Unified Messaging for M1/CS1000 Users

Feature Description

Unified Messaging for M1/CS1000 users was developed so that existing M1/CS1000 users could easily add UC^X as a voice mail system. It allows UC^X to control the message waiting light on Nortel digital sets, UNISTIM sets and UNISTIM soft clients.

UC^X controls the M1/CS1000 system by use of a serial connection as shown below:

The application makes use of the Background Feature on the M1/CS1000. This allows UC^X to send commands over a serial connection to control the state of the message waiting light.

Introduction

With this set up:

- Incoming calls to extension DIDs should ring on DNs on M1/CS1000 for the time configured in follow me settings on UCx. If there is no answer, the calls should go to voicemail.
- Incoming calls to DIDs not associated with extensions would go to IVR
- External outgoing calls from M1/CS1000 DNs should be routed over PRI-B to UCx and over PRI-A to PSTN
- Outgoing calls to the voicemail DN should be routed over PRI-B to UCx and there to voicemail
- Call forward to voicemail – users have to forward their phone to the UC^{X} Voicemail **Direct Dial Prefix** code followed by their DN (or just the code if the DN is added automatically)
- Transfer to voicemail – transfer to the UC^{X} Voice **Direct Dial Prefix** code followed by the target DN (mailbox)
- Call forward busy/no answer for calls originated on M1/CS1000 – works as normal if configured as described in this page

Pre-Requisites

There must be a free TTY port available on the M1/CS1000 system.

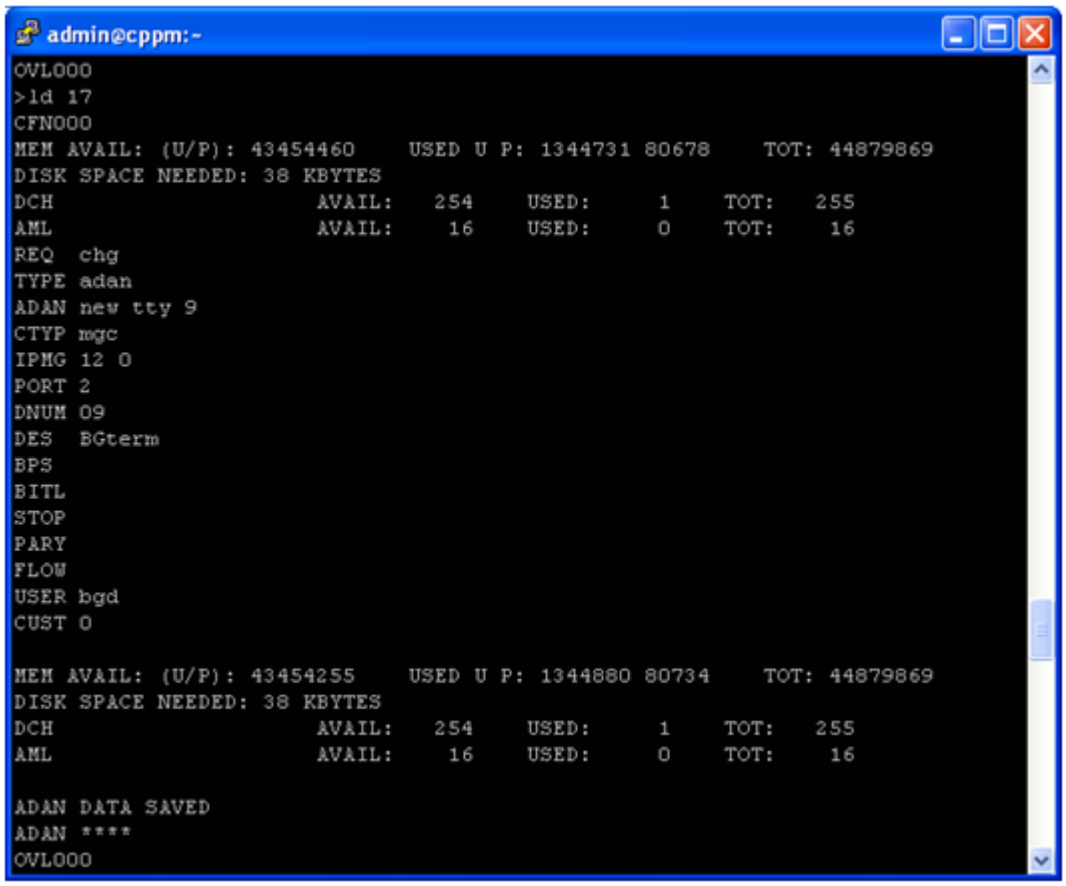
A USB to serial cable is required.

