## Objective

This guide provides basic steps on how to register 6800 Series, 7800 Series, and 8800 Series multiplatform phones to a BroadWorks platform.

## Configure BroadWorks

To configure BroadWorks for a phone, perform the following steps:

1.  Download the CPE Kit from BroadSoft Xchange.

    To get the latest CPE kits, go to this URL:
    https://xchange.broadsoft.com.

2.  Upload the most recent DTAF file to the Broadworks (system level) server.

    For more information, go to this URL:
    (https://xchange.broadsoft.com/node/1031047). Access the
    *BroadSoft Partner Configuration Guide* and see the section
    "*Configure BroadWorks Device Profile Type*".

3.  Configure Broadworks Device Profile Type.

    For more information on how to configure the device profile type, go to this URL:
    (https://xchange.broadsoft.com/node/1031047). Access the
    *BroadSoft Partner Configuration Guide* and see the section
    "*Broadworks Device Profile Type Configuration*".

## BroadWorks System and Subscriber Configuration Files

There are four template files that contain System and Subscriber Level Configuration on BroadWorks. The main tags in each tag are:

*   CiscoDev-3PCC_Bootstrap.xml:

DNS (will receive by DHCP if in use) - %DNS_SERVER_1%

(this "%" tags are configured as tags on the server)

Profile Rules

*   CiscoDev_System.xml

    SIP Proxy/Domain - %BWHOST-1%

    Outbound Proxy/SBC (if needed) - %SBC_ADDRESS_1%

*   CiscoDev_TypeXXXX.xml (where XXXX is the phone model type in the following format:)

    CiscoDev_Type*6821*.xml

    CiscoDev_Type*6861*.xml

    CiscoDev_Type*68xx*.xml

    CiscoDev_Type*78xx*.xml

    CiscoDev_Type*7832*.xml

    CiscoDev_Type*8832*.xml

    CiscoDev_Type*88xx*.xml

    CiscoDev_Type*88x5*.xml

The above file is automatically linked to from the bootstrap.xml based on the model type of the phone populating the bootstrap.xml file.

    Upgrade Rule (if a firmware upgrade is needed)

*   $MA_CiscoDev.xml (where $MA is a macro variable that automatically populates the MAC address of the phone in the filename).

*   Enable Phone Lines

Configure SIP credentials (for example, %BWLINEPORT-1% for user id and %BWAUTHPASSWORD-1% for the password

Enable SIP Authentication

If using the default CPE kit, and the Broadworks configuration has been completed correctly all the above (apart from the very first profile rule, by default bootstrap.xml) will be populated automatically, if tags are being set on BW at system/group level.

There are some parameters that are essential for the MPP phones to work and for your phone environment. For more information, go to this URL:
(https://xchange.broadsoft.com/node/1031047). Access the
*BroadSoft Partner Configuration Guide and* see the sections
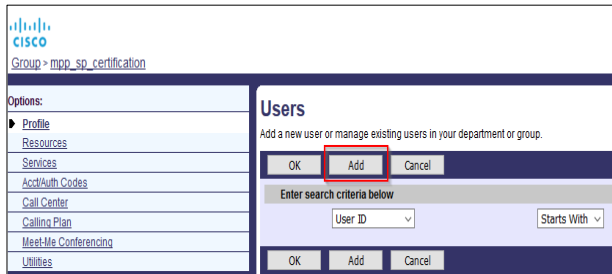"*System Level Configuration*" and "*Subscriber Level Configuration*".

## Device Management Configuration

For more information, go to this URL:
(https://xchange.broadsoft.com/node/1031047). Access the
*BroadSoft Partner Configuration Guide* and see the section
"*Device Management Configuration*".

## Create System Default Tags

On the BroadWorks server, select **System** > **Resources** > **Device Management Tag Sets** and add the following tags if they don't exist:

*   %DNS_SERVER_1%

*   %XSP_ADDRESS%

*   %SNTP_SERVER_1%

## Create Device Type-Specific Tags
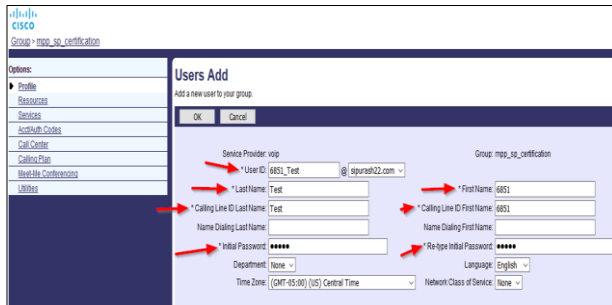
On the BroadWorks server, select **System > Resources > Device Management Tag Sets** and add the following tags if they don't exist:

- %ACCESS_PROTOCOL%

    %SBC_ADDRESS_1%

## Configure Device Profile on Broadworks

## Identity/Device Profile Type Credentials

1. On the BroadWorks server, select Group > Resources > Identity/Device Profiles.

    For more information, go to this URL: (https://xchange.broadsoft.com/node/1031047). Access the *BroadSoft Partner Configuration Guide* and see the section "*Create Device Profile Instance*".

