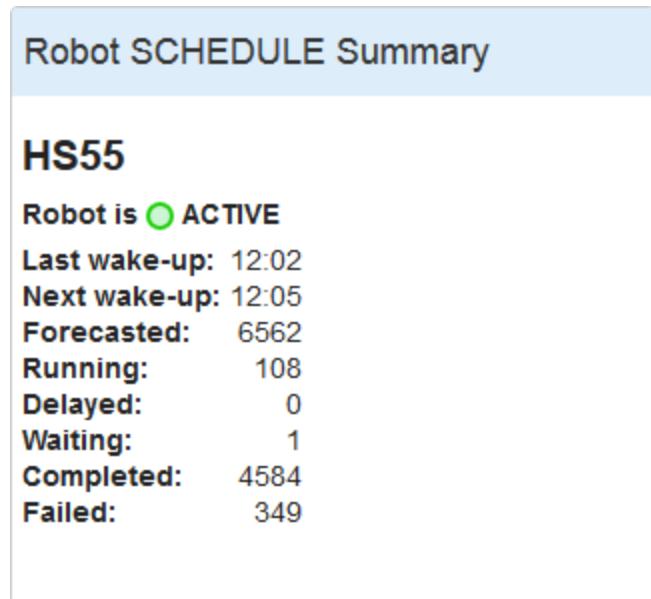
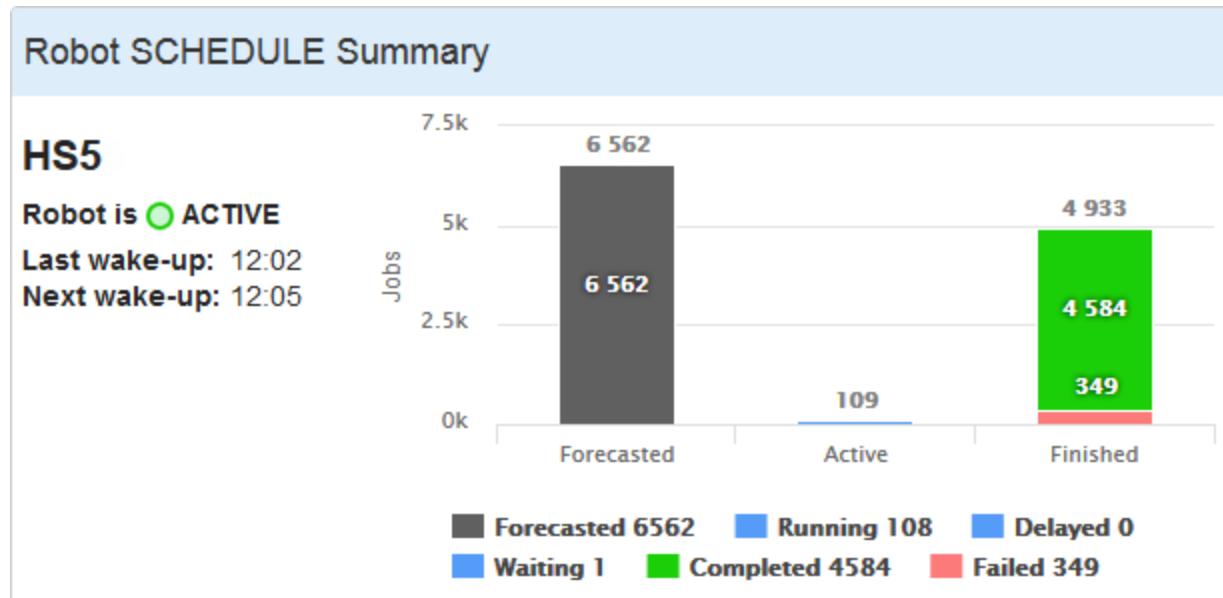
To open the Robot Schedule Summary, click **Home** under the Robot Schedule menu.

It shows the following information:

- The system name.
- The status of the Robot Schedule monitor jobs (Robot). Possible statuses:
  -  **ACTIVE** - Indicates that the Robot Schedule monitor jobs have been started; Robot Schedule can submit scheduled jobs
  -  **INACTIVE** - Indicates that the monitor jobs have not been started; Robot Schedule cannot submit scheduled jobs.
  -  **UNKNOWN** - Indicates that Robot Schedule is starting or stopping, the monitor jobs were ended, or that Robot Schedule was ended when the RBTSLEEPER subsystem was ended. If the monitor jobs or RBTSLEEPER were ended, the status remains UNKNOWN until Robot Schedule is restarted.

- The last time Robot Schedule woke up to submit a job and the next time it's scheduled to wake up and submit one. For more information, see [Robot Schedule Job Execution](#).
- The number of jobs for today in the following categories:
  - Forecasted
  - Active (Running, Delayed, Waiting)
  - Completed (Completed, Failed)

The data is presented differently depending on the size of your browser and your screen. You may see a graph or simply a list.



#### Things you can do:

- If you see a graph, click any item in the legend to hide or show its data in the graph.

## Robot Schedule Job Execution

While Robot Schedule is active, seven schedule monitor jobs sit in a wait state in the RBTSLEEPER subsystem. These monitors submit Robot Schedule jobs for execution when the required conditions are met, collect user job history, record schedule changes in the audit log, and provide alerts for jobs that are being monitored.

- ROBOT is the time-dependent schedule monitor. It sleeps until the time that a job is scheduled to run. Then, it wakes up, submits the job, and goes back to sleep.
- ROBOTREACT is the event-reactive monitor. It sleeps until an event is communicated to it. Then, it wakes up to see if the prerequisites for a reactive job have been satisfied. If the prerequisites for a job are met, ROBOTREACT submits the job and then goes back to sleep.
- ROBOTSBMJ processes IBM i job status messages for all jobs in all subsystems. This job collects user job history. User jobs are jobs run by anyone other than Robot Schedule. This job is required for tracking Robot Replay job logs.
- ROBOTAUDIT records schedule changes, overrides, and product control actions to the Robot Schedule audit log.
- ROBOTJM monitors the job schedule and provides real-time alerts for jobs that start late, run longer than they should (overrun), or complete too quickly (underrun).
- RBTFSEC is the event monitor controller job. It's notified when new monitors are created. It also resolves the Reserved Command Variable. RBTFSEC monitor job submits off the RBTFSEM monitor job.
- RBTFSEM does the actual file monitoring for event monitors.

**Note:** RBTFSEC and RBTFSEM are only found in Robot Schedule version 12 and higher.

# Dashboards

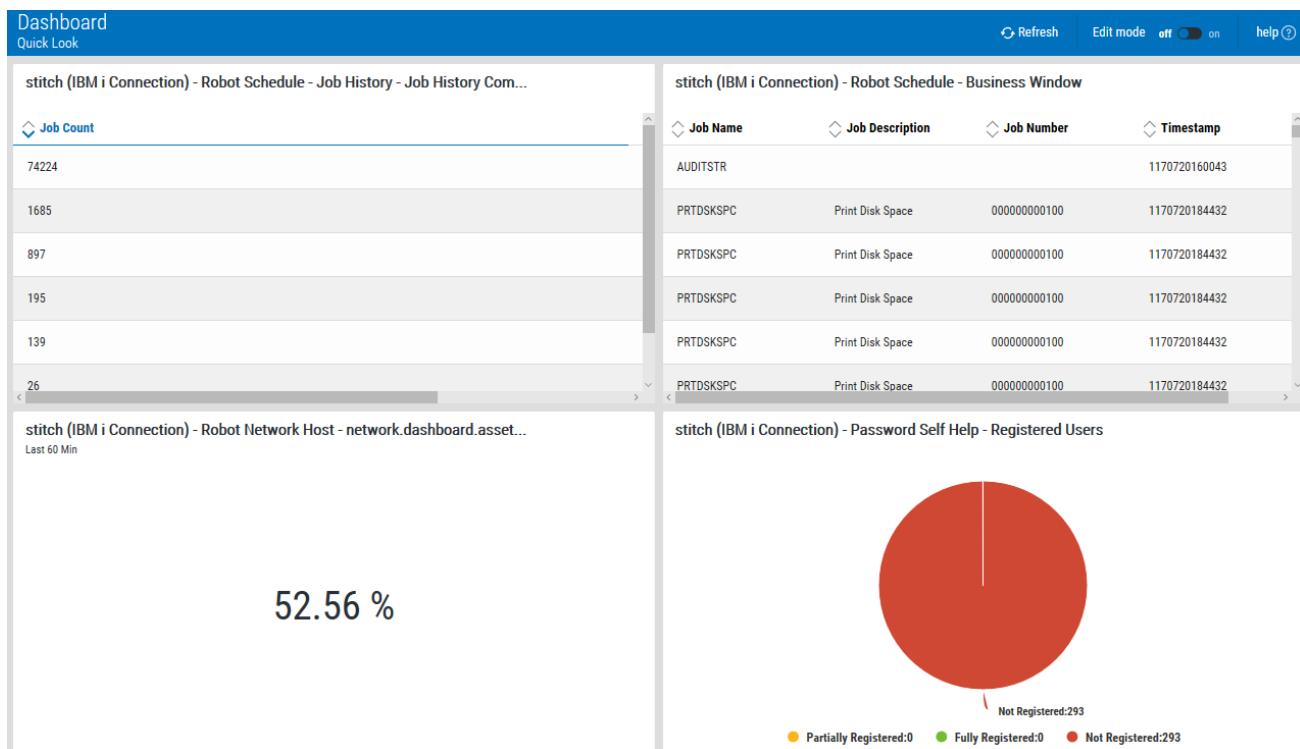
## Robot Schedule Dashboards Overview

With Robot Schedule for Insite, you can create custom dashboards that show you the data you want see, all on one screen.

The dashboards display data from the systems that the server is connected to. They show you the general status of Robot Schedule, help you keep an eye on jobs that are supposed to run within a specific business window, let you easily check the status of [critical jobs](#) and group jobs, and allow you to see the history for jobs and event monitors.

### Dashboard notes:

- You can create more than one dashboard.
- Any combination of widgets can be used in the same dashboard.
- Dashboards are specific to the profile you used to log on. However, you can share them with everyone or keep them private, as needed.
- Users logging on with the guest profile can view only those dashboards marked as Guest. For more on the guest profile, see the *HelpSystems Insite User Guide*.



## Working with Dashboards

You can create as many dashboards as you need to. Also, after you add a dashboard, you can change its layout and settings at any time by customizing it.

Simple instructions for working with dashboards are included in the following sections.

## Adding a Dashboard

1. In the Navigation Pane, click  **Dashboards**. If the menu is hidden, hover over the Navigation Pane to expand it.
2. Click **Add Dashboard** on the Dashboards page.
3. In the resulting panel, type a unique **Name**.
4. Type a **Description**.
5. In the Time section, toggle **Auto-Refresh** On or Off and enter the amount of minutes between automatic dashboard refresh.
6. Toggle **Business Hours** On or Off to define the business hours. If left turned off, this dashboard operates on a 24x7 basis.
7. Choose a **Default Time Range**. Choices are:
  - Last 60 Min
  - Last 24 Hours
  - Today
  - Today (Business Hours)
  - Yesterday
  - Yesterday (Business Hours)
  - Last 3 days
  - This Week
  - Past Week
8. Select from a list of **Users** to allow others to view this dashboard.
9. Select from a list of **Groups** to allow others to view this dashboard.
10. Click the **Guest** button to "On" to allow users who log on with the Guest profile to see this dashboard. The only thing Guest users can do is view dashboards marked as Guest. For more on the Guest profile, see the *HelpSystems Insite User Guide*.
11. Click **Save**.
12. Hover over the dashboard with **Edit Mode** set to On. You have the option of manually splitting your dashboard into widget panes by using the arrow icons OR you can click the **Select Quick Layout** button to select a predefined widget panel layout.

After you create the dashboard, you need to [add widgets](#) to it.

## Customizing a Dashboard

One easy way to customize a dashboard is to rearrange the widgets on it. However, keep in mind that if you're going to view this on a mobile device, the widgets will display in order by column (first, second, third).

To rearrange widgets:

1. Toggle **Edit mode** On when viewing your dashboard.
2. Hover over the widget you would like to move or split.
3. To split a widget, click on one of the arrow icons to split the widget pane in half in that direction.

4. To move a widget to a different pane, click on the Move icon. Then, click on the widget pane where you would like to move the widget. **Note:** If there is an existing widget in the target pane, that widget will be switched with the moving widget.

For other changes:

1. In the Navigation Pane, click  **Dashboards**. If the menu is hidden, hover over the Navigation Pane to expand it.
2. Click the dashboard name.
3. Toggle **Edit mode** On.
4. Click the Edit button in the top left of the screen.
5. In the resulting panel, edit the **Name**.
6. Edit the **Description**.
7. In the Time section, toggle **Auto-Refresh** On or Off and enter the amount of minutes between automatic dashboard refresh.
8. Toggle **Business Hours** On or Off to define the business hours. If left turned off, this dashboard operates on a 24x7 basis.
9. Edit the **Default Time Range**.
10. Select from a list of **Users** to allow others to view this dashboard.
11. Select from a list of **Groups** to allow others to view this dashboard.
12. Click the **Guest** button to "On" to allow users who log on with the Guest profile to see this dashboard. The only thing Guest users can do is view dashboards marked as Guest. For more on the Guest profile, see the *HelpSystems Insite User Guide*.
13. Click **Save**.

**Note:** You can only customize dashboards that you've created. Shared dashboards created by another user are view-only.

## Deleting Dashboards

You can delete one or more dashboards; however, you can only delete dashboards that you've created. Shared dashboards created by another user are view-only.

1. In the Navigation Pane, click  **Dashboards**. If the menu is hidden, hover over the Navigation Pane to expand it.
2. Select (check) the dashboards to delete.
3. Click **Delete**.
4. Click **Delete** again to confirm.
5. Click **Save**.

## Working with Widgets

After you create a dashboard, you need to add widgets to it.

Instructions for working with dashboard widgets are included in the following sections.

## Adding Widgets to a Dashboard

You can add as many widgets as you need to your dashboard. For many of the widgets, you can even add more than one of each kind. But, be aware that number of widgets on the page does affect the response time. Also, you can only add widgets to dashboards that you've created. Shared dashboards created by another user are view-only.

1. In the Navigation Pane, click  **Dashboards**. If the menu is hidden, hover over the Navigation Pane to expand it.
2. Click the dashboard name.
3. Toggle **Edit mode** On.
4. Put focus on an empty dashboard pane and Click **Add widget**.
5. In the resulting panel, Add a new data source by selecting a connection and product OR choose an existing Data Source OR create the widget with no Data Source.
6. Choose the **Asset** you would like included in the widget. See [Asset Descriptions](#) for more information.
7. If desired, edit the **Widget Name**.
8. Select a **Widget type**.
 

**Note:** The Widget types available will vary depending on your choice of Asset.
9. Select the metrics to be displayed in the widget (if applicable).
10. Edit Widget Settings as desired.
 

**Note:** The Widget Settings available will vary depending on your choice Data Source, Asset, and Widget type. See [Advanced Settings](#) for more information.
11. Click **Save**.
 

**Note:** If you want to add more than one widget of a particular type, for example, if you want to add two job history widgets, repeat the above steps for each one.
12. Customize the widgets you added. With **Edit mode** On, Click **Edit Widget** on any widget to edit its settings.

## Deleting Widgets from a Dashboard

You can only delete widgets from dashboards that you've created. Shared dashboards created by another user are view-only.

1. In the Navigation Pane, click  **Dashboards**. If the menu is hidden, hover over the Navigation Pane to expand it.
2. Click the dashboard name.
3. Toggle **Edit mode** On.
4. Click **Delete** on the widget you want to delete.

## Widget Advanced Settings

Some Data Sources will give you the option of specifying advanced settings for your widget. The advanced settings available for each widget will depend on the type of widget selected. See below for advanced

settings definitions by widget type:

#### Key Indicator:

#### Auto-Refresh

You can change the default refresh rate by turning this setting to **Custom** and enter the number of minutes to wait until the next refresh, or keep this setting at **Inherit** to have your widget's refresh rate be the same as the parent dashboard.

#### Header

You can use this setting to hide or show the widget header. The default is to show.

#### Title

You can use this setting to hide or show the widget Title. The default is to show.

#### Indicator

Use this setting to change the value of the indicator shown. The default is 'Last value in the period'.

#### Chart:

#### Auto-Refresh

You can change the default refresh rate by turning this setting to **Custom** and enter the number of minutes to wait until the next refresh, or keep this setting at **Inherit** to have your widget's refresh rate be the same as the parent dashboard.

#### Non-Value Axis

Use this setting to change the value displaying in the Non-Value Axis.

#### Layout

You can change the type of chart displaying your widget data. The default is to Line. Other possible values are: Bar, Area, and Column.

#### Header

You can use this setting to hide or show the widget header. The default is to show.

#### Title

You can use this setting to hide or show the widget title. The default is to show.

#### Legends

You can use this setting to hide or show the widget legends. The default is to show.

#### Grid Lines

You can use this setting to hide or show the widget grid lines. The default is to show.

#### Thresholds

You can use this setting to hide or show the widget thresholds. The default is to show.

## Axis Labels

You can use this setting to hide or show the widget axis labels. The default is to show.

### Axis Label

Use this setting to change the chart axis label. Change setting to **Custom** and enter a new label to change.

### Axis Unit Label

Use this setting to change the chart axis unit label. Change setting to **Custom** and enter a new label to change.

### Axis Range

Use this setting to change the chart axis range. Change setting to **Custom** and enter a new range to change.

#### List:

### Auto-Refresh

You can change the default refresh rate by turning this setting to **Custom** and enter the number of minutes to wait until the next refresh, or keep this setting at **Inherit** to have your widget's refresh rate be the same as the parent dashboard.

### Grouping field

Use this setting to change the field that the data is grouped by from the dropdown list of available fields.

### Header

You can use this setting to hide or show the widget header. The default is to show.

### Title

You can use this setting to hide or show the widget Title. The default is to show.

### Column Order and Default Sorting

Use this setting to change the order in which the selected fields are displayed in the widget and the desired sort order within each field (Ascending or Descending). You can also delete out selected fields from the display.

#### Status:

### Auto-Refresh

You can change the default refresh rate by turning this setting to **Custom** and enter the number of minutes to wait until the next refresh, or keep this setting at **Inherit** to have your widget's refresh rate be the same as the parent dashboard.

### Header

You can use this setting to hide or show the widget header. The default is to show.

### Title

You can use this setting to hide or show the widget Title. The default is to show.

**Title:****Title**

Enter the title of your widget in this field.

**Subtitle**

Enter the subtitle of your widget in this field.

**Text Align**

You can use this setting to display your widget text as left-aligned, right-aligned, or centered.

**Background Options**

You can use this setting to upload an image as your widget background or select a solid color background.

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## Robot Schedule Dashboard Asset Descriptions

Following are descriptions of each of the available Robot Schedule dashboard assets. You use the assets to create widgets. **Note:** The default asset names are listed below. When you create your widget, the asset name will be used as a default name. You can change that name.

**Business Window**

For the selected system or critical job list, you can create a widget from these assets that allows you to set a window of time during which you'd expect certain jobs to normally run. It then shows you any anomalies, such as jobs that didn't run, or jobs that ran outside of (before or after) the business window you set. This can help you monitor whether or not you're meeting the terms in your SLAs. With this information, you can identify problem areas and fix them.

Robot Schedule - Business Window				
Last 3 days				
< 1 >	Job Number	Job Name	Start Date	End Date
	000000000001	MON.SUMARY	2018-01-29 03:01:12	2018-01-29 03:10:05
	000000000001	MON.SUMARY	2018-01-30 03:01:11	2018-01-30 03:09:15
	000000000001	MON.SUMARY	2018-01-28 03:01:12	2018-01-28 03:09:55
	000000000003	MONDISK.D	2018-01-29 01:01:12	2018-01-29 01:09:20
	000000000002	MONDISK.F	2018-01-28 01:01:11	2018-01-28 01:09:01
	000000000002	MONDISK.F	2018-01-30 01:01:11	2018-01-30 10:07:28

**Available Assets:**

- Business Window
- Critical Job Business Window

### To Change the Settings:

1. Toggle **Edit mode** On.
2. Click **Edit Widget**.
3. On the Edit Widget panel, expand the Advanced Setting section and change settings as desired. See [Advanced Settings](#) for more information.

### Group Jobs

You can create a widget from these assets that displays information about the group jobs on the selected system. This information can help you analyze and address issues with your group jobs. For more on group jobs, see [Groups](#).

Robot Schedule - Group Jobs		
Last 12 months		
< 1 >	Group Name	Inherit Job Date
000000000024	LBGROUP	No
000000000042	JYGROUP	No
000000000057	ROXGROUP	No
000000000071	LRSO	No
000000000072	R01000	No
000000000112	MSCGRP1	No
000000000130	SW_GRP1	No

### Available Assets:

- Group Jobs
- Group Jobs Override Counts

### To Change the Settings:

1. Toggle **Edit mode** On.
2. Click **Edit Widget**.
3. On the Edit Widget panel, expand the Advanced Setting section and change settings as desired. See [Advanced Settings](#) for more information.

### Jobs

You can create a widget from this asset that displays information about jobs on the selected system over a selected period of time. This information can help you analyze and address issues with your jobs.

Robot Schedule - Jobs				
This Week				
Job Name	Job Number	Description	Job Type	Start Time
A_VBS_TEST	000000000005	test VBS	A	0:00
A_VB2_TEST	000000000002	test VBS	A	0:00
A_VB3_TEST	000000000003	test VBS	A	0:00
A_VB3_TRAN	000000000004	test VBS in transponder	A	0:00
A_VB3_TRAN	000000000014	test VBS in transponder	A	0:00
AABBCC	000000000016	AAAAAA	C	0:00
AGEOUTQ	000000000101	Age Outq Qprint	C	17:00

## Available Assets:

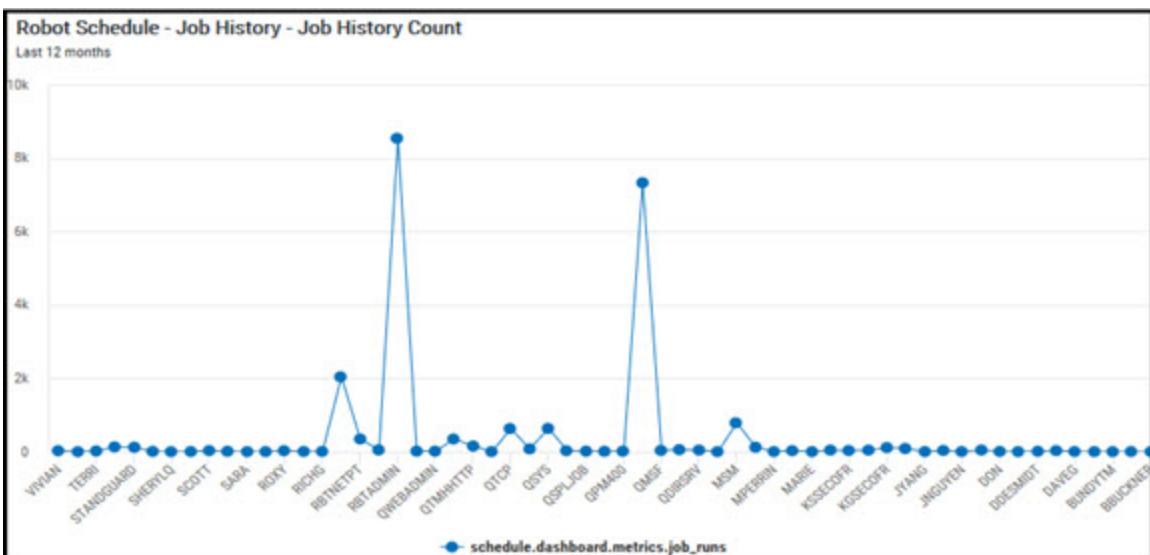
- Jobs

## To Change the Settings:

1. Toggle Edit mode On.
2. Click **Edit Widget**.
3. On the Edit Widget panel, expand the Advanced Setting section and change settings as desired. See [Advanced Settings](#) for more information.

## Job History

You can create a widget from these assets that displays the same job completion history records that you'll also see on the [Completion History](#) page. You can also create widgets that show Job History counts, status counts, and counts by type.



## Available Assets:

- Job History
- Job History Count
- Job History Count by Type

- Job History Status Count
- Job History Status Count by Type

### To Change the Settings:

1. Toggle **Edit mode** On.
2. Click **Edit Widget**.
3. On the Edit Widget panel, expand the Advanced Setting section and change settings as desired. See [Advanced Settings](#) for more information.

### Application Count

You can create a widget from these assets that displays the applications within your selected system.

Robot Schedule - Application Count			
< 1 >	Application Name	Application Description	Product Id
	SPACE	SPACE	30
	ROBOT	ROBOT	22
	HAHA	HAHA	1
	DOESMIDT	DOESMIDT	25
	DO	DO	31
	STEVE	Application STEVE	3
	LINDSEY	Application LINDSEY	26

### Available Assets:

- Application Count
- Applications

### To Change the Settings:

1. Toggle **Edit mode** On.
2. Click **Edit Widget**.
3. On the Edit Widget panel, expand the Advanced Setting section and change settings as desired. See [Advanced Settings](#) for more information.

### Job Monitor History

You can create a widget from these assets that displays the monitor history records for job overrun, underrun, and late start events that occurred. These are the same records you'll see on the [Job Monitor History](#) page; they're just displayed in a convenient dashboard. You can also view the history count by job and history count by type. **Note:** You can add a monitor to a job when you add or edit the job in Robot Schedule - either in the Explorer or on the IBM i.

Robot Schedule - Job Monitor History				
Last 12 months				
Event Type	Job Name	Job Number	Job Type	Time Detected
Overrun	KMWAIT	000000000148	Command	2018-01-23 13:42:00
Overrun	KMWAIT	000000000148	Command	2018-01-23 13:57:00
Overrun	KMWAIT	000000000148	Command	2018-01-23 15:56:00
Overrun	KMWAIT	000000000148	Command	2018-01-24 08:33:00
Overrun	KMWAIT	000000000148	Command	2018-01-24 08:41:00
Overrun	KMWAIT	000000000148	Command	2018-01-24 08:52:00
Overrun	VNHMBR8	000000000166	Command	2018-01-25 08:00:00

## Available Assets:

- Job Monitor History
- Job Monitor History Count by Job
- Job Monitor History Count by Type

## To Change the Settings:

1. Toggle **Edit mode** On.
2. Click **Edit Widget**.
3. On the Edit Widget panel, expand the Advanced Setting section and change settings as desired. See [Advanced Settings](#) for more information.

## Event Monitor History

You can create a widget from these assets that displays the event monitor history records. These are the same records you'll see on the [Event History](#) page; they're just displayed in a convenient dashboard. The records show the directory, file, and member events (added, changed, removed, or threshold) that occurred during the time period you select. **Note:** You can set up event monitors using either the Robot Schedule Explorer or the IBM i.

Robot Schedule - Event Monitor History				
Last 12 months				
Name	Event Type	Event Status	Event Error Status	Event Data
AAANONE	File Added	Event Occurred		C:\KBSERVICE.SHUTDOWN
DOPROCES	Process Ended	Event Occurred		10672 HELPSYSTEMS\DoDeSmidt "C:\Program Files (x86)\Mozilla Firefox\firefox.exe" -contentproc --channel="4" 1:0:2:0\16:1/26:1/27:1130:0/33:137:1/38:0/39:0/40:0/43:1/44:1/47:0/48:0/49:0/50:0/52:0/57:158:1/59:0/60:1/64:1/6 -stringPef3:7:release 96:0:141:3:1,0 158:332: \%n\ 159:4,h 194:38,(8bf93080-23e5-4de0-acb5-403c5b9f9
DOPROCES	Process Ended	Event Occurred		11668 HELPSYSTEMS\DoDeSmidt "C:\Program Files (x86)\Mozilla Firefox\firefox.exe" -contentproc --channel="4" 1:0:2:0\16:1/26:1/27:1130:0/33:137:1/38:0/39:0/40:0/43:1/44:1/47:0/48:0/49:0/50:0/52:0/57:158:1/59:0/60:1/64:1/6 -stringPef3:7:release 96:0:141:3:1,0 158:332: \%n\ 159:4,h 194:38,(8bf93080-23e5-4de0-acb5-403c5b9f9
DOPROCES	Process Ended	Event Occurred		12120 HELPSYSTEMS\DoDeSmidt "C:\Program Files (x86)\Mozilla Firefox\firefox.exe" -contentproc --channel="4" 1:0:2:0\16:1/26:1/27:1130:0/33:137:1/38:0/39:0/40:0/43:1/44:1/47:0/48:0/49:0/50:0/52:0/57:158:1/59:0/60:1/64:1/6 -stringPef3:7:release 96:0:141:3:1,0 158:332: \%n\ 159:4,h 194:38,(8bf93080-23e5-4de0-acb5-403c5b9f9
DOPROCES	Process	Event		4560 HELPSYSTEMS\DoDeSmidt "C:\Program Files (x86)\Mozilla Firefox\firefox.exe"

## Available Assets:

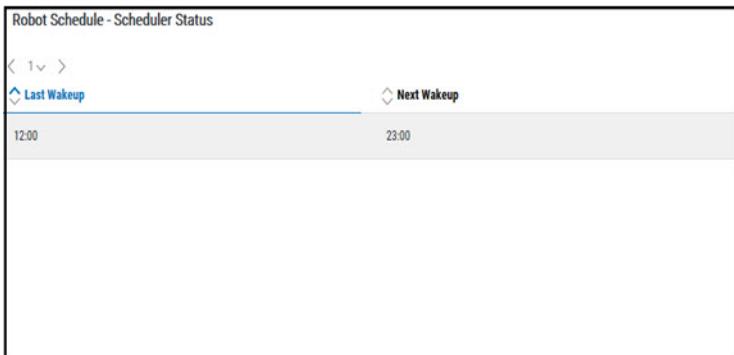
- Event Monitor History
- Event Monitor History Count by Category
- Event Monitor History Count by Event
- Event Monitor History Count by Type

## To Change the Settings:

1. Toggle **Edit mode** On.
2. Click **Edit Widget**.
3. On the Edit Widget panel, expand the Advanced Setting section and change settings as desired. See [Advanced Settings](#) for more information.

