



Configuring Backups

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Restoring the Cisco VNMC Software to the Backup Configuration

Restoring the Cisco VNMC Software to the Backup Configuration

Procedure

- Step 1** Install the Cisco VNMC virtual machine (VM).
For details, see the *Cisco Virtual Security Gateway, Release 4.2(1)VSG1(1)* and *Cisco Virtual Network Management Center, Release 1.0.1 Installation Guide*.
- Step 2** Uninstall the Cisco VSG policy agents.
Connect the Secure Shell to the Cisco VSG console for this task. This step does not cause a traffic disruption.

Example:

```
vsg# conf t
vsg (config)# vnm-policy-agent
vsg (config-vnm-policy-agent)# no policy-agent-image
```

Note Perform this step for all Cisco VSGs that are associated with the Cisco VNMC that you are restoring.

- Step 3** Uninstall the VSM policy agents.
Connect the Secure Shell to the VSM console for this task. This step does not cause a traffic disruption.

Example:

```
vsm# conf t
vsm (config)# vnm-policy-agent
vsm (config-vnm-policy-agent)# no policy-agent-image
```

Note Perform this step for all VSMS that are associated with the Cisco VNMC you are restoring.

Step 4 Restore the Cisco VNMC database.

Connect the Secure Shell to the Cisco VNMC CLI for this task. Depending upon your Cisco VNMC backup location, restore using File Transfer Protocol (FTP), Secure Copy (SCP), Trivial File Transfer Protocol (TFTP), or Secure File Transfer Protocol (SFTP).

Example:

```
vnmc# connect local-mgmt
vnmc(local-mgmt)# restore scp: [//[username@]server] [/path]
```

Step 5 In the Cisco VNMC GUI, click **Administration > Service Registry > Clients**, and in the **Work** pane do the following:

- a) Wait until each registered VSM displays the operational status as lost-visibility.
- b) Choose each VSM, and click the **Delete Client** icon.

Step 6 In the Cisco VNMC GUI, click **Resource Management > Resources > Virtual Supervisor Modules**, and verify that the deleted VSMS are not visible.**Step 7** Reinstall the VSM policy agents.

Note If the VSM policy agents must be upgraded, install the new software now.

Example:

```
VSM# conf t
VSM (config)# vnm-policy-agent
VSM (config-vnm-policy-agent)# policy-agent-image bootflash:vnmc-vsmpa.1.0.1g.bin
```

Step 8 Wait until all the VSMS have registered in the Service Registry and are displayed under **Resource Management > Resources > Virtual Supervisor Modules**.**Step 9** Reinstall the Cisco VSG policy agents.

Note If the Cisco VSG policy agents must be upgraded, install the new software now.

Example:

```
VSG# conf t
VSG (config)# vnm-policy-agent
VSG (config-vnm-policy-agent)# policy-agent-image bootflash:vnmc-vsgpa.1.0.1g.bin
```

Step 10 Verify the following states after the restore process is complete:

Note The restore process could take a few minutes depending upon your setup environment.

- a) On the Cisco VSG CLI, verify that your configurations are restored to their earlier state.
- b) On the Cisco VNMC GUI, verify that your objects and policies are restored to their earlier state.

Configuring Backup Operations

Creating a Backup Operation

Before You Begin

Obtain the backup server IP address and authentication credentials.

Procedure

- Step 1** In the **Navigation** pane, click the **Administration** tab.
- Step 2** In the **Navigation** pane, click the **Operations** subtab.
- Step 3** In the **Navigation** pane, click the **Backups** node.
- Step 4** In the **Work** pane, click the **Create Backup Operation** link.
- Step 5** In the **Create Backup Operation** dialog box, complete the following fields:

Name	Description
Admin State radio button	This can be: <ul style="list-style-type: none"> • enabled—Cisco VNMC runs the backup operation as soon as you click OK. • disabled—Cisco VNMC does not run the backup operation when you click OK. If you select this option, all fields in the dialog box remain visible.
Type field	The information saved in the backup configuration file. Full state —A copy of the database file. You can use this file for disaster recovery if you need to recreate every configuration on the Cisco VNMC.
Protocol radio button	The protocol to use when communicating with the remote server. This can be: <ul style="list-style-type: none"> • FTP • SCP • SFTP • TFTP

