Deploy a Customer Site

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Local Administration

You can connect to the BE4000 appliance using a Console or Ethernet connection for monitoring the DMVPN tunnel and troubleshooting the connectivity issues. After you connect the BE4000 appliance through Console or Ethernet connection, the local administration screen is displayed with a list of menu options. You can choose an option based on your requirement and get the related information.

Local administration screen can be used only for monitoring and troubleshooting. You cannot configure a BE4000 site using the command line interface (CLI) unlike other Cisco IOS-based routers.

Note You must be present physically at the BE4000 site to access local administration screen.

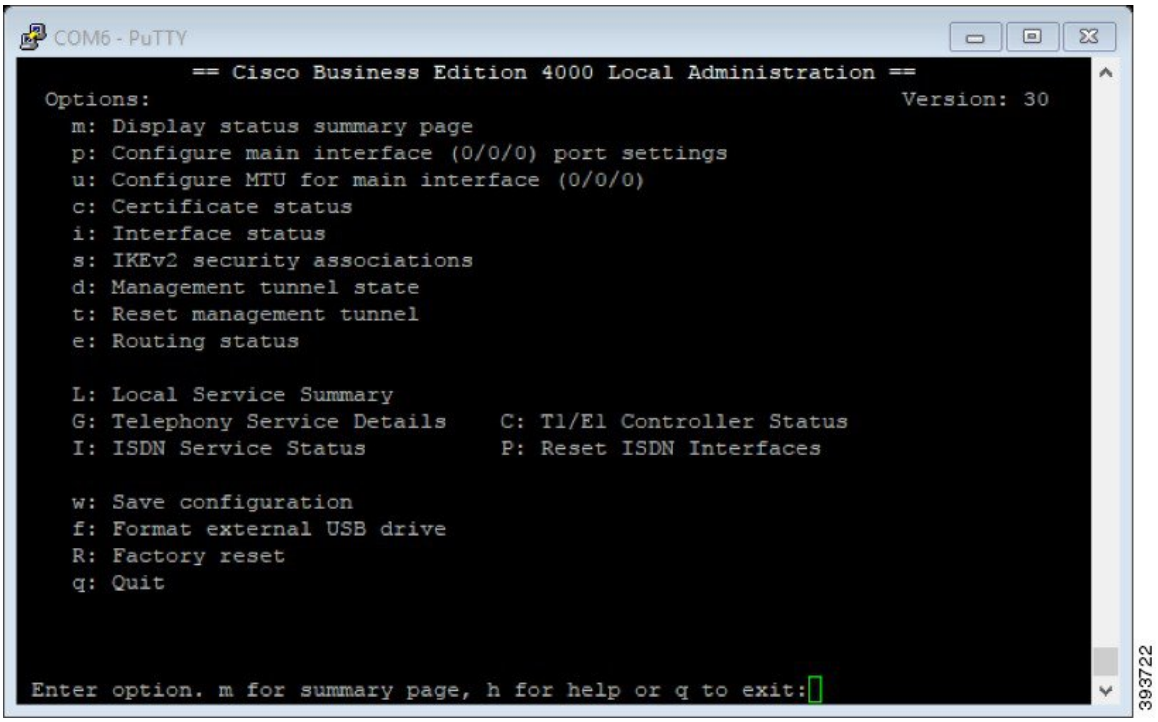
Console Based Local Administration

Procedure

Step 1 Connect through RJ45 or USB console cable.

Step 2 Log in with the username "`status`". Password is not required.

Step 3 Type the appropriate option and press **Enter**.



