Unified CVP Migration

If there is a change in platform of a later release of Unified CVP, migration from the existing release to the later release is required.

For example, moving from Unified CVP 8.5(1) to Unified CVP 10.0(1) is considered a migration because it involves a change in operating system, platform, or architecture of the later release.

Migration can also involve moving to a new hardware or a software and moving from one database to another database. Migration of database requires converting the data into a common format that can be used as output from the old database and saved into the new database.

Premigration Tasks

Before you begin

- Back up the Unified CVP installation files and data onto a different computer for redundancy.

Important You cannot roll back to an earlier version of Unified CVP after you initiate migration. Back up the installation files and data before you begin the migration process.

- Uninstall Cisco Security Agent.
- (Optional) Deploy additional servers if you choose to deploy Reporting Server.
- (Optional) Standalone distributed diagnostics and service network (SDDSN) is no longer required. If you have SDDSN servers, decommission these servers or use them for another purpose.

- Deploy Operations Console. For deployment of Operations Console, see *Configuration Guide for Cisco Unified Customer Voice Portal* at https://www.cisco.com/c/en/us/support/customer-collaboration/unified-customer-voice-portal/products-installation-and-configuration-guides-list.html.
- (Optional) Gatekeepers are not required in SIP implementations. Decommission gatekeepers or in some cases convert them to use as ingress or VXML gateways (or both) if you choose to use SIP for the implementation.
- (Optional) SIP Proxy servers and DNS servers for SIP message routing are optional components for SIP implementation. Add these components to the network if you intend to use them.

Note SIP Proxy servers and DNS servers cannot co-reside with other Unified CVP product components.

- Ensure that the version of Cisco IOS supports the required hardware.

Note If you are using an older gateway or gatekeeper hardware, the version of Cisco IOS that is required in this release may no longer support the required hardware. Hence, you need to purchase new hardware.

- Migrate the operating system from Windows 2003 SP2 to Windows Server 2008 R2 SP1, if required. For more details on whether a change in platform is required, see the Upgrade Path section.
- Migrate the operating system from Windows Server 2008 R2 SP1 to Windows Server 2012 R2 Standard Edition. For more information, see the Upgrade to Windows Server 2012 R2 Standard section.

Migrate Operations Console

To migrate Operations Console, back up and restore the CVP Operations Console configuration. To know whether a change in platform is required, see the Upgrade Path section.

Back Up Operations Console Configuration

Procedure

Step 1 Log in to Operations Console.

Step 2 On the Operations Console page, click **System** > **Export System Configuration** > **Export**.

Step 3 Manually copy the sip.properties file.

CVP Operations Console cannot export the sip.properties file.

For more information on Unified CVP Console Configuration, see *Administration Guide for Cisco Unified Customer Voice Portal* at https://www.cisco.com/c/en/us/support/customer-collaboration/unified-customer-voice-portal/products-installation-and-configuration-guides-list.html.

Step 4 Save the `CVP-OpsConsole-Backup.zip` file.

What to do next

- Save the exported configuration and custom files on network storage media or a portable storage media.
- Ensure that you are able to access the shared storage media from the Windows Server Machine.

Restore Operations Console Configuration

Before you begin

- Install the new release of Operations Console on the Windows Server 2008 R2.
- Export the Operations Console configuration from the older version to migrate it to the new version.

Procedure

Step 1 Stop the Cisco Resource Manager Windows service.

a) Click **Start > All Programs > Administrative Tools > Services**.
b) In the list of services names, select **Cisco Resource Manager** and click **Stop**.

Step 2 Import the saved Operations Console configuration.

a) On the Operations Console page, click **System > Import System Configuration**.
b) Click **Browse** and select the filename from the location where you saved the Operations Console configuration files of the previous version.
c) Click **Import**.
d) Copy the custom files, license files, and sip.properties files from the location where you saved the Operations Console configuration to their corresponding Unified CVP directories to complete the restore operation.

Note If you have not restored the backup containing the user-related information from the earlier version of Unified CVP, then skip to Step 5.

Step 3 In the Operations Console page, click **Device management** > **Reporting Server** > **Database Administration**.

Step 4 Delete the Reporting Users that are created in the earlier version of Unified CVP.

Note Creating the new users that are the same as the existing users does not work.

Step 5 Set the same password for the existing user that you imported from the earlier versions of CVP Operations Console.

a) Click **Server Manager > Configuration > Local Users and Groups > Users**.
b) Right-click the existing username and click **Set Password**.
c) On the **Set Password** screen, click **Proceed**.
d) Type the old password and confirm the new password.
e) Click **OK**.