## Scheduler Status

You can create a widget from this asset that displays the Last Wakeup and Next Wakeup time.



### Available Assets:

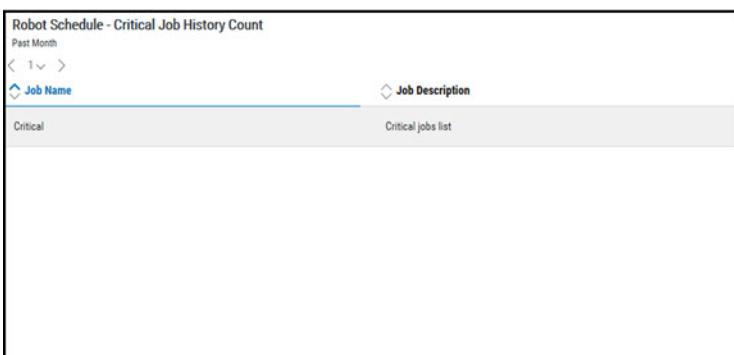
- Scheduler Status

### To Change the Settings:

1. Toggle **Edit mode** On.
2. Click **Edit Widget**.
3. On the Edit Widget panel, expand the Advanced Setting section and change settings as desired. See [Advanced Settings](#) for more information.

## Critical Job History Count

You can create a widget from this asset that displays a snapshot of the current status of the jobs that are on all the critical job lists that have been defined. With this information, you can decide whether or not you need to take action on those jobs. **Note:** Critical job lists allow you to identify jobs that are important to you - even if they run on different systems. For details, see [Critical Job Lists](#).



### Available Assets:

- Critical Job History Count
- Critical Job History Count by Type

- Critical Job History Status Counts
- Critical Job History Status Counts by Type

To Change the Settings:

1. Toggle **Edit mode** On.
2. Click **Edit Widget**.
3. On the Edit Widget panel, expand the Advanced Setting section and change settings as desired. See [Advanced Settings](#) for more information.

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## Viewing Legacy Dashboards

If you have dashboards that were created in Insite 1.x, you can view these dashboards from the main Dashboards page.

1. In the Navigation Pane, click  **Dashboards**.
2. Click on the expand button  next to the **Add Dashboard** button to view the options menu.
3. Click **Legacy Dashboards**.
4. Search for your legacy dashboard. Click to open.

## Robot Schedule Legacy Dashboard Widget Descriptions

Following are descriptions of each of the available Robot Schedule dashboard widgets. For more information about a widget, such as instructions on customizing it, click the "Read more" link in the description. **Note:** The default widget names are listed below. What you see on your system may differ because you can change the widget names.

### [Event Monitor - Directory Events](#)

This widget displays the number of directory events that occurred over a period of time. Directory events include directories that are added, changed, removed, or that meet (or fail to meet) a threshold. [Read more...](#)

### [Event Monitor - File Events](#)

This widget displays the number of file events that occurred over a period of time. File events include files that are added, changed, removed, or that meet (or fail to meet) a threshold. [Read more...](#)

### [Event Monitor - Member Events](#)

This widget displays the number of member events that occurred over a period of time. Member events include members that are added, changed, removed, or that meet (or fail to meet) a threshold. [Read more...](#)

### [History - Event Monitors](#)

This widget lists the event monitors by day for a period of time. It also indicates the type of event that

occurred: directory event (added, removed, changed, or threshold), file event (added, removed, changed, or threshold), or member event (added, removed, changed, or threshold). [Read more...](#)

### History - Job Monitors

This widget lists the job monitor events by day for a period of time. It also indicates the monitor event type: overrun, underrun, or late start. [Read more...](#)

### History - Jobs

This widget lists the jobs that were running, waiting, delayed, or completed over a period of time. [Read more...](#)

### History - Terminated Jobs

This widget lists the jobs that were terminated over a period of time. [Read more...](#)

### Statistics - Completed Jobs

This widget displays the number of jobs that were completed by day over a period of time. It shows the number of jobs that completed normally, were terminated, or ended in error. [Read more...](#)

### Statistics - Job Metrics

This widget displays various job metrics by day over a period of time. It shows the number of jobs that were started, submitted, or ended. [Read more...](#)

### Statistics - Job Monitors

This widget displays the number of job monitor events by day over a period of time. It shows the number of monitor events that were a late start, overrun, or underrun. [Read more...](#)

### Statistics - Total Jobs

This widget displays the number of jobs that ended each day over a period of time. [Read more...](#)

### Business Window- Business Window

This widget allows you to specify a business window during which jobs (on a system or critical job list) need to run. It then lists any variances from that business window. It shows the jobs that ran too early, ended too late, or didn't run at all during the window. [Read more...](#)

### Status - Critical Jobs

This widget displays information about the jobs in the critical job lists that have been set up in Robot Schedule for Insite. It shows the number of jobs in each list. Then, it shows how many of those jobs were terminated yesterday, are forecasted today, completed normally yesterday, and didn't run yesterday. [Read more...](#)

### Status - Group Jobs

This widget displays information about the members in the group jobs. (Note: You can set up group jobs using either the Robot Schedule Explorer or the IBM i.) It shows the number of members in the group. Then, it shows how many members have overrides (Omit Next, Held, Run Next). Finally, it shows yesterday's status for the member jobs (the number of jobs that either completed normally or were terminated yesterday), and today's forecast (the number of member jobs that are set to run today). [Read more...](#)

### Status - Robot Schedule

This widget displays status metrics for Robot Schedule on the selected system. It shows the current state of

Robot Schedule on the system, and its last and next wake up time. For jobs, it shows the number of forecasted, running, delayed, waiting, completed, and failed jobs. [Read more...](#)

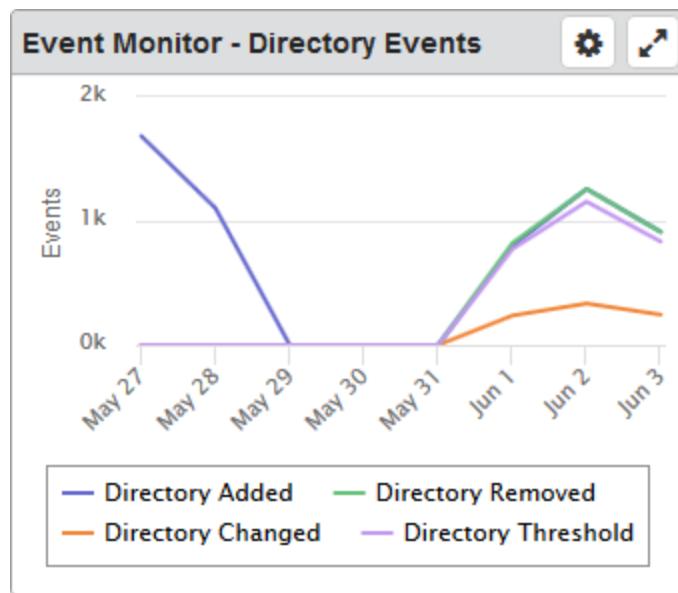
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## Event Monitor - Directory Events Dashboard Widget

For the selected system, this widget displays the number of directory events (added, removed, changed, or threshold) that were monitored over a period of time. **Note:** You can set up event monitors using either the Robot Schedule Explorer or the IBM i.



Things you can do:

- Click **Maximize** to view the widget full-screen. Click to view it on the dashboard again.
- Hover your mouse over a line to view information about the data.
- Click a data point to view the [Event History](#) page for it.
- Click any item in the legend to hide or show its data in the graph.
- Click and drag over an area of the graph to zoom in. Click **Reset Zoom** to zoom back out.

To change the settings:

- Click **Settings** on the widget.
- Type a new **Name**, if necessary.
- Click **Reset Name** to have the software create a name based on the widget and the settings you've selected.

**Note:** If you're using the system-generated name, be sure to click **Reset Name** before saving so that a new name can be generated, if needed.

4. Select the display **Size** of the widget on the dashboard. This affects the height of the widget.
5. Click the **Auto-Refresh** button to enable it (Yes) or disable it (No).
6. Type the number of minutes between each **Auto-Refresh (Min)**.
7. Select the **Date Range** for the data.
8. Select the **Systems** to display.

If you choose Selected System, click **Look Up** to select the one you want.

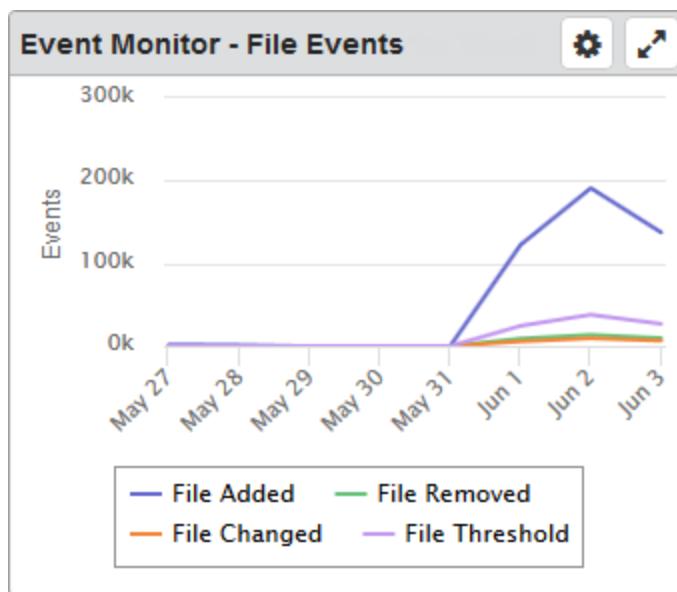
**Note:** For information on selecting the default system for Robot Schedule, see [Select System](#).

9. Click **Save**.

**Note:** Click **Delete** to delete this widget from the dashboard.

## Event Monitor - File Events Dashboard Widget

For the selected system, this widget displays the number of file events (added, removed, changed, or threshold) that were monitored over a period of time. **Note:** You can set up event monitors using either the Robot Schedule Explorer or the IBM i.



### Things you can do:

- Click **Maximize** to view the widget full-screen. Click to view it on the dashboard again.
- Hover your mouse over a line to view information about the data.
- Click a data point to view the [Event History](#) page for it.
- Click any item in the legend to hide or show its data in the graph.
- Click and drag over an area of the graph to zoom in. Click **Reset Zoom** to zoom back out.

### To change the settings:

1. Click **Settings** on the widget.
2. Type a new **Name**, if necessary.
3. Click **Reset Name** to have the software create a name based on the widget and the settings you've

selected.

**Note:** If you're using the system-generated name, be sure to click **Reset Name** before saving so that a new name can be generated, if needed.

4. Select the display **Size** of the widget on the dashboard. This affects the height of the widget.
5. Click the **Auto-Refresh** button to enable it (Yes) or disable it (No).
6. Type the number of minutes between each **Auto-Refresh (Min)**.
7. Select the **Date Range** for the data.
8. Select the **Systems** to display.

If you choose Selected System, click **Look Up** to select the one you want.

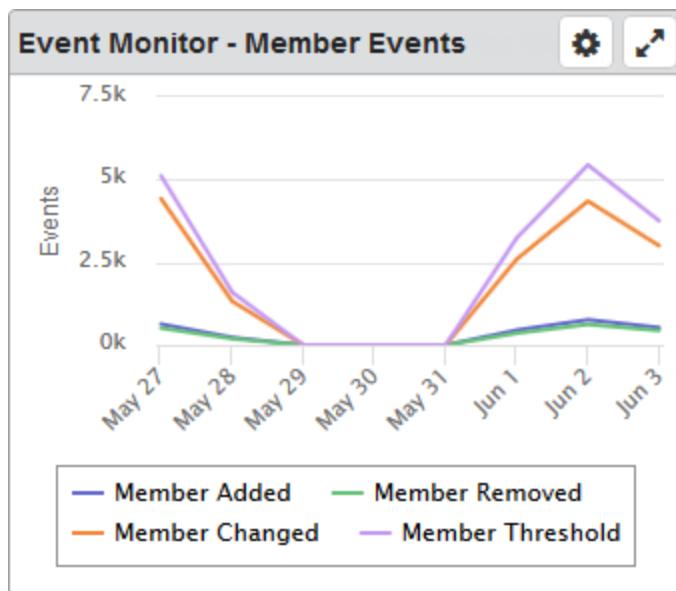
**Note:** For information on selecting the default system for Robot Schedule, see [Select System](#).

9. Click **Save**.

**Note:** Click **Delete** to delete this widget from the dashboard.

## Event Monitor - Member Events Dashboard Widget

For the selected system, this widget displays the number of member events (added, removed, changed, or threshold) that were monitored over a period of time. **Note:** You can set up event monitors using either the Robot Schedule Explorer or the IBM i.



Things you can do:

- Click **Maximize** to view the widget full-screen. Click to view it on the dashboard again.
- Hover your mouse over a line to view information about the data.
- Click a data point to view the [Event History](#) page for it.
- Click any item in the legend to hide or show its data in the graph.
- Click and drag over an area of the graph to zoom in. Click **Reset Zoom** to zoom back out.

To change the settings:

1. Click **Settings** on the widget.
2. Type a new **Name**, if necessary.
3. Click **Reset Name** to have the software create a name based on the widget and the settings you've selected.

**Note:** If you're using the system-generated name, be sure to click **Reset Name** before saving so that a new name can be generated, if needed.

4. Select the display **Size** of the widget on the dashboard. This affects the height of the widget.
5. Click the **Auto-Refresh** button to enable it (Yes) or disable it (No).
6. Type the number of minutes between each **Auto-Refresh (Min)**.
7. Select the **Date Range** for the data.
8. Select the **Systems** to display.

If you choose Selected System, click **Look Up** to select the one you want.

**Note:** For information on selecting the default system for Robot Schedule, see [Select System](#).

9. Click **Save**.

**Note:** Click **Delete** to delete this widget from the dashboard.

## History - Event Monitor Dashboard Widget

For the selected system, this widget displays the event monitor history records. These are the same records you'll see on the [Event History](#) page; they're just displayed in a convenient dashboard. The records show the directory, file, and member events (added, changed, removed, or threshold) that occurred during the time period you select. **Note:** You can set up event monitors using either the Robot Schedule Explorer or the IBM i.

The screenshot shows a dashboard widget titled "History - Event Monitors". It has a toolbar with a gear icon and a maximize/minimize button. The main area displays event logs for the system "DARFIL". There are two entries:

- DARFIL**  
File Changed  
Event Occurred processed at 2015-06-11 06:07:50  
/Help Systems/Robot SCHEDULE/logs/rbtfsem.log  
2015-06-10 13:07:50  
Outside Time Range
- DARFIL**  
File Changed  
Event Occurred processed at 2015-06-11 05:37:50  
/Help Systems/Robot SCHEDULE/logs/rbtfsem.log  
2015-06-10 12:37:50

Click **Maximize** to view the widget full-screen. Click to view it on the dashboard again.

To change the settings:

1. Click **Settings** on the widget.
2. Type a new **Name**, if necessary.
3. Click **Reset Name** to have the software create a name based on the widget and the settings you've selected.

**Note:** If you're using the system-generated name, be sure to click **Reset Name** before saving so that a new name can be generated, if needed.

4. Select the display **Size** of the widget on the dashboard. This affects the height of the widget.
5. Click the **Auto-Refresh** button to enable it (Yes) or disable it (No).
6. Type the number of minutes between each **Auto-Refresh (Min)**.
7. Select an option under **Sort By** to indicate which data to use for sorting, and whether to sort it in ascending or descending order.
8. Select one or more options under **Search By** to narrow the list of items displayed.  
If you've selected at least one option above, enter the **Search Text** you want used. The search results will include any record that contains the text within the types of data you selected under **Search By**.
9. Select an option under **Filter By** to further narrow the list of items displayed.
10. Select the **Systems** to display.  
If you choose Selected System, click **Look Up** to select the one you want.  
**Note:** For information on selecting the default system for Robot Schedule, see [Select System](#).
11. Click **Save**.

**Note:** Click **Delete** to delete this widget from the dashboard.

## History - Jobs Dashboard Widget

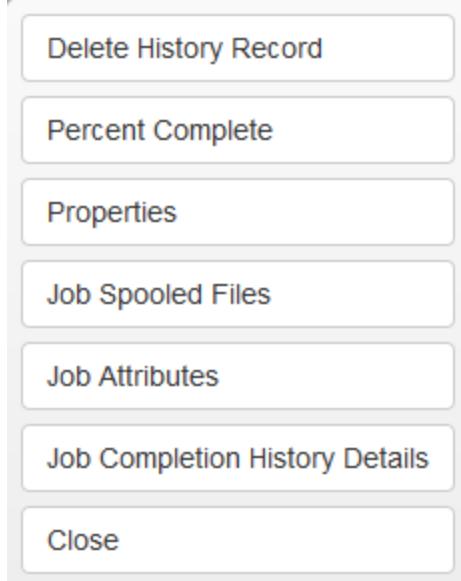
For the selected system or critical job list, this widget displays the same job completion history records that you'll also see on the [Completion History](#) page; they're just displayed here in a convenient dashboard.

The screenshot shows a dashboard titled "History - Jobs". It displays three completed jobs with the following details:

- DATE on OW**: Completed at 2015-06-11 06:08:01. Duration: 2 minute(s). Group: AAA App: SPACE.
- ALWAYSRUN on OW**: Completed at 2015-06-11 06:06:05. Duration: 0 minute(s). App: FARADAY.
- ALWAYSRUN2 on OW**: Completed at 2015-06-11 06:06:02. Duration: 0 minute(s). App: FARADAY.

Things you can do:

- Click  **Maximize** to view the widget full-screen. Click  to view it on the dashboard again.
- Click a history record to open that [Job Completion History Details](#) page.
- Click  **Show Actions**, then click an option to complete that action or access that page. **Note:** The image below is a sample. Available options depend upon the job's type and status. For details on the options, see the [Completion History](#) page.



#### To change the settings:

1. Click  **Settings** on the widget.
2. Type a new **Name**, if necessary.
3. Click **Reset Name** to have the software create a name based on the widget and the settings you've selected.  
**Note:** If you're using the system-generated name, be sure to click **Reset Name** before saving so that a new name can be generated, if needed.
4. Select the display **Size** of the widget on the dashboard. This affects the height of the widget.
5. Click the **Auto-Refresh** button to enable it (Yes) or disable it (No).
6. Type the number of minutes between each **Auto-Refresh (Min)**.
7. Select an option under **Sort By** to indicate which data to use for sorting, and whether to sort it in  ascending or  descending order.
8. Select one or more options under **Search By** to narrow the list of items displayed.  
If you've selected at least one option above, enter the **Search Text** you want used. The search results will include any record that contains the text within the types of data you selected under **Search By**.
9. Select an option under **Filter By** to further narrow the list of items displayed.
10. Select the **Systems** to display.  
If you choose Selected System or Critical Job List, click **Look Up** to select the one you want.  
**Note:** For information on selecting the default system for Robot Schedule, see [Select System](#).
11. Click **Save**.

**Note:** Click **Delete** to delete this widget from the dashboard.

## History - Job Monitors Dashboard Widget

For the selected system or critical job list, this widget displays the monitor history records for job overrun, underrun, and late start events that occurred. These are the same records you'll see on the [Job Monitor History](#) page; they're just displayed in a convenient dashboard. You can choose to see only one type of event, or all events during a selected time period. **Note:** You can add a monitor to a job when you add or edit the job in Robot Schedule - either in the Explorer or on the IBM i.

The screenshot shows a list of job monitor history records. The header says "History - Job Monitors". There are four entries:

- REACT2\_2**: Underrun at 2015-06-11 05:10:01
- UNDER\_RUN**: Underrun at 2015-06-11 05:00:16
- REACT2\_2**: Underrun at 2015-06-11 03:10:02
- REACT2 2**

Things you can do:

- Click **Maximize** to view the widget full-screen. Click to view it on the dashboard again.
- Click a history record to open that [job's properties](#) page.
- Click **Show Actions**, then click an option to access the [Job Completion History](#) or the [job's properties](#).



To change the settings:

- Click **Settings** on the widget.
- Type a new **Name**, if necessary.
- Click **Reset Name** to have the software create a name based on the widget and the settings you've selected.

**Note:** If you're using the system-generated name, be sure to click **Reset Name** before saving so that a new name can be generated, if needed.

4. Select the display **Size** of the widget on the dashboard. This affects the height of the widget.
5. Click the **Auto-Refresh** button to enable it (Yes) or disable it (No).
6. Type the number of minutes between each **Auto-Refresh (Min)**.
7. Select an option under **Sort By** to indicate which data to use for sorting, and whether to sort it in ascending or descending order.
8. Select one or more options under **Search By** to narrow the list of items displayed.  
If you've selected at least one option above, enter the **Search Text** you want used. The search results will include any record that contains the text within the types of data you selected under **Search By**.
9. Select an option under **Filter By** to further narrow the list of items displayed.
10. Select the **Systems** to display.  
If you choose Selected System or Critical Job List, click **Look Up** to select the one you want.  
**Note:** For information on selecting the default system for Robot Schedule, see [Select System](#).
11. Click **Save**.

**Note:** Click **Delete** to delete this widget from the dashboard.

## History - Terminated Jobs Dashboard Widget

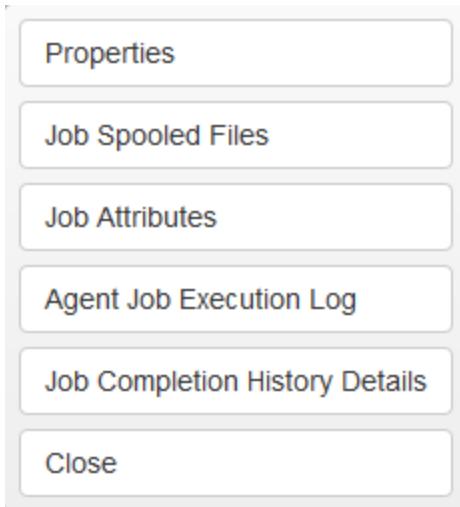
For the selected system or critical job list, this widget displays the same terminated jobs completion history records that you'll also see on the [Completion History](#) page; they're just gathered together here and displayed in a convenient dashboard.

The screenshot shows a list of completed jobs with the following details:

- GROUP4** on OW  
Group 4      2015-06-11 06:08:01  
Terminated at 2015-06-11 06:08:01  
Group: AAA App: FARADAY
- AGENTJOB** on OW  
Agent Job      2015-06-11 06:06:02  
Terminated at 2015-06-11 06:06:02  
Agent: HS103\_JSHA Group: AAA
- DATELIST** on OW  
Date List      2015-06-11 06:06:01

Things you can do:

- Click **Maximize** to view the widget full-screen. Click to view it on the dashboard again.
- Click a history record to open that [Job Completion History Details](#) page.
- Click **Show Actions**, then click an option to complete that action or access that page. **Note:** The image below is a sample. That available options depend upon the job's type and status. For details on the options, see the [Completion History](#) page.



### To change the settings:

1. Click **Settings** on the widget.
2. Type a new **Name**, if necessary.
3. Click **Reset Name** to have the software create a name based on the widget and the settings you've selected.

**Note:** If you're using the system-generated name, be sure to click **Reset Name** before saving so that a new name can be generated, if needed.

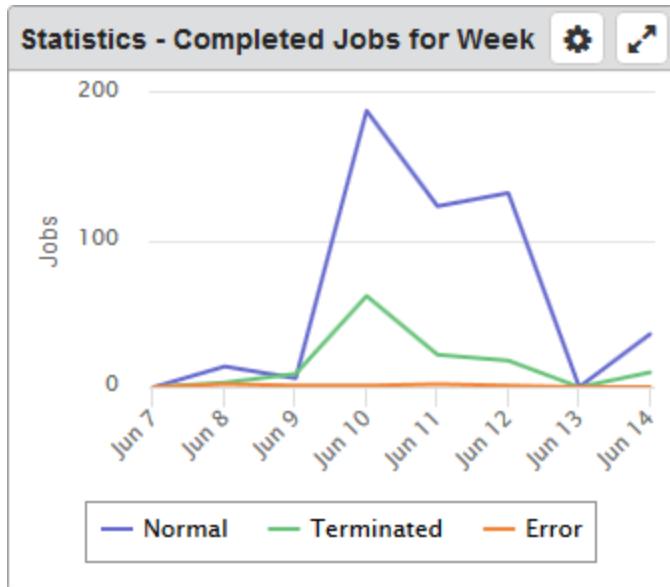
4. Select the display **Size** of the widget on the dashboard. This affects the height of the widget.
5. Click the **Auto-Refresh** button to enable it (Yes) or disable it (No).
6. Type the number of minutes between each **Auto-Refresh (Min)**.
7. Select an option under **Sort By** to indicate which data to use for sorting, and whether to sort it in ascending or descending order.
8. Select an option under **Filter By** to further narrow the list of items displayed.
9. Select the **Systems** to display.  
If you choose Selected System or Critical Job List, click **Look Up** to select the one you want.  
**Note:** For information on selecting the default system for Robot Schedule, see [Select System](#).

10. Click **Save**.

**Note:** Click **Delete** to delete this widget from the dashboard.

## Statistics - Completed Jobs Dashboard Widget

For the selected system or critical job list, this widget displays the number of completed Robot Schedule jobs per day over a period of time. The jobs are split out by those that completed normally, were terminated, and where an error occurred on submit. **Note:** User jobs are not included in the data.



### Things you can do:

- Click **Maximize** to view the widget full-screen. Click to view it on the dashboard again.
- Hover your mouse over a line to view information about the data.
- Click a data point to view the job [Completion History](#) page for it.
- Click any item in the legend to hide or show its data in the graph.
- Click and drag over an area of the graph to zoom in. Click **Reset Zoom** to zoom back out.

### To change the settings:

1. Click **Settings** on the widget.
2. Type a new **Name**, if necessary.
3. Click **Reset Name** to have the software create a name based on the widget and the settings you've selected.

**Note:** If you're using the system-generated name, be sure to click **Reset Name** before saving so that a new name can be generated, if needed.

4. Select the display **Size** of the widget on the dashboard. This affects the height of the widget.
5. Click the **Auto-Refresh** button to enable it (Yes) or disable it (No).
6. Type the number of minutes between each **Auto-Refresh (Min)**.
7. Select the **Date Range** for the data.
8. Select the **Systems** to display.

If you choose Selected System or Critical Job List, click **Look Up** to select the one you want.

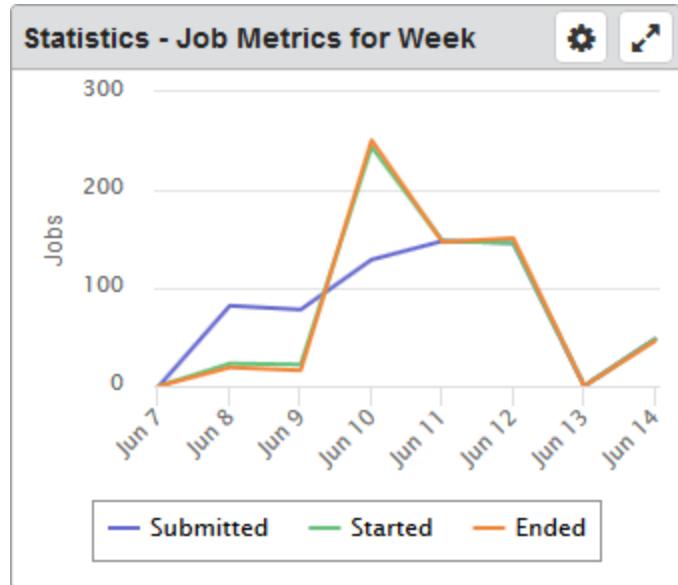
**Note:** For information on selecting the default system for Robot Schedule, see [Select System](#).

9. Click **Save**.

**Note:** Click **Delete** to delete this widget from the dashboard.

## Statistics - Job Metrics Dashboard Widget

For the selected system or critical job list, this widget displays the number of Robot Schedule jobs that were submitted, started, and ended each day over a period of time. **Note:** User jobs are not included in the data.



Things you can do:

- Click **Maximize** to view the widget full-screen. Click to view it on the dashboard again.
- Hover your mouse over a line to view information about the data.
- Click a data point to view the job [Completion History](#) page for it.
- Click any item in the legend to hide or show its data in the graph.
- Click and drag over an area of the graph to zoom in. Click **Reset Zoom** to zoom back out.

To change the settings:

- Click **Settings** on the widget.
- Type a new **Name**, if necessary.
- Click **Reset Name** to have the software create a name based on the widget and the settings you've selected.  
**Note:** If you're using the system-generated name, be sure to click **Reset Name** before saving so that a new name can be generated, if needed.
- Select the display **Size** of the widget on the dashboard. This affects the height of the widget.
- Click the **Auto-Refresh** button to enable it (Yes) or disable it (No).
- Type the number of minutes between each **Auto-Refresh (Min)**.
- Select the **Date Range** for the data.
- Select the **Systems** to display.

