



INDeX

Programming Reference

(Level 8.0)



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General Menus

Log On Menu

This is the standard starting menu at which the switch requests the programming password. The switch supports up to 8 passwords (*see "Passwords Menu" on page 14*). The password used at log on controls which menus and sub-menus the user can then access (*see "Permissions List menu" on page 50*).

The **Serial number** displayed should be noted. The number is unique to the switch's CPU Cassette and is used to define the licence numbers for additional equipment and facilities (*see "Switch Licences" on page 22 and "Server Licences" on page 22*).

To return to this screen the user must log off and then log on again.

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INDeX

ADMINISTRATION AND MAINTENANCE ACCESS

Serial number : 0000000123

Password= _

Resources Menu

This screen appears following a successful log on. It gives information on the CPU Cassette, software version and database resources. Pressing ↵ displays the **Main Menu**.

Note, this screen is only shown after correct password entry. To return to this screen the user must log off and then log on again.

The **Location** and **Country Code** options are set by uploading an appropriate default database for the country of operation required. The default database provides the system with the correct defaults for operation in that country.

**** Logged into INDeX V1000 at 12:10:14 on 01-JAN-99 **** V8.0

Resources

Directory numbers : 9969 available out of 10000
 User Records : 1475 available out of 1500
 Group cells : 3678 available out of 3700
 Device lines used : 10%
 Location : ENGLAND
 Country Code : ENGLAND

Press return to continue

Main Menu

This is the top level menu for INDeX system programming. Pressing the **Esc** key within any sub-menus returns you to this menu.

MAIN MENU

- | | |
|-------------------------------|----------------|
| 1. Reports | > See page 5. |
| 2. System | > See page 11. |
| 3. Users | > See page 23. |
| 4. Terminals | > See page 29. |
| 5. Trunks | > See page 31. |
| 6. Groups | > See page 33. |
| 7. Call Control | > See page 34. |
| 8. Directory | > See page 37. |
| 9. Maintenance | > See page 45. |
| 10. PSTN Access | > See page 47. |
| 11. Network | > See page 48. |
| 12. Permissions list | > See page 50. |
| 13. Night Service | > See page 51. |
| 14. Automatic Route Selection | > See page 53. |
| 15. Automatic Call Announcing | > See page 64. |
| 16. Database Management | > See page 66. |
| 17. Linecard Information | > See page 67. |

Select >

Reports

Reports Menu

This menu provides access to a series of report output options including the SMDR, fault and event logs.

- Reports.

REPORT MENU

- | | |
|---|----------------|
| 1. Set up statistics parameters | > See page 5. |
| 2. Set up Smdr parameters | > See page 6. |
| 3. Report statistics | > See page 7. |
| 4. Report fault details | > See page 8. |
| 5. Start/stop Smdr, fault, event logging and DECT | > See page 9. |
| 6. List the directory | > See page 10. |
| 7. Engineer reports | > See page 10. |

<ESC> Return to MAIN MENU

Select >

Set Up Statistics Parameters

The parameters on this screen control the display of data within statistics reports (*see "Report Statistics" on page 7*). The only other factor affecting statistics reports is an outgoing call's local, national or international category which is set through the ARS Route List used for a call (*see "Route Lists" on page 61*).

- Reports > Set up statistics parameters

SET UP STATISTICS

- | | |
|----------------------|-------------|
| 1. Busy period | : 1000-1200 |
| 2. Minimum call time | : 15 |
| 3. Long call time | : 180 |
| 4. Clear totals | |

<Esc> Return to the REPORT menu

Select >

Settings

- **Busy period:** *hh:mm-hh:mm*
Sets the start time and end time that define the switches "busy period" in 24-hour clock format. Statistics reports show separate tallies for calls during and outside the "busy period".
- **Minimum call time:** *0 to 999 seconds*
The duration below which the switch will not include calls on statistics reports.
- **Long call time:** *0 to 999 seconds*
Statistics reports show separate tallies for calls above and below the "long call time" in length.
- **Clear totals:** *Device [All or dn or address]*
Clears the stored call statistics for a specified device or for 'All' devices.

Set Up SMDR Parameters

This menu defines the parameters for SMDR log output via the chosen port. SMDR output is started on a port by using the **Start SMDR** or **Start SMDR and Event log** commands (see *"Start/stop SMDR, Fault, Event Logging and DECT"* on page 9).

Calls are only included on the SMDR output of a port if they meet the parameter below and both the User and the Trunk's Call Control Plan have their **Include on Smdr** status set to **yes** (see *"Personal Status"* on page 24 and *"Call Control"* on page 34).

The only other factor affecting SMDR output is an outgoing call's local, national or international category which is set through the ARS Route List used for a call (see *"Route Lists"* on page 61).

- Reports > Set up Smdr parameters > Port [range, 1-4]

SET UP SMDR - Port 1

```

1. Minimum call time      : 0
2. Call type              : Bothway
3. Other outgoing calls   : Not included
4. Long distance calls    : Not included
5. International calls    : Not included
6. Page size             : 60
7. Line spacing           : Single

```

<Esc> Return to the REPORT menu

Select >

Settings:

- **Minimum call time:** [range 0-999 seconds]
The duration below which the switch ignores calls for the SMDR log.
- **Call type:** [Bothway] or [Incoming] or [Outgoing]
Sets the type of calls recorded on the SMDR output of the port.
- **Other outgoing calls:** [Not included] or [Included]
Sets whether the SMDR output of the port should include calls not classified as long distance or international calls.
- **Long distance calls:** [Not included] or [Included]
Sets whether the SMDR output of the port should include calls classified as long distance.
- **International calls:** [Not included] or [Included]
Sets whether the SMDR output of the port should include calls classified as international.
- **Page size:** [1 to 255 lines]
Defines the page size for the SMDR output of the port.
- **Line spacing:** [Single] or [Double] or [Triple]
Defines the line spacing for the SMDR output of the port.

Report Statistics

Outputs call statistics reports according to the parameters set on the **Set Up Statistics Parameters** menu (*see "Set Up Statistics Parameters" on page 5*). An example report is shown below.

The **TAB** key is used to select the port to which the report is sent. If the same port as the programming display is selected, the report appears on the programming display (press the **Esc** key to end the report and return to programming).

- Reports > Report statistics

STATISTICS REPORTS

** Port selected (use TAB) **

Serial port 01 : you <--

Serial port 02 : idle

Serial port 03 : idle

Serial port 04 : idle

1. Statistics totals

2. Device statistics

3. Call charges

<Esc> Return to the REPORT menu

Select >

Settings:

- **Statistics totals:**

Outputs a report on call statistics for the whole switch.

- **Device statistics:** *Device [All or dn or address]*

Outputs a report on call statistics for a specific device or for all devices.

- **Call charges:** *Device [All or dn or address]*

Outputs a report on call charges received for the whole switch or for a specific device. This option only works for DASS and ISDN devices where the PSTN provides the appropriate call charge signals.

Example Report

STATISTICAL REPORT FOR ALL STATIONS TAKEN AT 07:28 2-OCT-98

EXTERNAL CALLS

TYPE	TOTAL SHORT	TOTAL LONG	BUSY PERIOD SHORT	BUSY PERIOD LONG
INCOMING :	14	42	3	2
UNCLASSIFIED :	28	26	5	3
LOCAL :	19	40	3	5
LONG DISTANCE :	6	11	0	4
INTERNATIONAL :	0	6	0	1
AVERAGE ANSWER TIME			20 SECONDS	

INTERNAL CALLS

TYPE	TOTAL CALLS	BUSY PERIOD CALLS
INTERNAL	45	26
BUSY PERIOD	START TIME	10:00
	STOP TIME	12:00
SHORT-CALL RANGE	15 TO 180 SECONDS	

Report Fault Details

This menu outputs a historical fault report for the whole switch or a specific device. Faults for the whole switch can also be output to a port as a fault log (see *"Start/stop SMDR, Fault, Event Logging and DECT" on page 9*).

The **TAB** key is used to select the port to which the report is sent. If the same port as the programming display is selected, the report will appear on the programming display (press the **Esc** key to end the report and return to programming).

- Reports > Report fault statistics

REPORT FAULTS

** Port selected (use TAB) **

Serial port 01 : you <--

Serial port 02 : idle

Serial port 03 : idle

Serial port 04 : idle

1. Clear faults

2. Print faults

<Esc> Return to the REPORT menu

Select >

Settings

- **Clear faults:** *Device [All or dn or address]*
Clear the fault log for a specific device or all switch devices.
- **Print faults:** *Device [All or dn or address]*
Outputs a report on faults for a specific device or all switch devices.

Fault Report/Log Details

Full details are found in the INDeX Installation & Maintenance Manual. This section only gives an overview of the fault reports and does not detail the fault codes.

Each line of a switch fault report includes the following fields.

- **Site Code:** The sites network node number.
- **Prefix:** Fixed as **ALM**.
- **Fault Priority:** 1 = Major, 2 = Minor, 3 = Warning, 4 = Information only (ie. cleared).
- **Fault Code:** A two digit code identifying the actual fault (code 91 and 92 are used for fault cleared).
- **Equipment Number:** The device address (cabinet/slot/channel).
- **Date:** The date the fault occurred.
- **Time:** The time the fault occurred.

Start/stop SMDR, Fault, Event Logging and DECT

This menu is used to start/stop the output of various switch log options. The current outputs running on each port are shown.

The **TAB** key is used to select the port to which the log is sent when start or the port on which output is being stopped. If the same port as the programming display is selected, the report will appear on the programming display (press the **Esc** key to end the log output and return to programming).

