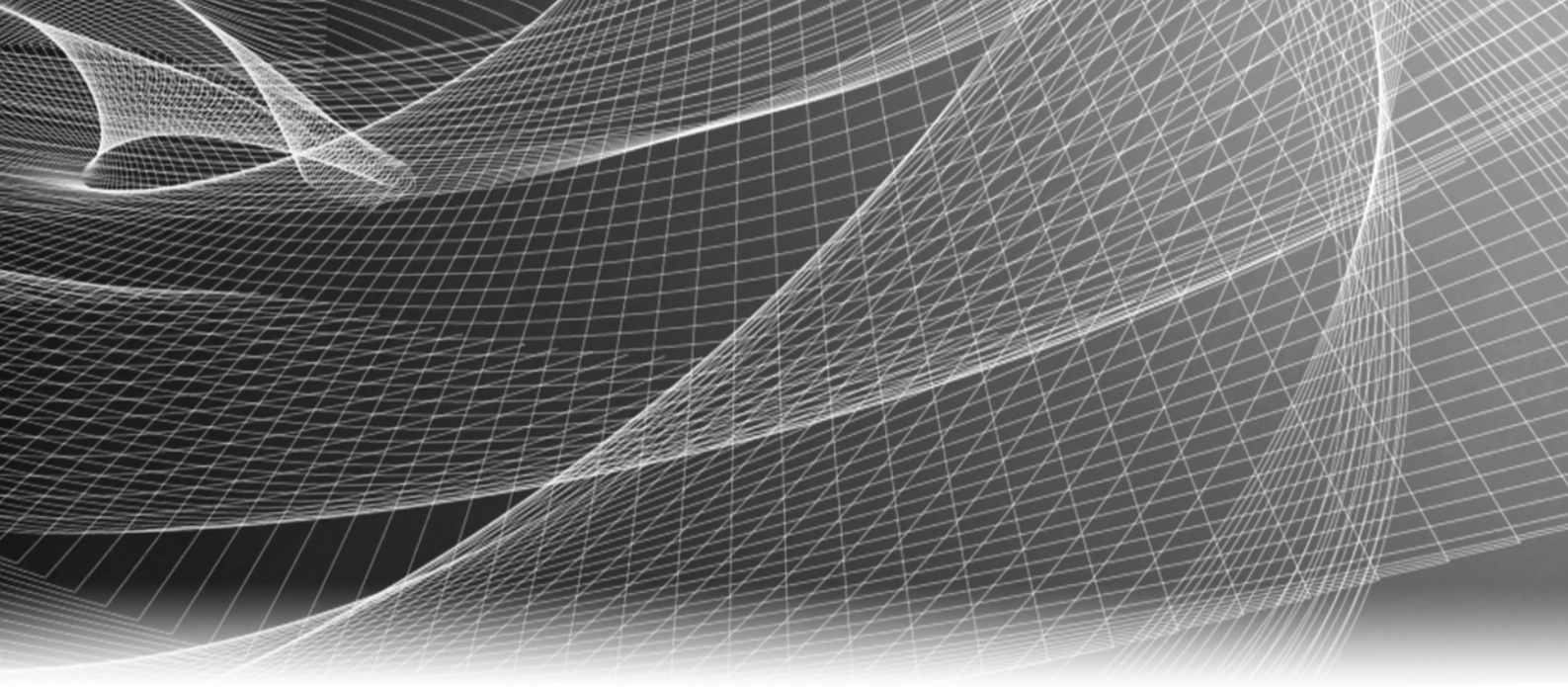

EMC® Secure Remote Services

Release 3.26

Installation Guide

REV 01

EMC²

Published January 2017

CONTENTS

PREFACE

As part of an effort to improve its product lines, EMC periodically releases revisions of its software and hardware. Therefore, some functions described in this document might not be supported by all versions of the software or hardware currently in use. The product release notes provide the most up-to-date information on product features.

Contact your EMC technical support professional if a product does not function properly or does not function as described in this document.

Note: This document was accurate at publication time. Go to Dell EMC Online Support (https://support.emc.com) to ensure that you are using the latest version of this document.

Purpose

This guide is part of the EMC Secure Remote Services (ESRS) Release 3.26 documentation set, and is intended for use by customers and prospective customers.

Readers of this guide are expected to be familiar with the following topics:

- Local network administration
- Internet protocols
- EMC storage system characteristics and administration

Related documentation

The following EMC publications provide additional information:

- *EMC Secure Remote Services Release Notes*
- *EMC Secure Remote Services Technical Description*
- *EMC Secure Remote Services Pre-Site Checklist*
- *EMC Secure Remote Services Site Planning Guide*
- *EMC Secure Remote Services Port Requirements*
- *EMC Secure Remote Services Installation Guide*
- *EMC Secure Remote Services Operations Guide*
- *EMC Secure Remote Services Policy Manager Operations Guide*
- *ESRS Policy Manager 6.8 Installation Guide - Standard Windows*
- *ESRS Policy Manager 6.8 Installation Guide - Integrated AD (Windows)*

Documentation conventions

EMC uses the following conventions for special notices:

DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to personal injury.

Note: A note presents information that is important, but not hazard-related.

Typographical conventions

EMC uses the following type style conventions in this document:

Bold	Use for names of interface elements, such as names of windows, dialog boxes, buttons, fields, tab names, key names, and menu paths (what the user specifically selects or clicks)
Italic	Use for full titles of publications referenced in text and for variables in body text.
`Monospace`	Use for: • System output, such as an error message or script • System code • Pathnames, file names, prompts, and syntax • Commands and options
`Monospace italic`	Use for variables.
`Monospace bold`	Use for user input.
[ ]	Square brackets enclose optional values
|	Vertical bar indicates alternate selections — the bar means “or”
{ }	Braces enclose content that the user must specify, such as x or y or z
...	Ellipses indicate nonessential information omitted from the example

Where to get help

EMC support, product, and licensing information can be obtained as follows:

Product information — For documentation, release notes, software updates, or information about EMC products, go to Dell EMC Online Support at:

https://support.emc.com

Technical support — Go to Dell EMC Online Support and click Service Center. You will see several options for contacting EMC Technical Support. Note that to open a service request, you must have a valid support agreement. Contact your EMC sales representative for details about obtaining a valid support agreement or with questions about your account.

Your comments

Your suggestions will help us continue to improve the accuracy, organization, and overall quality of the user publications. Send your opinions of this document to:

techpubcomments@emc.com

CHAPTER 1
System requirements

This chapter provides the specifications that you will need to install and provision ESRS. Topics include:

Preparing your environment

Follow the KB solution for the Network Requirements: https://support.emc.com/kb/494729

Port 443 and 8443 have to be allowed outbound.

Specifications for ESRS Virtual Edition and ESRS Docker Edition

Table 1 on page 10 shows the minimum configuration of the ESRS deployed on the ESX Server.

Table 1 Specifications for ESRS Virtual Edition

Type	Requirements	EMC provided software	Notes
ESRS Virtual Edition (ESRS VE) and Hyper-V	• **Server** — VMware ESX 5.0 or later or Windows Hyper-V environment on Windows 2008 R2 or Windows 2012 • **Processor** — One or more processors, each 2.2 GHz minimum, must be SSE2 supported (required for FIPS compliance) • **Free Memory** — 4 GB or higher • **Free Disk Space** — minimum disk space required for your esrsv3 appliance is 64 GB • **CPU** — One vCPU, 2.0 GHz or higher 64-bit • **Browser** — Internet Explorer 9 +, Mozilla Firefox, or Google Chrome **Note:** Collocation of a Policy Manager on the ESRS Host is **not** supported or permitted. The underlying SUSE operating system is customized for the ESRS and does **not** have the necessary libraries.	ESRS	Default is one vCPU, but you have the option to add additional vCPU before ESRS is powered up. ESRS requires a site-supplied ESX or Windows server. Two ESRS Virtual Edition servers deployed on a separate ESX servers/Hyper-V servers are required for a High Availability configuration. One ESRS Virtual Edition or ESRS Virtual Edition High Availability Cluster can support up to 250 devices. Do not place VMware/Hyper-V images or storage files on EMC devices managed by the ESRS Client. When running clustered HA Clients on VMware/Hyper-V, each Gateway Client must be located on different physical hardware.
ESRS Docker Edition (ESRS DE)	• Docker supported Linux distribution (x64 bit) • Docker engine (Docker runtime installed): https://docs.docker.com/engine/installation/ • **Processor** — One or more processors, each 2.2 GHz minimum, must be SSE2 supported (required for FIPS compliance) • **Free Memory** — 4 GB or higher • **Free Disk Space** — 64 GB or higher • **Ports** — FTP 21 | HTTPS 443 | SMTP 25 | Provision, WebUI & REST 9443 • **CPU** — One vCPU, 2.0 GHz or higher 64-bit • **Browser** — Internet Explorer 9 +, Mozilla Firefox, or Google Chrome		

CHAPTER 2
Installing

This chapter provides the information that you will need to prepare the ESRS server for the installation of ESRS. Topics include:

Overview

Apart from the ESRS backend system, there is an ESRS Gateway that is installed on the customer site either on the product itself (embedded ESRS Device Client), on a separate physical/virtual machine, or as a binary installer for Linux.

Install options

There are two install options for ESRS:

- ESRS Docker Edition (ESRS DE)
  - Can be run on a qualified Linux environment that supports Docker containers

    Note: Cloud platform support for the ESRS Docker Edition is best effort. Passive FTP is not supported with ESRS DE.

- ESRS Virtual Edition (ESRS VE)
  - ESRS can be run 100% virtually
  - No additional hardware required
  - No additional OS licenses required

The following section describes the binary install for ESRS on a Linux host.

Configuring ESRS on Linux host using Docker Engine (ESRS DE)

Prerequisites

To install the ESRS Docker on a Linux host, ESRS requires that specific assigned ports (see Port Requirements section below) on the system be available. If the prerequisites are not provided, then the ESRS application installer aborts the installation.

System Requirements

Before installing ESRS on a Linux host, the following must already be installed:

- Docker supported Linux distribution (x64 bit)
- Docker Engine (Docker runtime)

Using the binary installer, ESRS can be installed on the Linux distributions that support Docker. For a list of Linux distributions that are supported by Docker and for Docker installation instructions, refer to the following address: https://docs.docker.com/engine/installation/.

Note: The Docker Engine is supported on many Linux distributions (such as RHEL, CentOS, OpenSUSE, and SUSE Linux Enterprise), for example, the following is the link for a Docker installation on Red Hat Enterprise Linux (RHEL): https://docs.docker.com/engine/installation/linux/rhel/.

Port Requirements

ESRS runs its services on the following ports:

Table 2 Port Requirements

Services	Ports
Connect Home support (legacy) - FTP	21
Connect Home support (legacy) - HTTPS	443
Connect Home support (legacy) - SMTP	25
provision, WebUI, RESTful services (such as device management, RESTful Connect Home, MFT, keepalive, etc.)	9443

ESRS Installation Instructions

The ESRS installer performs the required prerequisite checks. In effect, it validates the system requirements, Docker runtime, and the specified port availability.

To install ESRS:

1. Download the latest ESRS Docker Edition (ESRS DE) for Linux on EMC Online Support and copy to the Linux server running Docker:

   https://support.emc.com

2. To change the permission of the installer, use the following chmod command example:

   ```
   chmod +x esrsde-3.xx.00.01.bin
   ```

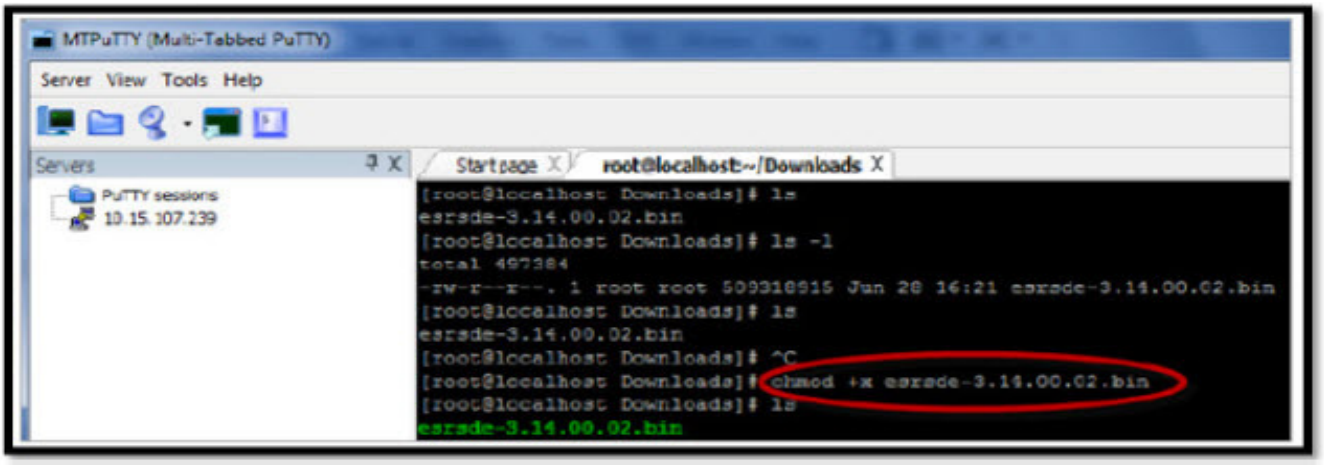

Figure 1 chmod command

3. Run the installer using the following command example:

   ```
   ./esrsde-3.xx.00.01.bin --install
   ```

   The command will check the following prerequisites, and proceed with installation:

   - Disk space availability, must be at least 64 GB
   - Docker runtime
   - Ports 21, 25, 443, 9443, and 8118 are free

- IP address is valid

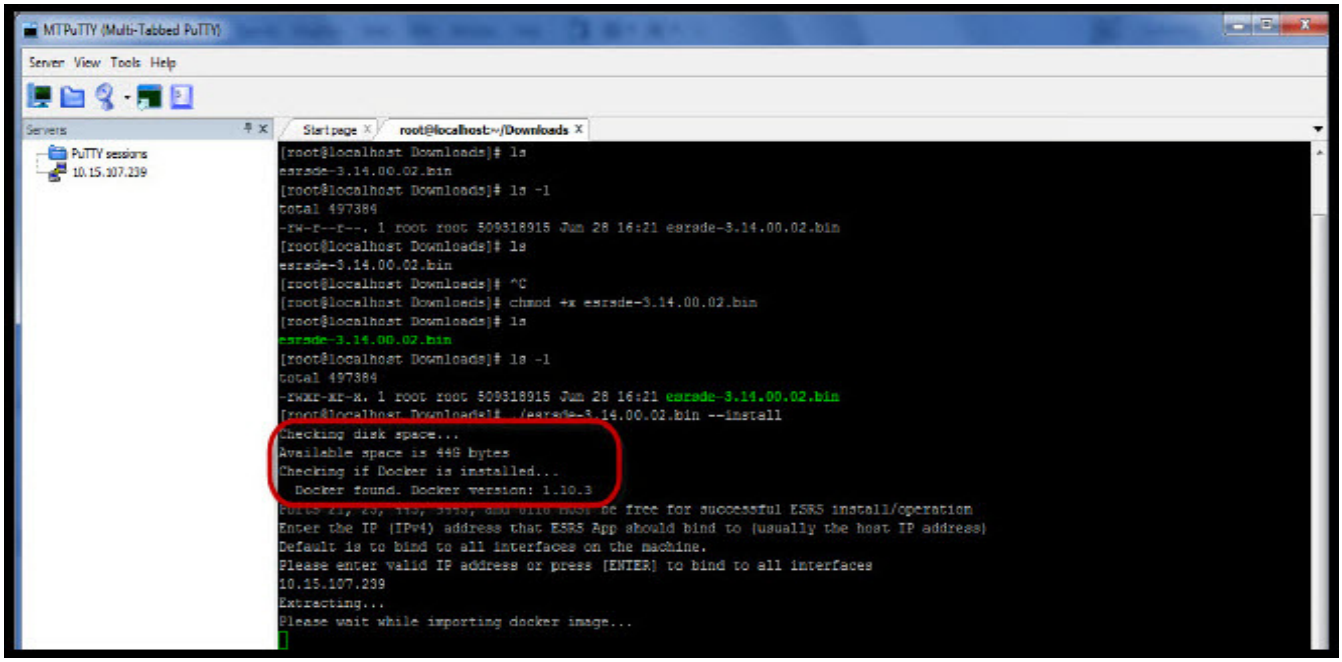

Figure 2 Checking prerequisites

4. Follow the instructions on the prompt to complete the installation.

   During the installation, the installer will request a password to be set for the root account of ESRS, as shown in the following figure.

