Installation Guide for Cisco Business Edition 6000, Release 9.0

First Published: February 01, 2013

Last Modified: May 13, 2013

Americas Headquarters
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
http://www.cisco.com
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 527-0883

Text Part Number: OL-28999-01

CONTENTS

Preface

Purpose

This document describes how to install Cisco Business Edition 6000, Release 9.x.

Audience

This installation guide is intended for administrators who are responsible for installing Cisco Business Edition 6000 software.

Organization

The following table shows how this guide is organized:

Chapter	Description
Product Overview	Provides a description of the Cisco Business Edition 6000 product and a summary of the applications that you can deploy with Cisco Business Edition 6000.
Preinstallation Tasks	Summarizes the tasks that you must perform prior to installation of the Cisco Business Edition 6000 applications.

Chapter	Description
Installation of Cisco Business Edition 6000 Applications	Summarizes the tasks that you must perform to install the Cisco Business Edition 6000 applications.

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS version 2.0.

Cisco Product Security Overview

This product contains cryptographic features and is subject to United States and local country laws governing import, export, transfer and use. Delivery of Cisco cryptographic products does not imply third-party authority to import, export, distribute or use encryption. Importers, exporters, distributors and users are responsible for compliance with U.S. and local country laws. By using this product you agree to comply with applicable laws and regulations. If you are unable to comply with U.S. and local laws, return this product immediately.

A summary of U.S. laws governing Cisco cryptographic products may be found at:

http://www.cisco.com/wwl/export/crypto/tool/stqrg.html

If you require further assistance please contact us by sending email to export@cisco.com.

CHAPTER 1

Product Overview

Cisco Business Edition 6000 Overview

Cisco Business Edition 6000 (Cisco BE 6000) is designed for organizations with up to 1000 employees. The Cisco BE 6000 solution offers premium voice, video, mobility, messaging, availability, paging, and contact center features on a single platform and provides core communication capabilities that medium-size businesses need. Enabled by virtualization technology, Cisco BE 6000 consolidates multiple applications on a single platform and allows medium-size businesses to reduce their total cost of ownership. The high availability features that the solution supports make Cisco BE 6000 ideally suited for companies that require mission-critical voice, messaging, and contact center capabilities.

Cisco BE 6000 consists of the following foundational elements:

- Cisco Unified Communications Manager (Unified Communications Manager)
- Cisco Unity Connection
- Cisco Prime Unified Provisioning Manager (Prime Unified Provisioning Manager) or Cisco Prime Collaboration Provisioning (Prime Collaboration Provisioning)
- Cisco UC Virtualization Hypervisor
- Cisco Unified Computing System C220 M3 Rack-Mount server

You can optionally add the following applications to the Cisco BE 6000 solution:

- Cisco Unified Communications Manager IM and Presence Service (IM and Presence Service)
- Cisco Unified Contact Center Express (Unified CCX)

- Cisco Emergency Responder (Emergency Responder)
- Cisco TelePresence Video Communication Server (Cisco VCS)
- Cisco Unified Attendant Console (Unified Attendant Console)
- Cisco Paging Server (Paging Server)

Cisco BE 6000 supports running coresident applications on a single Cisco Unified Computing System C220 M3 Rack-Mount server. Cisco BE 6000 supports full-featured redundancy for all the core applications over a WAN or LAN environment.

What You Receive in the Box

When you order a Cisco BE 6000 hardware bundle you receive the following:

- Cisco Unified Computing System C220 M3 Rack-Mount server
- DVD installation media for disaster recovery and reinstallation that contain software images of the following:
  - Cisco Unified Communications Manager / Cisco Unity Connection
  - Cisco Unified Communications Manager IM and Presence Service
  - Cisco Prime Unified Provisioning Manager Business Edition
  - Cisco Prime Collaboration Provisioning
  - VMware ESXi Hypervisor
  - Cisco Unified Contact Center Express

Cisco TelePresence Video Communication Server and Cisco Paging Server installation media are *not* shipped. If you require the installation media, you can download it online. To download Cisco TelePresence Video Communication Server installation media, go to http://software.cisco.com/download/navigator.html?mdfid=283613663&catid=280789323. To download Cisco Paging Server installation media, go to http://software.cisco.com/download/release.html?mdfid=284668396&softwareid=282074295&release=9.1.1(a)&relind=AVAILABLE&rellifecycle=&reltype=latest.

