



CHAPTER 3

Getting Started with Cisco Application Networking Manager Virtual Appliance

This chapter describes how to get started with Cisco Application Networking Manager (ANM) Virtual Appliance and includes the following sections:

- [Information About Licensing for ANM Virtual Appliance, page 3-1](#)
- [Setting the MAC Address of ANM Virtual Appliance, page 3-2](#)
- [Acquiring a License for ANM Virtual Appliance, page 3-3](#)
- [Applying the ANM Software License, page 3-3](#)
- [Logging In to ANM, page 3-4](#)
- [Using the Firefox Web Browser to Access ANM, page 3-5](#)

Information About Licensing for ANM Virtual Appliance

The licensing requirements and procedures for ANM Virtual Appliance are identical to those applicable to ANM server. When you install the ANM Virtual Appliance software, you also need to install an ANM license from the command line before you can access ANM.

[Table 3-1](#) describes the available ANM licenses.

Table 3-1 ANM License Descriptions

License Name	Description
ANM-DEMO or DEMO	Used for demonstration purposes. It lasts for 90 days from the issue day of the license and allows you to use all features.
ANM-SEVER-40-K9	Used to allow access to the ANM server. Beginning with ANM 4.1, ANM does not perform a license version number check; it will accept any version ANM license.

This chapter describes how obtain an ANM license and use the CLI to install it during the ANM Virtual Appliance installation process (see the [“Acquiring a License for ANM Virtual Appliance”](#) section on page 3-3 and [“Applying the ANM Software License”](#) section on page 3-3).

For information about viewing and managing ANM licenses after installing ANM, see the [“Using ANM License Manager to Manage ANM Server or Demo Licenses”](#) in the ANM online help or in Chapter 17, [“Administering the Cisco Application Networking Manager,”](#) of the *User Guide for the Cisco Application Networking Manager 4.2*.

Setting the MAC Address of ANM Virtual Appliance

This section describes how to assign a static MAC address to the virtual network interface of ANM Virtual Appliance in the vSphere Client.

ANM licenses are bound to the MAC address of the host device. By default, in vSphere the MAC address for the network adapter of a new virtual machine is dynamically allocated from a pool of MAC addresses.

Because the ANM license is bound to a MAC address, Cisco recommends that you manually set the MAC address for ANM Virtual Appliance to a static value and thereby avoid having to acquire a new license every time you remove and reinstall the virtual machine for ANM Virtual Appliance.

Procedure

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- Step 1** In the Hosts and Clusters tree of the vSphere Client, click on the node for the virtual machine of ANM Virtual Appliance.
 - Step 2** In the Getting Started tab, power off the virtual machine by clicking **Shut down the virtual machine**.
 - Step 3** Right-click on the ANM Virtual Appliance node in the vSphere Client and click **Edit Settings**.
 - Step 4** In the Virtual Machine Properties dialog box, choose **Network adapter** from the list of devices.
 - Step 5** Click the **Manual** radio button under the MAC Address field.
The MAC address becomes editable.
 - Step 6** In the MAC Address field, enter a MAC address that is outside the range of those that are automatically allocated by vSphere.
Make a note of the address you enter; you will need it when requesting the license.
 - Step 7** Click **OK**.
 - Step 8** In the Getting Started tab, power on the virtual machine to start ANM with the new MAC address.
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If you subsequently remove and reinstall ANM Virtual Appliance and want to use the same license for the new instance, you need to set the MAC address of the network adapter of the new virtual machine to the same MAC address associated with the license as described here.

Acquiring a License for ANM Virtual Appliance

This section describes how to acquire an ANM server or ANM demo license for your ANM Virtual Appliance software.

Procedure

- Step 1** On Cisco.com, go to <http://www.cisco.com/go/license>.
You are asked to log in to Cisco.com. If you are not a registered user, you are given a number of options including the option to log in without registering. After you are logged in, you are prompted to enter the product authorization key (PAK).
- Step 2** Enter the PAK exactly as it appears on the label that accompanied the Cisco Information Packet.
If you are unable to locate the PAK, contact your Cisco support team or click the link for an ANM demonstration license.



Note A demo license is valid for 90 days after it is issued. After 90 days, the product requires a standard ANM server license.

- Step 3** Follow the registration instructions on the license website.
After you finish registering, you will receive a message that confirms your registration, and an email that contains the license key file is sent to you at the e-mail address that you provided during product registration.



Note For information about discovering the MAC address associated with ANM Virtual Appliance, see “[Setting the MAC Address of ANM Virtual Appliance](#)” section on page 3-2.

- Step 4** After you receive your software license key file by email, save the email and the license file (.lic) that is attached to it to a temporary directory on your hard drive for safekeeping.
For information about applying the license to the ANM Virtual Appliance software, see the “[Applying the ANM Software License](#)” section on page 3-3.
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Applying the ANM Software License

This section describes how to apply a license to ANM Virtual Appliance. Before starting, make sure that you have already acquired the license and put it in a location that is accessible by network to the ANM Virtual Appliance installation (see the “[Acquiring a License for ANM Virtual Appliance](#)” section on page 3-3).



Note The license installation script reinitializes ANM. It may take several minutes before you can log in to ANM after the installation or upgrade.