   Note: This is **not** the root account of the host.

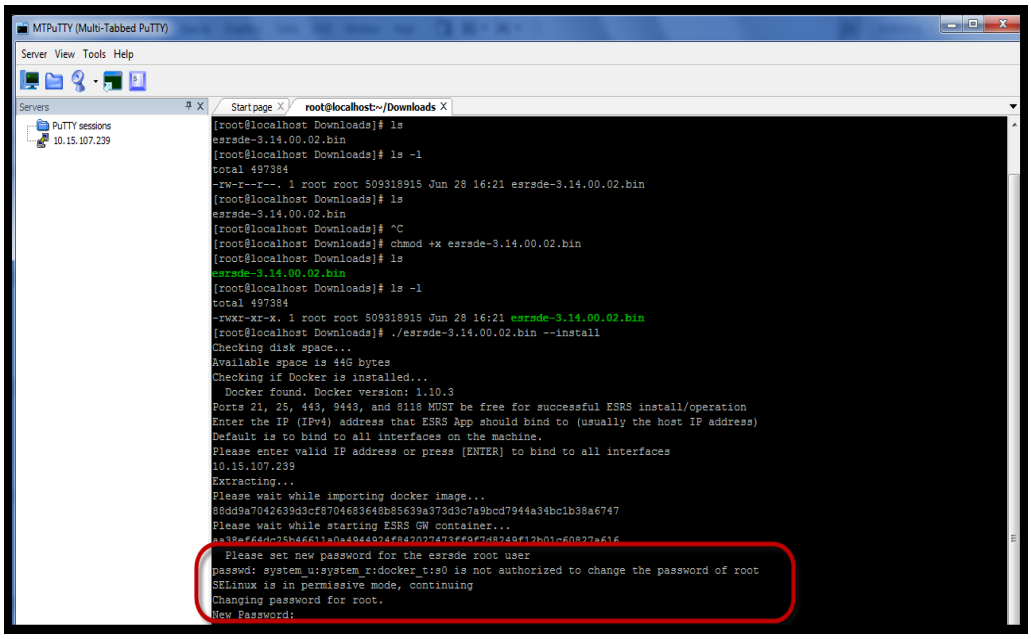

Figure 3 Setting the root password

At the end of a successful installation, the installer displays a message stating that the ESRS services are up and running and provides the URL for you to provision ESRS, as shown in the following figure.

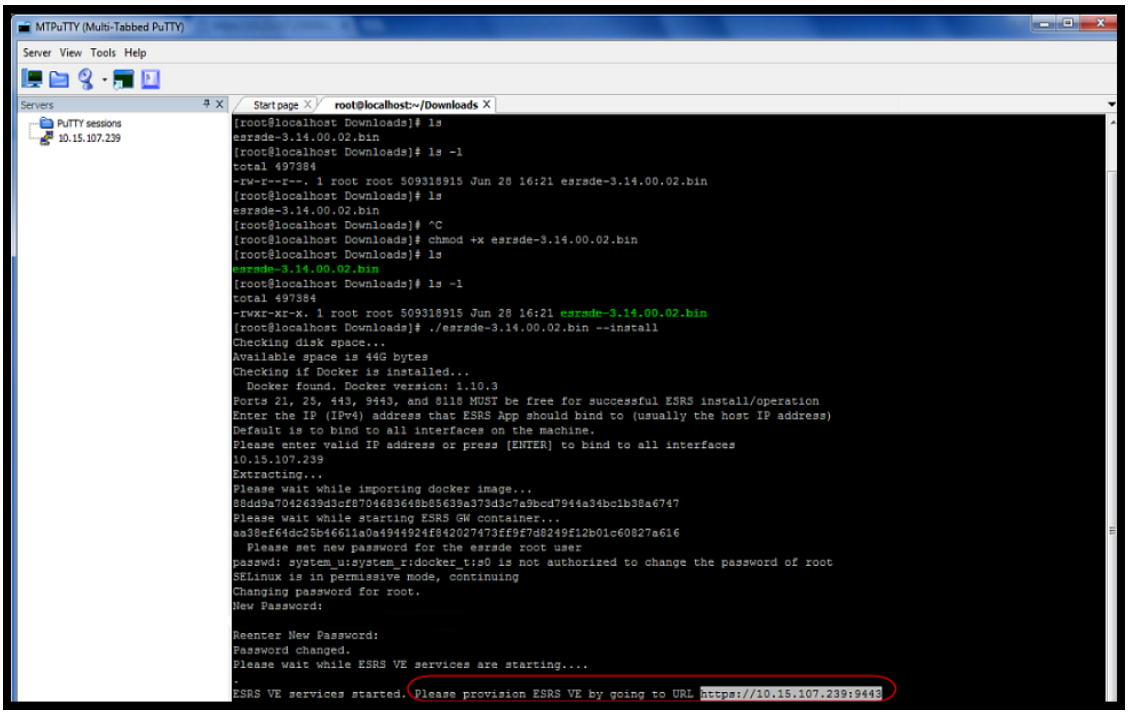

Figure 4 Sample image of successful installation

5. After you copy and paste the URL to a Web browser, follow the steps starting at the "Root logon and Admin setup" section in Chapter 3.

Upgrading Docker

To upgrade ESRS DE:

1. Download the latest ESRS Docker Edition (ESRS DE) for Linux on EMC Online Support and copy to the Linux server running Docker:

   https://support.emc.com

2. To change the permission of the installer, use the following chmod command example:

   ```
   chmod +x esrsde-3.xx.00.01.bin
   ```

3. Execute the upgrade using the following command example:

   ```
   ./esrsde-3.xx.00.01.bin --upgrade
   ```

   The command will check the following prerequisites, and proceed with the upgrade:

   - Disk space availability, must be at least 64 GB
   - Docker runtime

- Ports 21, 25, 443, 9443, and 8118 are free
- IP address is valid

4. Follow the instructions on the prompt to complete the upgrade.

   During the upgrade, the installer will request a password to be set for the root account of ESRS.

   Note: This is **not** the root account of the host.

Configuring Operating System for VM (ESRS VE)

Configure Network

The following are needed to set up ESRS:

- IP address
- Default gateway
- DNS server

The following are optional:

- Customer proxy server
- ESRS Policy Manager (strongly recommended)
- Mail server - if you would like notifications and/or Connect Home failover

Note the following:

- Do not change any elements (for example, firewall settings) of ESRS, according to customer security policies.
- Do not place VMware/Hyper-V images or storage files on EMC devices managed by ESRS.
- When running clustered HA ESRS Virtual Edition Clients on VMware /Hyper-V, each ESRS Virtual Edition Client must be located on a different physical ESX server.

First boot installation

Before you can access the ESRS Virtual Edition Web UI, you must perform a first boot installation.

This section provides the steps to install and configure ESRS and to boot it through the ESX Server/HYPERV.

Requirements

Before you begin, the following conditions must be met:

- The ESRS Virtual Edition software package has been downloaded by the customer and is available for installation

  Note: The version downloaded **must** match the virtual environment to be used.

- Enterprise level:
  - Hypervisor is available at the customer site
  - VMware or Hyper-V is available
- Customer must create a VM and install the OS.

To configure the ESRS during first boot, follow the steps in the following sections.

Downloading the vSphere Client and deploying the ESRS image

To download the vSphere Client and deploy the ESRS image:

1. Access the vSphere Client and select **File > Deploy OVF Template...**, as shown in Figure 5 on page 17. The Deploy OVF Template - Source wizard appears.

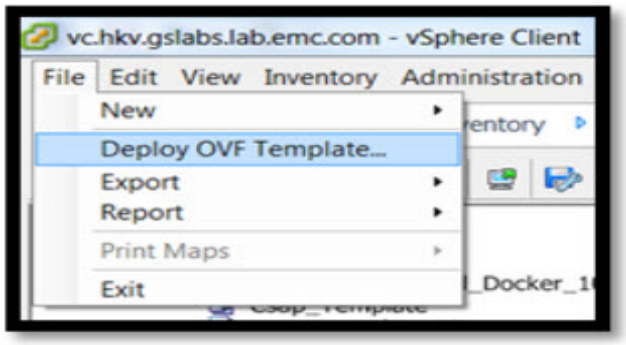

Figure 5 Deploy OVF Template

2. In the Deploy OVF Template - Source wizard, use the **Browse...** button to select the desired URL to download and install the OVF package, as shown in Figure 6 on page 17, and then click **Next**. The OVF Template Details window appears.

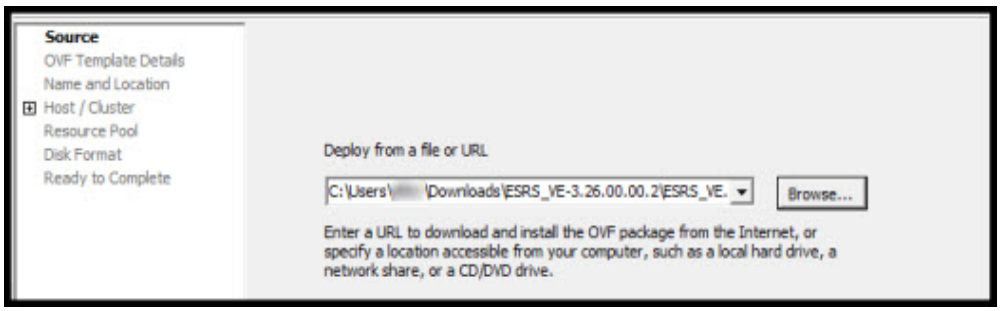

Figure 6 Deploy from a file or URL

3. In the **OVF Template Details** window, verify the details and then click **Next** to continue, as shown in Figure 7 on page 17. The **End User License Agreement** window appears.

Figure 7 OVF Template Details

4. In the **End User License Agreement** (EULA) window, read the license in its entirety, and then click **Accept**. The **Name and Location** window appears.

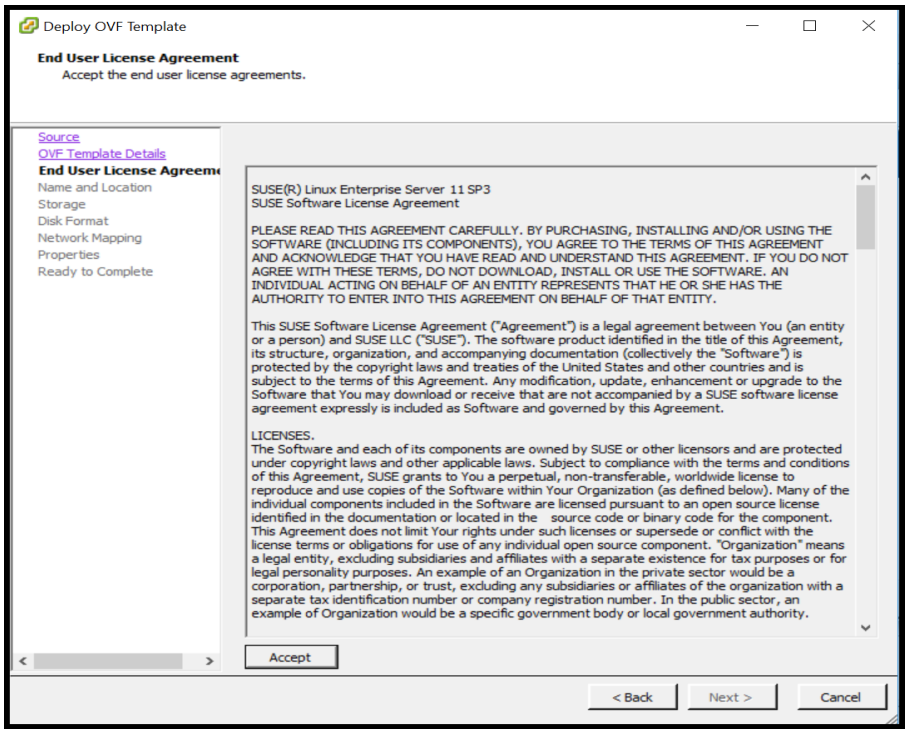

Figure 8 Eula screen

5. In the **Name and Location** window, enter a unique name and a location for the deployed template, as shown in Figure 9 on page 18, and then click **Next**. The **Host/Cluster** window appears.

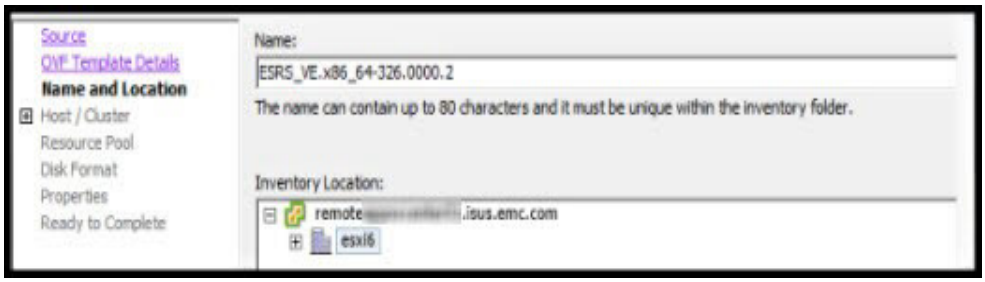

Figure 9 Name and Location

6. In the **Host/Cluster** window, select a host or cluster to run the deployed template, and then click **Next**. The **Specific Host** window appears.

Figure 10 Host / Cluster

7. In the **Specific Host** window, choose a specific host within the cluster, and then click **Next**. The **Storag**e window appears.

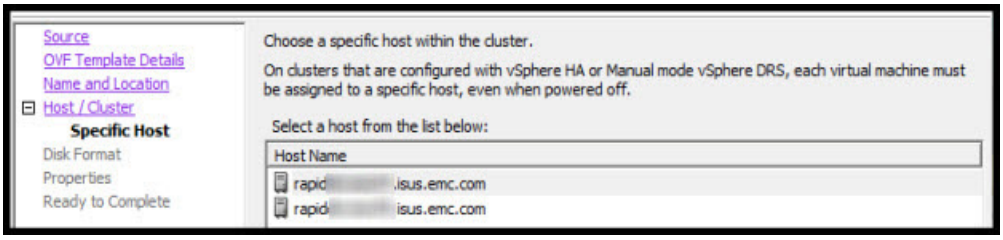

Figure 11 Specific Host

8. In the **Storage** window, select the destination storage for your vm files, and then click **Next**. The **Disk Format** window appears.

