



**CCC VMware Server
Installation Guide**
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Typographic Convention

All contents in this guide including text or screenshots follow the given list of conventions.

Item	Convention	Example
Topic titles	Shaded font typefaces	Preface
Subtitles	Bold & Black typefaces	Notation conventions
Navigation link	Normal typeface	File → Deploy OVF Template it means, to open the required page click on File then on Deploy OVF Template.
Notes & Recommendations	Bold typeface between the black borders	Note

Preface

Welcome to CCC VMware Server Installation and Deployment Guide. This guide describes how to download, deploy and run Cyberoam Central Console as a virtual machine on VMware platform.

System Requirements

The hardware requirement for installing CCC VMware Server is dependent on number of appliance(s) to be managed by CCC VMware Server. Following table outlines the important hardware components and their recommended availability.

Model	Appliances Supported	RAM	Hard Disk Drive	Browser
CCC VMS 15	15	2 GB free space (Minimum)	SATA or SCSI hard disk with minimum 80 GB free disk space	Microsoft Internet Explorer 7.0+
CCC VMS 50	50	4 GB free space (Minimum)	SATA or SCSI hard disk with minimum 160 GB free disk space	Mozilla Firefox 3.0+ Google Chrome
CCC VMS 100	100	4 GB free space (Minimum)	SATA or SCSI hard disk with minimum 250 GB free disk space	Best view - Mozilla Firefox 3.0+
CCC VMS 200	200	4 GB free space (Minimum)	SATA or SCSI hard disk with minimum 320 GB free disk space	

Installation Procedure

Pre-requisite

Make sure that VMware ESX server and VMware vSphere client to access ESX server is already installed in your network.

Please refer to <http://www.vmware.com/> for details.

Installation procedure covers:

- [CCC Virtual Machine Installation](#)
- [CCC Virtual Machine Management](#)

CCC Virtual Machine Installation

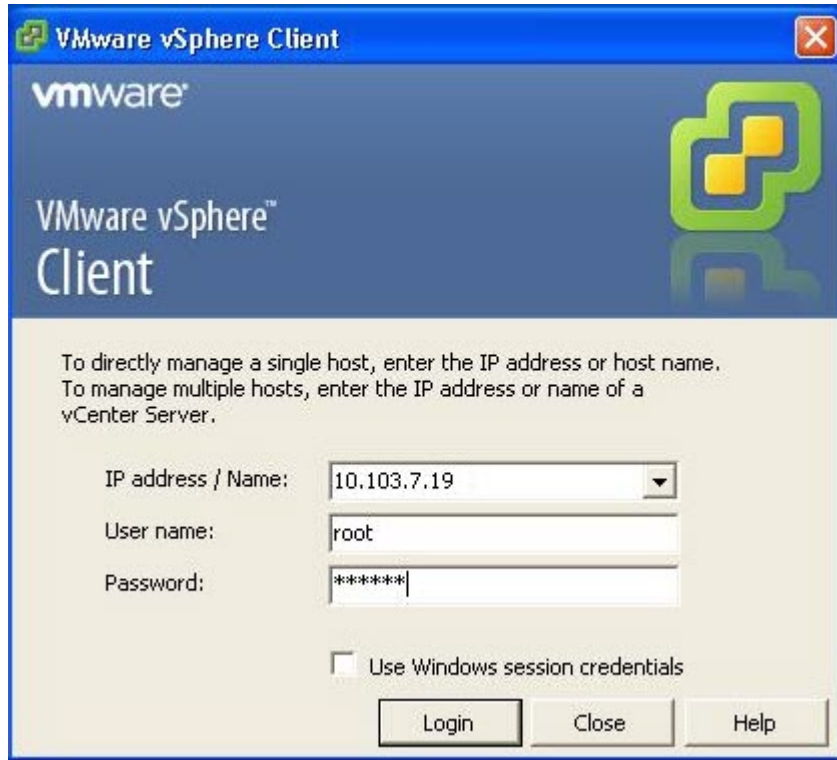
1. Download OVA file

Download .ova file of Cyberoam Central Console OVF image from following link and store it in your machine.