Procedure

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- Step 1** Log in to the console of ANM Virtual Appliance, either by SSH connection to the virtual machine or through the Console tab in the vSphere Client.
- Step 2** Use the ADE OS **copy** command to copy the license file from the temporary location to a directory on the virtual appliance.
- You can use any file transfer protocol for copying the file supported by Cisco ADE-OS, such as TFTP or SFTP.
- For example:
- ```
copy tftp://staging-server/licenses/anm-4.2.lic disk:
```
- Step 3** Apply the license to ANM using the **anm-license install** command, which has the following form:
- ```
anm-license install license-file
```
- For example:
- ```
anm-license install disk:anm-vm-4.2.lic
```
- Step 4** From the ANM GUI, verify that you can see the ANM license as follows:
- Log in to the ANM web interface (see the [“Logging In to ANM”](#) section on page 3-4).
  - From the ANM GUI, choose **Admin > ANM Management > License Management**. The License window appears.
  - Verify that you can see the ANM license listed under File Name and that its Install Status is OK.
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## Logging In to ANM

You access ANM features and functions through a web-based interface. The ANM login window allows you to log in to ANM, change the password for your account, and obtain online help by clicking **Help**.

ANM includes a self-signed certificate and keypair for authenticating itself to browser clients. For the first login, you need to temporarily accept the self-signed certificate from the browser. You can install your own certificate later from the command line interface as described in [“anm-certificate install”](#) section on page A-7.

**Note**

If you reinstall a later ANM Virtual Appliance release, make sure that you delete the cookies and clear the browser cache on all clients before you log in to ANM

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**Note**

The ANM client supports use with Firefox 3.5 on Windows XP or Windows Vista. When you use Firefox 3.x to log in and access ANM for the first time, the Firefox web browser displays a warning that the site is untrusted. When Firefox displays this warning, follow the prompts to add a security exception and download the self-signed certificate from the ANM server. After you complete this procedure, Firefox accepts the ANM server as a trusted site both now and during all future login attempts. See the [“Using the Firefox Web Browser to Access ANM”](#) section on page 3-5 for details.

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**Prerequisites**

Enable the following for all browsers: cookies, JavaScript/scripting, Adobe Flash Player 9, and popup windows.

**Procedure**

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**Step 1** To log in to the ANM web interface after a new installation, in your browser address field, enter **https://host**.

The default web port for HTTPS access is 443.



**Note** If you did not modify the standard HTTPS web port when configuring ANM Virtual Appliance as described in “[Setting Up ANM Virtual Appliance](#)” section on page 2-7, you do not have to explicitly enter the port number.

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For example, enter **https://192.168.10.10**. The login window appears.

**Step 2** In the User Name field, enter **admin**.

The admin account was created when ANM was installed. After you log in, you can create additional user accounts. For more information about setting up user accounts, see the *User Guide for the Cisco Application Networking Manager 4.2*.

**Step 3** In the Password field, enter the password that you specified for the admin user when performing the initial configuration of the ANM Virtual Appliance.

**Step 4** Click **Login**.



**Note** ANM installation takes 90 seconds for initialization to be completed. When the login window appears, make sure that you wait at least 90 seconds before you log in. Failure to wait a minimum of 90 seconds may result in an error.

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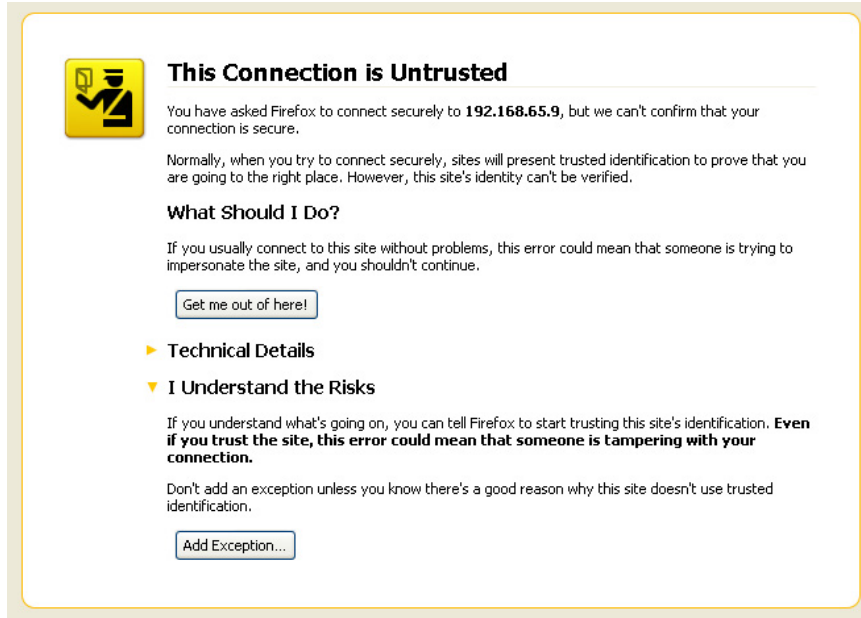
When you first log in, the ANM home page appears by default.

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## Using the Firefox Web Browser to Access ANM

The ANM client supports use with Firefox 3.6 on Windows XP, Windows Vista, or Windows 7. When you use Firefox 3.x to log in and access ANM for the first time, the Firefox web browser displays a warning that the site is untrusted ([Figure 3-1](#)).

Figure 3-1 Firefox 3.5 Untrusted Connection Warning



When Firefox displays this warning, follow the prompts to add a security exception and download the self-signed certificate from the ANM server. After you complete this procedure, Firefox accepts the ANM server as a trusted site both now and during all future login attempts.

### Procedure

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- Step 1** In the This Connection Is Untrusted window, click **I Understand the Risks**.
- Step 2** Click **Add Exception** to add a security exception to the Firefox web browser.  
The Add Security Exception popup window appears, which identifies the location of the ANM server.
- Step 3** In the Add Security Exception popup window, click **Get Certificate**.  
Firefox retrieves the ANM self-signed certificate and the window's Confirm Security Exception button becomes active.
- Step 4** Click **Confirm Security Exception**.  
Firefox recognizes the ANM server as a trusted site and the ANM Login window appears.
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