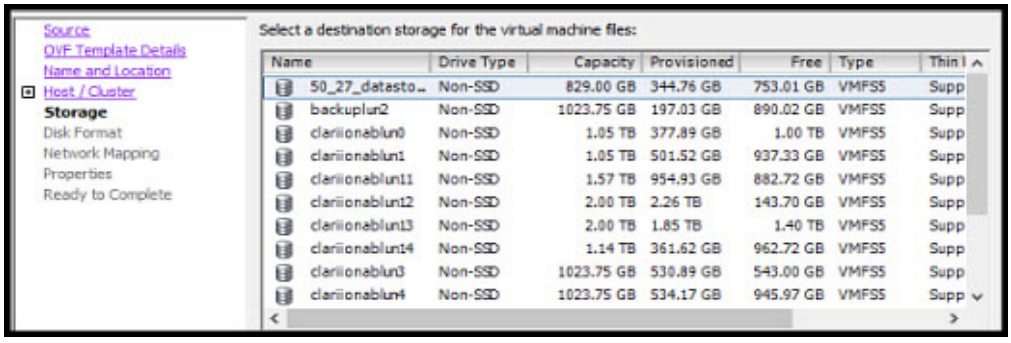

Figure 12 Storage

9. In the **Disk Format** window, select **Thin Provision**, and then click **Next**.

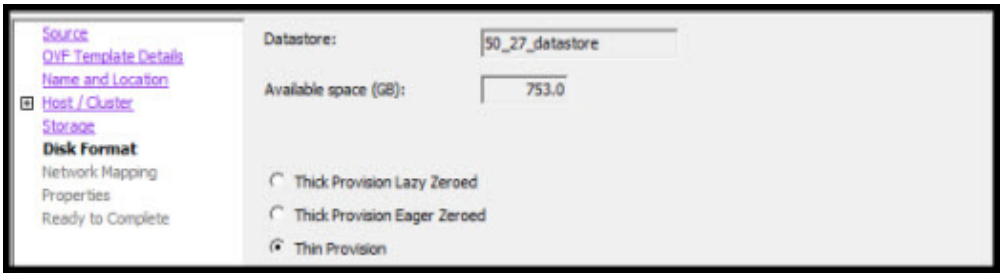

Figure 13 Disk Format

10. In the **Network Mapping** window, select the network the deployed template should use, and then click **Next**.

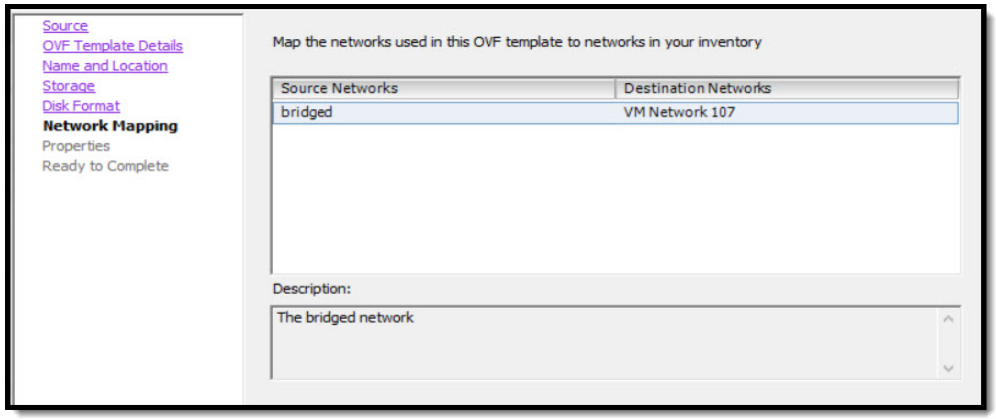

Figure 14 Network Mapping

11. In the **Properties** window, enter details for the following fields, and then click **Next**:

⚠CAUTION

Please enter complete information in this template to enable easy provisioning of ESRS VE. If any detail is incomplete or incorrect, it can only be corrected using YAST or you will be required to re-enter all the required information in the OVF template.

- DNS1
- DNS2
- Hostname
- Default Gateway
- Network IPV4 address
- Network IPV4 Netmask
- Time Zone Setting

- NTP Server Address
- Root Password

NOTICE

A root Password should be set during deployment. For security reasons, it is recommended to use a password that is a minimum of eight characters and contains a minimum of one upper, one lower, one digit, and one special character.

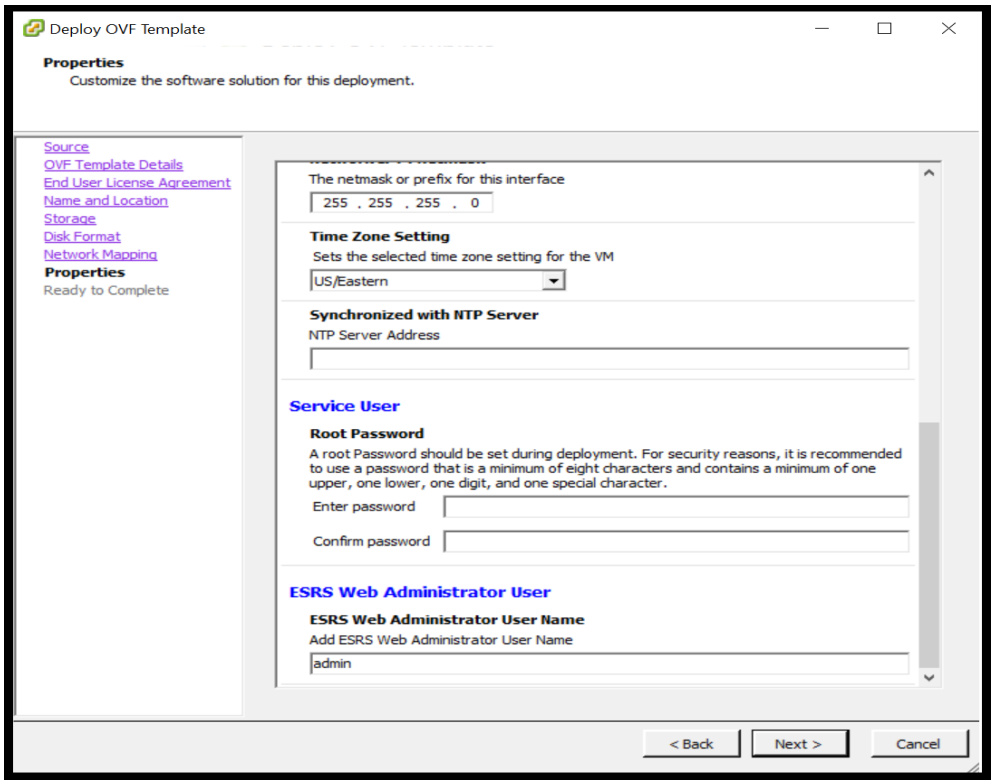

Figure 15 Properties

12. In the **Ready to Complete** window, review your options, and then click **Finish**. The **deployment status** window appears, as shown in Figure 17 on page 22. When the deployment is completed successfully, a deployment completed successfully message appears.

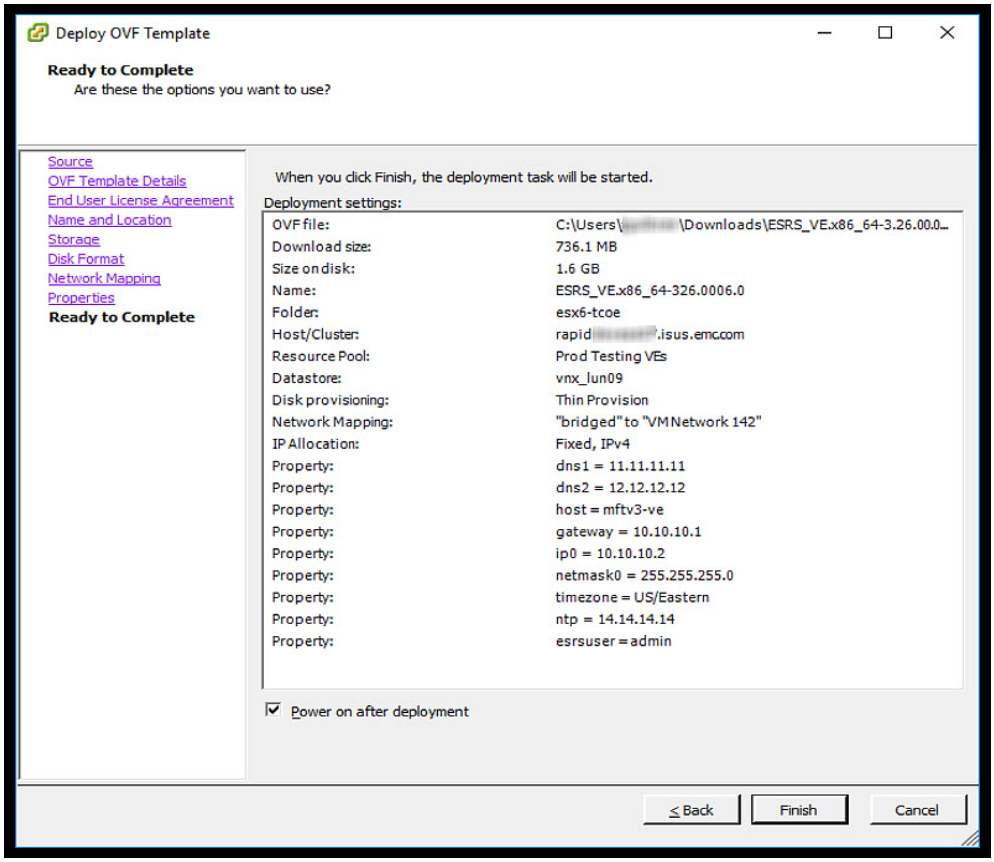

Figure 16 Ready to Complete

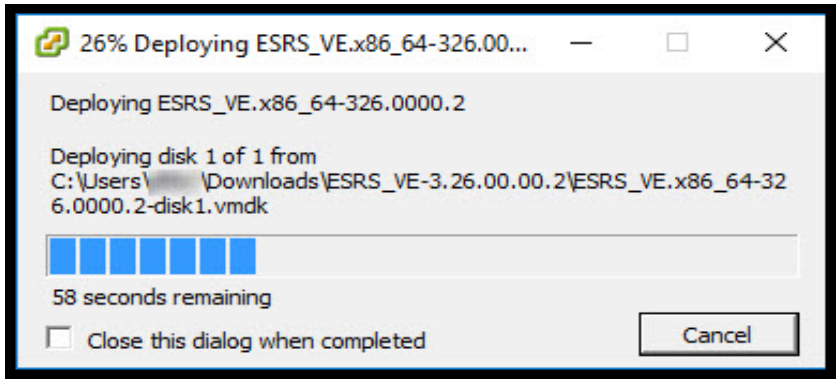

Figure 17 Deploying ESRS

13. In the **Deployment Completed Successfully** window, click **Close**, as shown in Figure 18 on page 23.

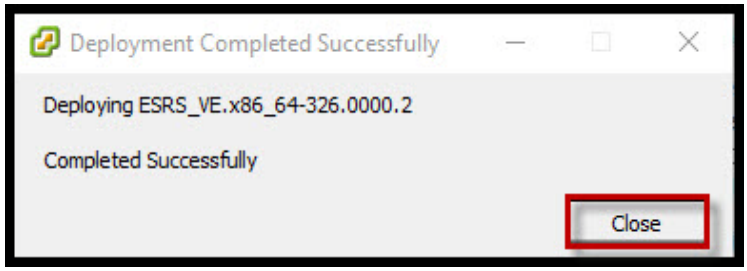

Figure 18 Completed Successfully message

Powering on the virtual machine

To navigate through the Linux console:

1. In the vSphere Client, ensure that your deployed template is selected in the left pane directory, and then click **Power on the virtual machine** in the **Getting Started** tab if you did not select that option during deployment., as shown in Figure 19 on page 23.

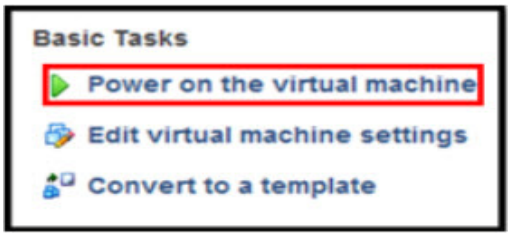

Figure 19 Powering on the virtual machine

2. If applicable, go to the Hyper-V Appendix and follow the instructions listed. Then go to the following step.
3. When the VE is powered on, wait until you see that the first boot is completed. Then go to the ESRS Web UI by using the IP address that is displayed in the configuration verification screen, as outlined in red on the screen example below.

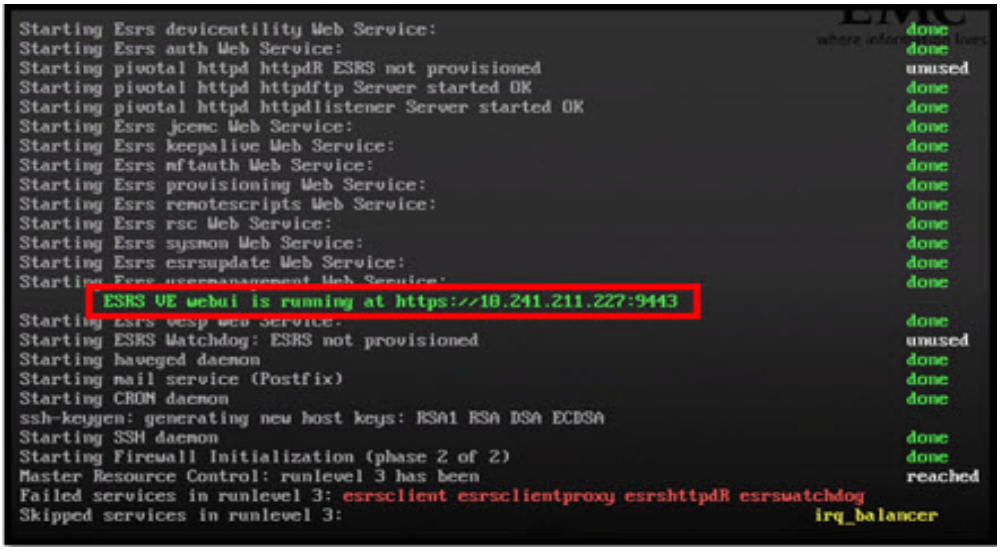

Figure 20 Configuration verification

Note: The failed services shown in red are expected at this time as some of the services have **not** been configured. This issue is addressed in the next section.

Note: The IP address of the ESRS should display in the **ESRS VE webui is running at https://<ESRSve-ip>:9443** field. If it displays anything different, then the network setup is not correct. This can be addressed by logging on to the ESRS shell and using YaST2 to correct the network configuration. See Appendix B for details.

Note: It is recommended that before you launch the Web UI portion of the ESRS install, you log on to the shell and verify the network, DNS, and default gateway configurations and connectivity. You can use the CECT to perform these tests. If there are issues with the configuration, then use YaST2 to correct them. See Appendix B for details.

CHAPTER 3
Provisioning

This chapter provides the information that you will need to prepare the ESRS server for the provisioning of ESRS. Topics include:

Root logon and Admin setup

The root logon and Admin setup described in this section are only a one-time setup, which is performed after a successful first boot configuration.

To initially log on to the ESRS Web UI after a first boot:

1. Access the ESRS Web UI using the following URL, either in **Internet Explorer 9 (IE9) or later**, **Google Chrome**, or **Mozilla Firefox** web browsers:

   https://<ESRSve-ip>:9443/

   The ESRSv3 home page displays.

2. On the ESRSv3 home page, on the menu bar on the upper-right corner, click **Login**. The Root Login page appears.

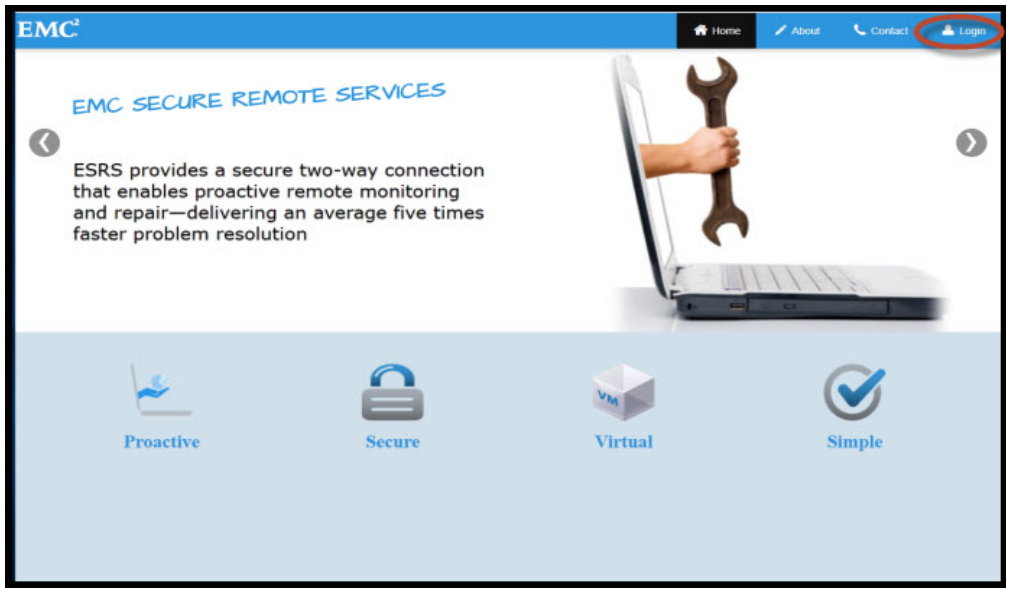

Figure 21 ESRSv3 home page

Note: The Root Login page, as shown in Figure 22 on page 27, only appears the first time you log on to ESRS, after a successful first boot configuration. Also, when you initially provision ESRS, the version being installed displays in the upper-left corner, after the word **ESRS Virtual Edition.**

3. On the Root Login page, in the **User Name** text box, enter **root** as the user name, as shown in Figure 22 on page 27.

