CPS UDC MoP for Session Migration, Release 18.2.0 (Restricted Release)

First Published: 2018-05-11

Last Modified: 2018-05-11

Americas Headquarters
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
http://www.cisco.com
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 527-0883

CONTENTS

RESTRICTED RELEASE

IMPORTANT: This is a Short Term Support (STS) release with availability and use restrictions. Contact your Cisco Account or Support representatives for more information.

UDC Session Migration

This guide describes UDC Session Migration procedures and includes the following topics:

- Migrate UDC VMs
- Configure Session Migration
- Verify Session Migration

Migrate UDC VMs

Perform the following steps to migrate UDC VMs:

Step 1 Migrate existing CPS setup to CPS 13.x ISO.

Step 2 Initialize new UDC VMs.

For more information about initializing new UDC VMs, see *CPS User Data Convergence Migration MoP for VMWare* or *CPS User Data Convergence Migration MoP for OpenStack*.

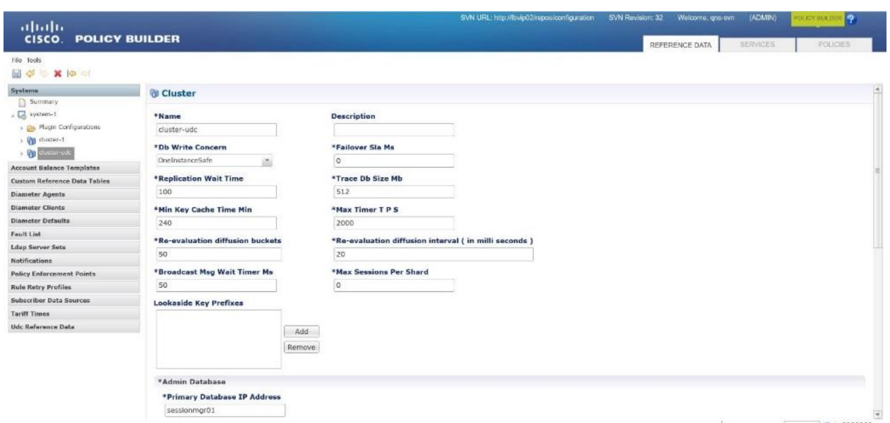
Step 3 Restart the qns processes on `pcrfclient01` and `pcrfclient02`.

Step 4 Add the following UDC Systems Configuration in Policy Builder and publish the configuration:

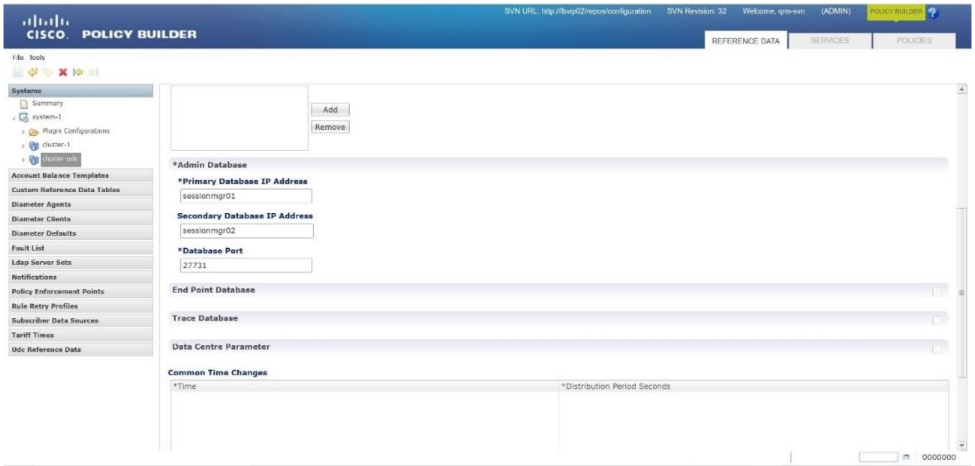
If you are using `systems.json` configuration, update the file with the following configurations:

1. Log in to Policy Builder.
2. Add a new cluster under **system-1**.
3. Navigate to **Systems**.
4. Click **Create Child: Cluster**.

   A new screen is displayed as follows:



5. Add the name **cluster-udc**.
6. Add the database IP and port address that are configured in mongoConfig.cfg for the Admin Database.



7. Add the remaining Policy Builder Systems Configuration for UDC.

   For information about systems configuration, see *CPS UDC Guide*.

   1. UD Interface Configuration
   2. cluster-udc Configurations
      i. UDC FE Configuration
      ii. Diameter Configuration
      iii. Ldap Server Configuration

NOTE: In order to configure Ldap Server Configuration, Ldap Server Sets have to be configured. To configure Ldap Server Sets, see *CPS Mobile Configuration Guide*.

