

Migrate Cisco Prime Infrastructure Data to Cisco Catalyst Center Using Prime Data Migration Tool Update 05

This chapter provides information on migrating data and important points related to migrating Cisco Prime Infrastructure to Cicso Catalyst Center using the Prime Data Migration Tool Update 05.

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Prerequisites for Using Prime Data Migration Tool Update 05

This section lists the prerequisites before using the Prime Data Migration Tool Update 05

- Ensure that you run the Cisco DNA Center AURA command line tool. The AURA tool performs a variety of health, scale and upgrade readiness checks for the Cisco DNA Center and the rest of the Fabric network. AURA ensures that Cisco DNA Center and its component services are all healthy and available before you start a migration. For more information on using Cisco DNA Center AURA tool, see Enhanced Visibility into the Cisco DNA Center using AURA.
- Ensure that you run the Cisco PDART (Cisco Prime Infrastructure Cisco DNA Center Assessment & Readiness Tool) analyzes a Cisco Prime Infrastructure deployment and assesses whether Cisco DNA Center supports the current deployment. For more information, see Cisco PDART - A Cisco DNA Center Readiness tool for the Cisco Prime Infrastructure.

Prerequisites for Using PI 3.10.4 Prime Data Migration Tool Update 05

Ensure that:

- You install Cisco Prime Infrastructure PI 3.10.4.
- You have Root or Super Users access privileges of Cisco Prime Infrastructure.
- You have access credentials of Cisco DNA Center.

• Refer the Cisco Prime Infrastructure and Cisco DNA Center Compatibility Matrix, on page 1.

Prerequisites for Using PI 3.9.x Prime Data Migration Tool Update 05

Ensure that:

- You install Cisco Prime Infrastructure PI 3.9.1 + PI 3.9.1 Update 02 or PI 3.9 + PI 3.9 Oracle Patch + PI 3.9.1 + PI 3.9.1 Update 02 on upgrade.
- If you need support for Catalyst 9800 16.12.x version, you will need to install PI_3_9_Oct_Oracle_patch-1.0.8.ubf patch before you install PI 3.9.1. For instructions to install the Oracle Patch, see *Installing Cisco Prime Infrastructure System Patch 3.9* section in the Cisco Prime Infrastructure 3.9 Administrator Guide.
- You have Root or Super Users access privileges of Cisco Prime Infrastructure.
- You have access credentials of Cisco DNA Center.
- Refer the Cisco Prime Infrastructure and Cisco DNA Center Compatibility Matrix, on page 1.

Prerequisites for Using PI 3.8.x Prime Data Migration Tool Update 05

Ensure that:

- You install Cisco Prime Infrastructure 3.8.1 Update 03.
- You have Root or Super Users access privileges of Cisco Prime Infrastructure.
- You have access credentials of Cisco DNA Center.
- Refer the Cisco Prime Infrastructure and Cisco DNA Center Compatibility Matrix, on page 1.

Prerequisites for Using PI 3.7.x Prime Data Migration Tool Update 05

Ensure that:

- You install Cisco Prime Infrastructure 3.7.1 Update 06.
- You have Root or Super Users access privileges of Cisco Prime Infrastructure.
- You have access credentials of Cisco DNA Center.
- Refer the Cisco Prime Infrastructure and Cisco DNA Center Compatibility Matrix, on page 1.

Migrating Data from Cisco Prime Infrastructure to Cisco DNA Center using Prime Data Migration Tool Update 05

This section helps you to migrate your Cisco Prime Infrastructure data from:

• PI 3.10.4 to Cisco DNA Center using PI 3.10.4 Prime Data Migration Tool Update 05.

- PI 3.9.1 Update 02 to Cisco DNA Center using PI 3.9.x Prime Data Migration Tool Update 05.
- PI 3.8.1 update 03 to Cisco DNA Center using PI 3.8.x Prime Data Migration Tool Update 05.
- PI 3.7.1 update 06 to Cisco DNA Center using PI 3.7.x Prime Data Migration Tool Update 05.

Follow this procedure to access the Cisco Prime Infrastructure to Cisco DNA Center migration by logging in to Cisco Prime Infrastructure:

Step 1 Choose Administration > Settings > System Settings > General > Prime Data Migration Tool, and then click Launch Prime Data Migration Tool to open Prime Infrastructure - Prime Data Migration Tool page.

