



Grandstream Networks, Inc.

UCM6xxx Series – BLF Monitoring for Remote Extensions Guide



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INTRODUCTION

The UCM6xxx series support monitoring remote extensions using Eventlist BLF and LDAP sync features between peered UCM6xxx systems in different locations.

This feature allows phones supporting Eventlist BLF to check status (Idle, Busy, In-Call) of remote extensions on peered UCM6xxx.

Peered UCM6xxx systems collect status information of monitored extensions and send them to monitoring phone(s) as a list in a single SIP NOTIFY message, instead of generating an individual SUBSCRIBE / NOTIFY request for each resource status, reducing network traffic and bandwidth usage.

The UCM6xxx event list feature supports the following:

- Add local extensions to the event list for the local users to monitor the extensions' status.
- Remote extensions are detected automatically, if UCM6xxx are peered and synchronized correctly using LDAP sync feature.
- Add remote extensions from peered UCM6xxx to local Eventlist BLF allowing local users to monitor remote extensions.

This document introduces the configuration of BLF list and LDAP sync feature on the UCM6xxx series to monitor remote extensions and how to apply them on Grandstream devices.



PEERING SETUP SCENARIO

The following diagram illustrates a typical peering scenario between two UCM6xxx IPPBX series.

Peer Trunk

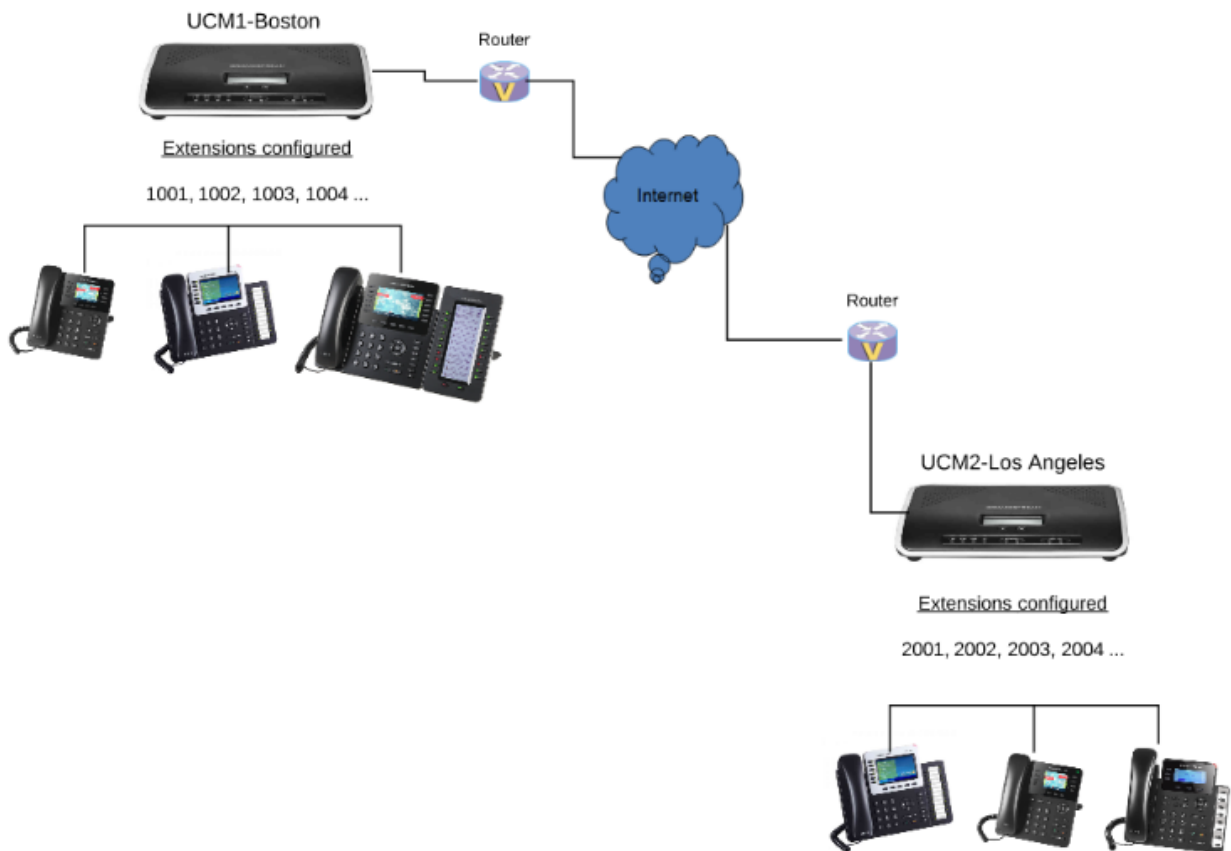


Figure 1: Peer Trunk Scenario

We will assume the following:

- A peer trunk is created between UCM1-Boston and UCM2-LA.
- Inbound and outbound routes are configured based on peering scenario for both UCMs.




UCM CONFIGURATION

The following chapter provides needed steps to be able to use remote extension monitoring via Eventlist BLF feature.

First step is to enable and configure “LDAP Sync” feature on both UCM6xxx peered, then Eventlist BLF needs to be created on UCM6xxx(s) where the phones are registered to monitor remote extensions.

Configure LDAP Sync

1. Access UCM6xxx **Web GUI** → **Extension/Trunk** → **VoIP Trunks**.
2. Locate peer trunk used to connect UCM-1 to UCM-2 and press  to edit trunk settings.
3. Access to **Advanced Settings** tab and check “**Sync LDAP Enable**”.
4. Define a password in **Sync LDAP Password** field.


