



Getting Started

This chapter discusses initial device configuration, logging into and navigating the Videoscape Distribution Suite Manager (VDSM), and a typical VDS-SBconfiguration workflow. This chapter presents the following major topics:

- [Initially Configuring the Devices, page 2-1](#)
- [Logging In to the VDSM, page 2-1](#)
- [Activating and Synchronizing the Devices, page 2-2](#)
- [Navigating the VDSM, page 2-4](#)
- [Configuring Primary and Standby VDSMs, page 2-7](#)
- [Typical Configuration Workflow, page 2-10](#)

Initially Configuring the Devices

After you have initially configured your hardware, you must activate the SBs and configure the internal clocks by using the VDSM. See the “[Activating and Synchronizing the Devices](#)” section on [page 2-2](#) for more information.

Logging In to the VDSM

To log in to the VDSM, do the following:

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- Step 1** Using your web browser, enter the IP address of your VDSM and port 8443.



Note VDS-SB supports Internet Explorer version 6 or higher, and Mozilla Firefox version 3.6 or higher.

For example, if the IP address of your VDSM is 192.168.0.236, enter:

https://192.168.0.236:8443

The Security Alert message is displayed.

**Note**

If you are using Mozilla Firefox version 3.6 or higher as your web browser, you need to add the VDSM IP address to the exception list. After entering the VDSM IP address with port 8443, Firefox displays a Secure Connection Failed message with a link stating “Or you can add an exception.” Click this link, then click **Add Exception**. The Add Security Exception dialog box is displayed. Click **Get Certificate**, and then click **Confirm Security Exception**. The VDSM IP address has been added to the exception list and you no longer get the Secure Connection Failed message.

**Note**

Sometimes the VDSM is not initially accessible from a web browser. If this occurs you must disable and re-enable the Centralized Management System (CMS). log in to the CLI for the VDSM, and enter the global configuration command **no cms enable** followed by **cms enable**.

Step 2 Click **Yes** to accept the security certificate. The Login page is displayed

Step 3 Enter the username and password and click **Login**. The VDSM home page is displayed.
The built-in username is *admin* and the initial password is *default*.

**Note**

We strongly recommend that you change the built-in admin password as soon as possible. To do so, log in to the CLI of the VDSM device, and use the **username admin password <password>** global configuration command.

**Note**

If the default username and password have been changed by another VDSM administrator, you need to get the new username and password.

Activating and Synchronizing the Devices

The VDS-SB administrator approves a device by making it active. This security feature prevents unauthorized devices from joining the VDS-SB.

**Caution**

All devices must be synchronized with each other for the VDS-SB to function properly.


Synchronization ensures accurate timestamps in all the logs. Using Network Time Protocol (NTP) to synchronize the devices in the VDS-SB is the best practice.

**Note**

If the network is not configured with NTP, then every device in the VDS-SB must be configured with exactly the same time and time zone. We recommend that you use an NTP server for network synchronization.

Activating and Setting NTP for Each Device

To activate and synchronize a Service Broker, do the following:

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- Step 1** From the VDSM home page, choose **Devices > Devices**. The Devices table is displayed listing all the registered SBs.
- Step 2** Click the **Edit** icon next to the device name. The Devices home page is displayed.
-  **Note** If the device you want to activate is not listed in the Devices Table, restart the CMS for that device by telneting to it and entering **no cms enable** followed by **cms enable** in global configuration mode.
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- Step 3** Click **Activate** in the Devices home page. The Location dialog box is displayed.
- Step 4** Create or choose a location. To activate an SB, you need to assign it to a location. Because the standby VDSM is global to the VDS-SB network, it does not need to be assigned to a location. You have the following options in creating or choosing a location:
- If you have already created locations, you can choose a location from the **Location** drop-down list.
 - To create a default location, which can be edited later, check the **Create a New location** check box. A default location is created with the following name: *<SB-name>-location*. From the **Parent of the New Location** drop-down list, choose a parent for this location. For information about creating locations, see the [“Configuring Locations” section on page 3-1](#).
- Step 5** Click **Apply and Activate**. The Status of the device shows “pending” until the device is fully activated. This may take a few minutes.
- Step 6** To display the top-level Table of Contents, click the **Show All** button above the Contents pane.
- Step 7** From the left-panel menu, select **General Settings > Network > NTP**. The NTP Settings page is displayed.
- Step 8** Check the **Enable** check box and enter the IP address or hostname of each NTP server. Use a space to separate each server.
- Step 9** Click **Submit** to save your settings. The activation and NTP server settings must be completed for each SB, and standby VDSM.