Step 5 Publish Policy Builder configurations.

Step 6 Run `restartall.sh`.

Step 7 From Installer, log in to UDC Admin DB using mongo `sessionmgr01:xxxxx`.

Where `xxxxx` is the port number of the new UDC Admin DB.

Verify if the values for `seed_1`, `seed_2`, and `port` corresponds to the values that is in the `session.db.init` parameters in `/etc/broadhop/udc/qns.conf` by running the following command from the MongoDB shell:

```
set06:PRIMARY> db.shards.findOne()

{

        "_id" : 1,

        "seed_1" : "sessionmgr01",
```

```
        "seed_2" : "sessionmgr02",
        "port" : 27727,
        "db" : "session_cache",
        "online" : true,
        "count" : NumberLong(5),
        "lockTime" : ISODate("2017-06-29T20:47:43.690Z"),
        "isLocked" : false,
        "lockedBy" : null
}
```

Step 8 Verify that processes on each UDC VM are up and running by running the following command:

```
ssh udc<xx> service qns status
```

Step 9 Verify that QNS UDC Client is up and running by running the following command:

```
diagnostics.sh
```

The following clean diagnostics.sh output indicates that the QNS UDC Client is up and running:

(`all [PASS]`)

Configure Session Migration

Configuring session migration includes the following tasks:

- Domain Configuration
- Policy Configuration

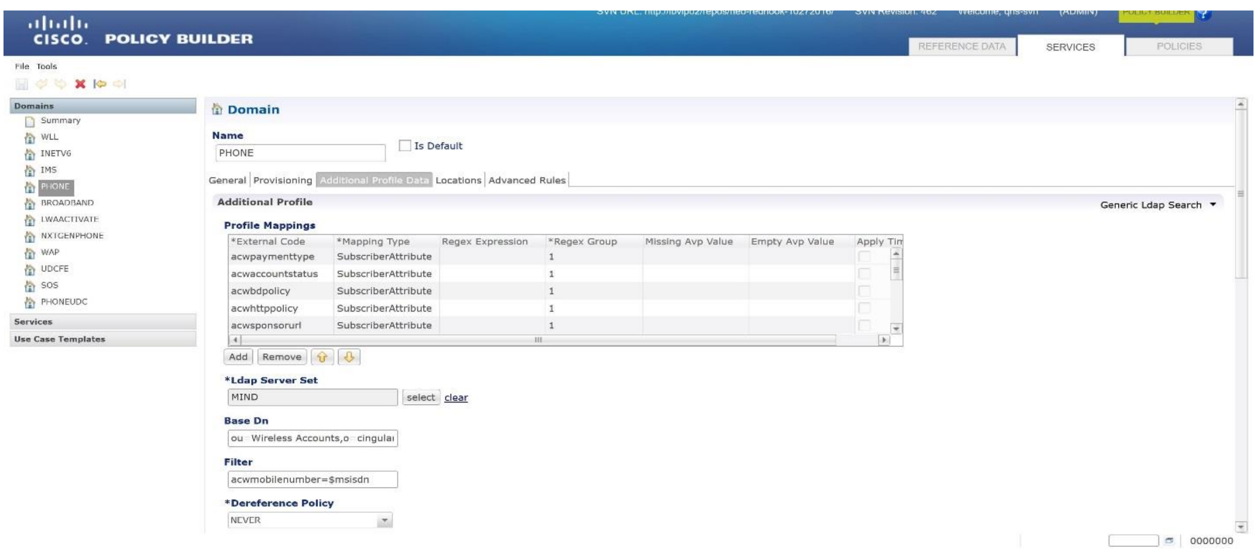
Domain Configuration

Step 1 In Policy Builder, navigate to Services.

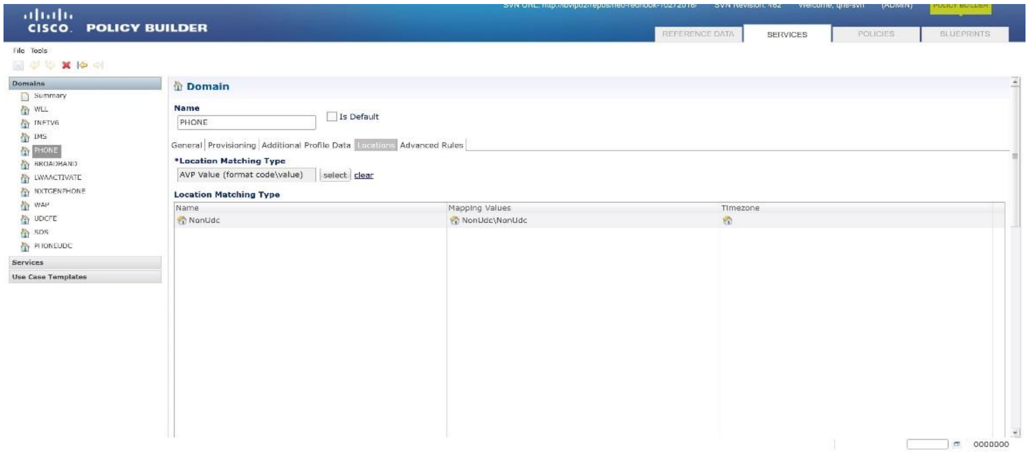
Step 2 Select Domain.