- Reports > Start/stop Smdr, fault, event logging and DECT

SMDR, FAULT, EVENT LOGGING AND DECT

** Port selected (use TAB) **

Serial port 01 : you <--

Serial port 02 : fault log

Serial port 03 : Smdr/Event log

Serial port 04 : dect

1. Start SMDR
2. Start fault log
3. Start Smdr and Event log
4. Start Event log
5. Start DECT
6. Stop log

<Esc> Return to the REPORT menu

Select >

Settings

- Start SMDR:

Starts SMDR output to the indicated port. Each port can be set up with differing SMDR output parameters (*see "Set Up SMDR Parameters" on page 6*). The SMDR log can be output from more than one port at a time.

- Start fault log: Device [All or dn or address]

Start output of faults as they are detected to the indicated port. The output may be for a specific device or all switch devices (*see "Report Fault Details" on page 8*). The fault log can be output on more than one port at a time.

- Start Smdr and Event log:

Starts combined SMDR and event log output to the indicated port. This output is subject the parameters/restrictions for individual SMDR and Event log outputs.

- Start Event log:

Starts event log output to the indicated port. Note that the Event log can only be output to one port at any time.

- Start Dect:

Starts the DECT log output to the indicated port. This carries switch information for devices which have their **Port Type** set to **DECT** (*see "Terminal" on page 29*). The DECT log can be output to more than one port at a time. Use of the DECT log requires entry of a **Mobile numbers** licence key for DECT.

- Stop log:

Stops the log output currently running on the indicated port.

List the Directory

This menu provides output of the switch's directory. The term '**Internal**' covers terminal, users, groups and trunks on the switch. The term '**External**' covers system speed dials programmed into the switch.

Those reports '...with pagination...' are intended for output to a printer and use the page size and line spacing settings from the ports SMDR parameters (*see "Set Up SMDR Parameters" on page 6*). The other reports are intended for output to an 80 character by 24-line display device.

The **TAB** key is used to select the port to which the log is sent when started or the port on which output is being stopped. If the same port as the programming display is selected, the report will appear on the programming display (press the **Esc** key to end the log output and return to programming).

- Reports > List the directory

```

      DIRECTORY DISPLAY

      ** Port selected (use TAB) **
Serial port 01 : you          <--
Serial port 02 : idle
Serial port 03 : idle
Serial port 04 : idle

1. Internal by name
2. Internal by number

3. External by name
4. External by number

5. Internal with pagination by name
6. Internal with pagination by number

7. External with pagination by name
8. External with pagination by number

<Esc> Return to the REPORT menu

Select >

```

Engineer Reports

The reports provided by this menu are intended for use only under instruction or guidance from Lucent Technologies. Where appropriate some of these reports are detailed in the INDeX Installation & Maintenance Manual.

- Reports > Engineer reports

```

      ENGINEER REPORTS

      ** Port selected (use TAB) **
Serial port 01 : you          <--
Serial port 02 : idle
Serial port 03 : idle
Serial port 04 : idle

1. S/W event trace report
2. S/W diagnostic report
3. Clear S/W event trace
4. Clear S/W diagnostic
5. Display GPT info
6. Display trace info
7. Clear trap info
8. List patch information

<Esc> Return to the REPORT menu

Select >

```

System

System Menu

This menu provides access to settings that control system wide features.

- System

SYSTEM MENU

1. System speed dial > *See page 12.*
2. Timeouts > *See page 13.*
3. Ports > *See page 14.*
4. Passwords > *See page 14.*
5. Clock > *See page 15.*
6. Installation > *See page 16.*
7. Frame synchronisation > *See page 17.*
8. P.I.N table > *See page 17.*
9. Accounts table > *See page 18.*
10. Tenant to area ratio > *See page 18.*
11. Voice mail > *See page 19.*
12. Facility options > *See page 19.*
13. Absence Messages > *See page 20.*
14. Supervisor Messages > *See page 20.*
15. System Alarms > *See page 21.*
16. Switch Licences > *See page 22.*
17. Server Licences > *See page 22.*

<ESC> Return to MAIN MENU

Select >

System Speed Dial

The switch can store 1800 speed dials. Users can then access these by either knowing the speed dial store number or using the INDeX function on suitable terminals.

- System > Speed dial number [ranges 100-899, 9000-9999] or [↵, first speed dial store]

SPEED DIAL STORE 100

1. Dial prefix :
2. CLI prefix :
3. Number :
4. Name :
5. Sort option : As entered
6. Account no. :
7. Tenant / X dir : 1

8. Enter a new speed dial number
9. Next used speed dial number

<Esc> Return to the SYSTEM menu, <TAB> for next speed dial

Select >

Settings

- **Dial prefix:** *[up to 4 digits] or [Sxxxx]*
Sets a prefix that is added to the **number** before processing by ARS when used for an outgoing call.
 - The prefix is normally the external dialling prefix or a specific trunk or trunk group. This allows the speed dial **number** (plus **CLI prefix**) to be used for incoming CLI matching (where a matched CLI is then replaced by the speed dial **name**).
 - If left blank or not assigned, the external dialling prefix (or trunk or trunk group number) should be included in the **number** part of the speed dial. This stops the speed dial being used for CLI matching.
 - The dial prefix can be set to another speed dial number in the form **Sxxxx** (eg. **S9001**). That speed dial is processed first and then followed by this speed dial. This is called a "chained speed dial".
- **CLI prefix:** *[up to 4 digits]*
Used for the incoming CLI matching where the **number** used to make calls to a location differs from the CLI received from that location. For example: For a local number, the speed dial number does not need to include the area code, however incoming CLI will include the area code and so that should be set as the CLI prefix.
- **Number:** *[up to 16 digits]*
The external number used for the speed dial. When the speed dial is used for an outgoing call it is prefixed with the **Dial prefix** before dialling. When the speed dial is used for incoming CLI matching it is prefixed with the **CLI prefix**.
- **Name:** *[up to 16 characters]*
The name associated with the speed dial. Displayed on suitable devices and directory reports.
- **Sort option:** *[As entered] or [Last name first]*
If the speed dial name includes spaces, determines how speed dial is sorted within the switch's INDeX function.
- **Account number:** *[up to 12 digits]*
The speed dial account code is output to the switch SMDR if the call meets SMDR parameters (see "Set Up SMDR Parameters" on page 6). It is used for both outgoing speed dial calls and incoming CLI matched calls. Speed dial account codes are not verified against the switch Accounts table (see "Accounts Table Menu" on page 18).
- **Tenant/X dir:** *[tenancy] or [0, X dir] or [↵, not allocated]*
Allows the speed dial to be used only by devices in a specific tenancy. If set to **not allocated** (by entering ↵) then the speed dial can be used by all tenancies. If set to **X dir** (by entering 0) then the speed dial can still be used by all tenancies but does not appear within the INDeX function display.

System Timeout Menu

- System > Timeouts

SYSTEM TIMEOUT MENU

1. Call back cancellation : 120 mins
2. PC Console red alert : 20 secs
3. Guest wake-up alarm : 45 secs
4. Guest alarm repeat : 120 secs
5. Tandem dialling : 60 10th/sec
6. Divert Tone send delay : 12 10th/sec
7. Divert Tone connect delay : 20 10th/sec
8. Busy wait for VM divert : 50 10th/sec

<Esc> Return to the SYSTEM menu

Select >

Settings

- **Call back cancellation:** *[range 0-999 minutes]*
Sets how long the switch waits for a call back to take place before being automatically cancelled.
- **PC Console red alert:** *[range 0-999 seconds]*
Sets the time before a call displayed in a Windows Operator Console (WOC & NOC) call queue changes from green to red.
- **Guest wake-up alarm:** *[range 5-999 seconds]*
Sets for how long a guest wake-up alarm rings.
- **Guest alarm repeat:** *[range 5-999 seconds]*
Sets the delay before an alarm is repeated if unanswered. The system will send a wake-up alarm three times before transferring it to the Reception phone group.
- **Tandem dialling:** *[range 0-999 10th/second]*
Sets the time during which digits for a call transiting to an AC15 circuit are passed on by the switch. After the timeout expires no further digits are allowed.
- **Divert Tone send delay:** *[range 0-999 10th/second]*
Affects two-wire device ports with their **Port Type** set to **MF receiver** (see "Terminal" on page 29). This timeout adds a delay before the switch outputs any dialling digits. Requires entry of a **Divert tones** licence (see "Switch Licences" on page 22).
- **Divert Tone connect delay:** *[range 0-999 10th/second]*
Affects two-wire device ports with their **Port Type** set to **MF receiver** (see "Terminal" on page 29). This timeout adds a delay between the sending of digits via the port and the opening of the speech path. Requires entry of a Divert tones licence (see "Switch Licences" on page 22).
- **Busy wait for VM divert:** *[range 0-999 10th/second]*.
Used when a call arrives at a busy user who has their busy divert set to the **Voice group no** (see "Reserved Numbers" on page 43). It sets how long the call waits before following the divert. Whilst waiting the caller can invoke other busy options instead (eg. callback, message).

Maintenance Ports Menu

Use the **TAB** key to select which port is being adjusted (shown by the ← symbol). If the baud rate of the programming port is altered, the baud rate of the programming device must be altered to match.

- System > Ports

MAINTENANCE PORTS MENU

```

                ** Port selected (use TAB) **
port one      : 9600          <--
port two      : 9600
port three    : 9600
port four     : 9600

```

1. Set port baud rate to 300
2. Set port baud rate to 600
3. Set port baud rate to 1200
4. Set port baud rate to 2400
5. Set port baud rate to 4800
6. Set port baud rate to 9600
7. Set port baud rate to 19200
8. Set port baud rate to 38400

<Esc> Return to the SYSTEM menu

Select >

Settings

- **Set port baud rate to ...:**
Sets the baud rate of the selected port to the required speed.

Passwords Menu

Each password has a corresponding section in the **Permissions List** menu that controls which menus and menu options its user can access (*see "Permissions List menu" on page 50*).

