Forcepoint Sidewinder Control Center, Virtual Appliance

Installation Guide

5.3.x

Revision A

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Virtual Appliance requirements

Before you set up your appliance, understand your Control Center, Virtual Appliance and make sure all requirements are met.

Two Control Center options

Depending on the license purchased, Control Center, Virtual Appliance provides two management options.

- **Basic —** The basic license provides a single Control Center, Virtual Appliance. Use the Control Center, Virtual Appliance in training facilities, test labs, or as a lower-cost option for managing multiple firewalls situated behind load balancers. Manage up to ten physical or virtual Sidewinder appliances.
- **Global —** A global license provides multiple Control Center, Virtual Appliances for use in enterprise environments. Use Control Center, Virtual Appliances to manage up to one thousand physical or virtual Sidewinder appliances.

In both instances, you can install Control Center, Virtual Appliances on a new ESX server or in an existing virtual infrastructure.

Sizing guidelines

Sizing guidelines are dependent on your Control Center license.

If you purchased a basic license, you can manage zero to ten firewalls.

If you purchased a global license, you can manage zero to one thousand firewalls. Use the table below to determine the number of Control Center, Virtual Appliances to download and install.

> **Note:** These guidelines are based on average policy configuration, and may need to be adjusted for your network depending on the number of rules, rule groups, and application objects in your policy.

Table 1: Global license sizing guidelines (continued)

Number of managed firewalls	Number of Control Center, Virtual Appliances
0-60	1
61-120	2
121-180	3
181-240	4
241-300	5
301-360	6
361-420	7
421-480	8
481-540	9
541-600	10
601-660	11

Number of managed firewalls	Number of Control Center, Virtual Appliances
661-720	12
721-780	13
781-840	14
841-900	15
901-960	16
961-1000	17

Virtual appliance requirements

The Forcepoint Sidewinder Control Center, Virtual Appliance runs on the VMware ESX 4.1 update 2 or later hypervisor operating system, providing flexible security for your virtual environment.

To run Control Center, Virtual Appliance, the following requirements must be met.

Table 2: System requirements

Component	Requirements
Control Center, Virtual Appliance	
VMware server	VMware ESX version 4.1 update 2 or later **Tip:** Make sure that VT (Virtual Technology) is enabled in your computer BIOS.
Hardware	• Any server-class type hardware. Examples: • Dell R910 • Dell R610
CPU	One virtual processor
Memory	1 GB minimum Recommended 2 GB
Drives	150 GB of available disk space **Note:** Hard drive space is thin-provisioned. 150 GB is the maximum amount of disk space the virtual machine will require. A minimal installation will use approximately 5 GB of disk space and increase as needed. **Note:** For a VMDK installation, we recommend that you select thin provisioning.

Component	Requirements
Control Center Client application	
Operating system	One of the following Microsoft operating systems: • Windows Server 2008 • Windows Vista • Windows 7 • Windows 8 • Windows 10 **Note:** Windows 8 and Windows 10 are supported in traditional desktop mode. Tablet mode is not supported. Touchscreen is not supported. Compatible legacy Microsoft operating systems: • Windows XP Professional • Windows Vista
Monitor	1024 x 768 or higher
Network interface card	Access to the network hosting your Control Center, Virtual Appliance
Browser	• Microsoft Internet Explorer, version 6 or later • Mozilla Firefox, version 1.0 or later

Prepare the ESX server

Prepare the virtual network for Forcepoint Sidewinder Control Center.

About ESX virtual networking

Use the Add Network Wizard to configure virtual networking on these virtual machine networking objects.

- **Virtual switch (vSwitch) —** A network object in ESX that connects virtual machines to each other like a physical switch

  - If the virtual machines connected to the vSwitch need to communicate with hosts on a physical network, you can join the vSwitch to the physical network by connecting it to an appropriate physical Ethernet adapter (also known as an uplink adapter).
  - If the virtual machines connected to the vSwitch need to communicate only with each other, you do not need to connect the vSwitch to a physical Ethernet adapter.

- **Port group —** A group of ports that provides a labeled, stable anchor point for virtual machines to connect to a vSwitch

  Port groups include common parameters like VLAN tagging and bandwidth shaping. Multiple port groups can be assigned to a single vSwitch.

  > **Tip:** The Add Network Wizard always creates a new port group, but creating a new vSwitch depends on your choices.

The Control Center, Virtual Appliance has two network interfaces. Each interface must be connected to an ESX vSwitch by mapping it to a port group. Note the following networking requirements:

- Interface assignments cannot overlap; each interface must be assigned to a unique vSwitch.
- One vSwitch must be connected to a physical adapter on your ESX server that provides access to the internet. Internet connectivity is required to meet license requirements for the virtual firewall.

Create a new isolated port group

Create a new port group that is not connected to a physical interface. This port group will be referenced by the unconfigured virtual firewall.

