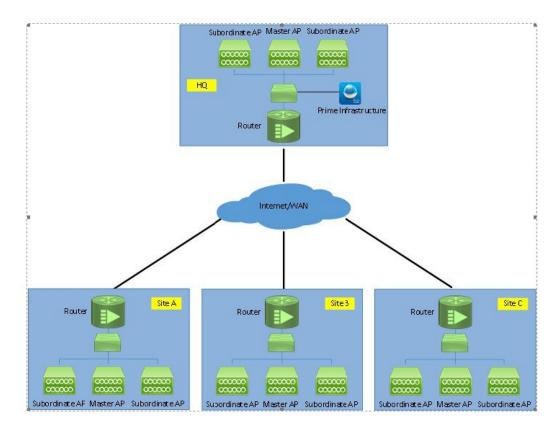


## Managing Mobility Express Deployments from Cisco Prime Infrastructure

Cisco Prime Infrastructure 3.01 or later can be utilized to monitor multiple instances of Cisco Mobility Express deployment.



• Adding Mobility Express to Prime, page 2

## **Adding Mobility Express to Prime**

Perform the following steps to add the controllers:

## Procedure

**Step 1** Login to Cisco Prime

| ດເຮດດ   |
|---|
|   |
| Cisco Prime Infrastructure  |
| Version: 3.0<br><u>View Installed Updates</u>   |
| Username<br>Password<br>Login   |
| Language: English   <u>日本語</u>  |
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Step 2 Navigate to Configuration / Network / Network Devices, click on Add Device.

| 😑 🖞  | tructure   |                |              |
|--|--|----------------|--------------|
| ↑ Configuration / Network                        | ork / Network Devices 🔺                          |                |              |
| Device Groups                                    | Device Groups<br>All Devices                     |                |              |
| <* "≣ +  | X Delete Z Edit Sync Groups & Sites V Add Device | Bulk Import Ex | xport Device |
| Q Search All<br>All Devices ⑦<br>▼ Device Type ⑦ | Device Name A Reachability IP Address            | DNS Name       | Device Type  |
|  | No determination                                 |                |              |

1

**Step 3** Enter the IP address of the Mobility Express controller.

| * General  |   | * General Parameters | (      |   | 1 |
|------------|---|----------------------|--------|---|---|
|            |   | IP Address           | e.     | 8 |   |
| * SNMP     |   | O DNS Name           |        |   |   |
|            |   | License Level        | Full   | • | 0 |
| Telnet/SSH |   | Credential Profile   | Select | • | 0 |
| HTTP/HTTPS | • |                      |        |   |   |
| IPSec      |   |                      |        |   |   |
|            |   |                      |        |   |   |

**Step 4** Enter the SNMP Parameters and click Add.

ſ

**Note** You must configure the SNMP community strings on the Mobility Express controller prior to adding the device in Prime.

| * General 🗸 |   | Version                  | v2c            | •   | 1      |
|-------------|---|--------------------------|----------------|-----|--------|
|             |   |                          | * SNMP Retries | 2   | 1      |
| * SNMP      |   |                          | * SNMP Timeout | 10  | (secs) |
| Telnet/SSH  | • |                          | * SNMP Port    | 161 | )      |
|             | • | * Read Community         |                |     | 0      |
| HTTP/HTTPS  | • | * Confirm Read Community |                |     |        |
|             |   | Write Community          |                |     | 0      |
| IPSec       |   | Confirm Write Community  |                |     |        |

Step 5 After the device is added, it shows up in the All Devices list.

| Configuration / Netw  | ork / Network Devices 🔺      |        |                |     |               |                    |              |                      |
|---|------------------------------|--------|----------------|-----|---------------|--------------------|--------------|----------------------|
| Device Groups   | Device Groups<br>All Devices |        |                |     |               |                    |              | Selected 0 / T       |
| ← " " +   | X Delete Z Edit              | Sync   | Groups & Sites | • A | Id Device B   | ulk Import         | » s          | how Quick Filter     |
| Q Search All All Devices (j)                                | Device Name                  | Reacha | IP Address     |     | DNS Name      | Device Type        | Admin Status | Last Inventory Colle |
| <ul> <li>Device Type (i)</li> <li>Unified AP (i)</li> </ul> | MobilityExpress              |        | 172.20.229.45  |     | 172.20.229.45 | Cisco Aironet 1850 | Managed      | Completed            |

**Step 6** To view the list of WLANs, navigate to **Network Devices > Device Groups > Device Type > Wireless Controller** and select the Mobility Express controller you added in Step 4.