- System > Passwords

PASSWORDS MENU

1. Engineer password :
2. Unrestricted user access :
3. Restricted user access :
4. User access level 4 :
5. User access level 5 :
6. User access level 6 :
7. User access level 7 :
8. User access level 8 :

<Esc> Return to the SYSTEM menu

Select >

Settings

- **Engineer password:** *[up to 6 characters]*
The top level password, intended for use by the system maintainer. Set when the switch is first logged onto for programming.
- **Unrestricted user access:** *[up to 6 characters or ↵, no password]*
- **Restricted user access:** *[up to 6 characters or ↵, no password]*
- **User access level x:** *[up to 6 characters or ↵, no password]*

Clock Data Menu

This menu sets the time and date for the switch plus the display mode for those values when shown on the suitable terminal devices. Within system programming all values are set in twenty-four hour clock format.

- System > Clock

CLOCK DATA MENU

1. Time : 15:52:41
2. Date : Monday 01-OCT-98
3. Time mode : 12-hour
4. DM or DMY : DM

<Esc> Return to the SYSTEM menu

Select >

Settings

- **Time:** *[hh:mm:ss]*
Sets the current time for the switch in 24-hour format.
- **Date:** *[dd:mmm:yy]*
Sets the current date for the switch.
- **Time mode:** *[12-hour] or [24-hour]*
Sets the mode used for time display on suitable terminals.
- **DM or DMY:** *[DM] or [DMY]*
Sets the mode used for date display on suitable terminals.

Installation Menu

- System > Installation

INSTALLATION MENU

1. Installation name : No installation name
2. Installation number :
3. Site network number : No site network number
4. Default language : ENGLISH

<Esc> Return to the SYSTEM menu

Select >

Settings

- **Installation name:** *[up to 30 characters] or [-], no installation name]*
This name is used to identify the switch on the SMDR output.
- **Installation number:** *[up to 20 digits]*
Used by R2 MFC services as the CLI for return calls.
- **Site network number:** *[1 to 6 digits]*
The switch's node number within a network of switches. Incoming network calls with a differing node number prefix are passed to the Network Routing table for onward direction (*see "Network Facilities Menus" on page 48*). Incoming network calls with the matching prefix have the prefix removed and are then routed on-switch. Also used in fault log output to identify the switch (*see "Report Fault Details" on page 8*).
- **Default language:** *See "Installation Menu - Default Language" on page 16.*

Installation Menu - Default Language

Sets the default display language used on suitable terminals. Each user number specifies its required language (*see "Personal Status - Language Selection" on page 26*) or **Default** for the switch's **default language** selected from the list below.

- System > Installation > default language

DEFAULT LANGUAGE SELECTION

1. English
2. French
3. Swedish
4. Dutch
5. Danish
6. Norwegian
7. Portuguese
8. Finnish
9. German
10. Czech
11. Slovenian
12. Spanish

Select >

Frame Synchronisation Menu

This menu defines from which source the switch should take its digital frame synchronisation signal. A source is specified by entering the address (*cabinet/slot*) of the cassette connected to that source.

The menu can list several sources in order of priority of their usage. This allows the system to recover for loss of signal its preferred source by switching to the next source on the list. Preferred sources tend to be PSTN signals, followed by other network sources and then the switch's own CPU signal (*specified by entering 0 as the address*).

The **Tab** key is used to select which source is being changed, deleted or having a new source inserted above.

- System > Frame synchronisation

```

                ** FRAME SYNCHRONISATION **

          Unit Slot                Unit Slot
      ->      CPU

1. Insert at
2. Delete           <TAB> to select entry
3. Change

Select >

```

Settings

- **Insert at:** [*address, unit/slot*]
Inserts a new source at the specified priority number. The position of any existing sources adjusts accordingly.
- **Delete:**
Deletes the specified priority number source. The position of any existing sources adjusts accordingly.
- **Change:** [*address, unit/slot*]
Changes the specified source used by a priority number.

PIN Table

The switch's PIN table can contain up to 200 PIN codes of up to six digits in length. PIN codes in the table are used to verify PIN codes entered by users.

Each PIN code has its own ARS User Class settings and associated user directory number. When a PIN is entered at a terminal, its settings override those of the terminal for the duration of the call.

PIN codes are used by users set to **Forced PIN** on external calls (*see "Personal Status" on page 24*) or trunks with their service type set to DISA (*see "Trunk Menu" on page 31*). PIN codes are also used by the Roaming PIN function (*the method of invoking roaming PIN depends on the terminal type – refer to the appropriate terminal guide*).

Note: If the PIN Table is left blank, the switch will accept any PIN code entered as being valid.

- System > PIN table > [PIN digits, up to 6 digits] > [user class, 8 x Y/N] > [dn]

```

                *** P.I.N. TABLE *** Page 1/2

123456  YYYYYYYY  200

                <TAB> Next Page

P.I.N digits [up to 6 digits] >

```

Accounts Table Menu

The Accounts Table can contain up to 200 account numbers of up to 12 digits. These are used to verify the account numbers entered by users set to **Forced account** on making external calls (*see "Personal Status" on page 24*) or users invoking voluntary account entry (*refer to the appropriate terminal guide*).

If a call is logged on the SMDR output, any account code entered is included in the output. System speed dials can also include account codes (*see "System Speed Dial" on page 12*). These are not verified against the Accounts Table entries.

The system checks account codes entered for matching entries in the Accounts table. For the forced account code function, no outdialling of digits is allowed until a matching code has been entered. For the voluntary account code function re-entry of a matching account code is requested if a matching code is not entered.

Note: If the Accounts Table is left blank, the switch will accept any account code entered as being valid.

- System > Accounts table > [account code, up to 12 digits]

```

*** ACCOUNTS TABLE *** Page 1/2

123456123456

<TAB> Next Page

Account number [up to 12 digits] >

```

The Accounts table can hold up to 200 account codes. To remove an existing code re-enter the number.

Tenant-Area Ratio

Each device (trunk and terminal) on the switch has a Tenancy setting (*see "Terminal" on page 29 and "Trunk Menu" on page 31*). Calls between devices in different tenancies are not allowed. Some devices can be set as **de-restricted** and these can transfer calls between tenancies (ie. acting as a multi-tenancy operator terminal).

Users and Call Control Plans have an area setting. This controls which night service timetable it follows (*see "Night Service Selections" on page 51*). Users can also only access directory entries in the same area.

The switch can be divided into one of four combinations of tenancies and areas.

Note: Changing the current tenant-area ratio returns the night service settings back to their default.

- System > Tenant to area ratio

```

TENANT-AREA CONFIGURATION

current ratio : 250 areas

1. 250 areas
2. 10 tenants each containing 25 areas
3. 25 tenants each containing 10 areas
4. 250 tenants

<Esc> Return to the SYSTEM menu

Select >

```

Voice Mail System

These settings are used by Lucent Technologies and INDeX Voice Manager systems attached to the switch. The group numbers necessary for integrated voice operation (**Voice group**, **Fast Access**, **Message desk**, **Temporary greeting** and **Customisation**) are set through the **Reserved numbers** menu (see “Reserved Numbers” on page 43). The use of the integrated modes required entry of an Integrated Voice Mail licence key for the switch (see “Switch Licences” on page 22).

- System > Voice mail

VOICE MAIL SYSTEM

1. Voice mail mode : integrated (local)
2. Password length : 4

<Esc> Return to the SYSTEM menu

Select >

Settings

- **Voice mail mode:** *[dial access] or [integrated (local)] or [integrated (remote)]*

Sets how the DT/TT display terminals on the system access Voice Manager features.

- **dial access:** Access voice mail using normal MF tones.
- **integrated (local):** The display terminals show integrated display functions for accessing a Voice Manager attached to the switch.
- **integrated (remote):** The display terminals show integrated display functions for accessing a remote Voice Manager via DPNSS links.

- **Password length:** *[0-9]*

For a switch with the **voice mail mode** set to **integrated (local)** or **integrated (remote)**, the password length must be set to match that on the Voice Manager.

Facility Options

- System > Facility options

FACILITY OPTIONS

1. Anti-trombone : yes
2. Answer page : yes

<Esc> Return to the SYSTEM menu

Select >

Settings

- **Anti-trombone:** *[yes] or [no]*

When set to **yes**, if an outgoing DPNSS call loops back to the switch it is converted to a simple on-switch call (thus freeing the DPNSS trunks used). The **no** option should only be selected for testing.

- **Answer page:** *[yes] or [no]*

Sets whether users can answer page calls (the method of answering depends on the type of terminal).

Absence Messages

This menu provides the set of absence messages available to display terminals. Each message can be up to 16 characters in length.

- System > Absence messages

ABSENCE MESSAGES

1. ON HOLIDAY UNTIL
2. WILL BE BACK
3. AT LUNCH UNTIL
4. MEETING UNTIL
5. PLEASE CALL
6. DONT DISTURB TIL
7. WITH VISITOR TIL
8. WITH CUST. TIL
9. BACK SOON
10. BACK TOMORROW

<Esc> Return to the SYSTEM menu

Select >

Supervisor Message Menu

Supervisor messages are selected by ACD users and sent to their Supervisor. They then appear on the Supervisor's PC display and on suitable wallboards if set up. Each ACD terminal can use up to eight ACD messages from the set of 30 stored on the switch (see *"Extended Functions - ACD Messages"* on page 28).

The **Name** is the text that is displayed on suitable ACD turrets after selecting the ACD MSG function. The **Message** is the text displayed on the Supervisor's PC display along with agent details.

Repeating the process of entering a particular message number will display a prompt to delete the existing message.

