



Secure Mobile Access 500v 10.2

Getting Started Guide

for Hyper-V

SONICWALL®

Contents

Introduction	4
Before You Begin	5
Supported Platforms	5
Requirements	5
Files for Installation	6
Creating a MySonicWall Account	6
Installing the SMA 500v for Hyper-V Virtual Appliance	8
Preparing the Windows Server System	8
Creating Virtual Switches in Hyper-V	8
Downloading the SMA 500v for Hyper-V Virtual Appliance Software	11
Installing SMA 500v for Hyper-V	12
Configuring the SMA 500v for Hyper-V Virtual Appliance	18
Connecting to the Console	18
Using the Command Line Interface	20
Setup Wizard	21
Reboot	21
Restart SSL VPN Services	22
Logout	22
Save TSR to Flash	22
Display EULA	22
Configuring Settings on the Appliance Web Interface	22
Licensing and Registering Your Appliance	24
Registering the SMA 500v for Hyper-V	25
Registering an SMA 500v for Hyper-V in a Closed Network	25
De-registering an SMA 500v for Hyper-V	26
Using the 30-day Trial Version	28
Deployment Considerations	28
Registering the 30-day Trial Virtual	29
Converting a Free Trial License to Full	30
Upgrading Your Appliance	31
Obtaining the Latest Image Version	31
Exporting a Copy of Your Configuration	31
Uploading a New Image	32

SonicWall Support	33
About This Document	34

Introduction

This Getting Started Guide contains installation procedures and configuration guidelines for deploying the SonicWall SMA 500v for Hyper-V Virtual Appliance on a server in your network. The SMA 500v for Hyper-V includes a software appliance, which has been preinstalled and preconfigured for your virtual environment, and allows for the secure and easy development of the SMA 500v for Hyper-V Virtual Appliance solutions within that virtual environment.

① **IMPORTANT:** A Hyper-V Generation 1 virtual machine is required for SMA 500v for Hyper-V to function correctly.

The SMA 500v for Hyper-V provides the following benefits:

- **Scalability and Redundancy**
 - Multiple virtual machines can be deployed as a single system, enabling specialization, scalability, and redundancy.
- **Operational Ease**
 - You can virtualize your entire environment and deploy multiple machines within a single server or across multiple servers.
- **Product Versatility**
 - SMA 500v for Hyper-V is compatible with other SonicWall platforms either as a stand-alone (All-in-One) unit, control center, or as a remote analyzer.
- **Security**
 - SMA 500v for Hyper-V provides an optimized, non-tamperable software and hardware architecture.

Before You Begin

Topics:

- [Supported Platforms](#)
- [Requirements](#)
- [Files for Installation](#)
- [Creating a MySonicWall Account](#)

Supported Platforms

The elements of basic Hyper-V structure must be implemented prior to deploying the SMA 500v for Hyper-V. The following Hyper-V platforms are supported:

- Hyper-V v2016 and v2019 or higher
- 2 vCPUs, 4G memory, 32G storage

Requirements

Hyper-V is available on 64-bit versions of Windows 10 Pro, Enterprise, and Education. It is not available on Windows Home edition. SonicWall recommends using the Windows Server 2012 or 2016 editions.

The following are the minimum requirements for the SMA 500v for Hyper-V:

- **4 GB RAM**
This is the minimum amount of RAM needed by the SMA 500v for Hyper-V operating system to meet the product performance and capacity specifications. You can generally run one or more virtual machines on a computer with 4GB of RAM, though you will need more resources for additional virtual machines.
- **2 CPU**
This is the default number of CPUs provisioned in the SMA 500v for Hyper-V. The minimum required number of CPUs is one.
- **32 GB Hard Disk space**
- **Internet access** (for communication between the and the SonicWall Licensing Manager).

For more information about Hyper-V's system requirements and how to verify that Hyper-V runs on your machine, see the *Hyper-V Requirements Reference*.

Files for Installation

① | **NOTE:** You use different files for fresh installations than you do when updating to a newer version.

SMA 500v for Hyper-V is available for download from www.MySonicWall.com. For a fresh install, the Virtual Hard Disk (VHD) file with a file name similar to the following format is available for import and deployment to your Hyper-V server:

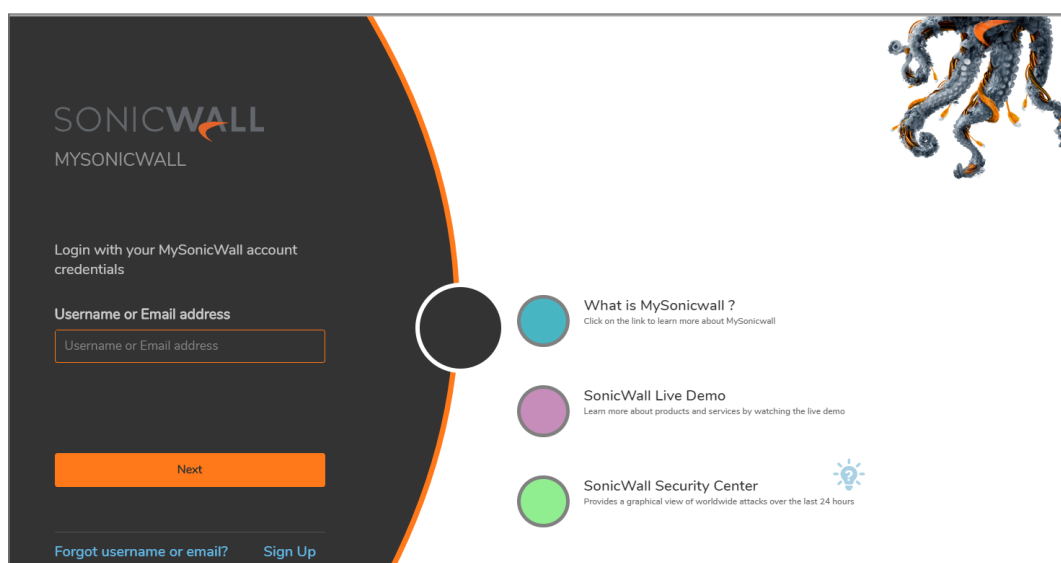
```
sw_smavm_eng_10.X.X.X_10.X.X_p_XXsv_XXXXXX.vhd
```

Creating a MySonicWall Account

A MySonicWall account is required for product registration. If you already have an account, log in and continue to the [Registration](#) section.

To create a MySonicWall account:

1. In your browser, navigate to www.MySonicWall.com.
2. In the login screen, click the **Sign Up** link.



3. Complete the account information, including email and password.
① | **NOTE:** Your password should be at least eight characters, but no more than 30 characters.
4. Enable two-factor authentication if desired.
5. If you enabled two-factor authentication, select one of the following authentication methods:
 - **Email (one-time passcode)** where an email with a one-time passcode is sent each time you log into your MySonicWall account.
 - **Microsoft/Google Authentication App** where you use a Microsoft or Google authenticator application to scan the code provided. If you are unable to scan the code, you can click on a link for a secret code.
6. Click **CONTINUE** to go to the **Company** page.

7. Complete the company information and click **CONTINUE**.
8. On the **Your Info** page, select whether you want to receive security renewal emails.
9. Identify whether you are interested in beta testing new products.
10. Click **CONTINUE** to go to the **Extras** page.
11. Select whether you want to add additional contacts to be notified for contract renewals.
12. If you opted for additional contacts, input the information and click **ADD CONTACT**.
13. Click **DONE**.
14. Check your email for a verification code and enter it in the **Verification Code*** field. If you did not receive a code, contact Customer Support by clicking the link.
15. Click **DONE**. You are returned to the login window so you can login into MySonicWall with your new account.

① | **NOTE:** MySonicWall registration information is not sold or shared with any other company.

Installing the SMA 500v for Hyper-V Virtual Appliance

The SMA 500v for Hyper-V Virtual Appliance is installed by deploying a VHD file to your Hyper-V server. Each VHD file contains all software components related to SMA 500v for Hyper-V.

You can deploy the VHD files as needed for your SMA 500v for Hyper-V environment. The SMA 500v for Hyper-V can be configured for a single server or in a distributed environment on multiple servers.

Topics:

- [Preparing the Windows Server System](#)
- [Creating Virtual Switches in Hyper-V](#)
- [Downloading the SMA 500v for Hyper-V Virtual Appliance Software](#)
- [Installing SMA 500v for Hyper-V](#)

Preparing the Windows Server System

Before installing an SMA 500v for Hyper-V Virtual Appliance on Hyper-V, prepare the Windows Server system:

- Install Windows Server 2016 or 2019.
- Install the Hyper-V Role in the Windows Server system. Refer to the instructions at: <https://docs.microsoft.com/en-us/windows-server/virtualization/hyper-v/get-started/install-the-hyper-v-role-on-windows-server>.
- Connect the Windows Server system to an external, internal, or private switch. For detailed instructions see the section that follows: *Creating Virtual Switches in Hyper-V*.

Creating Virtual Switches in Hyper-V

Microsoft Hyper-V allows you to create three types of virtual switches (vSwitches):

- **External vSwitch** – binds to a physical network adapter and provides the vSwitch access to a physical network.