Ethernet based Connectivity for BE4000 Local Administration

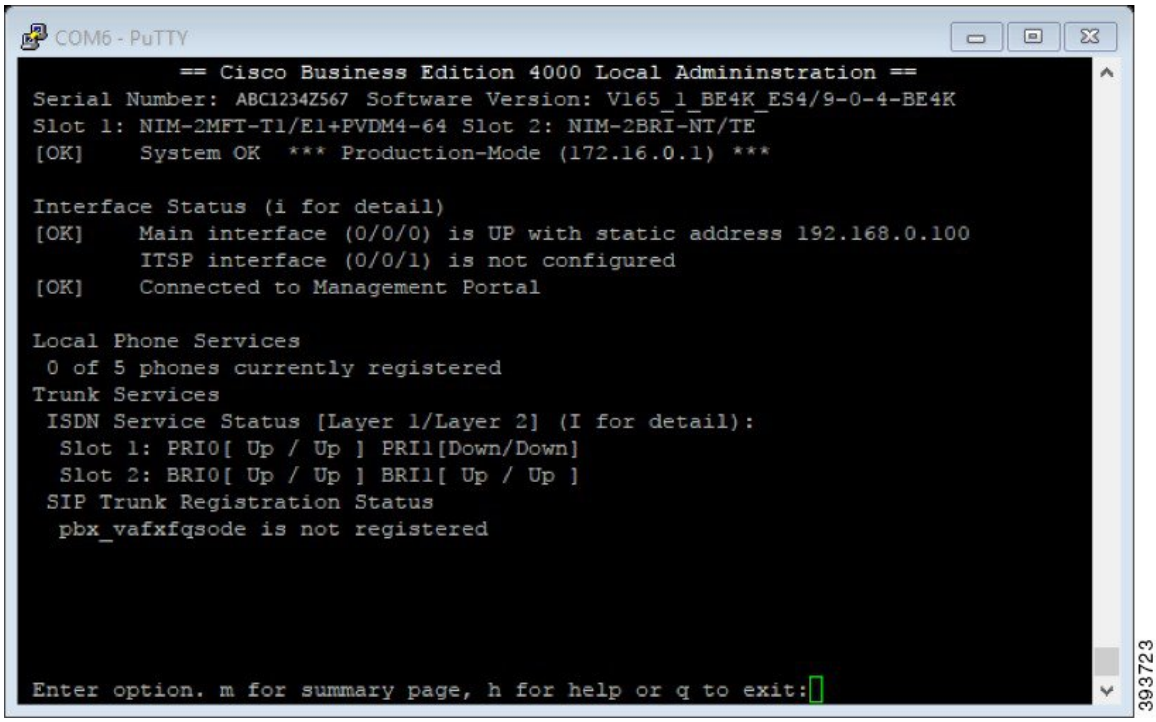
Procedure

Step 1 Connect your computer back to back to MGMT port (use a normal Cat5e or Cat6 cable).

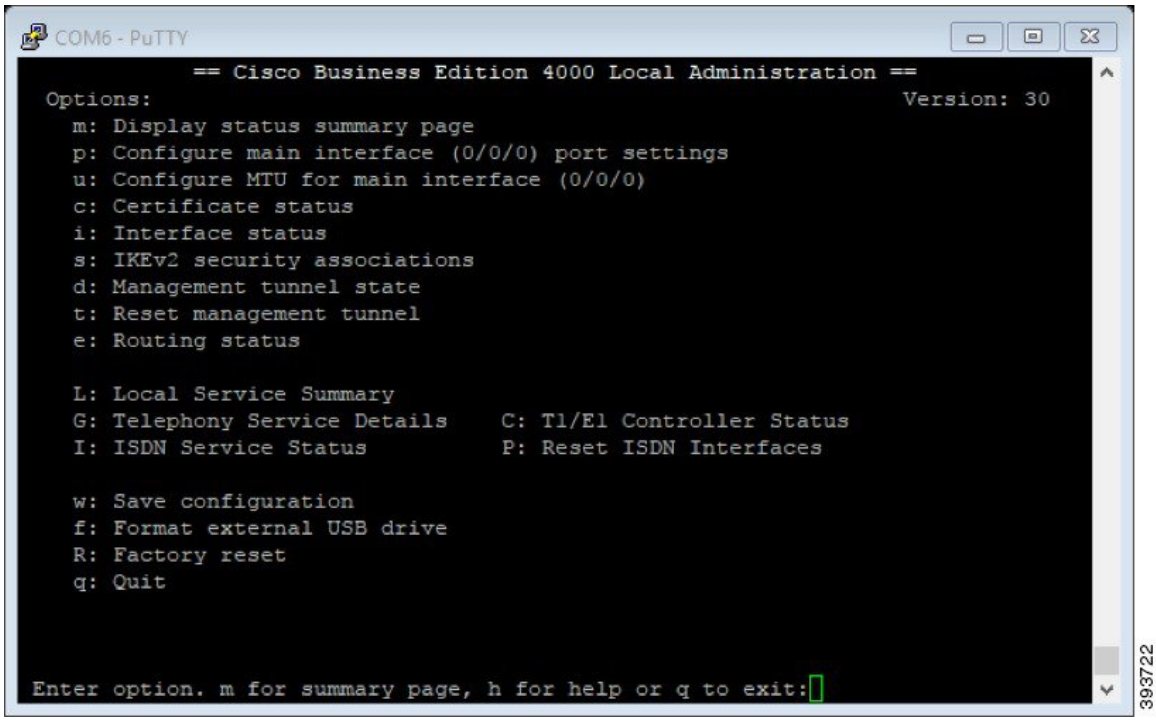
Step 2 Use SSH client to connect to the BE4000 using either the MGMT IP Address (`169.254.100.1`) or Host Name (`status@be4000`).