- System > Supervisor Messages > Enter message number [1-30] > Enter message name [up to 7 chars] > Enter message text [up to 30 chars]

SUPERVISOR MESSAGE MENU

Number	Name	Message
1	HELP	Help required
2	LISTEN	Please listen to this call
3	MANAGER	Manager assistance required
4	URGENT	Urgent help required
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

<TAB> scroll back, <RETURN> scroll forward

Enter message number [1-30] >

System Alarms

This menu is used to setup system alarms to users or groups of users. The alarm can use normal ringing, the system music source or ACA/DMOH modules. A message field with each alarm provides a text message for display on terminals during the alarm.

Use the **TAB** key to select the alarm being edited (*shown by a -> symbol*).

- System > System alarms

SYSTEM ALARMS							
	DAY	TIME	DN	TYPE	MSG	STATE	MESSAGE
-> 1.	None	--:--	----	Ring	----	Not Set	
2.	None	--:--	----	Ring	----	Not Set	
3.	None	--:--	----	Ring	----	Not Set	
4.	None	--:--	----	Ring	----	Not Set	
5.	None	--:--	----	Ring	----	Not Set	
6.	None	--:--	----	Ring	----	Not Set	
7.	None	--:--	----	Ring	----	Not Set	
8.	None	--:--	----	Ring	----	Not Set	
9.	None	--:--	----	Ring	----	Not Set	
10.	None	--:--	----	Ring	----	Not Set	
1.	Change day		5. Enter msg DN				
2.	Enter time		6. Enter Message				
3.	Enter target DN		7. Set/Clear				
4.	Change type						
<TAB> To select alarm <Esc> Return to the SYSTEM menu							
Select >							

Settings

- **Change day:** *[Monday] or ... or [Sunday] or [Every Day] or [Week Day] or [Week End] or [None]*
Sets the day or type of day on which the alarm should occur.
- **Enter time:** *[hh:mm]*
Sets the time at which the alarm should occur (24-hour clock format).
- **Enter target DN:**
Sets the user group or user for which the alarm is intended.
- **Change type:** *[Ring] or [Music] or [ACA msg] or [DMOH]*
Sets the type of the alarm. If **ACA msg** or **DMOH** is selected, then the dn of the ACA or DMOH module should be entered via **Enter msg DN**.
- **Enter msg DN:**
Sets the source for alarms using the **ACA msg** or **DMOH type**.
- **Enter message:** *[up to 16 characters]*
Sets a message for display on suitable terminals during the alarm.
- **Set/Clear:** *[Set] or [Not Set]*
Toggles use of the alarm on (**set**) or off (**not set**).

Switch Licences

Switch licences are used to enable additional functions within the switch. Each licence is based on the function being enabled and the switch's serial number (see “Log On Menu” on page 3) and so is unique to the switch.

- System > Switch Licences

SWITCH LICENCES				
	Facility	Option	Status	Licence code
1.	Integrated Voice Mail		Disabled	
2.	Operator's Console		Disabled	
3.	Silent Intrusion		Disabled	
4.	Divert Tones		Disabled	
5.	CTI Commands		Disabled	
6.	Extra DRC Channels		Disabled	
7.	Mobile Numbers		Disabled	
8.	VPN Access		Disabled	
9.	Combo Cards		Disabled	

Select >

Settings

- **Integrated Voice Mail:**
Required for the use of Visual Voice options on display terminals.
- **Operator's Console:**
Controls the number of WOC consoles or NOC clients supported by the switch. The number supported is shown in the option field.
- **Silent Intrusion:**
Controls the use of silent intrusion on the switch. Use of this licence may be subject to national restrictions.
- **Divert Tones:**
This licence allows analogue terminal ports with their **Port type** set to **MF Receiver** (see “Terminal” on page 29) to pass through MF signaling tones to attached peripheral devices.
- **CTI Commands:**
Controls the output of the CTI Event stream.
- **Extra DRC Channels:**
This licence is used to enable additional channels on the DRC Cassette.
- **Mobile Numbers:**
This licence enables the use of the **Mobile twin number** option (see “Extended Functions” on page 27). With option 1 it also enables the DECT log output.
- **VPN Access:**
This licence enables the use of the **VPN Numbers** menu (see “VPN Numbers Menu” on page 49). Not required for VCC cassette operation.
- **Combo Cards:**
Enables the use of Combo Cassettes with CPU's other than just the CPU 100 Cassette. The Option value indicates the number of Combo Cassettes supported.

Server Licences

Server licences are used to enable the switch's interaction with CTI server devices. Each licence is based on the function being enabled and the switch's serial number (see “Log On Menu” on page 3) and so is unique to the switch.

- System > Server Licences

SERVER LICENCES	
1.	16.
2.	17.
3.	18.

Enter License [nnnn-nnnn-nnnn-nnnn]

Users

User Menu

This menu and its sub-menus are used to apply the settings for user numbers. The options for user directory name are set through the **Directory** menu (see “*User Identity*” on page 38). New user numbers are created using the **Allocate user number** command (see “*Set Up*” on page 41).

- Users [dn or address] or [↵, first user dn] or [DEFAULT, default user settings]

USER MENU for 200 at 1/2/08

1. Default user
 2. Personal status > See page 24.
 3. Day-time outdialling > See page 26.
 4. Night-time outdialling > See page 26.
 5. Area : 1
 6. Line access : 90
 7. Dialling plan : 1 NO NAME
 8. Priority : 15
 9. Lock status : unlocked
 - 10 Auth. code number : 1
 11. Closed user group number : not assigned
 12. CUG outgoing access : not applicable
 13. Monitor group : no monitor dn
 14. Extended functions > See page 27.
 15. Copy user record
- <Esc> Return to the MAIN menu, <Tab> Next user

Select >

- **Default user:** Returns the user settings to their default values.
- **Area:** [Enter area, 1-10/25/250]
Sets to which area (see “*Tenant-Area Ratio*” on page 18) the user belongs. This then controls their night service operation (see “*Night Service Selections*” on page 51).
- **Line access:** [dn] or [↵, no dial 9 dn]
Sets the trunk or trunk group that the user uses for outgoing calls unless ARS specifies otherwise.
- **Dialling plan:** Plan number [1-6]
Used to determine call routing when ARS directs a call to Plan Based Analysis.
- **Priority:** [0-15]
Sets the users priority when queuing on-switch. 0 is high priority, 15 is low priority. Devices with a better priority go ahead in any queue. The priority for external callers is set through the Call Control Plan involved in routing the call (see “*Call Distribution*” on page 35).
- **Lock status:** [locked] or [unlocked]
Shows the current lock status. A user can set themselves to **locked** deliberately or by repeated wrong passcode entry. **Lock status** can toggle a user back to **unlocked** (this also resets their passcode to 0000).
- **Auth. code number:** [range 1-10]
Sets which authorisation code (see “*Authorisation Codes*” on page 47) is used when an Digit Translation requests **Insert authorisation string** (see “*Digit Translation - Translation Step*” on page 63).
- **Closed user group number:** [range, 0-99] or [↵, not assigned]
A number, provided by the DASS service provider, that is attached to the user’s outgoing DASS calls.
- **CUG outgoing access:** [not applicable] or [permitted] or [inhibited]
Indicated whether the user can make DASS calls to other users outside their DASS Closed User Group. Fixed as **not applicable** unless a **Closed user group number** is entered.
- **Monitor group:** [monitor group id, dn] or [↵, no monitor dn]
Defines a group the user can monitor. Silent monitoring requires entry of a **Silent Monitoring** licence key (see “*Switch Licences*” on page 22). The user must have their **User Type** set to **Supervisor** or **System Manager** (see “*Personal Status - User Type*” on page 25). The restrictions of **Secure Status** and **Barging Status** still apply (see “*Personal Status*” on page 24).
- **Copy user record:** [dn or dn1-dn2]
Copy the user settings to another user or range of users.

Personal Status

- User [dn] > Personal status

PERSONAL STATUS for 200 at 1/2/08

```

1.  Barging status      : cannot intrude
2.  Secure status      : not secure
3.  X-directory         : no
4.  Forced PIN or Account : not forced
5.  Include on Smdr     : yes
6.  Include on Event Log : no
7.  Route Access Level  : 55
8.  Busy Wait Override Key : disabled
9.  Top Price Route Alert : no
10. Divert feature access : yes
11. No Call feature access : yes
12. Group feature access  : yes
13. Force feed           : no
14. Remote forward       : disabled
15. User type            : Standard  > See page 25.
16. Language             : Default   > See page 26.

```

<Esc> Return to the USER menu, <TAB> for next user

Select >

- **Barging status:** *[cannot intrude] or [can intrude]*
Set whether the user can intrude on other users who have their **Secure status** set to **not secure**.
- **Secure status:** *[secure] or [not secure]*
Sets whether the user can be intruded upon by other users.
- **X-directory:** *[yes] or [no]*
Sets whether the user's directory name should appear within the switch's INDeX function.
- **Forced PIN or Account:** *[not forced] or [Account forced] or [PIN forced]*
Sets whether the user must enter a PIN or account code after starting to dial an external call.
- **Include on Smdr:** *[yes] or [no]*
Sets whether the user's calls appear on the SMDR. The trunk must also have its **Include on Smdr** status set to **yes**.
- **Include on Event Log:** *[yes] or [no]*
Sets whether actions by the user appear in the event log.
- **Route Access Level:** *[level, 1-99]*
Each route on a route list has a **minimum access level** requirement. If the user's Route access level is less than that required, the user cannot use that route or subsequent routes on the list. Each route also has a **wait access level**. If the user's access level is less than the routes wait access and the route is busy, the user must wait for the period shown by the route **Busy wait period** before attempting the next route on the list.
- **Busy Wait Override Key:** *[yes] or [no]*
Allows the user to bypass the Busy wait period on a route list by pressing their **Intrude** key.
- **Top Price Route Alert:** *[yes] or [no]*
When set to **yes**, if an outgoing call uses a route in a route list other than the first, the terminal flashes an indication.
- **Divert Feature access:** *[yes] or [no]*
Sets whether the user can use a terminal's **Divert** key to change their divert status.
- **No Call feature access:** *[yes] or [no]*
Sets whether the user can use a terminal's **No Calls** key to change their no calls status.
- **Group feature access:** *[yes] or [no]*
Sets whether the user can use a terminal's **Group** key to change their group status.
- **Force feed:** *[yes] or [no]*
Sets whether incoming calls are connected without the user having to press **Answer Release**. The user is given a single tone before a call is connected. The switch introduces a small delay between calls.
- **Remote forward:** *[disabled] or [enabled]*
Sets whether the user can remotely forward their calls from another terminal.