Note Licenses are not shipped with the hardware bundle. Product Authorization Key (PAK) codes and user licenses are shipped when you order part number R-CBE6K-K9.

Note Cisco Emergency Responder is shipped separately if you ordered a license.

Factory-Installed Hardware, Firmware, and Software

The following are installed or configured in the factory:

- VMware ESXi Hypervisor 5.0 update 1 is installed and licensed
- RAID and BIOS settings are configured
- Redundant Power Supply, if ordered, is installed

Preloaded Installation Media

The following installation media (.iso and .ova files) are preloaded in the datastore:

- Cisco Unified Communications Manager
- Cisco Unity Connection
- Cisco Unified Communications Manager IM and Presence Service
- Cisco Prime Unified Provisioning Manager Business Edition
- Cisco Prime Collaboration Provisioning
- Cisco Unified Contact Center Express
- Cisco Emergency Responder
- Cisco TelePresence Video Communication Server
- Cisco Paging Server

Cisco Business Edition 6000 Server Options

Cisco supports the following server options for Cisco BE 6000:

- Five applications (one provisioning application and four UC applications) running coresident on a Cisco UCS C220 M3 Rack-Mount server tested reference configuration 2 (TRC2).
- Nine applications (one provisioning application and eight UC applications) running coresident on a Cisco UCS C220 M3 Rack-Mount server tested reference configuration 3 (TRC3).

Table 1: Cisco BE 6000 Server Options

	UCS C220 M3 TRC2	UCS C220 M3 TRC3
Number of applications	1 provisioning and 4 UC	1 provisioning and 8 UC
Capacity	1000 users / 1200 devices	1000 users / 2500 devices
CPU	2 x 2.4 GHz E5-2609/80W 4C/10 MB Cache/DDR3 1066 MHz	2 x 2.4 GHz E5-2665/115W 8C/20 MB Cache/DDR3 1600MHz
RAM	4 x 8 GB	6 x 8 GB
Disk	4 x 500 GB	8 x 300 GB
RAID	MegaRAID 9266-8i with battery backup	MegaRAID 9266-8i with battery backup

	UCS C220 M3 TRC2	UCS C220 M3 TRC3
Power Supply Unit	1 x 650 W	2 x 650 W
VMware	Hypervisor Edition with 2 CPU sockets and unrestricted vRAM	Hypervisor Edition with 2 CPU sockets and unrestricted vRAM
Starter Hardware Bundle SKU	BE6K-ST-BDL-K9=	BE6K-STBDL-PLS-K9=

Coresidency

You can install various combinations of the Cisco BE 6000 applications provided that your choice is consistent with Cisco memory and processing specifications. For more information about the Cisco application coresidency support policy, see http://docwiki.cisco.com/wiki/Unified_Communications_Virtualization_Sizing_Guidelines#Application_Co-residency_Supp6ort_Policy.

Note On a Cisco UCS C220 M3 Rack-Mount server TRC2, Cisco BE 6000 supports one provisioning application and four UC applications, and a maximum of eight vCPU and 32 GB vRAM . If you deploy Cisco Unity Connection in a virtual machine, you must allocate one vCPU for the ESXi scheduler.

Note On a Cisco UCS C220 M3 Rack-Mount server TRC3, Cisco BE 6000 supports one provisioning application and eight UC applications, and a maximum of sixteen vCPU and 48 GB vRAM. If you deploy Cisco Unity Connection in a virtual machine, you must allocate one vCPU for the ESXi scheduler.

Note You must install only one of the provisioning applications: Prime Unified Provisioning Manager Business Edition or Prime Collaboration Provisioning.