1. Connect to your ESX server using the VMware vSphere Client.
2. Click **Configuration** > **Networking**.
   The Networking area appears in the right pane.
3. Click **Add Networking**.
   The Add Network Wizard Connection Type window appears.
4. Select **Virtual Machine** > **Next**.
   The Network Access window appears.
5. Create a virtual switch that is not connected to any physical network adapters.

   1. Select **Create a virtual switch**.
   2. Deselect the check boxes next to the physical network adapters (vmnics).
   3. Click **Next**.

   The Connection Settings window appears.
6. In the **Network Label** field, type **Unconfigured**, then click **Next**.

   The Summary window appears.

> **Note:** The port group must be named *Unconfigured* because it is referenced by the Control Center, Virtual Appliance during import.

7. Click **Finish**.

   The Add Network Wizard closes.

   A port group named Unconfigured is added.

Modify your virtual network configuration

Prepare ESX virtual networking for the deployment of Control Center, Virtual Appliance.

1. In the VMware vSphere Client, click **Configuration** > **Networking**.
   The Networking area appears in the right pane.
2. Click **Add Networking**.
   The Add Network Wizard window appears.
3. Select **Virtual Machine** > **Next**.
   The Network Access window appears.
4. Select the virtual switch that will handle network traffic for this connection, then click **Next**.

   - If you need to create a new vSwitch, select **Create a virtual switch**. Enable or disable physical Ethernet adapters for this vSwitch as necessary.
   - To assign this connection to an existing vSwitch, select it from the list.

   The Connection Settings window appears.
5. In the Port Group Properties area, configure the following items, then click **Next**.

   - **Network Label** — Enter a name for this port group.
   - **VLAN ID** — [Optional] To configure this port group to participate in VLAN tagging, enter a VLAN ID between 1 and 4095.

   The Summary window appears.
6. To examine the Preview:

   - To confirm your changes, click **Finish**.
   - To modify your changes, click **Back**.

   The new connection configuration is complete.

   > **Tip:** To modify a vSwitch after it has been created, click **Properties** next to it.

Configure the system clock

Configure your ESX server system clock.

We recommend the following:

- Synchronize your system clock with a time server using the Network Time Protocol (NTP).
- Because system clocks can drift from the ESX system clock, configure NTP on your virtual firewall.

To configure NTP on your ESX server:

1. In the VMware Infrastructure Client, click **Configuration** > **Time Configuration**.
   The Time Configuration area appears in the right pane.
2. Click **Properties**.
   The Time Configuration window appears.
3. Click **Options**.

The NTP Daemon (ntpd) Options window appears.

4. In the Service Commands area, click **Start**.
   The status changes to Running.
5. In the left pane, click **NTP settings**.
6. Add an NTP server.

   1. Click **Add**. The Add NTP Server window appears.
   2. Specify the host name or IP address of an NTP server, then click **OK**.

      The Add NTP Server window closes and the server is added to the list of NTP servers.

      To add additional NTP servers, repeat this step.

7. Select **Restart NTP service to apply changes**, then click **OK**.
   The NTP Daemon (ntpd) Options window closes.
8. Click **OK** to close the Time Configuration window.
   NTP is now configured on your ESX server.

Set up Control Center, Virtual Appliance

Install and configure Sidewinder Control Center, Virtual Appliance and the Control Center Client application.

Download the Control Center, Virtual Appliance software

Download the Control Center, Virtual Appliance software.

1. In a web browser, navigate to http://www.mcafee.com/us/downloads/downloads.aspx.
2. Provide your grant number, then navigate to the appropriate product and version.
3. Download these files:

   - **Management Tools —** Download the Control Center, Virtual Appliance Client Application executable (.exe) file.
   - **Version 5.2.0 Virtual Appliance —** Download the Control Center, Virtual Appliance .zip file

Install the Control Center, Virtual Appliance

Install the downloaded Control Center, Virtual Appliance on your ESXi server.

> **Note:** Refer to the sizing guidelines to determine the number of Control Center, Virtual Appliances to download.

1. Unzip the Control Center, Virtual Appliance file onto the hard drive of your Windows-based client computer.
2. Load the Control Center, Virtual Appliance onto an ESXi server.
   1. Connect to your ESXi server by using the VMware vSphere Client.
   2. From the File menu, select **Deploy OVF Template**.
      The Deploy OVF Template wizard appears.
   3. Select the **Deploy from file** option.
3. Click **Browse** to select the .ovf Control Center, Virtual Appliance file you extracted in Step 1, then click **Next**.
   The Virtual Appliance Details window appears.
4. Click **Next**. The Name and Location window appears.
5. Specify a name for the Control Center, Virtual Appliance, then click **Next**.
   The Disk Format window appears.
6. Select a format for the virtual machine disk, then click Next.
7. From the drop-down list, select **Unconfigured**, then click **Next**.
   The Ready to Complete window appears.
8. Review the summary.