Step 3 Configure existing domains to work with the UDC deployment.

For example, the domain "PHONE" has **Generic Ldap Search** under the **Additional Profile Data** tab. Another corresponding domain called "PHONEUDC" with UDC Profile in it has to be created to be used by the UDC Client on the QNS VM.



Step 4 Ensure that in the **Locations** tab of the "PHONE" domain, in the **Location Matching Type** table, the entry has the **Mapping Values** as "NonUdc\NonUdc."



Step 5 Add a corresponding UDC-specific domain, for each existing domain that has **Generic Ldap Search** under **Additional Profile Data**.

Step 6 Create a new domain named **PHONEUDC**.

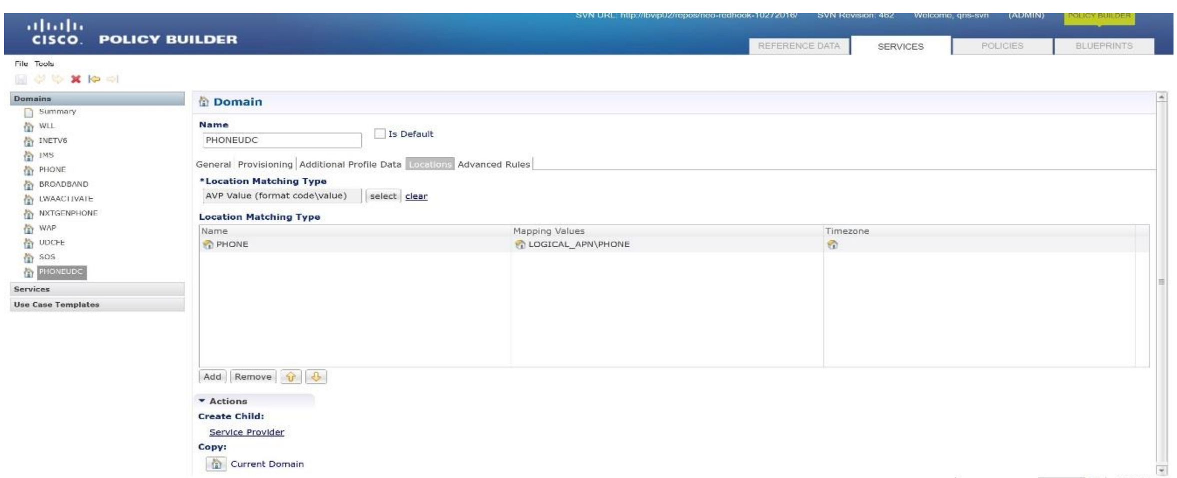
Step 7 In the “PHONEUDC” domain, under the **General** tab, in the **Authorization** section, select **Allow All Users**.

Step 8 In the “PHONEUDC” domain, under the **Additional Profile Data** tab, select **UDC Profile**.

For more information about configuring UDC Profile, refer to *CPS UDC Guide*.

Step 9 Under **Locations** tab in “PHONEUDC” domain, select “AVP Value (format code\value)” for **Location Matching Type**.

Step 10 Add a new entry in the **Location Matching Type** table with the **Name** as “PHONE” and the **Mapping Values** as “LOGICAL_APN\PHONE”



Step 11 Under **Advanced Rules** tab, select **Default Service** as the service that is used by the **PHONE** domain.

Step 12 Create a new domain named "UDCFE."

Step 13 Navigate to the **Authorization** section under **General tab** in the "UDCFE" domain.

Step 14 Select **Allow All Users**.

Step 15 Under the **Additional Profile Data** tab, select **Generic Ldap Search** and enter all possible attributes from all domains.

Step 16 Under **Locations** tab in "UDCFE" domain, select "AVP Value (format code\value)" for **Location Matching Type**.

Step 17 Add a new entry in the **Location Matching Type** table with the **Name** as "UDCFE" and the Mapping Values as "UDCFE\UDCFE".

Step 18 Under the Advanced Rules tab, select the Default Service as the service that is used by the "PHONE" domain.

Policy Configuration

Step 1 Navigate to **Policy** tab.

Step 2 Under **Policies** navigate to **Initial Blueprint**.

Step 3 Add the section if there is no existing **Pre session policies** section.

