ISDN Calling Line ID Enhancement (CLID)

Prior to X11 Release 22, CLID would only support a single LDN, a single Home NXX, and single Home Location Code. The Calling Line ID was built from key 0 of a set, or the Listed Directory Number.

The Calling Line ID Enhancements feature delivers enhanced functionality pertaining to the construction and generation of Calling Line ID, and allows more program flexibility for Meridian 1 sets pertaining to CLID.

Applications and Benefits Prior to X11 Release 22 the CLID generated on a transferred or conferenced call was inconsistent. The CLID associated with a call originating at an ACD phone would always be associated with key 0, regardless from what key the call originated.

The CLID enhancement rectifies these operations. The CLID parameters have also been enhanced to include multiple NXXs, multiple Home Location Codes (HLOCs), multiple Numbering Plan Areas (NPAs), multiple Local Steering Codes (LSCs), and multiple Listed Directory Numbers (LDNs). The Calling Line ID Enhancement will allow more flexible CLID generation than in the past.

With the Calling Line ID Enhancement feature, the system now supports:

A new table driven feature with up to 4000 entries.

Any entry number can be programmed against any DN on a per DN basis.

Allows any existing LDN to be used on a per DN key, per set basis.

Allows the Individual Directory Number (IDN) key of an ACD set to be sent as the CLID.

Allows the active DN key to determine the CLID that is sent for conference and transfer.

Supports the flexibility of 2-3 or 5-7 digit DNs.

The following example demonstrates the ISDN Calling Line ID Enhancement.

CLID Entry	Entry 0	Entry 1	Entry 2
HNTN, code for home national number	415	415	
HLCL, code for home local number or LDN	940	9699170	
DIDN, use DN as DID	Yes	No	SRCH
HLOC, home location code	646	646	646
LSC, local steering code	5	5	5

Key 1: CLID table entry 1

2540
2130

Key 0: CLID table entry 0

A call originator making a public network long distance call from key 0 will send the Calling Line ID (CLID) 415-940-2130. Key 0 referenced Entry 0, which has DIDN = Yes. This means that key 0 is a DID number. The full public CLID is created by saving the 4 digit DN, and adding the HLCL (in this case the equivalent of the HNXX) and the HNTN (in this case the equivalent of the HNPA). The same caller making a private network call will send CLID 646-2130. These numbers are constructed by accessing the HLOC data in Entry 0 from the CLID entry table in the Customer Data Block.

A call originator on key 1 making a public network long distance call will send CLID 415-969-9170. Key 1 references Entry 1, which has DIDN = No. This means that key 1 is not going to be considered a DID number. The CLID will be based on the input in the HLCL entry, plus the HNTN. The same caller making a private network call will send the CLID 646-2540.

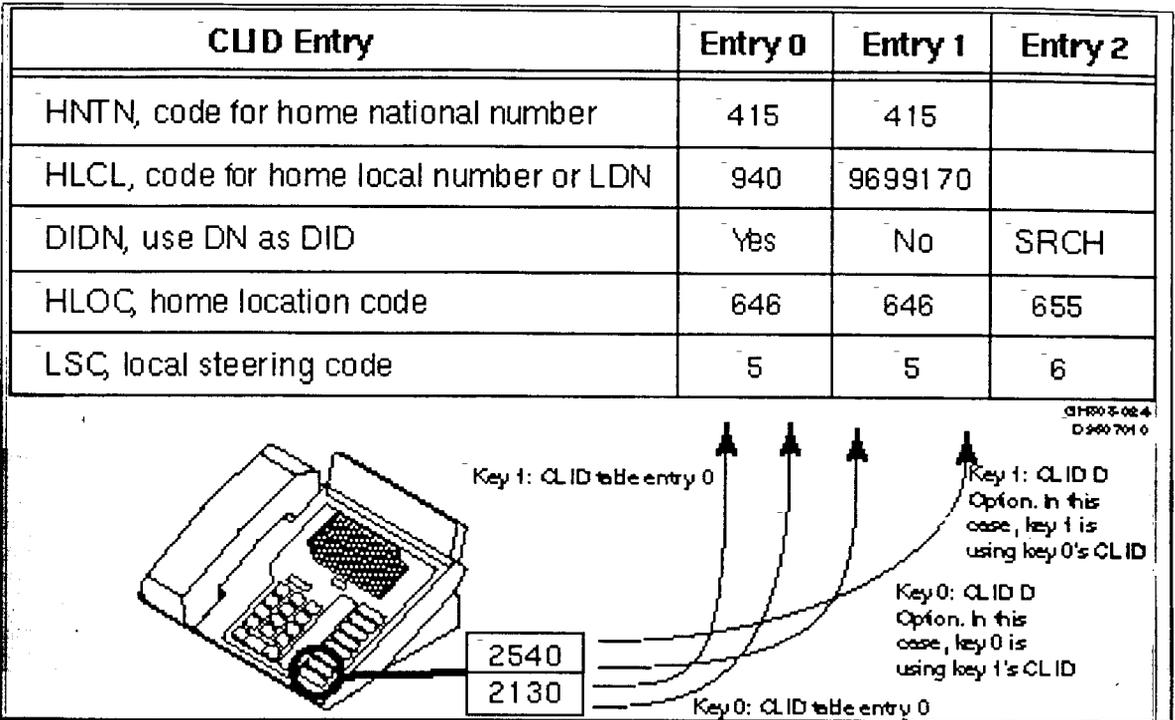The following illustration demonstrates the SRCH function of the CLID entries.

