

Chapter 9

Setting Up Schedules

This chapter describes how to set up schedules for running a configuration management operation, such as archive, restore, and inventory scan. You can specify the date, time, and interval when you want a JUNOScope software operation to occur.

A schedule is an independent entity that has no effect until you use it for an operation. When you set up a schedule, you are not doing anything operation related. You can use the same schedule for multiple operations.

When you want to see information about when an operation ran and when it is scheduled to run again, use the `Manage > Operations` command (see “Viewing Scheduled Operations” on page 212). The Operations page provides status information only for operations run using an existing schedule not for operations run using the Now schedule option.

You can import schedule information from another JUNOScope server or export it as backup or for importing to another server.

You must have superuser permission to set up a schedule.

This chapter includes the following topics:

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Adding a Schedule

As the JUNOScope software administrator, you can add a schedule for archiving a configuration file from an added router.

To add a schedule, follow these steps:

1. In the JUNOScope main window, click Settings > Schedules. The Schedules dialog box appears.
2. Click Add. The Add Schedule dialog box appears.

3. In the Schedule Name text box, type a name for the archive schedule that you want to add. The schedule name must be less than 20 characters long.
4. In the Start Date drop-down list boxes, select a schedule start date.
5. In the Start Time drop-down list boxes, select a schedule start time.
6. In the Time Interval drop-down list box, select the schedule time interval.
7. In the Comment text box, type an optional descriptive schedule comment.
8. Click OK.

The schedule is saved in the JUNOScope software database and is listed in the Schedules dialog box.

Copying a Schedule

To copy a schedule that you have added, follow these steps:

1. In the JUNOScope main window, click Settings > Schedules. The Schedules dialog box appears.
2. Select the check box for the schedule you want to copy.
3. Click Copy. The Add Schedule dialog box appears.

The screenshot shows the JUNOScope web interface. The top navigation bar includes 'Looking Glass', 'Configuration', 'Inventory Management', 'Monitor', and 'Settings'. The 'Settings' menu is expanded to show 'Schedules'. The 'Add Schedule' dialog box is open, displaying the following information:

- Schedule Name:** schedule002
- Start Date:** Jul 21 2004
- Start Time:** 10:00
- Time Interval:** every day
- Comment (optional):** daily operation

Buttons for 'OK' and 'Cancel' are visible at the bottom of the dialog box. The footer of the interface reads: 'Copyright 2003-2004, Juniper Networks, Inc. All Rights Reserved. Trademark Notice.'

The copied schedule appears with a 1 (the number one) after its name.

4. Edit the copied schedule appropriately using the procedure “Editing a Schedule” on page 107.
5. Click OK. The copied schedule is listed in the Schedules dialog box.

Viewing Schedules

You can view all schedules that have been added for JUNOScope software management.

To view schedules, in the JUNOScope main window, click Settings > Schedules. The Schedules dialog box appears with the list of added schedules.

The screenshot shows the JUNOScope web interface. The top navigation bar includes 'Looking Glass', 'Configuration', 'Inventory Management', 'Monitor', and 'Settings'. The 'Settings' menu is expanded to show 'Schedules'. The main content area displays 'Page 1 of 1' and 'Displaying 10 schedules of 10 total'. Below this is a table with the following data:

	Schedule Name ▲	Start Time	Time Interval	Comment
<input type="checkbox"/>	schedule001	Thu Sep 16 00:00:00 EDT 2004	every hour	hourly operation
<input type="checkbox"/>	schedule002	Tue Sep 16 10:10:00 EDT 2008	every day	daily operation
<input type="checkbox"/>	schedule003	Sat Apr 10 06:00:00 EDT 2004	every week	weekly operation
<input type="checkbox"/>	schedule004	Mon Apr 12 03:30:00 EDT 2004	every month	monthly operation
<input type="checkbox"/>	schedule005	Wed Jul 21 10:00:00 EDT 2004	every year	yearly operation

Below the table are buttons for 'Add', 'Copy', 'Edit', 'Delete', 'Export', and 'Import'. The footer contains the copyright notice: 'Copyright 2003-2004, Juniper Networks, Inc. All Rights Reserved. Trademark Notice.'

From the Schedules dialog box, you can add, edit, or delete one or more schedules.

Click a table column name to sort by that column. Clicking the column name toggles between ascending and descending sort order.

Editing a Schedule

You can edit a schedule when you want an operation, such as archiving, to occur at a different time.

To edit a schedule, follow these steps:

1. In the JUNOScope main window, click Settings > Schedules. The Schedules dialog box appears.
2. Select the schedule that you want to edit.
3. Click Edit. The Edit Schedule dialog box appears.

The screenshot shows the JUNOScope interface with the 'Edit Schedule' dialog box open. The dialog box contains the following fields:

- Schedule Name:** schedule003
- Start Date:** Jul 21 2004
- Start Time:** 10:00
- Time Interval:** every month
- Comment (optional):** monthly operation

At the bottom of the dialog box are 'OK' and 'Cancel' buttons. The background shows the JUNOScope main window with the 'Settings' > 'Schedules' path selected in the left sidebar.

4. Edit the schedule information as needed.
5. Click OK.

The edited schedule information is stored in the JUNOScope software database and listed in the Schedules dialog box.

Importing Schedule Information

You can import device information from another JUNOScope server, or you can use the provided sample XML import file `export-import-sample.xml` as a guide.