If you choose Selected System or Critical Job List, click **Look Up** to select the one you want.

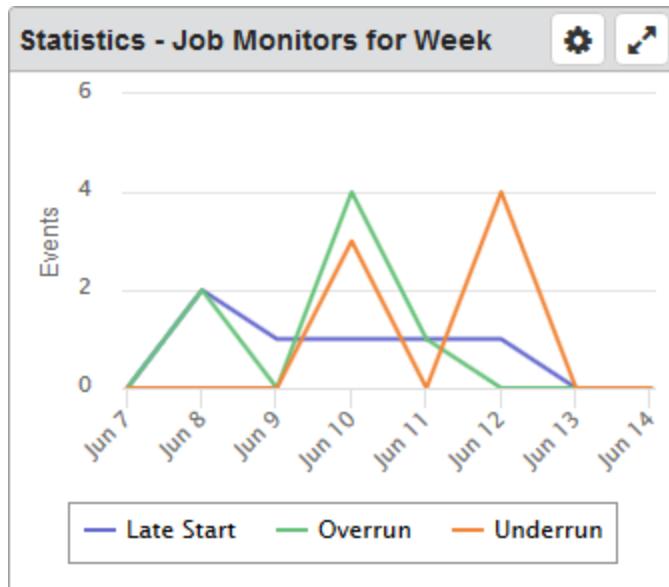
**Note:** For information on selecting the default system for Robot Schedule, see [Select System](#).

- Click **Save**.

**Note:** Click **Delete** to delete this widget from the dashboard.

## Statistics - Job Monitors Dashboard Widget

For the selected system or critical job list, this widget displays the number of monitored events (job overrun, underrun, and late start) that occurred each day over a period of time. **Note:** You can add a monitor to a job when you add or edit the job in Robot Schedule - either in the Explorer or on the IBM i.



### Things you can do:

- Click **Maximize** to view the widget full-screen. Click to view it on the dashboard again.
- Hover your mouse over a line to view information about the data.
- Click a data point to view the [Job Monitor History](#) page for it.
- Click any item in the legend to hide or show its data in the graph.
- Click and drag over an area of the graph to zoom in. Click **Reset Zoom** to zoom back out.

### To change the settings:

- Click **Settings** on the widget.
- Type a new **Name**, if necessary.
- Click **Reset Name** to have the software create a name based on the widget and the settings you've selected.

**Note:** If you're using the system-generated name, be sure to click **Reset Name** before saving so that a new name can be generated, if needed.

- Select the display **Size** of the widget on the dashboard. This affects the height of the widget.
- Click the **Auto-Refresh** button to enable it (Yes) or disable it (No).
- Type the number of minutes between each **Auto-Refresh (Min)**.
- Select the **Date Range** for the data.
- Select the **Systems** to display.

If you choose Selected System or Critical Job List, click **Look Up** to select the one you want.

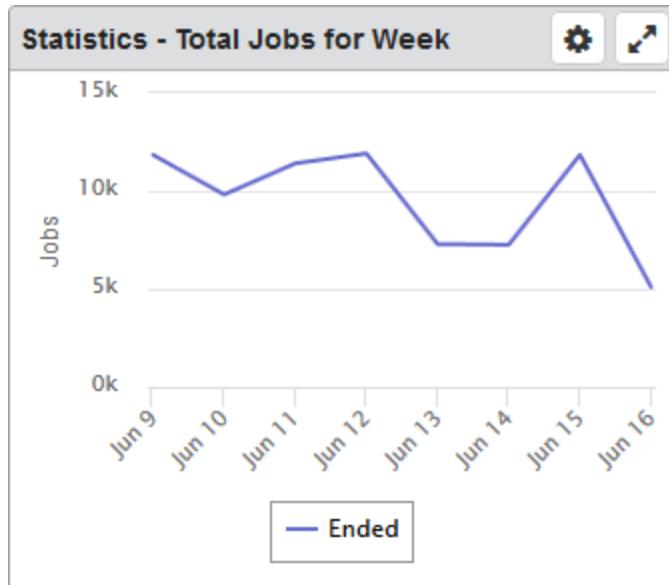
**Note:** For information on selecting the default system for Robot Schedule, see [Select System](#).

- Click **Save**.

Note: Click **Delete** to delete this widget from the dashboard.

## Statistics - Total Jobs Dashboard Widget

For the selected system or critical job list, this widget displays the total number of Robot Schedule jobs that ended each day over a period of time. This includes jobs that completed normally, ones that were terminated, and ones that ended in an error. **Note:** User jobs are not included in the data.



Things you can do:

- Click **Maximize** to view the widget full-screen. Click to view it on the dashboard again.
- Hover your mouse over a line to view information about the data.
- Click a data point to view the job [Completion History](#) page for it.
- Click any item in the legend to hide or show its data in the graph.
- Click and drag over an area of the graph to zoom in. Click **Reset Zoom** to zoom back out.

To change the settings:

- Click **Settings** on the widget.
- Type a new **Name**, if necessary.
- Click **Reset Name** to have the software create a name based on the widget and the settings you've selected.  
**Note:** If you're using the system-generated name, be sure to click **Reset Name** before saving so that a new name can be generated, if needed.
- Select the display **Size** of the widget on the dashboard. This affects the height of the widget.
- Click the **Auto-Refresh** button to enable it (Yes) or disable it (No).
- Type the number of minutes between each **Auto-Refresh (Min)**.
- Select the **Date Range** for the data.
- Select the **Systems** to display.

If you choose Selected System or Critical Job List, click **Look Up** to select the one you want.

**Note:** For information on selecting the default system for Robot Schedule, see [Select System](#).

9. Click **Save**.

**Note:** Click **Delete** to delete this widget from the dashboard.

## Business Window Dashboard Widget

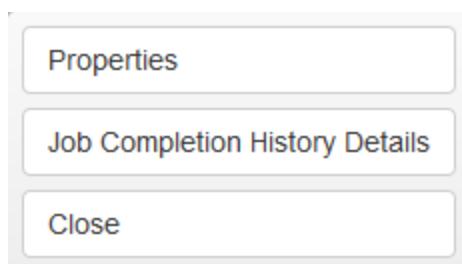
For the selected system or critical job list, this widget allows you to set a window of time during which you'd expect certain jobs to normally run. It then shows you any anomalies, such as jobs that didn't run, or jobs that ran outside of (before or after) the business window you set. This can help you monitor whether or not you're meeting the terms in your SLAs. With this information, you can identify problem areas and fix them.

The screenshot shows a dashboard widget titled "Status - Business Window". It displays two entries for the job "ZPRE\_OR02" running on "HS".

- ZPRE\_OR02 on HS**  
Ran Before 2015-06-16 16:00:00  
Or conjunction OR02  
App: JFDIAGRAM  
Start Time: 2015-06-16 15:51:01  
End Time: 2015-06-16 15:52:16
- ZPRE\_OR02 on HS**  
Ran Before 2015-06-16 16:00:00  
Or conjunction OR02  
App: JFDIAGRAM  
Start Time: 2015-06-16 15:41:01  
End Time: 2015-06-16 15:42:16

Things you can do:

- Click **Maximize** to view the widget full-screen. Click to view it on the dashboard again.
- Select Widget Type of Key Indicator or List.
- Sort displayed Column order on List Widget Type.
- Set Auto Refresh to custom setting.
- Click **Show Actions**, then click an option to complete that action or access that page. **Note:** The image below is a sample. That available options depend upon the job's type. For details on the options, see the job [Completion History](#) page.



To change the settings:

1. Click  **Settings** on the widget.
2. Type a new **Name**, if necessary.
3. Click **Reset Name** to have the software create a name based on the widget and the settings you've selected.

**Note:** If you're using the system-generated name, be sure to click **Reset Name** before saving so that a new name can be generated, if needed.

4. Select the display **Size** of the widget on the dashboard. This affects the height of the widget.
5. Click the **Auto-Refresh** button to enable it (Yes) or disable it (No).
6. Type the number of minutes between each **Auto-Refresh (Min)**.
7. Select an option under **Sort By** to indicate which data to use for sorting, and whether to sort it in  ascending or  descending order.
8. Select a **Time Range** for the data you want displayed on the dashboard.
9. Enter the **Start Time** and **End Time** for the business window on the days you chose in the previous step. Use 24-hour (military) time, in the format *hh:mm:ss*. Either type the time you want, or click  **Clock** to select it.  
You can have a business window that spans two days; for example, from 21:00:00 on one day to 02:59:59 on the next day. However, you cannot have a window longer than 24 hours.
10. Select the **Systems** to display.  
If you choose Selected System or Critical Job List, click **Look Up** to select the one you want.  
**Note:** For information on selecting the default system for Robot Schedule, see [Select System](#).
11. Click **Save**.

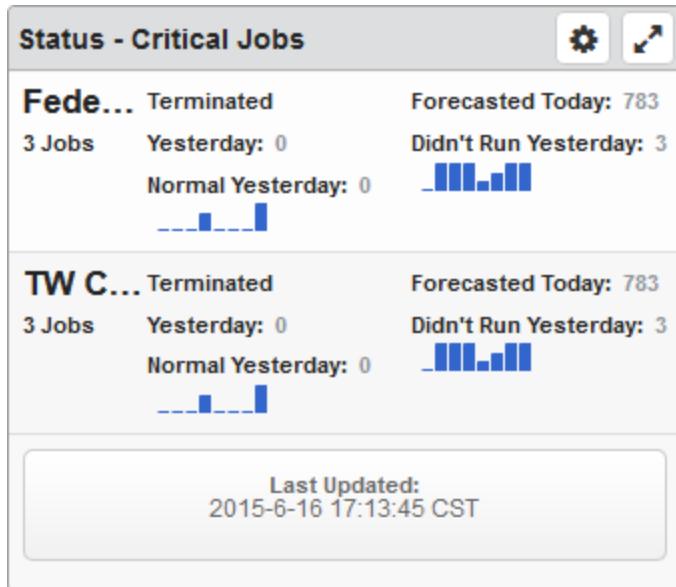
**Note:** Click **Delete** to delete this widget from the dashboard.

## Status - Critical Jobs Dashboard Widget

This widget allows you to display a snapshot of the current status of the jobs that are on all the critical job lists that have been defined. With this information, you can decide whether or not you need to take action on those jobs. **Note:** Critical job lists allow you to identify jobs that are important to you - even if they run on different systems. For details, see [Critical Job Lists](#).

This widget shows how many critical jobs on each list:

- Were terminated yesterday.
- Are forecasted today.
- Completed normally today and by day over the previous seven days.
- Didn't run today or by day over the previous seven days.



### Things you can do:

- Click **Maximize** to view the widget full-screen. Click to view it on the dashboard again.
- Hover your mouse over a bar on the graph to see the number of critical jobs are in that category for that day.

### To change the settings:

1. Click **Settings** on the widget.
2. Type a new **Name**, if necessary.
3. Click **Reset Name** to have the software create a name based on the widget and the settings you've selected.  
**Note:** If you're using the system-generated name, be sure to click **Reset Name** before saving so that a new name can be generated, if needed.
4. Select the display **Size** of the widget on the dashboard. This affects the height of the widget.
5. Click the **Auto-Refresh** button to enable it (Yes) or disable it (No).
6. Type the number of minutes between each **Auto-Refresh (Min)**.
7. Click **Save**.

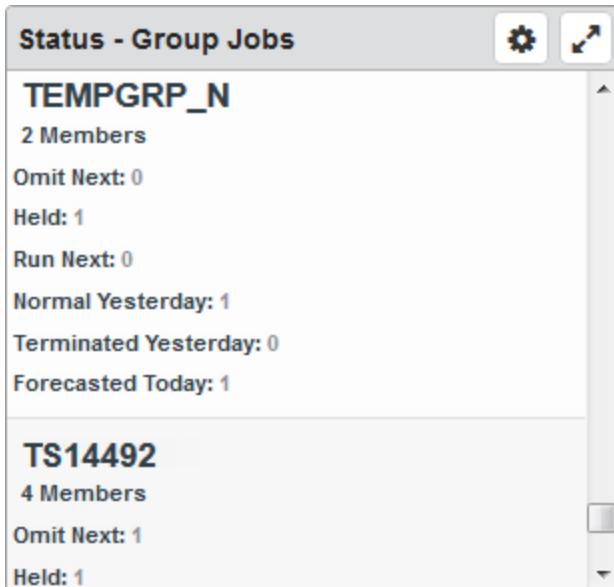
**Note:** Click **Delete** to delete this widget from the dashboard.

## Group Jobs Dashboard Widget

This widget displays information about the group jobs on the selected system. This information can help you analyze and address issues with your group jobs. For more on group jobs, see [Groups](#).

This widget shows the following about each group job:

- How many member jobs it has.
- The number of its member jobs that are in any of the following statuses:
  - Omit Next
  - Held
  - Run Next
- The total number of times its member jobs did any of the following. **Note:** Member jobs can be counted more than once in each category, if applicable.
  - Ended with a normal completion yesterday.
  - Were terminated yesterday.
  - Are forecasted to run today.



#### Things you can do:

- Click **Maximize** to view the widget full-screen. Click to view it on the dashboard again.

#### To change the settings:

1. Click **Settings** on the widget.
2. Type a new **Name**, if necessary.
3. Click **Reset Name** to have the software create a name based on the widget and the settings you've selected.

**Note:** If you're using the system-generated name, be sure to click **Reset Name** before saving so that a new name can be generated, if needed.

4. Select the display **Size** of the widget on the dashboard. This affects the height of the widget.
5. Click the **Auto-Refresh** button to enable it (Yes) or disable it (No).
6. Type the number of minutes between each **Auto-Refresh (Min)**.
7. Select the **Systems** to display.

If you choose Selected System, click **Look Up** to select the one you want.

**Note:** For information on selecting the default system for Robot Schedule, see [Select System](#).

8. Click **Save**.

**Note:** Click **Delete** to delete this widget from the dashboard.

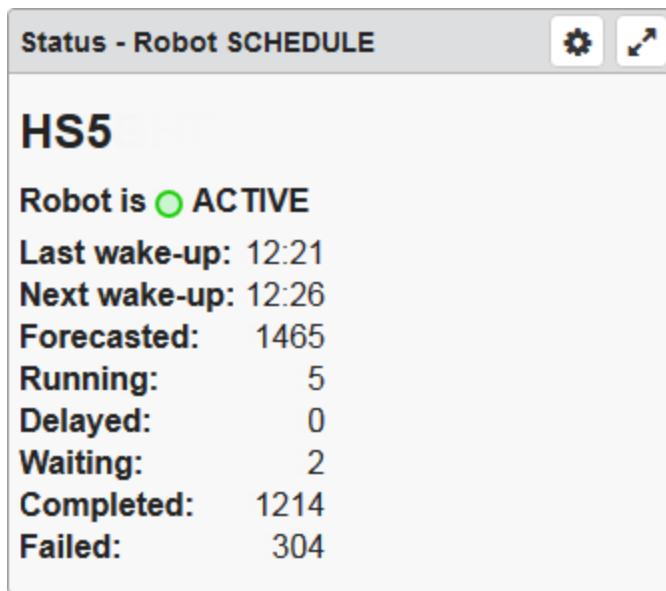
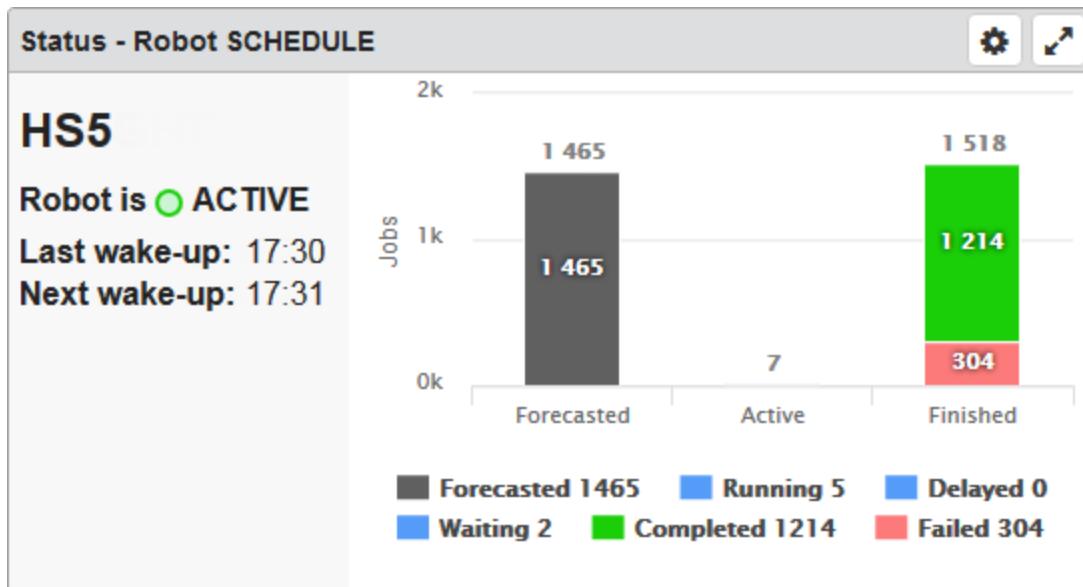
## Status - Robot Schedule Dashboard Widget

For the selected system, this widget displays a snapshot of the current status of Robot Schedule and its jobs.

It shows the following information:

- The system name.
- The status of the Robot Schedule monitor jobs (Robot). Possible statuses:
  -  ACTIVE - Indicates that the Robot Schedule monitor jobs have been started; Robot Schedule can submit scheduled jobs
  -  INACTIVE - Indicates that the monitor jobs have not been started; Robot Schedule cannot submit scheduled jobs.
  -  UNKNOWN - Indicates that Robot Schedule is starting or stopping, the monitor jobs were ended, or that Robot Schedule was ended when the RBTSLEEPER subsystem was ended. If the monitor jobs or RBTSLEEPER were ended, the status remains UNKNOWN until Robot Schedule is restarted.
- The last time Robot Schedule woke up to submit a job and the next time it's scheduled to wake up and submit one. For more information, see [Robot Schedule Job Execution](#).
- The number of jobs for today in the following categories:
  - Forecasted
  - Running
  - Delayed
  - Waiting
  - Completed
  - Failed

The data in this widget is presented differently depending on the size of your browser and your screen. You may see a graph or simply a list.



Things you can do:

- Click **Maximize** to view the widget full-screen. Click to view it on the dashboard again.
- If you see a graph, click any item in the legend to hide or show its data in the graph.

To change the settings:

- Click **Settings** on the widget.
- Type a new **Name**, if necessary.
- Click **Reset Name** to have the software create a name based on the widget and the settings you've selected.  
**Note:** If you're using the system-generated name, be sure to click **Reset Name** before saving so that a new name can be generated, if needed.
- Select the display **Size** of the widget on the dashboard. This affects the height of the widget.

5. Click the **Auto-Refresh** button to enable it (Yes) or disable it (No).
6. Type the number of minutes between each **Auto-Refresh (Min)**.
7. Select the **Systems** to display.

If you choose Selected System, click **Look Up** to select the one you want.

**Note:** For information on selecting the default system for Robot Schedule, see [Select System](#).

8. Click **Save**.

**Note:** Click **Delete** to delete this widget from the dashboard.

# Schedule Activity

The Schedule Activity monitor (SAM) provides a visual reference so that you can see that your jobs are running as expected. Whether you're new to Robot Schedule or are an experienced user, SAM can help you monitor your job schedule.

Use SAM to monitor all the jobs you have set up using Robot Schedule. SAM can display information about jobs that are running, waiting to run, completed, failed, or forecasted.

Click any of the following links to learn more about understanding and using the Schedule Activity page:

[Viewing the Schedule Activity page](#)

[Sorting and filtering the view](#)

[Forecasted - Schedule Activity](#)

[Active - Schedule Activity](#)

[Completed - Schedule Activity](#)

## Viewing the Schedule Activity

The Schedule Activity monitor (SAM) provides a visual reference of the status of your job schedule.

In the Navigation Pane, click **Schedule Activity** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it.

The SAM page is divided into three sections:

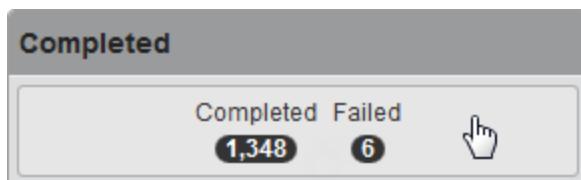
- Forecasted: Shows the jobs scheduled to run in the \*INTERNAL forecast (for details, see [Schedule Forecasting](#)). It includes forecast jobs that have been checked off if the [preference](#) for "Show Submitted/Checked-Off Forecast Jobs" is enabled.
- Active: Shows the jobs that are currently running, waiting to run, or are OPAL delayed.
- Completed: Shows the jobs that completed either normally or abnormally.

### Things to know and do:

- The total number of jobs of each type is listed at the top of each section. This includes only Robot Schedule jobs, not user jobs. **Note:** Completed and Active will show user jobs if the [preferences](#) are set up to track user jobs.
- Each section can only display up to 100 records. Which jobs are displayed depends on how you're [sorting the list](#). To expand the list and display the full listing, including more detail about each job, click the button at the top of the list.

#### Example

To see the full list of completed jobs, click the button at the top of the list.



You can see the following pages:

- [Forecasted jobs](#)
  - [Active jobs](#)
  - [Completed jobs](#)
- The colored icon by each job shows its status. This allows you to use SAM for a quick overview of your jobs. For details, see [Jobs—Icons, Colors, and Symbols](#).
  - Click Refresh to refresh the information in the display. Or, you can set up an [auto-refresh](#) in the Preferences.
  - Click Build Internal Forecast to manually rebuild the forecast. The internal forecast allows SAM to display a list of the jobs scheduled to run over a 24-hour period. For more on the internal forecast, see [Schedule Forecasting](#).
  - Click Print Schedule Activity to view the Schedule Activity List in HTML format. Then, select which day you're interested in seeing and click Print. **Note:** You may have to disable the pop-up blockers in your browser to view the list.
  - Click Show Actions by any of the jobs to open a menu of actions. Your choices will depend on the job type and its status. For details on the actions, see the [Forecasted jobs](#), [Active jobs](#), and [Completed jobs](#) pages.

## Sorting and Filtering the Schedule Activity Display

There are settings for the Schedule Activity page that allow you to choose how to sort the list, what types of data will be searched when you do a search, and how to filter the list.

You can choose how to sort the jobs on the Schedule Activity page.

1. Click Settings.

The screenshot shows a 'Sort By' section with two dropdown menus: 'Job Name' and 'Start Time'. Each menu has an upward-pointing arrow icon followed by the column header. Above the 'Sort By' section, there are icons for Refresh, Settings, and Print, along with a timestamp: 'Last Forecast: 2017-11-20 11:00:07'.

2. Select how you want the lists sorted (Sort By). Click your selection again to change the sort order to ascending or descending.
3. Click Settings to close the settings.

## Forecast Activity - Schedule Activity

The expanded Forecast Activity page shows all the jobs from the Schedule Activity page that are scheduled to run in a 24-hour period, including its name, status (if applicable), override code (if applicable), description, agent, group, application, forecasted start time, and check-off time and data (if applicable). The list is generated by the internal forecast, which runs automatically at 12-hour intervals. The jobs displayed on this page include both Robot Schedule jobs and user jobs.

In the Navigation Pane, click **Schedule Activity** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it. Then, click the button at the top of the Forecasted section.

### Things to know and do:

- The total number of jobs is listed at the top of the page.
- The colored icon by each job shows its status. For details, see [Jobs—Icons, Colors, and Symbols](#).
- Click  Refresh to refresh the information in the display. Or, you can set up an [auto-refresh](#) in the preferences.
- Click the page number and select the page you want to view. Or, use the previous and next arrows.
- Start typing in the Search field to find a specific job. It will find everything that contains what you're typing. See [Sorting and Filtering Active Jobs](#) (below) to learn how to filter your search.

### Actions you can take:

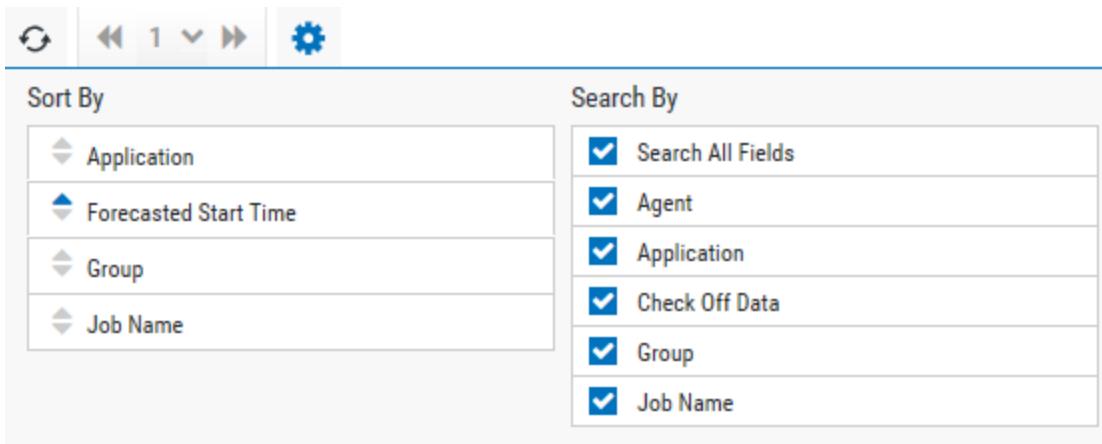
Click  Show Actions for any job to display options for monitoring and managing it. Depending on the job type and status, you'll have the following options:

- Select **Do Job Now** to [submit the job for execution](#).
- Select **Hold** to [place the job on hold](#).
- Select **Schedule Override** to [override the normal run schedule](#) and control the job manually. The page displays any override code that has been applied.
- Select **Remove Override** to remove a manual schedule override that has been applied.
- Select **Job Completion History** to see the [completion history for the job](#).
- Select **Where Used** to [see where this job is used](#) - whether it is part of a group, and whether it has any dependent jobs or prerequisite jobs.
- Select **Diagram Job** to [create a job flow diagram](#) for the job.
- Select **Start now with this member** to [start group processing at this member](#) job.
- Select **Group Members** to [see a list of members](#) that belong to this group.
- Select **Group History** to see the [completion history for the group](#).
- Select **Check Off Forecasted Job** to [acknowledge a forecasted job](#) that you've noticed is going to run late or was missed.
- Select **Properties** to [display the job's properties](#).

## Sorting and Filtering Forecast Activity

You can choose how to sort the jobs in the Forecast Activity list, and can filter the list to reduce the number of entries. You can also specify what types of data will be searched when you do a search.

1. Click  **Settings**.



The screenshot shows the 'Settings' dialog box with two main sections: 'Sort By' and 'Search By'. At the top, there are navigation icons: a refresh symbol, back and forward arrows, and a gear icon for settings.

**Sort By:**

- Application (selected)
- Forecasted Start Time
- Group
- Job Name

**Search By:**

- Search All Fields (selected)
- Agent
- Application
- Check Off Data
- Group
- Job Name (selected)

2. Select how you want the lists sorted (Sort By). Click your selection again to change the sort order to  ascending or  descending.
3. Select whether to **Search All Fields** or specific fields.
4. Click  **Settings** to close the settings.

## Schedule Forecasting

Robot Schedule automatically creates a special internal forecast, \*INTERNAL, every time it starts and at 12-hour intervals at 11:00 and 23:00. The forecast is for 24-hour periods and is designed to be used by the Schedule Activity monitor (SAM) and the Robot Schedule job monitors. **Note:** If you need a special forecast other than the \*INTERNAL one, you can manually create it in Robot Schedule, either in the Explorer or on the IBM i.

Because the \*INTERNAL forecast is used by Robot Schedule, you cannot modify or delete it. However, you can build a new \*INTERNAL forecast at any time from the Schedule Activity page. You can also print the \*INTERNAL forecast by using the [Schedule Forecast report](#).

## Checking Off Jobs

If you notice a forecasted job is going to run late or was missed, you can check it off to acknowledge it. The Schedule Activity Monitor logs who checked off the job and when, so there's a record that it was acknowledged.

**Note:** Checking off a forecasted job does not affect your job schedule.

To check off a job:

1. Click  **Show Actions** for the job and select **Check Off Forecasted Job**.
2. Click **Check Off** to confirm.

## Active Jobs - Schedule Activity

The expanded Active Jobs page shows all jobs from the Schedule Activity page that are currently running, waiting to run, or are OPAL delayed, including their name, system, description, status, duration, start time,

agent, group, and application. The jobs displayed on this page include both Robot Schedule jobs and user jobs.

In the Navigation Pane, click **Schedule Activity** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it. Then, click the button at the top of the Active section.

#### Things to know and do:

- The total number of jobs of each type is listed at the top of the page.  
**Note:** If you're tracking user jobs, these numbers may differ from the numbers shown in the Active section on the Schedule activity page because it will include user jobs. To track user jobs, enable the option for "Show Running/Waiting User Jobs" on the [Preferences](#) page.
- The colored icon by each job shows its status. For details, see [Jobs—Icons, Colors, and Symbols](#).
- Click  Refresh to refresh the information in the display. Or, you can set up an [auto-refresh](#) in the Preferences.
- Click the page number and select the page you want to view. Or, use the previous and next arrows.
- Start typing in the Search field to find a specific job. It will find everything that contains what you're typing. See [Sorting and Filtering Active Jobs](#) (below) to learn how to filter your search.