Personal Status - User Type

A user's **User type** determines a range of additional functions (those functions may also depend on the user directory number being associated with particular type of terminal device). For terminals set to hot desk operation, do not use **User types** other than **Standard** or **ACD**.

- User [dn] > Personal status > User type

USER TYPE SELECTION for 200 at 1/2/08

1. Standard
2. ACD
3. Supervisor
4. System Manager
5. Reception
6. Guest
7. Service

Select >

Settings

- **Standard:**
The normal setting for users.
- **ACD:**
The normal setting for User numbers associated with TT3/5 turrets. Provides the turret with **LOG ON/LOG OFF** and other ACD functions. The setting may also be used with DT5 terminals for limited ACD working. Terminal devices being used by ACD users should also have their **Port type** set to **Hot desk** (see “Terminal” on page 29).
- **Supervisor:**
The same as **ACD** but adds access to silent intrusion controls for TT3/5 turrets with a Monitor group set (see “User Menu” on page 23).
- **System Manager:**
Provides DT3/4/5 terminal users with a **•SETUP** function through which they can access switch date, time, night service and ACA message recording options. It also supports silent intrusion for DT3/4/5 terminals with a Monitor group set (see “User Menu” on page 23).
- **Reception:**
Provides a display terminal user with Hotel options for room booking and checking. Setting a user to this type automatically adds the user number to the **Reception** group (see “Reserved Numbers” on page 43). When receiving calls from a Guest (see below) the calling user’s language setting is displayed.
- **Guest:**
Provides an analogue terminal user with Hotel options for changing a room’s cleaned status. Setting a user to this type automatically adds the user number to the **Guest Room** group (see “Reserved Numbers” on page 43).
- **Service:**
Provides a terminal user with basic Hotel options. On display terminals, when receiving calls from a Guest (see above) the calling user’s language setting is displayed.

Personal Status - Language Selection

Sets the user's language for use on display terminals. Selecting default uses the switch's default language (*see "Installation Menu - Default Language" on page 16*). Display terminal users can change this option through their own terminal. User set to Reception can also remotely change the setting of Users set Guest.

- User [dn] > Personal status > Language

LANGUAGE SELECTION for 200 at 1/2/08

1. Default
2. English
3. French
4. Swedish
5. Dutch
6. Danish
7. Norwegian
8. Portuguese
9. Finnish
10. German
11. Czech
12. Slovenian
13. Spanish

Select >

Day-Time Outdialling

Sets the User Classes to which a user belongs when their associated terminal device's tenancy area is in day service. Users can only make PSTN calls via an ARS Route lists that belong to a matching User Class (*see "Route Lists" on page 61*).

The default classes to which a user belongs are Class 1, Class 2 and Class 8. If the ARS settings are still in default, those classes correspond to local calls (Class 1), national calls (Class 2) and emergency calls (Class 8). The ARS default for international calls is Class 3.

Hotel Systems: The switch automatically changes the Class of Service settings of a Guest user to provide the BARRING function invoked by Reception phones. When barring is on, the Guest user is set to only access Class 8 ARS route lists. When barring is off, the Guest user is set to the normal defaults (Classes 1, 2 and 8 for day service and Class 1 and 8 for night service).

Note: Class 8 is used for the routing of emergency numbers and users should not be removed from that class.

- User [dn] > Day-time outdialling

DAY CLASS OF SERVICE for 200 at 1/2/08

1. Class 1 user : Y
2. Class 2 user : Y
3. Class 3 user : N
4. Class 4 user : N
5. Class 5 user : N
6. Class 6 user : N
7. Class 7 user : N
8. Class 8 user : Y

<Esc> Return to the USER menu, <TAB> for next user

Select >

Night-Time Outdialling

Operates the same as Day-time outdialling but used when the associated user's tenancy is in night-service. *See "Day-Time Outdialling" on page 26*. By default users belong to Class 1 (local calls) and Class 8 (emergency calls) during night service.

Extended Functions

- User [dn] > Extended functions

EXTENDED FUNCTIONS for 200 at 1/2/08

1. Hot line number : no hotline
2. Hot line timeout : 5

3. DDI mode : wait on busy
4. DDI answer timeout : 0

5. Mobile twin number : not assigned

6. ACD messages
7. Wrap-up timeout : 0
8. Auto Log On : no

9. CLI on outgoing ISDN : yes
10. CLI to incoming ISDN : yes
11. Personal CLI :

<Esc> Return to the USER menu, <TAB> for next user

Select >

Settings

- **Hot line number:** [dn] or [Sxxxx] or [-], no hotline
Set the number automatically dialled if the user's hotline timeout expires (*see below*). **Sxxx** is used to select a system speed dial to provide an off-switch hot line number.
- **Hot line timeout:** [range, 0-999 seconds]
Sets how long the user can take a terminal device off-hook before the **Hot line number** (*above*) is automatically dialled.
- **DDI mode:** [wait on busy] or [redirect on busy] or [wait/redirect on busy] or [reject on busy]
Sets what happens if the user receives a direct DDI call when busy. This does not apply to DDI calls received via group or pilot numbers.
 - **wait on busy:** Wait for the DDI answer timeout before returning busy tone to the caller.
 - **redirect on busy:** Redirect the call using the user's call control plan (*see "User Identity" on page 38*).
 - **wait/redirect on busy:** Wait for the DDI answer timeout before redirecting the caller as above.
 - **reject on busy:** Return busy tone to the caller.
- **DDI answer timeout:** [range, 0-999 seconds]
The time delay used before rejecting a call (**DDI mode** set to **wait on busy**) or redirecting a call (**DDI mode** set to **wait/redirect on busy**).
- **Mobile twin number:** [dn] or [-], not assigned
Allows calls to the user to also ring another user directory number at the same time (act as a two-number collective group). Intended for users with a desk terminal and INDeX DECT handset. Requires a **Mobile number** licence key (*see "Switch Licences" on page 22*).
- **ACD messages:** See "Extended Functions - ACD Messages" on page 28.
- **Wrap-up timeout:** [range, 0-999 seconds] (0 equals no timeout)
Sets how long an ACD user can remain in busy wrap-up before being automatically returned to active.
- **Auto log on:** [no] or [yes]
Leave set to no unless specifically required by an ACD Manager system.
- **CLI on outgoing ISDN:** [yes] or [no]
Sets whether **Personal CLI** (*see below*) should be used in place of PTT provided CLI on outgoing calls.
- **CLI on incoming ISDN:** [yes] or [no]
Sets whether **Personal CLI** (*see below*) should be used in place of PTT provided CLI on incoming calls.
- **Personal CLI:** [up to 20 digits]
ETSI compliant ISDN (PRI & BRI) connections can send either a user specified CLI (*see above*) or use the PTT provided CLI. The use of this function may vary between different PTT providers. The CLI must be a valid number for return calls on that trunk.

Extended Functions - ACD Messages

Each user set for ACD operation (*see "Personal Status - User Type" on page 25*) can use up to 8 of the 30 ACD Supervisor Messages stored on the switch (*see "Supervisor Message Menu" on page 20*). This menu is used to select the 8 messages.

- User [dn] > Extended functions > ACD messages

ACD MESSAGES for 200 at 1/2/08

1. HELP
2. URGENT
3. MANAGER
4. LISTEN
- 5.
- 6.
- 7.
- 8.

Available Messages

Number	Name	Messages
1	HELP	Help required
2	LISTEN	Please listen to this call
3	MANAGER	Manager assistance required
4	URGENT	Urgent help required

<TAB> next terminal <RETURN> scroll list

Select >

Terminals

Terminal

- Terminal [dn] or [↵, first terminal device] or [DEFAULT, default terminal settings]

TERMINAL MENU for DT5 terminal at 1/1/00 208

1. Default terminal
2. Identification :
3. Tenant : 1
4. Port/type : Normal Extension
5. PC Console Port : not associated
6. Analogue control data > See page 30.
7. Copy terminal record

Select >

Settings

- **Default terminal:**
Returns the terminal's settings to the default values.
- **Identification:** [up to 15 characters]
Used to identify the terminal within system programming.
- **Tenant:** [tenant] or [↵, de-restricted]
Sets the tenancy to which the terminal belongs. The actual value entered depends on the tenant to area ratio of the system (see "Tenant-Area Ratio" on page 18). Devices cannot make calls between different tenancies unless set to **de-restricted**.
- **Port type:** [Normal Extension] or [Voice Manager] or [MF Receiver] or [Modem Port] or [Dect]
Indicates the function of the port. Most ports will be set to **Normal Extension**.
 - **Normal Extension:** The default setting for all terminal devices.
 - **Voice Manager:** Used for ports connected to a Voice Manager.
 - **MF Receiver:** Applies the **Divert Tones Send Delay** and **Divert Tone Connect Delay** to outgoing calls (see "System Timeout Menu" on page 13). Requires a **Divert Tones** licence key.
 - **Modem Port:** Requests support for 3.1KHz audio service from a digital trunk provider. This option may improve the reliability of analogue modem calls when routed over a digital trunk. Support for this option will depend on the digital trunk provider supporting the service.
 - **DECT:** Indicates that the terminal is a connection to an INDeX DECT system. The switch provides the DECT system with addition information about calls across such connections via the DECT log output (see "Start/stop SMDR, Fault, Event Logging and DECT" on page 9).
 - **Hot Desk:** Provides display terminals with a **LOG ON/LOG OFF** option. This allows user numbers to log on/off these terminals (thus changing the user number associated with the terminal device). Terminals intended for ACD working should; also be set to **Hot Desk**.
- **PC Console Port:** [port, 1-4] or [↵, not associated]
Associates the terminal with a Windows Operator Console (WOC) connected to the switch on that serial port. (Note that NOC clients are associated with a terminal device through their own menu control).
- **Copy terminal record:** [target, dn or dn1-dn2]
Copies the terminal's settings to another terminal or range of terminals.