Table 2: Supported Cisco BE 6000 Applications

	Application	Scale	vCPU	vRAM	vDisk	Preloaded
1	Unified Communications Manager	1000 users	2	4 GB	1 x 80 GB	Yes
2	Cisco Unity Connection	1000 users	1	4 GB	1 x 160 GB	Yes
3	Prime Unified Provisioning Manager Business Edition	1000 users	1	2 GB	1 x 30 GB	Yes
4	Prime Collaboration Provisioning	1000 users	1	2 GB	1 x 90 GB	Yes
5	IM and Presence Service	1000 users	1	2 GB	1 x 80 GB	Yes
6	Unified Attendant Console	50 clients	1	4 GB	1 x 72 GB	No

	Application	Scale	vCPU	vRAM	vDisk	Preloaded
7	Unified CCX	100 agents	2	4 GB	1 x 146GB	Yes
8	Cisco VCS	100 traversal and nontraversal calls	2	4 GB	1 x 128 GB	Yes
9	Emergency Responder	1000 users	2	4 GB	1 x 80 GB	Yes
10	Paging Server	1000 users	1	4 GB	1 x 80 GB	Yes

CHAPTER 2

Preinstallation Tasks

Preinstallation Tasks Overview

Before you install the Cisco Business Edition 6000 applications, you must perform the following tasks:

1. Configure the management network.
2. Install the VMware vSphere Client and download the OVA templates for the Cisco Business Edition 6000 applications to a Windows PC.
3. Deploy the OVA templates.
4. Set up the virtual machines.

Power on UCS C220 M3 Server and Configure Management Network

Procedure

Step 1 Use the supplied KVM cable to connect a USB keyboard and VGA monitor to the KVM connector on the front panel of the server.

Step 2 Power on the server and let the server boot.
The **VMware ESXi 5.0.0** window displays.

Step 3 Press **F2** to configure VMware ESXi Hypervisor 5.

The **Authentication Required** window displays.

Step 4 To log in:

a) Enter **root** for Login Name and **password** for Password.
b) Press **Enter**.

The **System Customization** window displays.

Step 5 To change the default password:

a) Choose **Configure Password**.
b) Enter the old password and the new password.
c) Press **Enter**.

The **System Customization** window displays.

Step 6 Choose **Configure Management Network** and press **Enter**.
The **IP Configuration** window displays.

Step 7 By default, the IP address is set to DHCP. To set a static IP address:

a) Choose **Set static IP address and network configuration**.
b) Enter the IP address, subnet mask, and default gateway.
c) Press **Enter**.

The **Configure Management Network** window displays.

Step 8 Choose **VLAN (optional)** if needed.

Step 9 Press **Esc** to exit.
The **Configure Management Network: Confirm** window displays.

Step 10 Press **Y** to apply the configuration changes and restart the management network.
The **System Customization** window displays.

Step 11 Press **Esc** to log out.

Install VMware vSphere Client and Download OVA Templates to the Desktop

Procedure

Step 1 Connect NIC-1 on the back of the UCS C220 M3 server to your network.

Step 2 Connect a Windows PC to the network that the UCS C220 M3 server is connected to and confirm that you can ping the server.

Note The Windows PC must have access to the Internet. A VMware vSphere Client is not available for the MAC OS.

Step 3 Download and install the VMware vSphere Client from the ESXi host (http://<IP_Address_ESXi_host>).
The **VMware ESXi 5 Welcome** window displays.

Step 4 Click **Download vSphere Client**.

The VMware vSphere Client is installed on your PC.

Step 5 Open the VMware vSphere Client.
The **VMware vSphere Client** window displays.

Step 6 Enter the IP address, username, and password, and click **Login**.
The **<IP address> - vSphere Client** window displays.

Step 7 On the upper left side of the **<IP address> - vSphere Client** window, click the server IP address to highlight it.

Step 8 Follow these steps to configure the VM Host with a valid NTP server:

Note Some Cisco Business Edition 6000 applications, for example Cisco TelePresence Video Communication Server, require NTP settings.

a) Click the **Configuration** tab on the **<IP address> - vSphere Client** window.
b) In the Software pane, click **Time Configuration**.
c) In the Time Configuration pane, click **Properties**.

The **Time Configuration** window displays.

Step 9 If the date and time in the Time Configuration pane of the **<IP address> - vSphere Client** window are displayed in red text, set the date and time manually to the current date and time:

a) In the **Time Configuration** window, enter the current date and time. Click **Options**.
The **NTP Daemon (ntpd) Options** window displays.
b) Choose **NTP Settings** and click **Add**.
The **Add NTP Server** window displays.
c) Enter the IP address of the NTP server and click **OK**.
The **NTP Daemon (ntpd) Options** window refreshes and displays the NTP server address in the NTP Servers pane.
d) Check the **Restart NTP service to apply changes** check box.
e) Click **OK** twice.

The **Date & Time** in the Time Configuration pane of the **<IP address> - vSphere Client** window are synchronized with the NTP server.

