OVERVIEW

Uniform Call Distribution (UCD) feature provides simplified built-in ACD service which is based on the Distributed Hunt feature.

Call Distribution

When this feature is implemented, the incoming call is distributed to agents via the following procedure.

1. The IPedge / VIPedge system receives an incoming call from PSTN or extension.
2. Initially, it is answered by voice mail which provides the auto attendant service. Also, the caller hears the General Greeting.
3. The destination hunting group be determined by dialed numbers entered by the caller. The pilot DN of the hunting group (UCD pilot) should be entered in accordance with voicemail.
4. According to hunting rule (distribute), the agent to be delivered the call is determined, which is the member in this hunting group.

On the other hand, if no agent is available in this hunting group, the call is camped on the UCD pilot immediately and voicemail provides ring-back tone to the caller.
Login/Logout

Login/Logout can be activated by Login button.

<table>
<thead>
<tr>
<th>Login button LED</th>
<th>Login State on Agent</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-Use</td>
<td>Login</td>
</tr>
<tr>
<td>Idle</td>
<td>Logout</td>
</tr>
</tbody>
</table>

Login state activated by Login button is applied to the call which terminates to UCD pilot only. Therefore, the call can terminate to an agent directly even if he/she is logged out. Also, Login state can be activated with feature access codes. The default feature access codes for them are:

<table>
<thead>
<tr>
<th>Access Code</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>#6061</td>
<td>Login – Local Setting</td>
</tr>
<tr>
<td>#6062</td>
<td>Logout – Local Setting</td>
</tr>
<tr>
<td>#6161</td>
<td>Login – Remote Setting</td>
</tr>
<tr>
<td>#6162</td>
<td>Logout – Remote Setting</td>
</tr>
</tbody>
</table>

Queuing

If no agent is available (e.g., all agents are busy), transferred call is camped on to the UCD pilot. It will be delivered right after the agent becomes available. While the call is camped on to the UCD pilot, the caller will hear Music on Hold which is assigned to UCD pilot.

**Note:** The caller will hear nothing if the Media resource is not set to hunt.

Overflow

Overflow destination is determined by System Call Forward feature if at least one of the following conditions is satisfied.

1. If Overflow timer is expired while transferred call is camped on UCD pilot, the call is forwarded to Call forward destination which is assigned as System Call Forward-No Answer.
2. If all agents in the hunting group are logout, DND or Make Busy state, transferred call is forwarded to Call forward destination which is assigned as System Call Forward-DND.

Also, if overflow destination is not assigned or is invalid, transferred call stays in queuing state (camped on).
Uniform Call Distribution (UCD) functionality provides call flow to distribute calls more efficiently through a call center. UCD enables calls to be answered by the auto attendant, which prompts the caller to dial the correct UCD group number or, calls can ring directly to UCD groups. The call is then sent to the UCD agent or queue if all agents are busy or logged out, but never to a busy number. Incoming calls can also be directed directly to UCD groups without the use of an Auto-attendant.

Calls sent to agents are managed by distributed hunt groups to find the next available agent. Callers in queue can receive music and announcements embedded in one of the systems music-on-hold sources, and each UCD group can share or have a separate music sources. The announcements must be recorded on the music source. Overflow timing is controlled by a unique overflow timer for each UCD group. Agent log-in and log-out buttons make it easy for agents to sign in and out of the system so that calls can be routed appropriately.
Uniform Call Distribution  Not Applicable.
PROGRAMMING

Log into Enterprise Manager.

1. Go to System > Class of Service.
   UCD Local Log-in – The UCD Local Log-in is checked by default. This enables a telephone to log in to a UCD group locally.
   UCD Remote Log-in – This box is unchecked. Check the box to enable the telephone to log in to a UCD group remotely.