#### Actions you can take:

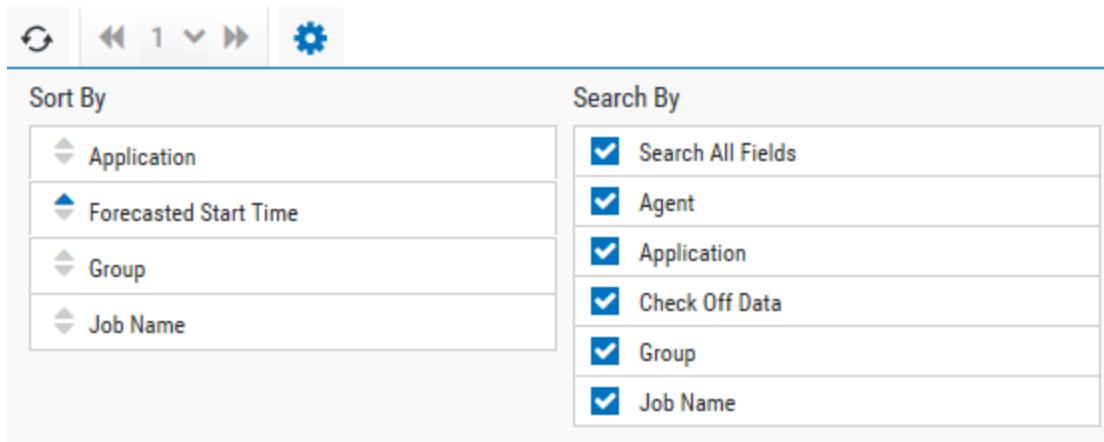
Click  Show Actions for any job to display options for monitoring and managing it. Depending on the job type and status, you'll have the following options:

- Select **End** to [end a job](#) that's currently running.
- Select **Hold** to [place the job on hold](#).
- Select **Release** to [release the hold on a job](#).
- Select **Percent Complete** to display the [completion percentage](#) of the selected job.
- Select **Diagram Job** to [create a job flow diagram](#) for the job.
- Select **Job Completion History** to see the [completion history for the job](#).
- Select **Group History** to see the [completion history for the group](#).
- Select **Job Log** to [display the job's log file](#).
- Select **Job Attributes** to [display the job's attributes](#).
- Select **Job Spooled Files** to [display and work with the job's spooled files](#).
- Select **Properties** to [display the job's properties](#).

## Sorting and Filtering Active Jobs

You can choose how to sort the Active Jobs list, and can filter the list to reduce the number of entries. You can also specify what types of data will be searched when you do a search.

1. Click  **Settings**.



The screenshot shows the 'Settings' dialog box with two main sections: 'Sort By' and 'Search By'. At the top, there are navigation icons: a refresh symbol, page numbers (1), and arrows for previous and next. Below these are the settings sections.

Sort By		Search By	
 Application	<input checked="" type="checkbox"/> Search All Fields		
 Forecasted Start Time	<input checked="" type="checkbox"/> Agent		
 Group	<input checked="" type="checkbox"/> Application		
 Job Name	<input checked="" type="checkbox"/> Check Off Data		
	<input checked="" type="checkbox"/> Group		
	<input checked="" type="checkbox"/> Job Name		

2. Select how you want the lists sorted (Sort By). Click your selection again to change the sort order to  ascending or  descending.
3. Select whether to **Search All Fields** or specific fields.
4. Click  **Settings** to close the settings.

## Recent Activity - Schedule Activity

The expanded Recent Activity page shows all jobs from the Completed section on the Schedule Activity page that completed normally or ended abnormally. The page shows their name, system, description, status, duration, start time, agent, group, and application. The jobs displayed on this page include both Robot Schedule jobs and user jobs.

In the Navigation Pane, click **Schedule Activity** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it. Then, click the button at the top of the Active section.

### Things to know and do:

- The total number of jobs of each type is listed at the top of the page.  
**Note:** If you're tracking user jobs, these numbers may differ from the numbers shown in the Completed section on the Schedule activity page because it will include user jobs. To track user jobs, enable the option for "Show Completed/Failed User Jobs" on the [Preferences](#) page.
- The colored icon by each job shows its status. For details, see [Jobs—Icons, Colors, and Symbols](#).
- Click  **Refresh** to refresh the information in the display. Or, you can set up an [auto-refresh](#) in the preferences.
- Click the page number and select the page you want to view. Or, use the previous and next arrows.
- Start typing in the Search field to find a specific job. It will find everything that contains what you're typing. See [Sorting and Filtering Active Jobs](#) (below) to learn how to filter your search.

### Actions you can take:

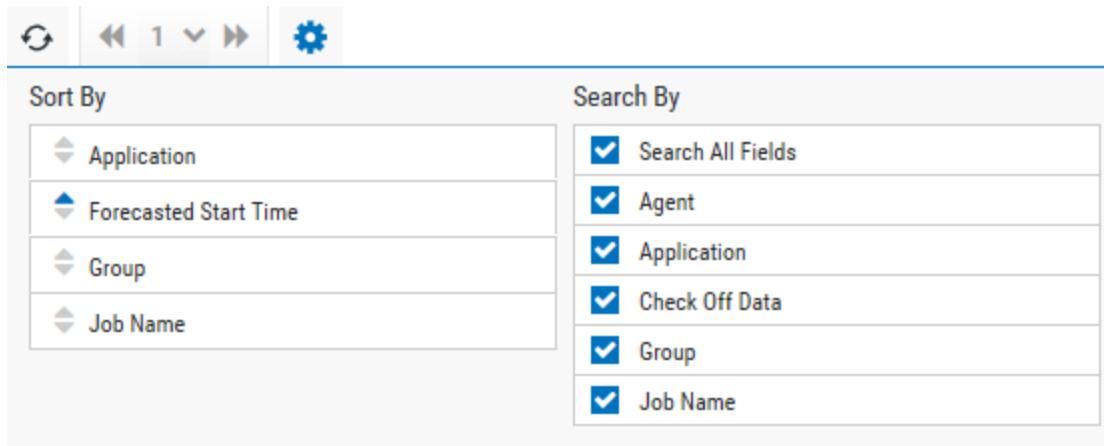
Click  **Show Actions** for any job to display options for monitoring and managing it. Depending on the job type and status, you'll have the following options:

- Select **Do Job Now** to [submit the job for execution](#).
- Select **Hold** to [place the job on hold](#).
- Select **Schedule Override** to [override the normal run schedule](#) and control the job manually. The page displays any override code that has been applied.
- Select **Remove Override** to remove a manual schedule override that has been applied.
- Select **Job Completion History** to see the [completion history for the job](#).
- Select **Where Used** to [see where this job is used](#) - whether it is part of a group, and whether it has any dependent jobs or prerequisite jobs.
- Select **Diagram Job** to [create a job flow diagram](#) for the job.
- Select **Group Members** to [see a list of members](#) that belong to this group.
- Select **Group History** to see the [completion history for the group](#).
- Select **Job Spooled Files** to [display and work with the job's spooled files](#).
- Select **Job Completion History Details** to [see the details of this particular job run](#).
- Select **Properties** to [display the job's properties](#).

## Sorting and Filtering Recent Activity

You can choose how to sort the Active Jobs list, and can filter the list to reduce the number of entries. You can also specify what types of data will be searched when you do a search.

1. Click  **Settings**.



The screenshot shows the 'Settings' dialog box with two main sections: 'Sort By' and 'Search By'. At the top, there are navigation icons: a refresh symbol, a double-left arrow, a page number '1', a double-right arrow, and a gear icon for settings.

**Sort By:**

- Application (selected)
- Forecasted Start Time
- Group
- Job Name

**Search By:**

- Search All Fields (selected)
- Agent
- Application
- Check Off Data
- Group
- Job Name (selected)

2. Select how you want the lists sorted (Sort By). Click your selection again to change the sort order to  ascending or  descending.
3. Select whether to **Search All Fields** or specific fields.
4. Click  **Close** to close the settings.

# Jobs

The list on the Jobs page summarizes the Robot Schedule job schedule. You can use it to monitor and manage the existing job schedule. The list can be sorted and filtered using a variety of criteria. There are also several views available, including compact, forecast, and history.

The information on the page describes the jobs. Depending on the view and how the list is filtered, the information can include the type of job, job name, override codes, description, agent, application, when it's scheduled to run, last run time and status, among other forecasted and historical information.

From the Jobs page, you have access to many actions you can perform on the jobs. For details, see [Viewing the Jobs List](#).

## Viewing the Jobs List

The Jobs list summarizes the Robot Schedule job schedule. You can use it to monitor and manage the existing job schedule.

In the Navigation Pane, click **Jobs** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it.

### Things to know and do:

- The server that the jobs are on is displayed at the top of the page, as is the [filter you've applied](#) (All Jobs or Held Jobs, for example) and the total number of jobs in the list (this number depends on how you're filtered the list).
- Click  **Refresh** to refresh the information in the display.
- Click the page number and select the page you want to view. Or, click the previous and next arrows.
- Click  **Print Jobs** to view the Jobs list in HTML format. You can then select all the records (**Ctrl+A**) and copy it (**Ctrl+C**) to paste it into a spreadsheet. **Note:** You may have to disable the pop-up blockers in your browser to view the list.
- Start typing in the Search field to find a specific list. It will find everything that contains what you're typing. See [Sorting and filtering](#) to learn how to filter your search.

The screenshot shows the 'Jobs' page interface. At the top, there's a blue header bar with the word 'Jobs' and a 'help ?' button. Below the header is a toolbar with icons for refresh, back, forward, search, and print. A search bar labeled 'Search...' is present. The main area displays a list of jobs in a table format:

<input type="checkbox"/>	<b>AGEOUTQ</b>	<span style="color:red;">Held</span> Age Outq Qprint	⋮
<input type="checkbox"/>	<b>DLTHSTLOG</b>	<span style="color:red;">Held</span> Delete History	⋮
<input type="checkbox"/>	<b>MON.SUMMARY</b>	RM Data Summarisation	⋮
<input type="checkbox"/>	<b>MONDISK.D</b>	RM Disk Collection	⋮
<input type="checkbox"/>	<b>MONDISK.F</b>	RM Disk Collection	⋮

#### Actions you can take:

Click ⋮ Show Actions for any job to display options for monitoring and managing it. Depending on the job type and status, you'll have the following options:

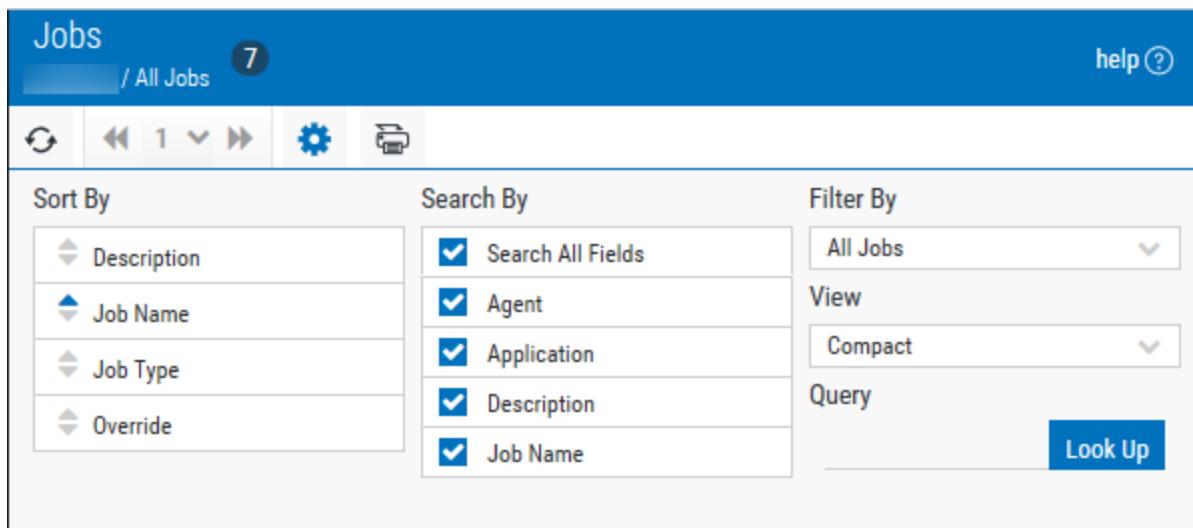
- Select **Do Job Now** to [submit the job for execution](#).
- Select **Start now with this member** to [start group processing at this member](#) job.
- Select **Hold** to [place the job on hold](#).
- Select **Schedule Override** to [override the normal run schedule](#) and control the job manually. The page displays any override code that has been applied.
- Select **Remove Override** to [remove a manual schedule override](#) that has been applied.
- Select **Job Completion History** to see the [completion history for the job](#).
- Select **Job Monitor History** to [view the history for any job monitors](#) that are monitoring this job.
- Select **Where Used** to [see where this job is used](#) - whether it is part of a group, and whether it has any dependent jobs or prerequisite jobs.
- Select **Diagram Job** to [create a job flow diagram](#) for the job.
- Select **Clear Completion Codes** to [clear the completion codes](#) for the job.
- Select **Group Members** to [see a list of members](#) that belong to this group.
- Select **Properties** to [display the job's properties](#).

## Sorting and Filtering the Jobs Display

There are settings for the Jobs page that allow you to choose how to sort the list, what types of data will be searched when you do a search, what filter to use to narrow the list, and the type of data you want to view.

Follow these steps:

1. Click **Settings**.



2. Select how you want the lists sorted (Sort By). Click your selection again to change the sort order to ascending or descending.
3. Select one or more options under **Search By** to narrow the list of items displayed.
4. Select an option under **Filter By** to further narrow the list of items displayed.
5. Select an option under **View** to identify the type of data you want displayed. You can choose from Compact, Forecast, and History.
6. To filter the list by the jobs contained in a query object, type the **Query** object's name in the field, or click **Look Up** to select it from a list.

Query
<b>Look Up</b>

7. Click **Settings** to close the settings.

## Jobs—Icons, Colors, and Symbols

Throughout the Robot Schedule pages, you'll see various icons and colors by the job names. These can help you see the status of the jobs at a glance. They also provide other information about the jobs, such as which override codes have been applied.

Following is a description of the icons that are used:

- A blue icon means the job is submitted or is currently running. **Note:** If you [set the preference](#) to "Show Submitted/Checked-Off Forecast Jobs," those jobs will also have a blue icon on the Schedule Activity page.
- A green icon means that the job completed normally.
- A yellow icon means the job didn't run or that a warning occurred.
- A red icon means the job ended abnormally, such as in a termination, or that there was an error on submit.

- A gray icon means the job was delayed.
- This icon indicates a reactive job.
- This icon indicates a group control job.
- This icon indicates a held job.
- This icon indicates a job with a "Run Next" override.
- This icon indicates a job with an "Omit Next" override.
- This icon indicates a member override, meaning that the override code was applied to the member job at the group level.

## Job

The Job page shows you all the setup information (properties) about an existing job. The page has sections that match the panels/tabs that you see when you create a job in the Explorer or IBM i versions of Robot Schedule. All of the sections are described below, even though the ones you actually see depend on the type of job you selected. In most cases, you see only a few sections. For unusual or more complex jobs, you may see more.

## Section Descriptions

### General

The General section shows the job name, description, job number, override code (if one has been applied), application for the job, job type, any notes or special instructions that were entered, and the job text (if it was entered). The sample below shows the general section for a group job.

### General

Name:	GRP_JOBQ
Description:	Group control - On jobq
Job Number:	000000000512
Application:	TESTING
Type:	Group
Completion History:	Last Ran: 2015-04-28 09:25:20 Last Status: Terminated Duration: 2 minute(s)

If the job is scheduled, its schedule is also displayed. It shows the run times, and whether the job will run on a particular day of the week or month, run at a certain interval, run according to a date object, and so on.

#### Schedule:

Every Week at 07:00 on Mon

#### Command Set

If the job is a command-type job, the Command Set section shows which commands the job will run.

#### Group

If you're working with a group control job, the Group section shows you the group name, and the options that are set for it.

## Group

Group Name:	GRP_JOBQ
Group Control Options for All Jobs:	Yes
Group Control Start Date for All Jobs:	No
Group Processing:	Submit all jobs immediately

To see which members are assigned to it, go to the Groups page. For details, see [Groups](#).

#### Output

The Output sections shows you the output options that are defined for the job. It shows the output queue, print text, number of copies, and other print information for all print files produced by the job.

#### Control

The Control section shows you the job options that have been defined for the job. This includes the job description, job queue, message queue, message reply, library list, user profile, and job priority, among others.

If this job uses a calendar other than the default STANDARD calendar, you can click the calendar object's name to view details about it.

#### Calendar:

→ KF\_F1

See [Calendar Object](#) for more information.

## Reactivity

Reactive jobs only run after certain prerequisite conditions occur. The Reactivity section lists those prerequisite conditions (the prerequisite job that must run and the REACT to status that must be met). A prerequisite job can be a Robot Schedule job, a batch job that runs outside of Robot Schedule, or a job on another system.

The text on the left for each prerequisite job shows the job name and the REACT to status that must be met. If the prerequisite was not satisfied the last time the prerequisite job ran, the actual status that occurred is shown on right.

## Reactivity

Robot Job GRPMBR01 status is Completed.

Robot Job PRE status is Skipped (OPAL).

Completed at 2015-07-01 18:05:00

## Exception Scheduling

The Exception Scheduling section shows any exceptions to the normal job schedule that have been defined for this job. This can include running the job on non-working days, having the job execute only during a specific time range, if the job is a Submit-Delay model job, having an omit date object added to the job's schedule, or the use of an OPAL object to determine when the job runs.

If a date object or an OPAL object was used for the exception scheduling, you can click the object's name to view its details. For more information, see [Date Object](#) or [OPAL Object](#).

Don't run on dates listed in Date Object:

→ [TWDATE](#)

## Job Monitors

You use job monitors to monitor for specific events, such as a job taking too long to complete, completing too quickly, or starting after its scheduled run time. When the job monitor is created, you define the actions Robot Schedule should take if it detects one of the specified events. You use job monitors to help you avoid problems in your job schedule if any of these events occur.

The Job Monitors section displays information about any job monitors that are set to watch this job.

## Agent Environment

The Agent Environment section shows information about the environment on the agent system that this job will run on.

**Note:** You must have Robot Schedule Enterprise installed for section to be displayed.

## Agent Output

The Agent Output section shows how Robot Schedule Enterprise is set up to handle the output files.

**Note:** You must have Robot Schedule Enterprise installed for section to be displayed.

## Actions You Can Take on the Job Page

Click **Actions** on the Job page to display a menu of options. Depending on the job type and status, you'll have the following options:

- Select **Do Job Now** to [submit the job for execution](#).
- Select **Hold** to [place the job on hold](#).
- Select **Remove Override** to [remove a manual schedule override](#) that has been applied.
- Select **Where Used** to [see where this job is used](#) - whether it is part of a group, and whether it has any dependent jobs or prerequisite jobs.

## Date Object

There are two types of date objects: Run Dates, which specify the run dates for jobs using the DATE scheduling method, and Exception Dates, which specify the exception dates to the job's normal run schedule. **Note:** Date objects are created and added to jobs in the Explorer or IBM i versions of Robot Schedule.

To view the Date Object page:

1. In the Navigation Pane, click **Jobs** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it.
2. Click  **Show Actions** for a job that uses a date object. Then, select **Properties**.
3. Locate the date object. Its location depends on its type:
  - A Run Dates type date object is found under Schedule in the General section.

Schedule:

[Run at 10:00 in TWRUN](#)

- An Exception Dates type date object is found under Exception Scheduling at the bottom of the page.

Don't run on dates listed in Date Object:

[→ TWDATE](#)

4. Click the date object's name to view details about it.

The bright blue dates on the calendar are either the run dates or the exception dates, depending on the type of date object you're viewing. (The dimmed dates indicate dates from the end of the previous month and the beginning of the next month).

### Calendar:

July, 2015							August, 2015							September, 2015							October, 2015								
Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su		
29	30	1	2	3	4	5	27	28	29	30	31	1	2	31	1	2	3	4	5	6	28	29	30	1	2	3	4		
6	7	8	9	10	11	12	3	4	5	6	7	8	9	7	8	9	10	11	12	13	5	6	7	8	9	10	11		
13	14	15	16	17	18	19	10	11	12	13	14	15	16	14	15	16	17	18	19	20	12	13	14	15	16	17	18		
20	21	22	23	24	25	26	17	18	19	20	21	22	23	21	22	23	24	25	26	27	19	20	21	22	23	24	25		
27	28	29	30	31	1	2	24	25	26	27	28	29	30	28	29	30	1	2	3	4	5	6	26	27	28	29	30	31	1
3	4	5	6	7	8	9	31	1	2	3	4	5	6	5	6	7	8	9	10	11	2	3	4	5	6	7	8		

5. Click **Close** to return to the Job properties page.

## Calendar Object

Robot Schedule comes with a default STANDARD calendar already defined; you can define any other standard or fiscal calendars that you need. **Note:** Calendar objects are created and added to jobs in the Explorer or IBM i versions of Robot Schedule.

To view the Calendar Object page:

1. In the Navigation Pane, click **Jobs** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it.
2. Click  **Show Actions** for a job that uses a calendar object other than the default. Then, select **Properties**.
3. The calendar object is shown by **Calendar** in the Control section.

### Calendar:

 → KF\_F1

Click the calendar object's name to view details about it.

On the Calendar page, the bright blue dates indicate holidays (for both standard and fiscal calendars) or the end of period dates (for fiscal calendars). The dimmed dates indicate dates from the end of the previous month and the beginning of the next month.

### Holidays:

July, 2015							August, 2015							September, 2015							October, 2015								
Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su		
29	30	1	2	3	4	5	27	28	29	30	31	1	2	31	1	2	3	4	5	6	28	29	30	1	2	3	4		
6	7	8	9	10	11	12	3	4	5	6	7	8	9	7	8	9	10	11	12	13	5	6	7	8	9	10	11		
13	14	15	16	17	18	19	10	11	12	13	14	15	16	14	15	16	17	18	19	20	12	13	14	15	16	17	18		
20	21	22	23	24	25	26	17	18	19	20	21	22	23	21	22	23	24	25	26	27	19	20	21	22	23	24	25		
27	28	29	30	31	1	2	24	25	26	27	28	29	30	28	29	30	1	2	3	4	5	6	26	27	28	29	30	31	1
3	4	5	6	7	8	9	31	1	2	3	4	5	6	5	6	7	8	9	10	11	2	3	4	5	6	7	8		

4. Click **Close** to return to the Job properties page.

## OPerator Assistance Language (OPAL)

The OPerator Assistance Language (OPAL) is a powerful operations language that's part of Robot Schedule.

With OPAL, you can check a variety of tasks, including:

- If an object exists on the IBM i or if the objects has locks.
- If a file has any records in it.
- If printers, workstations, users, controllers, and communication lines are up and running.
- The completion status of any batch job, or whether the job is running.

OPAL lets you set up any type of job-prerequisite requirement. OPAL also can read or update Robot Schedule reserved command variables. This capability gives you two-way communication with other Robot products. It also allows for two-way communications with PCs.

Thus, you can use OPAL to do the following:

- Change any Robot Schedule job to reflect changed conditions.
- Change any job environment object to reflect changed conditions. For example, if one printer is down, you can automatically direct all the night's reports to another printer.
- Change any data area, including the LDA.
- Skip running the job at this time.
- Delay running the job to a later time when conditions can be rechecked.
- Notify an expert using Robot Alert.
- Start another Robot Schedule job – even if it's on a remote system.
- Plus, many more.

This means you can create your own custom advanced scheduling options, advanced job prerequisites, and advanced event monitoring options. You can create exactly what you want using OPAL.

You work with OPAL using the Explorer or IBM i versions of Robot Schedule. Also, see the separate *Robot Schedule OPAL Reference Guide* for more information about using OPAL.

## OPAL Object

The OPerator Assistance Language (OPAL) is the operations language that can be used in Robot Schedule jobs.

OPAL objects are used to specify the exception dates to the job's normal run schedule. For more information on OPAL, see the [OPAL Overview](#). Note: OPAL objects are created and added to jobs in the Explorer or IBM i versions of Robot Schedule.

To view the OPAL Object page:

1. In the Navigation Pane, click **Jobs** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it.
2. Click  **Show Actions** for a job that uses an OPAL object. Then, select **Properties**.
3. Locate the OPAL object.

Execute schedule instructions in OPAL Object:

→ [BEFORENOON](#)

4. Click the OPAL object's name to view details about it.
5. Click **Close** to return to the Job properties page.

## Job Flow Diagrams

With Robot Schedule, you can select a job and create a graphical job flow that shows all the relationships between that job and others, including reactivity and group membership. And, you can view the resulting job flow as a static image, or you can make it "live" and watch the progression of the jobs being submitted and executed.

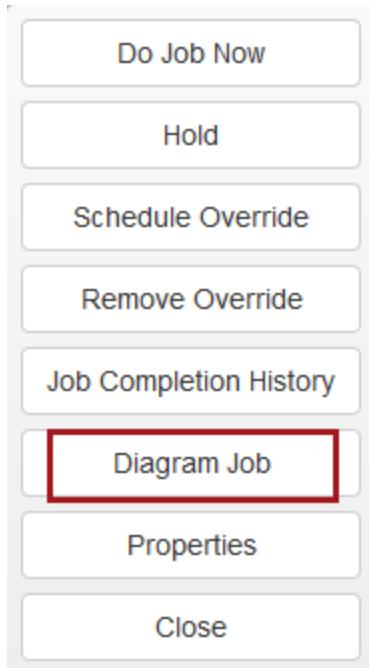
By using the job flow diagrams, you can discover gaps in your schedule where jobs can be added; find inefficiencies in your job schedule quickly; and see the effect of schedule changes before you apply them. You can even export the diagram to an image file that you can email or distribute anywhere. The image can be used to overview your job schedule or to train operators.

### Notes:

- Job flow diagrams are similar to the [reactivity chains](#) that you can create. The difference is that with job flow diagrams, you start with a single job and it shows all the jobs in the flow stemming from the job you selected. Reactivity chains, on the other hand, show only those jobs that react directly with the flow between two jobs you select.
- Job flow diagrams are also similar to the blueprints you can create in the Robot Schedule Explorer version. Job flow diagrams are more powerful in some respects, however, such as being able to watch a live view of the job flow.

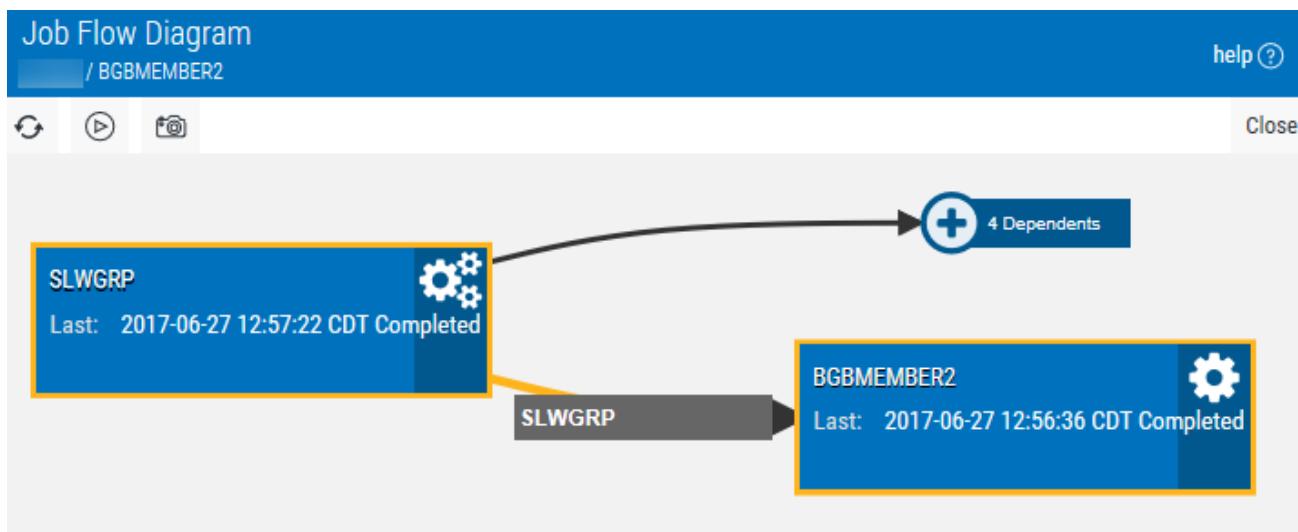
## Creating a Job Flow Diagram

Creating a job flow diagram is simple and can be done from many of the places where you view a job. All you have to do is click  **Show Actions** for the job and select **Diagram Job**.



## Working with Job Flow Diagrams

A job flow diagram is a graphical representation that looks at one job and shows all the relationships between that job and others in the flow around it, including reactivity and group membership.