Figure 22 Login page

4. In the **Password** text box, enter the root password that you set during the first boot installation.

IMPORTANT

If you forget your root password, not your Admin password, then you must perform the first boot installation again to set up a new root password. The system can not retrieve your root password. To reset your ESRS Version 3 (ESRSv3) Web UI Admin password using the Web UI, see Chapter 5, "Troubleshooting," in the Operations Guide for resetting the ESRS Web UI user password.

5. Click **Login**. The EULA license agreement page appears.

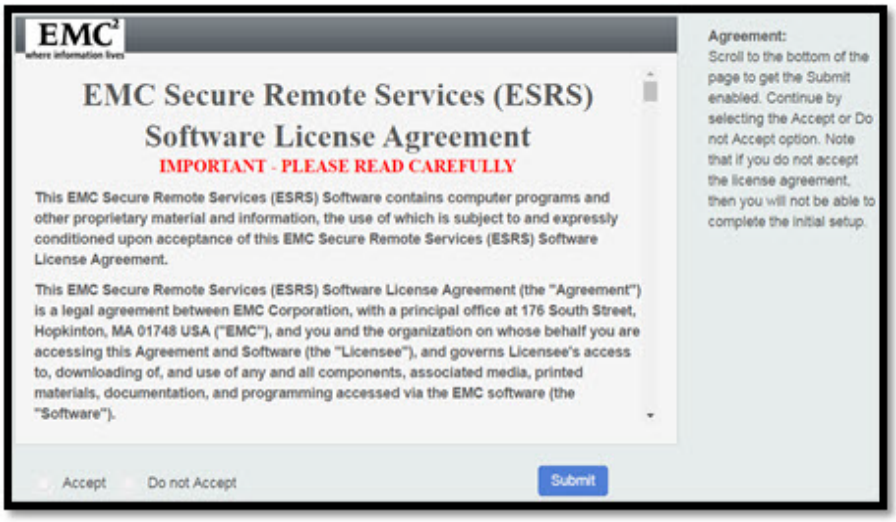

Figure 23 EULA page

6. Scroll down to read the agreement in its entirety. Accept the end-user license agreement by selecting the **Accept** option.

Note: You will not be able to select the **Accept** or **Do not Accept** radio button unless you scroll to the bottom of the page.

7. After accepting the agreement, click **Submit**. The Admin setup page appears. Note that the first time you log on to the user interface, the system prompts you to set the Admin password.
8. In the Admin setup page, set the Admin password, and then click **Log on as admin**, as shown in Figure 24 on page 29. Note the following:
   - There is no default password for the Admin user, therefore, you need to manually set the password when prompted.
   - If the Admin password is not changed within 15 minutes, then you will be logged out and will have to start from the beginning by logging on with your root credentials.
   - The password must meet the following requirements:
     - Be 8 or more characters in length, with a maximum of 16 characters.
     - Contain at least one numeric character.
     - Contain at least one uppercase and one lowercase character.
     - Contain at least one special character such as ‘ ~ ! @ # $ % ^ & * ( ) - _ = + [ ] { } ; < >
     - Be a password that does not match the previous password.
     - Do **not** use special characters ‘ (single quote) and “ (double quotes) as part of the password.
     - Do **not** use special characters / ? : , . | \
     - May **not** be a password that matches the previous password.
   - If all of the password requirements are met, then after clicking the **Log on as admin** button, you will be logged out as root and logged in as Admin with ESRS Admin rights.

Figure 24 Admin account setup

IMPORTANT

If you lose or forget your Admin password for the ESRS Web user interface (or the user name defined during the first boot configuration), then see see Chapter 5, "Troubleshooting," in the Operations Guide for resetting the ESRS Web UI user password. This requires access to the ESRS Shell with an SSH client.

9. Go to the "Provisioning screens/ESRS setup" on page 30, and follow the steps listed.

Provisioning screens/ESRS setup

Registration

To register for ESRS:

1. In the Primary Contact page, enter the primary contact information, as shown in Figure 25 on page 30. EMC uses the information provided in this section as the customer contact for ESRS. EMC will reach the primary contact first regarding any ESRSv3 queries.

   IMPORTANT

   This information is required to proceed with the ESRS configuration. Ensure that this information is accurate as it may have a direct impact on the ESRS support.

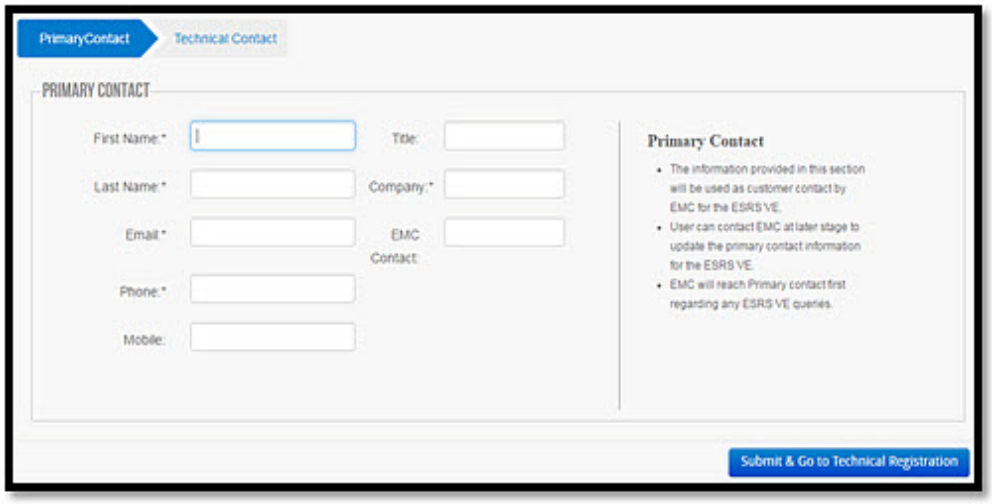

Figure 25 Primary Contact page

2. When the primary contact information is completed, click the **Submit & Go to Technical Registration** button. A status message displays stating that the primary contact has been saved. This contact information will be used by EMC in the event of any connectivity issues with ESRS.
3. In the status message window, click **OK**. The message closes and the Technical Contact page appears.

4. In the Technical Contact page, as shown in Figure 26 on page 31, enter the additional contact information. For any ESRSv3 queries, if the primary contact is not available, then EMC uses the technical contact information.

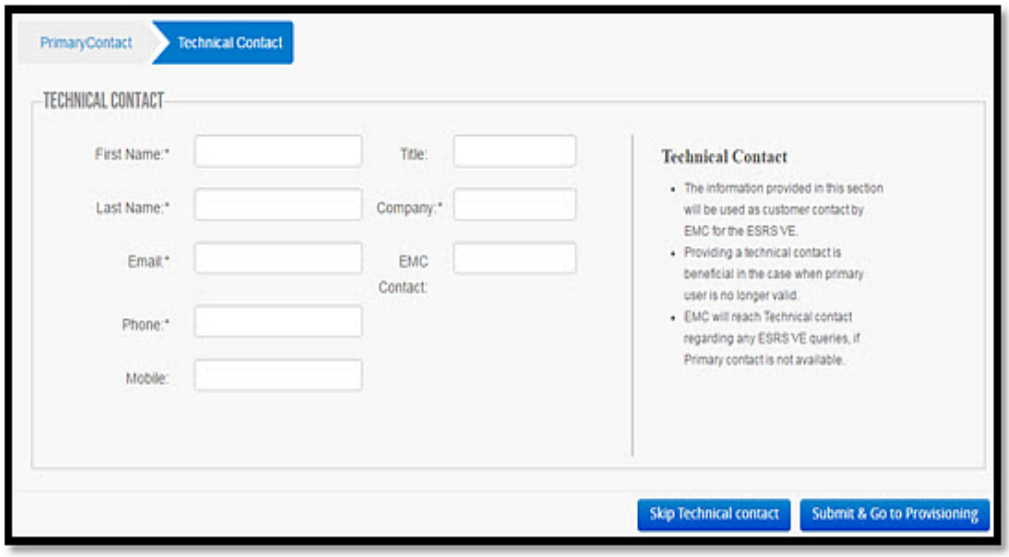

Figure 26 Technical Contact page

You can skip this step by clicking the **Skip Technical contact** button. The **Provisioning** tab displays with the Proxy Server, Network Check, and Provision sub tabs.

Note: Although this information is optional, EMC highly recommends that you provide it. This should be your secondary contact for ESRS. Ensure that this information is accurate as it may have a direct impact on ESRS support.

---

5. After you enter the technical contact information, click **Submit & Go to Provisioning**. A status message appears stating that the technical contact has been saved.
6. Click **OK**. The Provisioning tab appears with the Proxy Server, Network Check, and Provision sub tabs.
7. For the **Proxy Server** sub tab, if a proxy server is **not** required, then you can skip this step. If you need to provision the ESRS with a proxy server, then follow these steps:
   a. In the **Proxy Server** tab, select the **Enable Proxy between Client and EMC** checkbox and enter the required details, as shown in Figure 27 on page 32.

b. If your proxy server requires credentials, then select the **Authenticate using the following information** checkbox and complete the applicable details, as shown in Figure 27 on page 32.

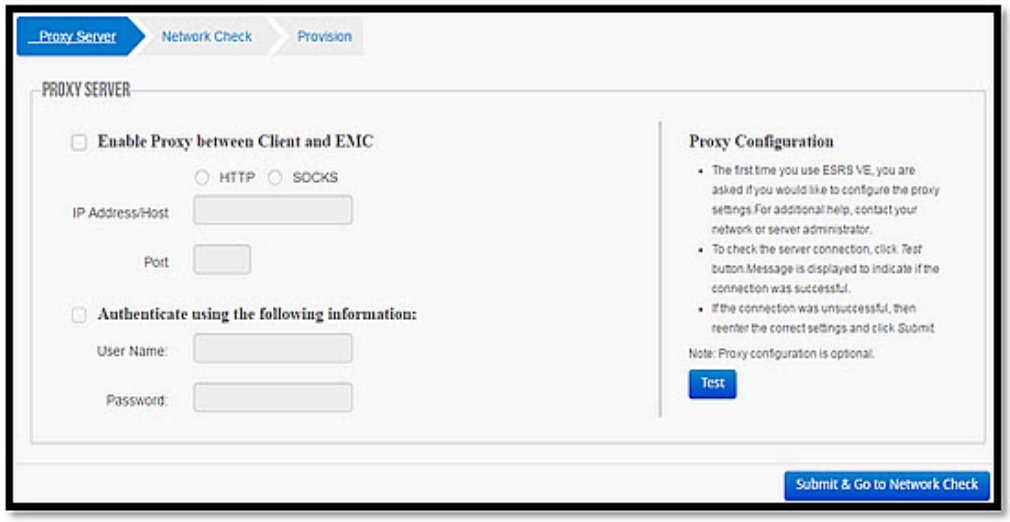

Figure 27 Proxy server tab

c. Click **Test** to test the connectivity through the proxy to EMC enterprise. A message displaying the result appears next to the Test button.

d. Click the **Submit & Go to Network Check** button. A message appears stating that the proxy configuration has been saved.

e. Click **OK**. The status message closes and the **Network Check** tab appears.

8. In the **Network Check** tab, you **must** run network checks to check the connectivity between the ESRS UI node, the core node, and the GAS servers. This step is **not** optional.

   To check the network connectivity from ESRS to all the required EMC servers, click the **Run Test** button.

- If all of the tests are successful, then the result shows connected (green), as shown in Figure 28 on page 33.

Figure 28 Run Test results

- If the tests are unsuccessful or unable to connect, then the results display as red circles. If this is the case, then verify that the appropriate firewall hosts and ports are open to EMC. All tests **must** be successful.

IMPORTANT

To ensure communication integrity, proxy servers and devices external to your DMZ must not perform any method of SSL checking on outbound or inbound traffic. SSL checking will cause a loss of connectivity to EMC. If SSL checking is performed on outbound communications by customer firewalls, proxies, Web traffic filtering appliances or applications, web traffic shaping/load balancing, certificate verification or proxying, or Intrusion Detection Services (IDS), then there will be connectivity loss to EMC.

Note: The customer is responsible for the configuration and resolution of the proxy server/firewall issues that impact connectivity to the EMC ESRS infrastructure.

9. Click **Go to Provision**. The **Provision** tab displays.
10. The following classes of users can log on to the **Provision** tab:
    - Partner
    - Employee
    - Customer
11. **Partner/employee provisioning log in:**

1. Enter your EMC Online Support Credentials in the Provisioning page and then click **Next**.

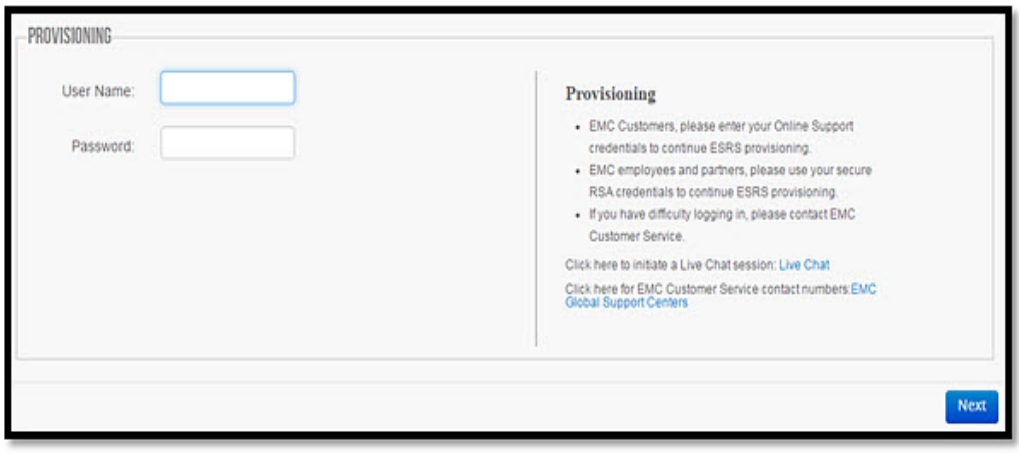

Figure 29 Enter Credentials

2. After you are successfully authenticated under the Provisioning page, the Enter Site ID page opens. Enter your Site ID in the **Site Id** field as shown in Figure 30 on page 34.

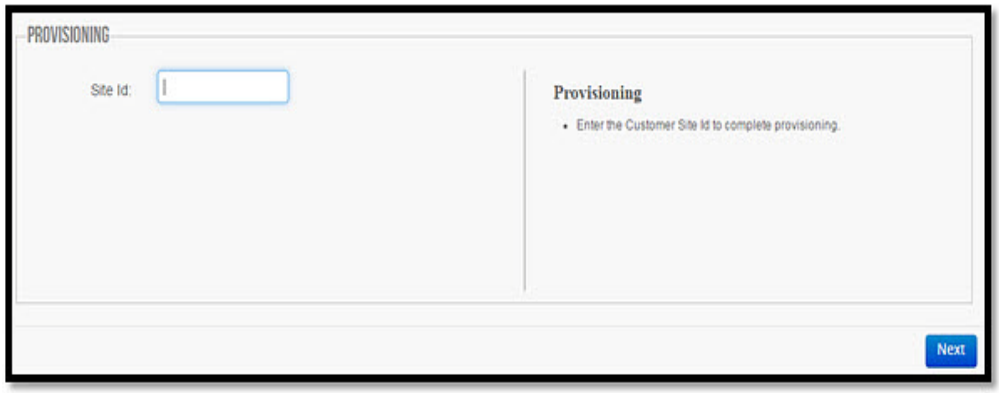

Figure 30 Provision Site ID tab

3. Click **Next** to continue. After EMC verifies the Site ID, you are directed to the **Confirmation** page.

4. Verify the information on the Confirmation page and then click **Next** to continue, as shown in Figure 31 on page 35. Provisioning commences, as shown in Figure 32 on page 35.

Figure 31 Confirmation page

Figure 32 Provisioning commences with status indicator

5. When provisioning is done, click **OK** to accept, as shown in Figure 33 on page 35. Your provisioning is complete. Proceed to "Email Configuration" on page 40.