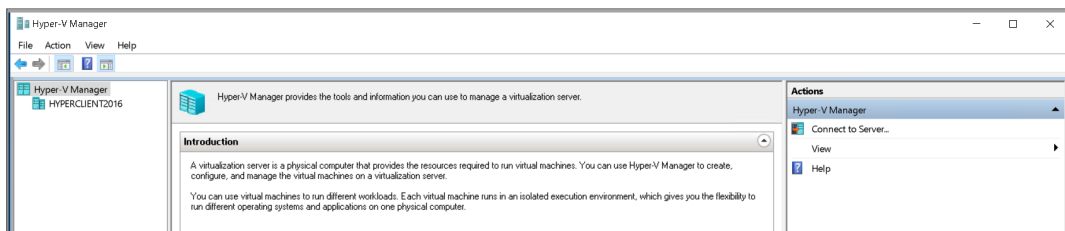
- **Internal vSwitch** – passes traffic between the virtual machines and the Hyper-V host. This type of vSwitch does not provide connectivity to a physical network.
- **Private vSwitch** – passes traffic between the virtual machines on the Hyper-V host only.

For an SMA 500v for Hyper-V deployment, an External vSwitch is required to provide connectivity for SMA 500v for Hyper-V management access and for routing traffic to and from the network devices that the appliance is securing (such as LAN or DMZ side devices).

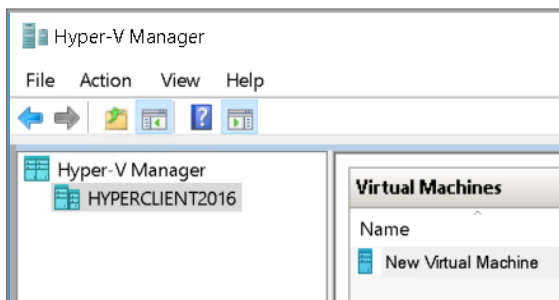
An **Internal vSwitch** or **Private vSwitch** is required when the virtual machines that the appliance is securing (such as a LAN or DMZ side VM) are created in the same Hyper-V server. The difference between an Internal vSwitch and a Private vSwitch is whether to allow traffic between the appliance and the Hyper-V host (by way of an Internal vSwitch or, between the SMA 500v for Hyper-V and other virtual systems running under Hyper-V (by way of a Private vSwitch).

To create an External vSwitch:

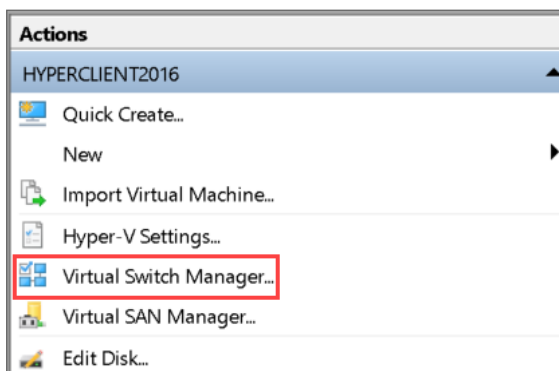
1. Open the **Hyper-V Manager** tool.



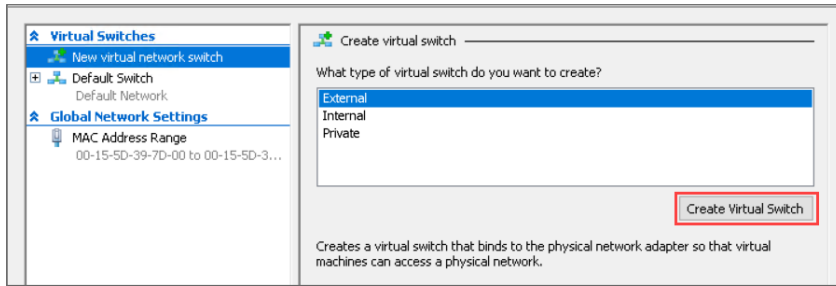
2. To bring up the detailed **Actions** panel, click the Hyper-V designation in the upper left and then double-click the name of the instance that appears under it.



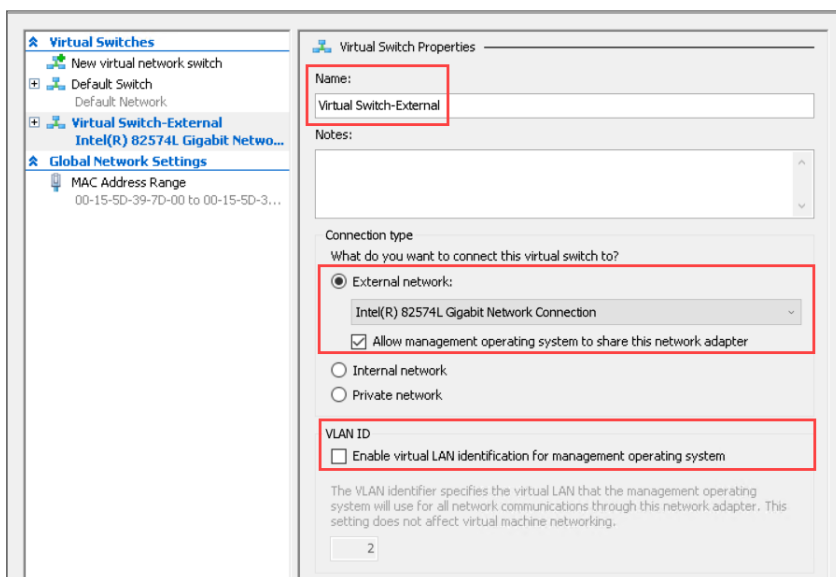
3. Select **Virtual Switch Manager**.



4. Select **External** for the type of virtual switch and then click **Create Virtual Switch**.



5. Under **Virtual Switch Properties**, type a descriptive name for the switch into the **Name** field.
6. For **Connection type**, select **External network** and select the physical network adapter that connects to the external vSwitch from the drop-down menu.
7. If you want to use this same physical adapter to manage the Hyper-V host at the same time, select **Allow management operating system to share this network adapter**.



NOTE: When the **Allow management operating system to share this network adapter** option is selected, you need to specify the VLAN ID that is used for this management traffic. If the VLAN ID is not configured, the management traffic is untagged. Always be sure to isolate the Hyper-V management traffic from the SMA 500v for Hyper-V traffic by using a different VLAN ID.

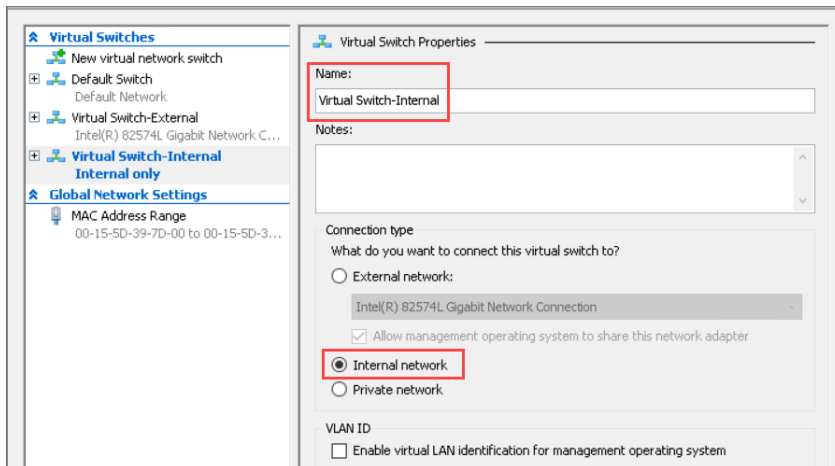
8. Repeat Step 4 through Step 7 to create more External vSwitches when you have more physical connections deployed between the Windows Server and the external switch and you would like to use them for routing SMA 500v for Hyper-V traffic.

When your SMA 500v for Hyper-V protects other virtual machines (LAN or DMZ side VM) located in the same Hyper-V server, perform the next procedure to create an Internal vSwitch or a Private vSwitch.

To create an Internal or Private vSwitch:

1. On the **Action** tab of the Hyper-V Manager tool, select **Virtual Switch Manager**.
2. Select **Internal** or **Private** for the type of virtual switch and then click **Create Virtual Switch**.
3. Under **Virtual Switch Properties**, type a descriptive name for the switch into the **Name** field.