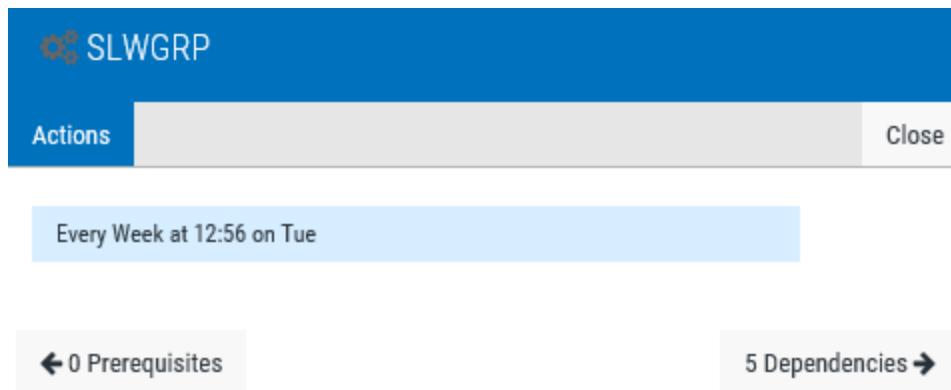


### Things to know and do:

- The job you're diagramming and the server it's on is listed at the top of the page.
- Click Refresh to refresh the information in the display.
- Click Watch Activity to start the live job flow. For details on using it, see [Live Job Flow Diagrams](#). Click Stop Watching Activity to stop the live job flow.
- Click Export to Image to export the diagram to an image file that you can email or distribute

anywhere. You can use the image file to overview your job schedule or to train operators. Keep in mind that if you export a job flow diagram to an image, it's just a snapshot in time of the job schedule. Saved images may be out of date and can reference jobs that are no longer on your system. For current information, always go to the job and [create a fresh job flow diagram](#).

- Click and hold anywhere in a blank spot, then move the diagram to a different spot on the screen.
- To zoom in, double-click on a blank spot on the diagram. You can also use the scroll wheel on your mouse to zoom in and out.
- Click a box to display more information about that job. The information you see varies depending on the job type and status, but includes the job name, description, any override code that has been applied, and the number of prerequisites and dependencies the job has.



#### Notes:

- Click **Actions** to open a menu of actions you can take. See below for details.
- Click **Prerequisites** or **Dependencies** to make those jobs visible on the job flow diagram.
- Click **Close** to close the diagram.

#### Actions you can take:

Click **Actions** to display the following options for monitoring and managing the job:

- Select **Do Job Now** to [submit the job for execution](#).
- Select **Start now with this member** to [start group processing at this member](#) job.
- Select **Hold** to [place the job on hold](#).
- Select **Schedule Override** to [override the normal run schedule](#) and control the job manually. The page displays any override code that has been applied.
- Select **Remove Override** to [remove a manual schedule override](#) that has been applied.
- Select **Job Completion History** to see the [completion history for the job](#).
- Select **Diagram Job** to [create a job flow diagram](#) for the job.
- Select **Properties** to [display the job's properties](#).

## Symbols and Colors in the Job Flow Diagram

Job flow diagrams use different symbols and colors to represent information about the jobs, events, and relationships.

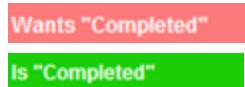
The symbol in the upper right corner of a box shows what type of job or event it is:

- Indicates a command job.
- Indicates a group control job.
- Indicates a user job.
- Indicates an event.
- Indicates an agent event.

The symbol in the lower right corner of a box shows whether an override code has been applied:

- Indicates the job is on hold.
- Indicates a Run Next override code.
- Indicates an Omit Next override code.

If the diagram contains prerequisite and reactive jobs, the line connecting the two indicates whatever React to status is defined for the prerequisite job. Red means the prerequisite status hasn't been met, green means it has been met.



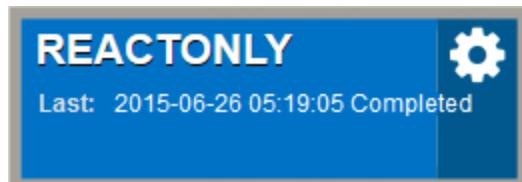
If there are prerequisite or dependent jobs that aren't visible in the diagram, click them to expand the diagram.



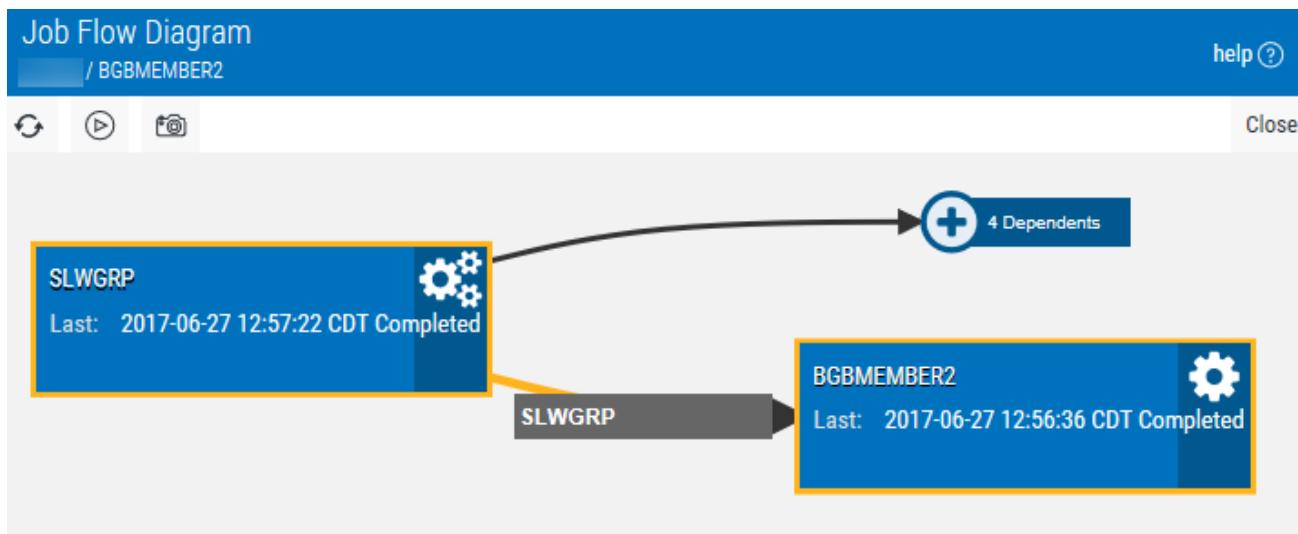
If the diagram contains group jobs, the line coming from the group control job or the member job shows the group name in gray.



The lines and colors also have meaning. The job that was diagrammed is outlined in gray, unless it's in focus (see below).



Hover your mouse over a job in the diagram to put that part of the job flow in focus. Those jobs have orange outlines and lines.



## Live Job Flow Diagrams

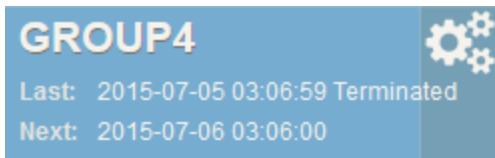
A live job flow diagram allows you to watch the progression as jobs are submitted and executed. It makes it easy to see problem areas in the job flow that may need attention. It's important to note that *the live job flow diagram is not a simulation*—it's a visual representation of live jobs that are actually running. There are two ways you might use the live job flow:

- You're interested in a particular job flow and the initial job is scheduled. Shortly before its scheduled run time, you [diagram the job](#) and start the live job flow so you can watch the activity as it's submitted and runs.
- You're interested in a particular job flow. So, you diagram the initial job, then manually submit it to run (click the job, click **Actions**, then select **Do Job Now**). You can then watch the activity as it's submitted and runs.

Many of the symbols, colors, and actions you can take are the same between the live job flow and the static one (for details, see [Working with Job Flow Diagrams](#) and [Symbols and Colors in the Job Flow Diagram](#)). The differences are described below.

Live job flows:

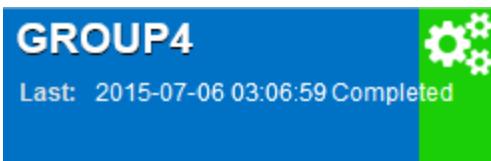
- Click **Watch Activity** to start the live job flow. Click **Stop Watching Activity** to stop the live action.
- The display automatically refreshes every 30 seconds. To manually refresh it, click **Refresh**.
- A shaded box means the job hasn't been submitted since you started the live action.



- A border around the box, shows that the job is either submitted or running.



- Yellow means the job has been submitted.
- Gray and pulsing means the job is running.
- The color of the banner on the right also has meaning.



- Dark blue means the job hasn't been submitted yet or is currently running.
- Green means the job completed normally.
- Yellow means the job is waiting.
- Red means either there was an error on submit or else the job completed abnormally.
- Black means the job is pending.
- Gray means the job is delayed.

## Schedule Override Codes

Robot Schedule lets you override the normal run schedule for a job as needed. You can do this from the Jobs list or from several other pages in the product.

To specify a schedule override code, click Show Actions for the job and select the code or select **Schedule Override** for more options. The code temporarily overrules the run schedule for the job, but doesn't permanently change it.

Follow the links below for an explanation of each override code. **Note:** All the available override codes are listed below. The actual override codes you might see for a specific job depend on the job's type and status.

[Do job now](#)

[Hold](#)

[Hold application](#)

[Omit job next time](#)

[Run job next time](#)

[Release application](#)

[Remove override](#)

[Start now with this member](#)

## Do Job Now

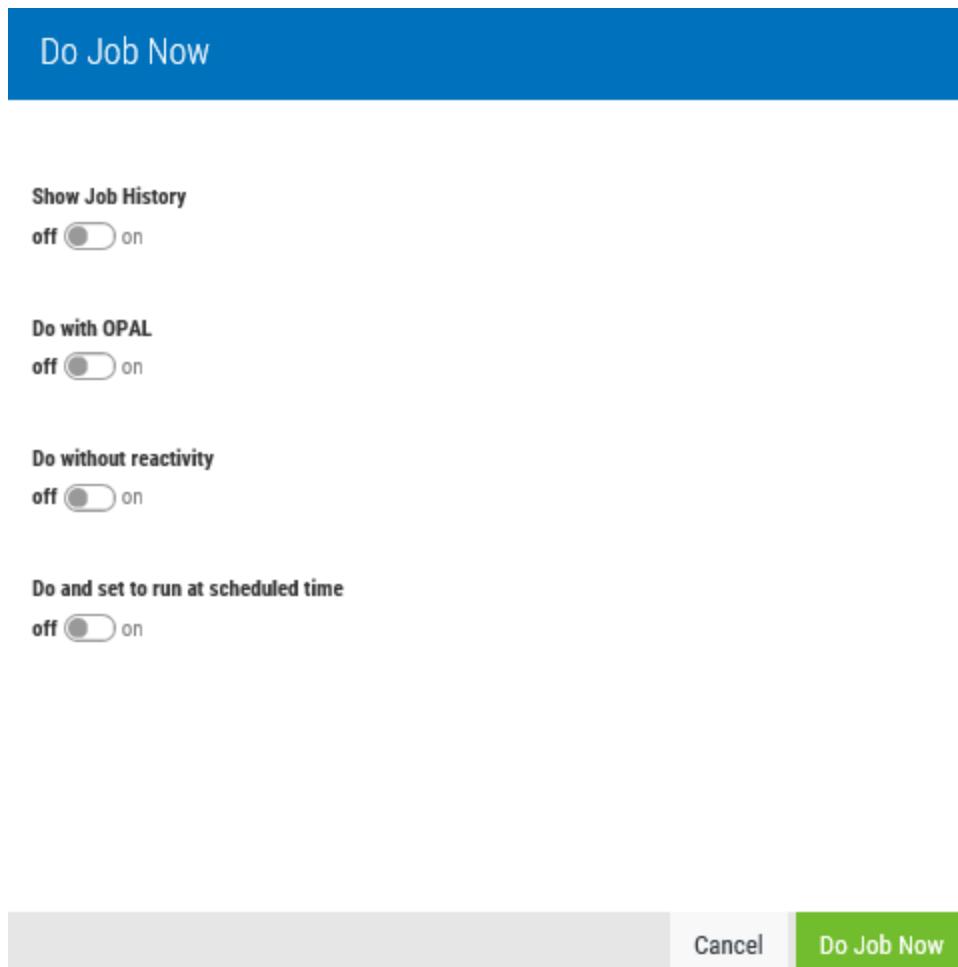
The **Do Job Now** override code allows you to run most jobs immediately, even if the Robot Schedule monitors are not active. The exceptions are as follows:

- Group control jobs: The Robot Schedule monitors must be active for the jobs to run.
- Submit-Delay model jobs: The Do Job Now option is not allowed.
- Reactive jobs: The job runs, but any reactive jobs won't run until the Robot Schedule monitors are active.

When you select Do Job Now, all exception scheduling options are ignored. This includes the OPAL object, if the job has one. However, you can override this by using the Do with OPAL option.

If you have the proper authority, you can apply the Do Job Now override code from certain pages in Robot Schedule, such as the Jobs page. Follow these steps:

1. Click  **Show Actions** for the job and select **Do Job Now**.
2. Click the **Show Job History** button to **On** if you want to see the Completion History page after this job is submitted.



3. Click the **Do with OPAL** button to **On** to also execute the OPAL code in this job. Depending on how the OPAL is set up, the job will run before or after the OPAL is executed.

4. Click the **Do without reactivity** button to **On** to simply run the job this time without any reactivity occurring. This means that any dependent jobs would not run.
5. Click the **Do and set to run at scheduled time** button to **On** to run the job immediately and then again at its normally scheduled time.
6. Click **Do Job Now**.

**Notes:**

- After the job run completes, the job completion history is updated. If it's scheduled to run only once in a day, the job is not run again the same day unless you [clear its completion code](#) (its normal schedule resumes the next day).
- If the Robot Schedule monitors are active and the job is a group control job, the Do Job Now override code causes Robot Schedule to submit the group. All job options, including exception scheduling options (even OPAL), process normally. If you want to start a dependent group with a specific member and continue through the rest of the group, use the [Start Now with this Member](#) override code instead.
- If the job has its own LDA (local data area) record, selecting Do Job Now submits the job and the LDA record. If there is no LDA record for the job, the Do Job Now override code submits the job with the LDA from your interactive job.
- If you select the Do Job Now override code and then, later in the same day, select the "Do and set to run at scheduled time" option, the job's completion is not cleared because the job ran earlier in the day.
- If you select the "Do and set to run at scheduled time" option on an OPAL delay job, the job may not clear the completion code. OPAL delay jobs are temporary jobs and are created separately from the original job.

## Holding and Releasing Jobs

You can hold or release jobs and their associated spooled files from the Jobs page and several other pages in Robot Schedule. Use the Hold override code to keep the job from running. The job won't run until after you remove the override.

A red icon indicates that a job is being held.

### To hold a single job:

1. Click **Show Actions** for the job and select **Hold**.
2. If this is an active job, you're asked if you also want to hold all the spooled files (the default setting). Check the box to do so, though this doesn't prevent them from printing.
3. Click **Hold**.
4. Refresh the page to see the change in status.

### To release a single job:

Click **Show Actions** for the job and select **Remove override (or Release)**.

Refresh the page to see the change in status.

### To hold multiple jobs:

1. Check the box by each job you want to hold.
2. Click **Hold**.
3. If any of the jobs are active, you're asked if you also want to hold all the spooled files (the default setting). Check the box to do so, though this doesn't prevent them from printing.
4. Click **Hold**.

### To release multiple jobs:

1. Check the box by each job you want to release.
2. Click **Remove Override**.

## Holding and Releasing Applications

You can hold or release all the jobs in an application from pages in Robot Schedule, such as the Jobs page. When you use the Hold override code to keep the jobs in an application from running, none of the jobs will run until after you remove the override from the application or from an individual job.

A red icon  indicates that a job is being held.

### To hold all the jobs in a single application:

1. Click  **Show Actions** for one of the jobs in the application, and select **Select Override**.
2. Select **Hold Application**, then click **Override**.
3. If there are active jobs in the application, you're asked if you also want to hold all the spooled files (the default setting). Check the box to do so, though this doesn't prevent them from printing.
4. Click **Yes** to confirm the request.

### To release all the jobs in a single application:

1. Click  **Show Actions** for one of the jobs in the application, and select **Select Override**.
2. Select **Release Application**, then click **Override**.
3. Click **Hold** to confirm the request.

### To hold all the jobs in multiple applications:

1. Check the box by a job in each of the applications you want to hold.
2. Click **Override**.
3. Select **Hold Application**, then click **Override**.
4. If there are active jobs in the applications, you're asked if you also want to hold all the spooled files (the default setting). Check the box to do so, though this doesn't prevent them from printing.
5. Click **Yes** to confirm the request.

### To release all the jobs in multiple applications:

1. Check the box by a job in each of the applications you want to release.
2. Click **Override**.
3. Select **Release Application**, then click **Override**.

4. Click **Yes** to confirm the request.

## Omit Job Next Time

You can omit a job's next scheduled run time from pages in Robot Schedule, such as the Jobs page. Use the Omit Job Next Time override code to keep the job from running at its next scheduled time. After that time has passed, Robot Schedule removes the override code and the normal schedule resumes.

**Note:** The Omit Job Next Time override code acts like a normal completion. If you have a reactive job waiting for a completion code of C from the job you're overriding, the Omit Job Next Time override code will kick off the reactive job.

This icon  indicates that a job has a schedule override of Omit Job Next Time.

To omit the next run time for a single job:

1. Click  **Show Actions** for the jobs, and select **Select Override**.
2. Select **Omit Job Next Time**, then click **Override**.
3. Click  **Refresh** to refresh the information in the display.

To omit the next run time for multiple jobs:

1. Check the box by each job you want to omit.
2. Click **Override**.
3. Select **Omit Job Next Time**, then click **Override**.

## Run Job Next Time

Use the Run Next Time override code to run a job at its next run time, regardless of any other scheduling options, such as Daily/Weekly, Advanced Scheduling, or Exception Scheduling. For example, if a job is scheduled to run at 9:00 and 11:00 Monday through Friday and you enter the Run Next Time override code at 15:00 on Friday, the job will run at 9:00 on Saturday.

**Note:** If the job was put on hold before you selected the Run Next Time override code, it's put back on hold after the job run completes. If the job was not on hold, it returns to its normal run schedule.

This icon  indicates that a job has a schedule override of Run Job Next Time.

**To run a single job at its next run time:**

1. Click  **Show Actions** for the jobs, and select **Select Override**.
2. Select **Run Job Next Time**, then click **Override**.

**To run multiple jobs at their next run times:**

1. Check the box by each job you want to run at their next run time.
2. Click **Override**.
3. Select **Run Job Next Time**, then click **Override**.

## Remove Override

Use the Remove Override code to remove any schedule override code on the job. **Note:** This does not remove member overrides. Also, if the job is part of an application that had a Hold Application override code applied to it, only that job will be released, any other jobs in the application will remain on hold.

To remove the override code on a single job:

1. Click  **Show Actions** for the jobs, and select **Remove Override**.
2. Select **Run Job Next Time**, then click **Override**.
3. Click  **Refresh** to refresh the information in the display.

To remove the override codes on multiple jobs:

1. Check the box by each job you want to run at their next run time.
2. Click **Override**.
3. Select **Run Job Next Time**, then click **Override**.

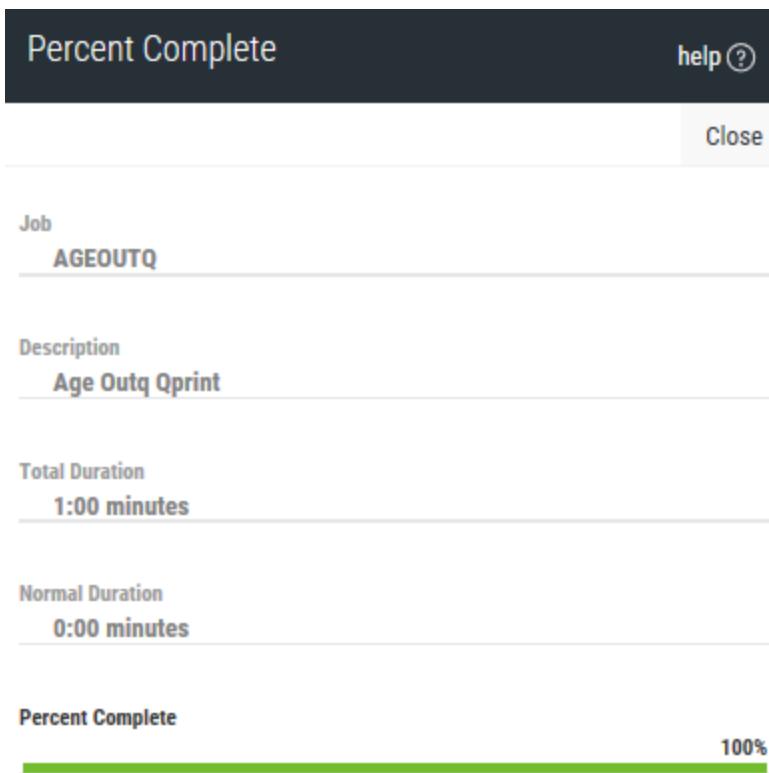
## Percent Complete

Use the Percent Complete option to display the job's current completion percentage based on the job's average run duration (a job that's completed is 100 percent). This can be useful for troubleshooting jobs.

To display the completion percentage for a job:

1. Click  **Show Actions** for the job and select **Percent Complete**.

The Percent Complete window displays the job name, description, the total duration time (actual) amount of time the job has been running, and the normal duration (average) time required for the job to complete.



2. Click **Close** to close the window.

## Creating a Query Object and Adding Jobs To It

Queries help you narrow down a list of jobs to only those jobs that meet certain comparison criteria. For the purposes of critical job lists, the query contains simple comparison criteria that finds data about any of the jobs you add to it. For more on queries, see the user guide for the Explorer or IBM i version of Robot Schedule. **Note:** This procedure describes how to add a query object using Robot Schedule for Insite. You can also [remove a job from a query object](#). Any other changes to query objects must be made using either the Explorer or IBM i versions of Robot Schedule.

In Robot Schedule for Insite, you use query objects to add jobs to a critical job list.

Follow these steps to create a query object and add jobs to it:

1. To create the query object, follow the procedure to [add or edit a critical job list](#), being sure to type the new query object name by the system where it should be located.
2. After you've created the query object, click **Home** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it.
3. Select the jobs you want included. **Note:** Query objects can contain a maximum of 99 criteria. Using this procedure to add jobs to a query object adds one criteria per job.

The screenshot shows the 'Jobs' interface. At the top is a yellow header bar with buttons for 'Cancel', 'Hold', 'Override', 'Remove Override', and 'Add to Query'. Below the header is a toolbar with icons for refresh, search, and print. A search bar contains the placeholder 'Search...'. The main area displays a list of jobs in a table format:

<input checked="" type="checkbox"/>	<b>AGEOUTQ</b>	<span style="color:red;">Held</span> Age Outq Qprint
<input checked="" type="checkbox"/>	<b>AGEQEJOB</b>	<span style="color:red;">Held</span> Age Outq QEJOBLOG
<input type="checkbox"/>	<b>AT122</b>	<span style="color:red;">Held</span> Test AT122
<input checked="" type="checkbox"/>	<b>BGBDLY</b>	

4. Click **Add to Query**.
5. Find and click the query object you want. The jobs are added to it.

You can now use the critical job list that uses this query object to monitor and manage the jobs on it. You can also use the critical job list as a filter when setting up dashboard widgets and when working with certain pages.

## Removing Jobs from a Query Object

You can remove one or more jobs from a query object.

Follow these steps:

1. In the Navigation Pane, click **Jobs** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it.
2. Click **Settings**.
3. Either type the **Query** object's name in the field, or click **Look Up** to select it from a list.

The screenshot shows the 'Jobs' interface with the 'Settings' dialog open. The dialog has three main sections: 'Sort By', 'Search By', and 'Filter By'.

- Sort By:** Contains dropdown menus for 'Description', 'Job Name', 'Job Type', and 'Override'.
- Search By:** Contains checkboxes for 'Search All Fields', 'Agent', 'Application', 'Description', and 'Job Name', all of which are checked.
- Filter By:** Contains dropdown menus for 'All Jobs', 'View' (set to 'Compact'), and a 'Query' field containing 'BGBTTEST'. Below the 'Query' field is a 'Look Up' button.

Click **Settings** to close the settings.

- Select the jobs you want to remove and click Remove from Query.

The screenshot shows a software interface for managing job overrides. At the top is a toolbar with buttons for 'Cancel', 'Hold', 'Override', 'Remove Override', and 'Remove from Query'. Below the toolbar is a search bar with the placeholder 'Search...'. The main content area shows a hierarchical list. Under the group 'BGBDLY', there are two items: 'BGBMEMBER1' and 'BGBMEMBER2', both of which are checked (indicated by a blue background and a checked checkbox icon). To the right of each item is the text 'App: BGB'.

## Job Where Used

The Job Where Used page gathers information about a job's group membership, dependencies, and prerequisites and displays it all on one page.

To view the Job Where Used page, click Show Actions for the job and select **Where Used**.

**Things to know and do:**

- Click Refresh to refresh the information in the display.
- If the selected job is a member of a group, it's listed under Group Membership. You can see the group name and group description.

### Group Membership:

GROUP6      Group with Reactivity



[See below](#) for a description of the actions you can take on the group.

- If the selected job has Dependent Jobs, they're listed in that section. A dependent job will react to a specific status from the selected. Another way of putting it is that the selected job is a prerequisite for the dependent job. On this page, you can see the dependent job's name and the status it will react to.

### Dependent Jobs:

DATELIST reacts to Error on Submit status



DLTHSTLOG reacts to Error on Submit status



[See below](#) for a description of the actions you can take on a dependent job.

- If the selected job has prerequisite jobs, they're listed under Prerequisites. The selected job will react to a specific status from its prerequisite. You can see the prerequisite job name, the prerequisite react to status that must be met, and group description. Prerequisites that have been met are green; those

that haven't been met are red.

Prerequisites:

Event KETS occurred.

Robot Job INDAY status is Completed.

Completed at 2015-07-06 02:02:00

**OR**

Robot Job GROUP2 status is Completed.

Completed at 2015-07-06 08:02:00

[See below](#) for a description of the actions you can take on a prerequisite job.

**Actions you can take on a group:**

Click  Show Actions for the group to display the menu. You'll have the following options:

- Select **Do Job Now** to [submit the group for execution](#).
- Select **Hold in Group** to [place the group on hold](#).
- Select **Override in Group** to [override the normal run schedule](#) and apply an manual override at the group level. The page displays any override code that has been applied.
- Select **Remove Override in Group** to [remove a manual schedule override](#) that has been applied at the group level.
- Select **Job Completion History** to see the [completion history for the group control job](#).
- Select **Where Used** to see where this group control job is used.
- Select **Properties** to [display the group control job's properties](#).

**Actions you can take on a dependent job:**

Click  Show Actions for any dependent job to display the menu. You'll have the following options:

- Select **Job Completion History** to see the [completion history for the dependent job](#).
- Select **Properties** to [display the dependent job's properties](#).

**Actions you can take on a prerequisite job:**

Click  Show Actions for any prerequisite job to display the menu. You'll have the following options:

- Select **Insert Status** to [change the status of the prerequisite job](#) so the selected reactive job can run.
- Select **Job Completion History** to see the [completion history for the prerequisite job](#).
- Select **Where Used** to see where this prerequisite job is used.
- Select **Properties** to [display the prerequisite job's properties](#).

## Changing the Completion Status

The Job Where Used page shows the last status of a prerequisite job or event. That status must match the prerequisite status before the reactive job will run. If necessary, you can manually change the prerequisite completion status so that the reactive job will run. Following is a list of the valid statuses you can choose from on the Insert Status page. The single-character status codes from the Explorer and IBM i versions of Robot Schedule are also listed below.

Job statuses:

- B Blank - Robot Schedule clears the status automatically each time the reactive job could run, unless you use the Keep option.
- C Completed - Indicates the job completed normally.
- D Delay (OPAL) - Indicates the job is delayed. Use this status only with jobs that have OPAL objects.
- K Skipped (OPAL) - Indicates the job was skipped. Use this status only with jobs that have OPAL objects.
- P Pending (OPAL) - Indicates the job is pending. Use this status only with jobs that have OPAL objects.
- R Running - Indicates the job is running.
- S Submitted - Indicates the job was submitted to the job queue.
- T Terminated - Indicates that the job ended abnormally in a termination.

Event statuses:

- B Blank - Robot Schedule clears the status automatically each time the reactive job could run, unless you use the Keep option.
- \* Occurred - Indicates that the event occurred.

These codes affect only the prerequisite list; they do not update the Robot Schedule completion history or weekly completion log.

Follow these steps to manually change the actual completion status of a prerequisite job or event:

1. Click **Jobs** under the Robot Schedule menu.
2. Find the reactive job that has the prerequisite with the status you need to change. For instructions on finding a specific job, see [Jobs](#).
3. Click  Show Actions for the reactive job and select **Where Used**.
4. Click  Show Actions for the prerequisite job or event and select **Insert Status**.

**Note:** Under Prerequisites, the status shown on the left is the prerequisite status that's required for the reactive job to run. If the actual status is different from the required status, it's shown on the right ("Skipped (OPAL)" in the above image).

5. Select the new status for the prerequisite.
6. Optional: If the prerequisite is an event, You can enter Event Data that describes what triggers the event; a file name, for example

7. Click **Insert Status**.
8. Click  **Refresh** on the Job Where Used page to refresh the display. If the actual status of the prerequisite matches the required status for the reactive job to run, the status is only displayed on the left.
9. Click **Close** to return to the Jobs page.

# Groups

## Groups—Overview

Robot Schedule lets you group several jobs together under the control of a group control job. The group control job contains the run schedule for the group; it can also contain the control options for all jobs in the group. By entering those values only once, you save time and avoid errors. **Note:** While you can monitor and manage your groups in Robot Schedule for Insite, you create and edit them in the Explorer or IBM i versions of the software.