Step 10 To place the supported application ISO images and OVA templates in the datastore:

a) Click the **Configuration** tab on the **<IP address> - vSphere Client** window.
b) In the Hardware pane, click **Storage**.
c) In the Datastores pane, right-click the **datastore1** icon and choose **Browse Datastore** from the popup list.

All of the supported application ISO images and OVA templates are placed in the datastore.

The **Datastore Browser - [datastore1]** window displays.

Step 11 To deploy the OVA, you must download the OVA templates to the desktop. Click the **Download Files from the Datastore** icon, to download the OVA templates from the datastore to your desktop.

Note You require approximately 5 GB of disk space on the local drive to store the OVA templates.

Deploy OVA Templates

Before you install the applications that Cisco Business Edition 6000 supports, you must deploy the OVA templates.

Deploy OVA Templates for UC Applications

Follow this procedure to deploy the OVA templates for the following applications:

- Cisco Unified Communications Manager
- Cisco Unified Communications Manager IM and Presence Service
- Cisco Unity Connection
- Cisco Unified Contact Center Express
- Cisco Emergency Responder

Note To proceed with the deployment of the OVA templates, you must review and accept the End User License Agreement when prompted.

Procedure

Step 1 On the main tab in the **<IP address> - vSphere Client** window, choose **File** > **Deploy OVF Template**. The **Source** window displays.

Step 2 Browse to the application OVA template on your local desktop and click **Open**.

Step 3 Click **Next**.
The **OVF Template Details** window displays.

Step 4 Click **Next**.
The **Name and Location** window displays.

Step 5 Click **Next**.
The **Deployment Configuration** window displays.

Step 6 On the **Deployment Configuration** window, choose a deployment option and click **Next**.

Choose deployment option...	To deploy OVA template for...
CUCM 1000 user node – C200 (including BE6000) **Note** Use this option for both the UCS C200 server and the UCS C220 server.	Cisco Unified Communications Manager
1000 users	Cisco Unity Connection
CUCM IM and Presence 1000 (BE6K only)	Cisco Unified Communications Manager IM and Presence Service

Choose deployment option...	To deploy OVA template for...
UCCX 100 Agent	Cisco Unified Contact Center Express
CER 12000 user node – C200 **Note** Use this option for both the UCS C200 server and the UCS C220 server.	Cisco Emergency Responder

Step 7 For Disk Format, choose **Thick Provision Lazy Zeroed** and click **Next**.

Step 8 Review the deployment settings summary and click **Finish**.

Related Topics

Install VMware vSphere Client and Download OVA Templates to the Desktop, on page 8

Deploy OVA Templates for Provisioning Applications, Cisco VCS, and Cisco Paging Server

Follow this procedure to deploy the OVA templates for the following applications and servers:

- Cisco Prime Unified Provisioning Manager Business Edition
- Cisco Prime Collaboration Provisioning
- Cisco TelePresence Video Communication Server (Cisco VCS)
- Cisco Paging Server

Note Install only one of the provisioning applications: Cisco Prime Unified Provisioning Manager Business Edition or Cisco Prime Collaboration Provisioning.

Note If you install Cisco VCS, ensure that the you configure the VM Host with a valid NTP server.

Note To proceed with the deployment of the OVA templates, you must review and accept the End User License Agreement when prompted.

Procedure

Step 1 On the main tab in the **<IP address> - vSphere Client** window, choose **File** > **Deploy OVF Template**.

The **Source** window displays.

Step 2 Browse to the application OVA template on your local desktop and click **Open**.

Step 3 Click **Next**.
The **OVF Template Details** window displays.

Step 4 Click **Next**.
The **Name and Location** window displays.

Step 5 Click **Next**.

Step 6 For Disk Format, choose **Thick Provision Lazy Zeroed** and click **Next**.

Step 7 Review the deployment settings summary and click **Finish**.

Related Topics

Install VMware vSphere Client and Download OVA Templates to the Desktop, on page 8

Set Up Virtual Machines

Before you install the applications that Cisco Business Edition 6000 supports, you must set up the virtual machines.