4. For **Connection Type**, select **Internal network** or **Private network**.

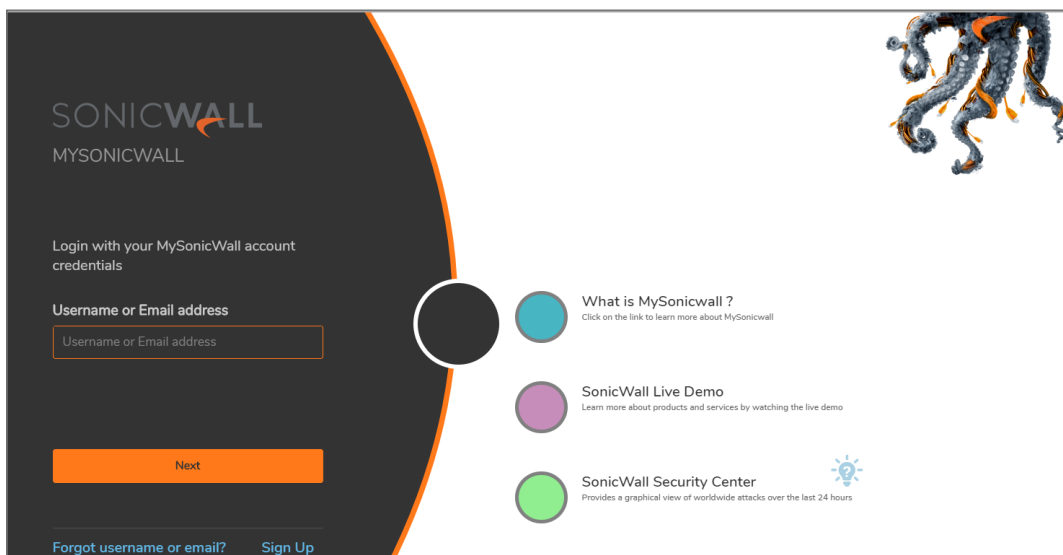


Downloading the SMA 500v for Hyper-V Virtual Appliance Software

This section details the process for downloading the SMA 500v for Hyper-V software from MySonicWall. After purchasing SMA 500v for Hyper-V, you will receive an email with a serial number and Authentication Code. Log in to MySonicWall, go to **My Downloads**, and complete the steps that follow. If you do not have a MySonicWall account, you can easily create one. Refer to [Creating a MySonicWall Account](#) for more information.

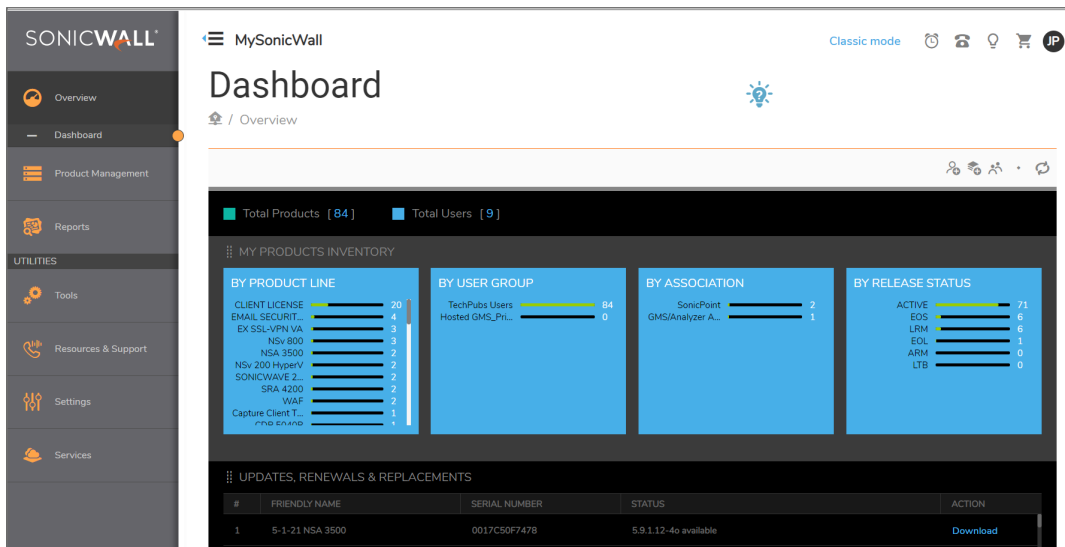
To complete the download process:

1. Navigate to www.MySonicWall.com.



2. Enter your **Username or Email** and **Password** in the required fields, then click **Login**. The

MySonicWall page displays the following screen:

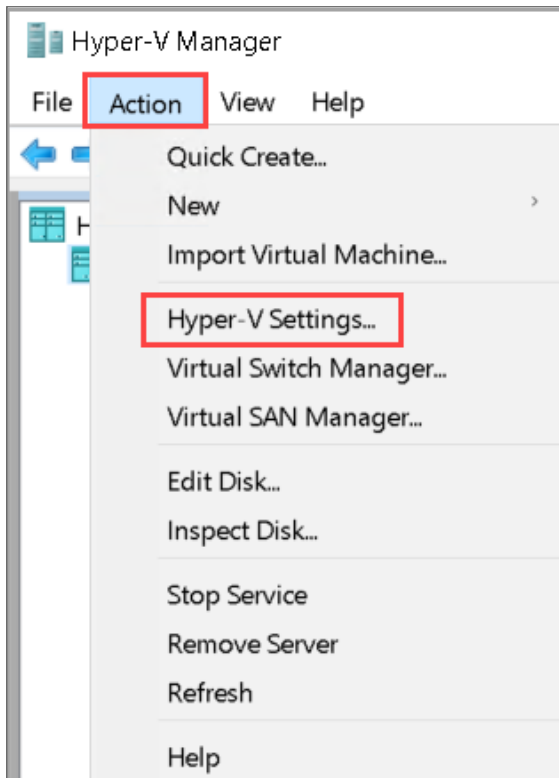


3. Click **My Downloads** in the left-pane menu under **Resources & Support**. The **My Downloads** page is displayed.
4. From the button bar, narrow selections by choosing from **Recent Releases**, **Select a Product**, **Language**, **Firmware** or **Documentation**, and the **Version** you would like to download.
5. Click the **Select a Product** drop-down list, go to **SMA**, and select **SMA 500v for Hyper-V Virtual Appliance Base Firmware**.
6. In the **Available Software** list, click **SMA 500v for Hyper-V Virtual Appliance Base Firmware**.
7. Save the SMA 500v for Hyper-V Virtual Appliance software image to your computer.

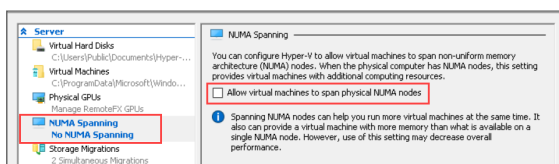
Installing SMA 500v for Hyper-V

To install SMA 500v for Hyper-V:

1. Download the SMA 500v for Hyper-V VHD file to a local folder in the Windows Server system.
2. In the **Hyper-V Manager** window, click **Action** and select **Hyper-V Settings**.

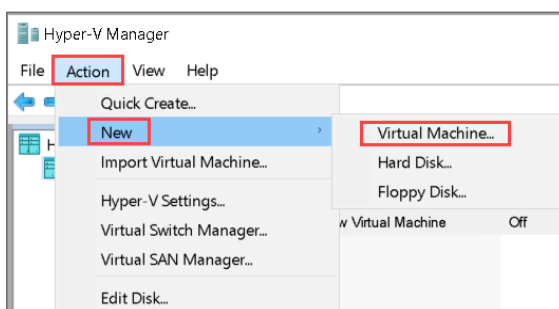


3. Clear the **Allow virtual machines to span physical NUMA nodes** option.

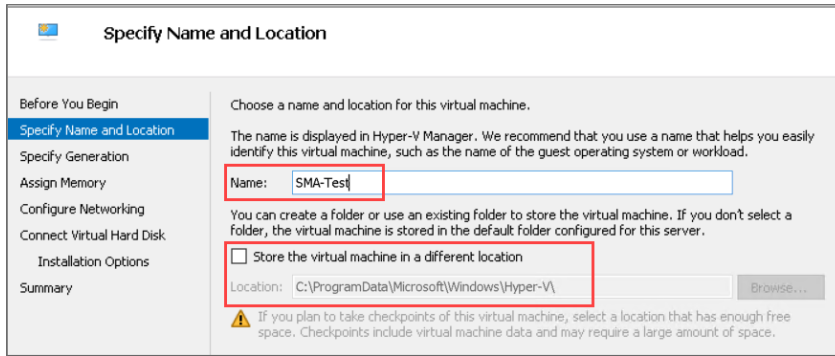


- ① **NOTE:** After clearing the **Allow virtual machines to span physical NUMA nodes** option, the Hyper-V Virtual Machine Management service must be restarted to apply the change. To restart the service, select **Action > Stop Service**, then select **Action > Start Service** in the Hyper-V Manager.

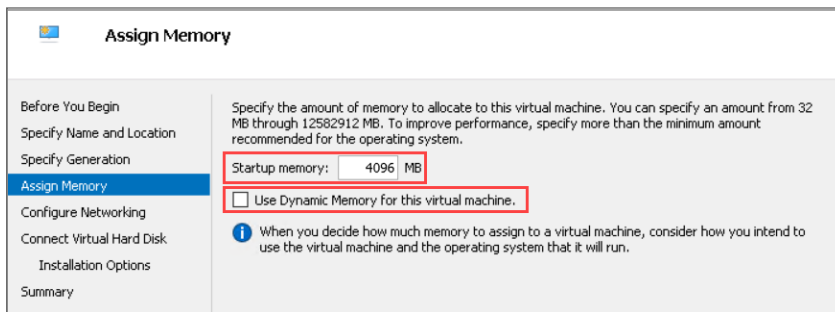
4. Create a virtual machine by clicking **Action > New > Virtual Machine**.



5. Type a descriptive name for the SMA 500v for Hyper-V virtual machine into the **Name** field.
6. If you do not want to use the default location to store the VM files, select **Store the virtual machine in a different location** and enter a different location into the **Location** field.