For 3.9.1, and 3.10.4 you can either:

Click Prime Data Migration Tool in the Mega Menu page.

Or

Launch Prime Data Migration Tool in the Getting Started page. Choose **Settings** > **Getting Started** > **Prime Data Migration Tool**, and then click **Launch Prime Data Migration Tool** to open the **Prime Infrastructure** - **Prime Data Migration Tool** page.

Before you launch the Prime Data Migration Tool, click **Execute PDART** to run the pre-assessment to analyze a Cisco Prime Infrastructure deployment and assesses whether Cisco DNA Center supports the current deployment. To know more information on how to install and run the Cisco PDART, See Install and Run PDART.

Click **Download Report** to download the PDART report in the pdf format.

- Step 2 Click Job history, in the top-right corner of the Prime Data Migration Tool, the Prime Data Migration Job History window appears.
- Step 3 In the Prime Data Migration Job History window, do the following:
 - a) Click Force Sync to view the list of jobs that are force synced and the job details such as Cisco DNA Center IP, Start Time, End Time, Status and Info. You can click on the i icon next to the status column of the corresponding jobs to view the detailed information. You can also click on the hyperlinked completed or failed status to view the respective job summary in the Job Summary window.
 - b) Click **Dynamic Sync** to view the list of dynamically synced job details such as Cisco DNA Center IP, Start Time, End Time, Status, and Info. You can click on the i icon next to the status column of the corresponding jobs to view the detailed information.
 - c) You can search for the job history by choosing a category from the drop-down list such as Groups/Maps, Devices, ISE, CMX and Templates or by using the search box.
 - If you choose Devices or ISE or CMX categories, enter the IP address in the search box and click Search to retrieve the job details.
- Step 4 Click **Download Logs** in the top-right corner of the Prime Data Migration Tool, to download the prime migration logs in the .ZIP format.
- Step 5 Click Add Cisco DNA Center Server.
- **Step 6** Enter the following Cisco DNA Center server details:
 - a) Server IP Address or Hostname.
 - b) Username.
 - c) Password.
 - d) Confirm Password.

You can integrate only one Cisco DNA Center server at a time.

When an invalid IP (invalid TOFU certificate) is added in the 'IP Address' field, a pop up will be displayed with the error message 'Invalid Certificate' and "To delete the existing cerificate <u>click here</u>". You can remove the invalid certificate directly from the TOFU certification user interface by clicking the click here hyperlink in the error message.

Step 7 Click **Save**, to check server reachability.

Step 8 (Optional) Click **Multi Server Settings**, to archive, and restore the data that is migrated from Prime Infrastructure to DNA Center. It is recommended to use this option after Force Sync.

You can use the following options to archive the migrated data:

- List of Cisco DNA Center Archive Available Displays the list of available archives.
- Back-up Current Cisco DNA Center Pairing Backup the currently paired Cisco DNA Center server details in the migration tool.
- Back-up Current & Load Cisco DNA Center Archive Current Cisco DNA Center server and its details are backed up and you are prompted to load any other available archive by entering the IP address.
- **Delete Cisco DNA Center Archive** Deletes the selected DNA Center archives.

Step 9 In the Sync Settings window:

a) You can check for the Supported or Available Limits of the Cisco DNA Center server for the Site Groups/Site Maps, Devices, and Templates. Supported or Available Limits of Cisco DNA Center vareis based on the Cisco DNA Center server cores count.

The Supported/Available limits are specified in the following table:

Table 1: Supported/Available Limits

DNAC Core	Site Groups/Site Maps	Devices	Templates
44-Core	500	1000	1000
56-Core	1000	4000	1000
112-Core	2000	5000	1000

- b) Check the Enables automatic synchronization of data integrated with Cisco DNA Center check box to automatically synchronize any updates to the set of migrated Groups, Devices and CMX from Cisco Prime Infrastructure to Cisco DNA Center.
- c) Select the Include newly added data during dynamic synchronization check box to automatically migrate any new addition to the set of migrated Groups, Devices and CMX from Cisco Prime Infrastructure to Cisco DNA Center.

Note

Dynamic Synchronization does not support add, update or delete operations for the already migrated data and will not synchronize the data automatically for the following components:

- Maps
- · CLI Templates
- ISE Server

Maps, CLI templates, and ISE server migration is achieved only by Force Sync.