Follow this procedure to set up the virtual machines for the following applications:

- Cisco Unified Communications Manager
- Cisco Unified Communications Manager IM and Presence Service
- Cisco Unity Connection
- Cisco Prime Unified Provisioning Manager Business Edition
- Cisco Unified Contact Center Express
- Cisco Emergency Responder

Note Install only one of the provisioning applications: Cisco Prime Unified Provisioning Manager Business Edition or Cisco Prime Collaboration Provisioning.

Before You Begin

Ensure that the VM Host is configured with the NTP server that is used for Cisco TelePresence Video Communication Server Control.

Procedure

Step 1 On the upper left side of the **<IP address> - vSphere Client** window, click the + icon next to the server IP address to expand the list of virtual machines.

Step 2 Right-click the virtual machine and choose **Edit Settings**.

The **<Application> - Virtual Machine Properties** window displays.

Step 3 On the **<Application> - Virtual Machine Properties** window, choose one of the following options:

Option	To set up virtual machine for ...
Hardware > **CD/DVD drive 1** In the Device Type area, click the **Datastore ISO File** radio button. Browse to datastore1 and choose the ISO file for the application.	a) Cisco Unified Communications Manager b) Cisco Unified Communications Manager IM and Presence Service c) Cisco Unity Connection d) Cisco Unified Contact Center Express e) Cisco Emergency Responder
Hardware > **Network adapter 1** In the MAC Address area, click the **Manual** radio button. Change the MAC address to 00:50:56:11:11:11	Cisco Prime Unified Provisioning Manager Business Edition

Step 4 In the Device Status area, check the **Connect at power on** check box and click **OK**.

Note If you do not check the **Connect at power on** check box, the ISO file will not load when you power on the application.

Related Topics

Install VMware vSphere Client and Download OVA Templates to the Desktop, on page 8

CHAPTER 3

Installation of Cisco Business Edition 6000 Applications

Recommended Installation Practice

You can install various combinations of the Cisco BE 6000 applications provided that your choice is consistent with Cisco memory and processing specifications. For more information about selecting the applications to install, see Coresidency, on page 4.

Note that

- To reduce the overall installation time, you can install the applications concurrently. (You cannot install Cisco Unified Communications Manager and Cisco Unity Connection concurrently because they share the same .iso image.)
- You can install the applications in any order.
- To preserve the state of the VMs and avoid reinstallation, after installation save a VMware snapshot of each application.

Install Unified Communications Manager, Cisco Unity Connection, IM and Presence Service, and Unified CCX

Follow this procedure to install the following applications:

- Cisco Unified Communications Manager
- Cisco Unity Connection
- Cisco Unified Communications Manager IM and Presence Service
- Cisco Unified Contact Center Express

Table 3: Approximate Time that You Require to Install the Applications

Application	Approximate time that you require to install the application
Unified Communications Manager	60 minutes
Cisco Unity Connection	60 minutes
IM and Presence Service	45 minutes
Unified CCX	60 minutes

Procedure

Step 1 On the upper left side of the **<IP address> - vSphere Client** window, click the + icon next to the server IP address to expand the list of virtual machines.

Step 2 Right-click the virtual machine and choose **Power > Power On**.

Right-click the virtual machine ...	To install application for ...
Cisco Unified Communications Manager (CUCM)	Unified Communications Manager
Cisco Unity Connection	Cisco Unity Connection
Cisco IM and Presence Server	IM and Presence Service
Cisco Unified Contact Center Express (UCCX)	Unified CCX

Step 3 To launch the virtual machine, click the **Open Console** icon.
The **DVD Found** window displays.

Step 4 Cisco recommends that you perform a media check before you install the virtual machine. To perform a media check:

a) Click **Yes** and press **Enter**.
The **Media Check Result** window displays.

b) Click **OK**.
The **Product Deployment Selection** window displays.

Step 5 Select the product or product suite that you are installing and click **OK**.
Note If you select Cisco Unified Communications Manger, Cisco Enterprise License Manager is also deployed as part of the installation.
The **Proceed with Install** window displays.

Step 6 Click **Yes** and press **Enter**.
The **Platform Installation Wizard** window displays.

Step 7 Click **Proceed** and press **Enter**.
The **Apply Patch** window displays.

Step 8 Click **No** and press **Enter**.
The **Basic Install** window displays.

Step 9 Click **Continue**.
The **Time Configuration** window displays.

Step 10 To configure the time:

a) Choose the time zone.

b) Click **OK** and press **Enter**.
The **Auto Negotiation Configuration** window displays.