    

2. Click **Add**.



3. In the **Identify/Device Profile Add** screen, add the following field values:



Identity/Device Profile Name

Identity/Device Profile Type (this is the profile type previously uploaded with the DTAF)

MAC Address

For the remaining fields, the default values are used to facilitate the phone to register with a non-TLS 1 to 1 MAC address mapping.

4. Click **OK** to save the Device Profile configuration.

5. Click Files to view the list of files that you might use later for the phone provisioning.



**Important**: Cisco recommends that you copy this URL because this URL is used later for phone provisioning.

In the Profile Rule field on the phone, the bootstrap file is loaded first. The bootstrap file points the phone to subsequent files.

## Configure Users on Broadworks

1. On the BroadWorks server, select **Group > Users.**



2. Click **Add**.

3.   Enter values in the following mandatory fields.



User ID

First Name

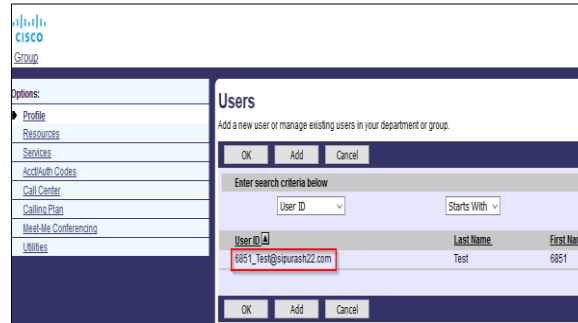Last Name

Calling Line ID First Name

Calling Line ID Last Name

Initial Password

For the remaining fields, the default values are used.

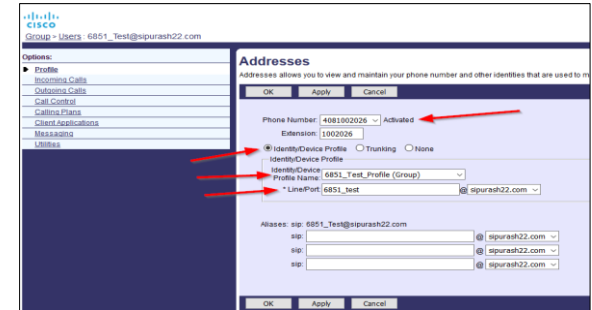## Associate User to Device profile

1.   On the BroadWorks server, select **Group > Users** and search for the newly created user.



2.   On the **User** screen, click a link in the User ID column.

3.   Click **Addresses.**



4.   In the **Addresses** screen, enter values in the following fields:



Pick an available Phone number

Select Identity/Device Profile

Select the Profile Name previously created

Fill out the Line/Port field
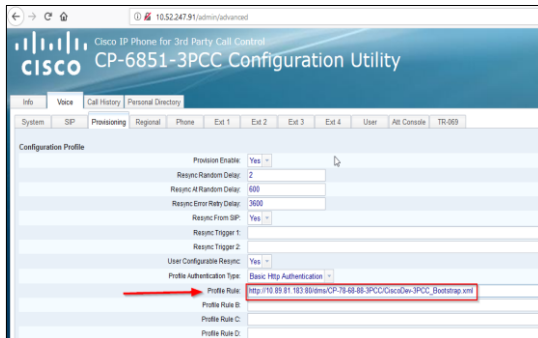
## Skip Device Onboarding

1.   On the BroadWorks server, select **Group > Resources > Identity/Device Profiles**. Search and select the appropriate profile.

2.   Select **Device Activation > Skip device onboarding.**
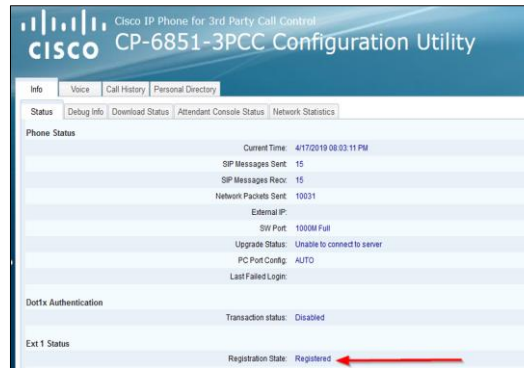
## Phone configuration

### Manual Provisioning

1. Login to the phone web page as admin/advanced options:
   (*http://IP_ADDRESS_PHONE/admin/advanced*).

2. Select **Voice > Provisioning** (no username or password is required by default).

3. In the **Profile Rule** field, enter the profile rule with the Bootstrap file. This file link is previously copied from the **Device Files** tab in Broadworks server.



4. Click **Submit Changes**.

   The phone retrieves the configuration file from the provisioning server and registers to the server.



## References

- https://xchange.broadsoft.com/node/1031047

- https://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cuipph/MPP/8800/english/adminguide/p881_b_8800-mpp-ag.pdf

- https://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cuipph/MPP/8800/english/provisioning/p881_b_mpp-8800-provisioning-guide.pdf