2. Click on Station > Station Groups.
   Select the appropriate server
   Select Hunt Group or click the New icon.
   Hunting Group Number (per system, 1-1100, Default = Not set)
   Hunt Method (per Station Hunting, Serial, Circular or Distributed. Default = Circular)
   For “IP Voice Mail”. For other voice mail, specify “Distributed”. For Multiple DN hunt group, specify “Circular”.
   Pilot Number – Pilot Directory Number (per Station Hunting, Max 5 digits, Default = Not set). The Pilot Number must be a valid dial number and a unique number in the system.
   Number to Display – Display DN (per Station Hunting, Max 5 digits, Default = Not set)
   Pilot No. SCFwd – This is the System Call Forward Index number for the UCD Pilot number (per Station Hunting, 0-48, Default = 0 (Not set))
   Index 0 means it does not apply to System Call Forward.
   Multiple DN Hunt – To execute Call Forward or not (per Station Hunting, 1:Enable/ 2:Disable, Default = Enable).
   For Multiple DN purpose, set Enable.
   DHG Auto CampOn – To execute Automatic Campon or not (per Station Hunting, Enable/ Disable, Default = Disable). CampOn is required for the Distributed method.
   UCD Enable/Disable – Select Enable. To apply UCD or not (per Station Hunting, Enable/Disable, Default = Disable).
   UCD MOH Source – Select appropriate Music On Hold selection in queuing state for UCD (per Station Hunting, Quiet Tone, Music 1 ~ Music 15, and Beep tone; Default = Music 1).
   UCD Overflow Timer – Overflow timer value for UCD (per Station Hunting, 1~3600s, Default = 300)
UCD RBT Timer – This time determines when the caller will hear ring back tone or Music on Hold. Response Timer value for UCD (per Station Hunting, 0-30s, Default = 10)

**Note:** To delete station hunting group, select the group, then click Delete.

3. Go to System > Call Forward
   Select SCF Number which is the index number (per system, 1-48, Default = Not set)
   Select the Telephone Status. Change it from "No forwarding" to an appropriate Call Forward option.
   Call Type (per system, CF index, 1:CO Loop Grd/ 2:DID/ 3:TIE/ 4:Ring Transfer/ 5:Internal, Default = Not set). CO Loop Grd is not supported.
   Telephone Status – System Call Forward Day/Night Mode (per system CF index and call type, 1:Day/ 2:Day2/ 3:Night, Default = Not set)
   Select the Call Type to add Destinations 1 and 2. The Telephone status, and period are already listed.

4. Go to Station > Station Groups. If you set the UCD to Distributed, then select Hunting Group Number (per system, 1-1100, Default = Not set).
   Select the Member tab to select available Member users.

5. Go to System > Flexible Access Code. If you selected Distributed and created a pilot number, it is displayed here.
   Click the Add icon to create an Access Code.
   Digits of UCD local login feature access code (Per system, Max 5 digits, Default = #6061)
   UCD local login access code ( Per system, Value = 890)
   Digits of UCD local logout feature access code (Per system, Max 5 digits, Default = #6062)
   UCD local logout access code ( Per system, Value = 891)
   Digits of UCD remote login feature access code (Per system, Max 5 digits, Default = #6161)
   UCD remote login access code ( Per system, Value = 892)
   Digits of UCD remote logout feature access code (Per system, Max 5 digits, Default = #6162)
   UCD remote logout access code ( Per system, Value = 893)
6. Go to Station > Station Assignment, Key tab and make the following selections:
   - UCD agent login/ logout button
   - Feature button number on target IPT. Per terminal, 1-20
   - FeatureCode =890 UCD agent login/ logout button
CAPACITY

Queueing is executed according to camp-on feature.