Step 4 Select **Configured Extension Point**.

The dialog box is displayed.

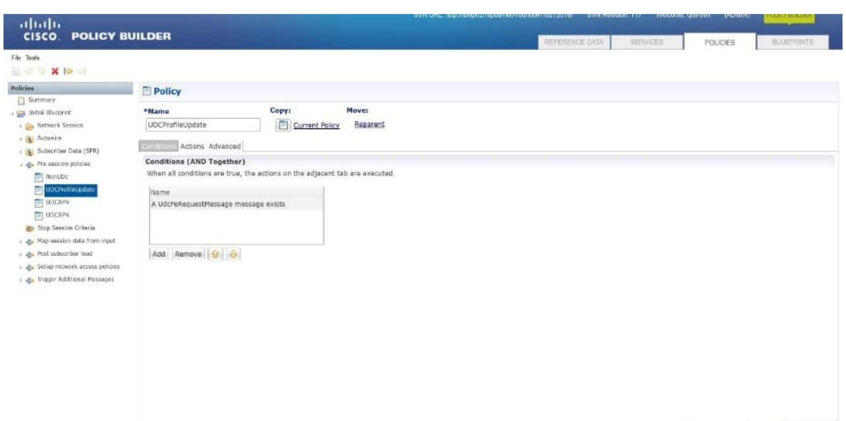
Step 5 Expand **Initial Blueprint**.

Step 6 Select **Pre session policies**.

Step 7 Click **ok**.

Step 8 Under **Pre session policies**, add another policy named "UDCProfileUpdate".

Step 9 Under **Conditions** tab, add a new condition **A UdcFeRequestMessage message exists**.



Step 10 Under **Actions** tab, add a new action **Add a policy derived AVP**.

Step 11 Under **Input Variables**, add **code** with the following details:

Type: Literal

Operator: =

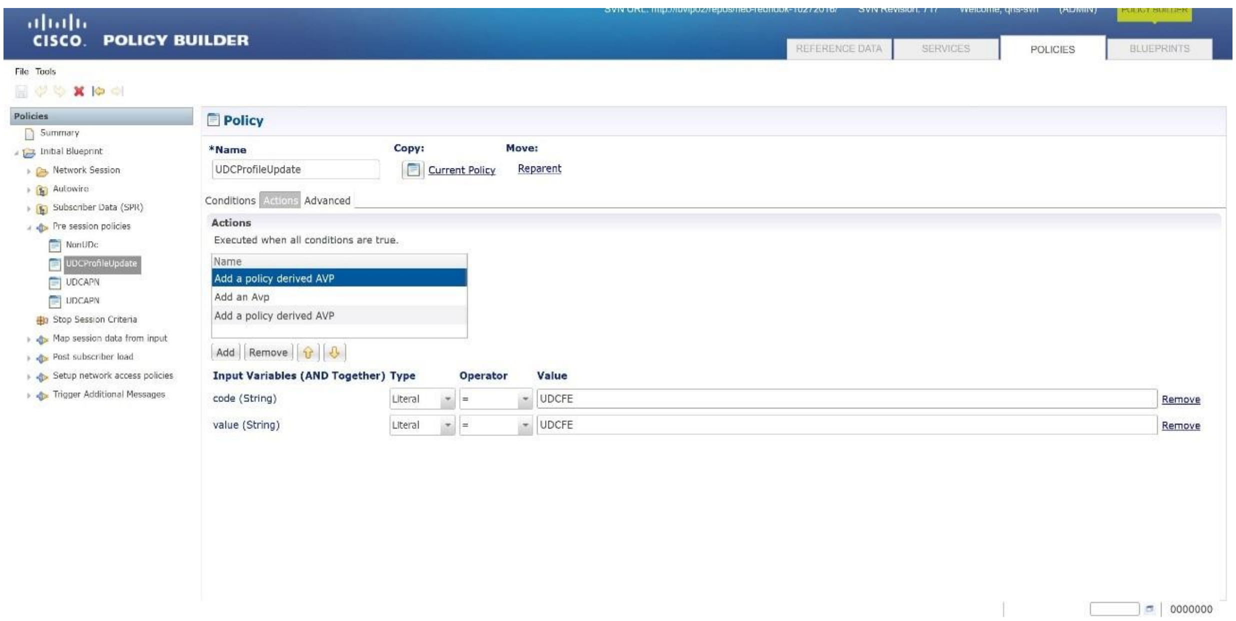
Value: UDCFE

Step 12 Add **string** with the following details:

Type: Literal

Operator: =

Value: UDCFE



Step 13 Publish Policy Builder configuration.

Verify Session Migration

After migration, you need to monitor the increase in the number of sessions on UDC session cache to verify if all subscribers are migrated to the UDC cache.