

February 6, 2002

Log #: AN-0015

Reassigning PBX "Group" Features

1. Overview

This note provides general information for configuring PBX "workgroup" features such as hunting on users' phones after connecting a PWT Mobility Server system.

Of necessity, this note gives only general guidelines for configuration, not hard and fast rules. Various PBX manufacturers have variations in how workgroup features operate, and even for one PBX type there may be different user options for each workgroup feature. Furthermore, each customer uses the features in a different way. Therefore this note is intended to assist administrators of the Mobility Server system and PBX to understand one way in which the PBX features might be used to exploit the PBX features and the power and flexibility of the Mobility Server system.

We consider one approach of how the PBX administrator may wish to reassign the Lucent Definity® PBX group features of Hunting, Terminating Extension Group (TEG), and Call Pickup for members of a workgroup who will also be defined within the Mobility Server system. The approach is based on the philosophy or principles that:

1. *when callers need access to the **group** function they call the **group number***
2. *when callers need a particular **person**, they dial the person's Mobility Server **personal number**.*

Note: we emphasize that the "group" features of hunting, TEG, and pickup are *not* implemented within the Mobility Server system. They are solely PBX features; this note addresses how to reassign the features when the user migrates to the Mobility Server system.

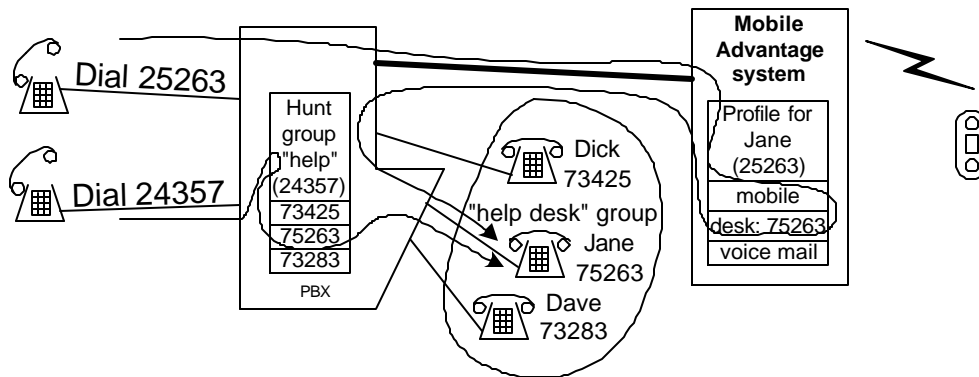
2. Technical Discussion

The call pickup feature is suitable for a workgroup of people in physical proximity working closely together, typically handling incoming phone calls. When a desk phone belonging to a group member rings, the ringing is normally audible to every member of the group. A conceptual model might be a purchasing or shipping department. The hunting or terminating extension group feature might be used in the same environment also; hunting can be used in larger inbound call centers as well. Smaller groups might make use of one or all of the wireline system's features for Hunting or Terminating Extension Group, and Call Pickup.

When a Personal Number user's desk phone is a member of one of these groups, the desk phone number may belong to two lists: the group list within the PBX, and the ringing sequence list within the user's Mobility Server system personal profile. This is illustrated for the case of hunting in the following figure:

February 6, 2002

Log #: AN-0015



Two call scenarios are illustrated. Calls to Jane's personal number 25263 are routed by the PBX to the Mobility Server system, and by the Mobility Server system to her desk extension 75263, possibly after ringing her PWT phone first. Calls to the "Help Desk" (24357) may be routed directly to Jane's desk phone by the PBX if the desk phone is idle.

This scenario shows that if the Help Desk people were also in a Call Pickup group, it would be convenient to have their PWT phone as the first phone in their Personal Number ringing sequences. Then on calls to their personal numbers their PWT will ring first, giving them a chance to answer personally even if they are away from their desks; this will diminish the chances of coworkers picking up these calls prematurely because the desk phone was ringing. If these users are also hunt-group members, calls from the hunt group which ring their desk phones will not ring their PWT, and can properly be answered via call pickup by coworkers.