Terminal - Analogue Control Data

The settings in this menu should only be altered under direct guidance from Lucent Technologies.

- Terminal [dn] > Analogue control data

ANALOGUE CONTROL DATA for Two Wire terminal at 1/2/09 201

1. Dialling timeout (100ms units) : 50

2. Inter digit pause minimum(10ms units) : 24

3. Recall detect minimum (10ms units) : 5

4. Recall detect maximum (10ms units) : 15

5. Gain adjustment (A-D/D-A 0.5db units) : 86

<Esc> Return to the USER menu, <TAB> for next user

Select >

Trunks

Trunk Menu

See also “Trunk Identity” on page 38.

– Trunk > [address or dn] or [↓, first device] or [DEFAULT, default settings]

TRUNK MENU for Loop start trunk at 1/2/06 700

1. Default trunk
2. Identification :
3. Service type : bothway
4. DDI Line : no
5. Tenant : 1
6. Live speech path : no
7. Busy or no answer : forward
8. Network priority : X
9. Wait for dial tone : 20 10th/sec
10. Analogue control data > See page 32.

11. Copy trunk record

<Esc> Return to the MAIN menu, <Tab> Next trunk

Select >

Settings

- **Default trunk:**
Returns the trunk's settings to the default values.
- **Identification:** [up to 15 characters]
Used to identify the trunk within system programming.
- **Service type:** [bothway] or [DISA] or [incoming] or [outgoing]
Sets the direction of call flow allowed by the trunk. DISA sets the trunk as a DISA service link.
- **DDI Line:** [No of DDI digits, 1-8] or [0, yes] or [↓, not DDI]
Sets a trunk for DDI operation. For R2 DID/PRI services, the number chosen sets the number of DID digits passed through. For non-R2 DDI services, enter **0** (which displays as **Yes**) for a DDI line using the number of digits supplied by the PSTN.
- **Tenant:** [tenancy] or [↓, de-restricted]
Sets the tenancy to which the trunk belongs. The actual value entered depends on the tenant to area ratio of the system (see “Tenant-Area Ratio” on page 18). Devices cannot make calls between different tenancies unless set to **de-restricted**.
- **Live speech path:** [no] or [yes]
Normally live speech is not allowed until the switch has finished outdialling all routing digits. Allowing live speech immediately a line is seized is only required for a tie line that links directly to a single extension rather than to another switch.
- **Busy or no answer:** [forward] or [do not forward]
Defines whether incoming calls received via the trunk can be forwarded by the target dispositions busy or no answer divert settings.
- **Network priority:** [X] or [Y]
Used to resolve potential call collision on network channels. One end of each DPNSS link should be set to X and the other to Y. At the X end of a channel, incoming calls have priority over outgoing calls (vice versa at the Y end).
- **Wait for dial tone:** [0-999 10th/second]
Sets how long the switch waits after seizing the trunk before it sends digits. A value of **0** instructs the system to actively wait for dial tone before outdialling.
- **Copy trunk record:** [target, dn or dn1-dn2]
Copies the trunk's settings to another trunk or range of trunks.

Trunk - Analogue Control Data

The settings in this menu should only be altered under direct guidance from Lucent Technologies.

- Terminal [dn] > Analogue control data

ANALOGUE CONTROL DATA for Loop start trunk at 1/2/06 700

1. Signalling type : DTMF
2. Clearing mode : unguarded
3. Ring persistency (10ms units) : 12
4. Ring off maximum (100ms units) : 30
5. Recall pulse width (10ms units) : 12
6. Pulse on width (1ms units) : 80
7. Pulse off width (1ms units) : 40
8. Inter digit pause (1ms units) : 100
9. Disconnect/Guarded clear (10ms units) : 45
10. Idle state wait (10ms units) : 45
11. Line length : universal
12. Gain adjustment (A-D/D-A 0.5db units) : C4

<Esc> Return to the TRUNK menu, <TAB> for next trunk

Select >

Groups

Group Menu

Note that group numbers must first be assigned through the **Directory** menu before group members can be added (*see "Group Identity" on page 39*). The **Directory** is also used to set the group type and name.

- Group id [dn] or [↵, first existing group]

GROUP MENU for rotary group 0 Operator

1. Delete members
2. Add to group
3. Insert into group
4. Rotate group

<TAB> for next group

Select >

Settings

- **Delete members:** [dn or dn1-dn2]
Deletes the specified member or range of members from the group.
- **Add to group:** [dn or dn1-dn2]
Adds the specified member or range of members to the end of the group.
- **Insert into group:** [Insert before, dn] > [Add, dn or dn1-dn2]
Inserts the specified member or range of members after a particular existing member.
- **Rotate group:**
Rotates the group members in a sequential group.

Call Control

Call Control

Call control plans are used for both incoming and outgoing calls. Call control plans are used by trunks (*see "Trunk Identity" on page 38*) and pilot numbers (*see "Pilot Number" on page 40*). They are also used by User Numbers to redirect DDI calls when busy (*see "User Identity" on page 38*).

- Call control plan [1-500] or [↵, first plan]

CALL CONTROL PLAN

- | | | |
|--------------------------|---|----------------|
| 1. Identification | : | |
| 2. Dialling plan | : | 1 NO NAME |
| 3. Line selection string | : | 9 |
| 4. Music on hold | : | system |
| 5. Include on Smdr | : | yes |
| 6. Call distribution | : | > See page 35. |
| 7. Call timers | : | > See page 36. |

<Esc> Return to the MAIN menu, <Tab> Next plan

Select >

- **Identification:** [up to 16 characters]
Used to identify the call control plan within system programming.
- **Dialling plan:** [plan, 1-6]
Used to determine the call routing when ARS directs an outgoing call to a Plan Based Analysis process (*see "Plan Based Analysis" on page 56*).
- **Line selection string:** [up to 6 digits]
Sets a string of digits prefixed to the dialled digits when a trunk is seized directly by a terminal user. The full string is then subject to ARS and a matching route to the trunk seized must exist for the call to be allowed. ARS can apply digit translation to the prefixed string (eg. to remove the prefix after the ARS check).
- **Music on hold:** [address or dn or ↵, system]
Sets which source (DMOH card or the system MOH socket input) the trunk should use for music on hold.
- **Include on Smdr:** [yes] or [no]
Sets whether calls using the trunk are included on the SMDR log output. This is subject to the terminal involved also being set to **Include on Smdr** and the call matching other SMDR criteria (*see "Set Up SMDR Parameters" on page 6*).
- **Call distribution:** See "Call Distribution" on page 35.
- **Call timers:** See "Call Timers" on page 36.

Call Distribution

This section of a call control plan controls the handling of incoming calls to the switch (except DDI calls).

- Call control plan [1-500] > Call distribution

INCOMING CALL DISTRIBUTION for PLAN

1. Day disposition 1 :
2. Day disposition 2 :
3. Day disposition 3 : Operator Group
4. Day announcer plan : No plan

5. Night disposition 1 :
6. Night disposition 2 :
7. Night disposition 3 : Night Service Group
8. Night announcer plan : No plan

9. Priority : 0
10. Incoming queue number : 1
11. Area : 1

<Esc> Return to the PLAN menu, <TAB> for next plan

Select >

Settings

- **Day disposition 1/2/3:** [dn] or [O, Operator group] or [N, Night service group] or [↵, none]
Sets the target for incoming calls when the trunk's area is in day service. The length of time that a call tries to connect to a disposition is set by various timers (see "Call Timers" on page 36).
 - Dispositions can be a user or group dn. Alternatively **O** or **N** can be entered for the Operator or Night service groups (see "Reserved Numbers" on page 43). System speed dials can also entered as **Sxxxx** (where **xxxx** is the store number) to route incoming calls back off-switch.
 - With all three dispositions set, unanswered calls cycle through the set of dispositions until answered.
 - With no 2nd disposition set, calls remain at the 1st disposition.
 - With no 3rd disposition set, calls try the 2nd disposition twice in each cycle.
 - With only a single disposition set, calls remain at that disposition unless unavailable.
 - If all dispositions are unavailable, the switch will use the alternate set of dispositions before sending the call to the lowest terminal device address.
- **Day announcer plan:** [1-16] or [↵, no plan]
Sets the ACA announcer plan (see "Call Announcing Menu" on page 64) played to waiting callers when the trunk's area is in day service.
- **Night disposition 1/2/3:** [dn] or [O, Operator group] or [N, Night service group] or [↵, none]
As per the set of day dispositions but used when the trunk's area is in night service.
- **Night announcer plan:** [1-16] or [↵, no plan]
Sets the ACA announcer plan (see "Call Announcing Menu" on page 64) played to waiting callers when the trunk's area is in night service.
- **Priority:** [0-15]
Sets the priority of external callers when queuing for a device on-switch. 0 is high priority, 15 is low priority. Calls with a better priority go ahead in any queue. The priority of internal callers is set under their user number (see "User Menu" on page 23).
- **Incoming queue number:** [1-3]
If incoming calls are presented to an operator console, this options sets in which console queue the call appears.
- **Area:** [1-10/25/250]
Indicates to which area (see "Tenant-Area Ratio" on page 18) the plan belongs. This controls its night service timetable (see "Night Service Selections" on page 51).