**Tip**

For a quick way to get to other SBs, click the **Display All Devices** icon located to the left of the Expand All button. This icon toggles between the Display All Devices and Menu icons.

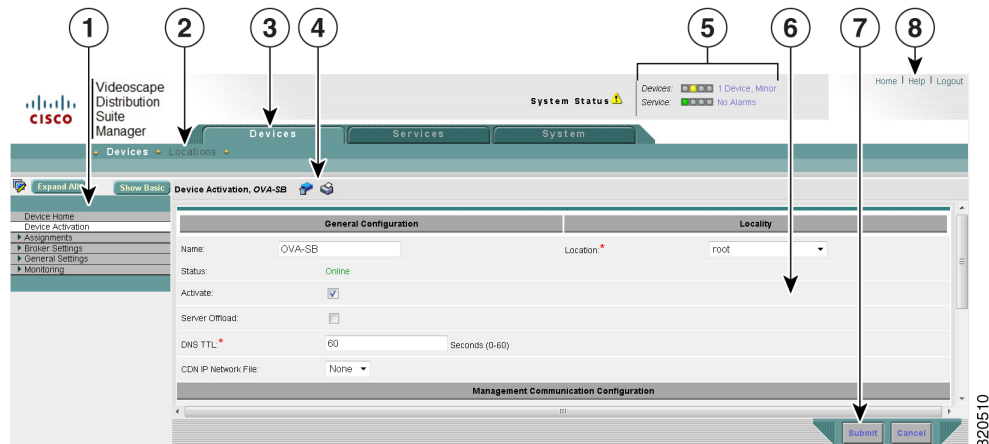
For more detailed information about configuring locations, activating devices, and configuring NTP servers, see the following sections:

- [Configuring Locations, page 3-1](#)
- [Configuring NTP, page 3-21](#)

Navigating the VDSM

Figure 2-1 shows the different elements of the VDSM.

Figure 2-1 VDSM User Interface



1	Left panel menu	5	System Status bar
2	Tab options	6	Page
3	Tabs	7	Submit and Cancel buttons
4	Task bar	8	Tools (Home, Help, and Logout)

The System Status bar, tabs, tab options, and tools are accessible from any page in the VDSM. The left panel menu changes depending on which tab and tab option you choose.

Devices, Services, and Other Tables

The Devices Table page shows all the devices registered in the VDSM. Figure 2-2 shows an example of the Devices Table page. A table is displayed for each of the following tab options:

- Devices (from Devices tab)
- Locations (from Devices tab)
- BFQDNs (from Services tab)
- BFQDN Policies (from Services > BFQDN tab)
- Content delivery Networks (from Services tab)

Figure 2-2 Devices Table Page

Device Name	Type	IP Address	Status	Location	Software Version
OVA-SB	Service Broker	10.79.49.81	Online	root	0.9.0.b.33
OVA-TEST	Videscape Distribution Suite Manager (Primary)	10.79.49.82	Online		1.0.0.b.3

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You can sort the information in the table by clicking on any column title. The table can be sorted in ascending or descending order for each column. The task bar options provide other table manipulations, including filtering, refreshing the table, viewing all items, and printing.

The bottom of the table lists the page number and the total number of pages, as well as how many items are showing out of the total number of items.