<http://download.cyberoam.com/virtualccc>

2. Login to VMware vSphere Client

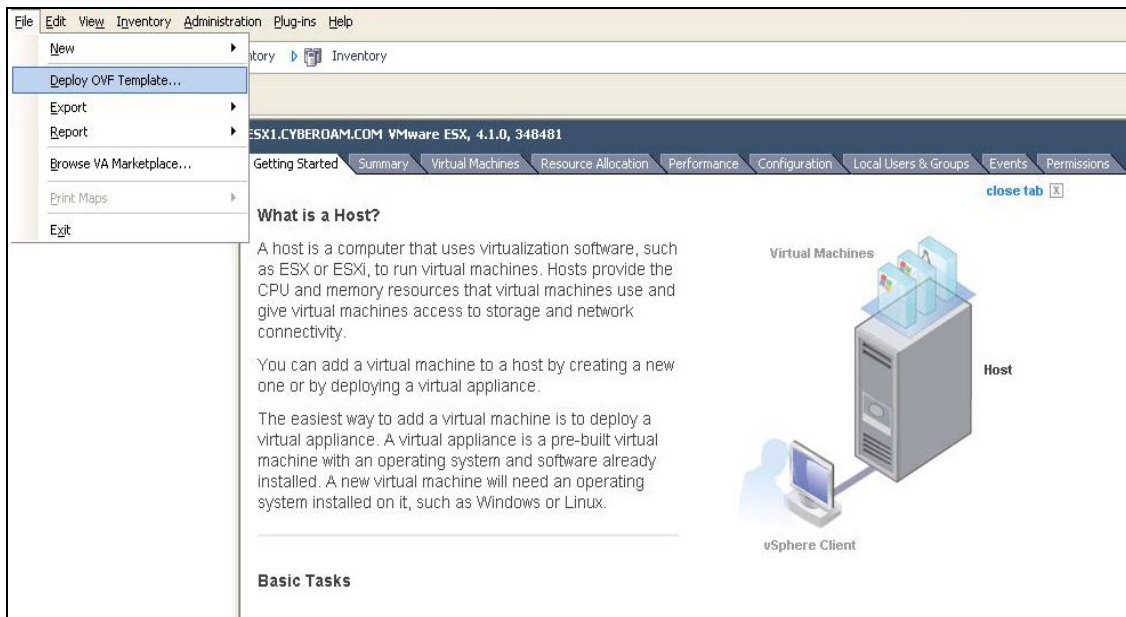
Start VMware vSphere client and login using credentials provided by your service provider to manage CCC Virtual machine.



Screen – Login to VMware vSphere Client

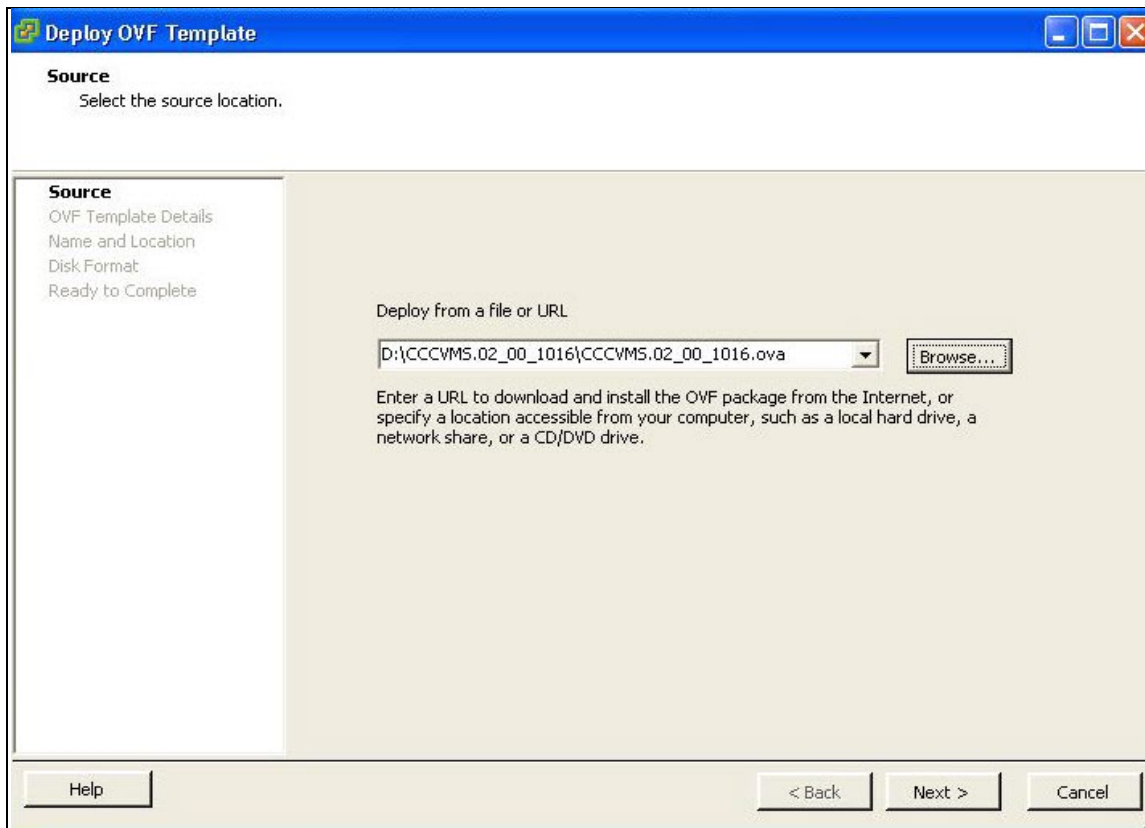
3. Deploy OVF Template

Once you login to VMware vSphere client go to **File** → **Deploy OVF Template**.



Screen – Deploy OVF Template

Click **Browse** to locate .ova file (**step 1**) in your machine and click **Next** to proceed.