Call Timers

- Call control plan [1-500] > Call timers

TIMERS for PLAN 1

1.	Incoming call answer	: 120 secs
2.	Incoming call camp on	: 120 secs
3.	Ringing recall	: 45 secs
4.	Busy recall	: 90 secs
5.	Dial digits	: 40 secs
6.	Wait for external route	: 30 secs
7.	Second level recall	: 10 secs
8.	Announce transfer	: 90 secs
9.	On-hold	: 180 secs
10.	Digit outputpulse	: 5 10th/sec

<Esc> Return to the PLAN menu, <TAB> for next plan

Select >

Settings

- **Incoming call answer:** *[range, 0 or 5-999 seconds]*
Sets how long an unanswered call waits at a ringing disposition before trying the next disposition. Entering 0 disables the use of the timer.
- **Incoming call camp on:** *[range, 0 or 5-999 seconds]*
Sets how long an unanswered call waits at a busy disposition before trying the next disposition. Entering 0 disables the use of the timer.
- **Ringing recall:** *[range, 0-999 seconds]*
Sets how long an external call transferred by an operator to a ringing device waits before recalling.
- **Busy recall:** *[range, 0-999 seconds]*
Sets how long an external call transferred as an unannounced transfer by an operator to a busy device waits before recalling (for announced transfers see **Announce transfer** below).
- **Dial digits:** *[range, 0-999 seconds]*
Sets how long the switch will hold a line and wait for the next dialling digit before it releasing the line. Applies to the wait between digits until sufficient digits are dialled to route the call.
- **Wait for external route:** *[range, 0-999 seconds]*
Sets how long an external call will wait for a busy off-switch disposition before trying the next disposition.
- **Second level recall:** *[range, 0-999 seconds]*
Sets how long an external call will wait before recalling after having been transferred to a device other than the one which first answered, and this second device has transferred it to a ring at a third device.
- **Announce transfer:** *[range, 0-999 seconds]*
Sets how long an external call transferred as an announced transfer by an operator to a busy device waits before recalling (for unannounced transfers see **Busy recall** above).
- **On-hold:** *[range, 0-999 seconds]*
Sets how long an external call will stay on hold before it recalls to the device that placed it on hold.
- **Digit outputpulse:** *[range, 0-999 10th/seconds]*
The switch dials digits in groups of up to 16. The Digit Outputpulse period is used if more than 16 digits are keyed. It sets the time the switch allows for outdialling of the first set of 16 digits before sending the next set of digits.
 - The default value only needs changing for loop disconnect trunks which outdial digits at a rate of 10 per second. The **Digit outputpulse** period for these should be 16, ie. 1.6 seconds for 16 digits at 10 digits per second.

Directory

Directory Menu

- Directory

DIRECTORY MENU

1. Users
2. Trunks
3. Groups
4. Pilot numbers
5. Set up

6. DDI numbers

<ESC> Return to MAIN MENU

Select >

- **Users:** See "User Identity" on page 38.
- **Trunks:** See "Trunk Identity" on page 38.
- **Groups:** See "Group Identity" on page 39.
- **Pilot numbers:** See "Pilot Number" on page 40.
- **Set up:** See "Set Up" on page 41.
- **DDI Numbers:** See "DDI Numbers" on page 44.

User Identity

Note: The **Set up** menu (see "Set Up" on page 41) is used to **Allocate user numbers** and **Assign user numbers** to physical devices.

- Directory > User identity [dn or address] or [J, first existing user]

DIRECTORY ENTRY for 200

Target Device : Two wire terminal at 1/2/08

1. Name :
2. Sort option : As entered
3. Call control plan : 1
4. Select a new user

<Esc> Return to the DIRECTORY menu, <TAB> for next user

Select >

Settings

- **Name:** [up to 16 characters]
Sets the directory name used for display on suitable terminal devices.
- **Sort option:** [As entered] or [Last name first]
Sets how the name should be sorted within the INDeX function if it includes spaces.
- **Call control plan:** [plan, 1-500]
If the user numbers receives direct DDI calls, this call control plan is used to redirect the DDI calls when the user number is busy or not available. It is used as set by the user's DDI mode setting (see "Extended Functions" on page 27). This does not apply to DDI calls received via group or pilot numbers.
- **Select a new user:** [dn]
Select another user number.

Trunk Identity

-Directory > Trunk identity [address or dn]

DIRECTORY ENTRY for 700

Target Device : Loop start trunk at 1/2/06

1. Name :
2. Sort option : As entered
3. Call control plan : 1
4. Select a new trunk

<Esc> Return to the DIRECTORY menu, <TAB> for next trunk

Select >

Settings

- **Name:** [up to 16 characters]
Sets the directory name used for display on suitable terminal devices.
- **Sort option:** [As entered] or [Last name first]
Sets how the name should be sorted within the INDeX function if it includes spaces.
- **Call control plan:** [plan, 1-500]
Select which call control plan the trunk should use for routing calls (see "Call Control" on page 34).
- **Select a new trunk:** [dn]
Select another trunk.

Group Identity

After selecting **Groups**, entering a new directory number will bring up a "Number not in use, allocate now? [Y/N]" request. Entering **Y** creates a new group using that directory number.

The available resources left for group cells (the combination of numbers and members) is shown on the switch resource screen during programming log on (*see "Resources Menu" on page 3*). Group members are added and removed via the Groups menu (*see "Group Menu" on page 33*).

- Directory > Groups [dn] or [↓, first existing group]

```

                                DIRECTORY ENTRY for 0

1. Name                        : Operator
2. Sort option                 : As entered
3. Group type                  : rotary      > See page 39

4. Select a new group

<Esc> Return to the DIRECTORY menu, <TAB> for next group

Select >

```

Settings

- **Name:** *[up to 16 characters]*
Sets the directory name used for display on suitable terminal devices.
- **Sort option:** *[As entered] or [Last name first]*
Sets how the name should be sorted within the INDeX function if it includes spaces.
- **Select a new group:** *[dn]*
Select another group (this cannot be used to enter a directory number to create a new group).

Group Identity - Group Type

This menu is used to select the group type for a group. The first four options are for terminal/user groups, the remainder are trunk groups.

- Directory > Groups [dn] > Group type

```

                                GROUP TYPE SELECTION for 0

1. sequential
2. rotary
3. collective
4. longest waiting

5. trunk sequential
6. trunk rotary

Select >

```

- **sequential:**
The switch rings the first free member in the group. If unanswered the switch tries the next free member and then shuttles between those two members until answered. This method concentrates calls towards the start of the group.
- **rotary:**
The switch rings the first free members after the last member rung. If unanswered it then tries the next member and so on. This method tends to distribute calls evenly between group members.
- **collective:**
The switch rings all members of the group at the same time. This type of group cannot be used with trunks.
- **longest waiting:**
The switch presents the call to the member which has been free for the longest. This type of group cannot be used with trunks.

Pilot Number

Pilot numbers are intended to allow the flexible on-switch presentation of DDI calls. This is achieved by creating pilot numbers that match the incoming DDI digits.

Internal users can dial pilot numbers but they can only be answered by a DSS key programmed with that pilot number.

If the dn entered is not already in use, a "Number not in use, allocate now? [Y/N]" request is displayed.

Entering **Y** creates a new pilot number.

- Directory > Pilot number > [dn] or [↵, first existing number]

DIRECTORY ENTRY for 100

```
1. Name           :
2. Sort option    : As entered
3. Call control plan : 1
4. Call limit     :
5. Call limit mode  :
```

```
6. Select new pilot number
```

```
<Esc> Return to the DIRECTORY menu, <TAB> for next pilot number
```

Select >

- **Name:** *[up to 16 characters]*
Sets the directory name used for display on suitable terminal devices.
- **Sort option:** *[As entered] or [Last name first]*
Sets how the name should be sorted within the INDeX function if it includes spaces.
- **Call control plan:** *[1-500]*
Sets the call control plan used to route DDI calls that match the pilot number (see "Call Control" on page 34).
- **Call limit:** *[limit, 1-1119] or [↵, no limit]*
Sets how many calls can be routed through a pilot number at any time. This is used in conjunction with the Call limit mode option below. When the limit is exceeded, additional calls receive busy tone.
- **Call limit mode:** *[calls accepted] or [calls waiting]*
Controls how the call limiting mode is triggered. When set to ***calls accepted*** then the limit is based on the number of calls answered or waiting at any time. When set to ***calls waiting*** then the limit is based on just the number of calls waiting at any time.
- **Select new pilot number:** [dn]
Select another pilot number.

Set Up

- Directory > Set up

DIRECTORY SET UP

1. Reserved numbers > See page 43.

2. Change number

3. Swap numbers

4. Deallocate numbers

5. Allocate users numbers

6. Assign user to device

7. Swap users

8. Identify remote users

9. Upload Directory > See page 42.

<ESC> Return to DIRECTORY MENU

Select >

- **Change number:** *[Enter directory number, dn] > [Enter new dn, dn]*
Allows the directory number of a device to be changed to another free number.
- **Swap numbers:** *[Enter directory number, dn] > [Swap with directory number, dn]*
Allows the directory numbers of two devices to be swapped.
- **Deallocate numbers:** *[dn or dn1-dn2]*
Allows a specific directory number or range of directory numbers to be removed from the switch.
- **Allocate users numbers:** *[dn or dn1-dn2]*
Allows a specific directory number or range of directory numbers to be set as user numbers. The switch can support up to 1500 user numbers. The number of user numbers available is shown on the **Resources** screen during programming log on (see "Resources Menu" on page 3).
- **Assign user to device:** *[Enter directory number, dn] > [Enter device identity, address]*
Sets which user number is associated with a specific device.
- **Swap users:** *[Enter directory number, dn] > [Swap with directory number, dn]*
Swaps the settings of two user numbers.
- **Identify remote users:** *[Enter node number, up to 6 digits] > [dn or dn1-dn2]*
Indicates the ranges of extension numbers on remote INDeX nodes that the switch should include within its own INDeX function. This also removes the need to provide ARS routing to those user numbers (that does require full network planning rules to be followed, ie. the user numbers on both switches should be unique). The switch will also learn new user numbers and changes to existing user number names on the remote node following any incoming calls from that remote user number.