- Maximum number of camped on calls per terminal = 1 for Offhook Campon, and 1 for Automatic Callback
- Maximum number of camped on calls per system = 256 Shared with Offhook Campon and Automatic Callback

Availability

<table>
<thead>
<tr>
<th>Terminal/Line</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPT</td>
<td>Applied</td>
</tr>
<tr>
<td>Soft IPT</td>
<td>Applied</td>
</tr>
<tr>
<td>IP Attendant</td>
<td>N/A</td>
</tr>
<tr>
<td>SIP compliant terminal</td>
<td>N/A</td>
</tr>
<tr>
<td>SLT (via FXS gateway)</td>
<td>N/A</td>
</tr>
<tr>
<td>Paging Device (via FXS gateway)</td>
<td>N/A</td>
</tr>
<tr>
<td>Door Phone (via FXS gateway)</td>
<td>N/A</td>
</tr>
<tr>
<td>SIP trunk</td>
<td>N/A</td>
</tr>
<tr>
<td>IP-QSIG</td>
<td>N/A</td>
</tr>
<tr>
<td>Analog trunk (via FXO gateway)</td>
<td>N/A</td>
</tr>
<tr>
<td>ISDN trunk (via FXO gateway)</td>
<td>N/A</td>
</tr>
<tr>
<td>T1 trunk (via FXO gateway)</td>
<td>N/A</td>
</tr>
<tr>
<td>Voice Mail – MAS</td>
<td>Accept call and transfer</td>
</tr>
<tr>
<td>Voice Mail – SIP</td>
<td>Accept call and transfer</td>
</tr>
</tbody>
</table>

RESTRICTION

If the system receives an incoming call to UCD pilot directly, the caller cannot hear the first announcement from voice mail. However, if UCD is executed to this call, it is usually delivered according to the hunting rule. Also, if no agent is available, the terminating call will be in a queuing state and the caller hears Ring Back Tone. After that, if the UCD Response Timer has expired, the caller hears Music On Hold.

- If the overflow timer is expired while the call stays in queuing state and overflow destination is busy, it is camped on overflow destination.
- If overflow destination is busy, the call is camped on at the overflow destination.
- Ring transfer timer is not applied to UCD call. Therefore, after the call is delivered to the agent, Ring transfer recall is not executed to voice mail.
- If the call is delivered to an agent, it is not delivered to other agents again even if it is not answered for a long time.
• If an agent is in Logout state by pressing Login button while UCD call terminates to him/her, queuing or overflow is not executed and it continues to ring at the terminal of the agent logged out.
• The second destination of System Call Forward can not be used as an overflow destination.
• Only IP telephones that are operational can be configured using Enterprise Manager.
• Automatic tag VLAN configuration such as GVRP (GARP VLAN Registration Protocol) is not supported.

AVAILABILITY

IPedge system, VIPedge solution and IP5000-series telephones.
HARDWARE

IP5000 Telephones, IPedge servers.
### FEATURE INTERACTION

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Call Forward</strong></td>
<td>If Call Forward or System Call Forward is set for an agent, the call is not forwarded. However, if Call Forward or System Call Forward is set for the overflow destination, then the call is forwarded. If cascade forwarding is made by Call Forward, the last Call Forward is not established.</td>
</tr>
<tr>
<td><strong>Class Of Service</strong></td>
<td>Class of Service of Camp on is not applied for the camped on call to UCD. This means, any Campon features to UCD can be activated regardless of Class of Service of the caller.</td>
</tr>
<tr>
<td><strong>Dial Number Identification Service (DNIS)</strong></td>
<td>If the overflow destination is voice mail, and the overflow call is DNIS call and is associated with VM-ID, VM-ID notifying to Voice Mail follows the DNIS specifications.</td>
</tr>
<tr>
<td><strong>Do Not Disturb (DND)</strong></td>
<td>If DND is activated when the call is delivered to the agent, ringing tone is stopped. However, queuing or overflow is not executed. On the other hand, if DND is activated on the overflow destination, the call is not overflowed and queued again.</td>
</tr>
<tr>
<td><strong>Message Waiting</strong></td>
<td>It is not supported to set Message Waiting to UCD pilot DN. Message Waiting is set on the dialed terminal regardless of the result of UCD if UCD member is dialed.</td>
</tr>
<tr>
<td><strong>Multiple Calling</strong></td>
<td>Even if the call terminates to Multiple Calling Groups in which the members belong to UCD groups, UCD agent is not called. Therefore, if all members in Multiple Calling Groups belong to UCD groups, the caller hears Reorder tone.</td>
</tr>
<tr>
<td><strong>Music On Hold</strong></td>
<td>The originator calling UCD overflow destination hears MOH if the destination is busy, and the type of MOH depends on the programming per the line of overflow destination.</td>
</tr>
<tr>
<td><strong>Station To Station Connection</strong></td>
<td>If the called DN is a pilot DN of the group, the destination is determined per the service provided by each group.</td>
</tr>
<tr>
<td><strong>Call Pickup</strong></td>
<td>The terminating call cannot be picked up if the user specifies pilot DN of Station Hunting or UCD. However, it is possible to pick the call up by specifying DN of the call terminating.</td>
</tr>
<tr>
<td><strong>Lost Call Treatment</strong></td>
<td>If Lost call destination is UCD pilot DN, it terminates to UCD agents according to hunting rule of Distributed even if agents are not logged in or set DND.</td>
</tr>
<tr>
<td><strong>Station Hunting</strong></td>
<td>It is not supported to set Station Hunting pilot number as the member of Uniform Call Distribution (UCD). The overflow destination can be either station hunting pilot or member. The system selects idle station from Station Hunting group and terminates</td>
</tr>
</tbody>
</table>
Intercept
If UCD pilot number is assigned as intercept position, the call terminates to UCD agents according to hunting rule of Distributed even if agents are not logged in or set DND. However, the terminating call does not ring and the DN button of the terminal only indicates Called if the agent terminal sets DND.