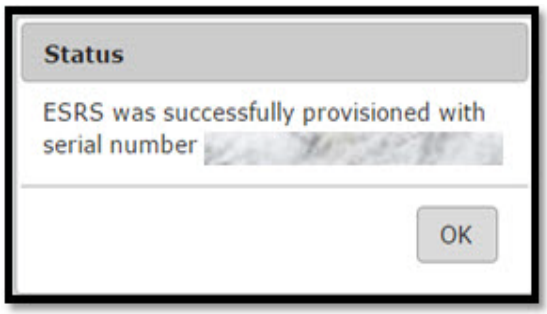

Figure 33 Provisioning completed

12. Customer provisioning log in:

1. Enter your EMC Online Support Credentials in the **Provisioning** page and click **Next**.

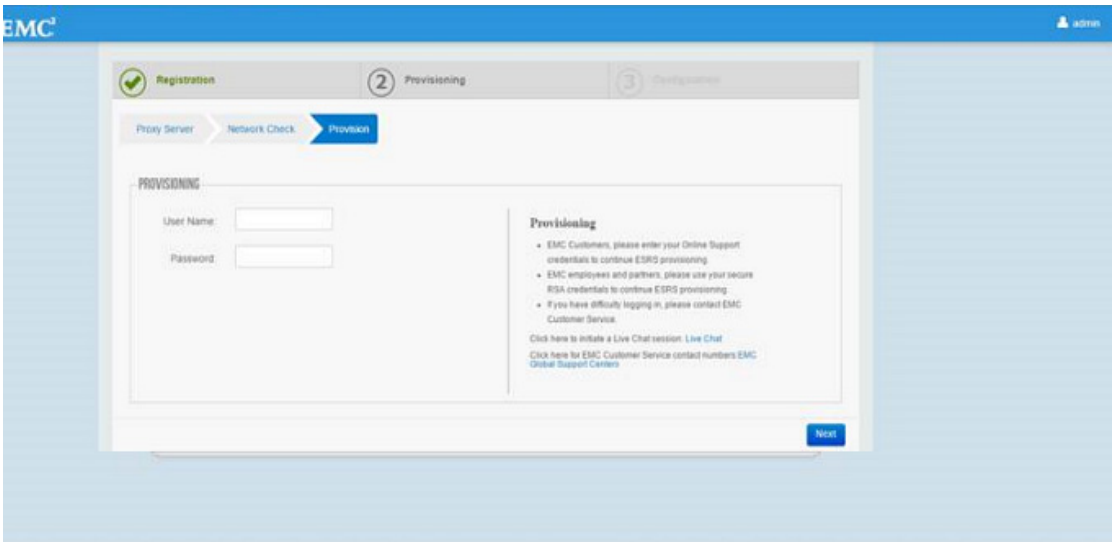

Figure 34 Enter Credentials

2. In Figure 47, "Customer Provisioning Page" click **Email my access code** to receive an access code.

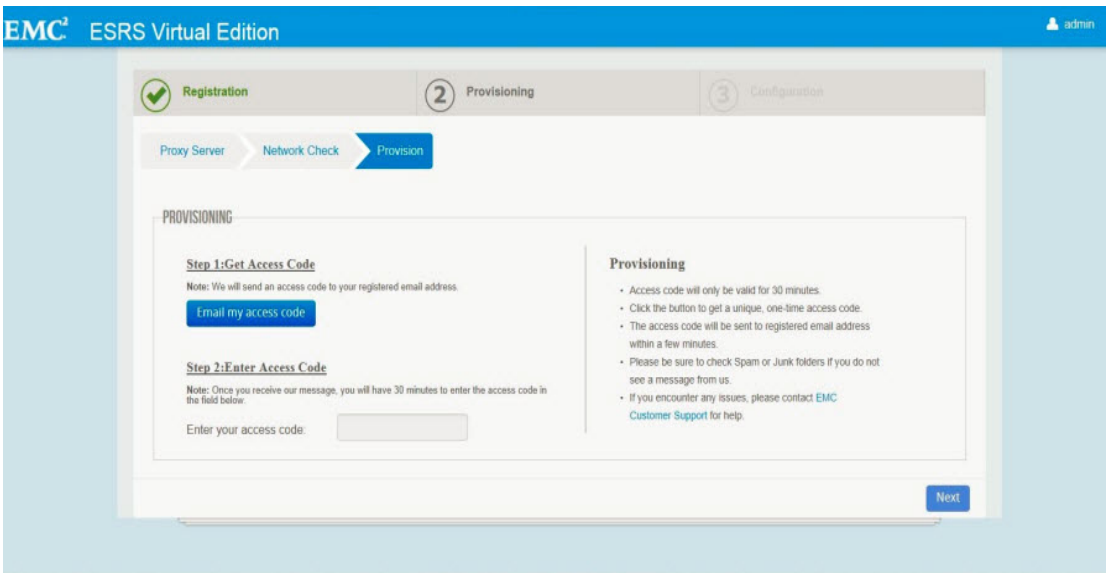

Figure 35 Customer Provisioning Page

3. After a new access code is generated, an email containing the access code is sent, and a **Status** window opens telling you to check your email, as shown in Figure 36 on page 37. Click **OK** to close this window.

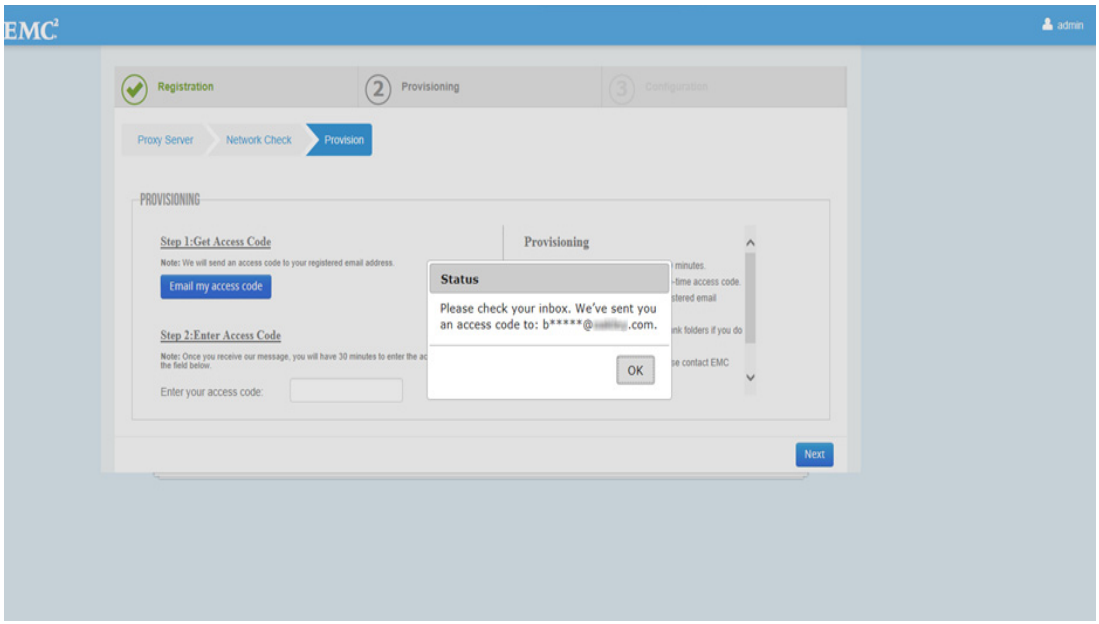

Figure 36 Status window

Note: The generated access code is an 8-digit long pin code and is valid for 30 minutes from the time it is generated. You must complete the installation within that time frame.

4. After you obtain your access code, enter it in the **Enter your access code** field, as shown in Figure 37 on page 37.

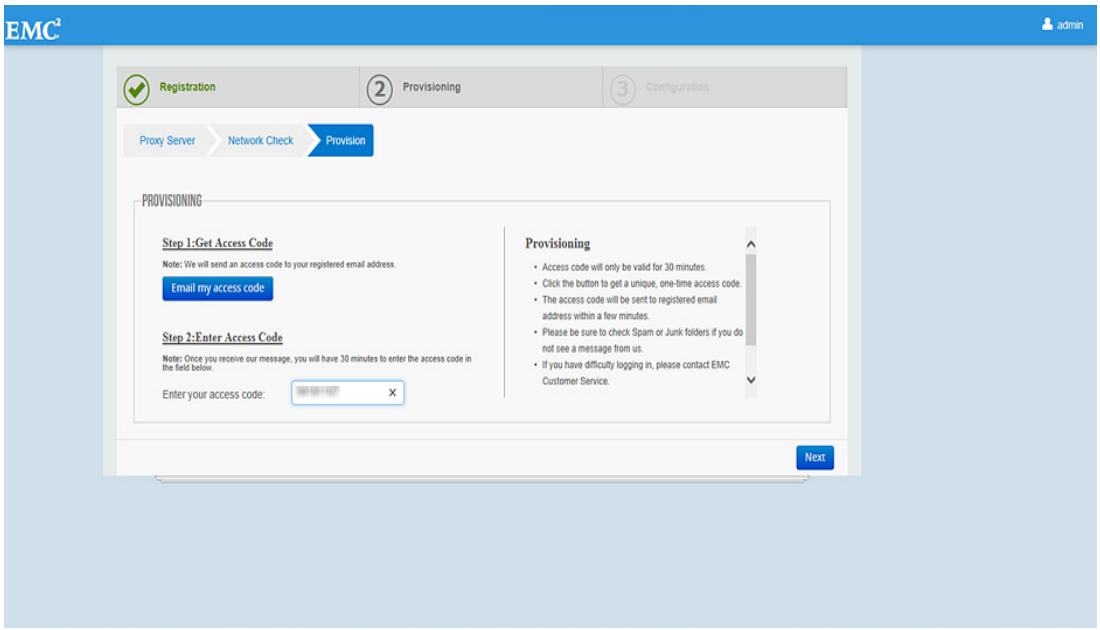

Figure 37 Enter access code

5. Click **Next**. Figure 38, "Customer Site page," opens.

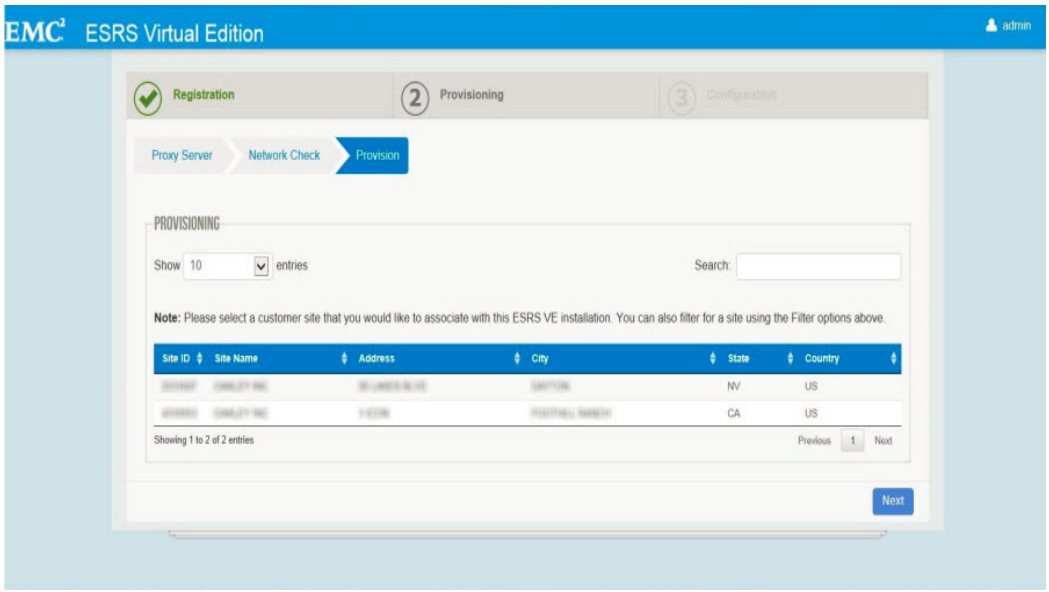

Figure 38 Customer Site page

6. Select the site that you want to provision from the list, and then click **Next**. Note that at this point, you do not need administrator privileges to select sites. The page displays what you have selected, as shown in Figure 39 on page 38.

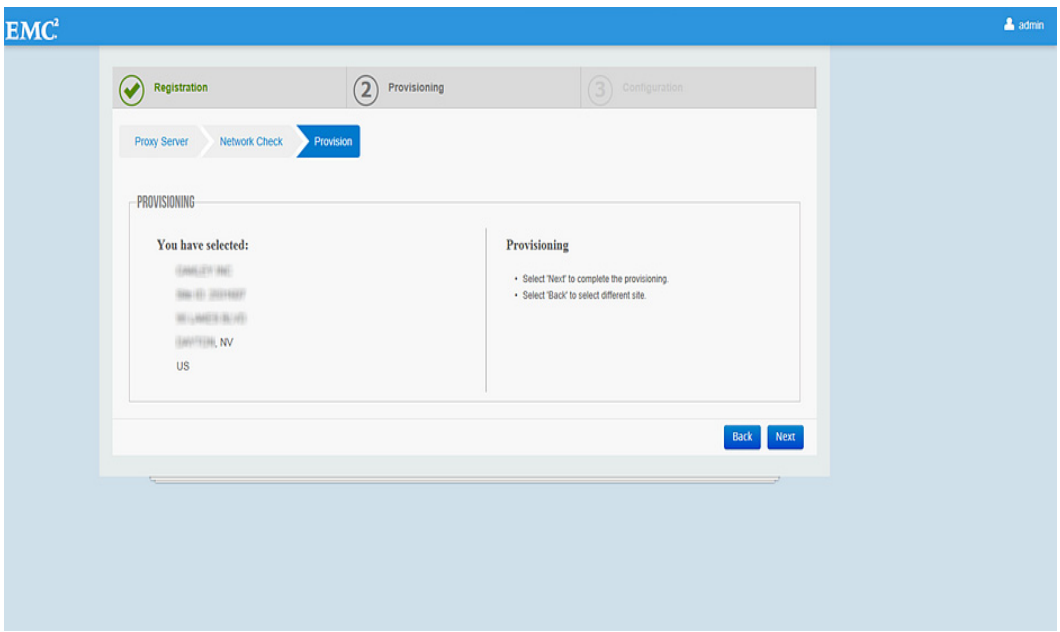

Figure 39 Site confirmation

7. Click **Next** to continue. The provisioning status appears, as shown in Figure 40 on page 39.

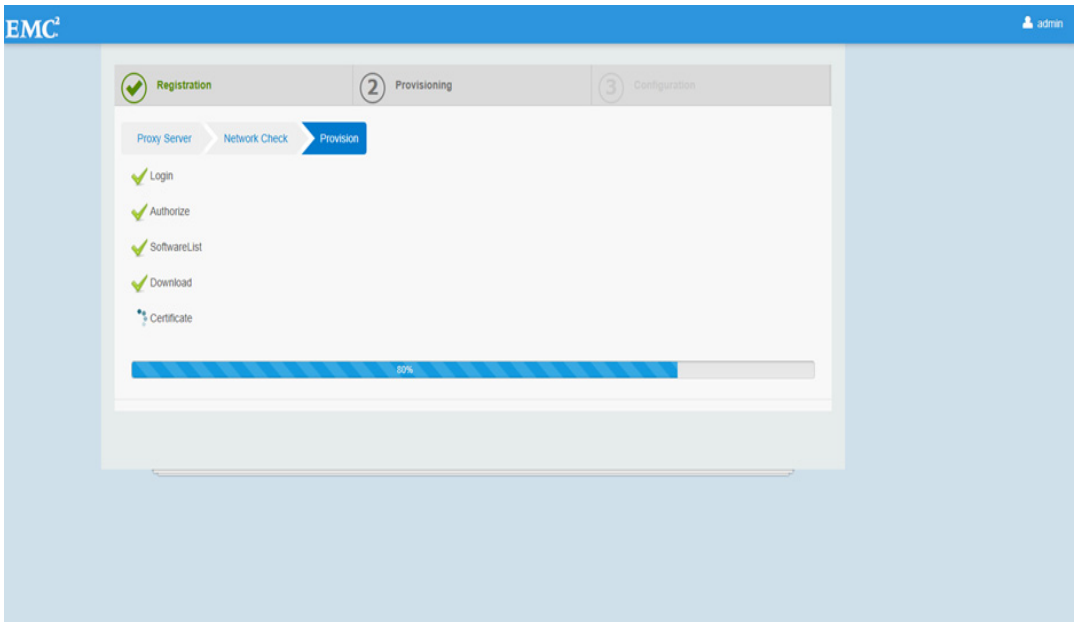

Figure 40 Provisioning status

When provisioning is completed, the **Status** window appears. If provisioning is successful, then the EMC certificates are installed, ESRS is provisioned and registered on the EMC Enterprise, and a status message appears on the Web UI, as shown in Figure 41, "Provisioning Success window."