An additional option (not shown in the above figure) would be to simply remove a user's desk phone from the Mobility Server system Personal Number profile. Then hunt-group calls would ring the desk phone exclusively and personal-number calls would ring the PWT exclusively and could not be taken at the user's desk phone.

The numbering plan in this scenario was chosen to conform to recommendations for Mobility Server system redundancy (see reference 2).

3. Solution

This section focuses on the primary workgroup features of Hunting, Terminating Extension Group, and Call Pickup.

3.1 Hunt Groups.

The PBX Hunt Group Feature distributes calls to a single hunt-group number among multiple people, one at a time. The hunt-group number will be that of the *desk-phone hunt group*, not the personal number of any individual. A person in a hunt group will be given an incoming call if the wireline system detects their phone is "next" and their line is not busy. The feature is presumably used to receive calls from customers, etc. Note that the wireline system cannot detect that a person in a hunt group is active on a PWT phone call.

If the user is to continue to be in a hunt group, it is assumed that the person will receive and answer hunt-group calls only at their desk - i.e., only with the wireline phone, never with the PWT phone. The PWT phone is reserved for calls to the user's personal number. *Hunt-group calls are not routed to the Mobility Server system.*

February 6, 2002

Log #: AN-0015

When moving to the PWT Mobility Server, the user's desk phone is assigned a new extension number. The user's personal number is removed from the phone and hunt group and routed to the Mobility Server system. The new extension number must be substituted into the hunt group for the number which was previously that of user's desk phone (now the user's personal number). Then hunt-group calls will be sent to the user's desk phone if the phone is not off-hook; the PBX will detect off-hooks as a result of a hunt-group call, personal-number call, or an origination. If a call to the user's personal number is answered at the PWT phone, the desk phone may still get hunt-group calls while the user on a call using the wireless phone. Since the new extension number, not personal number, is in the hunt group, no hunt-group calls will be sent to the PWT phone.

3.2 Terminating Extension Groups

A Terminating Extension (group alerting) Group (TEG) is a group of up to 4 extensions (or for stations so equipped, call appearances) which ring *concurrently* in response to an incoming call to a single number. The single number will be that of the TEG, not any user's personal number. The call can be answered at any ringing extension.

It is suggested that TEGs be handled analogously to hunt groups (see above): calls to the TEG are taken at a user's desk with the wireline phone only; the PWT phone is reserved for calls to the user's personal number. Then as with a hunt group, the user's personal number is removed from the phone and TEG and routed to the Mobility Server system. The new PBX extension number must be substituted into the TEG. Then TEG calls will be sent to the user's desk phone if the phone is not off-hook. If a call to the user's personal number is answered at the PWT Phone, the desk phone may still get TEG calls. Since the PBX extension, not the personal number, is in the TEG, no TEG calls will be sent to the PWT phone.

3.3 Call Pickup Groups

The Call Pickup feature allows a user to use a desk phone to answer a call ringing at the desk phone of another user in the same call pickup group. This feature is useful in environments in which the ringing of the pickup group phones can be heard at the other phones.

When a call-pickup group member becomes a Mobility Server system user, the new PBX extension number for the user's desk phone can be substituted into any call pickup group(s) for the previous user number. The user will then be able to pick up calls ringing at the same phones that the user was able to pick up previously. Members of these pick-up groups will be able to pick up calls ringing at the user's desk phone, but not at the user's PWT phone.

As noted above, operation of call pickup may cause confusion if concurrent ringing is active. If an incoming call arrives for the user's personal number, the user may be about to answer the call with a PWT phone, but someone in the pickup group picks up the call because the user's desk phone was ringing and the user was away from the desk. It is suggested that call pickup be utilized with concurrent ringing disabled for Mobility Server system users in the group; the users' profiles would ring the PWT phone first and desk phones last. In this case a ringing desk phone is likely a hunt-group call and can be appropriately picked up by another user. Alternatively, the desk extension can be removed completely from the Personal Number user's profile, as described above.

4. Reference

1. PWT Mobility Server Installation and Operations Manual
2. Application Note 1999-1-0004A, Redundant Configurations.