This password is used for LDAP contact file encryption and decryption. The password should be the same for both peers (UCM-1 and UCM-2) to ensure successful connection and synchronization.

5. Configure **Sync LDAP Port** to be used by the service (TCP port). Example: 19090.

Make sure to use a port not already used by UCM (Port 389 is by default used by the LDAP server supported on the UCM6xxx).

Sync LDAP Enable:	<input checked="" type="checkbox"/>
* Sync LDAP Password:	<input type="text" value="admin123"/>
* Sync LDAP Port:	<input type="text" value="15000"/>
LDAP Outbound Rule:	<input type="text" value="To_LA"/> ▼
LDAP Dialed Prefix:	<input type="text"/>

Figure 2: Sync LDAP Settings on UCM1-Boston

6. Press **Save** button to store the configuration.
7. Click on  under **Extension/Trunk** → **VoIP Trunks** to start LDAP Sync.
LDAP Last Sync Date feature will display date and time of last synchronization (as shown in previous figure) if successful.

Important: Above steps needs to be done on all peered UCM6xxx (UCM-1 and UCM-2 in this guide) for successful synchronization.

Configure Eventlist BLF

1. Access UCM6xxx **web GUI** → **Call Features** → **Event List**.
2. Click on “**Create New Event List**”.
3. Specify an **URI** for the Eventlist BLF (for example: UCM_Remote). URI name cannot be the same as any extension number on the UCM6xxx.



4. Select available extensions from **Remote Extensions** and/or **Local Extensions**.

Available Remote Extensions will be displayed only if the local UCM6xxx and the remote UCM6xxx are successfully synchronized via LDAP sync feature.

5. Press **Save** and **Apply Changes**.

Edit Event List:

* URI:

Event Type:

Local Extensions:

Available		Selected
<input type="checkbox"/> 2 items	<	<input type="checkbox"/> 1 item
<input type="checkbox"/> 4001 "John Doe"	>	<input type="checkbox"/> 4000
<input type="checkbox"/> 4004	↑	
	^	
	↓	
	v	

Remote Extensions:

Available		Selected
<input type="checkbox"/> 149 items	<	<input type="checkbox"/> 4 items
<input type="checkbox"/> 140--1000	>	<input type="checkbox"/> LA--2000 "Fernando Jose"
<input type="checkbox"/> 140--1001	↑	<input type="checkbox"/> LA--2001 "Chase smith"
<input type="checkbox"/> 140--1002	^	<input type="checkbox"/> LA--2003 "Angelica hale"
<input type="checkbox"/> 140--1003	↓	<input type="checkbox"/> LA--2004 "Stefani Germanota"
<input type="checkbox"/> 140--1004	v	