Step 11 Click **Continue** and press **Enter**.
The **MTU Configuration** window displays.

Step 12 Choose the MTU configuration:

a) To keep the default MTU size, click **No** and press **Enter**. Skip the next substeps.
The **DHCP Configuration** window displays.

b) To change the default MTU size, click **Yes**.
The **MTP Configuration** window displays.

c) Enter the MTU size. Click **OK** and press **Enter**.
The **DHCP Configuration** window displays.

Step 13 Choose the DHCP configuration:

a) If you use DHCP, click **Yes** and skip the next substeps.
The **Administrator Login Configuration** window displays.

b) If you do not use DHCP, click **No**.
The **Static Network Configuration** window displays.

c) Enter the Host Name, the IP Address, the IP Mask, and the GW Address. Click **OK** and press **Enter**.
Note Enter a different IP address in the **Static Network Configuration** window for each application that co-resides on the server.
The **DNS Client Configuration** window displays.

d) Select the DNS Client configuration.
To *not* enable DNS Client, click **No** and skip the next substeps.

The **Administrator Login Configuration** window displays.

e) To enable DNS Client, click **Yes**.
The **DNS Client Configuration** window displays.

f) Enter the Primary DNS, the Secondary DNS (optional), and the Domain. Click **OK** and press **Enter**.
The **Administrator Login Configuration** window displays.

Step 14 Enter the Administrator ID and the Password. Click **OK** and press **Enter**.
The **Certificate Information** window displays.

Step 15 Enter the certificate information. Click **OK** and press **Enter**.
The **First Node Configuration** window displays.

Step 16 If the server is the First Node in the cluster, click **Yes** and press **Enter**. Skip the next substeps.
The **Network Time Protocol Client Configuration** window displays.

a) If the server is *not* the First Node in the cluster, click **No** and press **Enter**.
Note To configure for redundancy you require a secondary server.
The **First Node Configuration** window displays.

b) Click **OK**.
The **Network Connectivity Test Configuration** window displays.

c) Click **No** to start the installation process after validating network connectivity to the Primary Node.
The **First Node Access Configuration** window displays.

d) Enter the Host Name, the IP Address, and the Security Password of the First Node in the cluster. Click **OK** and press **Enter**.
The **Network Time Protocol Client Configuration** window displays.

Step 17 Enter the IP address of an NTP server. Click **OK** and press **Enter**.
You require NTP settings to complete the installation process.

The **Security Configuration** window displays.

Step 18 Enter the Security Password. Click **OK** and press **Enter**.
The **SMTP Host Configuration** window displays.

Step 19 Choose the SMTP host configuration:

a) To skip SMTP host configuration, click **No** and press **Enter**. Skip the next substeps.
The **Application User Configuration** window displays.

b) To configure an SMTP host, click **Yes** and press **Enter**.
The **SMTP Host Configuration** window displays.

c) Enter the IP address of the SMTP host. Click **OK** and press **Enter**.
The **Application User Configuration** window displays.

Step 20 Enter the Application User Username and the Application User Password. Click **OK** and press **Enter**.
The **Platform Configuration Confirmation** window displays.

Step 21 To start the installation, click **OK** and press **Enter**.
After the installation is complete, the **Login** window displays.

Install Cisco Prime Unified Provisioning Manager Business Edition or Cisco Prime Collaboration Provisioning

Follow this procedure to install the following applications:

- Cisco Prime Unified Provisioning Manager Business Edition
- Cisco Prime Collaboration Provisioning

Note Install only one of the provisioning applications: Prime Unified Provisioning Manager Business Edition or Prime Collaboration Provisioning.

Table 4: Approximate Time that You Require to Install the Applications

Application	Approximate time that you require to install the application
Prime Unified Provisioning Manager Business Edition	30 minutes
Prime Collaboration Provisioning	30 minutes

Procedure

Step 1 On the upper left side of the **<IP address> - vSphere Client** window, click the + icon next to the server IP address to expand the list of virtual machines.

Step 2 Right-click the virtual machine and choose **Power > Power On**.

Right-click the virtual machine ...	To install application for ...
Cisco Unified Provisioning Manager	Cisco Prime Unified Provisioning Manager Business Edition
Cisco Prime Collaboration	Cisco Prime Collaboration Provisioning

Step 3 To launch the virtual machine, click the **Open Console** icon.