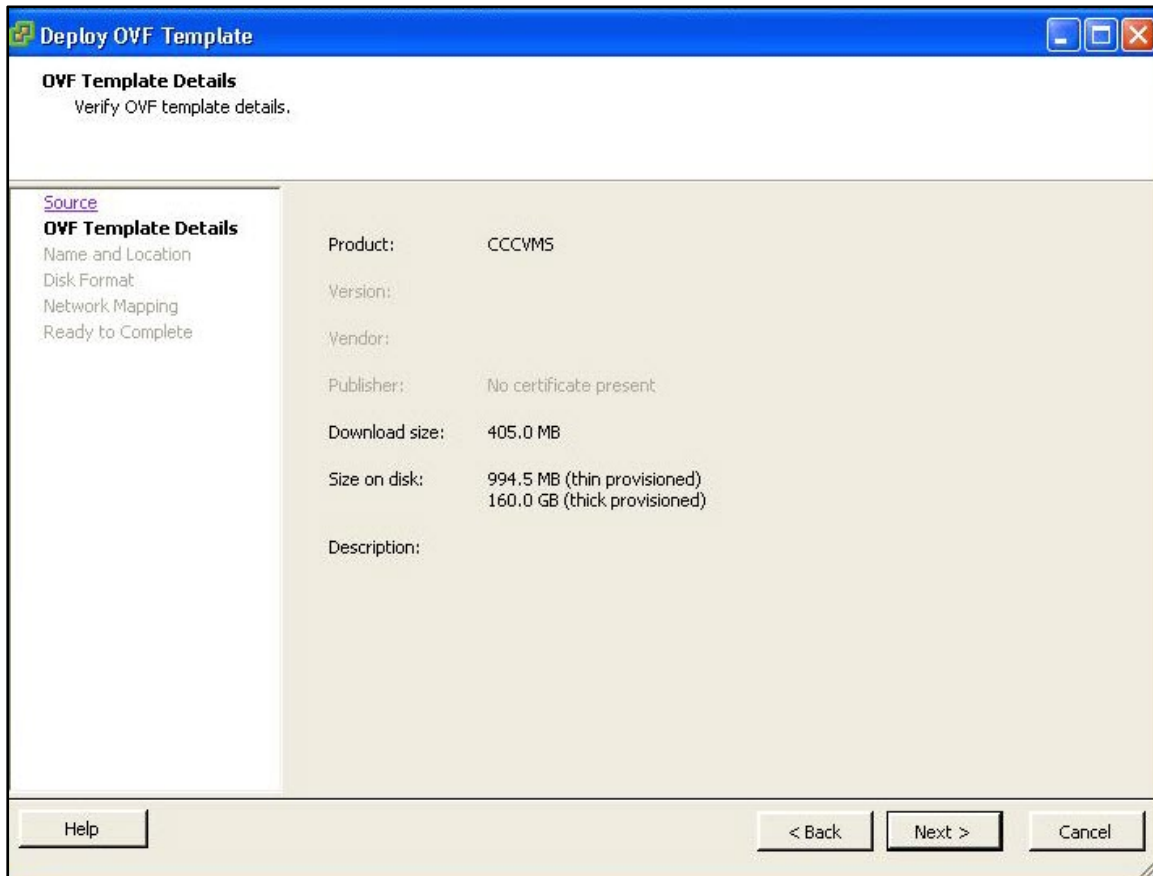
Screen – Specify OVF Template Location

4. OVF Template Details

This screen displays details of deployed OVF template. OVF template details include:

- Product name
- Download size
- Size on disk

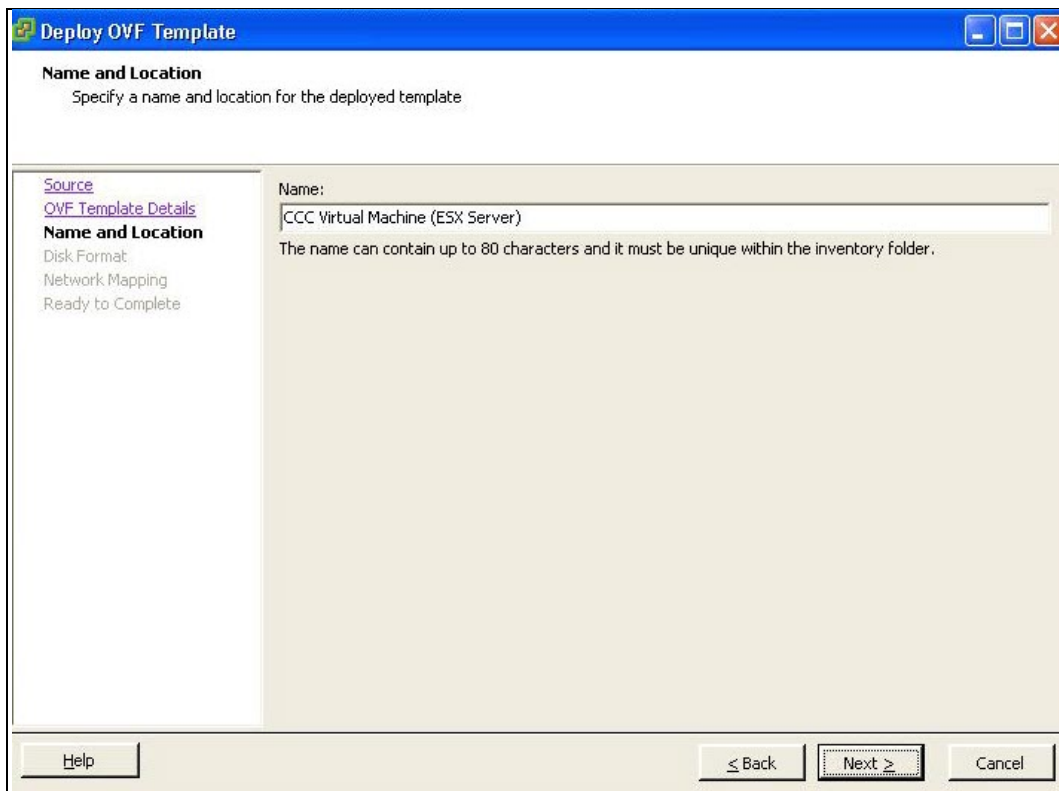
Click **Next** to proceed.