   - If you are satisfied the summary is correct, click **Finish**.
   - To make changes, click **Back**.

   When you click **Finish**, the Control Center, Virtual Appliance is uploaded to your ESX or ESXi server.

Configure Control Center, Virtual Appliance

Configure network mappings and administrator settings for the Control Center, Virtual Appliance.

Configure network mappings

Configure the network mappings and administrator settings for the Control Center, Virtual Appliance.

1. In the VMware vSphere Client, select the Control Center, Virtual Appliance.
2. Click **Getting Started** > **Edit virtual machine settings**.
   The Virtual Machine Properties window appears.
3. Map one of the Control Center, Virtual Appliance network adapters to the appropriate virtual network.
   1. Refer to the table below, and select the network adapter that you want to configure.

      Table 3: Network adapters

Virtual machine hardware device	Control Center, Virtual Appliance NIC
Network Adapter 1	eth0
Network Adapter 2	eth1

   2. Make sure **Connected** and **Connect at power on** are selected.
   3. From the **Network label** drop-down list, select the appropriate port group.

      > **Note:** The port group you select for **Network Adapter 1** must provide Internet connectivity to allow the Control Center, Virtual Appliance to maintain a current license.

4. Click **OK**.

Perform the initial configuration

Configure basic networking and administrator settings for Control Center, Virtual Appliance.

1. In the vSphere Client, select the Control Center, Virtual Appliance.
2. On the Getting Started tab, click **Power on this virtual machine**.
   The Control Center, Virtual Appliance starts.
3. Click **Console**.
   After startup is complete, a *Searching for configuration* message appears.
4. Click inside of the console window, then press m.
   The following prompt appears: Name of interface.
5. Complete the initial configuration process using the information in the following table.

   • Press **Enter** after each entry.
   • You will be asked to confirm your entries.

   Table 4: Initial configuration responses

Prompt	Entry
Name of interface to configure	• To configure Network Adapter 1, specify eth0. • To configure Network Adapter 2, specify eth1.
IP address	Specify an appropriate IP address for the network you mapped to this interface.

Prompt	Entry
Network mask	Specify an appropriate netmask for the IP address you specified.

Do you wish to configure another interface	• If you do not want to configure the second interface, press N.
	• To configure the second interface:
	    • Press Y. The following prompt appears: `Name of interface to configure.`
	    • Specify configuration parameters for the second interface.

Gateway IP address	Specify the IP address of the router that will handle packets destined for addresses that are not in your virtual appliance routing table.
Enter this management server's host name (FQDN)	Specify a host name for your Control Center, Virtual Appliance, *for example,* controlcenter.example.com
Enter the DNS server IP address	Specify the IP address of a DNS server that is available on the configured interface(s).
Enter the domain name	Specify the name of the domain that your Control Center, Virtual Appliance is a member of, for example, example.com
Enter the SMTP server host name	Specify the host name of an internal email server, for example, smtp.example.com
Enter the CC Admin user name	• To use the default user name (ccadmin), press **Enter**. • To specify a custom user name, specify the name.
A password will be assigned to the CC Admin user	Specify a password for the Control Center administrator. Confirm the password.
Enter the dbuser PostgreSQL account password	Specify a password for the DB user. Confirm the password.
Enter the sso UNIX account password	Specify a password for the SSO user. Confirm the password.
Enter the mgradmin UNIX account password	Specify a password for the mgradmin user. Confirm the password.
Do you wish to unlock the FTP UNIX account	• If you wish to unlock the FTP account, press Y. • If you do not wish to unlock the FTP account, press N.
Enter the FTP UNIX account password	This prompt appears only if the FTP account was unlocked. To enter the password: **1.** Specify a password for the FTP user. **2.** Confirm the password.

6. Configure your Control Center, Virtual Appliance system clock settings.

When you have completed the following prompt, you are finished with the initial configuration process.

```
Do you want to specify an NTP server?
```

The Control Center, Virtual Appliance uses your responses to perform its initial configuration. When it is finished, the logon prompt appears.

Install the Control Center Client application

Install the Control Center Client application on a Windows system.

As of the version 5.0.0 release of the Control Center Client application, you can install multiple versions of this application on the same system. If you have another version of the Control Center Client application already installed, you have the following choices when you go through the installation:

- You can upgrade the previously installed version to this version.
- You can keep your old version and install this version to another location on your computer.

To install the Control Center Client application on a Windows computer:

1. Log on to the Windows system as an administrator.
2. Navigate to the Sidewinder Control Center Client application file (CC*nnn*clientsetup.exe, where *nnn* is the version), and double-click the file.
   The Welcome window appears.
3. Follow the on-screen instructions.