Step One: Connect the Serial Cable

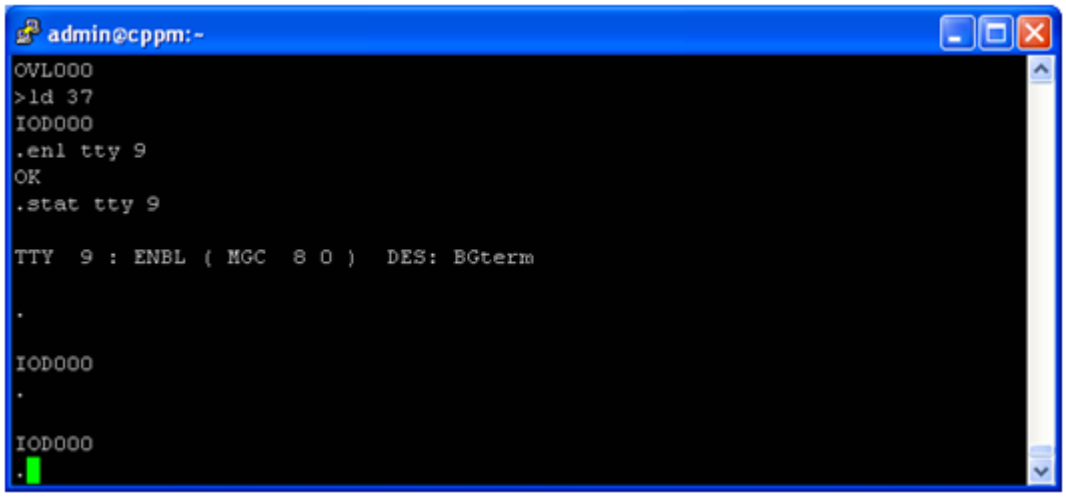
1. Plug the USB to serial cable to one of the USB ports on the UC^{X}
2. Connect a M1/CS1000 serial cable to the M1/CS1000
3. Connect the UCx serial cable to the M1/CS1000 serial cable

Step Two: Configure M1/CS1000 System

1. On the M1/CS1000 configure a TTY with **USER BGD**:

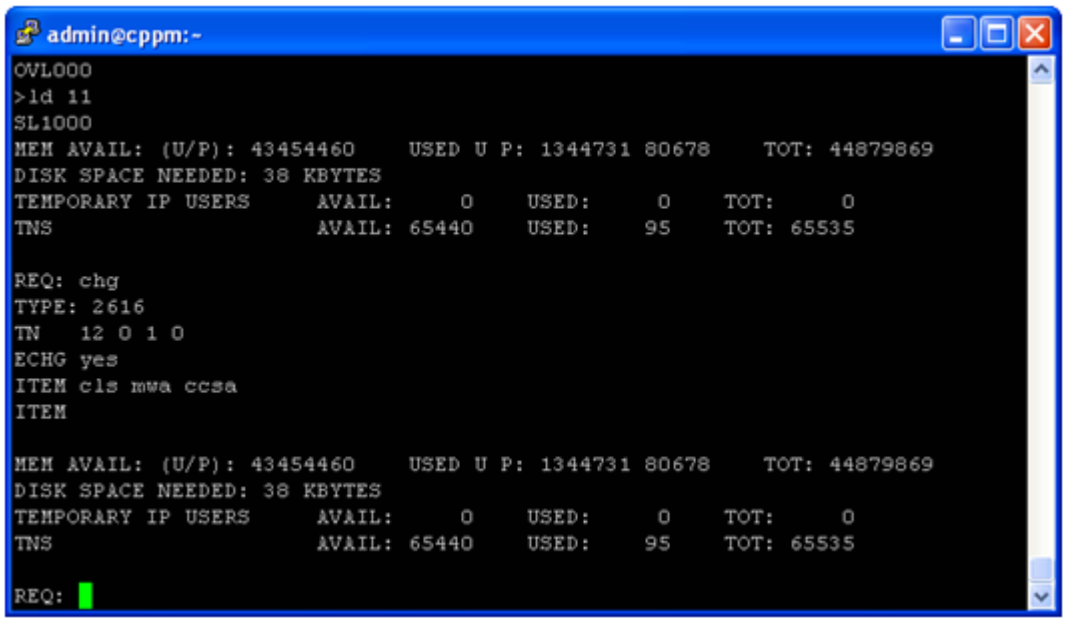


2. Use LD 37 to enable the TTY:



On an MGC it may be necessary to reboot the MGC to get the TTY operational.