Screen – OVF Template Details

5. Name and Location for Deployed OVF Template

Specify the name and location of deployed OVF template and click **Next** to proceed.



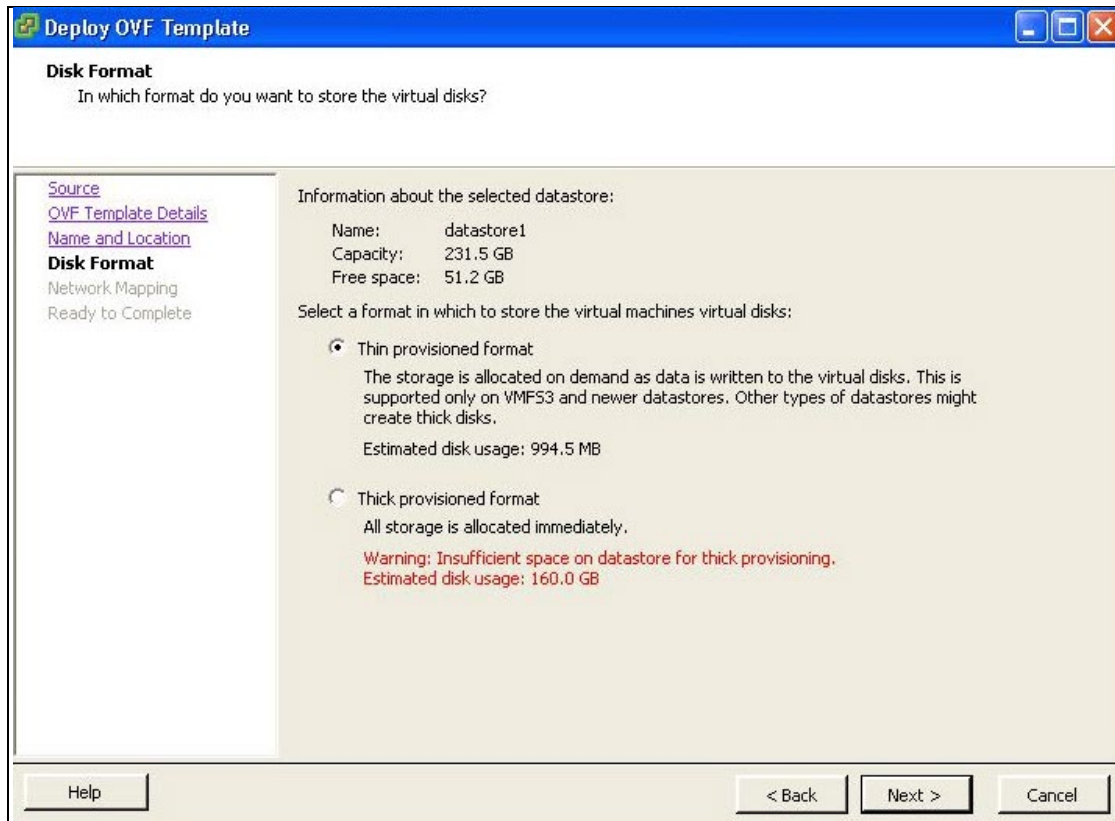
Screen – Name and Location

6. Disk Format

Specify the disk format to store CCC virtual machine. Choose one of the following disc allocation formats as per your requirement:

- Thin Provisioned Format: Thin provisioning allows allocation of storage space to virtual machine(s) on on-demand basis i.e. initially it commits only that much space which is required for initial operations.
- Thick Provisioned Format: Thick provisioning allows allocation of all the available space to the virtual machine(s) immediately.

