

Application Note



Ascom® Wireless Solutions Inc.

Product: DLU Port Configuration – Norstar
Purpose: To provide information on DLU port configuration between DCT1900 Freeset on-site wireless communication system and Norstar.
Date: March 9, 2005

DLU Port Configuration – Norstar

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
- Call Back
- Cancel Call Back

Hardware

There are no line cards in the base unit of a Norstar system. The various Norstar systems can have between 8 and 32 ports in the base unit and certain systems can expand to much more.

Software

The Norstar DLU is compatible with software release DR2-DR5 on the 6X16 and 8X24 systems and CICS/MICS software release 6 or lower.

Programming

The programming menus for Norstar systems vary between different systems and software releases...consult the appropriate manuals for details.

The important port configuration details:

- Handsfree option must be off
- There should be 4 intercom keys. In instances where the software release supports less than 4, the handsets must be configured for the number of available line appearances at time of initialization.
- The prime line must be set to I/C (intercom)

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1. It is advisable to administer the system from one of the first two ports in the system. You must have a M7310 or larger phone connected to this port (2 line display).
2. Place the programming overlay over the top two lines of LCD indicators, this shows you where the NEXT/SHOW/BACK/HEADING keys are.
3. Dial FEATURE * * 2 6 6 3 4 4 on the phone. Enter the configuration password.
4. "Terminals&Sets" is displayed. Press SHOW.
5. At the "Enter Extension" prompt, enter the DN of the DLU port. Press SHOW.
6. Press NEXT until "Line Access" is shown. Press SHOW, NEXT, NEXT.
7. The "Prime Line" field is displayed; press the CHG softkey until the field is "I/C".
8. Press NEXT and the "Intercom keys" field is displayed, press the CHG softkey until the value is 4.
9. Press HEADING to return to "Line Access" and press NEXT to display "Capabilities". Press SHOW, NEXT, NEXT, NEXT.
10. The "Full Handsfree" field is displayed. Press the CHG softkey until the field is "None".
11. Press HEADING, HEADING to get back to return to step 4. Repeat steps 5-11 for all DLU ports.
12. Press RLS to terminate the session and activate all changes.

Configuring System for Analog and Digital External Calling

It is assumed that a PRI trunk and at least one analog CO line are present and configured for operation including routing, remote package, and destination codes for the PRI trunk and an access code for the Analog line. The following settings are required in order to send and receive external PRI/Analog calls:

1. PRI Inbound:
 - Under "LINES"
 - Select a target line (number and range determined by system size) and assign the DN of the desired PRI line as "REC'D DIGITS" (DID number).
 - Set target line to "PUBLIC"
 - Set "If Busy" field to "TO PRIME" and make Prime Set and CLID set the DN of the set the line is being assigned to.
 - Under "TERMINALS and SETS"
 - Assign the target line as "RING ONLY" to the DN of the desired set.
 - Enable "LINE POOL ACCESS" for the appropriate PRI card in the KSU.
2. PRI Outbound;
 - With the proper routes and destination code configured and Line Pool Access enabled for the set in question, outbound dialing is already configured. Simply go off-hook, dial the Destination Code (9 in this example) and the desired external number.

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3. Analog Inbound:
 - Under “LINES”
 - Select the desired analog line
 - The “TRUNK TYPE” will be set automatically, dependant on KSU card type.
 - Set “LINE TYPE” to the appropriate line pool “POOL A” for this example.
 - Make Prime Set and CLID set the DN of the set the line is being assigned to.
 - Under “TERMINALS and SETS”
 - Assign the analog line as “RING ONLY” to the DN of the desired set.
 - Enable “LINE POOL ACCESS” for the appropriate line pool in the KSU.
4. Analog Outbound;
 - With the proper routes and Access Code configured and Line Pool Access enabled for the set in question, outbound dialing is already configured. Simply go off-hook; dial the Access Code (8 in this example) and the desired external number.

Note: Disconnect supervision is only available if the analog line in question is connected to a Disconnect Supervision card in the KSU (recommended).

Naming Conventions for Internal Caller ID

To properly display internal Caller Identification on the Freeset DCT1900 portable telephones, the Set Name must begin with a numeric string. This numeric string can be followed by an alphanumeric string, but must be separated by at least a space. For example:

- “28” is valid
- “28 Joe Smith” is valid
- “28-Joe Smith” is invalid
- “Joe Smith 28” is invalid

References

Ascom Technical Service Bulletin – AN-0360

<http://www.nortelnetworks.com/products/01/norstar/systems>

Additional Information

For additional information, please contact the Ascom Technical Support team at 1-877-71ASC0M, Option 3.