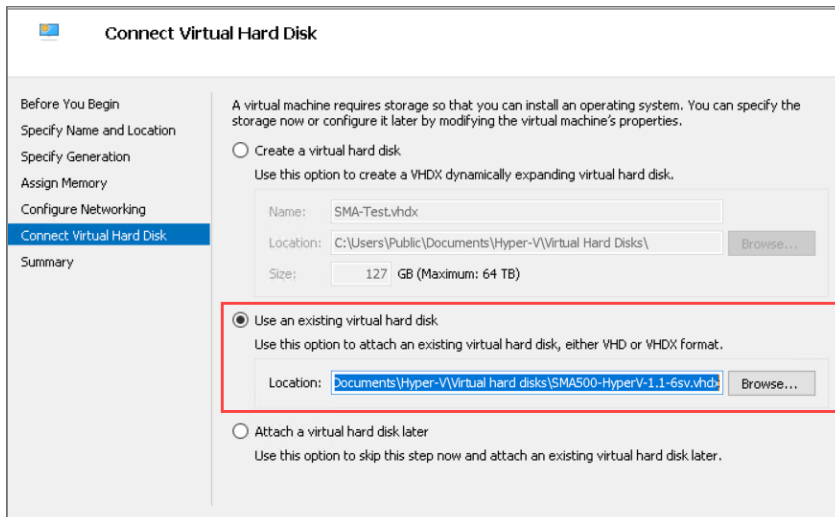


7. In the **Specify Generation** screen, select **Generation 1**. This is the default option and the only version supported.
8. In the **Assign Memory** screen, assign the memory based on the system requirements of your SMA 500v for Hyper-V model. In general, 4096 MB is the minimum required.

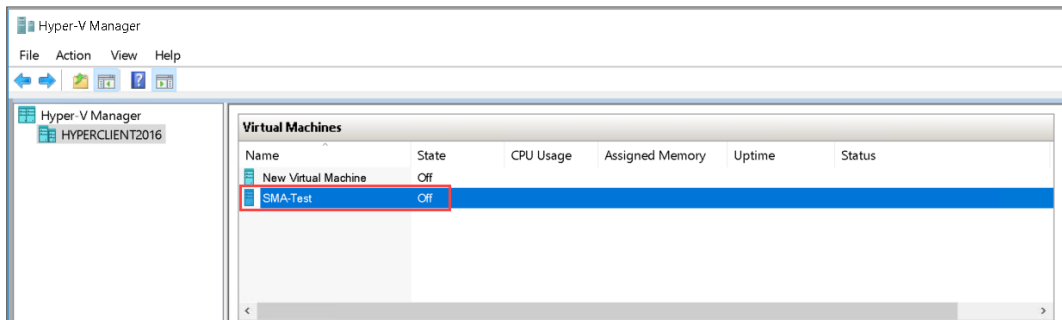


① **NOTE:** Do not select the **Use Dynamic Memory for this virtual machine** option; this function is not supported by SMA 500v for Hyper-V.

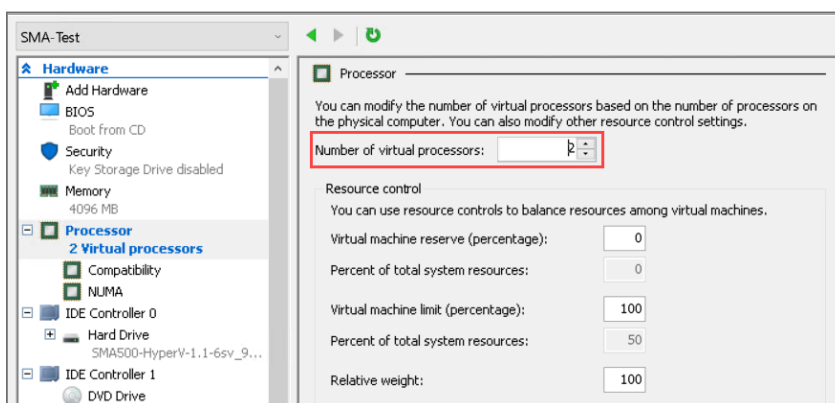
9. In the **Configure Networking** screen, since this is the first network interface to be mapped to X0 in the SMA 500v for Hyper-V, do one of the following:
 - Select your **Private** vSwitch if your LAN (X0) side network devices are virtual machines located in the same Hyper-V host.
 - Select your **External** vSwitch if your LAN (X0) side network devices are located external to the Hyper-V host.
10. In the **Connect Virtual Hard Disk** screen, select the **Use an existing virtual hard disk** option and set the **Location** field to the folder where you downloaded the SMA 500v for Hyper-V VHD file in Step 1.



11. Review the summary and click **Finish**.
12. Check the created SMA 500v for Hyper-V virtual machine in the Hyper-V Manager tool. The virtual machine is **Off** by default.

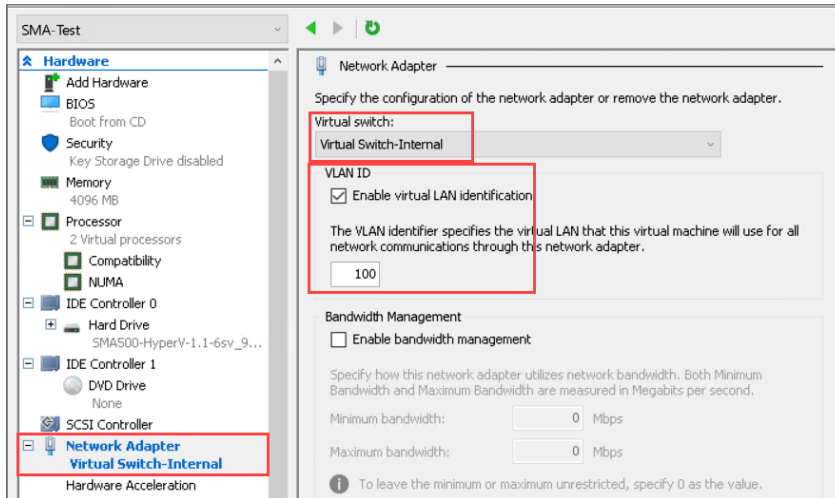


13. Right-click the SMA 500v for Hyper-V virtual machine and select **Settings** to open the **Edit Settings** page.
14. Configure the **Number of virtual processors** field based on the SMA 500v for Hyper-V system requirements of your model. This is the CPU core number. In general, two cores are the minimum required.

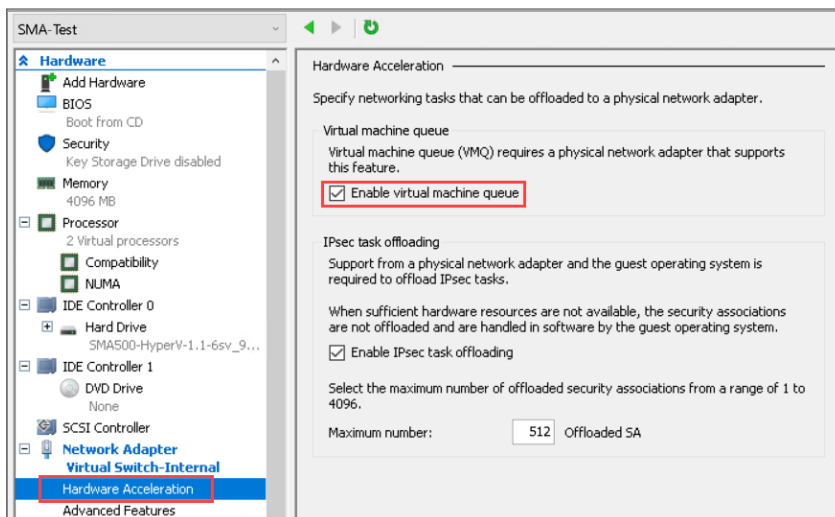


15. Configure the network adapter. The first network adapter is mapped to X0 in the SMA 500v for Hyper-

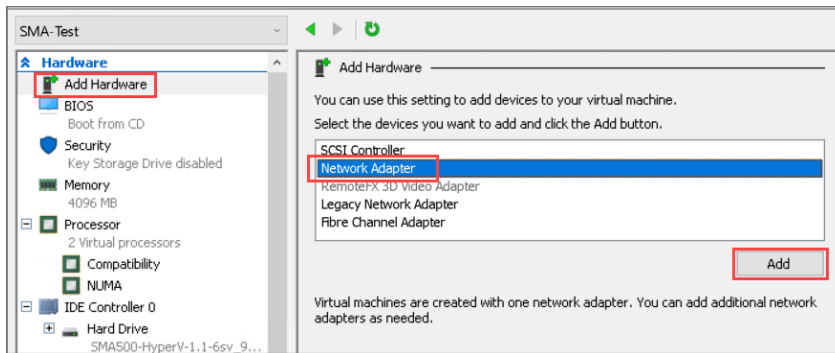
V. Configure the vSwitch and VLAN ID that match the network settings in your LAN (X0) side network devices, as configured in Step 9.