Step 6 Restart Cisco Unified CVP Operations Console and Cisco CVP Resource Manager.

a) Click **Start > All Programs > Administrative Tools > Services**.
b) Select Cisco CVP Operations Console Server.
c) Click **Restart**.

The CVP Operations Console Server service starts in the Services window.

d) Select Cisco CVP Resource Manager.
e) Click **Restart**.

The CVP Resource Manager Service starts in the Services window.

All the existing CVP Operations Console data including the CVP Operations Console login credentials get overwritten by the new data that is imported from the saved CVP Operations Console configuration.

What to do next

Log in to Operations Console using the Operations Console login credentials of the previous version.

Secure Communication with Operations Console

Procedure

To secure communication between Operations Console and CVP components, on the Operations Console page, click **Enable Secured Communication with the Operations Console**.

For configuring the security certificate exchange between Operations Console and CVP components, see the *Configuration Guide for Cisco Unified Customer Voice Portal* at https://www.cisco.com/c/en/us/support/customer-collaboration/unified-customer-voice-portal/products-installation-and-configuration-guides-list.html.

Migrate Call Server

Before you begin

- Back up existing Unified CVP installation onto a different computer for redundancy.
- Install the Windows Server 2008 R2.
- If you are migrating from Windows Server 2003 to Windows Server 2008 R2, assign the IP address and hostname of the previous Unified CVP to the later release.
- Install the latest Unified CVP server component.
- Ensure that the Windows Server 2003 is not on the same network as the Windows Server 2008 R2.

Procedure

Step 1 Log in to Operations Console and select **Device Management > Unified CVP Call Server**.

Step 2 Select the Unified CVP Call server with the chosen IP address and the hostname.

Step 3 Click **Edit**.

Step 4 Click **Save and Deploy** to deploy the configuration to Unified CVP Call Server.

Step 5 Click **System > SIP Server Groups**.

On the SIP Server Groups screen, verify that the data is populated from the previous OAMP configuration importing step.

Step 6 Click **Save and Deploy** and confirm that the operation has completed successfully.

Step 7 Select **System > Dialed Number Pattern**.

In the **Dialed Number Pattern** screen, verify that the data is populated from the previous OAMP configuration importing step.

Step 8 Click **Deploy**.

Step 9 Select **Device Management > Media Server**.

Step 10 From the **Default Media Server** drop-down list, choose the appropriate media server.

Step 11 Click **Set**.

Step 12 Click **Deploy**.

Step 13 From the Media Server that is installed on the computer, select **Internet Information Services** > **Sites**.

- To add a new group to the list, click **Add** and select **Everyone**.
- To give full control to group **Everyone**, check the **Full Control** check box.

Step 14 From the FTP site, click **Restart** to restart the FTP server.

Migrate Unified CVP VXML Server

Before you begin

- Ensure that the Unified CVP VXML Server and Unified Call Studio are of the same version so that Unified Call Studio can work with the Unified CVP VXML Server.
- Ensure that you have licenses for all Unified CVP components.

Note If you do not apply licenses to the migrated components, the software runs in evaluation mode.

- Back up any custom audio files from `%CATALINA_HOME%/webapps/CVP/audio`.
- Back up third-party libraries, such as .class or .jar files, at:

```
%CVP_HOME%\VXMLServer\common\classes
%CVP_HOME%\VXMLServer\common\lib
%CVP_HOME%\VXMLServer\applications\APP_NAME\java\application\classes
%CVP_HOME%\VXMLServer\applications\APP_NAME\java\application\lib
%CVP_HOME%\VXMLServer\applications\APP_NAME\java\util
```

where APP_NAME is the name of deployed voice application.

- Install Unified CVP Server. See Install Unified CVP Server.

Procedure

Step 1 Log in to Operations Console and select **Device Management** > **Unified CVP VXML Server**.

Step 2 Select the Unified CVP VXML Server with the chosen IP address and the hostname.

Step 3 Click **Edit** and select the Unified CVP VXML Server configuration for editing.

Step 4 Click **Save and Deploy** to deploy the configuration to the new Unified CVP VXML Server.

Step 5 (Optional) If you need a secure connection between the Operations Console and Unified CVP VXML Server, configure SSL certificates.

Step 6 Upload the license file to the new Unified CVP VXML Server using Operations Console.

Step 7 Restore the audio files to the `%CATALINA_HOME%\webapps\CVP\audio folder`.