Name	Description
Hostname field	The hostname or IP address of the location where the backup file is stored. Note If you use a hostname rather than an IP address, you must configure a DNS server in Cisco VNMC. The hostname cannot be changed when editing the operation.
User field	The username the system should use to log in to the remote server. This field does not apply if the protocol is TFTP.
Password field	The password for the remote server username. This field does not apply if the protocol is TFTP. Cisco VNMC does not store this password. Therefore, you do not need to enter this password unless you intend to enable and run the backup operation immediately.
Remote File field	The full path to the backup configuration file. This field can contain the filename as well as the path. If you omit the filename, the backup procedure assigns a name to the file.

Step 6 Click **OK**.

Running a Backup Operation

Procedure

- Step 1** In the **Navigation** pane, click the **Administration** tab.
- Step 2** In the **Navigation** pane, click the **Operations** subtab.
- Step 3** In the **Navigation** pane, click and expand the **Backups** node.
- Step 4** In the **Navigation** pane, click the file you want to run.
- Step 5** In the **Work** pane, click on the **Properties** tab.
- Step 6** In the **Properties** area, complete the following fields:
 - a) In the **Admin State** field, click the **enabled** button.
 - b) For all the protocols, except TFTP, enter the password for the username in the **Password** field.

c) (Optional) Change the content of the other available fields.

- Step 7** Click **Save**.
Cisco VNMC takes a snapshot of the configuration type that you selected and exports the file to the network location.
- Step 8** (Optional) To view the progress of the backup operation, click the **FSM** tab in the pane. The backup operation continues to run until it is completed.

Editing a Backup Operation

Before You Begin

Obtain the backup server IP address and authentication credentials.

Procedure

- Step 1** In the **Navigation** pane, click the **Administration** tab.
- Step 2** In the **Navigation** pane, click the **Operations** subtab.
- Step 3** In the **Navigation** pane, click the **Backups** node.
- Step 4** In the **Work** pane, expand the items in the table, and select the backup operation you want to edit.
- Step 5** Click the **Edit** link.
- Step 6** In the **Edit** dialog box, modify the fields as appropriate:

Name	Description
Admin State radio button	This can be: <ul style="list-style-type: none"> • enabled—Cisco VNMC runs the backup operation as soon as you click OK. • disabled—Cisco VNMC does not run the backup operation when you click OK. If you select this option, all fields in the dialog box remain visible.
Type field	The information saved in the backup configuration file. Full state —A copy of the database file. You can use this file for disaster recovery if you need to recreate every configuration on the Cisco VNMC.

Name	Description
Protocol radio button	<p>The protocol to use when communicating with the remote server. This can be:</p> <ul style="list-style-type: none"> • FTP • SCP • SFTP • TFTP
Hostname field	<p>The hostname or IP address of the location where the backup file is stored.</p> <p>Note If you use a hostname rather than an IP address, you must configure a DNS server in Cisco VNMC.</p> <p>The hostname cannot be changed when editing the operation.</p>
User field	<p>The username the system should use to log in to the remote server. This field does not apply if the protocol is TFTP.</p>
Password field	<p>The password for the remote server username. This field does not apply if the protocol is TFTP.</p> <p>Cisco VNMC does not store this password. Therefore, you do not need to enter this password unless you intend to enable and run the backup operation immediately.</p>
Remote File field	<p>The full path to the backup configuration file. This field can contain the filename as well as the path. If you omit the filename, the backup procedure assigns a name to the file.</p>

Step 7 Click **OK**.

Deleting a Backup Operation

Procedure

- Step 1** In the **Navigation** pane, click the **Administration** tab.
 - Step 2** In the **Navigation** pane, click the **Operations** subtab.
 - Step 3** In the **Navigation** pane, click the **Backups** node.
 - Step 4** In the **Work** pane, expand the items in the table, and select the backup operation you want to delete.
 - Step 5** Click the **Delete** link.
 - Step 6** In the **Confirm** dialog box, click **OK**.
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Configuring Import Operations

Creating an Import Operation

Before You Begin

Obtain the backup server IP address and authentication credentials.