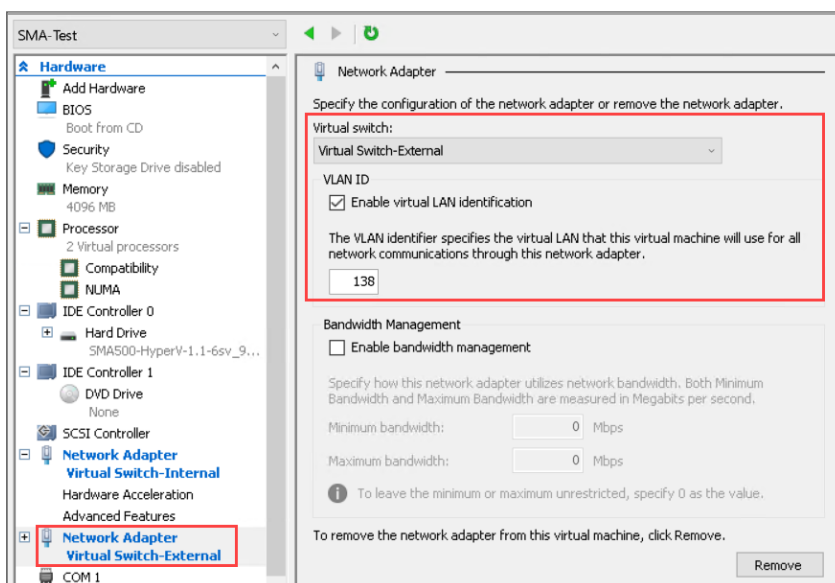
16. Configure the advanced settings of the network adapter. In the **Hardware Acceleration** screen, select the **Enable virtual machine queue** option (enabled by default). This option can improve the performance of the SMA 500v for Hyper-V.



17. To add more network adapters for the SMA 500v for Hyper-V, click **Add Hardware** and select **Network Adapter**, then click **Add**.



18. Map your second network adapter to X1 (default WAN), which should use an External vSwitch. For the VLAN ID, select **Enable virtual LAN identification** and enter the VLAN ID of the VLAN that connects to the Internet through the external switch.



19. Add more network adapters with a mapping sequence from X2-X4 for a maximum of three network interfaces.
 - ① **NOTE:** It is not required to have all three adapters. SMA 500v for Hyper-V can run with a minimum of two network adapters configured.
20. Click **OK** when finished adding network adapters.
21. In the Hyper-V Manager tool, right-click your SMA 500v for Hyper-V and select **Connect** to open the SMA 500v for Hyper-V console window.
22. Click **Power On** to boot up the SMA 500v for Hyper-V.

You are now ready to register your SMA 500v for Hyper-V and proceed with management.

Configuring the SMA 500v for Hyper-V Virtual Appliance

This section describes how to power on and configure basic settings on the SMA 500v for Hyper-V Virtual Appliance, including virtual hardware settings and networking settings.

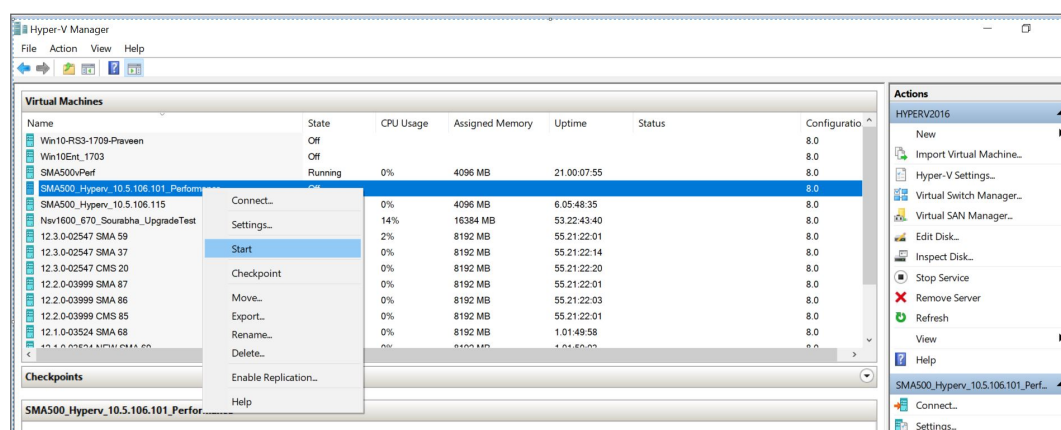
Topics:

- [Connecting to the Console](#)
- [Using the Command Line Interface](#)
- [Configuring Settings on the Appliance Web Interface](#)

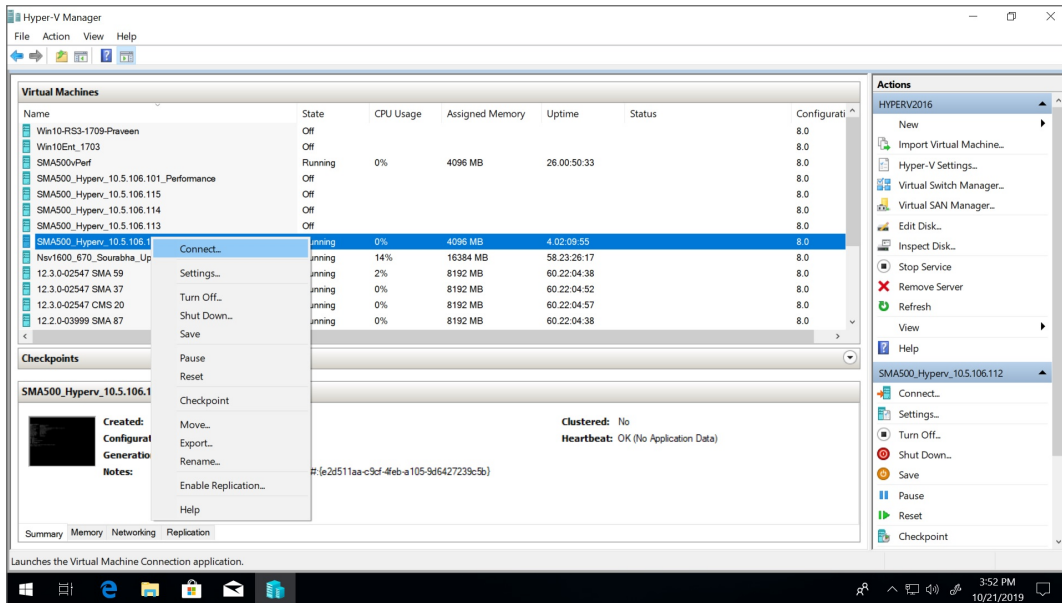
Connecting to the Console

To Start, Connect, and Shut Down SMA 500v for Hyper-V:

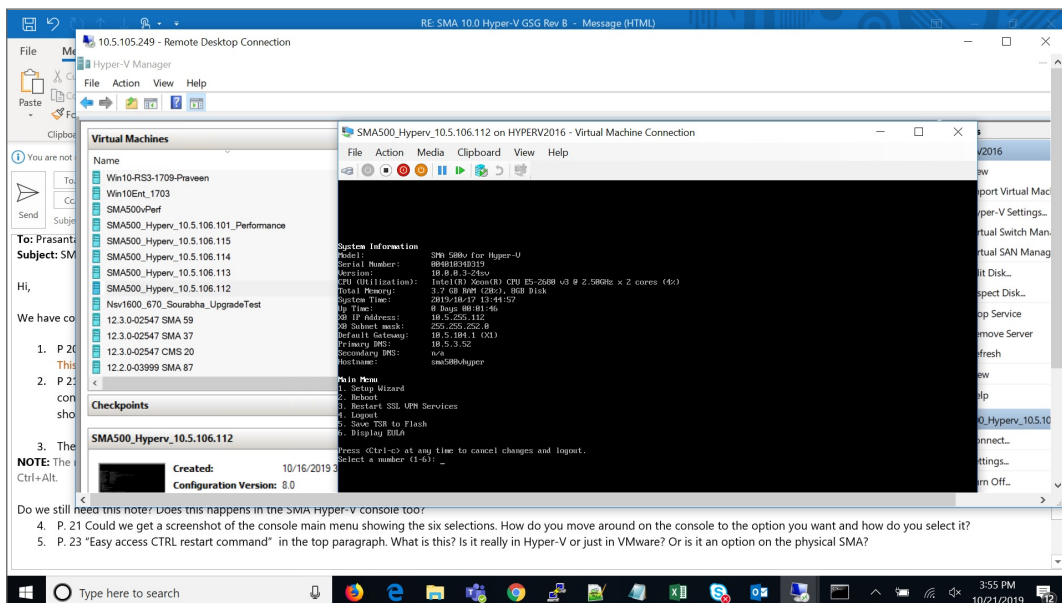
1. Click SMA 500v for Hyper-V in the Virtual Machines list.
2. If the **State** is **Off**, right-click to bring up the **Start** dialog box.
3. Click **Start** to start the machine.