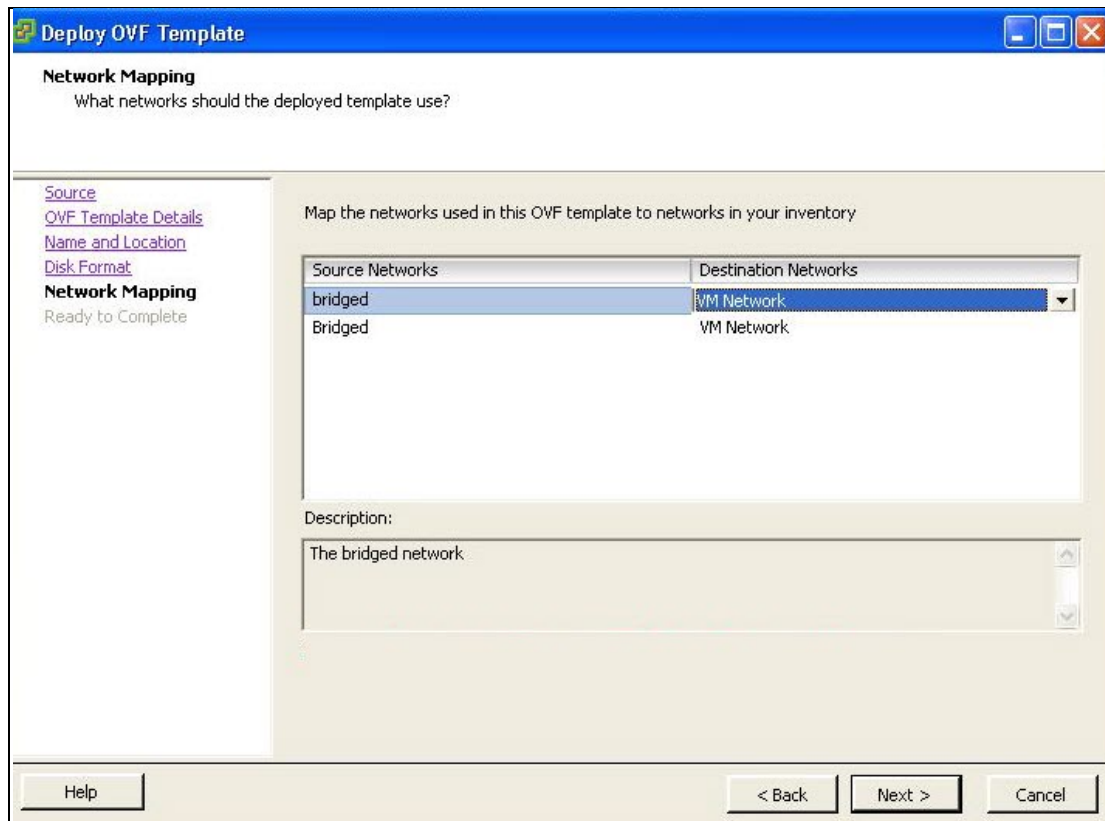
Click **Next** to proceed.