Groups are very flexible. When you're running a job as a member of the group, you can use exception scheduling options to create exceptions to the schedule on the group member record. For example, you can attach a date object to the member that indicates dates the member should NOT run. The group continues just as if the member were no longer part of the group. In addition, you can attach OPAL objects that can skip or delay a job unless conditions are just right.

If you have Robot Schedule on a remote IBM i, group members can reside on those systems. The capability to include group members on remote systems allows you to have a master job that controls the running of remote Robot Schedule jobs. If you have Robot Schedule Enterprise, you can do the same thing with your Windows, UNIX, and Linux servers. Jobs that run on your servers can be part of a group. In fact, you could have a group control job that controls nothing but server jobs.

The group control job shows a status of running until all members of the group, including members on remote systems, end. If all the jobs in the group complete normally, the group control job shows a status of Completed (C) on the Group History page. If any member ends abnormally, the group control job shows a status of Terminated (T).

**Tip:** We recommend that you limit the number of jobs in a group to a maximum of 99. If you have a larger number of jobs that you logically group together, you can set them up in multiple groups so that one group control job reacts to the completion of another. Since the group control job does not have a status of Completed until the last member finishes normally, it makes it easy to have another group control job react to the completion of the first. In addition, you can change which jobs are members of a group without affecting the group that reacts to it.

There are two different types of groups in Robot Schedule: dependent and independent. They're described below.

## Dependent Groups

The most common type of group is a dependent group. You might have a dependent group that controls the execution of procedures. You can easily enter procedures such as monthly, quarterly, and annual closings as dependent group jobs.

By scheduling these procedures as group jobs, you can document their submission options, programs, and processing sequence. And, you can enter job text to further document each job. Robot Schedule runs the procedure exactly as you have instructed, and you have the benefit of crash protection.

A dependent group provides crash protection because Robot Schedule stops processing the group if any job in the group fails. The next job in the group is not submitted until the previous job has completed successfully. Each job in the group is dependent on the jobs before it.

### Example

If a program in your group of monthly closing procedures fails, Robot Schedule can stop processing the group and notify you. You can then fix the problem and restart the group at any job in the group. To do so, you just select the schedule override code [Start now with this Member](#) for the job. Robot Schedule resumes processing the group at the selected job.

## Independent Groups

The second type of group is called an independent group. With this type of group, Robot Schedule submits all jobs in the group at the same time. The jobs in the group are not dependent upon each other; each job runs without regard to the completion status of the other jobs in the group.

## Groups

You can group several jobs together under the control of a group control job. The group control job contains the run schedule for the group; it can also contain the control options for all jobs in the group. You can even apply schedule override codes at the group level.

The Groups page lists the groups that have been created in the Explorer or IBM i versions of Robot Schedule. It also lists the jobs that are members of each group.

## Viewing Groups and Group Members

In the Navigation Pane, click **Groups** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it.

### Things to know and do:

- The total number of groups listed and the server they're on is displayed at the top of the page.
- To see a group's member jobs, click  **Expand** by the group name. Click  **Collapse** to collapse the member list.
- Click  **Refresh** to refresh the information in the display.
- Click the page number and select the page you want to view. Or, click the previous and next arrows.
- Click  **Print Groups** to view the list of groups and group members in HTML format. (**Note:** You may have to disable your pop-up blocker in order to view the report.) You can then print it using your browser's print function.
- Start typing in the Search field to find a specific group. It will find every group name, group control job, and description that contains what you're typing. See [Sorting and filtering](#) below to learn how to filter your search.

The screenshot shows a software interface titled "Groups" with a blue header bar. On the right side of the header is a "help ?" button. Below the header is a toolbar with icons for refresh, back, forward, search, and print. A search bar labeled "Search..." is positioned below the toolbar. The main content area displays a list of groups and their member jobs. Each group entry includes a plus sign icon, the group name, and its schedule. To the right of each group entry is a vertical ellipsis menu. The groups listed are:

- SLWGROUP (SLWGROUP)** Every Week at 13:59 on Mon, and Wed
- SLWGRP (SLWGRP)** Every Week at 12:56 on Tue
- BGBMEMBER1** BGBMEMBER1
- BGBMEMBER2** BGBMEMBER2
- BGBMEMBER3** BGBMEMBER3
- BGBMEMBER4** BGBMEMBER4
- BGBMEMBER5** BGBMEMBER5

You can take actions on both the group and the member jobs.

#### Actions you can take on the group control jobs:

Click **Show Actions** by any group to display the following actions that you can take:

- Select **Do Job Now** to [submit the group control job for execution](#).
- Select **Hold** to [place the group control job on hold](#). Only the group control job is affected. If one of its member jobs is scheduled to run outside of the group, it will still run.
- Select **Schedule Override** to [override the normal run schedule](#) and control the group control job manually. The page displays any override code that has been applied. These overrides only apply to the group control job, not its member jobs.
- Select **Remove Override** to [remove a manual schedule override](#) that has been applied. Only the override on the group control job will be removed. Its member jobs are not affected.
- Select **Job Completion History** to see the [completion history for the group control job](#).
- Select **Where Used** to [see where the group control job is used](#) - whether it's part of another group, and whether it has any dependent jobs or prerequisite jobs.
- Select **Diagram Job** to [create a job flow diagram](#) for the group control job.
- Select **Properties** to [display the group control job's properties](#).

#### Actions you can take on the member jobs:

Click **Show Actions** for any member job to display actions you can take. Depending on the job type and status, you'll have the following options:

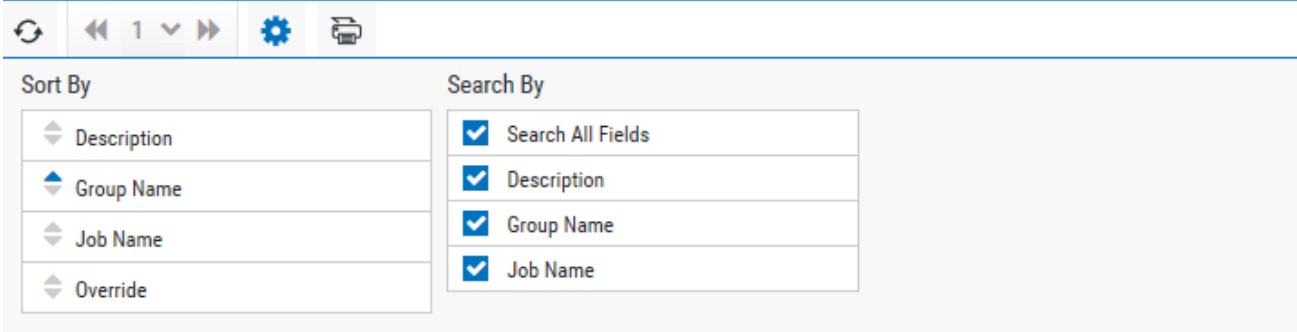
- Select **Start now with this member** to [start group processing at this member](#) job.
- Select **Hold in Group** to [place the member job on hold](#) within this group. If the member job also has a standalone run schedule outside of the group, it will still run on that schedule.
- Select **Override in Group** to [override the normal run schedule](#) and control the member job manually. The page displays any override code that has been applied. These overrides only apply to the member job within the group. If the member job has a standalone run schedule outside of the group, that schedule still applies.
- Select **Remove Override in Group** to [remove a manual schedule override](#) that has been applied to this member job. Only the override that was applied within the group will be removed. Any override applied to this member job outside of the group will remain.
- Select **Where Used** to [see where the member job is used](#) - whether it's part of another group, and whether it has any dependent jobs or prerequisite jobs.
- Select **Diagram Job** to [create a job flow diagram](#) for the member job.
- Select **Properties** to [display the member job's properties](#).

## Sorting and Filtering the Display

There are settings for the Groups page that allow you to choose how to sort the list, and what types of data will be searched when you do a search.

Follow these steps:

1. Click  **Settings**.



The screenshot shows a 'Settings' dialog box with two main sections: 'Sort By' and 'Search By'. The 'Sort By' section contains a list of fields with arrows to change the sort order: Description, Group Name, Job Name, and Override. The 'Search By' section contains a list of fields with checkboxes: Search All Fields, Description, Group Name, and Job Name. All checkboxes in the 'Search By' section are checked.

2. Select how you want the lists sorted (Sort By). Click your selection again to change the sort order to  ascending or  descending.
3. Select one or more options under **Search By** to narrow the list of items displayed.
4. Click  **Settings** to close the settings.

## Start Now with This Member

Use the Start Now with This Member override code if you want to start a dependent group with a specific member and continue through the rest of the group, rather than rerunning the entire group.

Follow these steps:

1. Click  **Show Actions** for the member job and select **Start now with this member**.
2. If this member job belongs to more than one group, select which groups you want to start it in. You

can select more than one.

3. Click **Start Now**.

## Group Members

Groups allow you to control several jobs together. The jobs within a group control job are called members. This page is one place you can see which jobs are members of a particular group.

### Viewing Group Members

In the Navigation Pane, click **Jobs** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it. Then, click **Show Actions** for a group control job and select **Group Members**.

**Things to know and do:**

- The group control job name and the server it's on is displayed at the top of the page.
- Click **Refresh** to refresh the information in the display.
- Start typing in the Search field to find a specific member job. It will find every member that contains what you're typing.
- Any override codes that have been applied to a member at the group level are displayed.

The screenshot shows a software interface titled "Group Members" with a blue header bar. The header includes the title, a search bar, and a "help ?" link. Below the header, there is a refresh button. A search bar with a magnifying glass icon is present. The main content area displays two member jobs in a table format:

Member Job	Status	User	Action
SLWMEMBR1	test	OPAL: SLWADMIN	
SLWMEMBR2	test		

**Actions you can take:**

Click **Show Actions** for any member job to display actions you can take. Depending on the job type and status, you'll have the following options:

- Select **Hold in Group** to place the member job on hold within this group. If it's scheduled to run outside of the group, it will still run.
- Select **Override in Group** to override the normal run schedule and control the member job manually. The page displays any override code that has been applied. These overrides only apply to the member job within the group. If it's scheduled to run outside of the group, that schedule still applies.

- Select Remove Override in Group to [remove a manual schedule override](#) that has been applied to this member job. Only the override that was applied within the group will be removed. Any override applied to this member job outside of the group will remain.
- Select Where Used to [see where the member job is used](#) - whether it's part of another group, and whether it has any dependent jobs or prerequisite jobs.
- Select Diagram Job to [create a job flow diagram](#) for the member job.
- Select Properties to [display the member job's properties](#).

## Override Codes for Groups

You can apply schedule override codes to group control jobs or to individual group members. When you apply these override codes from the [Groups page](#) or the [Member Jobs](#) page, they're applied at the group level and affect the group run schedule.

Override codes applied at the group level are indicated by a Member Override icon  on the [Jobs page](#). To see what kind of override was applied, go to the [Groups page](#).

## Applying an Override Code to a Group Control Job

From the [Groups page](#), click  **Show Actions** by any group to select one of the following override codes for it:

- Do Job Now: Runs the group immediately.
- Hold: Holds the entire group.
- Omit Job Next Time: Omits the group on the group's next scheduled run time. (This option is found under Schedule Override.)
- Run Job Next Time: Runs the group on the group's next scheduled run time. (This option is found under Schedule Override.)
- Remove Override: Removes the group's override code. **Note:** Any override codes that were applied outside of the group control job (for example, from the Jobs page, or at the member level) will remain in effect.

## Applying an Override Code to a Member Job

A job can have both an individual run schedule and be a member of one or more groups. You can apply schedule override codes at either level: individual or group. Member overrides are applied at the group level and do not affect a member job's individual run schedule (if it has one). This section describes applying member override codes at the group level. For information on applying schedule override codes at the individual level, see [Schedule Overrides](#).

First, you must find the member job on either the [Groups page](#) or the [Member Jobs](#) page. Then, do one of the following:

- From the Groups page, expand the group the member belongs to. Then, click  **Show Actions** by the member and select an override code.
- From the Member Jobs page, click  **Show Actions** by the member and select an override code.

Select from the following schedule override codes for the group member:

- Start now with this Member: Start group processing at this job. This code works only for dependent groups; that is, only when group processing stops when a job in the group fails. If a group is set to run all members at once, this won't work.
- Hold in Group: Hold this job; Robot Schedule skips this member job each time it runs the group as if it wasn't part of the group.
- Omit Job Next Time: Omit this member job the next time the group runs. (This option is found under Override in Group.)
- Run Job Next Time: Run this member job the next time the group runs. (This option is found under Override in Group.)
- Remove Override in Group: Remove any member override code on this job that was applied at the group level. **Note:** Any override codes that were applied outside of the group (for example, codes applied from the Jobs page if this member job has an individual run schedule outside of the group) will remain in effect.

To run the job immediately as a standalone job, not as a member of the group, go to the [Jobs page](#) and apply the Do Job Now override code.

# History

Robot Schedule provides a wide variety of history records to help you troubleshoot your job schedule. You can find records on the following:

[Job completion history](#)

[Group history](#)

[Job monitor history](#)

[Event history](#)

## Job Completion History

The Completion History page lists information about job runs on the system. It displays information about the actual start and end times for each job; the job's status (running, completed, terminated, warning message), the agent the job ran on, its group (if it belongs to one or is the group control job), and application. It also provides access to completion history details, job attribute information, and any spooled files.

## Displaying the Completion History Page

You can display completion history from a number of pages in Robot Schedule. And, you can display it for all jobs or for a specific job.

To display Completion History for all jobs: In the Navigation Pane, click **Completion History** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it.

To display Completion History for a single job: Click  **Show Actions** for a job on a page such as [Jobs](#). Then, select **Job Completion History**.

## Viewing the Completion History Page

Regardless of whether you're viewing all of the completion history or the history for a single job, the page functions are the same.

### Things to know and do:

- The number of records in the list, the server they're on, and the filter being used is displayed at the top of the page.
- Click  **Refresh** to refresh the information in the display.
- Click the page number and select the page you want to view. Or, click the previous and next arrows.
- Click  **Print Completion History** to view the Completion History list in HTML format. You can then select all the records (**Ctrl+A**) and copy it (**Ctrl+C**) to paste it into a spreadsheet. **Note:** You may have to disable the pop-up blockers in your browser to view the list.
- Start typing in the Search field to find a specific record. It will find every job name, description, agent, group, or application that contains what you're typing. See [Sorting and filtering](#) below to learn how to filter your search.

The screenshot shows the 'Completion History' page with the following details:

- AGEOUTQ on FLYNN**: Status: Running for 138 minute(s). Submitted on 2017-11-21 09:02:30 by App: DDESMIDT.
- DDMAXRUN on FLYNN**: Status: Running for 56117 minute(s). Submitted on 2017-10-13 12:04:04 CDT by App: DDESMIDT.
- DDMAXRUN on FLYNN**: Status: Running for 56118 minute(s). Submitted on 2017-10-13 12:02:58 CDT by App: DDESMIDT.
- DDMAXRUN on FLYNN**: Status: Running for 56119 minute(s). Submitted on 2017-10-13 12:01:43 CDT by App: DDESMIDT.
- S\_IBGB\_IFS on FLYNN**: Status: Submitted for 16603 minute(s). Submitted on 2017-09-01 11:57:44 CDT.

### Actions you can take:

Click **Show Actions** for any record to display the menu. Depending on the job type and status, you'll have the following options:

- Select **Terminate Job** to [terminate a job](#) that's currently running.
- Select **Delete History Record** to [remove the history record](#) from the server.
- Select **Percent Complete** to display the [completion percentage](#) of the selected job.
- Select **Properties** to [display the job's properties](#).
- Select **Job Spooled Files** to [display and work with the job's spooled files](#).
- Select **Job Attributes** to [display the job's attributes](#).
- Select **Agent Job Execution Log** to [display the execution log file for the agent job](#).
- Select **Job Completion History Details** to [see the details of this particular job run](#).

## Sorting and Filtering the Display

There are settings for the Completion History page that allow you to choose how to sort and filter the list.

Follow these steps:

1. Click  **Settings**.

Sort By	Search By	Filter By
<input type="checkbox"/> End Date/Time	<input checked="" type="checkbox"/> Search All Fields	<input type="button" value="Today's Activity"/>
<input checked="" type="checkbox"/> Job Date/Time	<input checked="" type="checkbox"/> Agent	
<input type="checkbox"/> Job Name	<input checked="" type="checkbox"/> Application	
<input type="checkbox"/> Start Date/Time	<input checked="" type="checkbox"/> Description	
<input type="checkbox"/> Submitted Date/Time	<input checked="" type="checkbox"/> Group Name	
	<input checked="" type="checkbox"/> Job Name	
	<input checked="" type="checkbox"/> System	

2. Select how you want the lists sorted (Sort By). Click your selection again to change the sort order to  ascending or  descending.
3. Select one or more options under **Search By** to narrow the list of items displayed.
4. Select an option under **Filter By** to further narrow the list of items displayed. There are a number of filters to choose from that allow you to filter by time, status, or job type.
5. Click  **Settings** to close the settings.

## Job Attributes

Use the Job Attributes window to display detailed Status Attribute, Definition Attribute, Run Attribute, and Library List information for a job. Use this information to help you troubleshoot problems with a job.

- The Status Attributes section displays information on the job's current status, including the user profile that ran the job, its start time, type, and other job information.
- The Definition Attributes section displays job definition information.
- The Library Lists section displays the library lists used for the job.
- The Run Attributes section displays job run information.

To open the Job Attributes page: click  **Show Actions** for a job's history record (commonly on the [Completion History page](#) or on the [Group History page](#)). Then, select **Job Attributes**.

Click **Close** to return to the history page.

## Job Completion History Details

You can display a detailed record of the job's history. The following describes the information that displays on the Job Completion History Details page:

**Job:** The job name.

**Robot Job Number:** The Robot Schedule job number.

**Description:** A user-supplied description of the job.

**Group Name:** The name of the group with which the job is associated. Only applies to group jobs.

**Group System:** The name of the system where the group is defined. Only applies to group jobs.

**Initiation Code:** Provided by the system.

**Message Status:** A one-character code indicating the completion status of the job with which the message is associated. Possible values are:

- T - Terminated (job ended abnormally)
- E - Error on submit (error in setup, so job submission failed)
- C - Completed (job completed successfully)
- W - Warning (job completed with a warning message)
- D - Delay (delayed by OPAL)
- R - Running (job is currently running)
- S - Submitted (job has been submitted but is not running)
- P - Pending (job is in a queue waiting for OPAL to run)
- K - Skipped (job is skipped by OPAL)
- O - Omit (job is omitted from this run)

**Message Text:** The complete text of the job message.

**Message Last Changed:** The date and time the message was last updated.

**Message Event ID:** Provided by the system.

**Group Event ID:** Provided by the system.

**System Job User:** Provided by the system.

**System Job Number:** Provided by the system.

**System Job Name:** Provided by the system.

## Terminate Job

If you have the proper authority, you can terminate any running job from the [Completion History](#) page in Robot Schedule. Running jobs have a blue  icon.

**To terminate a single job:**

1. Click  **Show Actions** for the job and select **Terminate Job**.
2. When asked to confirm the request, click **Terminate**.

**To terminate multiple jobs:**

1. Check the box by each job you want to terminate.
2. Click **Terminate Job**.
3. When asked to confirm the request, click **Terminate**.

## Deleting Job History

Job completion history records accumulate until you delete them. If the system is not set up to automatically delete history records (that setup is done in the Explorer or IBM i versions of Robot Schedule), you must manually delete the records.

To delete a single history record:

1. Click  Show Actions for the record and select Delete History Record.
2. When asked to confirm the request, click Delete.

To delete multiple history records:

1. Check the box by each record you want to delete.
2. Click Delete.
3. When asked to confirm the request, click Delete.

## Group History

The Group History page lists information about the group control job runs and member job runs that occurred on the system. It displays information about the actual start and end times for each job; the job's status (running, completed, terminated, warning message), the agent the job ran on, its group (if it belongs to one or is the group control job), and application. It also provides access to completion history details, job attribute information, and any spooled files.

The Group History page is quite similar to the job Completion History page. The difference is that on the Group History page, the records for a group (the group control job and the member jobs) are displayed together.

## Displaying the Group History Page

You can display group history from a number of pages in Robot Schedule. And, you can display it for all jobs or for a specific job.

To display Group History for all jobs: In the Navigation Pane, click **Group History** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it.

To display Group History for a single group: Click  Show Actions for a group control job on the [Groups](#) page. Then, select Job Completion History.

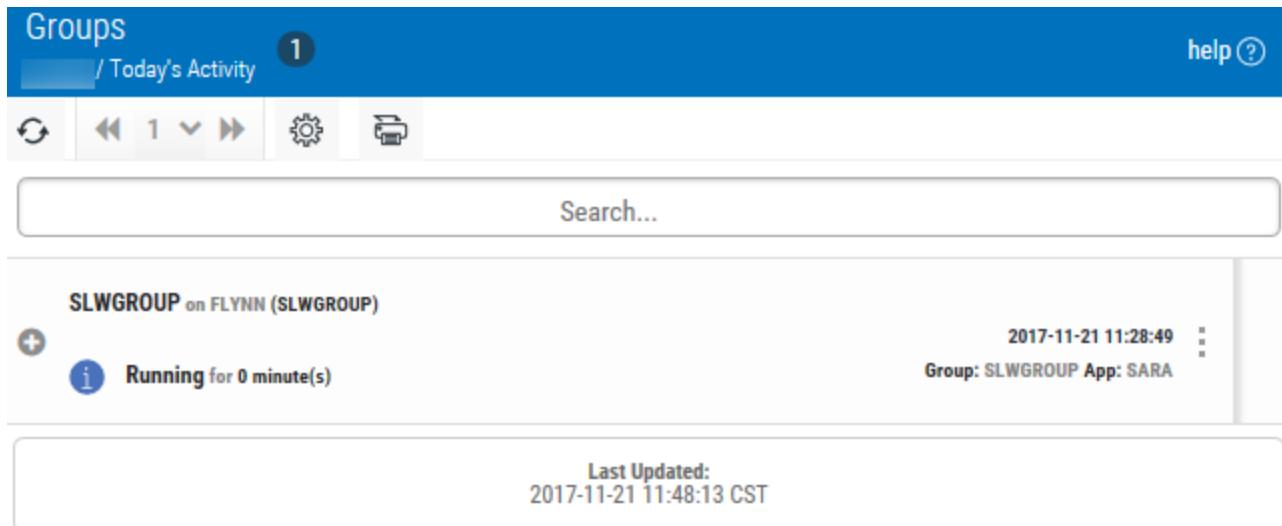
## Viewing the Group History Page

Regardless of whether you're viewing history for all of the groups or for a single group, the page functions are the same.

**Things to know and do:**

- The number of records in the list, the server they're on, and the filter being used is displayed at the top of the page.
- To see the records for a group's member jobs, click  Expand by the group name. Click  Collapse collapse the member list.
- Click  Refresh to refresh the information in the display.
- Click the page number and select the page you want to view. Or, click the previous and next arrows.

- Click  **Print Group History** to view the Group History list in HTML format. You can then select all the records (Ctrl+A) and copy it (Ctrl+C) to paste it into a spreadsheet. **Note:** You may have to disable the pop-up blockers in your browser to view the list.
- Start typing in the Search field to find a specific record. It will find every group name, description, job name, agent, group, or application that contains what you're typing. See [Sorting and Filtering](#) below to learn how to filter your search.



The screenshot shows the 'Groups' page with a single record listed. The record is for 'SLWGROUP on FLYNN (SLWGROUP)'. It is marked as 'Running for 0 minute(s)'. The status was last updated on 2017-11-21 at 11:48:13 CST. The record was created on 2017-11-21 at 11:28:49. The group is associated with the application 'SARA'. A 'help' button is visible in the top right corner.

#### Actions you can take:

Click  **Show Actions** for any record to display the menu. Depending on the job type and status, you'll have the following options:

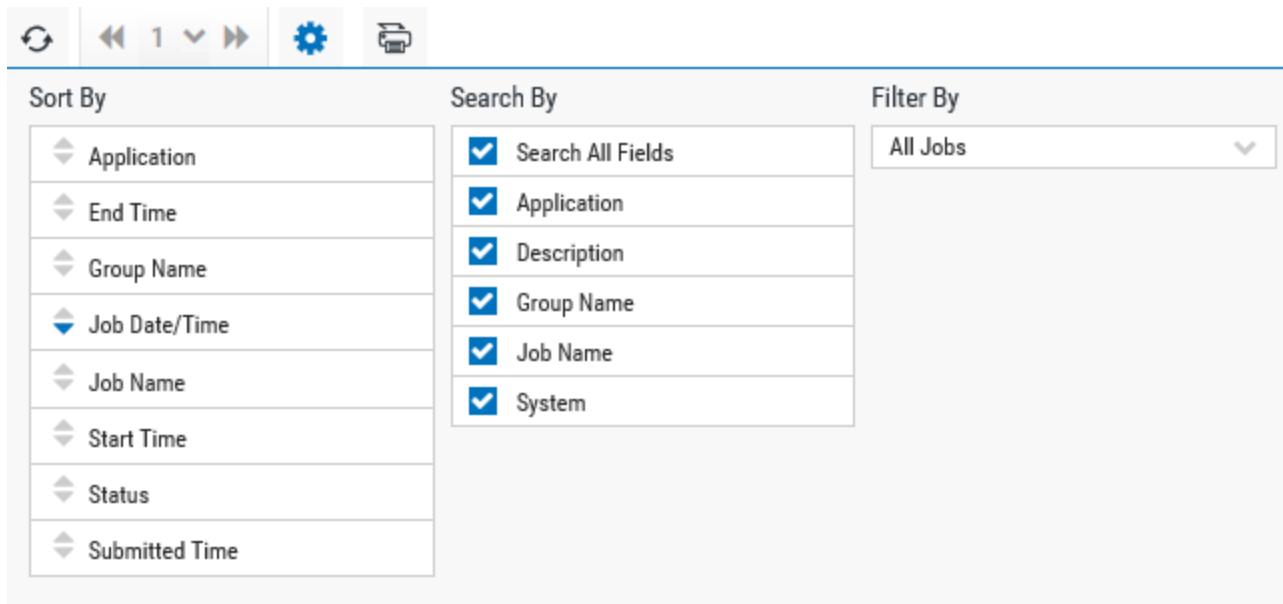
- Select **Terminate Job** to [terminate a job](#) that's currently running.
- Select **Delete History Record** to [remove the history record](#) from the server.
- Select **Percent Complete** to display the [completion percentage](#) of the selected job.
- Select **Properties** to [display the job's properties](#).
- Select **Job Spooled Files** to [display and work with the job's spooled files](#).
- Select **Job Attributes** to [display the job's attributes](#).
- Select **Agent Job Execution Log** to [display the execution log file for the agent job](#).
- Select **Job Completion History Details** to [see the details of this particular job run](#).

## Sorting and Filtering the Display

There are settings for the Group History page that allow you to choose how to sort and filter the list.

Follow these steps:

1. Click  **Settings**.



The screenshot shows the 'Job Monitor Settings' interface. At the top are standard navigation icons: Refresh, Back, Forward, Home, and Print. Below these are three main sections: 'Sort By', 'Search By', and 'Filter By'. The 'Sort By' section contains a list of items with ascending/descending arrows: Application, End Time, Group Name, Job Date/Time, Job Name, Start Time, Status, and Submitted Time. The 'Search By' section has checkboxes for: Search All Fields (checked), Application (checked), Description (checked), Group Name (checked), Job Name (checked), and System (checked). The 'Filter By' section has a dropdown menu set to 'All Jobs'.

2. Select how you want the lists sorted (Sort By). Click your selection again to change the sort order to  ascending or  descending.
3. Select one or more options under **Search By** to narrow the list of items displayed.
4. Select an option under **Filter By** to further narrow the list of items displayed. There are a number of filters to choose from that allow you to filter by time, status, or job type.
5. Click  **Settings** to close the settings.

## Job Monitor History

Job monitors allow you to monitor your job schedule for specific events, such as jobs that run too long, complete too quickly, or start later than their scheduled run time. You specify the criteria when you set the job up (this is done in the Explorer or IBM i versions of Robot Schedule). You also specify what Robot Schedule should do if it identifies a job monitor event. Robot Schedule can end a job or notify you by sending a message to the job's message queue; sending a text, email, or pager message via Robot Alert; or sending a status to the Robot Network Status Center.

When a monitored job reaches one or more of the criteria defined on the Job Monitors tab, Robot Schedule takes the specified action and a history record is created. You can view these history records.