Important

The association of compute firewalls with VSGs are not included in the export or import data. Only the compute firewall definitions are included, such as device profiles and policies. Therefore, if an imported compute firewall did not exist in the system, it will not be associated to any VSG after the import operation. If an imported firewall already existed in the system, the association state remains the same.

Procedure

- Step 1** In the **Navigation** pane, click the **Administration** tab.
- Step 2** In the **Navigation** pane, click the **Operations** subtab.
- Step 3** In the **Navigation** pane, click the **Backups** node.
- Step 4** In the **Work** pane, click the **Create Import Operation** link.
- Step 5** In the **Create Import Operation** dialog box, complete the following fields:

Name	Description
Admin State radio button	This can be: <ul style="list-style-type: none"> • enabled—Cisco VNMC runs the import operation as soon as you click OK. • disabled—Cisco VNMC does not run the import operation when you click OK. If you select this option, all fields in the dialog box remain visible.
Action radio button	The action to be taken on the file. This can be: <ul style="list-style-type: none"> • merge • replace
Protocol radio button	The protocol to use when communicating with the remote server. This can be: <ul style="list-style-type: none"> • FTP • SCP • SFTP • TFTP
Hostname field	The hostname or IP address of the location where the backup file is stored. <p>Note If you use a hostname rather than an IP address, you must configure a DNS server in Cisco VNMC.</p> <p>The hostname cannot be changed when editing the operation.</p>
User field	The username the system should use to log in to the remote server. This field does not apply if the protocol is TFTP.
Password field	The password for the remote server username. This field does not apply if the protocol is TFTP. <p>Cisco VNMC does not store this password. Therefore, you do not need to enter this password unless you intend to enable and run the backup operation immediately.</p>

Name	Description
Remote File Prefix field	The full path to the import configuration file. This field can contain the filename as well as the path. If you omit the filename, the backup procedure assigns a name to the file.

Step 6 Click **OK**.

Editing an Import Operation

Before You Begin

Obtain the backup server IP address and authentication credentials.

Procedure

- Step 1** In the **Navigation** pane, click the **Administration** tab.
- Step 2** In the **Navigation** pane, click the **Operations** subtab.
- Step 3** In the **Navigation** pane, click the **Backups** node.
- Step 4** In the **Work** pane, expand the items in the table, and select the import operation you want to edit.
- Step 5** Click the **Edit** link.
- Step 6** In the **Edit** dialog box, modify the fields as appropriate:

Name	Description
Admin State radio button	This can be: <ul style="list-style-type: none"> • enabled—Cisco VNMC runs the import operation as soon as you click OK. • disabled—Cisco VNMC does not run the import operation when you click OK. If you select this option, all fields in the dialog box remain visible.
Action radio button	The action to be taken on the file. This can be: <ul style="list-style-type: none"> • merge • replace

Name	Description
Protocol radio button	<p>The protocol to use when communicating with the remote server. This can be:</p> <ul style="list-style-type: none"> • FTP • SCP • SFTP • TFTP
Hostname field	<p>The hostname or IP address of the location where the backup file is stored.</p> <p>Note If you use a hostname rather than an IP address, you must configure a DNS server in Cisco VNMC.</p> <p>The hostname cannot be changed when editing the operation.</p>
User field	<p>The username the system should use to log in to the remote server. This field does not apply if the protocol is TFTP.</p>
Password field	<p>The password for the remote server username. This field does not apply if the protocol is TFTP.</p> <p>Cisco VNMC does not store this password. Therefore, you do not need to enter this password unless you intend to enable and run the backup operation immediately.</p>
Remote File Prefix field	<p>The full path to the import configuration file. This field can contain the filename as well as the path. If you omit the filename, the backup procedure assigns a name to the file.</p>

Step 7 Click **OK**.

Deleting an Import Operation

Procedure

- Step 1** In the **Navigation** pane, click the **Administration** tab.
 - Step 2** In the **Navigation** pane, click the **Operations** subtab.
 - Step 3** In the **Navigation** pane, click the **Backups** node.
 - Step 4** In the **Work** pane, expand the items in the table, and select the import operation you want to delete.
 - Step 5** Click the **Delete** link.
 - Step 6** In the **Confirm** dialog box, click **OK**.
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Configuring Export Operations

Creating an Export Operation

Before You Begin

Obtain the backup server IP address and authentication credentials.



