This application note will guide you through connecting the Wahsega Labs Access Control Intercom to the Cisco Unified Communications Manager (CUCM).
Preface

Important Notice

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1. Set up your Wahsega device.
   

   b. Fill in your network parameters on the Network page.

   c. Fill in information regarding your intercom's SIP account on the Accounts page.

2. Log in to Cisco Unified CM Administration webpages.

3. Activate the IP Voice Media Streaming App if you have not done so already.
   
a. Pull down the Navigation menu in the top-right corner of the page.

   b. Select Cisco Unified Serviceability.

   c. Click Go.

   d. On the Cisco Unified Serviceability page, pull down the Tools menu and select Service Activation.

   e. Check the box next to Cisco IP Voice Media Streaming App.

   f. At the bottom of the page, click Save.

   g. In the Activation Status column, the Cisco IP Voice Media Streaming App should now be listed as Activated.
4. Set up a new user in the Cisco Unified CallManager (CUCM).

   a. On the Cisco Unified CM Administration page, pull down the User Management menu and select End User.

   b. On the Find and List Users page, click Add New.

   c. On the End User Configuration page, fill in the required (*) fields with your device’s information.

      i. For User ID, enter your Wahsega device's Username/Number as entered in the Wahsega configuration webpages under Accounts (in Step 1c).

         1. If you used an Authentication Username for your Wahsega device (on the Accounts page, under the Advanced tab), enter that Authentication Username in the CUCM User ID field.

         2. If you used an Authentication Username for your Wahsega device (on the Accounts page, under the Advanced tab), enter the password (from the Accounts page, under the General tab) in the CUCM Digest Credentials field. Enter it again in the Confirm Digest Credentials field.

      ii. If you entered a password for your Wahsega device (on the Accounts page, under the General tab), make sure to enter that password in the CUCM Password field. Enter it again in the Confirm Password field.

   d. Click Save.
e. In a moment, the top of the page should read, *Update Successful or Add Successful.*

**5. Set up new phone device in the CUCM.**

a. On the *Cisco Unified CM Administration* main page, pull down the *Device* menu and select *Phone.*

b. On the *Find and List Phones* page, click *Add New.*

c. On the *Add a New Phone* page, pull down the *Phone Type* menu and select *Third Party SIP Device (Basic).*

d. Click *Next.*

e. On the *Phone Configuration* page, enter the appropriate values for your Wahsega device in the required (*) fields.

   i. **MAC Address**

      1. Enter the MAC address for your Wahsega device, as found on your device’s packaging and/or on the device itself. It can also be found in the *Status* bar on the right side of the Wahsega configuration webpages.

      2. The MAC address should be entered in a 12-character format, with no spaces or dashes (e.g., *00102A030B1C*).
ii. Description
   1. This field is not required. It is for your reference only, so type in any name you’d like.

iii. Device Pool
   1. Select Default.

iv. Phone Button Template
   1. Select Third-party SIP Device (Basic).

v. Common Phone Profile
   1. Select Standard Common Phone Profile.

vi. Device Mobility Mode
   1. Select Default.

vii. Owner User ID
   1. Select the name that you entered into the User ID field when setting up your new user in CUCM (Step 4c).

viii. Use Trusted Relay Point
   1. Select Default.

ix. Presence Group

x. MTP Preferred Originating Codec
1. Choose your preferred codec here. 711ulaw is the standard default codec.

xi. Device Security Profile


xii. SIP Profile

1. Select Standard SIP Profile.

xiii. Digest User

1. Select the name that you entered into the User ID field when setting up your new user in CUCM (Step 4c).

f. Check the box next to Media Termination Point Required.

g. Click Save.

h. After a moment, the page should refresh and display a popup which reads, ▲Click on the Reset Phone button to have the changes take effect.

i. Click OK.

i. You’ll need to reset your device once the page refreshes. At the bottom of the Phone Configuration page, click Reset.

j. In the Device Reset popup, click Reset once more.

k. Click Close.
l. Once the device reset is completed, you should see **Add successful** at the top of the *Phone Configuration* page.

6. **Create a new Directory Number (DN).**

   a. On the left side of the *Phone Configuration* page, look for a box labeled *Association Information*, containing *Modify Button Items*.
      
      i. Click *Line [1] – Add a new DN*.

   b. On the *Directory Number Configuration* page, find the *Directory Number* field.

   c. At *Directory Number*, enter the *Username/Number* of the Wahsega device you’d like to associate. (This is the number you configured on the *Accounts* page of your Wahsega configuration pages, under the *General* tab.)

   d. At the bottom of the page, click *Save*.

7. **Associate the Directory Number to the new user**

   a. At the top of the page, pull down the *User Management* menu and select *End User*.

   b. On the *Find and List Users* page, click the *Find* button under *User*.

   c. You should now see all pre-configured Users listed under *User ID*. 
d. Click the User ID that you set up in Section 4 (above).

e. On the *End User Configuration* page, click the *Device Association* button.

f. On the *User Device Association* page, click the *Find* button.

g. If you leave the search box empty, all user devices should appear below.

h. Look for your device's MAC address under *Device Name* and tick the box to the left of it.

i. Click the *Save Selected/Changes* button at the bottom of the page.

j. Pull down the *Related Links* menu in the top right corner and select *Back to User*. Click *Go*.

k. On the *End User Configuration* page, verify that the correct device’s MAC address or Cisco identifier is listed under *Device Associations* in the *Controlled Devices* window.

l. Under *Directory Number Associations*, pull down the *Primary Extension* menu and choose the number you’d like to associate with the End User. This should be the same number you entered as *Directory Number* in **Step 6c**.

m. At the bottom of the page, click *Save*. 
8. Check the registration

a. At the top of the page, pull down the Device menu and select Phone.

b. Under Phone on the Find and List Phones page, click the Find button.

c. Your new device should appear with its status listed as Registered with [IP address].