Step 4 At the local host login prompt, enter **setup**.

Step 5 At the console prompts, enter the following information:

- Hostname of the VM instance
- IP address
- IP default netmask
- IP default gateway

- Default DNS domain
- Primary nameserver (To add a secondary nameserver, enter y at the next prompt.)
- Primary NTP server (To add a secondary NTP server, enter y at the next prompt.)
- Time zone (UTC)
- Administrative username for logging in to the Linux server at the shell prompt
- Password for logging in to the Linux server at the shell prompt

Step 6 Create passwords when prompted.

Application ...	Create passwords for ...
Cisco Prime Unified Provisioning Manager Business Edition	pmadmin, postgres, and root
Cisco Prime Collaboration Provisioning	root and globaladmin

After the installation is complete, the **Login** window displays.

What to Do Next

For more information about the Cisco Prime Collaboration Provisioning license file and application patches, see the Readme.docx document. The Readme.docx document is in the Cisco Prime Collaboration Provisioning DVD installation media kit and it is preloaded in the Cisco BE 6000 server datastore.

Install Cisco Emergency Responder

You require approximately 45 minutes to install Cisco Emergency Responder.

Procedure

Step 1 On the upper left side of the **<IP address> - vSphere Client** window, click the + icon next to the server IP address to expand the list of virtual machines.

a) Right-click **Cisco Emergency Responder**.
b) Choose **Power > Power On**.
c) To launch the Cisco Emergency Responder virtual machine, click the **Open Console** icon.
The **DVD Found** window displays.

Step 2 Cisco recommends that you perform a media check before you install the virtual machine. To perform a media check:

a) Click **Yes** and press **Enter**.
The **Media Check Result** window displays.

b) Click **OK**.
The **Product Deployment Selection** window displays.

Step 3 Click **OK**.

The **Proceed with Install** window displays.

Step 4 Click **Yes** and press **Enter**.
The **Platform Installation Wizard** window displays.

Step 5 Click **Proceed** and press **Enter**.
The **Basic Install** window displays.

Step 6 Click **Continue**.
The **Time Configuration** window displays.

Step 7 To configure the time:

a) Choose the time zone.

b) Click **OK** and press **Enter**.
The **Auto Negotiation Configuration** window displays.

Step 8 Click **Continue** and press **Enter**.
The **MTU Configuration** window displays.

Step 9 Choose the MTU configuration:

a) To keep the default MTU size, click **No** and press **Enter**. Skip the next substeps.
The **DHCP Configuration** window displays.

b) To change the default MTU size, click **Yes**.
The **MTP Configuration** window displays.

c) Enter the MTU size. Click **OK** and press **Enter**.
The **DHCP Configuration** window displays.

Step 10 Choose the DHCP configuration:

a) If you use DHCP, click **Yes** and skip the next substeps.
The **Administrator Login Configuration** window displays.

b) If you do not use DHCP, click **No**.
The **Static Network Configuration** window displays.

c) Enter the Host Name, the IP Address, the IP Mask, and the GW Address. Click **OK** and press **Enter**.
Note Enter a different IP address in the **Static Network Configuration** window for each application that co-resides on the server.
The **DNS Client Configuration** window displays.

d) Select the DNS Client configuration:
To *not* enable DNS Client, click **No** and skip the next substeps.

The **Administrator Login Configuration** window displays.

e) To enable DNS Client, click **Yes**.
The **DNS Client Configuration** window displays.

f) Enter the Primary DNS, Secondary DNS (optional) and the Domain. Click **OK** and press **Enter**.
The **Administrator Login Configuration** window displays.

Step 11 Enter the Administrator ID and Password. Click **OK** and press **Enter**.
The **Certificate Information** window displays.

Step 12 Enter the certificate information. Click **OK** and press **Enter**.

The **Publisher Configuration** window displays.

Step 13 If the server is a Publisher, click **Yes** and press **Enter**. Skip the next substeps.
The **Network Time Protocol Client Configuration** window displays.

a) If the server is *not* a Publisher, click **No** and press **Enter**.
Note To configure for redundancy you require a secondary server.
The **Publisher Configuration** window displays.

b) Click **OK**.
The **Network Connectivity Test Configuration** window displays.

c) Click **No** to start the installation process after validating network connectivity to the Primary Node.
The **Publisher Access Configuration** window displays.

d) Enter the Host Name, the IP Address, and the Security Password of the Publisher. Click **OK** and press **Enter**.
The **Network Time Protocol Client Configuration** window displays.