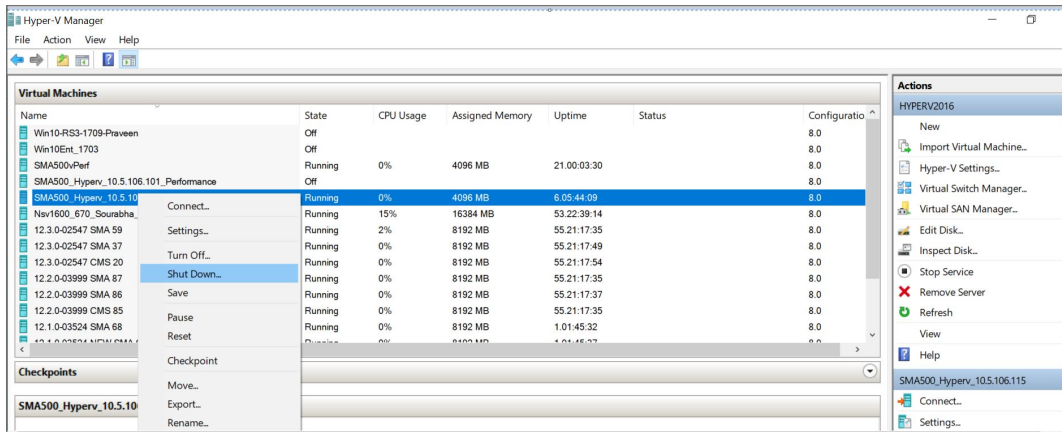
4. When Hyper-V is fully booted, click your SMA 500v for Hyper-V in the Virtual Machines list to connect.
5. Right-click to bring up the dialog box.
6. Click **Connect**.



- The console screen appears, and a login prompt is displayed.
- To access the Command Line Interface, log in as **admin**. The password is the same as the password for the “admin” account configured on the appliance. The default is **password**.
- If the incorrect credentials are used, you can try again at the prompt.
- Press **Enter**. This launches CLI.



- To shut down when the **State is Running**, right-click on the machine in the list to bring up the **Shut Down** dialog box.
- Click **Shut Down** to shut down the machine.



Using the Command Line Interface

The Command Line Interface (CLI) is a text-only mechanism for interacting with a computer operating system or software by typing commands to perform specific tasks. It is a critical part of the deployment of the SMA 500v for Hyper-V Virtual Appliance, where basic networking needs to be configured from the console.

While the physical SMA 500v for Hyper-V Virtual Appliance has a default IP address and network configuration that requires a client's network settings to be reconfigured to connect, as the network settings in the VMware virtual environment might conflict with the SonicWall defaults. The CLI utility remedies this by allowing basic configuration of the network settings when deploying the SMA 500v for Hyper-V Virtual Appliance.

After the SMA 500v for Hyper-V Virtual Appliance firmware has fully booted, a login prompt is displayed.

To access the CLI, login as admin. The password is the same as the password for the "admin" account configured on the appliance. The default is password.

```

sslvpn login: admin
Password: <password>
  
```

If an incorrect password is entered, the login prompt is displayed again. If the correct password is entered, the CLI is launched.

① **NOTE:** The User input used in the examples highlighted in red indicates text entered by the user, there is no coloring of text done on the actual CLI.

Basic system information and network settings are displayed along with the main menu.

The main menu has six selections:

- Setup Wizard
- Reboot
- Restart SSL VPN Services
- Logout

- Save TSR to Flash
- Display EULA

Setup Wizard

This option launches a simple wizard to change the basic network settings, starting with the X0 IP Address, X0 subnet mask, default gateway, primary and secondary DNS, and the hostname. The following CLI output illustrates an example where each field is changed:

```
X0 IP Address (default 192.168.200.1): 192.168.200.201
X0 Subnet Mask (default 255.255.255.0): 255.255.0.0
Default Gateway (default 192.168.200.2): 192.168.200.1
Primary DNS: 10.50.128.52
Secondary DNS (optional, enter "none" to disable): 4.2.2.2
Hostname (default sslvpn): sra4200

New Network Settings:
X0 IP Address:      192.168.200.201
X0 Subnet mask:    255.255.0.0
Default Gateway:  192.168.200.1
Primary DNS:      10.50.128.52
Secondary DNS:    4.2.2.2
Hostname:         sra

Would you like to save these changes (y/n)?
```

If a field is not filled out, the prior value is retained, allowing you to change only a single field. After each field has been prompted, the new network settings are shown and a confirmation message is given for the user to review and verify the changes before applying them. The following shows the result when you save the changes:

```
Would you like to save these changes (y/n)? y
Saving changes...please wait....
Changes saved!
Press <Enter> to continue...
```

After saving the changes, press **Enter** to return to the original display of the **System Information and Network Settings**. Verify that the changes have taken effect.

If no changes are saved, a message displays. Pressing **Enter** returns to the initial display of the **System Information and Network settings**.

① **NOTE:** When applying settings that change the IP address, there could be a delay of up to five seconds as the interface settings are updated.

Reboot

Selecting this option displays a confirmation prompt and then reboots:

```
Reboot
Are you sure you want to reboot (y/n)?
```

Restart SSL VPN Services

This option displays a confirmation prompt, and then restarts the Web server and the related SSL-VPN daemon services. This command is equivalent to issuing the Easy Access Ctrl restart command.

```
Restart SSL-VPN Services
Are you sure you want to restart the SSL-VPN services (y/n)? y
Restarting SSL-VPN services...please wait.
Stopping SMM: [ OK ]
Stopping Firebase :[ OK ]
Stopping FTP Session:[ OK ]
Stopping HTTPD: [ OK ]
Cleaning Apache State: [ OK ]
Stopping Graphd :[ OK ]

Cleaning Temporary files.....
Starting SMM: [ OK ]
Starting firebase: [ OK ]
Starting httpd: [ OK ]
Starting Tpsession: [ OK ]
Starting graphd: [ OK ]

Restart completed...returning to main menu...
```

Logout

The logout option ends the CLI session and returns to the login prompt.

Save TSR to Flash

Saves the Technical Support Report (TSR) to flash memory on the SMA 500v for Hyper-V Virtual Appliance.

Display EULA

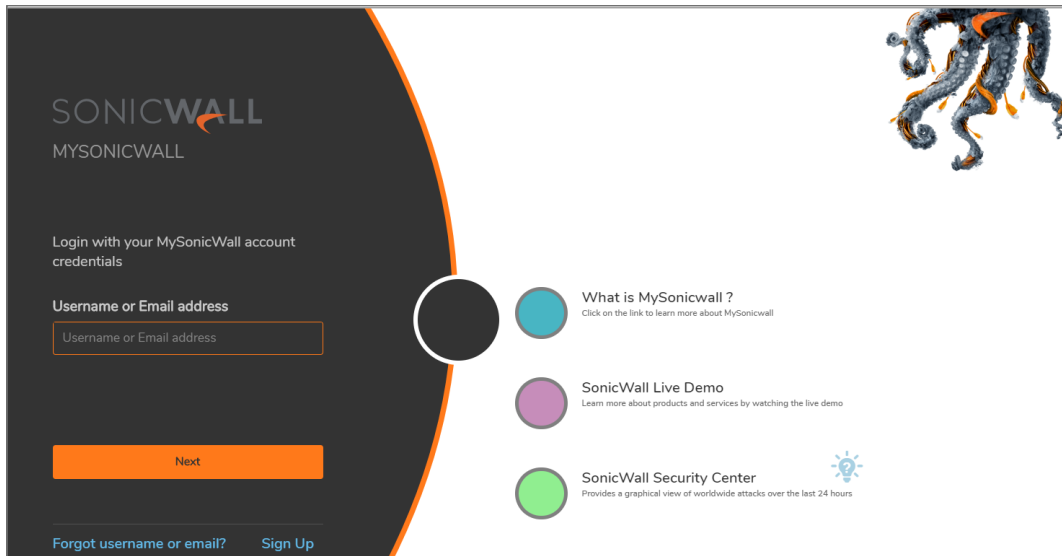
Displays the End User License Agreement (EULA) associated with the SMA 500v for Hyper-V Virtual Appliance.

Configuring Settings on the Appliance Web Interface

This section provides procedures to configure the remaining appliance settings as you would for the SonicWall SMA 500v for Hyper-V Virtual Appliance hardware appliance.

To complete the host configuration:

1. Launch a browser and enter the URL of the virtual appliance.
2. On the appliance interface login page, type in the default credentials and then click **Login**.