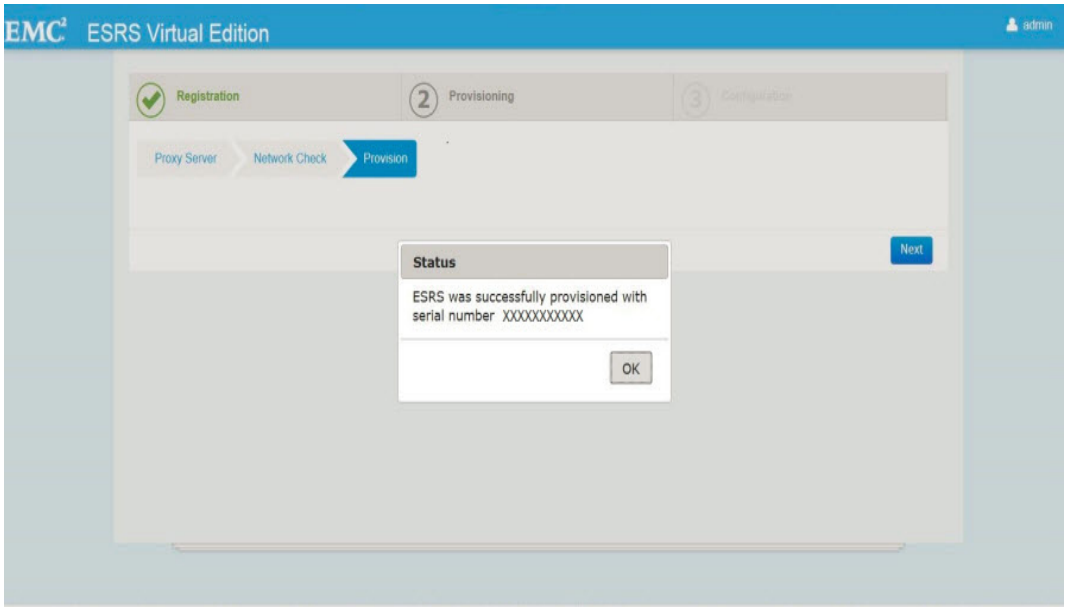

Figure 41 Provisioning Success window

Note: If, at any time during the 30-minute window for this procedure, you re-click **Email my access code,** then the previous code is automatically invalidated, and you must use the most current code.

8. Click **OK** to continue. The **Email Configuration** tab displays.

Email Configuration

In the **Email Configuration** tab, the following details need to be configured to get the notification mails, as shown in Figure 42 on page 40.

Note: The email server is on the customer's network. ESRS should **not** be used for SMTP traffic destined for the customer, that is, mail will not be forwarded.

1. To send notification emails and Connect Home files (if enabled), provide the email server and its port details in the **Email Server** and **Port** text boxes.
2. Provide an email address in the **Sender Email** section.This address will be used as the FROM address in the email notifications.
3. Provide an email address in the **Notification Email(s)** section. This address will be used as the recipient address for any critical failure event notifications or failed Connect Homes on the ESRS.
4. If you select **Enable on Success Notification**, then the customer will receive emails when a Connect Home is forwarded successfully to EMC (if configured). Multiple email users and distribution lists can be added by separating the names with a comma.

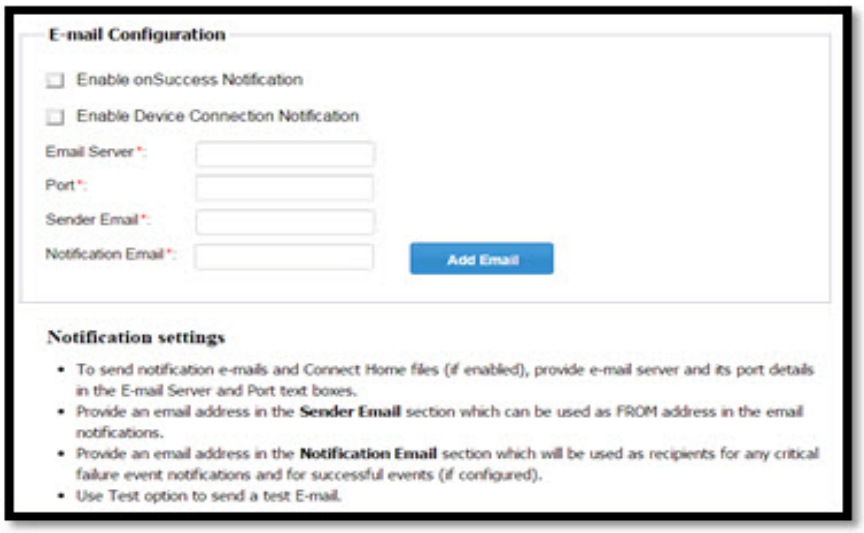

Figure 42 Email Configuration

5. Click **Test**. A pop-up window indicating that the test email was successfully sent displays.

   If the server settings are incorrect after clicking **Test**, then an error message displays.

If you click **OK** and then click **Submit & Go to Policy Manager** when the server validation fails, then a pop-up warning message appears, as shown in Figure 43 on page 41. During initial provisioning process only, this pop-up message appears if the email configuration is for the first time only and it fails.

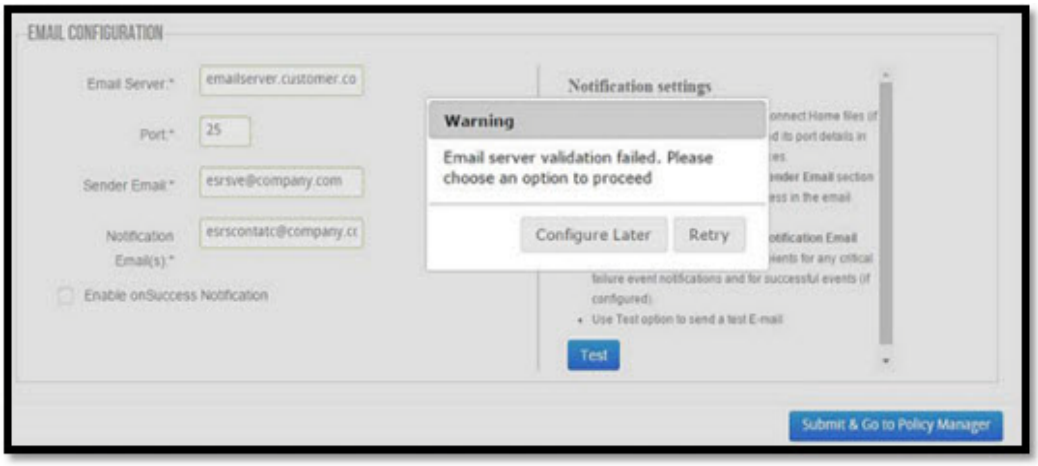

Figure 43 Warning pop-up message

The email information is not saved in the ESRS database if the email configuration information is incorrect.

You have to choose **Configure Later** or **Retry**.

If you click **Configure Later**, you are taken to the next tab to continue provisioning ESRS. You will have the option to configure the email after provisioning ESRS.

Note: Configure Later button does not save the email information in the ESRS database.

Policy Manager

If you are using Policy Manager (it must be installed and operational), then complete the applicable information on this tab as follows:

Note: ESRS can use any Policy Manager 2.02.1-xxx or later, including Policy Manager 6.6.

1. In the **Policy Manager** tab, enter the following applicable information:
   - To enable Policy Manager on this page, enter the IP address, the port number, and the SSL strength (Low, Medium, or High). EMC recommends that the SSL strength be High.
   - If you are not using SSL for communication to the Policy Manager, then clear the **Enable SSL** checkbox.
   - If a proxy server is not used for communication to the Policy Manager, then clear the enable proxy server checkbox as well.

2. When you are done, click the **Test** button to check the connectivity to Policy Manager from ESRS. If the connection is successful, then a message appears beneath the **Test** button, as shown in Figure 44 on page 42.

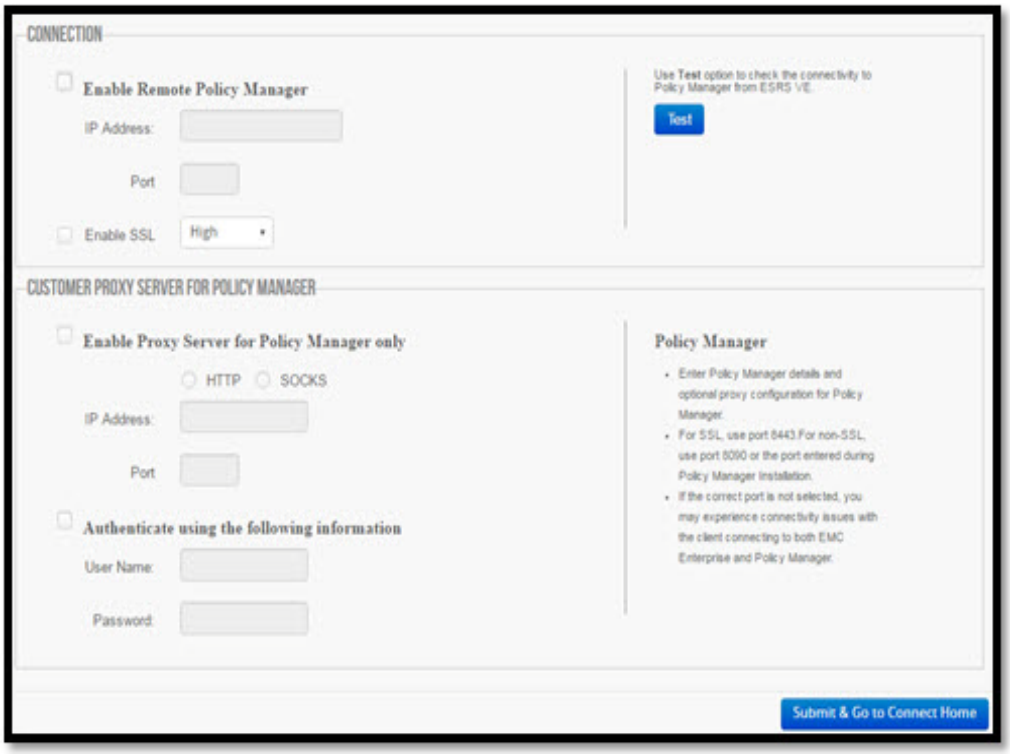

Figure 44 Policy Manager

3. Click **Submit & Go to Connect Home**. The status pop-up window appears.
4. Click **OK** to continue. The **Connect Home** tab displays.

Connect Home

Managed File Transfer (MFT) is the default and primary channel for the Connect Home files. In the event MFT is not available, Connect Home will failover to the ESRS channel.

On the **Connect Home** tab, you can configure and test Connect Home failover to alternate paths using FTPS and/or Email (SMTP) via the customer SMTP server.

Note: Connect Homes to EMC on alternate paths will only occur if the Primary Method of ESRSv3 (MFT) is unavailable.

Completing the **Connect Home** tab is highly recommended but ***not*** required. Your firewall(s) and proxy server may need to be configured to pass this traffic. See the Ports Requirement Document for ports used. **Again, note that these alternate paths are only used if the MFT channel is unavailable**.

To enable Connect Home failover:

Note: ConnectEMC can be enabled for the following transport types as a failover channel in the corresponding order: 1) FTPS, 2) Email.

1. Select either or both of the Connect Home connections. The **Test** button becomes enabled, as shown in Figure 45 on page 43.

Figure 45 Selecting connections

2. Click the **Test** button to test the connection to EMC.
3. If the tests are successful, then the following messages appears at the bottom of the page:
   - For FTPS: **Test connect home using FTPS was successful**
   - For email: **Test connect home using Email was successful**

   Note: The customer must configure their proxy server(s)/firewalls per the Ports Requirement document.
4. Click **Complete Setup**. The Setup Complete page appears.
5. In the Setup Complete page, click the Home button (as shown in Figure 46 on page 43) to access the ESRS Web UI Dashboard, as shown in Figure 47 on page 44.

Figure 46 Home button

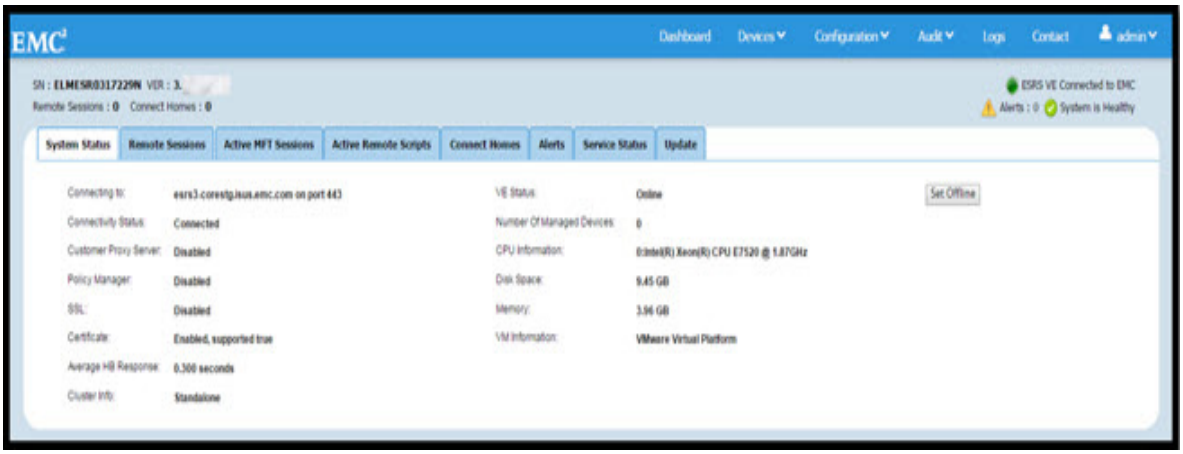

Figure 47 Dashboard

APPENDIX A
IP Addresses used by ESRS

This appendix lists the article that provides the IP addresses used by the EMC Secure Remote Services Virtual Edition.

Key information

Article Number: 0000494729

Version: 1

ID: emc238467

Domain: EMC1

Solution Class: 3.X Compatibility

Note: Always check `support.emc.com` for the latest version of this article as it may have been updated.

Article access

The following is a Primus(R) eServer solution.

Article Title: What IP addresses are used by the EMC Secure Remote Services IP Solution?

This is from KB article 494729. To access this article, go to:

https://support.emc.com/kb/494729

APPENDIX B
ESRS v3.x on Hyper-V Install Process

This appendix describes the Hyper-V install process for ESRS v3.xx.

Procedure

Follow the steps below to install the Hyper-V on your ESRS Virtual Edition (ESRS v3.xx):

1. Copy the VHD for the ESRS Virtual Edition to the location where you wish to host the virtual disk for the virtual machine.
2. Uncompress the zip file.
3. Launch the Hyper-V Manager, as shown in Figure 48 on page 48.