Specified Caller Identification
When making a call from MAS (FF PCH) or Varaha to UCD pilot No., specified caller number is displayed on LCD of UCD agent that is destination of UCD distribution. Specified caller number is not displayed when a call is terminated to overflow destination. If the call is answered on the overflow destination, it is displayed on LCD of overflow destination terminal.

Basic Survivability
If network fault is the reason, IPT is temporarily left from the UCD group during switchover. The limitation of belonging to the same local node is the spec of UCD feature.

OFF-hook Call Announce (OCA)
Even if automatic OCA is set at the originator terminal and the overflow destination is set to accept OCA call, the over flown call is not automatically terminated as OCA call.

Phantom DN
If the phantom DN is assigned to UCD group, Login/Logout and DND are controlled by the owner of the phantom DN. When the owner logs in, the call can be terminated at phantom DN. If this DN appears on multiple phones, it will ring all phones. However, if no owner is assigned to phantom DN, the call can not be terminated at phantom DN. (see the chart below)

LCD Shift Key
Each feature button can be set on both the fore side and the hidden side.

The service using LED continues even though it is not indicated while on the hidden side.

SIP Extension
SIP terminal can be set as the member of Station Hunting or UCD group.

The Rejected Call Forward feature can forward a call which directly arrives at a member of the group, i.e. the call that the dialed station is a member of the group. In this case, a user has to set CF-NA to the member’s DN, not to the pilot number. The rejected call for pilot DN is not supported. Also refer to the table below.

Back Light
UCD Remote Login does not make an influence to Backlight.

LCD Keystrip
A registration status is reflected to a Keystrip label not only when UCD button is pressed but also the registration by remote access code.

PC Attendant
Logging state cannot be displayed on PC-Attendant because it does not have feature button.

It is not supported to set Attendant group as the member of UCD group.
If DN of attendant is set as the member of UCD group, the terminating call is treated as the individual call if Attendant is in Attended mode. The terminating call is treated the same as IPT if Attendant is in Position Busy mode. The UCD call does not terminate if Attendant is in Position Busy Pending mode.

**External ACD**

It is possible to set the DN as both the ACD agent and the UCD agent and run simultaneously because these 2 services are different implementation.

**Private Networking Over IP**

It is not supported to include DN in the remote node in UCD member.

Overflow destination may set as the remote terminal. However, the call is not diverted to the overflow destination and keeps in the queue if the overflow destination is UCD pilot DN in the remote node and all agents are logged out, DND, or make busy.

**Network DN Table**

It is supported to set UCD pilot DN as Network DN.