- This check box is enabled only if you select the **Enables automatic synchronization of data** integrated with Cisco DNA Center check box.
- During force synchronization, if the Enables automatic synchronization of data integrated with Cisco DNA Center check box is enabled, any modifications that are made through force synchronization to the Location Group and Devices entities are dynamically synced in Cisco DNA Center.
- If the **Enables automatic synchronization of data integrated with Cisco DNA Center** check box is selected, CMX is dynamically assigned to Cisco DNA Center floor groups, when Cisco Prime Infrastructure imports maps to CMX.
- d) If you select the **Enable CMX settings** check box, CMX will be pushed with floor groups. If you do not select the **Enable CMX settings** check box, CMX data will not be pushed to the Cisco DNA Center server.
- e) If you select the **Enable ISE settings** check box, ISE server details will be pushed. If you do not select the **Enable ISE settings** check box, ISE data will not be pushed to the Cisco DNA Center server.
- f) Select the **Migrate User Defined CLI Templates** check box to migrate the user-defined CLI and/or Composite Templates to Cisco DNA Center.

Step 10 Click **Next** to go to the **Select Groups** page.

Step 11 In the **Select Groups** window:

Expand the **Usage Details** section to view a summary of the site and device count details such as **Recommended**, **Selected for Migration**, and **Available**.

- a) Check the **Sync only new selection** checkbox to migrate only the newly selected groups for migration. If you click Force sync, only newly selected groups will be migrated to DNA Center.
- b) Uncheck the **Sync only new selection** checkbox to migrate only the newly selected groups and groups which is already migrated.
- c) If you want to delete only the mapping from Prime data migration to Cisco DNA Center and retain the instances of migrated sites in the DNA Center for the current force sync, uncheck the **Delete sites in Cisco DNA Center for the current Force Sync** check box.
- d) Check the **Delete sites in Cisco DNA Center for the current Force Sync** check box to delete the sites from Cisco DNA Center and remove the mapping from prime data migration to Cisco DNA Center for the current force sync.
 - Uncheck the **Delete sites in Cisco DNA Center for the current Force Sync** check box to remove the mapping from Prime Data Migration Tool to Cisco DNA Center for the current force sync
- e) If you want to move an entire group hierarchy to Cisco DNA Center, check the **Replicate Parent Hierarchy** check box and select the location groups in the **Prime Infrastructure Location Groups** pane.
 - By default, when you select Site Groups, the buildings, floors, and associated maps are also selected.
 - Click **Select DNAC Parent** below the **Prime Infrastructure Location Groups** pane to open the **Cisco DNA Center Site Groups** window.

Marked for Deletion label appears when you unselect an already migrated group with Delete sites in Cisco DNA Center for the current Force Sync check box, checked.

Marked for Unmapping label appears when you unselect an already migrated group with Delete sites in Cisco DNA Center for the current Force Sync check box, unchecked.

Select **Global** from the **Cisco DNA Center Site Groups** pane under which you want to move the PI groups and click **OK**. The selected groups will be added in the **Group Movement Log** pane with the label as **Marked for Migration**.

Update Civic Location window pops up to enter the civic location details for the selected building, if no location details are available. You can choose the **Address** or provide **Latitude** and **Longitude** values and click **Save** to update the civic details for the building which you selected.

f) If you want to move only a building or a floor to Cisco DNA Center under a different campus or area, click Select DNAC Parent below the Prime Infrastructure Location Groups pane to open the Cisco DNA Center Site Groups window.

Select a campus or an area from **Cisco DNA Center Site Groups** under which you need to move the building and select a building from Cisco DNA Center Site Groups under which you need to move the floor and click **OK**. The selected groups will be added in the **Group Movement Log** pane with the label as **Marked for Migration**.

If you click the **Close** or **Cancel** buttons in the **Cisco DNA Center Site Groups** window, the window closes without selecting any groups for migration and the **Group Movement Log** pane is not updated with the selected groups.

After you move the groups from Prime Infrastructure to Cisco DNA Center, **Marked for Migration** label appears on the moved groups.

Already migrated groups from Prime Infrastructure to Cisco DNA Center appear with the label as **Migrated** in the **Prime Infrastructure Location Groups** pane as well as the **Group Movement Log** pane.

The count of selected groups for migration appears as **Selected for Migration** under Sites. The count of selected devices for migration appears as **Selected for Migration** under Devices in **Usage details**.