Step 14 Enter the IP address of an NTP server. Click **OK** and press **Enter**.
The **Security Configuration** window displays.

Step 15 Enter the Security Password. Click **OK** and press **Enter**.
The **SMTP Host Configuration** window displays.

Step 16 Choose the SMTP host configuration:

a) To skip SMTP host configuration, click **No** and press **Enter**. Skip the next substeps.
The **Platform Configuration Confirmation** window displays.

b) To configure an SMTP host, click **Yes** and press **Enter**.
The **SMTP Host Configuration** window displays.

c) Enter the IP address of the SMTP host. Click **OK** and press **Enter**.
The **Platform Configuration Confirmation** window displays.

Step 17 Click **OK** and press **Enter**.
The **Cisco Emergency Responder Configuration** window displays.

Step 18 Enter the emergency number.
Note Enter **911** for the United States. The emergency number will be different in other countries.

a) Select **9.0** for the Cisco Unified Communications Manager version.
b) Click **OK** and press **Enter**.
The **Localization Settings** window displays.

Step 19 Select the end user language. Click **OK** and press **Enter**.
The **Application User Configuration** window displays.

Step 20 Enter the Application User Username and the Application User Password. Click **OK** and press **Enter**.
The **Platform Configuration Confirmation** window displays.

Step 21 To start the installation, click **OK** and press **Enter**.
After the installation is complete, the **Login** window displays.

Install Cisco TelePresence Video Communication Server Control

You require approximately one hour to install Cisco TelePresence Video Communication Server Control.

Procedure

Step 1 On the upper left side of the **<IP address> - vSphere Client** window, click the + icon next to the server IP address to expand the list of virtual machines.

a) Right-click **Video Communication Server**.
b) Choose **Power > Power On**.
c) To launch the Cisco TelePresence Video Communication Server, click the **Open Console** icon.

Step 2 At the login prompt, enter **admin** for the username and **TANDBERG** for the password.

Step 3 At the Run install wizard prompt, enter **y** and press **Enter**.

Step 4 To change the password, enter **y** and press **Enter**.
At the prompt, enter the new password.

Step 5 At the console prompts, enter the following information:

- For IP protocol, IPv4, or IPv6, or Both for dual-stack (IPv4 and IPv6). The default is IPv4.
- IP address of the LAN.
- Subnet mask of the LAN.
- Default gateway address.
- Ethernet speed of the LAN. The default setting is auto.
- For Run ssh (Secure Shell) daemon, enter **y**.

Step 6 At the Restart Now prompt, enter **y** to apply the new settings.
After the system reboots, you can access the Video Communication Server with a web browser.

Install Cisco Paging Server

You require approximately 15 minutes to install Cisco Paging Server.

Procedure

Step 1 On the upper left side of the **<IP address> - vSphere Client** window, click the + icon next to the server IP address to expand the list of virtual machines.

a) Right-click **Cisco Paging Server**.
b) Choose **Power > Power On**.

c) To launch the Cisco Paging Server, click the **Open Console** icon.

Step 2 Review and accept the End User License Agreement when prompted.

Step 3 On the **Network Configuration** window, enter the following information:

- IP address
- Netmask
- Gateway address
- DNS server addresses

Step 4 Click **SUBMIT**.

Step 5 Verify the information and click **Finish**.

Step 6 Click **OK** to finish the configuration.

What to Do Next

To log in to the Cisco Paging Server through the CLI, press **ALT** + **F2**.

To log in to the Cisco Paging Server through a web UI, open a browser and enter **https://<IP_Address_of_Paging -Server>:8444/InformaCast**.

Note For both the CLI and the web UI, the login username is **admin** and the default password is **changeMe**.

Disaster Recovery

To recover from a hardware failure you must install and configure new hardware components and manually reinstall the application images.

For more information about configuring hardware components on the server, see http://docwiki.cisco.com/wiki/Implementing_Cisco_Business_Edition_6000.

The media disks that are shipped with your order contain software images of VMware ESXi and the Cisco Unified Communications applications that you can deploy with Cisco Business Edition 6000.