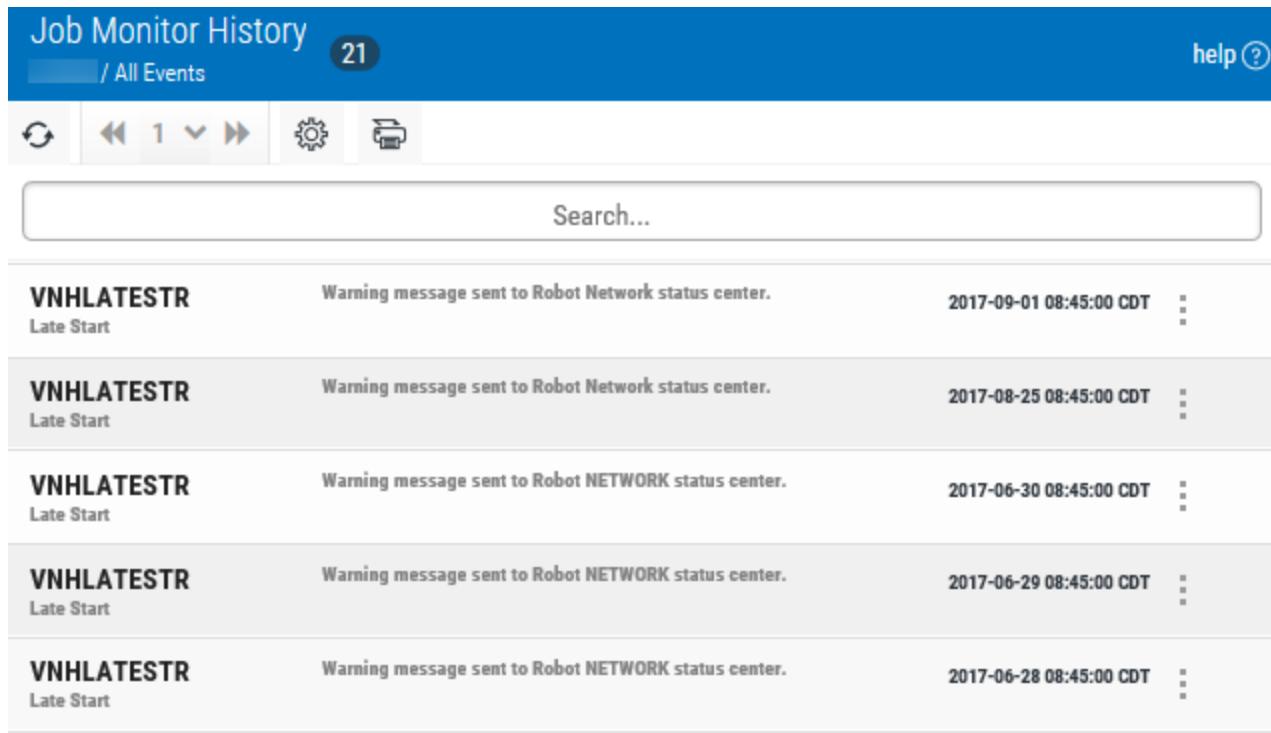
## Viewing the Job Monitor History Page

In the Navigation Pane, click **Job Monitor History** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it.

### Things to know and do:

- The number of records in the list, the server they're on, and the filter being used is displayed at the top of the page.
- Click  **Refresh** to refresh the information in the display.

- Click the page number and select the page you want to view. Or, click the previous and next arrows.
- Click  Print Event History to view the Event History list in HTML format. You can then select all the records (**Ctrl+A**) and copy it (**Ctrl+C**) to paste it into a spreadsheet. **Note:** You may have to disable the pop-up blockers in your browser to view the list.
- Start typing in the Search field to find a specific record. It will find everything that contains what you're typing. See [Sorting and filtering](#) below to learn how to filter your search.



Event ID	Description	Date	Action
VNHLATESTR	Warning message sent to Robot Network status center. Late Start	2017-09-01 08:45:00 CDT	⋮
VNHLATESTR	Warning message sent to Robot Network status center. Late Start	2017-08-25 08:45:00 CDT	⋮
VNHLATESTR	Warning message sent to Robot NETWORK status center. Late Start	2017-06-30 08:45:00 CDT	⋮
VNHLATESTR	Warning message sent to Robot NETWORK status center. Late Start	2017-06-29 08:45:00 CDT	⋮
VNHLATESTR	Warning message sent to Robot NETWORK status center. Late Start	2017-06-28 08:45:00 CDT	⋮

#### Actions you can take:

Click  Show Actions for any record to display the following options:

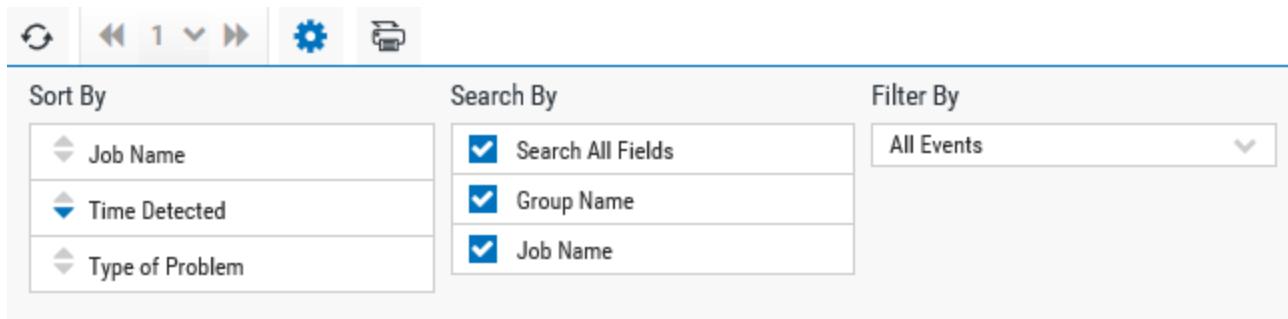
- Select **Job Completion History** to see the [completion history for the job](#).
- Select **Properties** to [display the job's properties](#).

## Sorting and Filtering the Display

There are settings for the Job Monitor History page that allow you to choose how to sort and filter the list.

Follow these steps:

1. Click  **Settings**.



The screenshot shows the 'Settings' interface with three main sections: 'Sort By', 'Search By', and 'Filter By'.  
**Sort By:** Contains dropdown menus for 'Job Name' (set to ascending), 'Time Detected' (set to descending), and 'Type of Problem'.  
**Search By:** Contains checkboxes for 'Search All Fields' (checked), 'Group Name' (checked), and 'Job Name' (checked).  
**Filter By:** A dropdown menu set to 'All Events'.

2. Select how you want the lists sorted (Sort By). Click your selection again to change the sort order to  ascending or  descending.
3. Select one or more options under **Search By** to narrow the list of items displayed.
4. Select an option under **Filter By** to further narrow the list of items displayed.
5. Click  **Settings** to close the settings.

## Event History

Robot Schedule includes event monitors to let you know when something has happened on the IBM i you're connected to. You can monitor for events such as changes to a file (IFS or native), directory (IFS), or member (native). You can then use these event monitors as prerequisites for reactive jobs. **Note:** You can only create the event monitors in the Robot Schedule GUI.

The Event History page lists information about the events that occurred on the system. Keep the following in mind as you're reviewing the information and troubleshooting the event monitors:

- The status is usually an asterisk (\*), which indicates that the event has occurred. If you used the RBTEVTDTA command to blank the event, the status may be empty.
- Likely error codes include Time Range or Invalid Filter.

## Viewing the Event History Page

In the Navigation Pane, click **Event History** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it.

### Things to know and do:

- The number of records in the list, the server they're on, and the filter being used is displayed at the top of the page.
- Click  **Refresh** to refresh the information in the display.
- Click the page number and select the page you want to view. Or, click the previous and next arrows.
- Click  **Print Event History** to view the Event History list in HTML format. You can then select all the records (**Ctrl+A**) and copy it (**Ctrl+C**) to paste it into a spreadsheet. **Note:** You may have to disable the pop-up blockers in your browser to view the list.
- Start typing in the Search field to find a specific record. It will find everything that contains what you're typing. See [Sorting and filtering](#) below to learn how to filter your search.

KMROBOT	Event Occurred processed at 2017-11-09 09:00:19 /QSYS.LIB/ROBOTLIB.LIB/RBTRV.FILE	2017-11-09 09:00:19
KMROBOT	Event Occurred processed at 2017-11-09 08:58:19 /QSYS.LIB/ROBOTLIB.LIB/RBTRV.FILE	2017-11-09 08:58:19
KMROBOT	Event Occurred processed at 2017-11-09 08:57:19 /QSYS.LIB/ROBOTLIB.LIB/RBTRV.FILE	2017-11-09 08:57:19
KMROBOT	Event Occurred processed at 2017-11-09 08:51:19 /QSYS.LIB/ROBOTLIB.LIB/RBTRV.FILE	2017-11-09 08:51:19

## Sorting and Filtering the Display

There are settings for the Event History page that allow you to choose how to sort and filter the list.

Follow these steps:

1. Click **Settings**.

Sort By	Search By	Filter By
Event Name	<input checked="" type="checkbox"/> Search All Fields	All Events
Event Occurred	<input checked="" type="checkbox"/> Event Data	
	<input checked="" type="checkbox"/> Event Name	

2. Select how you want the lists sorted (Sort By). Click your selection again to change the sort order to ascending or descending.
3. Select one or more options under **Search By** to narrow the list of items displayed.
4. Select an option under **Filter By** to further narrow the list of items displayed.
5. Click **Settings** to close the settings.

## Agent Job Execution Log

You can view the contents of the agent job execution log file and even search the text in it. You access the log file from the job [Completion History](#) page.

Follow these steps:

1. Find the agent job history record you want. Click  **Show Actions** for it, and select **Agent Job Execution Log**.
2. To search for a string of characters, use your browser's Find feature.
3. Click **Close** to return to the job completion history records.

# Critical Jobs

## Critical Job Lists

A critical job list allows you to focus on a specific set of jobs that are important to you. With a critical job list, you can gather the jobs together in one list so it's convenient to monitor and manage them. You can also use the critical job list as a filter when completing various tasks in Robot Schedule, such as setting up dashboard widgets or working with certain pages. The jobs you add to a critical job list can be from one system, or any combination of systems that you have assigned profiles to.

Critical job lists use query objects to add the jobs to the list. You can create or select query objects using Robot Schedule for Insite.

Click any of the following links to learn more about working with critical job lists:

[Viewing the critical job lists](#)

[Sorting and filtering the view](#)

[Adding or editing a critical jobs list](#)

[Creating a query object and adding jobs to it](#)

[Deleting a critical jobs list](#)

## Viewing the Critical Job Lists

A critical job list allows you to focus on a specific set of jobs—even across systems—when completing certain tasks. Use the Critical Job Lists page to view information about the lists that have been created. You can see the name of the critical job list, its description, and the number of systems on which any of its jobs run.

In the Navigation Pane, click **Critical Job Lists** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it.

Things to know and do:

- The total number of critical job lists is displayed at the top of the page.
- Click  Refresh to refresh the information in the display.
- Click the page number and select the page you want to view. Or, click the previous and next arrows.
- Start typing in the Search field to find a specific list. It will find everything that contains what you're typing. See [Sorting and filtering](#) to learn how to filter your search.

The screenshot shows the 'Critical Job Lists' page with a single list entry. The entry is titled 'Critical' and is described as a 'Critical jobs list'. It was last updated on 2017-11-21 13:17:16 CST. The page includes standard navigation controls (refresh, back, forward, search) and a green '+ Add' button.

#### Actions you can take:

Click Show Actions by any list to display the following actions that you can take:

- Select **Jobs** to [view the jobs](#) that are in the query object attached to the list.
- Select **Job Monitor History** to [view the history for any job monitors](#) that are in the query object attached to the list.
- Select **Completion History** to [see the completion history](#) for the jobs on the list.
- Select **Schedule Activity** to [see the Schedule Activity page](#) for only those jobs on the list.
- Select **Edit** to [open the page where you can edit the list](#).

## Sorting and Filtering the Critical Job Lists Display

There are settings for the Critical Job Lists page that allow you to choose how to sort the list, and what types of data will be searched when you do a search.

Follow these steps:

1. Click **Settings**.

The screenshot shows the 'Critical Job Lists' page with sorting and filtering settings open. Under 'Sort By', 'Critical Job List Name' is selected. Under 'Search By', 'Search All Fields' and 'Critical Job List Name' are checked. Navigation controls and a green '+ Add' button are also visible.

2. Select how you want the lists sorted (Sort By). Click your selection again to change the sort order to ascending or descending.
3. Click **Settings** to close the settings.

# Adding or Editing a Critical Job List

A critical job list allows you to focus on a specific set of jobs—even across systems—when completing certain tasks.

To add or edit a critical job list:

1. In the Navigation Pane, click **Critical Job Lists** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it.
2. To add a new list, click **Add**.

To edit an existing list, find it and click its row.

Name	Description
cybrking	<a href="#">Look Up</a>
FLYNN	<a href="#">Look Up</a>
geppetto	<a href="#">Look Up</a>

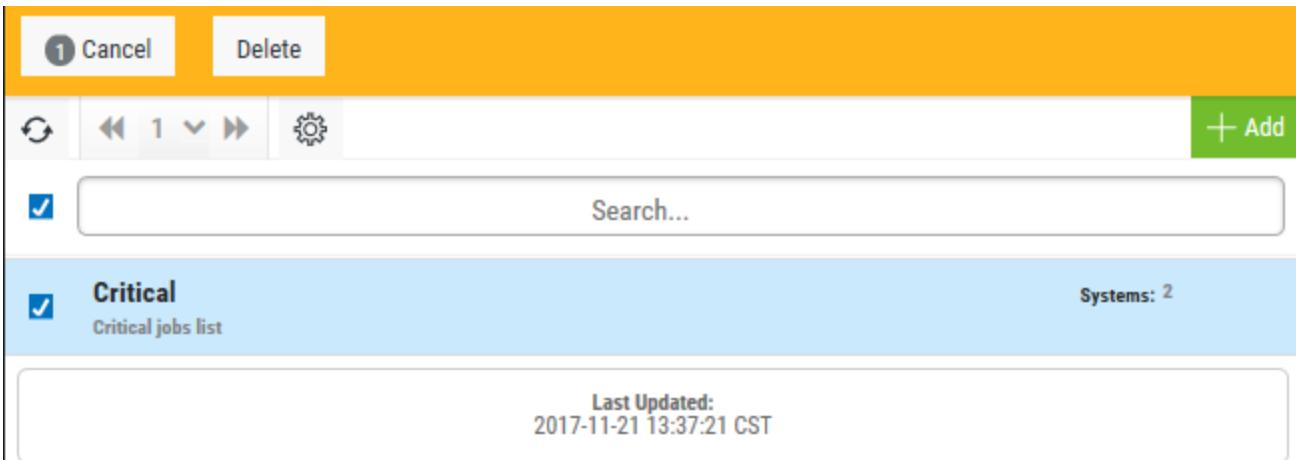
3. Enter a **Name** and **Description** for the list.
4. Do one of the following for each system that has jobs you want included:
  - Type the name of a new query object. **Note:** If you create a new query, you must [add jobs to it](#) after you finish this procedure.
  - Click **Look Up** to select an existing query object from a list.
5. Click **Save**.

You can now use the critical job list in many tasks, including filtering dashboard widgets, filtering lists on pages, and generating reports.

# Deleting a Critical Job List

To delete a critical job list:

1. In the Navigation Pane, click **Critical Job Lists** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it.
2. Select the critical job lists you need to delete.



3. Click **Delete**.
4. Click **Delete** again when asked to confirm the deletion.

## Creating a Query Object and Adding Jobs To It

Queries help you narrow down a list of jobs to only those jobs that meet certain comparison criteria. For the purposes of critical job lists, the query contains simple comparison criteria that finds data about any of the jobs you add to it. For more on queries, see the user guide for the Explorer or IBM i version of Robot Schedule. **Note:** This procedure describes how to add a query object using Robot Schedule for Insite. You can also [remove a job from a query object](#). Any other changes to query objects must be made using either the Explorer or IBM i versions of Robot Schedule.

In Robot Schedule for Insite, you use query objects to add jobs to a critical job list.

Follow these steps to create a query object and add jobs to it:

1. To create the query object, follow the procedure to [add or edit a critical job list](#), being sure to type the new query object name by the system where it should be located.
2. After you've created the query object, click **Home** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it.
3. Select the jobs you want included. **Note:** Query objects can contain a maximum of 99 criteria. Using this procedure to add jobs to a query object adds one criteria per job.

The screenshot shows a software interface for managing critical jobs. At the top, there's a toolbar with buttons for Cancel (highlighted with a red circle containing the number 4), Hold, Override, Remove Override, and Add to Query. Below the toolbar is a navigation bar with icons for refresh, back, forward, settings, and print. A search bar labeled "Search..." is also present. The main area displays a list of jobs assigned to a specific query object. Each job entry includes a checkbox, the job name, its status (e.g., Held), and a brief description. The jobs listed are: AGEOUTQ (Held, Age Outq Qprint), AGEQEJOB (Held, Age Outq QEJOBLOG), AT122 (Held, Test AT122), and BGBDLY (selected, checked). There are also three vertical ellipsis dots on the right side of the list.

4. Click **Add to Query**.
5. Find and click the query object you want. The jobs are added to it.

You can now use the critical job list that uses this query object to monitor and manage the jobs on it. You can also use the critical job list as a filter when setting up dashboard widgets and when working with certain pages.

## Removing Jobs from a Query Object

You can remove one or more jobs from a query object.

Follow these steps:

1. In the Navigation Pane, click **Jobs** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it.
2. Click **Settings**.
3. Either type the **Query** object's name in the field, or click **Look Up** to select it from a list.

The screenshot shows the "Settings" dialog box. It has three main sections: "Sort By", "Search By", and "Filter By".

- Sort By:** A dropdown menu with options: Description, Job Name, Job Type, and Override.
- Search By:** A list of checked checkboxes: Search All Fields, Agent, Application, Description, and Job Name.
- Filter By:** A dropdown menu with options: All Jobs, View, Compact, and Query. The "Query" dropdown is open, showing the value "BGBTTEST". To the right of the "Query" dropdown is a "Look Up" button.

Click **Settings** to close the settings.

4. Select the jobs you want to remove and click Remove from Query.

The screenshot shows a user interface for managing critical jobs. At the top, there's a navigation bar with buttons for 'Cancel', 'Hold', 'Override', 'Remove Override', and 'Remove from Query'. Below this is a toolbar with icons for refresh, search, and other operations. A search bar is also present. The main content area displays a list of jobs. At the top of the list is 'BGBDLY'. Below it are two entries under 'BGBMEMBER1': 'BGBMEMBER1' and 'BGBMEMBER1'. Under 'BGBMEMBER2', there are two more entries: 'BGBMEMBER2' and 'BGBMEMBER2'. Each job entry has a checkbox to its left. The 'BGBMEMBER1' entries have a light blue background, while the 'BGBMEMBER2' entries are white. To the right of each job name, there is an 'App: BGB' label. There are also three vertical dots at the end of the list.

Job Type	Job Name	App
BGBDLY		
BGBMEMBER1	BGBMEMBER1	App: BGB
BGBMEMBER1	BGBMEMBER1	App: BGB
BGBMEMBER2	BGBMEMBER2	App: BGB
BGBMEMBER2	BGBMEMBER2	App: BGB

# Reactivity

## Overview of Reactivity

Robot Schedule lets you schedule jobs that run only after certain prerequisite conditions occur. These jobs are called reactive jobs because they react to conditions. **Note:** Reactive jobs are set up in the Explorer or IBM i versions of Robot Schedule.

A prerequisite job can be a Robot Schedule job, a batch job, a job on another system, or a job on a remote Skybot Scheduler server. Before the reactive job can start, the prerequisite job must return the specified status code. The status can be normal completion, abnormal termination, either normal completion or abnormal termination (this includes jobs that return a "W" completion status), submitted, running, delayed by OPAL, skipped by OPAL, or pending OPAL.

A reactive job can run only when its prerequisites are satisfied. However, a reactive job can also be limited by a run schedule. There are three options:

- **Prerequisites are specified, but not a run schedule:** The job runs every time its prerequisites are met.  
When all prerequisites are met, the job runs and the completion statuses on the prerequisite list are cleared.
- **Prerequisites are specified, and so are run days or dates:** The job runs only if it's scheduled for that day.  
When all prerequisites are met, Robot Schedule checks whether the job is scheduled to run that day. If it is, the job runs. Robot Schedule clears the completion statuses on the prerequisite list whether the job runs or not. Thus, the last of its prerequisites must happen on a run day or the reactive job does not run.
- **Prerequisites are specified, and so is a schedule with run days and times:** The job runs at its next run day and time if its prerequisites are met.  
Each day and time that the job is scheduled to run, Robot Schedule checks whether all prerequisites for the job are satisfied. If they are, the job runs. If they're not, Robot Schedule sends a warning message that the job was scheduled to run, but prerequisites were not met.

## Reactivity Chains

Reactivity chains are quite similar to [job flow diagrams](#). However, because you select a starting and ending job for the chain, it allows you to focus on just a segment of the overall reactive job flow. This can help you troubleshoot problems in your job schedule.

After you [create and validate a reactivity chain](#), you can diagram the job flow for it. Reactivity chain diagrams work in the same way as other job flow diagrams. You can even make the reactivity chain's diagram live so you can watch the progression of the job flow.

## Viewing Reactivity Chains

In the Navigation Pane, click **Reactivity Chains** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it.

**Things to know and do:**

- The total number of reactivity chains in the list and the server they're on is displayed at the top of the page.
- Click Refresh to refresh the information in the display.
- Click the page number and select the page you want to view. Or, click the previous and next arrows.
- Start typing in the Search field to find a specific chain. It will find everything that contains what you're typing. See [Sorting and filtering](#) below to learn how to filter your search.

The screenshot shows the 'Reactivity Chains' page with a single entry. At the top, there's a blue header bar with the title 'Reactivity Chains' and a 'stitch' indicator. Below the header are navigation buttons (refresh, back, forward, search, settings) and a green '+ Add' button. A search bar is present. The main list area shows one item: 'A\_VBS\_TEST→A\_VB3\_TEST' under the category 'Reactivity Chain'. To the right of this item is a three-dot menu icon. Below the list, a box displays 'Last Updated: 2017-11-21 13:48:58 CST'.

#### Actions you can take:

Click Show Actions by any reactivity chain to display the following actions that you can take:

- Select **Diagram Reactivity Chain** to [create a job flow diagram](#) for the reactivity chain.
- Select **Edit** to open the page where you can [edit the reactivity chain](#).

## Sorting and Filtering the Display

There are settings for the Reactivity Chains page that allow you to choose how to sort the list, and what types of data will be searched when you do a search.

Follow these steps:

1. Click Settings.

The screenshot shows the 'Reactivity Chains' page with sorting and filtering settings. At the top, there are navigation buttons (refresh, back, forward, search, settings) and a green '+ Add' button. Below these are two sections: 'Sort By' and 'Search By'. The 'Sort By' section contains dropdown menus for 'Start Job Name' and 'End Job Name'. The 'Search By' section contains checkboxes for 'Search All Fields', 'End Job Name', and 'Start Job Name', all of which are checked.

2. Select how you want the lists sorted (Sort By). Click your selection again to change the sort order to ascending or descending.
3. Click Settings to close the settings.

# Adding or Editing a Reactivity Chain

A reactivity chain allows you to focus on a specific segment of a reactive job flow.

To add or edit a reactivity chain:

1. In the Navigation Pane, click **Reactivity Chains** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it.
2. To add a new chain, click **Add**.

To edit an existing chain, find it and click its row.

The screenshot shows a dialog box titled "New Reactivity Chain - stitch". At the top right are "help ?" and "Save" buttons. Below the title are "Cancel" and "Save" buttons. The main area contains input fields: "Start Job Name" with a "Look Up" button, "End Job Name" with a "Look Up" button, and a "Description" field. A "Status" section includes a "Validate Reactivity Chain" button, which is highlighted with a blue background and white text. The entire dialog has a dark header bar and a light body.

3. Enter a **Start Job Name**, or click **Look Up** to select it from the job list. This is the first job in the reactivity chain.
4. Enter an **End Job Name**, or click **Look Up** to select it from the job list. This is the final job in the reactivity chain.
5. Type a **Description** for the chain.
6. You must validate the chain before you can successfully diagram it. Click **Validate Reactivity Chain** to do so.

There are three Statuses you might see.

- ● Reactivity chain has not been tested. – You'll see this status before you attempt to validate the reactivity chain for the first time.
- ● No path was found between the two jobs. – This status means that the validation failed. You should change the starting or ending job and try the validation again.
- ● Valid – This status means that your reactivity chain is valid and can be diagrammed.

7. Click **Save**.

If you have a valid reactivity chain, you can now [diagram its job flow](#).

# Reactivity Chain Diagram

After you've created a reactivity chain and validated it, you can diagram it to see the job flow. You work with a diagram of a reactivity chain in the same way you work with a job flow diagram; the difference is that the reactivity chain focuses on only a segment of the larger job flow. That segment is the reactive job flow that occurs between the starting and ending jobs that you specify.

To diagram a reactivity chain:

1. In the Navigation Pane, click **Reactivity Chains** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it.
2. Click  **Show Actions** by the reactivity chain you want to diagram. **Note:** The chain must have a Valid status before you can diagram it. For details, see [Adding or Editing a Reactivity Chain](#).
3. Click **Diagram Reactivity Chain**.

For information on working with the diagram and making it "live," see the following:

[Working with job flow diagrams](#)

[Symbols and colors in the job flow diagram](#)

[Live job flow diagrams](#)

# Active Jobs

The Active Jobs page contains information about all of the jobs currently active on your IBM i server.

## Viewing the Active Jobs Page

In the Navigation Pane, click **Active Jobs** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it.

### Things to know and do:

- The total number of currently active jobs is displayed at the top of the page.
- Click Refresh to refresh the information in the display.
- Click the page number and select the page you want to view. Or, click the previous and next arrows.
- Click Print Active Jobs to view the Active Jobs list in HTML format. You can then select all the records (Ctrl+A) and copy it (Ctrl+C) to paste it into a spreadsheet. **Note:** You may have to disable the pop-up blockers in your browser to view the list.

Active Jobs			
787 / All Jobs			
1    help			
<b>850748 / QTMHHTTP / ADMIN</b>	QHTTPSVR/QHTTPSVR	Status: SIGW	PGM-QZHBMAIN
Job Type: Batch CPU: 0%	Threads: 1 Pool: *BASE Priority: 25	CPU Time: 430 MS Temp: 15 MB	Aux I/O: 854 Transactions: 0
<b>850756 / QTMHHTTP / ADMIN</b>	QHTTPSVR/QHTTPSVR	Status: SIGW	PGM-QZSRLOG
Job Type: Batch CPU: 0%	Threads: 1 Pool: *BASE Priority: 25	CPU Time: 15,566 MS Temp: 7 MB	Aux I/O: 366 Transactions: 0
<b>850767 / QTMHHTTP / ADMIN</b>	QHTTPSVR/QHTTPSVR	Status: SIGW	PGM-QZSRHTTP
Job Type: Batch CPU: 0%	Threads: 12 Pool: *BASE Priority: 25	CPU Time: 13,787 MS Temp: 16 MB	Aux I/O: 385 Transactions: 0
<b>850762 / QLWISVR / ADMIN1</b>	QHTTPSVR/QHTTPSVR	Status: THDW	
Job Type: Batch CPU: 0%	Threads: 55 Pool: *BASE Priority: 25	CPU Time: 92,293 MS Temp: 308 MB	Aux I/O: 101772 Transactions: 0
<b>850764 / QLWISVR / ADMIN2</b>	QHTTPSVR/QHTTPSVR	Status: THDW	
Job Type: Batch CPU: 0%	Threads: 72 Pool: *BASE Priority: 25	CPU Time: 728,731 MS Temp: 789 MB	Aux I/O: 153040 Transactions: 0

### Actions you can take:

Click Show Actions for any job to display options for monitoring and managing it. You'll have the following options:

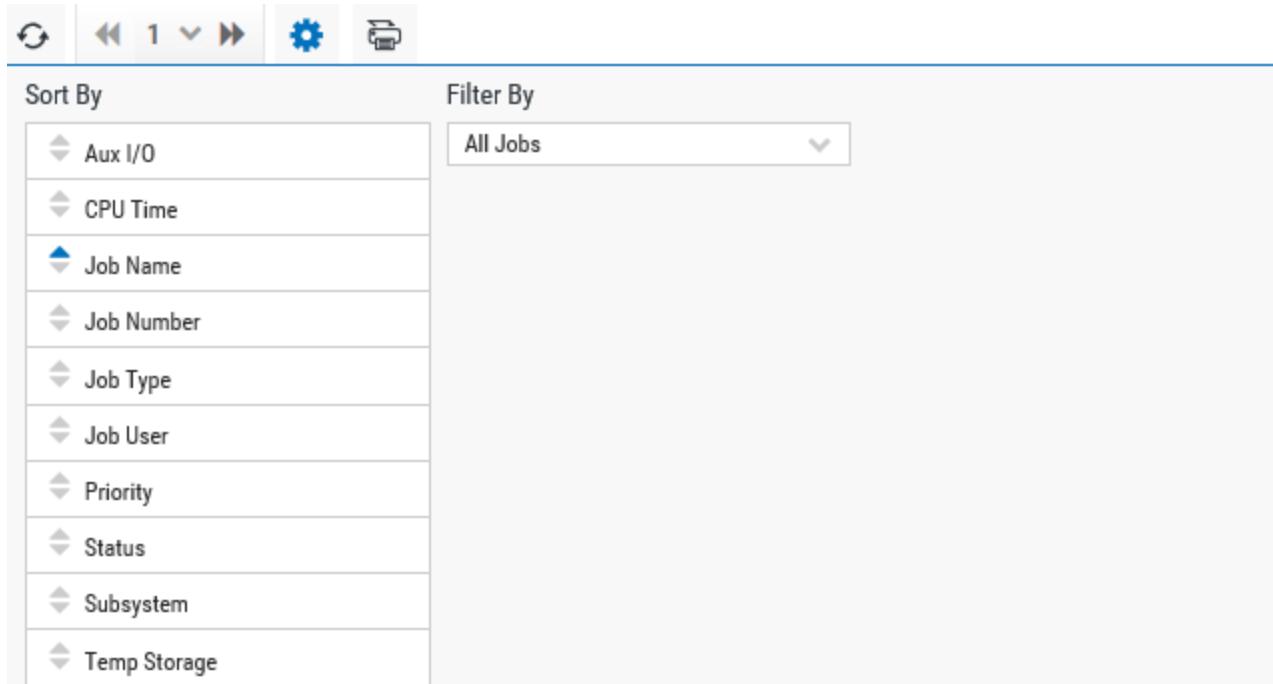
- Select **End** to [end a job](#) that's currently running.
- Select **Hold** to [place the job on hold](#).
- Select **Release** to [release the hold on a job](#).
- Select **Job QHST Log** to [display the job's QHST log file](#).
- Select **Job Log** to [display the job's log file](#).
- Select **Job Attributes** to [display the job's attributes](#).