Available groups count in Cisco DNA Center appears in the **Available** section under Sites and available devices count in Cisco DNA Center appears in the **Available** section under Devices in **Usage details**.

The **Prime Infrastructure Location Groups** pane lists all the Cisco Prime Infrastructure groups irrespective of any virtual domain.

Note

- Cisco Prime Infrastructure does not migrate devices assigned in a "Campus" to the Cisco DNA Center, when the migration tool is used. As a workaround, you can assign your devices to a "Building" or "Floor" type location group before using the migration tool.
- Devices assigned in the Location groups with 'Default' Group type are not migrated to Cisco DNA Center.

DNAC Site Builder: To create sites directly in Cisco DNA Center so that you can move your sites from Prime Infrastructure to Cisco DNA Center, click **DNAC Site Builder**.

In the **DNAC Site Builder** window, if you select the **Area** radio button, enter the following information:

- Site Name: Site name that you can create in Cisco DNA Center.
- Parent Site: Cisco DNA Center parent under which you can create the site.

In the **DNAC Site Builder** window, if you select the **Building** radio button to create a building in the Cisco DNA Center Area, enter the following information:

- Site Name: Building name that you can create in Cisco DNA Center.
- Parent Site: Cisco DNA Center parent under which you can create the building.
- Civic Location: Enter the civic location details under which you want to create the building.
- **GPS** (Latitude/Longitude): These co-ordinates are auto-populated.

Click Add to create a site or building in Cisco DNA Center and clicl Next.

Step 12 In the ISE & CMX Credentials window:

- a) Click the **ISE** tab to view the ISE server details that are present in Prime Infrastructure such as:
 - · Server Status
 - Server IP
 - Port
 - Server Name
 - Username
 - Shared Secret: You must ensure that this shared secret field is not empty.
 - Timeout: This value must not exceed 20.
 - Retries

If no ISE server is present in Prime Infrastructure, a **No data available** message appears.

- b) Click the CMX tab to can view the list of associated CMX servers for selected groups with the following details:
 - · Credential Status
 - · Server IP address
 - Device Name
 - Username
 - Password
 - SSH Username
 - · SSH Password

You must update the **SSH Username** and **SSH Password**, if it is not available for the respective CMX.

If the associated CMX is not found, then click Next

Note When the Cisco Prime Infrastructure – Cisco DNA Center migration tool is active and auto sync is enabled, then CMX will be dynamically pushed to Cisco DNA Center floor groups. Cisco DNA Center will there by track the location data for assigned groups.

- Step 13 If you check the Migrate User Defined CLI Templates check box in the Sync Settings page, then a new page Select CLI Templates appears after the CMX page.
- **Step 14** In the **Select CLI Templates** window:

- a) Non-Migrated templates list all the available CLI or Composite User Defined Templates available in Prime Infrastructure. You can select the templates need to be migrated to Cisco DNA Center.
- b) Migrated templates list all the migrated templates available in Cisco DNA Center. You can either update or delete these templates.

Note By default all the rows are selected. Selected templates from the list are updated and the deselected templates are deleted from Cisco DNA Center.

Step 15 Click Next.

Step 16 In the **Summary** window:

- a) You can view the overall summary of selected location groups, devices, associated maps, user-defined templates, CMX sesrvers, and ISE servers before migrating to the Cisco DNA Center.
- b) Click the **CLI templates** tab to view the selected CLI templates listed here. Based on the device selection in the groups you can Add/Update or Delete the CLI/Composite user defined Templates in Cisco DNA Center.
- c) In the **Sync Settings** tab, you can view the summary of the sync status.
- **Step 17** Click **Force Sync** to push data to the Cisco DNA Center server after the first migration.

A confirmation message appears **DNAC** data will be overwritten by **PI** data by the Force Sync. Click **Yes** to proceed or **No** to stop Force Sync.

A success message appears after the successful completion of the Force Sync operation.

What to do next

1. If you want to revert the site hierarchy in Cisco DNA Center, uncheck the migrated groups in the Prime Data Migration tool and click **Force Sync**. This step deletes the migrated groups in Cisco DNA Center.