3. Each set on the M1/CS1000 that is going to use the UCx voicemail must have **CLS** of **MWA** and **CCSA**:

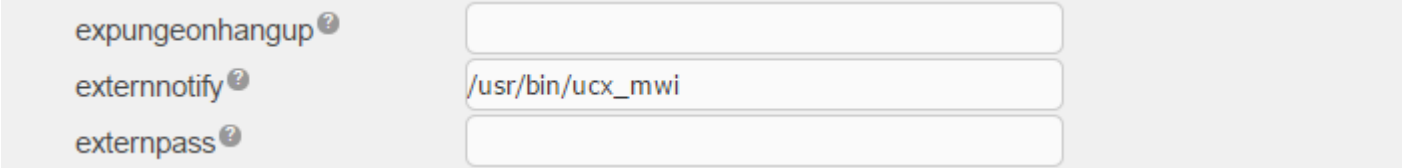


4. Connect the UCx serial cable to the M1/CS1000 serial cable.

Step Three: Configure UCx

Use the UC^{X} Web-based Configuration Utility to add ***/usr/bin/ucx_mwi*** as the External Voicemail notify application. To do this:

1. Open the UCx Web-based Configuration Utility
2. From the **PBX** tab, select **PBX Configuration**
3. From the left side column, select **Voicemail Settings**
4. Select **Settings** from the list of System View Links
5. Enter **/usr/bin/ucx_mwi** in the **externnotify** field



Refer to Voicemail Settings for more information.

Step Four: Configure Voice Mail

1. The UCx50/450/1000 should be equipped with a PRI card with 2 spans
   - The first span (PRI-A) would be connected to the CO to take over the PSTN connectivity
   - The second span (PRI-B) would be connected to the M1/CS1000 system

- An outbound route should be defined on UC^{X} to send calls to M1/CS1000 over PRI-B using some prefix (e.g. 1000)

2. For all DNs on the M1/CS1000 system that require voicemail services, corresponding extensions should be created on UCx
   - If there is no plan to use phones directly connected to the UCx, use the same extension numbers on UCx as the DNs on the M1/CS1000 (for DN 2000 on M1/CS1000, an extension 2000 would be created on UCx, etc.)
   - If there is a need to use phones directly connected to the UCx, use extensions numbers that are created by adding a prefix to the DNs on the M1/CS1000 (for example if the prefix is 1, for DN 2000 on M1/CS1000, an extension 12000 would be created on UCx)
   - These extensions should be created as Nortel devices (Generic Nortel Device)
   - The MAC address should be set to **0**
   - Voicemail should be enabled for these extensions
   - The device type selected on the Nortel Properties page should be **Virtual**
   - If more than one incoming call should be sent to a single M1/CS1000 DN, the number of lines configured under Nortel Properties of these extensions should be set to the maximum number of allowed simultaneous incoming calls (and the **Call Waiting** feature should be enabled)
   - Follow me should be configured as follows for these extensions:
     - Only one destination **prefix+extension+#** (for example, with the outbound route prefix 1000, the destination for extension 2000/12000 would be 10002000#).
     - **Follow Me Ring Strategy** should be set to **ringall**
     - **Ring Time** to the desired time before the call goes to voicemail
     - **Destination if no answer** should be Voicemail and the UCx extension (2000/12000)

Create one extension first, test the full functionality and then use the Bulk Add Nortel Extensions feature to create all other extensions.

3. IVR for the main incoming number should be configured
4. Inbound routes should be configured to handle calls from PSTN
   - For each DID number that is to be routed to an extension, an inbound route that sends the call to the corresponding UCx extension should be created
   - One inbound route that sends calls to IVR should be created for the main incoming number
5. Inbound routes should be set up for DID(s) sent by M1/CS1000 over PRI-B
   - For the voicemail destination, calls should be routed to voicemail
   - For external destinations, routing prefix (if any) should be removed and calls should be routed out to PSTN over PRI-A
6. Go to the Feature Codes page under Voicemail section, change the field **Direct Dial Prefix** from the default value (**#***) to a code that can be used by M1/CS1000 as part of a dial string

(e.g. 75)

7. On the M1/CS1000 configure the routing to send calls that start with the UCx Voicemail **Direct Dial Prefix** code over SIP trunks to UCx.
8. Configure Call Forward Busy and Call Forward No Answer for DNs to be the UCx Voicemail **Direct Dial Prefix** code followed by the DN (or just the code if you configure to add the DN automatically)