Important

The association of compute firewalls with VSGs are not included in the export or import data. Only the compute firewall definitions are included, such as device profiles and policies. Therefore, if an imported compute firewall did not exist in the system, it will not be associated to any VSG after the import operation. If an imported firewall already existed in the system, the association state remains the same.

Procedure

- Step 1** In the **Navigation** pane, click the **Administration** tab.
- Step 2** In the **Navigation** pane, click the **Operations** subtab.
- Step 3** In the **Navigation** pane, click the **Backups** node.
- Step 4** In the **Work** pane, click the **Create Export Operation** link.
- Step 5** In the **Create Export Operation** dialog box, complete the following fields:

Name	Description
Admin State radio button	This can be: <ul style="list-style-type: none"> • enabled—Cisco VNMC runs the export operation as soon as you click OK. • disabled—Cisco VNMC does not run the export operation when you click OK. If you select this option, all fields in the dialog box remain visible.
Type radio button	The type of file. This can be: <ul style="list-style-type: none"> • config-all • config-logical • config-system
Protocol radio button	The protocol to use when communicating with the remote server. This can be: <ul style="list-style-type: none"> • FTP • SCP • SFTP • TFTP
Hostname field	The hostname or IP address of the location where the backup file is stored. <p>Note If you use a hostname rather than an IP address, you must configure a DNS server in Cisco VNMC.</p> <p>The hostname cannot be changed when editing the operation.</p>
User field	The username the system should use to log in to the remote server. This field does not apply if the protocol is TFTP.
Password field	The password for the remote server username. This field does not apply if the protocol is TFTP. <p>Cisco VNMC does not store this password. Therefore, you do not need to enter this password unless you intend to enable and run the backup operation immediately.</p>

Name	Description
Remote File Prefix field	The full path to the export configuration file. This field can contain the filename as well as the path. If you omit the filename, the backup procedure assigns a name to the file.

Step 6 Click **OK**.

Editing an Export Operation

Before You Begin

Obtain the backup server IP address and authentication credentials.

Procedure

- Step 1** In the **Navigation** pane, click the **Administration** tab.
- Step 2** In the **Navigation** pane, click the **Operations** subtab.
- Step 3** In the **Navigation** pane, click the **Backups** node.
- Step 4** In the **Work** pane, expand the items in the table, and select the export operation you want to edit.
- Step 5** Click the **Edit** link.
- Step 6** In the **Edit** dialog box, modify the fields as appropriate:

Name	Description
Admin State radio button	This can be: <ul style="list-style-type: none"> • enabled—Cisco VNMC runs the export operation as soon as you click OK. • disabled—Cisco VNMC does not run the export operation when you click OK. If you select this option, all fields in the dialog box remain visible.
Type radio button	The type of file. This can be: <ul style="list-style-type: none"> • config-all • config-logical • config-system

Name	Description
Protocol radio button	<p>The protocol to use when communicating with the remote server. This can be:</p> <ul style="list-style-type: none"> • FTP • SCP • SFTP • TFTP
Hostname field	<p>The hostname or IP address of the location where the backup file is stored.</p> <p>Note If you use a hostname rather than an IP address, you must configure a DNS server in Cisco VNMC.</p> <p>The hostname cannot be changed when editing the operation.</p>
User field	<p>The username the system should use to log in to the remote server. This field does not apply if the protocol is TFTP.</p>
Password field	<p>The password for the remote server username. This field does not apply if the protocol is TFTP.</p> <p>Cisco VNMC does not store this password. Therefore, you do not need to enter this password unless you intend to enable and run the backup operation immediately.</p>
Remote File Prefix field	<p>The full path to the export configuration file. This field can contain the filename as well as the path. If you omit the filename, the backup procedure assigns a name to the file.</p>

Step 7 Click **OK**.

Deleting an Export Operation

Procedure

- Step 1** In the **Navigation** pane, click the **Administration** tab.
 - Step 2** In the **Navigation** pane, click the **Operations** subtab.
 - Step 3** In the **Navigation** pane, click the **Backups** node.
 - Step 4** In the **Work** pane, expand the items in the table, and select the export operation you want to delete.
 - Step 5** Click the **Delete** link.
 - Step 6** In the **Confirm** dialog box, click **OK**.
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