The table defaults to listing ten rows. You can change the number of rows shown by clicking the Rows drop-down list.

To get more information on an item or to configure an item, click the **Edit** icon to the left of the item name. To create a new item, click the **Create New** icon in the task bar.

Devices Home Page

The Devices home page provides information about the device, as well as the ability to perform the following task:

- View a list of devices (Service Broker and VDSM) configured

The left panel menu has two toggle buttons: Show Basic/Show All and Expand All/Collapse All.

- **Show All** Shows all the menu items in the menu.
- **Show Basic** Shows only the Device home menu item.
- **Expand All** Shows every menu and submenu.
- **Collapse All** Shows only the top-level menu items.

Task Bar

The task bar displays information about the page you are on and provides associated tasks. All task bar icons, as well as other icons, have labels that are displayed when you roll over the icon with your mouse pointer.

Any icon used in a procedure is referenced by the rollover label; for example, **Create New** is the rollover label for the following icon:



Table 2-1 describes the icons available in the VDSM.

Table 2-1 VDSM Icons

































Icon	Function
	Activates all inactive Service Brokers.
	Displays devices.
	Displays left-panel menu.
	Deactivates the device.
	Updates application statistics.
	Forces refresh of replication information or process content changes.
	Goes back to Replication Status page.
	Forces full database update.
	Forces settings on SBs in group.
	Forces the group settings.
	Views read-only items.
	Creates a new item.
	Edits an item.
	Deletes an item.
	Adds a content item for acquisition.
	Deletes a selected item.
	Manages between host and proxy servers for content acquisition.
	Saves to disk.

Table 2-1 VDSM Icons (continued)

Icon	Function
	Views complete URL (+) or view (-) partial URL that is used to acquire content.
	Exports a table to a comma-separated value (CSV) file.
	Creates a filtered table. Filter the table based on the field values.
	Displays a graph.
	Applies the default settings to the device.
	Overrides the group settings on the device.
	Views all table entries. Click this icon to view all entries after you have created a filtered table.
	Refreshes the table.
	Reboots the device.
	Prints the current window.
	Assigns all items to the entity.
	Removes all items from the entity.
	Indicates that the current transaction was successfully completed.
	Indicates that user input is invalid and that the transaction did not finish.

Configuring Primary and Standby VDSMs

The VDSM can operate in two different roles: primary and standby. The primary role is the default. You can have only one primary VDSM active in your network; however, you can have any number of VDSMs operating in a standby role to provide redundancy and failover capacity. You must configure the primary VDSM first.



Note

The primary and standby VDSMs must be running the same version of software. You must upgrade your standby VDSM first, and then upgrade your primary VDSM.

If the primary VDSM is down, the device SB cannot send regular reports and events to it, so the data is sent to the standby VDSM. After the primary VDSM is online, the database on the standby VDSM is synchronized with the database on the primary VDSM.

To configure a standby VDSM, do the following using the CLI:

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- Step 1** Follow the instructions for configuring a VDSM using the setup utility, except do not enter the IP address of the VDSM.
- Step 2** Configure the standby VDSM.
`SB(config)# VDSM role standby`
- Step 3** Identify the IP address of the primary VDSM.
`SB(config)# VDSM ip 10.1.1.90`
- Step 4** Start the Centralized Management System (CMS).
`SB(config)# cms enable`
- Step 5** Save the configuration.
`SB# copy running-config startup-config`
- Step 6** Activate the standby VDSM by using the web interface of the primary VDSM.
 The primary VDSM notifies all registered devices that a standby VDSM exists and sends each device the information it needs to contact the standby should the primary fail or become inactive.

**Note**

You cannot log in to the web interface of the standby VDSM. Its function is to maintain an up-to-date copy of the primary's database.

Changing a Standby to a Primary VDSM

**Note**

If your primary VDSM is still operating, you must change its role to standby by executing the **VDSM role standby** command before following these steps. You can only have one primary VDSM operating at any given time.