Special Extensions:

Figure 3: Eventlist BLF Configuration

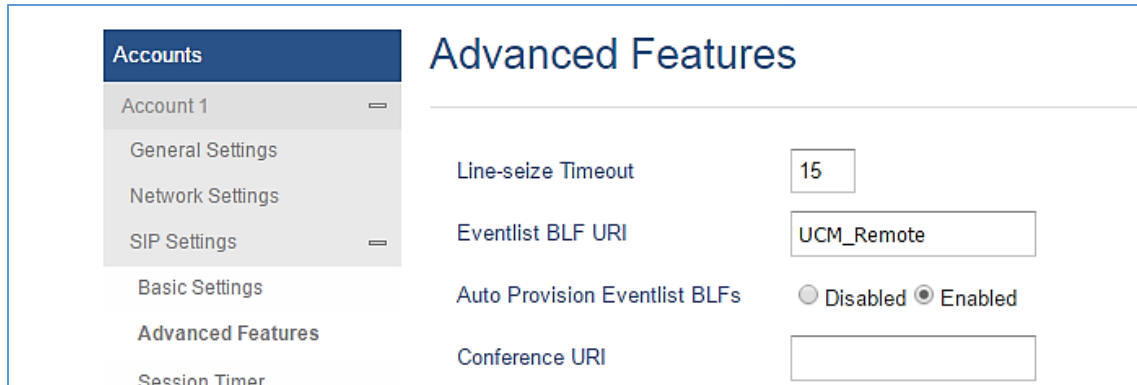
Note: If LDAP sync is not configured on the UCM6xxx, no extension will be listed available for selection. In this case, please fill in the remote extensions number in "Special Extensions" field manually. (Format: extension1, extension2, extension3...)

MONITORING PHONES CONFIGURATION

We will assume that a SIP account from UCM-1 is correctly registered on the phone's Account 1.

1. Access the phone's web GUI under **Accounts** → **Account(x)** → **SIP Settings** → **Advanced Features**.
2. Specify **Eventlist BLF URI** (in this guide: UCM_Remote).
3. Set **Auto Provision Eventlist BLFs** to **Enabled** or **Disabled**.





Accounts		Advanced Features	
Account 1		Line-seize Timeout	15
General Settings		Eventlist BLF URI	UCM_Remote
Network Settings		Auto Provision Eventlist BLFs	<input type="radio"/> Disabled <input checked="" type="radio"/> Enabled
SIP Settings		Conference URI	
Basic Settings			
Advanced Features			
Session Timer			

Figure 4: Example of Configuring Eventlist on GXP21xx

- a. If **Enabled**: Monitored extensions will be automatically provisioned on non-configured MPKs/VPKs available on the phone following extensions order as defined in the Eventlist BLF created on UCM6xxx.
- b. If **Disabled**: Users should manually configure MPKs or VPKs on the phone(s) following below steps:
 - i. Access phone's web GUI:
Settings → Extension Boards to use EXT module; or
Settings → Programmable Keys → Virtual Multi-Purpose Keys to use VPKs; or
Settings → Programmable Keys → Programmable Keys to use integrated MPKs (if supported on used phone).
 - ii. On each MPK, set the following:
 - **Mode**: "Eventlist BLF".
 - **Account**: Set the account to be used. (Account 1 in this example).
 - **Description**: Specify a description for this MPK (optional).
 - **Value**: Enter extension number from created Eventlist BLF (for instance: "2000").

Multi-Purpose Keys				
	Mode	Account	Description	Value
MPK 1	Eventlist BLF	Account 1	Fernando Jose	2000
MPK 2	Eventlist BLF	Account 1	chase Smitch	2001
MPK 3	Eventlist BLF	Account 1	Angelica Hale	2003
MPK 4	Eventlist BLF	Account 1	Stefani Germanota	2004

Figure 5: Example of Multi-Purpose Keys Configuration on GXP21xx

4. Press **Save and Apply** and start getting monitored extensions statuses.

