

Upgrading the Cisco Prime Service Catalog Virtual Appliance

You can upgrade to the 12.1 virtual appliance from any of the following version: 11.0, 11.1, 11.1.1, and 12.0.

To upgrade to Cisco Prime Service Catalog Virtual Appliance 12.1, you must perform a migration process rather than an in-place upgrade. This is because many third-party components have changed in version 12.1, such as the Operating System, RabbitMQ and so on. Therefore, you must deploy a new 12.1 virtual appliance prior to migrating the existing virtual appliance. For instructions to deploy Cisco Prime Service Catalog Virtual Appliance 12.1, see Installing Prime Service Catalog Virtual Appliance.

At a high level, the upgrade procedures are as follows:

Table 1: High-Level Upgrade Procedures

Step 1	Disable the UCS Director automatic polling flag. This setting should be disabled on the previous Prime Service Catalog virtual appliance set up.	Go to Administration > Settings and disable the UCSD Scheduler option.	
Step 2	Back up the database on the previous virtual appliance.	See Backing up the Database on Previous Cisco Prime Service Catalog Virtual Appliance, on page 2	
Step 3	Install a new 12.1 Virtual Appliance.	See Installing Prime Service Catalog Virtual Appliance	
Step 4	Retrieve Remote Backup of Prime Service Catalog Database	See Retrieving Backup of Prime Service Catalog Database, on page 3	
Step 5	Upgrade the database from previous virtual appliance to 12.1 virtual appliance. You can either manually copy the database from the backup in Step 2 or you can let the system copy it from the remote location using the shell menu option.	See Upgrading to the Latest Virtual Appliance Database, on page 5	

Step 6	1 10 1	See Performing Post-upgrade Tasks for the Virtual Appliance, on page 6

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Backing up the Database on Previous Cisco Prime Service Catalog Virtual Appliance



If you plan to use your own database and choose not to install the database node. You can download the factory default dump <code>cpcsuser_factory_default.dmp</code> from the cisco.com website and import the dump into your Oracle 12c database instance. For more information on Importing, see Exporting Cisco Prime Service Catalog Schema and Importing to the External Oracle Database, on page 3.

- Step 1 Login to the Virtual Appliance as the **shelladmin** user and the password that you had provided while installing the previous Prime Service Catalog Virtual Appliance. Once logged in, you will see the Shell Menu.
- Step 2 Back up database. Select Manage Databases > Backup Prime Service Catalog Database. While taking the backup of the database, you will be prompted for the following values:
 - a) **Do you want to proceed:**Enter y to proceed with the database backup.
 - b) Enter the desired name for the backup file CPSCUSER_backup_<timestamp>.dmp. For example: pscbdBackup.dmp

After the value for the last prompt is entered, the VM will perform a series of tasks to backup the Oracle database. This process will take a few minutes to complete. Wait until you see the message on the screen, which says that the Backup performed successfully. After the backup is done, the system will ask you whether you want to start all Prime Service Catalog services. You can start the services on the previous virtual appliance.

- **Step 3** Ensure database backup was successful.
- **Step 4** Login as the root user. From the Shell Menu, select **Login as Root**.
- **Step 5** Access the Oracle Backup Directory by executing the following command: cd /opt/cisco/.backups/oracle/cpscuser

What to Do Next

Install the 12.1 virtual appliance. For more information, see Installing Prime Service Catalog Virtual Appliance

Exporting Cisco Prime Service Catalog Schema and Importing to the External Oracle Database

- Step 1 Back up the database. For detailed procedure, see section Backing up the Database on Previous Cisco Prime Service Catalog Virtual Appliance, on page 2.
- **Step 2** Login as the root user on the Prime Service Catalog 12.0 Virtual Appliance.
- **Step 3** Go to the Oracle Backup Directory by executing the following command: cd /opt/cisco/.backups/oracle/cpscuser
- **Step 4** Execute the following command to copy the backup files from previous Virtual Appliance to the external Oracle database: scp CPSCUSER_backup_<timestamp>.dmp root@{IP_of_external oracle database}:/<external oracle directory>
- **Step 5** Enter the password of the external oracle database.
- Step 6 Execute the following command on the external oracle to create the directory in the external oracle database by logging in as system user:

 SQL> create or replace directory CPSC BACKUPS as 'opt/cisco/.backups/oracle/cpscuser'
- Step 7 Execute the following command on the external oracle to verify the location of the dump file in the specified directory:

 SQL> select directory_name, directory_path from dba_directories
- **Step 8** Execute the following command on the external oracle to import the backup files:

 impdp <systemuser>_schemas=cpscuser directory=CPSC_BACKUPS dumpfile=CPSCUSER_backup_<timestamp>.dmp

Retrieving Backup of Prime Service Catalog Database

You can either manually copy the database from the backup or you can let the system copy it from the remote location using the shell menu option. Follow the Automated Method if you want system to copy the database files from a remote machine. Choose the Manual Method if you want to manually copy the database from some location to your local folder.

