

Using the Nasuni VSS Hardware Provider

Nasuni Corporation – Boston, MA

Introduction

The Nasuni VSS Hardware Provider supports creating shadow copies of iSCSI volumes for third-party Windows applications. This provider provides a fast, consistent method to take snapshots of iSCSI volumes on the Nasuni Filer.

Note: While the Nasuni VSS Hardware Provider enables creating consistent point-in-time snapshots, it does not provide a snapshot volume for backup by an application. Nasuni's own snapshot technology preserves the snapshot in the cloud.

This consists of two pieces:

1. **Nasuni Provider:** This is a service that runs on a Windows Server machine (including Windows Server 2003, Windows Server 2008, and Windows Server 2012). This service initiates shadow copies for iSCSI volumes on a registered Nasuni Filer. The provider communicates with the Nasuni Filer over HTTPS. Registering the Nasuni Filer with the provider requires the Nasuni Filer IP address, an API key name, and a key passcode.
2. **Nasuni Filer API Access Keys:** On the Nasuni Filer or Nasuni Management Console user interfaces, the administrator needs to create a Key Name and generate a Key Passcode.

Installing the Nasuni VSS Hardware Provider

To install the Nasuni VSS Hardware Provider on a target Windows Server platform, follow these steps:

1. Download the Nasuni VSS Hardware Provider software from the Nasuni Web site. Visit <https://account.nasuni.com/account/>, then select **Downloads**, then click the link for the Nasuni VSS Hardware Provider software.
2. Unzip the software. The package includes a 32-bit version and a 64-bit version of the software, plus a README file.
3. Double-click the `.msi` file for your platform to install the software. This requires Administrative permissions.
4. The Nasuni VSS Hardware Provider Setup wizard runs.
5. Accept the Terms of Service and click **Next**.
6. If necessary, change the destination location for the software. Click **Next**.
7. Review the installation parameters and make any changes necessary. Click **Next**. The Nasuni VSS Hardware Provider software installs. When the installation is complete, the wizard displays a Finish page.

The result of the installation is two executables in the destination location:

`NasuniProvider.exe` and `NasuniRegTool.exe`. In addition, the installation creates a Nasuni Provider service in the list of Windows services. The status of the Nasuni Provider service is Stopped and Automatic.



Configuring the Nasuni VSS Hardware Provider

To configure the Nasuni VSS Hardware Provider, an API Access Key and Passcode are necessary.

Obtaining Access Key and Passcode from Nasuni Filer

To obtain an API Access Key and Passcode from the Nasuni Filer, follow these steps:

1. On the Nasuni Filer with the iSCSI volume, click **Configuration** and select **API Access Keys** from the drop-down menu. The **API Access Keys** page appears.
2. Click **Add API Key**. The **Add API Key** dialog box appears.
3. In the **Name** text box, enter a name for this API key. Use a name that is meaningful to you, such as "vsskey".
4. Click **Create Key**. The Nasuni Filer generates a Key Passcode for this key. The **Successfully Generated API Key** dialog box appears.
5. Copy and store the **Key Passcode**.
6. Click **Close**.
7. The new key appears in the **API Access Keys** list.
8. To regenerate the Key Passcode, click **Update**.
9. To delete this key, click **Delete**.

Note: If you update or delete a key, and then add another key, you must re-do the *Configuring Nasuni VSS Hardware Provider* procedure below.

Obtaining Access Key and Passcode from Nasuni Management Console

Alternatively, if the Nasuni Filer with the iSCSI volume is managed by the Nasuni Management Console, to obtain an API Access Key and Passcode, follow these steps:

1. On the Nasuni Management Console, click **Filers** and select **API Keys** from the menu on the left. The **Filer API Access Key Settings** page appears.
2. Click **New API Key**. The **Add API Access Key** dialog box appears.
3. From the **Filer** drop-down list, select the Nasuni Filer with the iSCSI volume.
4. In the **Name** text box, enter a name for this API key. Use a name that is meaningful to you, such as "vsskey".
5. Click **Add API Key**. The Nasuni Filer generates a Key Passcode for this key. A message appears with the Key Passcode for this key.
6. Copy and store the **Key Passcode**.
7. The new key appears in the **Filer API Access Key Settings** list.
8. To regenerate the Key Passcode, click **Edit**. Then click **Update Key**.
9. To delete this key, click **Delete**.

Configuring Nasuni VSS Hardware Provider

Now that you have the API Access Key Name and Key Passcode, you must use this information to configure the Nasuni VSS Hardware Provider. Follow these steps:

1. Run the `NasuniRegTool.exe` executable. This requires Administrative permissions. The `NasuniRegTool` runs and opens a command window.
2. Press 1 for Add Filer Configuration.
3. Enter the IP address of the Nasuni Filer with the iSCSI volume.
4. Enter the Key Name.
5. Enter the Key Passcode.
6. Press **Enter**.

The message "Success" appears. The `NasuniRegTool` creates Windows Registry entries with your configuration information for the `NasuniProvider` service to use.

Important: Whenever you use the `NasuniRegTool.exe` executable to change an entry in the Windows Registry, you must restart the `NasuniProvider` service. To do this, select **Start** → **All Programs** → **Administrative Tools** → **Services**. Right-click the `NasuniProvider` service, then select **Restart** from the drop-down menu.



At this point, you can use your usual Microsoft VSS Shadow Copy functionality to obtain consistent snapshots of iSCSI volumes.

Additional Information

Using the `NasuniRegTool.exe` executable, you can also update the Nasuni Filer configuration with a different IP address, Key Name, or Key Passcode (choice 2); remove the Nasuni Filer configuration (choice 3); display the Nasuni Filer configuration (choice 4); or enable debug tracing (choice 5) (if requested by Nasuni Technical Support).

Contacting Technical Support

Telephone: 1-888-6NASUNI (888-662-7864)

Email: support@nasuni.com

Technical Support is available 24/7/365 for full production clients.