I

| / Device Groups / Device Typ       | e / Wireless     | Controller / Mol | bilityExpress 🔺 |                        |                         |              |                |
|------------------------------------|------------------|------------------|-----------------|------------------------|-------------------------|--------------|----------------|
| evice Details Configuration Applie | ed/Scheduled Ter | mplates Configu  | uration Archive | mage Latest Config Aud | it Report               |              |                |
| Features                           | WLANS            |                  |                 |                        |                         |              |                |
| <* ≡ ♀*                            | WLAN ID          | Profile Name     | SSID            | Security Policies      | No. of Mobility Anchors | Admin Status | No. of Clients |
| ▼ System                           | 1                | rtayal-me        | rtayal-me       | [WPA2] [Auth( PSK)]    | 0                       | Enabled      | 2              |
| Summary<br>CLI Sessions            | 2                | rtayal-psk       | rtayal-psk      | [WPA2] [Auth( PSK)]    | 0                       | Enabled      | 0              |
| DHCP Statistics                    | 3                | ME-WPA2-ACS      | ME-WPA2-ACS     | [WPA2] [Auth( 802.1X)] | 0                       | Enabled      | 0              |
| Multicast                          |                  |                  |                 |                        |                         |              |                |
| Spanning Tree Protocol             |                  |                  |                 |                        |                         |              |                |

Step 7 To view the list of AP, navigate to Monitor > Wireless Technologies > Access Point Radios

| Monitor / Wirele | us reennologies   | , ACC233 FU   | ant Radios  |              |               |                 | G                  | enerate report for s | elected APs \$ | Select a report - | 0<br>. • Go   |
|------------------|-------------------|---------------|-------------|--------------|---------------|-----------------|--------------------|----------------------|----------------|-------------------|---------------|
|                  |                   |               |             |              |               |                 |                    |                      |                |                   | Total Entries |
| AP Name          | Ethernet MAC      | IP Address    | Radio       | Map Location | Controller    | Controller Name | Radio Client Count | Admin Status         | AP Mode        | Oper Status       | Alarm Status  |
| APBC16.6514.35D5 | bc:16:65:14:35:d5 | 172.20.229.59 | 802.11b/g/n | Unassigned   | 172.20.229.45 | MobilityExpress | 0                  | Enabled              | FlexConnect    | Up                |               |
| APBC16.6514.35D5 | bc:16:65:14:35:d5 | 172.20.229.59 | 802.11a/n   | Unassigned   | 172.20.229.45 | MobilityExpress | 0                  | Enabled              | FlexConnect    | Up                |               |
|                  | f0:7f:06:92:cc:78 | 172 20 229 51 | 802.11b/g/n | Unassigned   | 172.20.229.45 | MobilityExpress | 0                  | Enabled              | FlexConnect    | Up                |               |
| APF07F.0692.CC78 | 10.71.00.02.00.10 |               |             |              |               |                 |                    |                      |                |                   |               |

**Step 8** To configure WLANS from Prime on Mobility Express, navigate to **Configuration > Feature & Technologies** under **Template**.

|               | * | Configuration  | ture        |               |              |            |
|---------------|---|--|-------------|---------------|--------------|------------|
| O Search Menu |   | Network<br>Network Devices                               | nologies    | Access Poi    | int Radios   | dir View 🔺 |
| Dashboard     |   | Wireless Technologies                                    |             |               |              |            |
| Monitor       | • | Chokepoints<br>WiFi TDOA Receivers                       | et MAC      | IP Address    | Radio        | Map Locat  |
| Configuration | • | Access Point Radios<br>WLAN Controller Auto Provisioning | 65:14:35:d5 | 172.20.229.59 | 802.11b/g/n  | Unassigne  |
| Inventory     | i | Templates  | 65:14:35:d5 | 172.20.229.59 | 802.11a/n    | Unassigne  |
| inventory     |   | Features & Technologies                                  | 16:92:cc:78 | 172.20.229.51 | 802.11b/g/n  | Unassigne  |
| Maps          | • | Shared Policy Objects                                    | 6:92:cc:78  | 172.20.229.51 | 802.11a/n/ac | Unassigne  |

Step 9 Navigate to Controller > WLAN > WLAN Configuration. Enter the Template name and the Template Detail.