Step 3 Log in with username `status`. No password is required.

Step 4 Type **h** to see the available options.



Step 5 Type the appropriate option and press **Enter**.



Run Port Check Tool

Run Port Check tool to confirm if the UDP ports 500 and 4500 are accessible to the BE4000 portal.

Before you begin

- Port Check tool must be run on Chrome, Firefox, or Opera browsers only
- Your computer must be on the same network as your BE4000 appliance

Procedure

Step 1 Enter the URL https://portcheck.be4000.cisco.com.

Step 2 Ensure that UDP ports 500 and 4500 are available.

Deploy a Customer Site

Deploying a Customer site involves downloading the software files from the Cisco Business Edition 4000 Management Portal through the internet. So, we recommend you to have a minimum of 2 Mbps internet download speed. If you do not have the minimum required internet download speed, you can download the latest software files from BE4000 Software Download page onto a USB before deployment. Having the software files on the USB expedites the deployment process.

While deploying the BE4000 site, the following checks are made in sequential order:

1. Availability of the USB. If USB is not detected, the software files are downloaded from the Cisco Business Edition 4000 Management Portal.
2. If USB is detected, check for the latest software files. If one or more software files on the USB are out of date, the software files are downloaded from the Cisco Business Edition 4000 Management Portal.
3. If USB is detected and all the files are the latest, the software files are copied locally from USB.

Deploy a Customer Site—Software Updates Through Internet

Before you begin

Ensure that you have:

- BE4000 site is added in the Cisco Business Edition 4000 Management Portal
- Internet download speed is a minimum of 2 Mbps
- Network Interface Module (NIM) cards, if necessary, are inserted in appropriate slots and connected
- BE4000 appliance is connected to the network. See, Local Administration
- BE4000 appliance is powered ON

- A minimum of 2-GB free space on the flash

Procedure

Step 1 Locate the QR code on the underside of the product.

Step 2 Use a QR scanner application to scan the QR code and launch the BE4000 portal. If you don't have a QR scanner, browse to the BE4000 deploy portal by entering the URL - http://be4000.cisco.com/deploy.

Step 3 Enter the serial number if prompted, and select your site configuration.

Ensure that you adhere to the following guidelines while entering the serial number of the BE4000 appliance:

First three characters are letters only, the next four characters are numbers only, and the last four characters are numbers and letters excluding letters O and I.

Step 4 Verify Network Interface Module (NIM) cards, if necessary, are inserted in appropriate slots, cables are connected and BE4000 appliance is powered ON.

Step 5 Click **Deploy Configuration**. After a successful deployment, the site shows "Online" in the Cisco Business Edition 4000 Management Portal.

Step 6 (Optional) We recommend that you install the BE4000 appliance in a 19-inch rack. You can also wall mount or place the BE4000 appliance on any secure flat surface, if preferred. If you are installing in a rack, use the bracket mounting point (both sides) to attach the mounting brackets with the screws provided. Use suitable fastenings to secure the product in place.

Deploy a Customer Site—Software Updates Through USB

Before you begin

Ensure that you have:

- A USB 16-GB or less and be formatted for FAT32
- Download permission for BE4000 Software Download page
- BE4000 site is added in the Cisco Business Edition 4000 Management Portal
- Network Interface Module (NIM) cards, if necessary, are inserted in appropriate slots and connected
- BE4000 appliance is connected to the network. See, Local Administration
- BE4000 appliance is powered ON
- A minimum of 2-GB free space on the flash

Procedure

Step 1 Download the software from BE4000 Software Download page.

Step 2 Copy the downloaded software image to the root directory of the USB.

Step 3 Insert the USB in to the USB slot available on the BE4000 appliance.

Step 4 Locate the QR code on the underside of the product.

Step 5 Use a QR scanner application to scan the QR code and launch the BE4000 deploy portal. If you don't have a QR scanner, browse to the BE4000 deploy portal by entering the URL - http://be4000.cisco.com/deploy.

Step 6 Enter the serial number if prompted, and select your site configuration.

Ensure that you adhere to the following guidelines while entering the serial number of the BE4000 appliance:

First three characters are letters only, the next four characters are numbers only, and the last four characters are numbers and letters excluding letters O and I.

Step 7 Verify Network Interface Module (NIM) cards, if necessary, are inserted in appropriate slots, cables are connected and BE4000 appliance is powered ON.

Step 8 Click **Deploy Configuration**. After a successful deployment, the site shows "Online" in the Cisco Business Edition 4000 Management Portal.