Automated Method

This option is used to retrieve backup of Prime Service Catalog database hosted on a remote server, using SSH connection.

- Step 1 Login to the Virtual Appliance as the shelladmin user and the password that you had provided while Installing Prime Service Catalog Virtual Appliance 12.1. Once logged in, you will see the Shell Menu.
- Step 2 Select Manage Databases > Retrieve Remote Backup of Prime Service Catalog Database. While retrieving the backup of the database, you will be prompted for the following values:
- **Step 3** Do you want to continue?: Enter y to proceed.
- **Step 4** Enter the hostname or IP address of the remote server where the database backup file is located.
- **Step 5** Enter the username of the remote server. The default value, 'root' is the username for Prime Service Catalog database node.
- **Step 6** Enter the password of the remote server.
- **Step 7** Enter the directory path to the backup files. The default path is specific to Prime Service Catalog database node. If using a external database, enter the path to the backup files.
 - Note Ensure that the external server is connected via SSH.
- **Step 8** Select the file to be backed up from the list of files located in the specified location.
- **Step 9** Enter the desired name for the file retrieved on the local VA server. By default the same name is retained. After the value for the last prompt is entered, the VM imports the specified file from the remote server.

Manual Method

If you have already performed the steps to retrieve the backup of the prior virtual appliance, skip this procedure. Otherwise, use the following procedure to manually copy the database files from a local folder to the desired location.

DETAILED STEPS

	Command or Action	Purpose
Step 1	Login as the root user on the 12.1 Virtual Appliance.	
Step 2	Go to the Oracle Backup Directory by executing the following command:	cd /opt/cisco/.backups/oracle/cpscuser
Step 3	Execute the following command to copy the backup files from previous Virtual Appliance to the new 12.1 Virtual Appliance:	<pre>scp root@{IP_of_11.1_VA}:/opt/cisco/.backups/oracle/cpscuser/CPSC_11.1_backup.dmp.</pre>

	Command or Action	Purpose
Step 4	ownership and permissions:	chown oracle.oracle CPSCUSER_11.0_backup.dmp chmod a+r CPSCUSER_11.0_backup.dmp

What to Do Next

Upgrade to the latest Virtual Appliance database. For more information, see Upgrading the Cisco Prime Service Catalog Virtual Appliance, on page 1.

Upgrading to the Latest Virtual Appliance Database

Before You Begin

- Make sure the root user is enabled on the database node. From the Shell Menu, select **Manage Users** > **Enable Root Access**.
- Make sure the old database files are backed up. For more information on backing the old database, see Backing up the Database on Previous Cisco Prime Service Catalog Virtual Appliance, on page 2.
- In case the backup files are located in another location follow the procedure in section Retrieving Backup of Prime Service Catalog Database, on page 3 to copy the back up file to a local folder.
- Step 1 Login to the Virtual Appliance as the **shelladmin** user and the password that you had provided while Installing Prime Service Catalog Virtual Appliance 12.1. Once logged in, you will see the Shell Menu.
- **Step 2** Select **Manage Database** > **Restore Prime Service Catalog Database**. You will be prompted for the following values:
 - a) **Do you want to proceed:**Enter y to proceed with the database upgrade.
 - b) Select the backup file to restore:
 - **Note** At the end of the restore process, you will be prompted for starting Prime Service Catalog services. Enter **n** to proceed with the upgrade process.
- **Step 3** Update the python packages on the database and application nodes.
 - 1 Login to the node, select Manage Packages and patches > Update Prime Service Catalog Packages.
 - 2 Choose the python package and update the node.
 - 3 Logout of shelladmin after the update.

If you need access to the repository that contain the Cisco VA patch files on cisco.com, follow the steps in the section Requesting Access to Repository.

Step 4 Select Manage Database > Upgrade Prime Service Catalog Database from Earlier Appliance from the Prime Service Catalog node. You will be prompted for the following values:

Do you want to proceed:Enter y to proceed with the database upgrade.

Step 5 Ensure database upgrade was successful.

What to Do Next

Perform the post upgrade steps to complete the upgrade/migration process. For more information, see Performing Post-upgrade Tasks for the Virtual Appliance.

Performing Post-upgrade Tasks for the Virtual Appliance

- **Step 1** Log in to the Service Catalog application as a Site Administrator user.
- **Step 2** Update UCSD users, groups, infrastructure templates, containers.
 - a) From the main menu, navigate to Advanced Configuration > Integrations.
 - b) Select the UCSD connection and import data into Prime Service Catalog using click **Import all Objects** option from **Manage Integration** drop-down.
- **Step 3** (Optional) This step is applicable only if the Docker app was used in 11.0. After the upgrade, select an application template with Docker software, click on the software and do the following:
 - 1 Change the Docker version from 1.4.1 to the latest.
 - 2 Set the Docker registry to private registry or a public docker hub (for example: https://hub.docker.com/login/).
 - 3 Enter the values for RegistryUsername, RegistryPassword, and RegistryUserEmail.
 - 4 Click Save after updating the Docker configuration.
 - 5 Rebuild the Docker application service.