If you want to revert the device assignment (devices will be unassigned from Cisco DNA Center sites and assigned to migrated groups if the same devices are present both in Cisco Prime Infrastructure groups and Cisco DNA Center sites), perform the following steps:

- Uncheck the migrated groups in the Prime Data Migration tool and click Force Sync. This step deletes the migrated groups and devices in Cisco DNA Center.
- Add and assign or provision the devices in Cisco DNA Center in the required sites.

The pre-migration site hierarchy appears in Cisco DNA Center.

To migrate your Cisco Prime Infrastructure data again using the Prime Data Migration Tool, unassign the devices in Cisco Prime Infrastructure for the required groups and migrate the data.

- 2. Multi-DNAC is supported from Prime Data Migration Tool Update 02.0. This feature allows you to migrate to multiple DNAC clusters (one DNAC server at a time) and retain the migration data for each DNAC server.
- **3.** Refer the important notes about Cisco Prime Infrastructure Cisco DNA Center migration, see Important Notes, on page 9.

Important Notes

This section contains important notes about Cisco Prime Infrastructure - Cisco DNA Center migration:

- You can integrate only one Cisco DNA Center server at a time.
- When the integration or initialization phase remains in the loading state for more than 5 minutes, check for any firewall restrictions, and ensure that no firewall restrictions are blocking or redirecting communication.
- You can migrate obstacles that are created within an image to the Cisco DNA Center.
- Maps Archives (tar.gz files) to be deleted manually post migration from /opt/CSCOlumos/maparchives, if your system is running with low disk space.
- Maps Migration fails when you migrate other groups along with the outdoor area to a non-global area.
- Outdoor area migration is not supported in Prime Data Migration tool.
- You can migrate ISE Server and CLI Templates along with the group migration.
- Groups with empty/null civic location values will be ignored for migration.
- When migrating ISE from Prime Infrastructure to DNA Center, ISE gets added to DNA Center in the failed state. To avoid this make sure to do the following:
 - · Activate PXGrid on ISE
 - Enable ERS on ISE
 - ISE's CLI and GUI password must be the same
- Cisco Catalyst 9800 Series Wireless Controllers can be managed in multiple Cisco Prime Infrastructure servers or in Cisco DNA Center and Prime Infrastructure server as long as the subscription limit is available. To get managed, a single Prime Infrastructure server consumes or requires 30 config telemetry subscriptions, and a single DNA Center requires 70 or more telemetry subscriptions. IOS XE 17.6 and later versions support 128 telemetry subscriptions.
- To connect with cisco.com, with respect to SWIM and Software Update, you must install PI_3_9_1_Security_Update_01 UBF along with PI 3.9.x Prime Data Migration Tool Update 03 UBF or PI 3 8 1 Security Update 01 UBF along with PI 3.8.x Prime Data Migration Tool Update 03 UBF.
- You use a single session of the migration at a time for the same Cisco Prime Infrastructure server and Cisco DNA Center server pair.
- Once the CMX is migrated to Cisco DNA Center, it will not be managed by Cisco Prime Infrastructure.
- Any legacy devices which are not supported by Cisco DNA Center chosen for migration will be added to Cisco DNA Center inventory under Device Type column "Unsupported Cisco Device".
- Devices managed with SNMP v2 and v3 can be migrated to Cisco DNA Center.
- Any devices managed only with SNMP v1 or SNMP v3 with DES protocol of AuthPriv credentials in Cisco Prime Infrastructure cannot be migrated to Cisco DNA Center.
- Also, bulk migration fails if any one of the devices managed by SNMP v1 or v3 with DES protocol of AuthPriv credentials.

- Only the basic information of the groups will be migrated, but not the rules and profiles assigned to group.
- After integration, while upgrading Cisco DNA Center to an unsupported version, error will be thrown as "Unsupported Version" and migration will stop.
- Access Points positioned in the maps in Cisco Prime Infrastructure will migrate to Cisco DNA Center, only if we manage its WLC devices with CLI Credentials.
- For Composite template Migration The associated template should not be System template. If any
 composite template with system template will not get migrated.
- During composite template migration all the associated template in composite template should be having the same device type. Otherwise migration will fail.
- Specific composite templates migration is not recommended till Cisco DNA Center 1.3.3.8 and 2.1.1.3. However it works in later DNA Center versions.
- DNA Center Version 2.2.1.0 specific update.
- Civic location is mandatory for Location Groups / Site groups migration especially from Cisco DNA Center 2.2.1.0 version.