## Sorting and Filtering the Display

There are settings for the Active Jobs page that allow you to choose how to sort and filter the list.

Follow these steps:

1. Click  **Settings**.



Sort By		Filter By
 Aux I/O		All Jobs
 CPU Time		
 Job Name		
 Job Number		
 Job Type		
 Job User		
 Priority		
 Status		
 Subsystem		
 Temp Storage		

2. Select how you want the lists sorted (Sort By). Click your selection again to change the sort order to  ascending or  descending.
3. Select an option under **Filter By** to further narrow the list of items displayed.
4. Click  **Settings** to close the settings.

## End Job

If you have the proper authority, you can end any job from certain pages in Robot Schedule, such as the Active Jobs page.

To end a job:

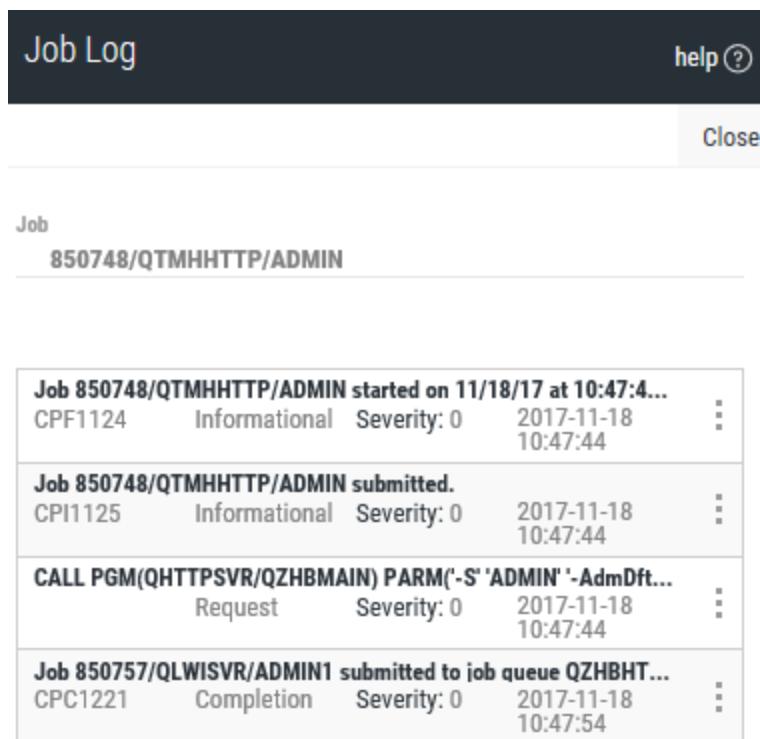
1. Click  Show Actions for the job and select End.
2. Check the Use \*IMMED when ending box to end the job immediately (this is the default setting). If you don't use \*IMMED, the job is ended in a controlled manner (\*CNTRLD).
3. Click End.

**Note:** Your IBM i user profile authority determines which functions you can perform on the system. Robot Schedule doesn't override this authority.

## Job Log

Use the Job Log page to display the system messages associated with the job you selected. **Note:** You can only view the job log for active jobs. If the job you selected is not active, you can [view the spooled file](#) instead (if one is available).

To open the Job Log page: click  Show Actions for a job (commonly under Active on the [Schedule Activity page](#) or else on the [Active Jobs page](#)). Then, select Job Log.



The screenshot shows the 'Job Log' interface. At the top, there's a header bar with 'Job Log' on the left and 'help ?' on the right. Below the header is a 'Close' button. The main area displays a table of system messages for job 850748/QTMHHTTP/ADMIN. The table has four columns: Message ID, Type, Severity, and Date/Time. Each message row has a three-dot ellipsis icon on the far right.

Job 850748/QTMHHTTP/ADMIN started on 11/18/17 at 10:47:4...			
CPF1124	Informational	Severity: 0	2017-11-18 10:47:44
<b>Job 850748/QTMHHTTP/ADMIN submitted.</b>			
CPI1125	Informational	Severity: 0	2017-11-18 10:47:44
<b>CALL PGM(QHTTPPSVR/QZHBMAIN) PARM('S' 'ADMIN' '-AdmDft...')</b>			
Request	Severity: 0	2017-11-18 10:47:44	
<b>Job 850757/QLWISVR/ADMIN1 submitted to job queue QZHBHT...</b>			
CPC1221	Completion	Severity: 0	2017-11-18 10:47:54

To see the details for a message in the log, click  Show Actions for the message, then select **Message Details**.

Message Details
help ?

Close

Job	850748/QTMHHTTP/ADMIN
<hr/>	
Message ID	
<hr/>	
Message Severity	0
<hr/>	
Node Date/Time Sent	11/18/2017 10:47:44
<hr/>	
Message Type	Request
<hr/>	
Message Text	<pre>CALL PGM(QHTTPPSVR/QZHBMAIN) PARM ('S' 'ADMIN' '-AdmDftPort' '2001' '-AdmDftSecPort' '2010' '-uiMin' '10 '-uiMax' '40' '-cEAMap' '*CCSID' '-cAEMap' '*CCSID' '-uiCCSID' '819' '- apache' '-d' '/QIBM/UserData/HTTPA/admin' '-f' '/QIBM/ProdData/HT TPA/admin/conf/admin-ibm.conf' '-AutoStartY' '-c' 'Listen' '2001')</pre>

## History Log (QHST)

The History Log page displays the contents of the job log associated with the job message history queue (QHST) for the selected job.

To open the History Log page: click  **Show Actions** for a job (commonly on the [Active Jobs page](#)). Then, select **Job QHST Log**.

History Log help (?)

Close

Job

**850748/QTMHHTTP/ADMIN**

Job 850748/QTMHHTTP/ADMIN started on 11/18/17 at 10:47:44 in subsystem QHTTPSVR in QHTTPSVR. Job entered system on 11/18/17 at 10:47 ⋮

To see the details for a message in the log, click ⋮ Show Actions for the message, then select **Message Details**.

Message Details help (?)

Close

Job

**850748/QTMHHTTP/ADMIN**

Message ID

**CPF1124**

Message Severity

**0**

Node Date/Time Sent

**11/18/2017 10:47:44**

Message Type

**Informational**

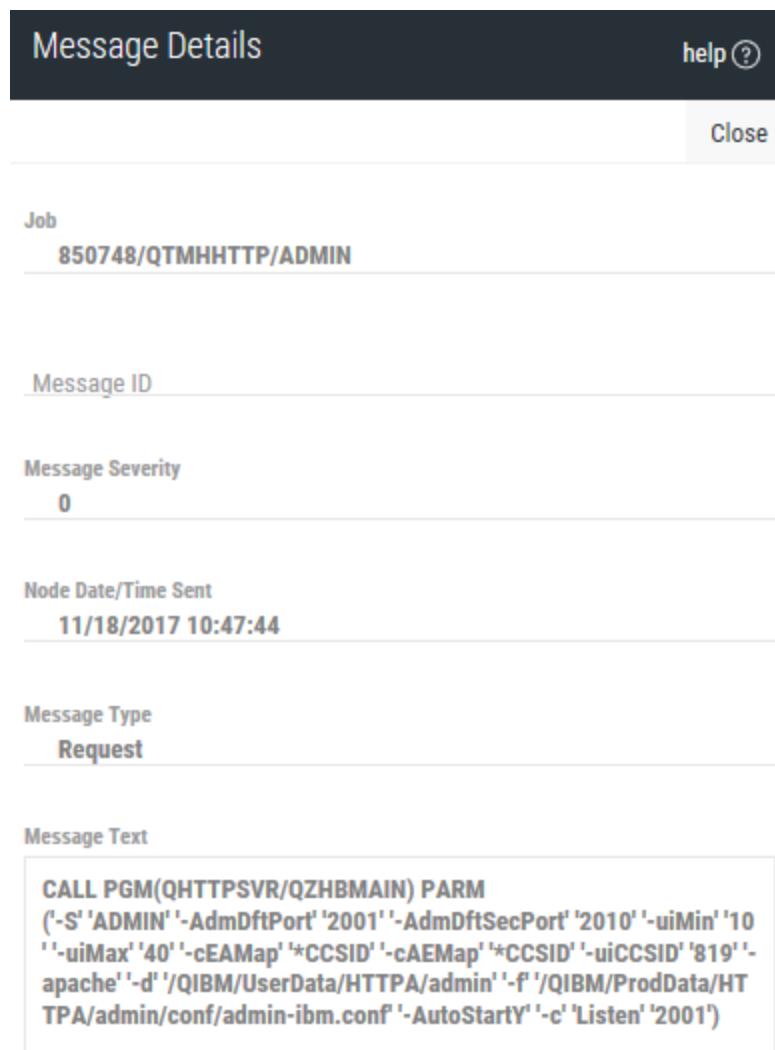
Message Text

Job 850748/QTMHHTTP/ADMIN started on 11/18/17 at 10:47:44 in subsystem QHTTPSVR in QHTTPSVR. Job entered system on 11/18/17 at 10:47

## Message Details

The Message Details page displays details for the selected job log message. You can access the message details when you're viewing the Job Log page or the History Log (QHST) page.

To see the details for a message in the log, click  Show Actions for the message, then select **Message Details**.



**Message Details**

help ?

Close

**Job**  
850748/QTMHHTTP/ADMIN

**Message ID**

**Message Severity**  
0

**Node Date/Time Sent**  
11/18/2017 10:47:44

**Message Type**  
Request

**Message Text**

```
CALL PGM(QHTTPPSVR/QZHBMAIN) PARM
('S' 'ADMIN' '-AdmDftPort' '2001' '-AdmDftSecPort' '2010' '-uiMin' '10
'-uiMax' '40' '-cEAMap' '*CCSID' '-cAEMap' '*CCSID' '-uiCCSID' '819' '-'
apache' '-d' '/QIBM/UserData/HTTPPA/admin' '-f' '/QIBM/ProdData/HT
TPA/admin/conf/admin.ibm.conf' '-AutoStartY' '-c' 'Listen' '2001')
```

## Spooled Files

You can use the Spooled Files page to view, print, and delete the spooled files on your system. You can work with all of the spooled files on the system, or just the ones belonging to the current user.

[Viewing the Spooled Files list](#)

[Sorting and filtering the display](#)

[Editing the spooled file properties](#)

[Viewing a spooled file](#)

## Viewing the Spooled Files Page

In the Navigation Pane, click **Spooled Files** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it.

### Things to know and do:

- The total number of spooled files on the system (all files or for the current user) is displayed at the top of the page.
- Click **Refresh** to refresh the information in the display.
- Click the page number and select the page you want to view. Or, click the previous and next arrows.
- Click **Print Spooled Files List** to view the list in HTML format. You can then select all the records (**Ctrl+A**) and copy it (**Ctrl+C**) to paste it into a spreadsheet. **Note:** You may have to disable the pop-up blockers in your browser to view the list.

	2017-11-17 22:08:27 <b>QPJOBLOG (27)</b>	Queue: QUSRSYS / QEJOBLOG Status: *READY Pages: 1	820306 / QSECOFR / QRPTJOB Priority: 5 Size: 40	User Data: QSQSRVR Copies: 1 ASP: 1	⋮
<input type="checkbox"/>	2017-11-17 22:08:26 <b>QPJOBLOG (26)</b>	Queue: QUSRSYS / QEJOBLOG Status: *READY Pages: 1	820306 / QSECOFR / QRPTJOB Priority: 5 Size: 40	User Data: QSQSRVR Copies: 1 ASP: 1	⋮
<input type="checkbox"/>	2017-11-17 22:08:25 <b>QPJOBLOG (25)</b>	Queue: QUSRSYS / QEJOBLOG Status: *READY Pages: 1	820306 / QSECOFR / QRPTJOB Priority: 5 Size: 40	User Data: QSQSRVR Copies: 1 ASP: 1	⋮
<input type="checkbox"/>	2017-11-17 22:08:24 <b>QPJOBLOG (24)</b>	Queue: QUSRSYS / QEJOBLOG Status: *READY Pages: 1	820306 / QSECOFR / QRPTJOB Priority: 5 Size: 40	User Data: QSQSRVR Copies: 1 ASP: 1	⋮

### Actions you can take:

Click **Show Actions** for any file to display options for working with it. You have the following options:

- Select **Hold** to place the spooled file on hold. Its status changes to \*HELD.
- Select **Release** to release a hold on a spooled file. Its status changes to \*READY.
- Select **Delete** to delete the spooled file from the system. You're asked to confirm the request.
- Select **Top of the queue** to move the spooled file to the top of the output queue.
- Select **Properties** to [view or edit the spooled file's properties](#).
- Select **Spooled File View** to [view the spooled file](#).

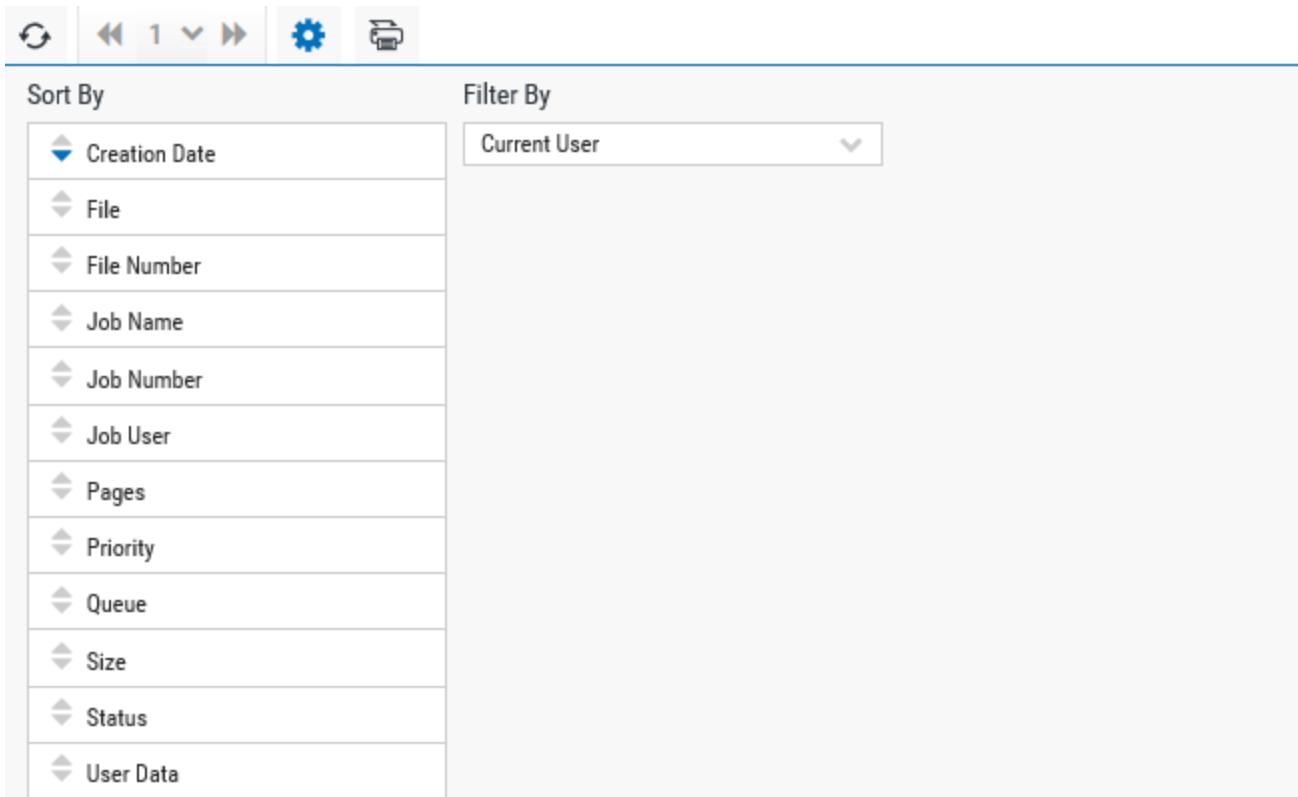
If you wish to perform the above actions on multiple spooled files, check the boxes by the files you want. Then, click a button at the top of the page. Available options are **Top of the queue**, **Delete**, **Hold**, and **Release**.

## Sorting and Filtering the Display

There are settings for the Spooled Files page that allow you to choose how to sort and filter the list.

Follow these steps:

1. Click  **Settings**.



Sort By		Filter By
 Creation Date		Current User
 File		
 File Number		
 Job Name		
 Job Number		
 Job User		
 Pages		
 Priority		
 Queue		
 Size		
 Status		
 User Data		

2. Select how you want the lists sorted (Sort By). Click your selection again to change the sort order to  ascending or  descending.
3. Select an option under **Filter By** to further narrow the list of items displayed.
4. Click  **Settings** to close the settings.

## Spooled File Properties

You can display and edit the properties of a spooled file.

Follow these steps:

1. Click **Spooled Files** under the Robot Schedule menu.
2. Find the spooled file you want. Click  **Show Actions** for it, and select **Properties**.
3. Make your changes. (The properties that can be changed are under the Edit Properties section.)
4. Click **Save**.

## View Spooled File

You can view the contents of a spooled file and even search the text in it.

Follow these steps:

1. Click **Spooled Files** under the Robot Schedule menu.
2. Find the spooled file you want. Click  **Show Actions** for it, and select **Spooled File View**.
3. To search for a string of characters, use your browser's Find feature.
4. Click **Close** to return to the list of spooled files.

# Reports

## Reports Overview

Robot Schedule provides many reports for all categories of job scheduling to help you manage, monitor, and maintain your IBM i job schedule. Some of the reports help you manage the tools in Robot Schedule that you use for job scheduling. These include system reports, such as the Good Morning Report and the Job Monitor Event Report, that give you feedback on the status of jobs and your schedule. Whether you want a high-level summary or a more comprehensive analysis of your job schedule or its components, Robot Schedule offers the report.

See [Reports](#) for information on working with the Reports page. See [Adding or Editing a Report](#) for information about setting up Robot Schedule reports.

The following describes the reports that are available in Robot Schedule. They're listed alphabetically.

### [Event Monitor History Report](#)

Lists the monitored events of these types: directory, file, and member. You can specify all available events or specify a specific date range. You also can limit the report to a specific event monitor or list all events that were monitored. The report includes detailed information about the monitored events.

### [Good Morning Report](#)

Summarizes the job processing during a specific time period. The following spooled files could be produced when you select the Good Morning Report.

- RB9401P1—Summary List
- RB9401P2—Abnormal Jobs
- RB9401P3—Reports time deviations
- RB9401P4—Report forecast deviations

### [Job Completion Message Report](#)

Lists the completion message information about job status, date range, all jobs, specific jobs, or by job type. It also includes status messages for the selected jobs. You can select by job name, group name, or query name. You can choose to display all status messages or list the messages by:

- All Statuses
- From/To Date
- D Delay
- K Skipped
- R Running
- T Abnormal Terminate
- C Normal Completion
- E Error in setup
- P Pending
- S Submitted to queue
- W Warning message

## Job Monitor Event Report

Lists the job monitor events; job underruns, job overruns, and job late starts. You can specify all available events or specify a specific date range. You also can limit the report to a specific job, specify a query name, or list all jobs. The report includes a summary page and detailed information about the jobs that had a monitored event.

## Schedule Forecast

Displays the forecast for a specific period, which lists the jobs scheduled to run and their predicted run time. You must enter the forecast name. You can enter a subsystem and job queue if you want to see only the jobs that run in the specified job queue and subsystem.

## Schedule of Date Jobs to Run This Month

Lists all jobs that have a Run Date Object or are using DAYNO to schedule the job to run on a specific date for the current month. The report lists the job name, description, group job (if any), day to run, the day of the week it falls on, and working and non-working day information.

## Schedule of Jobs to Run by Date

Lists all jobs for the forecast within the specified date and time range. The report lists the jobs in ascending order for the time they are scheduled to run. It includes the job name, description, group name (if any), and the last date and time the job ran.

## Unused Jobs

Lists all jobs that have not run since a date you specify. The report displays basic job information, such as name, number, type, override status, description, and the last run date for the job.

## Weekly Work Schedule by Completion Time

Lists job by completion time and date for the current week.

## Work Schedule by Time Scheduled

Lists all jobs for the week in group order and in run time order. Group jobs are listed in their order of execution.

# Reports

Robot Schedule provides many reports for all categories of job scheduling to help you manage, monitor, and maintain your IBM i job schedule.

## Viewing the Reports Page

In the Navigation Pane, click **Reports** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it.

### Things to know and do:

- The total number of saved reports in the list and the server they're on is displayed at the top of the page.
- Click  Refresh to refresh the information in the display.

- Click the page number and select the page you want to view. Or, click the previous and next arrows.
- Start typing in the Search field to find a specific report. It will find everything that contains what you're typing. See [Sorting and filtering](#) below to learn how to filter your search.
- Click **Add** to set up a new report for printing. For instructions, see [Adding or Editing Reports](#).

The screenshot shows a 'Reports' page with a blue header. In the top right corner, there's a 'help' link with a question mark icon. Below the header, there are navigation buttons for refresh, back, forward, and a gear icon for settings. A green 'Add' button is located in the top right. A search bar with the placeholder 'Search...' is positioned below the navigation. The main content area displays two reports: 'Schedule Forecast' and 'Good Morning Report', each with a checkbox, a name, and a three-dot menu icon. At the bottom, a box indicates the last update was on 2017-11-21 at 15:25:02 CST.

#### Actions you can take:

Click **Show Actions** by any report to display the following actions that you can take:

- Select **Schedule** to open the page where you can [schedule the report for printing](#).
- Select **Submit** to immediately submit the report for printing.
- Select **Edit** to open the page where you can [edit the report](#).

## Sorting and Filtering the Display

There are settings for the Reports page that allow you to choose how to sort the list, and what types of data will be searched when you do a search.

Follow these steps:

1. Click **Settings**.

The screenshot shows the 'Settings' panel for the Reports page. It includes a 'Sort By' section with dropdown menus for 'Report Description' and 'Report Name'. An arrow icon indicates that clicking the dropdown will change the sort order from ascending to descending. To the right is a 'Search By' section with a checked checkbox for 'Search All Fields' and three other checked checkboxes for 'Report Description' and 'Report Name'.

2. Select how you want the lists sorted (Sort By). Click your selection again to change the sort order to ascending or descending.
3. Select one or more options under **Search By** to narrow the list of items displayed.
4. Click **Settings** to close the settings.

## Adding or Editing Saved Report

You can set up a Robot Schedule report and save the setup so you can print it whenever you need to. You can also [schedule it for printing](#).

For most reports, you can specify selection criteria, such as a date range. The criteria that's available varies depending on the report you choose.

To add or edit a report:

1. In the Navigation Pane, click **Reports** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it.
2. To add a new report, click **Add**. Then, select the report you want to set up.  
To edit an existing report, find it and click its row.
3. Enter a **Name** and **Description** for the report.
4. Slide **Shared** to "On" if you want others to be able to work with and use this report.
5. Enter the Selection Criteria.
6. Enter the Print Options.
7. Click **Save**.

You can now print the report immediately or schedule it for printing.

## Scheduling a Report

Use the Setup Robot Schedule Job page to schedule jobs in Robot Schedule to print reports.

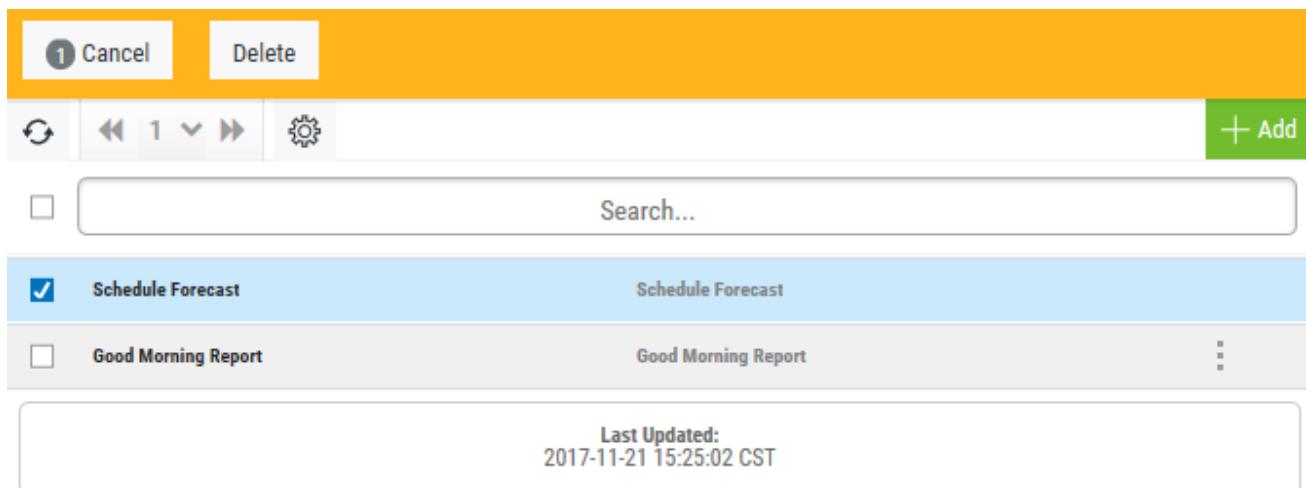
To schedule a job to print a report:

1. In the Navigation Pane, click **Reports** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it.
2. Click  **Show Actions** by any report to display the menu and select **Schedule**.
3. Enter the **Run Times** for the job.
4. Under **Run Days**, select an option for each day you want the job to run.
5. Click **Save**.

## Deleting Reports

To delete a saved report:

1. In the Navigation Pane, click **Reports** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it.
2. Select the reports you need to delete.



3. Click **Delete**.
4. Click **Delete** again when asked to confirm the deletion.

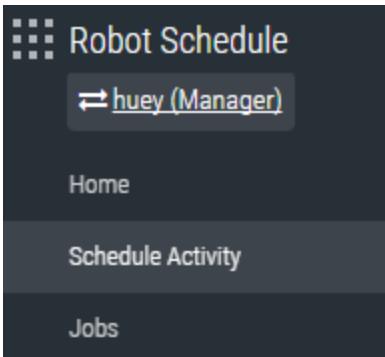
# Preferences

The Preferences page allows you to configure your sessions to function in a way that's best for you. Preference settings only apply to the profile you're currently logged in under.

Follow these steps to change your preferences:

1. In the Navigation Pane, click **Preferences** under the Robot Schedule menu. If the menu is hidden, hover over the Navigation Pane to expand it.
2. Enter the IBM i system you want to work with by default. To select from a list, click **Look Up**.

**Note:** As you're working, you can easily change to another system by clicking the system name under Robot Schedule in the menu and selecting a different system.



3. Under Job Activity Summary:
  - a. Enter the **Run Duration Deviation** percentage you want used. This is the percentage that the job's run time can deviate from the average run time for that job. The Job Activity Summary will show the number of jobs with run time durations outside of that deviation.  
**Example**  
You set the deviation at 25% and have a job with an average run duration of 10 minutes. The job actually runs for 13 minutes. It will show up on the Job Activity Summary because that 13 minute run deviated from the average run by 30%, and that exceeds the limit of 25% that you set.
  - b. Enter the number of minutes to use for the **Forecast Deviation**. The Job Activity Summary will show the number of jobs that started outside of that deviation of the forecast.  
**Example**  
You set the Forecast Deviation at 10 minutes. The Job Activity Summary will show the number of jobs that did not start within 10 minutes of their forecasted start time (10 minutes before or after the forecasted time).
4. Under Schedule Activity:
  - a. Click the **Auto-Refresh** button to enable it (On) or disable it (Off).
  - b. Enter the **Interval (in Minutes)** for the auto-refresh.
  - c. Select an option for **Show Jobs on All Tables with Job Type**. This allows you to see all jobs, or to see only iSeries jobs or only agent jobs.
  - d. Select an option for **Show Completed/Failed Jobs** from to indicate a time frame for which jobs to display.

- e. For the remaining four options (**Show Completed/Failed User Jobs**, **Show Running/Waiting User Jobs**, **Show Submitted/Checked-Off Forecast Jobs**, and **Show Forecasted Jobs Scheduled with the EVERY Option**), click the button to enable it (On) or disable it (Off).
5. Click **Save**.

# Other Help

For help with other Insite components and products supported by HelpSystems Insite, refer to the following resources:

*Alignia Monitoring Room for Insite User Guide*

*Authority Broker Administrator's Guide*

*AutoMate Ops Console User Guide*

*HelpSystems Insite User Guide*

*Network Security Administrator's Guide*

*Password Self Help for Insite User Guide*

*Robot Network for Insite User Guide*

*Robot Schedule for Insite User Guide*

*Webdocs for Insite User Guide*