1

| E dudu Prime Infrastructure  |   | 🔍 💌 Application Search                                | 49 |
|--|---|---|----|
| Configuration / Templates / F Templates  | Templates / Features and Technologies / Controller / WLANs  |   |    |
| <ul> <li>Features and Technologies</li> <li>App Visibility &amp; Control</li> <li>Controller</li> <li>802.11</li> <li>802.11 or n or ac</li> </ul>   | WLAN Configuration   Template Basic  Name Description Tags  | Author root<br>Feature Category WLAN Configuration    |    |
| <ul> <li>802.11b or g or n</li> <li>Application Visibility And Control</li> <li>CLI</li> </ul>   | Validation Criteria     Bevice Type     CUWN (default)     V  | )   |    |
| <ul> <li>FlexConnect</li> <li>IPv6</li> <li>Location</li> <li>LyncSDN</li> <li>Management</li> <li>Mesh</li> <li>Netflow</li> <li>PAIIP</li> <li>Security</li> <li>System</li> <li>Tunneling</li> <li>WLANs</li> <li>AP Groups ()</li> <li>Policy Configuration ()</li> <li>WLAN Configuration ()</li> </ul> | Template Detail     General Security QoS Advanced HotSpot     Scan Defer Prionty      Scan Defer Time 100 (ms)     DTIM Period <sup>®</sup> 802.11a/n (1-255) 1 (ms)     802.11b/g/n (1-255) 1 (ms)     mDNS Configuration <sup>®</sup> mDNS Snooping <sup>®</sup> Enable     mDNS Profile none ▼ | Voice   | ¥  |
| <ul> <li>► mDNS</li> <li>► Interfaces</li> <li>▼</li> </ul>  |   | Media Session Snooping Enable<br>KTS based CAC Enable |    |

Step 10 On the Advanced Tab, make sure mDNS profile is set to none as it is not supported on Mobility Express.