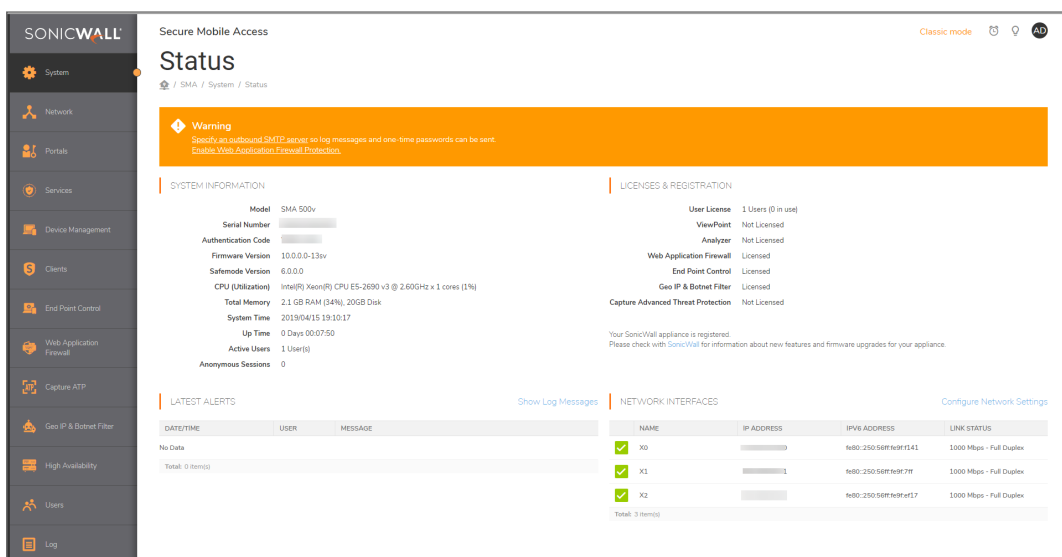


The default credentials are:

User - admin

Password - password

After you log in, the SMA 500v for Hyper-V Virtual Appliance management interface displays.



3. Configure your settings for the SMA 500v for Hyper-V.

Licensing and Registering Your Appliance

This section contains information about licensing and registering your SMA 500v for Hyper-V Virtual Appliance.

You must purchase a license and register your SMA 500v for Hyper-V before first use. Registration is performed using the management interface. After the registration is completed, the SMA 500v for Hyper-V is licensed and ready to use. For the 30-Day Trial Virtual Appliance registration process, refer to Registering the 30-day Trial Virtual Appliance.

① **NOTE:** The SMA 500v for Hyper-V shares the same SKU and license structure as the SMA 500v for Hyper-V. After you have purchased an SMA 500v for Hyper-V Virtual Appliance from MySonicWall, you can use the serial number and authorization code you get to register the SMA 500v for Hyper-V or for SMA 500v for Hyper-V. However, you cannot use the same serial number and authorization code to register both.

SMA 500v for Hyper-V provides user-based licensing. By default, the virtual appliance comes with a 5-user license. Extra licenses can be added in 5, 10, and 25 user denominations, up to a maximum that allows for 50 concurrent user sessions.

Licensing is controlled by SonicWall's license manager service, and customers can add licenses through their MySonicWall accounts. Unregistered units support the default license allotment for their model, but the unit must be registered in order to activate additional licensing from MySonicWall.

License status is displayed in the SMA 500v for Hyper-V Virtual Appliance management interface, on the Licenses & Registration section of the **System > Status** page.

Communication with the SonicWall Licensing Manager is necessary while using the SMA 500v for Hyper-V Virtual Appliance, and requires Internet access.

If a user attempts to log in to the Virtual Office portal and there are no more available user licenses, the login page displays the error, "No more User Licenses available. Please contact your administrator." The same error is displayed when a user launches the NetExtender client when all user licenses are in use. These login attempts are logged with a similar message in the log entries, and displayed in the **Log > View** page. You can add user licenses if this occurs regularly. For occasional spikes in remote access needs, you can purchase a Spike License to temporarily increase the number of remote users your virtual appliance can support. See the *SMA Administration Guide* for more information.

Topics:

- [Registering the SMA 500v for Hyper-V](#)
- [Registering an SMA 500v for Hyper-V in a Closed Network](#)
- [De-registering an SMA 500v for Hyper-V](#)

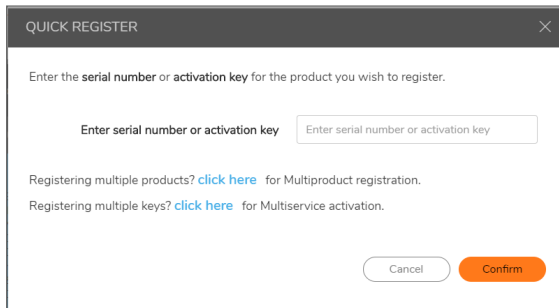
Registering the SMA 500v for Hyper-V

After you have installed and configured the network settings for your SMA 500v for Hyper-V Virtual Appliance, you can log into the management console and register it to your MySonicWall account. Registration of your SonicWall SMA 500v for Hyper-V Virtual Appliance follows the same process as for other SonicWall hardware-based appliances.

① | **NOTE:** System functionality is extremely limited when registration is not completed.

To register your SMA 500v for Hyper-V Virtual Appliance:

1. Log in to your SMA 500v for Hyper-V. Navigate to the **System > Licenses** page.
2. Under **Manage Security Services Online**, click **Activate, Upgrade, or Renew services**. This should take you to a MySonicWall login.
3. Enter your MySonicWall.com account username or email address and password in the appropriate fields. Click **Submit**.
4. The **Dashboard** displays. Click the **Add Product** icon in the top button bar.



5. Enter the **Serial Number** or **Activation Key** for your new appliance. Click **Confirm** to finish the registration process.
6. You have successfully registered your SMA 500v for Hyper-V. Click **Continue** to view the Manage Licenses screen or continue configuring other settings within the appliance.

Registering an SMA 500v for Hyper-V in a Closed Network

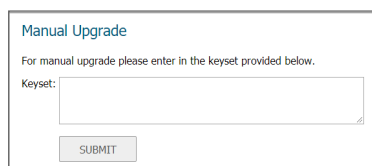
① | **NOTE:** This registration method uses Manual Upgrade and is not recommended for normal product registration on products that have Internet access. See *Registering the SMA 500v for Hyper-V* for the recommended registration method on products with Internet access.

- ① **NOTE:** Only an SMA 500v for Hyper-V that was registered online can be de-registered. If the SMA 500v for Hyper-V was registered using the offline method, de-registration is not supported.

In a closed network, your SMA 500v for Hyper-V does not have Internet access and cannot communicate directly with the SonicWall licensing server. To complete the registration process, you need to obtain information from MySonicWall and then log into your SMA 500v for Hyper-V and enter that information.

To register an SMA 500v for Hyper-V in a closed network environment:

1. Log into your SMA 500v for Hyper-V appliance and navigate to the **System > Status** page.
2. Make a note of the GUID, or leave the page open in your browser. The GUID is displayed in the **System Information** section.
3. In another browser tab or window, log in to your MySonicWall account.
4. Navigate to **My Products** and click on the entry for your SMA 500v for Hyper-V appliance.
5. To get the **License Keyset**, first click the key icon.
6. Enter the **GUID** into the dialog box and click **Update**. The **License Keyset** is displayed. This is a binary representation of all the service licenses activated on your SMA 500v for Hyper-V.
7. Select the **License Keyset** and copy it to your clipboard.
8. Log into your SMA 500v for Hyper-V appliance or return to that browser window if you are still logged in.
9. Navigate to the **System > Licenses** page.
10. Under **Manual Upgrade**, paste the **License Keyset** into the **Keyset** field.



11. Click **Submit**. Your SMA 500v for Hyper-V is now registered.

De-registering an SMA 500v for Hyper-V

You can de-register an SMA 500v for Hyper-V directly from the Secure Mobile Access interface. Removing the registration puts the virtual appliance into an unregistered state and deletes the binding between it and its serial number in MySonicWall. At that point, you can use that serial number to register the same or another SMA 500v for Hyper-V instance. Only one SMA 500v for Hyper-V instance is allowed per serial number.

To De-register an SMA 500v for Hyper-V:

1. Log into the Secure Mobile Access management interface on your SMA 500v for Hyper-V Virtual Appliance.
2. Navigate to the **System > Settings** page.
3. Under **Settings Management**, click **Export Settings** to export a copy of your current configuration settings before de-registering your SMA 500v for Hyper-V. This makes it possible to import these settings to another SMA 500v for Hyper-V instance.

⚠ **CAUTION:** Be sure to export your configuration settings before de-registering your SMA 500v for Hyper-V. You cannot recover them after de-registration.

4. Navigate to **System > Licenses**.
5. Under **Manage Security Services Online**, click **Activate, Upgrade, or Renew services** and log into your MySonicWall account.
6. Navigate to **Product Management > My Products**, and select the SMA 500v for Hyper-V you would like to de-register. Click **Delete Product** on the far right of the row. A dialog box appears requesting the reason.
7. Click **Confirm**.
8. If the de-registration is successful, the SMA 500v for Hyper-V returns to the unregistered state.

Using the 30-day Trial Version

The SMA 500v for Hyper-V Virtual Appliance is offered in a 30-day Trial version. The installation, registration, and functionality of the 30-Day Trial appliance is the same as the full SMA 500v for Hyper-V, except for differences noted below in Deployment Considerations. An email is sent from the SonicWall License Manager to warn you when your trial is near its expiration date.

To upgrade to the full version:

- Purchase the full SMA 500v for Hyper-V.
- Export your settings from the 30-day Trial version.
- Install and register the full SMA 500v for Hyper-V.
- Import your settings.

You must install the SMA 500v for Hyper-V software before registering your 30-Day Trial. For more information on obtaining the software, see [Downloading the Virtual Appliance Software](#).