Screen – Disk Format

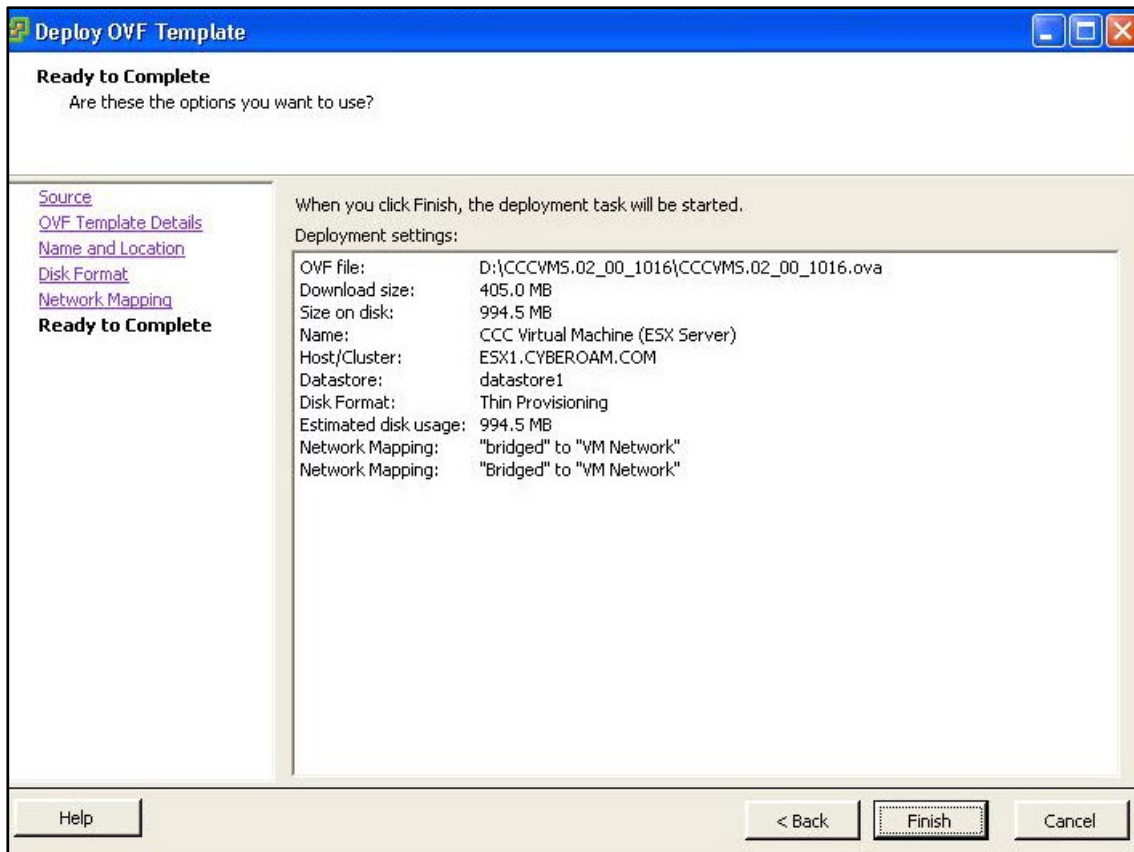
7. Network Mapping

Specify the network(s) available in your inventory to be used by OVF template and click **Next** to proceed.

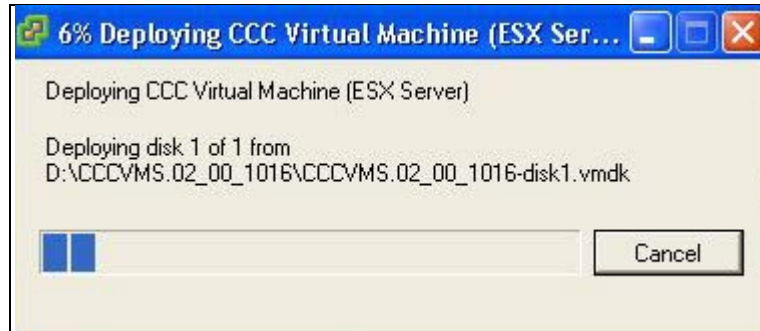


Screen – Network Mapping

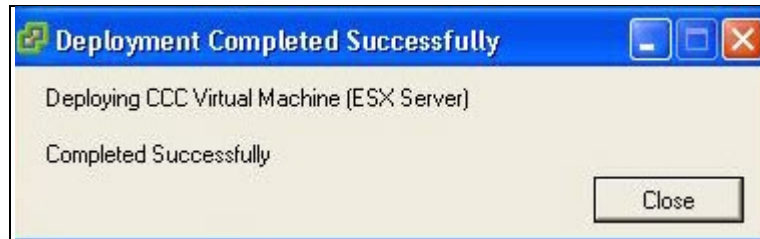
Click **Finish** to complete installation process.



Screen – Ready to Complete



Screen – CCC Virtual Machine Installation



Screen – Successful Installation of CCC VMware Server

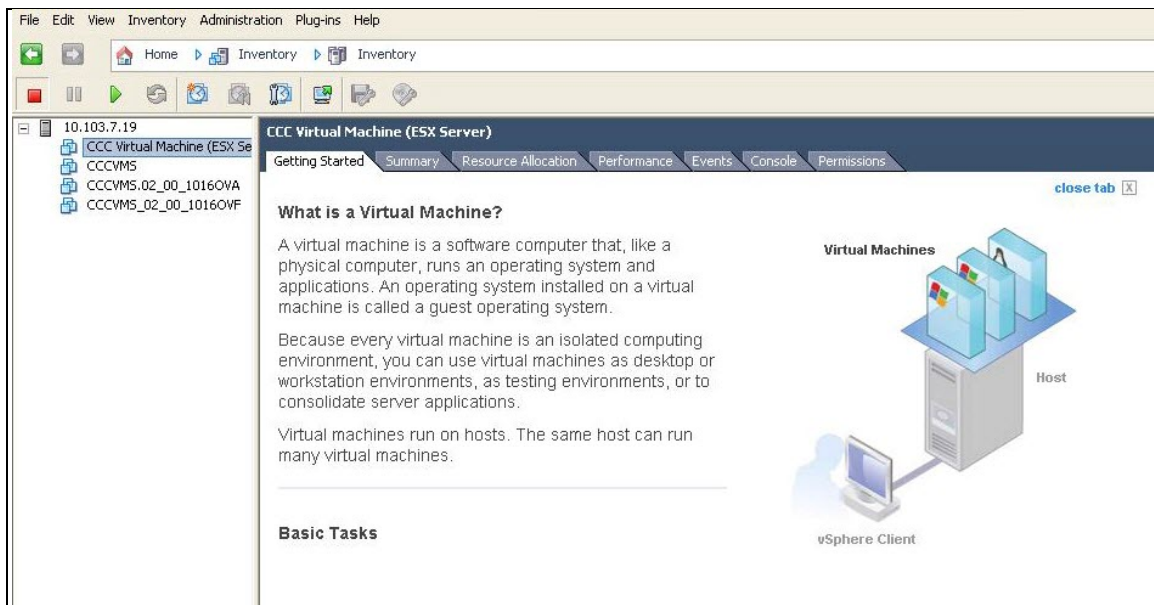
CCC Virtual Machine Management

Management of CCC Virtual machine includes

- [Resource Allocation](#)
- [CCC Virtual Machine Activation](#)
- [Virtual CCC Basic Configuration](#)
- [Other Configurations](#)