Step 8 Restart Cisco CVP VXML Server and VXMLServer service.

What to do next

To configure the Unified CVP VXML Server using Operations Console, see *Configuration Guide for Cisco Unified Customer Voice Portal*.

Migrate Unified Call Studio

Before you begin

- Back up all audio files.

Note Audio files are deployed to `%CATALINA_HOME%\webapps\CVP\audio` are deleted. %CATALINA_HOME% implies the Tomcat installation directory.

- Launch the Call Studio application.
- Ensure that you have licenses for all Unified CVP components.

Note If you do not apply licenses to migrated components, then the software runs in the evaluation mode.

- In the **Navigator** view, right-click on the project, and then click **Export**.

Note Export Unified Call Studio projects to offline media, if they are not stored in version-control systems. You can export multiple projects simultaneously by unchecking them from the list that Export wizard displays.

Procedure

Step 1 Select the **Existing Cisco Unified CVP Project into Workspace** option to import the projects.

The import process upgrades the projects to the format of the new release, if necessary.

Note
- Starting from release 10.5 onwards, the old VXML gateway adapters have been replaced with new ones. Choose the appropriate VXML gateway adapter once you migrate to Release 10.5 and onwards. For more information on VXML gateway adapter, see VXML Gateway Adapter, on page 7.
- If you check out applications from a source repository rather than importing from the file system, you can still import the applications to Call Studio project to start the conversion process. In addition, for the first check-in after importing, all files in each project are considered modified and you need to update them in the repository.

Step 2 Recompile any custom components that were compiled in the earlier versions of Java.

Review the list of Java changes that may affect backward compatibility and make any required updates. You can locate the compatibility page, at: http://java.sun.com/j2se/1.5.0/compatibility.html.

Step 3 Deploy all projects, including the newly recompiled components from the previous step, to the appropriate Cisco Unified CVP VXML Servers.

Use Operations Console for bulk transfer of the project to multiple Unified CVP VXML Servers in one step.

VXML Gateway Adapter

Gateway adapters are small plug-ins installed on VXML Server that provide compatibility with a particular Voice Browser. Once installed, all Unified CVP voice elements (and all custom voice elements not using browser-specific functionality) work on that Voice Browser.

Starting from Release 10.5 onwards VXML Server supports the following gateway adapters:

- **Cisco DTMF:** Generates the grammar for DTMF detection at Cisco Gateway.
- **VXML 2.1 with Cisco DTMF:** Generates the grammar for DTMF detection at Cisco Gateway using VXML 2.1 tags.
- **Nuance 10:** Generates the grammar for Speech and DTMF detection on the Nuance 10 server.
- **VXML 2.1 with Nuance 10:** Generates the grammar for Speech and DTMF detection on the Nuance 10 server using VXML 2.1 tags

- **Speech:** Generates the grammar for Speech and DTMF detection on the SpeechWorks server.
- **VXML 2.1 with Speech:** Generates the grammar for Speech and DTMF detection on the SpeechWorks server using VXML 2.1 tags

Note Nuance 10 or Speech adapter can process the grammars that are present on Nuance 10 or Speech server respectively; however, Cisco DTMF adapter can process the grammars that are present locally on the Cisco IOS gateway.

The following table provides the gateway adapter mapping to be used, while migrating from older version of Call Studio to Release 10.5(1) and onwards.

Adapters Prior to Release 10.5	New adapters from Release 10.5 onwards
Cisco Unified CVP 4.1/7.0/8.0/8.5/9.0 with Cisco DTMF	Cisco DTMF
Cisco Unified CVP 4.1/7.0/8.0/8.5/9.0 VoiceXML 2.1 with Cisco DTMF	VXML 2.1 with Cisco DTMF
Cisco Unified CVP 4.1/7.0/8.0/8.5/9.0 with Nuance 8.5	Nuance 10
Cisco Unified CVP 4.1/7.0/8.0/8.5/9.0 VoiceXML 2.1 with Nuance 8.5	VXML 2.1 with Nuance 10
Cisco Unified CVP 4.1/7.0/8.0/8.5/9.0 with OSR 3	Nuance 10
Cisco Unified CVP 4.1/7.0/8.0/8.5/9.0 VoiceXML 2.1 with OSR 3/Nuance 9	VXML 2.1 with Nuance 10
Cisco Unified CVP 4.1/7.0/8.0/8.5/9.0 with Speech	Speech
Cisco Unified CVP 4.1/7.0/8.0/8.5/9.0 VoiceXML 2.1 with Speech	VXML 2.1 with Speech

Migrate Reporting Server

Before you begin

Retain the call data during migration by unloading the existing databases of Unified CVP.