Topics:

- [Deployment Considerations](#)
- [Registering the 30-day Trial Virtual Appliance](#)
- [Converting a Free Trial License to Full License](#)

Deployment Considerations

The following is a list of deployment considerations for the 30-day Trial version:

- The SMA 500v for Hyper-V is disabled after 30 days.
- A maximum of two concurrent users are allowed to login to the appliance.
- Trial versions of Web Application Firewall are activated during registration.
- No paid add-on licenses or services can be added.
- Communication with the SonicWall Licensing Manager is required during the entire trial period.
- It is recommended to save a copy of your appliance's configuration settings before upgrading to the actual version of the SMA 500v for Hyper-V.

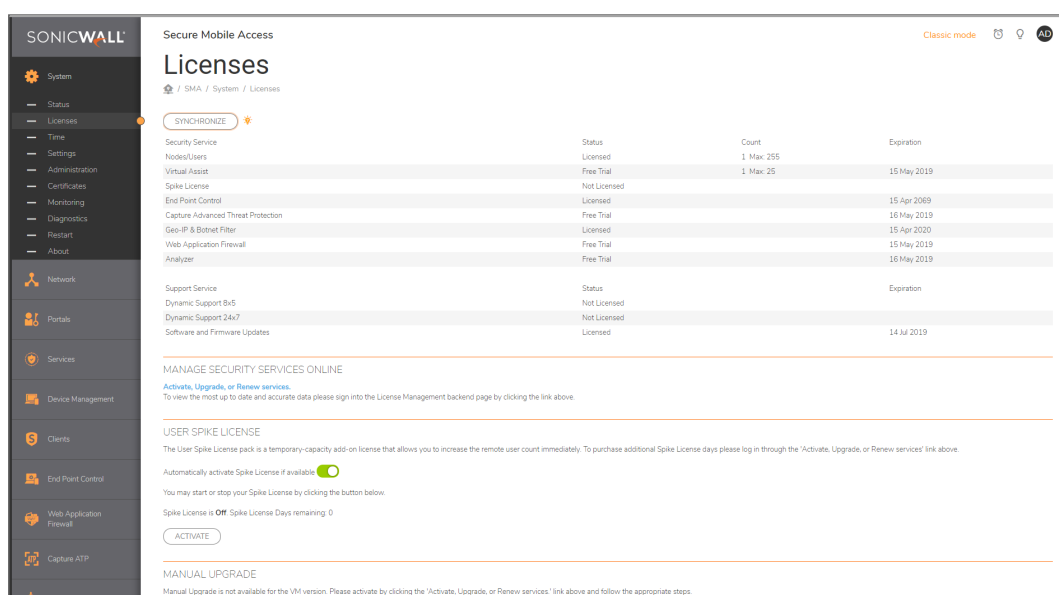
Registering the 30-day Trial Virtual

This section details registration of the SonicWall 30-day Trial Virtual Appliance.

- ① **NOTE:** Before starting the registration process, contact SonicWall Sales to obtain a serial number and authorization code.

To register the 30-day Trial:

1. Log in to your SMA 500v for Hyper-V Virtual Appliance.
2. Navigate to the **System > Licenses** page.



3. Click the **Activate, Upgrade, or Renew services** link.

The screenshot shows the 'License Management' login page. It features a 'Synchronize' button with a refresh icon. Below the button, the page title is 'License Management'. There are two input fields: 'MySonicWALL username/email:' and 'Password:'. A 'Submit' button is located below the password field. At the bottom left, there is a link that says 'Forgot your Username or Password?'.

4. Enter your MySonicWall account name and password, then click **Submit**.
5. Enter the **Serial Number**, **Authentication Code**, and a **Friendly Name**.
6. Click **Submit**.
7. When the registration confirmation page displays, click **Continue**.

Converting a Free Trial License to Full

An SMA 500v for Hyper-V instance installed as a 30-day free trial can easily be converted to a full production licensed SMA 500v for Hyper-V instance.

To convert your free trial to a production version:

1. Purchase an SMA 500v for Hyper-V license from a distributor. You should receive a fulfillment email with the new serial number and authentication code.
2. Log in to Secure Mobile Access on your free trial instance.
3. Navigate to the **System > Licenses** page.
4. Under **Manage Security Services Online**, click **Activate, Upgrade, or Renew services** and log in to your MySonicWall account.
5. Navigate to your **My Products** page, and select the free instance of the SMA 500v for Hyper-V you would like to unregister. Click **Deregister**.
6. Click **OK** in the confirmation dialog. The SMA 500v for Hyper-V returns to the unregistered state.
7. In MySonicWall, click to **Register** a new instance.
8. Enter the **Serial Number** and **Authentication Code** you received after purchasing your SMA 500v for Hyper-V instance. Your SMA 500v for Hyper-V is now registered.

Upgrading Your Appliance

Topics:

- [Obtaining the Latest Image Version](#)
- [Exporting a Copy of Your Configuration Settings](#)
- [Uploading a New Image](#)

Obtaining the Latest Image Version

To obtain a new SMA 500v for Hyper-V image file for your security appliance:

1. Go to www.MySonicWall.com and connect to your MySonicWall account.
 - ① **NOTE:** If you have already registered your SMA 500v for Hyper-V and you chose to be notified when new firmware updates are available on the **System > Settings** page, you are automatically notified of any updates available for your model.
2. Copy the new SMA 500v for Hyper-V image file to a directory on your management station. For the Virtual Appliance, this is a file such as:

```
sw_sma_hyperv_eng_10.x.x.x_10.x.x_p_xxsv_XXXXXXXX.zip
```

Exporting a Copy of Your Configuration

Before beginning the update process, export a copy of your SMA 500v for Hyper-V Virtual Appliance configuration settings to your local machine. The **Export Settings** feature saves a copy of your current configuration settings on your SMA 500v for Hyper-V, protecting all your existing settings in the event that it becomes necessary to return to a previous configuration state.

To save a copy of your configuration settings and export them to a file on your local management station, click **Export Settings** on the **System > Settings** page and save the settings file to your local machine. The default settings file is named `slvpnSettings.zip`.

- ① **NOTE:** To more easily restore settings in the future, rename the .zip file to include the version of the SMA 500v for Hyper-V image from which you are exporting the settings.

Uploading a New Image

SMA 500v for Hyper-V Virtual Appliances do not support downgrading an image and using the configuration settings file from a higher version. To downgrade to a previous version of a SMA 500v for Hyper-V image, you must create a new Virtual Machine or load a snapshot taken earlier.

To upload a new SMA 500v for Hyper-V Virtual Appliance image:

1. Download the SMA 500v for Hyper-V image file and save it to a location on your local computer.
2. Select **Upload New Firmware** from the **System > Settings** page. Browse to the location where you saved the SMA 500v for Hyper-V Virtual Appliance image file, select the file, and click **Upload**. The upload process can take up to one minute.
3. When the upload is complete, you are ready to reboot your SMA 500v for Hyper-V with the new SMA 500v for Hyper-V Virtual Appliance image. Do one of the following:
 - To reboot the image with current preferences, click the boot icon for **New Firmware**.
 - To reboot the image with factory default settings, click the boot icon for **New Firmware** and select the check box to **Boot with factory default settings**.

① **NOTE:** Be sure to save a backup of your current configuration settings to your local computer before rebooting the SonicWall SMA 500v for Hyper-V Virtual Appliance with factory default settings, as described in [Exporting a Copy of Your Configuration Settings](#).

4. A warning message dialog displays that reads, "Are you sure you wish to boot this firmware?" Click **OK** to proceed. After clicking **OK**, do not power off the device while the image is being uploaded to the hard disk.
5. After successfully uploading the image to your SMA 500v for Hyper-V, the login screen displays. The updated image information displays on the **System > Settings** page.

SonicWall Support

Technical support is available to customers who have purchased SonicWall products with a valid maintenance contract.

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. To access the Support Portal, go to <https://www.sonicwall.com/support>.

The Support Portal enables you to:

- View knowledge base articles and technical documentation
- View and participate in the Community forum discussions at <https://community.sonicwall.com/technology-and-support>.
- View video tutorials
- Access <https://mysonicwall.com>
- Learn about SonicWall professional services
- Review SonicWall Support services and warranty information
- Register for training and certification
- Request technical support or customer service

To contact SonicWall Support, visit <https://www.sonicwall.com/support/contact-support>.

About This Document

① | **NOTE:** A NOTE icon indicates supporting information.

① | **IMPORTANT:** An IMPORTANT icon indicates supporting information.

① | **TIP:** A TIP icon indicates helpful information.

⚠ | **CAUTION:** A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.

⚠ | **WARNING:** A WARNING icon indicates a potential for property damage, personal injury, or death.

Secure Mobile Access 500v for Hyper-V Getting Started Guide

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Software Version - 10.2

232-005650-00 Rev A

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For more information, visit <https://www.sonicwall.com/legal>.

End User Product Agreement

To view the SonicWall End User Product Agreement, go to: <https://www.sonicwall.com/legal/end-user-product-agreements/>.

Open Source Code

SonicWall Inc. is able to provide a machine-readable copy of open source code with restrictive licenses such as GPL, LGPL, AGPL when applicable per license requirements. To obtain a complete machine-readable copy, send your written requests, along with certified check or money order in the amount of USD 25.00 payable to "SonicWall Inc.", to:

General Public License Source Code Request

Attn: Jennifer Anderson

1033 McCarthy Blvd

Milpitas, CA 95035