| e vilue Prime Infrastructure                     |  |                           |                | (                           | 🗸 🗸 Application Search            | 🐥 😣 49                      | root - ROOT-DOM   |
|--|--|---------------------------|----------------|-----------------------------|-----------------------------------|-----------------------------|-------------------|
| ↑ Configuration / Templates / I                  | Features & Technologies 🔺  |                           |                | 24.45 B                     |                                   |                             |                   |
| Templates  | Templates / Features and Technologies / Controller<br>WLAN Configuration | /WLANs                    |                |                             |                                   |                             |                   |
|  |  |                           |                |                             |                                   |                             |                   |
| O Search All                                     | <ul> <li>Template Detail</li> </ul>                                      |                           |                |                             |                                   |                             |                   |
| <ul> <li>Features and Technologies</li> </ul>    | General Security QoS   | Advanced                  | HotSpot        | Policy Mappings             | i                                 |                             |                   |
| <ul> <li>App Visibility &amp; Control</li> </ul> |  | Contraction of the second |                |                             |                                   |                             |                   |
| ▼ Controller                                     | Wired LAN  |                           |                |                             |                                   |                             |                   |
| ▶ 802.11   | *Profile Name  |                           |                |                             |                                   |                             |                   |
| ▶ 802.11a or n or ac                             | *SSID  | pi-wlan-me                |                |                             |                                   |                             |                   |
| ▶ 802.11b or g or n                              | Admin Status   | Cenable Enable            |                |                             |                                   |                             |                   |
| Application Visibility And Control               | Configure Wlan Id  | Enable                    |                |                             |                                   |                             |                   |
| ► CLI  |  |                           |                |                             |                                   |                             |                   |
| FlexConnect                                      | Security Policies  | None                      |                |                             |                                   |                             |                   |
| ▶ <i>IP</i> v6                                   | 0  |                           |                |                             |                                   |                             |                   |
| <ul> <li>Location</li> </ul>                     | Radio Policy   | All                       | ۲              | 1                           |                                   |                             |                   |
| LyncSDN  | Interface Interface Group  | management                | ,              |                             |                                   |                             |                   |
| <ul> <li>Management</li> </ul>                   | Multicast VLAN   | Enable                    |                |                             |                                   |                             |                   |
| <ul> <li>Mesh</li> </ul>                         | Thirtiest Test   | None                      | ,              | 1                           |                                   |                             |                   |
| <ul> <li>Netflow</li> </ul>                      | BroadCast SSID   |                           |                |                             |                                   |                             |                   |
| ► PMIP   | BroadCast SSID   | Se Linable                |                |                             |                                   |                             |                   |
| Security   |  |                           |                |                             |                                   |                             |                   |
| <ul> <li>System</li> </ul>                       |  |                           |                |                             |                                   |                             |                   |
| Tunneling  |  |                           |                |                             |                                   |                             |                   |
| ▼ WLANs  |  |                           |                |                             |                                   |                             |                   |
| AP Groups (j)                                    |  |                           |                |                             |                                   |                             |                   |
| Policy Configuration (i)                         |  |                           |                |                             |                                   |                             |                   |
| WLAN Configuration ()                            | Footnotes:<br>1. On Deploy, only controllers configured with In          | hanfana (Tabadana Car     |                | at and released DADDIC or   | num I DAD som om ACI Norra with   |                             | an will be about  |
| mDNS   |  | ten ace/interrace Gro     | up - managemen | ii, anu selecitéd RADIUS se | rvers, LDAP servers, ACL Name Wit | n rures and ingress interra | ce will be shown. |
| <ul> <li>Interfaces</li> </ul>                   | Save as New Template Cancel  |                           |                |                             |                                   |                             |                   |

**Step 11** To save the Template, click on 'Save as New Template' and select the folder where the teamplates need to be saved.

| Save | Templa   | te    | ×      |
|------|----------|-------|--------|
|      | * Folder | WLANs | •      |
|      |          | Save  | Cancel |