Procedure

Step 1 Prepare the Reporting Server.

Step 2 Unload Data From Reporting Database

Step 3 Load Data to Reporting Server Database

Step 4 Configure Reporting Server in Operations Console

Preparing the Unified CVP Reporting Server

Procedure

Step 1 Install CVP 9.0(1) Reporting server on the Windows 2008 R2 server.

Ensure that the CVP Reporting database is up and running.

Note Check if Informix IDS - CVP service is installed and running in Windows Service Manager.

Step 2 From the command prompt, run **dbaccess** and then select **database.**

Step 3 Using the arrow keys, select the following and press Return, to ensure that each databases are selected.

- **callback**
- **ciscoadmin**
- **cvp_data**

Unload Data From Reporting Database

Procedure

Step 1 Log in as user Informix (cvp_dbadmin) to Unified CVP.

Step 2 Stop the **Cisco CVP Call Server** service from the Windows Service Manager.

Note The unload script checks the hard disk space before unloading.

Step 3 Access the Unified CVP installation file.

Step 4 From the command prompt, change the directory to the migration folder.

Note You can also copy the migration folder to local disk and run the unload script directly.

Step 5 Locate the `migrate_unload.bat` file.

Step 6 By default, the data is exported to c:\migration. Ensure that this path exists. If you want to change the default path, then update the path in *unl.sql*:

```
create procedure unld(path char(128) default "c: \migration\") RETURNING char(128)
```

Step 7 Run the following command to unload the Reporting database:

Example:

```
migrate_unload.bat
```

After the script executes, the database is exported into the cvpdb.tar file in the path provided. Here the cvpdb.tar file is exported to c:\cvpdata. This folder should have full access permission for “cvp_dbadmin” user.

Step 8 Copy the exported cvpdb.tar file to the Unified CVP database Reporting Server.

Load Data to Reporting Server Database

Procedure

Step 1 Open the Unified CVP installation file.

Step 2 Navigate to **CVP** > **Migration**.

Step 3 From the command prompt, change the directory to the migration folder.

Tip You can also copy the migration folder to the local disk and run the load script directly.

Step 4 On the local disk, locate the Unified CVP database backup file (cvpdb.tar) that you want to load into the Unified CVP database.

Note This is the backup file that you created when you unloaded data from the Unified CVP database.

Step 5 By default, the data is exported to c:\migration. Ensure that this path exists. If you want to change the default path, then update the path in *ld.sql*:

```
ld(path char(128) default "c:\migration\") RETURNING char(256)
```

Step 6 Run the following command as an administrator to load the Unified CVP database: `migrate_load.bat.`

Note If the backup cvpdb.tar file is located in `c:\cvpdata`, you must execute the script load as `migrate_load.bat`.

This script loads all the three Unified CVP Reporting databases with the previous call data to the Unified CVP Reporting database.

Step 7 Run the following command as an administrator to load the Unified CVP database: `migrate_load.bat -p <absolute path to tar file>.`

Note If the backup cvpdb.tar file is located in `c:\cvpdata`, you must execute the script load as `migrate_load.bat -p c: \cvpdata\cvpdb.tar`.

This script loads all the three Unified CVP Reporting databases with the previous call data to the Unified CVP Reporting database.

Configure Reporting Server in Operations Console

Procedure

Step 1 Import the Operations Console configuration and redeploy the Unified CVP Reporting Server to retain the same IP address as that of Unified CVP.

Step 2 If the IP address of the server is changed, then delete the previous instance of the server and add the new Unified CVP Reporting Server to Operations Console, and then deploy the server.

Unified CVP Redeployment

You can redeploy an existing Unified CVP component from Operations Console.

Redeploy Operations Console

Procedure

See Migrate Operations Console, on page 2.

Redeploy CVP Server

Procedure

See the Migrate Call Server section and the Migrate VXML Server section.

Redeploy Unified CVP Reporting Server

Procedure

Step 1 Reinstall the Unified CVP Reporting Server.

Step 2 Save and deploy the Unified CVP Reporting Server in Operations Console.

Step 3 Update the Unified CVP Reporting Server license.

Step 4 Restart the Unified CVP Reporting Server.

Step 5 Redeploy courtesy callback system-level configuration, if applicable.

Step 6 Redeploy SNMP configuration, if applicable.

Redeploy Unified Call Studio

See the Migrate Unified Call Studio section.