Application Note

Ascom® Wireless Solutions Inc.

Product: DLU Port Configuration-Meridian-1/SL-1
Purpose: To provide information on DLU port configuration between DCT1900 Freeset on-site wireless communication system and Meridian-1/SL-1.
Date: March 8, 2005

DLU Port Configuration-Meridian-1/SL-1

Overview

The DLU provides an intelligent interface between the Freeset DCT1900 on-site wireless communication system and a proprietary digital PBX. The DLU emulates the digital telephone sets of the PBX and allows Freeset users to take advantage of digital phone set features.

Digital Phone Set Features

The DLU supports the following digital phone set features to the Freeset DCT1900 Portable Telephones:

- Multiple Line Appearance
- Calling Line Identity
- Called Line Identity
- Connected Line Identity
- Redirected Party Number
- Message Waiting Indication
- Transfer
- Conference
- Hold
- Reconnect

Hardware

The NT8DO2 (16 port) line card is needed for the M-1 PBX
The QPC578D (8 port) line card is needed for the SL-1 PBX
The NTDK16BA (48 port) line card is needed for the Option 11c Mini

Software

Supports software release 25 – Succession 3.0

Programming

The programming menus for M-1/SL-1 systems vary between different software releases. Refer to the appropriate manuals for details. Error codes are in numeric form. You will need a manual to decode them.

The important port configuration details:

- Handsfree (HFA) and display (ADD) must be set in CLS (class of service).
- There must be 4 SCR (single call ringing) appearances, with unique DNs, on the first 4 keys (0-3).
- LHK (last hunt key) must be set to 3.
- TRN (transfer) must be on key 4.
- AO6 (conference) must be on key 5.

1. Enter <CR> a few times. The consoles should respond with “OVL111 IDLE”: this means you can attempt to login.
2. Enter “LOGI” and hit <CR>. Enter your password and hit <CR>.
3. The system should log you on. The system prompt will say “TTY #00 LOGGED ON AT…” and the current date and time.
4. Configure the DLU ports using Overlay 11. Type “LD 11” <CR> and wait for the “REQ” prompt.
5. If the 2616 ports exist, use “CHG” to modify them. Type “CHG” <CR>, enter “2616” for the type, and then the TN (terminal number). Use the easy change option (type “YES” <CR> at the “ECHG” prompt) to set the following fields. If the ports do not exist, use the “NEW” option and use all default values (press <CR> at the prompt) with the following exceptions:
    a. CLS (class of service): The following marks must be set: HFA ADD
    b. LHK (last hunk key) must be set to 3.
    c. KEY 00 SCR XXXX. This must be a unique DN.
    d. KEY 01 SCR XXXX. This must be a unique DN.
    e. KEY 02 SCR XXXX. This must be a unique DN.
    f. KEY 03 SCR XXXX. This must be a unique DN.
    g. KEY 04 TRN. This is the transfer key.
    h. KEY 05 AO6. This is the 6-party conference key.
6. Repeat 5-13 for all DLU ports.
7. Exit system by typing LOGO.

Assigning PRI Lines for External Calling

It is assumed a PRI trunk is present and configured for general operation. Assigning PRI lines/DNs to the port is accomplished by simply entering the desired DID number associated with one of the PRI trunk lines as a KEY 00 to 03 number (as seen in the previous page).

Assigning Analog Lines for External Calling

With an analog trunk attached and configured on the PBX, incoming calls can be configured to ring at a desired set by programming the following:

1. Login and type “LD 14” <CR> and wait for the “REQ” prompt.
2. At “REQ” enter “CHG”.
3. At “TYPE” enter “COT”.
4. At “TN” enter the analog terminal number - “1 0” for this example.
5. Press “enter” until “ATDN” is displayed and enter the DN of the set to receive the call.
6. Press “enter” until “REQ” is displayed.

The DN assigned to receive the call can be verified by the following steps:

1. Login and type “LD 20” <CR> and wait for the “REQ” prompt.
2. At “REQ” enter “PRT”.
3. At “TYPE” enter “COT”.
4. At “TN” enter the analog terminal number - “1 0” for this example.
5. Press “enter” until “ATDN” and the assigned DN are displayed.

Maintenance

The Meridian PBX may disable ports that are left idle for a long period of time. If this occurs, the following steps may be taken to re-enable the ports:

Repeat steps 1 to 3 in the Port Configuration section.

1. Login and type “LD 32”
2. Get that state of the card or DN.
   Type: STAT 17 (card 17)
   Type: STAT 17 05 (card 17, port 05)
3. If any ports are listed as disabled, either the entire card or individual ports can be re-enabled.
   Type: ENLC 17 (enable entire card)
   Type: ENLU 17 05 (card 17, port 05)
4. Get the state (step 2) to verify ports are enabled. They should be listed as “Idle”.

References

Nortel Meridian Administration and Implementation Manual.
Ascom Technical Services Bulletin - AN-0359 V2

http://www.nortelnetworks.com/support

Comments

The Meridian DLU interface board provides similar characteristics of the M2616 telephone with display.

Additional Information

For additional information, please contact the Ascom Technical Support team at 1-877-71ASCOM, Option 3.