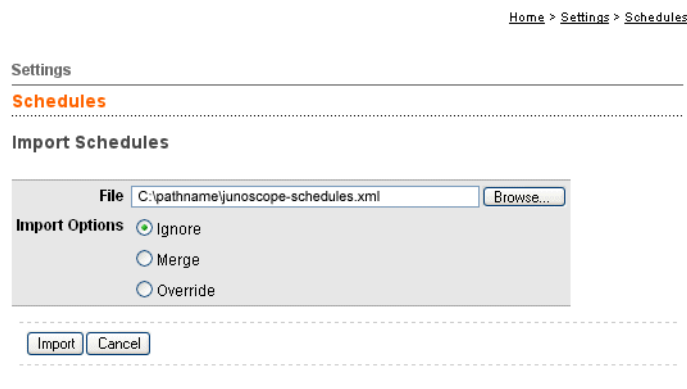
NOTE: Use only `utc-milliseconds` in the `<start-time>` element. This is the number of milliseconds since the epoch January 1, 1970. The `<start-time>` element text is ignored. The `<period>` element text can be every minute, every 5 minutes, every 15 minutes, every 30 minutes, every hour, every 6 hours, every 12 hours, every day, every 2 days, every week, every two weeks, every month, or every year.

Importing device information is useful when you do not want to enter setup information manually.

Importing access method or authentication information is useful when you want to use existing access method and authentication data that you have exported from another JUNOScope software server instead of adding that information manually.

To import schedules information, follow these steps:

1. In the JUNOScope main window, click `Settings > Schedules`. The Schedules dialog box appears.
2. Click `Import`. The Import Schedules dialog box appears.

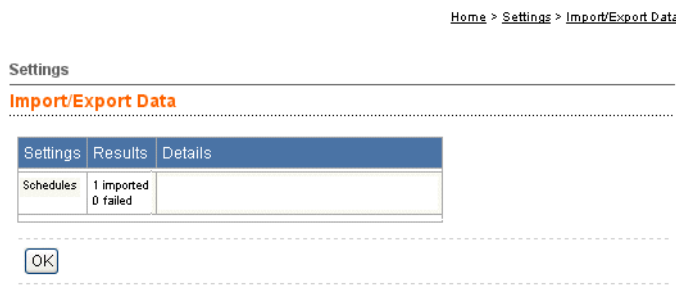


3. In the File text box, either browse to or type the name of the XML file that you want to import. For example, you can import the default `schedules.xml` export file from another JUNOScope server or use the provided sample `export-import-sample.xml` XML file on the JUNOScope server to generate a file to import.



NOTE: The `junoscope-` XML file prefix is not generated if you use the Microsoft Internet Explorer 6.0 Web browser to export JUNOScope setup data. You will only see the `schedules` filename.

4. To support synchronizing JUNOScope settings imported from multiple servers, select an import method to be used if a conflict occurs between existing records stored in the JUNOScope server and imported records. The available import method options include:
 - Ignore—(Default) An existing record stored in the JUNOScope server takes precedence over any imported record. The imported record is ignored and the existing record is not affected. Any imported record that does not exist in the JUNOScope server is inserted.
 - Merge—If a record exists in the JUNOScope server and also exists in the imported record, the imported record merges with the existing record and is augmented as necessary. If an imported record is in conflict with an existing record, the imported record takes precedence over the existing record. The existing record is merged with the imported record; however, the fields of imported record take precedence over the fields of the existing record. Any imported record that does not exist in the JUNOScope server is inserted.
 - Override—All records in the JUNOScope server are deleted, then all imported records are inserted. Before the override operation occurs, a message window appears with the following confirmation prompt: “The import with override option will delete all the existing records. Do you want to continue?” Select Yes or No to continue.
5. Click Import. The Import status dialog box appears.



The dialog box indicates the number of records imported successfully and unsuccessfully. The Details column provides a description for records that fail import.

6. Click OK. The imported data is listed in the Groups dialog box.

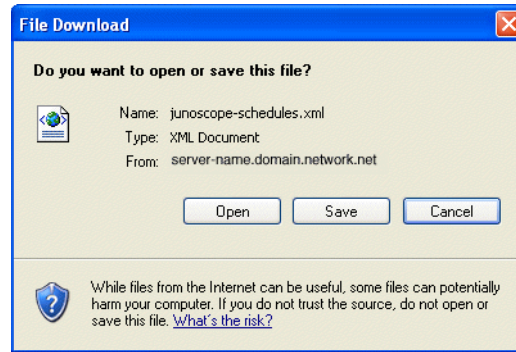
Exporting Schedule Information

You can export schedule information that you want back up or import to another JUNOScope server.

To export schedule information, follow these steps:

1. In the JUNOScope main window, click Settings > Schedules. The Schedules dialog box appears.

2. Click Export. The File Download dialog box appears.



3. Click Save to export the schedule information to the local file system in a file named `junoscope-schedules.xml`. Click Open to view the contents of the schedule export file.

Deleting a Schedule

You can delete an operation schedule that you no longer want to occur.



NOTE: You cannot delete a schedule that is scheduled to be run. You must delete the operation first, then delete the schedule. See “Managing Operations” on page 211.

To delete a schedule, follow these steps:

1. In the JUNOScope main window, click Settings > Schedules. The Schedules dialog box appears.
2. Select the schedule(s) that you want to delete. You can delete one or more schedules at a time.
3. Click Delete. The schedule information is deleted from the Manage Schedules dialog box and from JUNOScope software database.