Step 9 (Optional) We recommend that you install the BE4000 appliance in a 19-inch rack. You can also wall mount or place the appliance on any secure flat surface, if preferred. If you are installing in a rack, use the bracket mounting point (both sides) to attach the mounting brackets with the screws provided. Use suitable fastenings to secure the product in place.

Add Cisco Wireless IP Phone 8821 to the Wireless LAN

Before provisioning the Cisco Wireless IP Phone 8821, you must add the phone to the wireless LAN. Perform the following steps on the Cisco Wireless IP Phone 8821 phone:

Before you begin

- To ensure reliability and performance, your wireless LAN should meet the requirements outlined in the Cisco Wireless IP Phone 8821 and 8821-EX Wireless LAN Deployment Guide.
- Ensure that you have the following details ready:
  - SSID—Name of the wireless LAN
  - Security type (for example, WEP, EAP)
  - PIN or passkey for selected security type
- If you are not using DHCP, ensure that you have the following details ready:
  - IP address
  - Subnet mask
  - Default router
  - DNS server 1
  - TFTP server 1

Procedure

Step 1 Select **Settings** > **Wi-Fi**.

Step 2 Select a Profile.

Step 3 (Optional) Set a profile name.

a) Select **Profile Name**.
b) Enter the name of the Profile.
c) Press **More** and select **Save**.

Step 4 Select **Network configuration** > **IPv4 Setup**.

Step 5 Select **DHCP** and press **On**.

Step 6 (Optional) If you are not using DHCP, select **DHCP** and press **Off**. Enter the IP address and subnet mask of the phone, default router, DNS Server 1, and TFTP server 1 address in the respective fields.

Step 7 Select **WLAN configuration**.

Step 8 Select **SSID**. Use the keypad to enter the SSID of the wireless access point. Press **More** and select **Save.**

Note Ensure that the SSID matches the name of the wireless LAN.

Step 9 Select **Security mode** based on the security type configured for your wireless LAN.

Step 10 Select **802.11 mode** and select the required mode. The mode determines the frequency. If you set the mode to Auto, the phone can use either the 5 or 2.4-GHz frequency, with 5 GHz as the preferred frequency.

Step 11 Select **On call power save** and press **Select** to change the setting. Only for troubleshooting purposes, set this field to disabled.

Step 12 Press **More** and select **Save**.

Provision the Phone

Extension Assigner feature allows you to assign an extension to a new or replacement IP phone. Perform the following steps to assign an extension to a phone.

Before you begin

- Customer site successfully deployed and available Online
- You have Network IP address, TFTP options containing IP address of BE4000, and Gateway address to connect to the BE4000 server

Note We recommend you to configure DHCP Option 150 to simplify the provisioning of phones. Configuring DHCP Option 66 is also supported. You can manually configure the TFTP address but it may take more time.

- If you are provisioning Cisco Wireless IP Phone 8821, ensure that you have configured the phone with the wireless LAN. For more information, see Add Cisco Wireless IP Phone 8821 to the Wireless LAN, on page 6.

Procedure

Step 1 Connect the phone to the network.

The phone gets assigned with a temporary extension.

Note If you are manually configuring the TFTP address and you are prompted for a password while accessing the administrator settings on the phone, enter **adg234**.

Step 2 Dial the Extension Assigner directory number, 70000. When prompted for password, enter **1234**.

Step 3 Enter the pound (#) key.

Step 4 Enter the permanent extension, followed by the pound (#) key. Enter the extension configured on the portal for this user or phone.

Step 5 Enter **1**, followed by the pound (#) key to confirm the extension.

Step 6 End the call.

The phone reboots and the assigned extension is shown on the phone display.

Note If you are prompted for a password while accessing the administrator settings on the phone after configuring the permanent extension, enter **ptwmjg**.

Troubleshooting Phone Provisioning

Once a phone is known to the system (auto-registered or fully configured), it may become unregistered for several reasons (some of them are listed below). Check for the following:

- Verify whether the phone is connected to power and is operational.
- Check whether the phone has an IP address and the TFTP address. If the MAC address is correct, phones must have lost its connection to BE4000. Unplug and plug the phones to the BE4000 network again.
- Check reachability between the phone and BE4000. The TFTP address must be the address of BE4000. If there is no reachability, then connect the phones to a different port and verify the reachability again.
- Even after the correct IP address and TFTP is configured, and the phone is still unregistered, check whether BE4000 is reachable from the phone. If the phone is faulty, we have to replace the phone.
- Verify whether the customer site is in the Online state.
- Try resetting the phone to factory default. On the phone display, choose **Applications** > **Admin Settings** > **Reset Settings** > **All**.