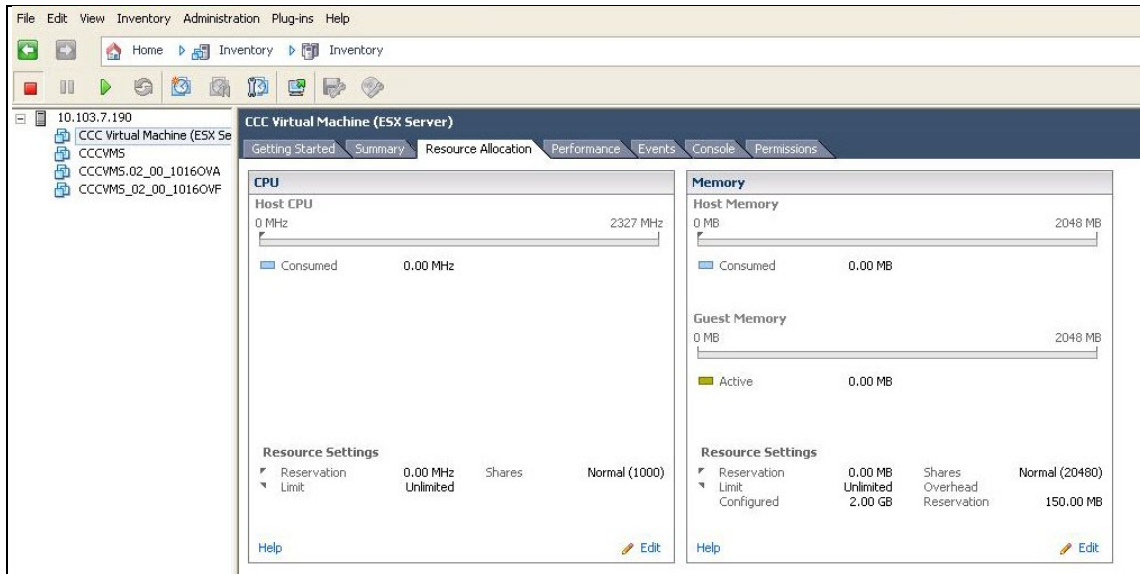
Resource Allocation

Once the CCC Virtual machine is installed, you can start managing it using VMware vSphere client.



Screen – Manage CCC VMware Server

To change the resource allocation of CCC Virtual machine, go to Resource Allocation tab and click **Edit** to change the allocation of CPU and memory to the CCC Virtual machine.



Screen – Resource Allocation

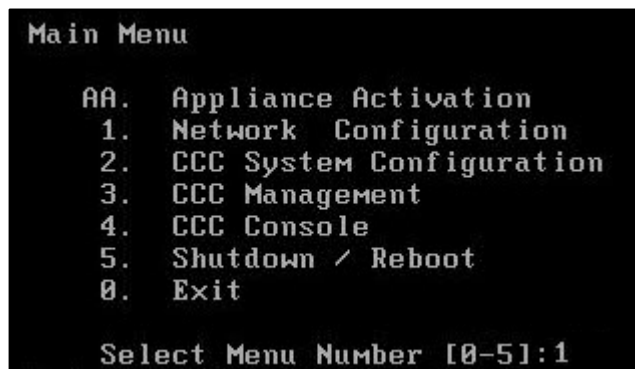
CCC Virtual Machine Activation

Pre-requisite

Please make sure that <http://cyberoamupdate.elitecore.com/> is accessible from deployed CCC virtual machine

1. You need to activate the Virtual CCC in order to start managing it. Given below is the default network schema for your CCC Virtual machine.
 - Port A: 172.16.16.16/255.255.255.0
 - Port B: 192.168.2.1/255.255.240.0
 - Default Gateway: 192.168.1.254

If your organization’s network schema differs from default network configuration, please update it using ‘1. Network Configuration’ option available in CCC Virtual machine CLI Console to get Internet connectivity.



Screen – Network Configuration

Network Configuration option allows you to view and change network settings. Use this option to change IP address of available ports.

For further details, please refer to [CCC Console guide](#).

2. To activate the CCC Virtual machine, select ‘AA. Appliance Activation’ option and provide appliance activation key.

```

Main Menu

AA.  Appliance Activation
    1.  Network Configuration
    2.  CCC System Configuration
    3.  CCC Management
    4.  CCC Console
    5.  Shutdown / Reboot
    0.  Exit

Select Menu Number [0-5]: AA
Enter Appliance Key : _
    
```

Screen – CCC Virtual Machine Activation

```

Main Menu

AA.  Appliance Activation
    1.  Network Configuration
    2.  CCC System Configuration
    3.  CCC Management
    4.  CCC Console
    5.  Shutdown / Reboot
    0.  Exit

Select Menu Number [0-5]: AA
Enter Appliance Key : C093000261-RXXRXXRX

Appliance Activation in process.....Activation done...
Press Enter to continue .....
    
```

Screen – Successful Activation of CCC Virtual Machine

- After successful activation of CCC Virtual machine, browse to default (<http://172.16.16.16>) or the configured IP address to access Web Admin Console of Virtual CCC. Use following default credentials to access and manage Virtual CCC from Web.
 - Username: admin
 - Password: admin

Virtual CCC Basic Configuration

- Once you login to CCC Web admin console you can change interface(s) IP address from **Management Console → CCC Management → Network → Interface**.