To change the standby VDSM to become the primary, do the following:

-
- Step 1** If your primary VDSM has failed, enter the following command:
`SB(config)# VDSM role primary`
- Step 2** Save the configuration.
`SB# copy running-config startup-config`
- Step 3** Restore the old primary VDSM, if possible.
- Step 4** When the old primary VDSM is restored, change its role to standby.
`VDSM role standby`

Step 5 Reconnect the old primary VDSM (now standby VDSM) into the VDS-SB network.

Step 6 Wait at least one polling interval to allow the data from the primary VDSM to be copied to the standby VDSM.



Note During this period, do not make any configuration changes.

Step 7 When the new primary VDSM and the new standby VDSM have synchronized, you can change the roles of the VDSMs back to their original roles.



Note There can only be one primary VDSM in a VDS-SB at one time. If there are two primary VDSMs, both VDSMs are halted.

To change the roles back, do the following:

- a. Change the role of the primary VDSM to standby.

```
VDSM role standby
```

- b. Change the role of the standby VDSM to primary.

```
VDSM role primary
```



Note If you have recently made configuration changes to the primary VDSM, wait at least the polling interval before changing roles to ensure that the standby has a record of the most recent configuration changes.

Recovering from Two Primary VDSMs

If you did not change the primary VDSM to standby before you changed the standby VDSM to primary, you will have two primary VDSMs in your VDS-SB and both will be halted. To restore both VDSMs, do the following:

Step 1 Make sure the VDSM that is to be designated as the standby is in fact the standby by entering the **VDSM role standby** command.

Step 2 Initiate the CMS on the standby VDSM by entering the **cms enable** command.

Step 3 Make sure the VDSM that is to be designated as the primary is in fact the primary by entering the **VDSM role primary** command.

Step 4 Initiate the CMS on the primary VDSM by entering the **cms enable** command.

Step 5 Make sure the standby VDSM is activated by using the web interface of the primary VDSM.

Typical Configuration Workflow

Once you have completed activating and configuring the NTP servers for all the devices in the VDSM, you are ready to configure the VDS-SB for content playout. For information about activating and configuring the NTP servers for a device, see the [“Activating and Setting NTP for Each Device”](#) section on page 2-3.

Table 2-2 lists the basic tasks for configuring the VDS-SB or routing content to appropriate CDNs, with references to the associated sections in each chapter.

Table 2-2 Configuration Workflow

Task	Description	Where to Find More Information
Change admin password	Change the administrator password on each device, including the VDSM, and change the administrator password for the system	Log in to the CLI for the device and use the username admin password <password> global configuration command. The password strength must be a combination of alphabetic characters, at least one number, at least one special character, and at least one uppercase character. To change the password for the VDSM GUI and CLI, go to “Creating, Editing, and Deleting Users,” page 5-2
Configure Devices	Configure Locations, Service Broker and VDSM	“Configuring the Service Broker,” page 3-2 “Configuring the VDSM,” page 3-55 “Configuring Locations,” page 3-1
Create BFQDNS	Create BFQDNs to be assigned to Service Brokers	“Creating BFQDNs,” page 4-1
Create Content Delivery Networks	Create CDNs for Service Broker to route the content	“Creating Content Delivery Networks,” page 4-3
Create Service Broker Policy Files	Create Service Broker Policy File, BFQDN Policy File, CDN Selection Policy File and CDN Adaptation Policy File	“Configuring Service Broker Policy File,” page 5-10 “Configuring BFQDN Policy File,” page 5-11 “Configuring CDN Selection Policy File,” page 5-12 “Configuring CDN Adaptation Policy File,” page 5-13
Configure Geo Location Routing Service	Enable Geo Location Service for the Service Broker	“Enabling Geo Location Service for Service Broker,” page 3-4
Configure Transaction Logs	Configuring Transaction Logs for Service Broker	“Configuring Transaction Logs for the Service Broker,” page 3-51