**Step 12** To deploy the template to Mobility Express, click **Deploy**.

| ••••••• Prime Infrastructure                 |                           |              |                      |                |                      |                  |                          | O . Application Search            | 🐥 😒 49                     |
|--|---------------------------|--------------|----------------------|----------------|----------------------|------------------|--------------------------|-----------------------------------|----------------------------|
| Configuration / Templates / F                | eatures & Te              | chnolo       | gies 🔺               |                |                      |                  |                          |                                   |                            |
| Templates                                    | Templates /<br>Template 1 |              | s and Technolog      | gies / Contro  | oller / WLANs        |                  |                          |                                   |                            |
| <" ™ 8                                       | ▼ Temp                    | late De      | tail                 |                |                      |                  |                          |                                   |                            |
| O Search All                                 |                           |              |                      |                |                      |                  |                          |                                   |                            |
| Mesh   | Ge                        | eneral       | Security             | QoS            | Advanced             | HotSpot          | Policy Mapping           | S                                 |                            |
| Netflow                                      |                           |              |                      |                |                      |                  |                          |                                   |                            |
| ► PMIP                                       |                           |              |                      | Wired LAN      |                      |                  |                          |                                   |                            |
| <ul> <li>Security</li> </ul>                 |                           |              | *Profile             | e Name 🖗       | pi-wlan-me           |                  |                          |                                   |                            |
| <ul> <li>System</li> </ul>                   |                           |              |                      | *SSID          | pi-wlan-me           |                  |                          |                                   |                            |
| ► Tunneling                                  |                           |              | Adı                  | nin Status     | Carable              |                  |                          |                                   |                            |
| ▼ WLANs                                      |                           |              |                      |                |                      |                  |                          |                                   |                            |
| AP Groups (j)                                |                           |              | Securi               | ty Policies    | [WPA2] [Auth( P      | SK)]             |                          |                                   |                            |
| Policy Configuration (j)                     |                           |              |                      |                |                      |                  |                          |                                   |                            |
| WLAN Configuration (j)                       | h                         |              | R                    | dio Policy     | All                  | •                |                          |                                   |                            |
| ▶ mDNS                                       |                           | Interfa      | ce 🔍 Interfa         |                | management           | •                |                          |                                   |                            |
| ► Interfaces                                 | 1                         | incorre      |                      | icast VLAN     | Enable               |                  |                          |                                   |                            |
| <ul> <li>Network Analysis Module</li> </ul>  |                           |              | Huit                 | ICASE VEAN     | None                 | Ŧ                |                          |                                   |                            |
| ► Security                                   |                           |              |                      | Cast SSID      |                      |                  |                          |                                   |                            |
| <ul> <li>WAN Optimization</li> </ul>         |                           |              | Broad                | Cast SSID      | C Ellable            |                  |                          |                                   |                            |
| <ul> <li>CLI Templates</li> </ul>            |                           |              |                      |                |                      |                  |                          |                                   |                            |
| Composite Templates                          |                           |              |                      |                |                      |                  |                          |                                   |                            |
| Feature Templates                            |                           |              |                      |                |                      |                  |                          |                                   |                            |
| My Tags                                      |                           |              |                      |                |                      |                  |                          |                                   |                            |
| ▼ My Templates (j)                           |                           |              |                      |                |                      |                  |                          |                                   |                            |
| ▼ Features and Technologies (i)              |                           |              |                      |                |                      |                  |                          |                                   |                            |
| ▼ Controller (j)                             |                           |              |                      |                |                      |                  |                          |                                   |                            |
| ▼ WLANs (j)                                  | Footr                     |              |                      |                |                      |                  |                          |                                   |                            |
| Template for ME (2)                          | 1. On                     | Deploy, only | y controllers config | gured with Int | ertace/Interface Gro | oup - 'managemen | t' and selected RADIUS s | servers, LDAP servers, ACL Name w | ith rules and Ingress inte |
| <ul> <li>Discovered Templates (i)</li> </ul> | Save                      | Save as I    | New Template         | Canc           | el Depl              | oy               |                          |                                   |                            |

**Step 13** Select the Cisco Mobility Express controller and click OK.

| Devi<br>Devi | ce Selection<br>ces             |                            |      |       |              | Q      |
|--------------|---------------------------------|----------------------------|------|-------|--------------|--------|
|              |                                 |                            |      | Show  | Quick Filter | •      |
|              | Name                            | Description                | Туре | IP Ad | dress/DNS    | Vendor |
|              | <ul> <li>All Devices</li> </ul> | All Members                |      |       |              |        |
|              | ▼ Device Type                   | Device Type                |      |       |              |        |
|              | ▼ Wireless Controller           | Wireless Controller        |      |       |              |        |
|              | ▶ Cisco Mobility Express        | Cisco Mobility Express     |      |       |              |        |
|              | ► Location                      | Location based groups      |      |       |              |        |
|              | User Defined                    | User Defined Device Groups |      |       |              |        |

Step 14 Navigate to Job Dashboard to view the Job Status

I

| )    | Prime Infrastru        | icture                            |                      |                 |            | O <sub>4</sub> ▼ Application Search | . ♣ ⊗ | -43 | root - ROOT- | DOM | Ana |
|------|------------------------|-----------------------------------|----------------------|-----------------|------------|-------------------------------------|-------|-----|--------------|-----|-----|
| curr | Administration / Dashb | oards / Job                       | Dashboard / Template | e for ME_1 ★    |            |                                     |       |     |              |     | 0   |
|      |                        | g latest 5 Job instances Show All |                      |                 |            |                                     |       |     | Total 1      | Ø   | \$  |
|      |                        |                                   |                      |                 |            |                                     | Show  | All |              | •   | 7   |
| ł    | Run ID 🔻               | Status                            | Duration (hh:mm:ss   | )               | Start Time | Completion Time                     |       |     |              |     |     |
|      |                        |                                   |                      |                 |            |                                     |       |     |              |     |     |
|      | Device                 |                                   | Status               | Transcript      |            |                                     |       |     |              |     |     |
|      | 172.20.229.45          | (j)                               | Success              | Deploy succeede |            |                                     |       |     |              |     | (i) |