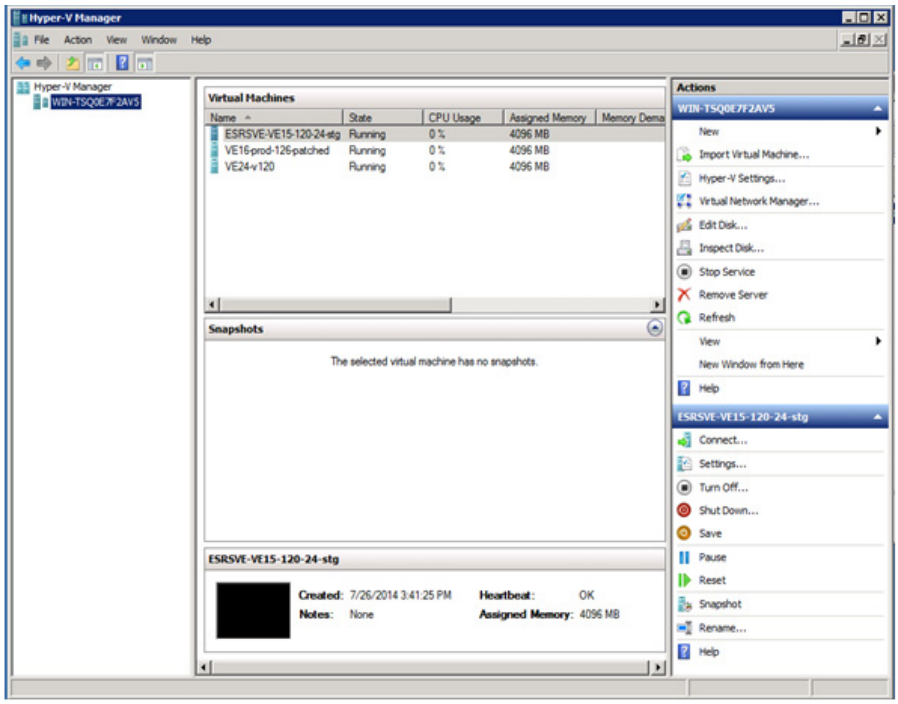

Figure 48 Launching Hyper-V Manager

4. Create the virtual machine that will be hosting the ESRS Virtual Edition.
   a. In the upper-right corner, select **New > Virtual Machine**, as shown in Figure 49 on page 49.

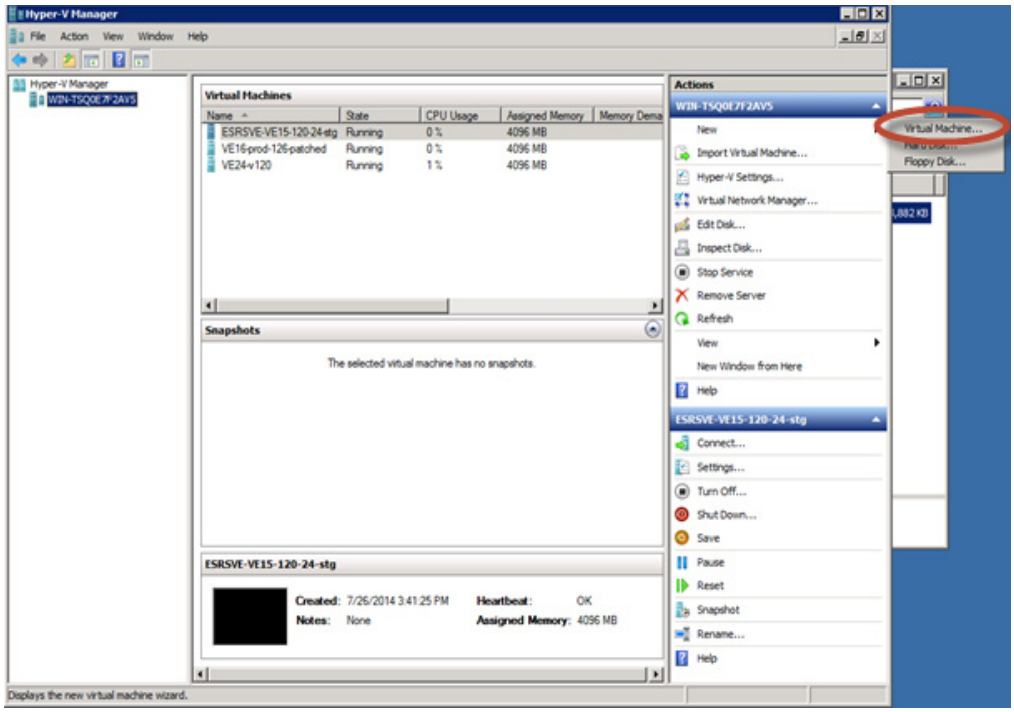

Figure 49 Selecting New › Virtual Machine

   b. Click **Next**, as shown in Figure 50 on page 49.

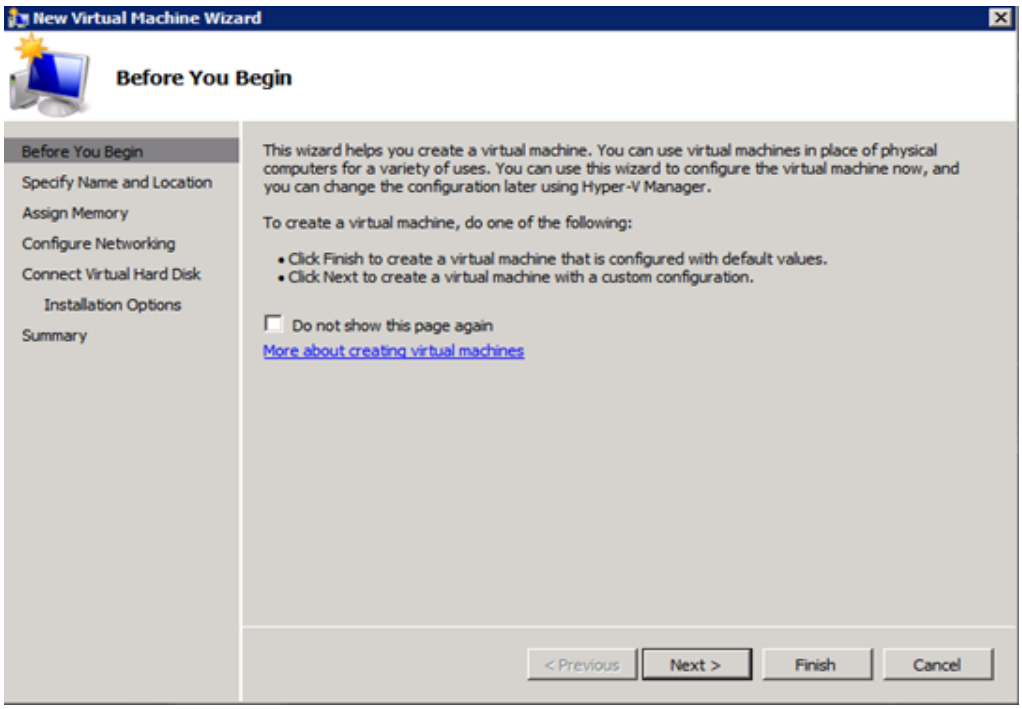

Figure 50 Selecting Next

c. In the upper-right corner, select **New > Virtual Machine**, as shown in Figure 51 on page 50.

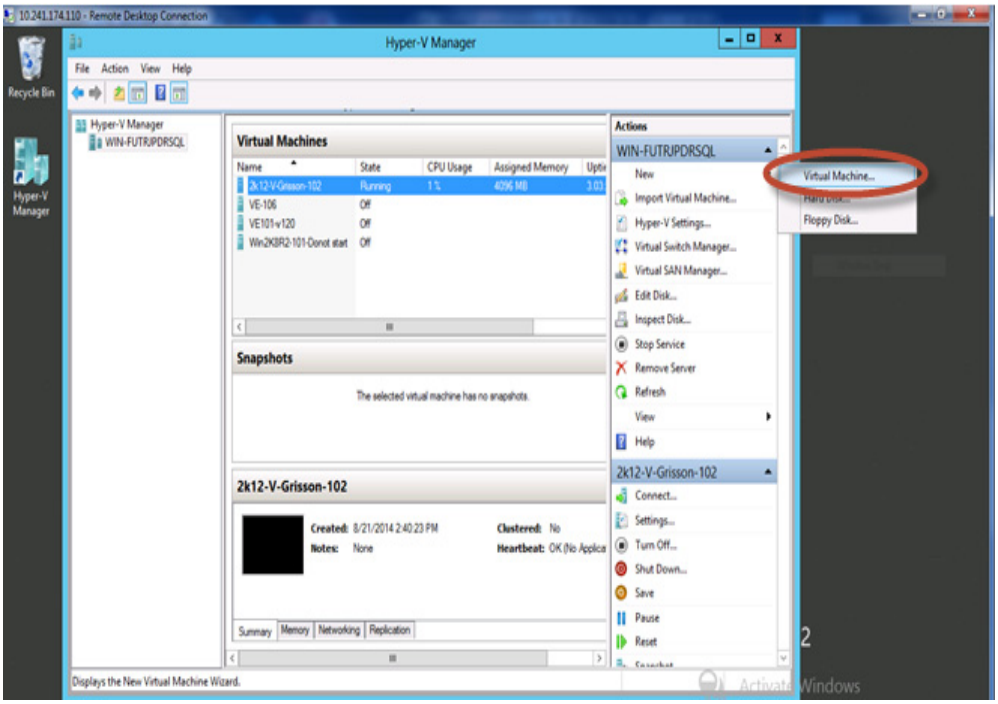

Figure 51 Selecting Virtual Machine

d. Name the virtual machine, as shown in Figure 52 on page 50, and then click **Next**.

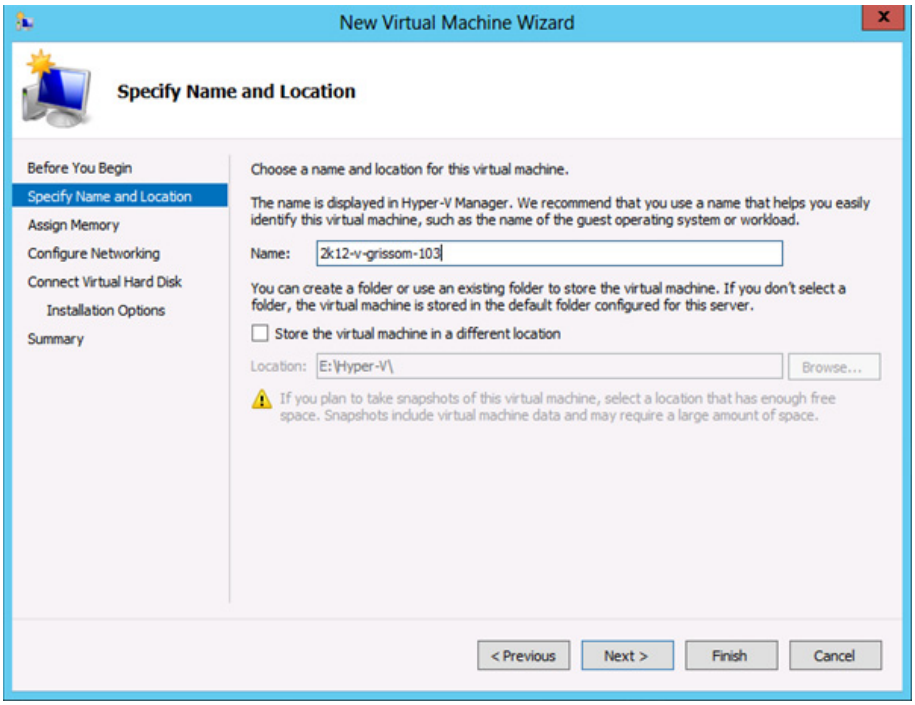

Figure 52 Specifying name

e. Define the memory (4 GB [4096 MB]), as shown in Figure 53 on page 51, and then click **Next**.

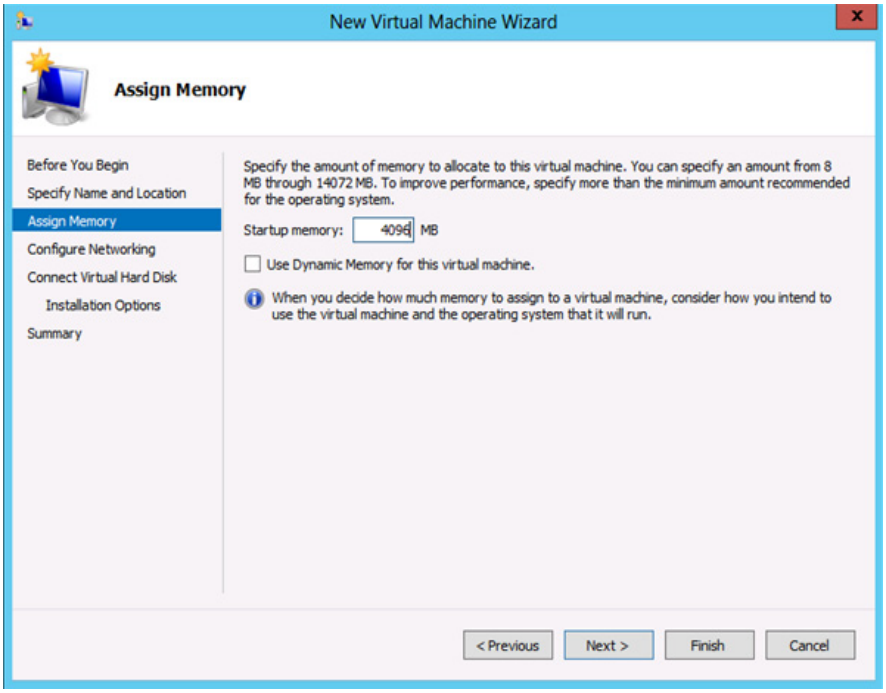

Figure 53 Assigning Memory

f. In the Connection menu, select the network card that will be used by the virtual machine, and then click **Next**, as shown in Figure 54 on page 51.

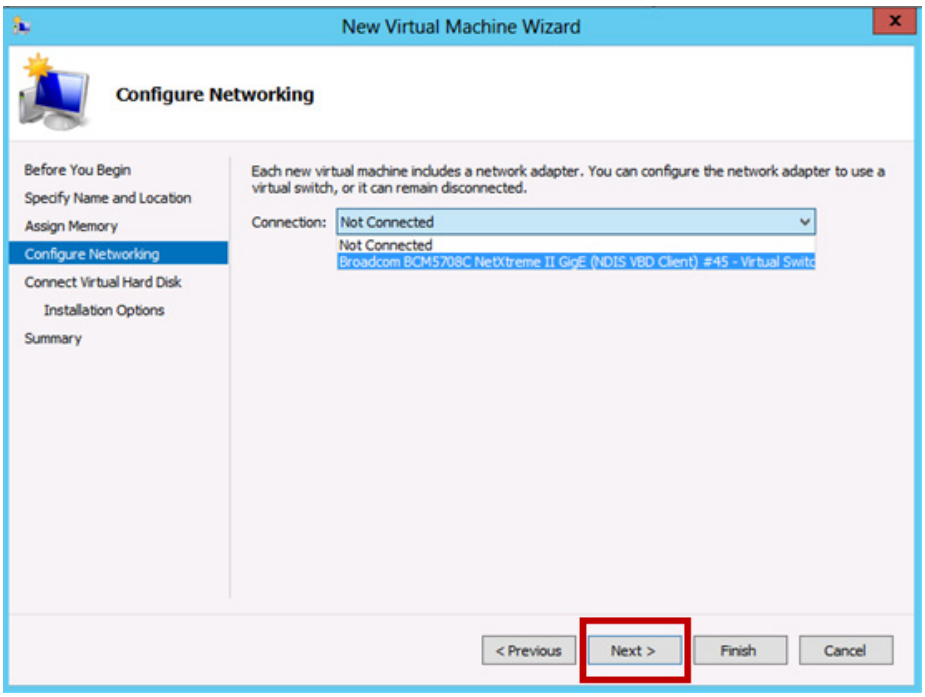

Figure 54 Configuring Networking

g. Select the location to which you copied the VHD file for this ESRS, as shown in Figure 55 on page 52.