Interface	DNS	Gateway	Unicast Route
Add Alias Delete			
Interface Name	IP/Netmask	MTU	Interface Speed
PortA	10.103.7.1/255.255.254.0	1500	Auto-negotiated
PortB	172.16.16.1/255.255.240.0	1500	Auto-negotiated
PortC	10.10.2.1/255.255.255.0	1500	Auto-negotiated
PortD	10.10.3.1/255.255.255.0	1500	Auto-negotiated
PortE	10.10.4.1/255.255.255.0	1500	Auto-negotiated
PortF	10.10.5.1/255.255.255.0	1500	Auto-negotiated
Add Alias Delete			

Screen – Change Interface IP Address

Change default gateway IP address from **Management Console** → **CCC Management** → **Network** → **Gateway**.

Interface	DNS	Gateway	Unicast Route
		Gateway Name	Gateway IP Address
		Ethernet Port	Status
		Default Gateway	10.103.6.1
		PortA	●

Screen – Change Gateway IP Address

2. Configure DNS from **Management Console** → **CCC Management** → **Network** → **DNS**.

Interface
DNS
Gateway
Unicast Route

DNS List

10.103.6.1
 127.0.0.1

List order indicates preference

Screen – Configure DNS

3. Set time zone and current date from **Management Console** → **CCC Management** → **System** → **Time**.

CCC Certificate	Settings	Notification	Time	CCC Appliance Access
Current Time		2011-05-25 14:06:02		
Time Zone		Asia/Kolkata		
<input checked="" type="radio"/> Set Date & Time				
Date		05/25/2011		
Time		14 HH 06 MM 02 SS		
<input type="radio"/> Sync with NTP Server				
<input checked="" type="radio"/> Use pre-defined				
<input type="radio"/> Use Custom				
		<input type="text"/> <input type="button" value="Add"/> (Enter NTP Server IP Address/Domain)		
		<div style="border: 1px solid gray; padding: 5px;">No Record</div>		
Sync Status		<input type="button" value="Synchronize Now"/>		
		<input type="button" value="Apply"/>		

Screen – Time Settings

Congratulations!!!

This finishes the basic configuration of Virtual CCC and you are now ready to use the Virtual machine.

Other Configurations

1. Create Customer Account and register Virtual CCC

Browse to <http://customer.cyberoam.com> and click Register and follow the on-screen steps. It will create your customer account as well as register your Virtual CCC.

2. Configure Cyberoam to communicate with Virtual CCC

- Enable management of the Cyberoam appliance by Virtual CCC from **System** → **Administration** → **Central Console** and enter IP address of CCC appliance.
- Select heartbeat protocol to communicate with Virtual CCC.

Make sure, Virtual CCC can receive heartbeat information on port 514 for Syslog and port 80 for HTTP.

Cyberoam Central Console (CCC) settings

Manage this appliance using CCC

CCC IPAddress * 10.103.3.9

Heartbeat Protocol Syslog (Recommended) HTTP (Send Keep-Alive Heartbeat request from appliance to CCC)

Heartbeat Port * 80

AV, IPS & Web category Signature Updates From Update Server From CCC

Apply

Screen – Configure CCC in Cyberoam

3. Access Virtual CCC Web Admin Console

Browse to <https://<IP address of Virtual CCC>> and log on using the default username (admin) and password (admin).

Note: Internet Explorer 7+ or Mozilla Firefox 3.0+ is required to access the CCC Web Admin Console.

4. Configure Virtual CCC to add and manage Cyberoam

Add Cyberoam appliance to CCC from **Management Console** → **Appliance Management** → **Appliance(s)**.

Add Appliance

Appliance Name *

Appliance Key *

IP/Domain *

Username *

Password *

Confirm Password *

Access Protocol * HTTP HTTPS

Access Port * 443

Access to User * All User ▼

Description

Administrator Information

Administrator Name

Contact Address

Email Id

Test Connection OK Cancel

Screen – Add Appliance(s)

- Specify Appliance Name to identify added Cyberoam appliance .
- Specify Appliance Key.
- Specify routable IP Address of the Cyberoam appliance.
- Specify Administrator Username and Password of the Cyberoam appliance.
- Select Access Protocol and Port to communicate with Cyberoam appliance. Make sure to allow HTTP/HTTPS traffic on Cyberoam for Virtual CCC.
- Select CCC administrator user who can access and manage the appliance. Only the selected administrator will be allowed.
- Specify additional details for the administrator user e.g. name, email id and contact address.

5. Access Help

For accessing online help, click the Help button or F1 key on any of the screens to access the corresponding topic's help. Use the Contents and Index options to navigate through the entire online help

Additional Resources

Visit following links for more information on Cyberoam Central Console
Technical Documentation – http://docs.cyberoam.com
Cyberoam Knowledge Base – http://kb.cyberoam.com
Cyberoam Security Center – http://csc.cyberoam.com
Cyberoam Upgrades – http://download.cyberoam.com