   - If you have already installed another version of the Control Center Client application on this machine, make a decision about whether you want to overwrite your old version or install this new version at a different location. Make your selections and click **Next**.
   - Accept the default settings when possible and click **Next** until the wizard has completed.

   The Client application is now installed.
4. [Conditional] If you do not have the correct version of Microsoft .NET Framework installed, you must install it before you access the Client application.

   📝 **Note:** See KnowledgeBase article KB68967 for instructions about obtaining the correct version of Microsoft .NET Framework.

Connect using the Control Center Client application

Connect to your Control Center, Virtual Appliance by using the Control Center Client application.

💡 **Tip:** The assumption is that you are logging on to Control Center for the first time. If you have already configured Management Servers or certificates, select those objects in the appropriate fields.

1. From the Client application computer, select **Start** > **All Programs** > **Forcepoint** > **Sidewinder Control Center v5** > <version> > **Sidewinder Control Center**.
   The Add New Server window appears.
2. Specify the appropriate information:

   - If another version of the Control Center Client application is installed on this machine, the default information from that version appears; make the necessary changes.
   - If this is the first version of the Control Center Client application being installed on this machine, you must complete the fields on this window.

     - **Name** — Specify a name that quickly identifies this Control Center Management Server.

- **Server address** — Specify the host name or IP address of the Control Center Management Server.
- **Primary server** — Select this option and complete the following fields with information appropriate for this Management Server:
  - **User name** — Specify a valid user name.
  - **Password** — Specify the appropriate password.

3. Click **OK**.

   A Certificate Problem message appears.

   This message is expected. It appears because the application imports a non-certificate authority (CA) certificate before it imports the CA certificate of the Control Center Management Server. You can safely ignore this error.

4. Click **Yes**.
   A Root Certificate Store message appears.

5. Click **Yes**.
   The main logon window appears, with the newly created server selected.

6. Make the appropriate entries and selections:

   - **User Name** — Specify a valid Control Center user name.
   - [Optional] Select **Remember User Name** to preserve the specified user name.
   - **Password** — Specify the corresponding password.

7. Click **Connect**.
   A certificate validation message appears.

8. Click **Yes**.
   You are logged on to the Control Center Management Server.

Activate the license

License the Control Center Management Server.

The Control Center Management Server must be licensed before you can perform most administrative functions, such as registering firewalls, retrieving policy from and applying policy to firewalls, and performing software updates.

To license over the Internet, the Control Center Management Server establishes an HTTPS connection to the activation server on TCP port 443.

1. Make sure you know the 16-digit serial number for the virtual appliance.
2. Using the Control Center Client application, log on to the Control Center Management Server.
3. In the navigation bar, select **Control Center**.
4. In the Control Center tree, expand the **Settings** node.
5. Double-click the **License** node.
   The License window appears.
6. On the Server tab, in the **Serial Number** field, specify the 16-digit serial number.

   > **Note:** Maintain the default values for all other fields on this tab.

7. On the Contact tab, specify administrator information for this particular Management Server.
8. On the Company tab, specify your company information.
9. Click **Activate License**.

   The licensing information is sent to the activation server, which is located at the URL defined in the Activation URL field. The activation server verifies the serial number and returns an activation key, which appears in the **Activation Key** field.

10. Click **OK** to close the form and save the licensing information.
    Your license is activated.

Post-installation tasks

See the *Forcepoint Sidewinder Control Center Product Guide* for information on post-installation tasks.

Post installation tasks include the following:

- Adding and registering firewalls
- Configuring policy
- Creating a configuration backup
- Checking for software updates and patches
- Deploying companion products in your network

Re-installation

To re-image your Control Center, Virtual Appliance, you must first delete it from your ESX or ESXi server, then import a new Control Center, Virtual Appliance to replace it.

> **Note:** To re-install your Control Center, Virtual Appliance, you will need the Control Center, Virtual Appliance file you downloaded previously.

Delete the existing Control Center, Virtual Appliance

Delete an existing Control Center, Virtual Appliance from your ESXi server to make room for a new virtual appliance.

1. Connect to your ESX or ESXi server by using the VMware vSphere Client.
2. Click **Virtual Machines**.
3. If the Control Center, Virtual Appliance to delete is turned on, right-click it in the list and select **Power Off**.
4. To delete the Control Center, Virtual Appliance, right-click it and select **Delete from Disk**.
   A confirmation window appears.
5. Click **Yes**.
   The Control Center, Virtual Appliance is deleted.

Import a new Control Center, Virtual Appliance

After the old Control Center, Virtual Appliance has been deleted, install and configure a new virtual appliance.
Related concepts
Set up Control Center, Virtual Appliance on page 9
Install and configure Sidewinder Control Center, Virtual Appliance and the Control Center Client application.