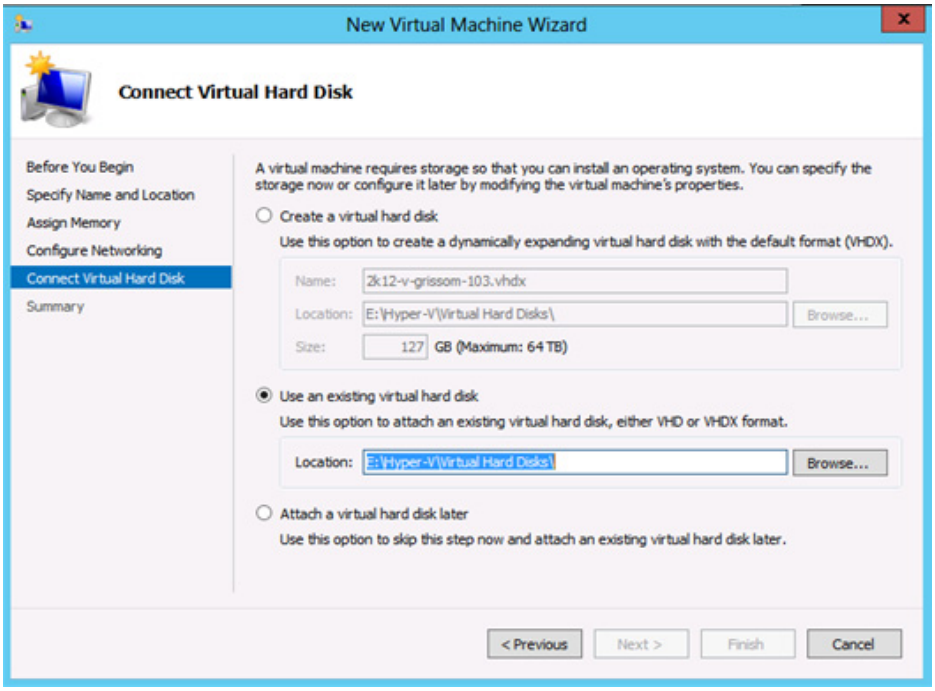

Figure 55 Selecting location

h. Click **Open**, as shown in Figure 56 on page 52.

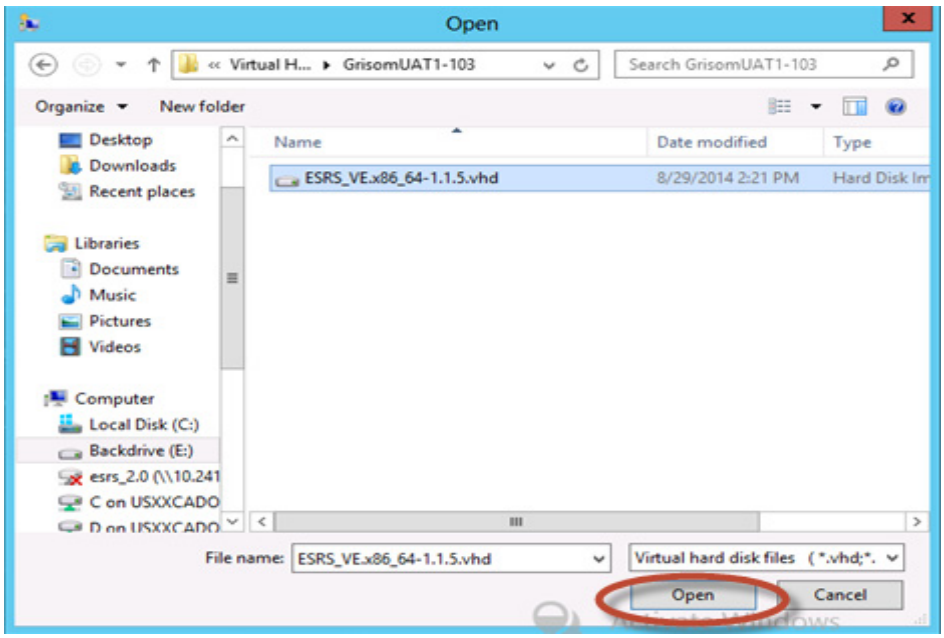

Figure 56 Clicking Open

i. Browse for the location of the virtual hard disk, and then click **Next**, as shown in Figure 57 on page 53.

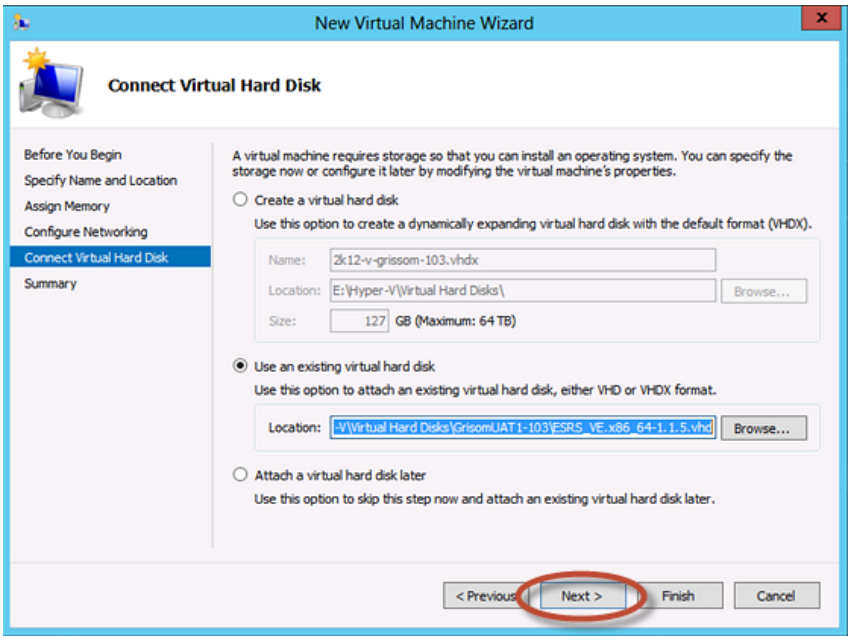

Figure 57 Entering location and clicking Next to continue

j. Review the summary, and click **Finish**, as shown in Figure 58 on page 53. The new ESRS Virtual Edition virtual machine is now configured in the Hyper-V environment. You must now connect to the virtual instance and start the host, which starts the first boot process.

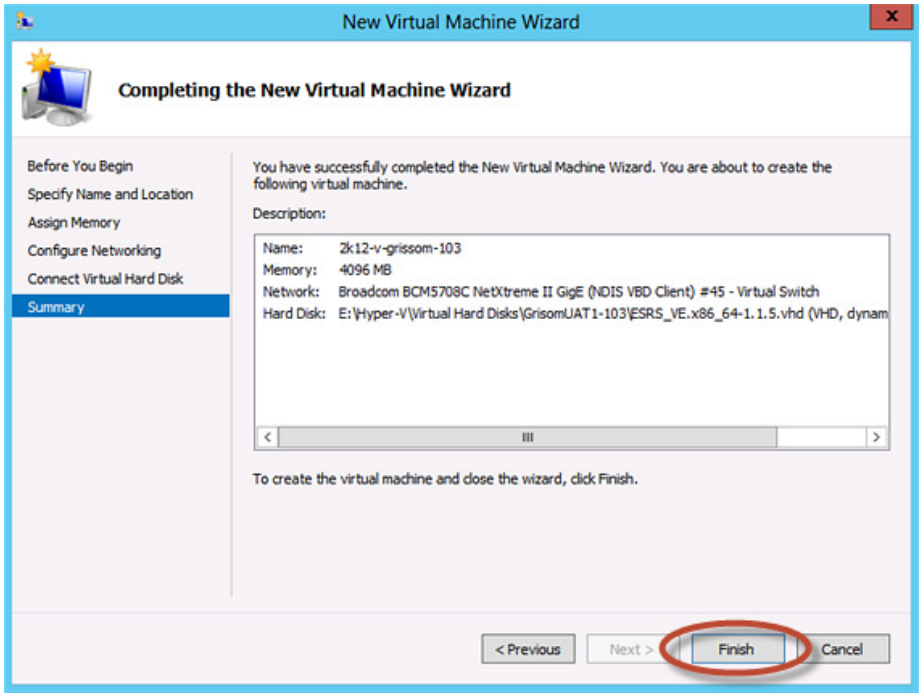

Figure 58 Clicking Finish to complete

k. The first boot process starts the virtual host. You must configure the host name, the network, the password of the root user, and so forth.

l. Select the new virtual machine, and then click **Connect**, as shown in Figure 59 on page 54.

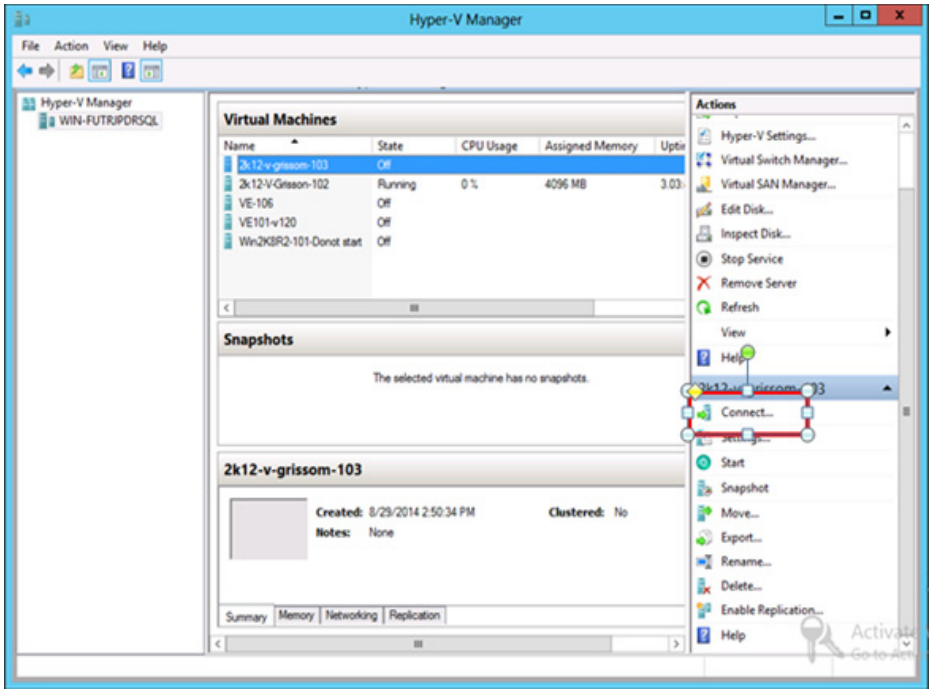

Figure 59 Clicking Connect

m. The following screen appears. Click the **Start** icon, as shown in Figure 60 on page 54.

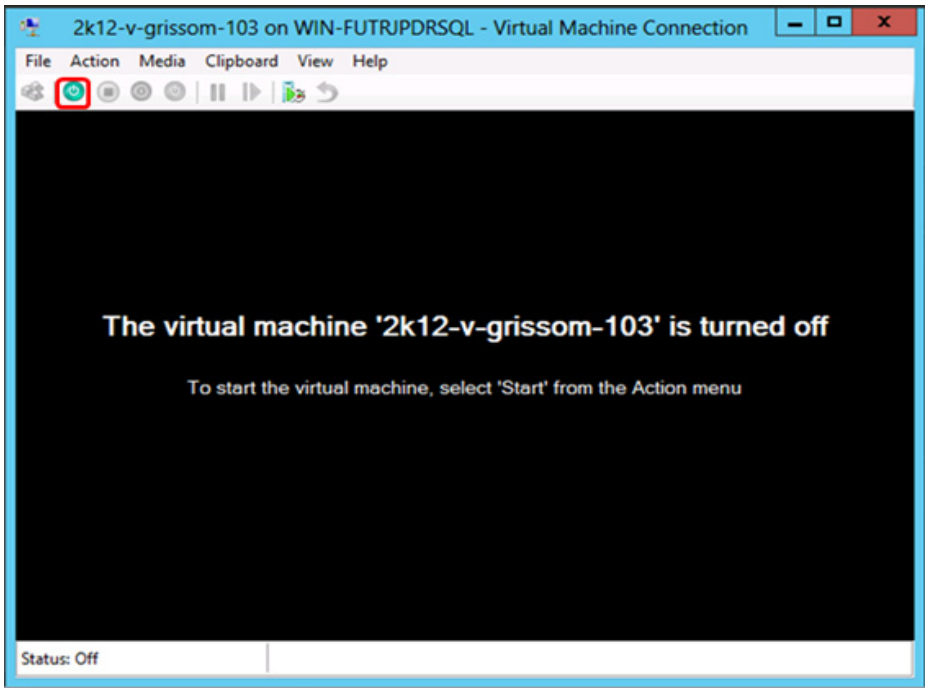

Figure 60 Powering on

n. The ESRS starts the first boot process, as shown in Figure 61 on page 55.

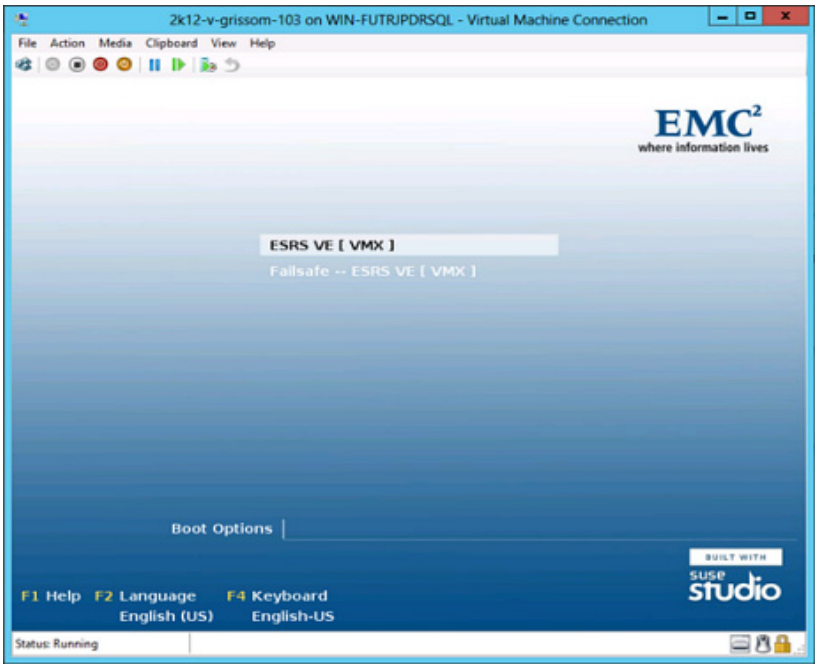

Figure 61 First boot configuration

o. When the first boot process is completed, from this point on, all of the install processes are the same regardless of which virtual environment (VMware ESX or Microsoft Hyper-V) is used. To complete provisioning, copy and paste the URL to a Web browser, and then follow the steps starting at the "Root logon and Admin setup" section in Chapter 3.

GLOSSARY

This glossary contains terms related to remote services and ESRS.

A

access See *Remote Access*.

C

connect home Connecting from a remote site to EMC's support network.

D

DMZ Demilitarized zone — Device used to secure an internal network from unauthorized external access.

Dynamic IP address An address that is assigned by the access device by which the user's host connects over a dialup telephone line or by a set-top box for an IP over cable network.

E

EMC Online Support Site Web-based access on support.emc.com to documentation, downloads, and support information for EMC customers and internal EMC users.

ESRS EMC® Secure Remote Services is an IP-based automated connect home and remote support solution enhanced by a comprehensive security system. ESRS creates both a unified architecture and a common point of access for remote support activities performed on your EMC products.

ESRS Virtual Edition EMC Secure Remote Services, Virtual Edition, which is installed on an ESX or Hyper-V Server, acts as the single point of entry and exit for all connect home and remote support activities

F

failover The capability to switch over automatically to a standby server upon the failure or abnormal termination of the previously active server. Failover happens without human intervention and generally without warning.

firewall A hardware or software device that is configured to permit, deny, or proxy data through a computer network which has different levels of trust.

FTP File Transfer Protocol — Used to transfer data from one computer to another, over the Internet or through a network.

G

Gateway 2.x An ESRS 2.x software component that is installed on a customer-supplied dedicated server (or servers) or VMware instance. The servers act as the single point of entry and exit for all IP-based EMC remote notification and remote support activity.

P

Policy Manager An ESRS software component that is installed on a customer-supplied server or servers. It enables customizable control of remote access to customer devices and maintains an audit log of remote connections.

proxy server A server (a computer system or an application program) which services the request of its servers by forwarding request to other servers. A server connects to the proxy server, requesting some service, such as a file, connection, web page, or other resource, available from a different server. The proxy server provides the resource by connecting to the specified server and requesting the service on behalf of the server. A proxy server may optionally alter the server's request or the server's response, and sometimes it may serve the request without contacting the specified server.

R

remote access Communication with a processing device from a remote location through a data link.

S

SMTP Simple Mail Transfer Protocol — The de facto standard for email transmissions across the Internet.

T

topology Network configuration, including firewalls, servers, devices, and ports used for communication between all devices.

Transport Layer Security (TLS) port A port that uses cryptographic protocols to provide secure Internet communications for data transfers.