CLID Entry	Entry 0	Entry 1	Entry 2
HNTN, code for home national number	415	415	408
HLCL, code for home local number or LDN	940	9699170	9885560
DIDN, use DN as DID	Yes	No	SRCH
HLOC, home location code	646	646	655
LSC, local steering code	5	5	6

Key 0:CLID table entry 0

Key 1: CLID table entry 2

Key 0:CLID table entry 1

2540
2130

A call originator making a public network long distance call from key 1 will send 415-940-2130 the CLID associated with key 0, if key 0 references Entry 0. This is because key 1 is using CLID entry 2, which has DIDN = SRCH. This means, beginning at key 0, the system will search for the first DN whose CLID DIDN entry = Yes. If the CLID entry associated with key 0 is entry 1, which has DIDN = No, then the CLID associated with key 1 will be 408-988-5560. If the system is unable to find a key with an entry that has DIDN = Yes associated it, it will send the digits referenced in the HLCL of its own original entry number.

A call originator making a private network call from key 1 will send CLID 655-2540.

The following illustration demonstrates the CLID **D** option.

CLID Entry	Entry 0	Entry 1	Entry 2
HNTN, code for home national number	415	415	
HLCL, code for home local number or LDN	940	9699170	
DIDN, use DN as DID	Yes	No	SRCH
HLOC, home location code	646	646	655
LSC, local steering code	5	5	6

A call originator from key 1 has the **D** option referenced to it. The **D** option means that beginning with key 0 the system will search for a CLID entry to find a DN key and then use the CLID entry associated with the found DN key. In the example below, a call to the public network originating on key 1 will send the CLID 415-940-2130. A call to the private network will send the CLID 646-2130. The CLIDs that are sent result from key 1 referencing the **D** option, and the system finding a DN on key 0 associated with entry 0 of the CLID table. The CLID is constructed based on the HNTN and HLCL of entry 0, plus the DN appearing on key 0.

Feature or Hardware Limitations There is no new hardware introduced by this feature.

This feature is not applicable to ACD 500/2500 sets.

Programming

Use the following overlays to implement Calling Line ID Enhancement:. **(New information appears in bold.)**

- Program the CLID entries in LD 15:

PROMPT	RESPONSE	DESCRIPTION
REQ	CHG	Change the Customer Data Block
TYPE	NET	Change Network Data
CUST	0-99	Customer Number
CLID	(NO)/YES	**Calling ID option is (disabled) enabled**
SIZE	0-(256)-4000	**Maximum Calling Line ID entries. (Memory will be allocated for the size entered**
ENTRY	0-3999	**Entry number**
HNTN	XXXXXX	**National code for home national number (NPA) (1-6 digits)**
HLCL	XXXXXXXXXXXX	**Local code for the home local number (NXX) (1-12 digits)**
HLOC	XXXXXXX	**Home Location Code (1-7 digits)**
DIDN	(YES)/NO/SRCH	**Yes = Precede the DN of the active DN key with the digits of the HLCL** **No = Send the digits in the HLCL instead of the DN** **Srch = Do not use active DN, instead begin at key 0 and search for a DN with DIDN = YES**

Program the CLID information for any non-ACD DNs that appear on multi-line/digital/SL1 phones in LD 11:

KEY	X SCR/N, MCR/N, PVR/N YYYY Z*/D	X = Key number (0-59) Y = Directory Number Z = CLID entry number (0-3999) or D = Search the set from Key 0 and up to find a DN key. Use the CLID entry of the found DN as the CLID of the active DN *All DNs will default to Entry 0*

Program the CLID information for an ACD DN that appears on a multi-line/digital/SL1 phone in LD 11:

PROMPT	RESPONSE	DESCRIPTION
REQ	CHG	Change the Set Data Block
TYPE	2XXX, 3XXX, SL1	Type of set
—continued—		

Program the CLID information for an ACD DN that appears on a
multi-line/digital/SL1 phone in LD 11: **(continued)**

PROMPT	RESPONSE	DESCRIPTION
TN	L S C U	Loop, shelf, card, unit
KEY	0 ACD XXXX Y*/D ZZZZ	X = ACD DN Y = CLID entry number (0-3999) or D = Search the set from Key 0 and up to find a DN key. Use the CLID entry of the found DN as the CLID of the active DN Z = Position ID (0001-9999) *All DNs will default to Entry 0* NOTE: CLID entry number or D option is provisioned between the ACD DN and the Position ID.

Program the CLID information for the DN in LD 10:

PROMPT	RESPONSE	DESCRIPTION
REQ	CHG	Change the Set Data Block
TYPE	500	Analog set
TN	L S C U	Loop, shelf, card, unit
DN	XXXX Y*	XXXX= Directory number Y= CLID entry (0-3999) *All DNs will default to Entry 0*