Set Up - Upload Directory

This menu provides options associated with the uploading of a comma separated variable (CSV) file onto the switch. The CSV file can contain entries for either internal directory numbers or system speed dials. The first line of the CSV file must contain recognised field headers (*refer to the INDeX System Programming Manual for full details*).

- Directory > Set up > Upload directory

```

                                DIRECTORY INSTALLATION MENU

1.  Upload file:
2.  Preview
3.  Install/Update

<ESC> Return to DIRECTORY SETUP

Select >
```

Settings

- **Upload file:**
Puts the switch into upload mode, indicated by the #N3 prompt. When a file is present the menu displays ***File loaded.*** A loaded file is removed by using **Install/Update** below or **Release upload buffer** (*see page 45*).
- **Preview:**
Displays the records contained in the uploaded CSV file. Press ↵ to return to the Directory Installation Menu.
- **Install/Update:**
Installs the directory file onto the switch and then deletes it from the switch's upload buffer.

Reserved Numbers

This menu contains directory and group numbers which serve special purposes on the switch.

- Directory > Set up > Reserved numbers

RESERVED DIRECTORY NUMBER

1.	Next terminal number	: 200
2.	Next trunk number	: 700
3.	Next group number	: 500
4.	Voice group no.	: 13
5.	Fast access no.	: 900
6.	Message desk no.	: 901
7.	Temporary greeting no.	: 902
8.	Customisation no.	: 903
9.	Page Group	: 10
10.	Line Group	: 90
11.	Operator Group	: 0
12.	Night Service Group	: 19
13.	Reception Group	: 11
14.	Guest Room Group	: 12
15.	VCC Input Group	: 112
16.	VCC Output Group	: 113

Select >

Settings

- **Next terminal number:**
Displays the next directory number the switch should allocate when a new terminal device is added to the switch. The entry can be selected and altered. It can also be left blank (by entering ↵) to disable the automatic allocation of user directory numbers to terminal devices.
- **Next trunk number:**
Displays the next directory number the switch should allocate when a new trunk device is added to the switch. For digital trunks that process is initiated through Channel details (*see page 69*).
- **Next group number:**
Displays the next group number used when automatically creating groups during a CSV directory file upload (*see page 42*).
- **Voice group no.:** The group number for ports connected to an integrated Voice Manager.
- **Fast access no.:** The group number used for the **•LISTEN** function on display terminals.
- **Message desk no.:** The group number used for the **•MESSAGE** function on display terminals.
- **Temporary greeting no.:** The group number used for the **•TEMP MSG** function on display terminals.
- **Customisation no.:** The group number used for the **•MODIFY** function on display terminals.
- **Page Group:** Terminals devices added to the switch are automatically added to this group.
- **Line Group:** Trunk devices added to the switch are automatically added to this group.
- **Operator Group:** The default disposition for day service (*see “Call Distribution” on page 35*).
- **Night Service Group:** The default disposition for night service (*see “Call Distribution” on page 35*).
- **Reception group:** User numbers with their **User Type** set to **Reception** are automatically added to this group.
- **Guest Room Group:** User numbers with their **User Type** set to **Guest** are automatically added to this group.
- **VCC Input Group:** Automatically used by the switch.
- **VCC Output Group:** Automatically used by the switch.

DDI Numbers

The DDI Numbers menu is used to add blocks of DDI numbers. Each block is specified by its start number and then the size of the block. The switch supports a total of 1000 DDI numbers

- Directory > DDI numbers

```

                                DDI NUMBER PLAN

                                First Number  Block Size      First Number  Block Size

                                _____

                                Remaining block size : 1000

                                1. Add a new number block
                                2. Remove a number block
                                3. Change a block size
                                4. Change a first number

                                5. DDI names

                                <Esc> Return to the DIRECTORY menu

Select >

```

Settings

- **Add a new number block:** *[Enter DDI number, 1-8 digits] > [Enter block size]*.
Creates a new block of DDI numbers by specifying the block start number and then the block size.
- **Remove a number block:** *[Enter DDI number]*
Removes a block of DDI numbers by specific the block start number.
- **Change a block size:** *[Enter DDI number] > [Enter block size]*
Alters a block of numbers be specifying the block start number and then the new block size. If reducing the block size the switch will request confirmation before deleting numbers from the end of the block.
- **Change a first number:** *[Enter DDI number] > [Enter new DDI number]*
Allows the start number of a block of DDI numbers to be changed.
- **DDI names:** See "DDI Numbers - DDI Names" on page 44.

DDI Numbers - DDI Names

- Directory > DDI numbers > DDI Names [dn]

```

                                DDI NUMBER DIRECTORY

                                Number : 100

                                Name   :

                                1. Change DDI Name
                                2. Enter a new target number

                                <Esc> Return to the DDI NUMBER PLAN, <TAB> for next number

Select >

```

Settings

- **Change DDI Name:** *[Name, up to 16 characters]*
Enter a name to associate with the DDI number. The name is then displayed on suitable terminals when answering a DDI call.
- **Enter a new target number:** *[Enter DDI number]*
Select another DDI number to name.

Maintenance

Maintenance Menu

- Maintenance

MAINTENANCE MENU

1. Online device
2. Offline device
3. Reset device
4. Reset System
5. De-allocate device
6. Software Upload
7. System Monitors > See page 46.
8. Switch off Real-Time Clock
9. Real-time Message Trace
10. Install Line Card > See page 46.
11. Card Software Download
12. Release upload buffer

<Esc> Return to the MAIN menu

Select >

Settings

- **Online device:** *[device, dn or address]*
Makes an offline device (*see below*) available again.
- **Offline device:** *[device, dn or address]*
Makes a device unavailable without removing its settings from the switch. The device can be made available again using the **Online device** command (*see above*).
- **Reset device:** *[device, dn or address]*
Resets a device.
- **Reset system:** *[Enter command]*
Allows the entry of **SYSTEM RESET** and **DEVICE DATABASE** commands. **SYSTEM RESET** restarts the whole switch (this will log you off the programming port). **DEVICE DATABASE** resets the switch to default settings (using the **Next terminal number** and **Next trunk number** settings for devices – *see “Reserved Numbers” on page 43*).
- **De-allocate device:** *[device, dn or address]*
Removes a device from the switch (including all associated settings).
- **Software Upload:**
Used during the uploading of system or cassette software. Refer to the INDeX Installation & Maintenance Manual for full procedures.
- **Switch off Real-Time Clock:**
For Lucent Technologies use only. Used to preserve CPU Cassette clock battery charge when placed into warehouse storage for long periods.
- **Real-time Message Trace:**
Use under Lucent Technologies guidance only.
- **Card Software Download:**
Used after the upload to the switch of cassette software to install it onto individual cassettes.
- **Release upload buffer:**
Remove any file currently held in the switch upload buffer after a CPU, cassette or directory upload.

System Monitors

This menu provides access to a set of system activity monitor. They should only be used under Lucent Technologies guidance, especially as they impose additional load upon the switch's normal operation.

- Maintenance > System monitors

```
MONITORS

1. Real-time CPU monitor
2. Real-time Task monitor
3. System Buffer Monitor
4. Real-time Network Monitor
5. Real-time CSTA Comms monitor

<Esc> Return to MAINTENANCE MENU

Select >
```

Install Line Card

This menu allows the existence of various types of cassette to be mimicked. It is mainly intended for setting up test systems without requiring large numbers of real cassettes. It also allows the preparation of customer databases before installation of the full system.

It also bypasses the normal restrictions on combinations of PSU, CPU and cassette combinations.

- Maintenance > Install line card > Enter shelf nbr/slot nbr

```
INDeX LINE CARD INSTALLATION at 3/1

1. Digital Subscriber Line Card
2. Analogue Line Card
3. DASS Line Card
4. DPNSS Line Card
5. Basic Rate ISDN Line Card
6. Primary Rate ISDN Line Card
7. E1-R2 Line Card
8. R2 DID Line Card
9. Voice Compression Card
10. Analogue Signalling Card
11. Digital Router Card
12. LC/BIF Card
13. ACA/MOH Card
14. Combo Line Card

15. Select another slot

<TAB> for next empty slot
<Esc> Return to the MAINTENANCE MENU

Select >
```

PSTN Access

PSTN Access Menu

- PSTN Access

PSTN ACCESS MENU

1. Authorisation codes > *See page 47.*
2. PSTN access digit : 9
3. Secondary dial tone required : no

Select >

- **PSTN access digit:** *[0-9]*
Sets the leading digit dialled by users that indicates an external call to the switch. This is used to trigger the **Forced Pin or Account** options (*see "Personal Status" on page 24*) and **Secondary Dial Tone Required** (*see below*) option if set.
- **Secondary dial tone required:** *[no] or [yes]*
Sets whether the switch should give dial tone after the user dials a number starting with the **PSTN access digit** (*see above*).

Authorisation Codes

The switch can store ten authorisation codes, each of up to sixteen digits. Each user on the switch is associated with one authorisation code (*see "User Menu" on page 23*). The use of an authorisation code during a call is triggered by the **Insert authorisation code** option in an ARS digit translation.

- PSTN Access > Authorisation codes

AUTHORISATION CODE MENU

1. Authorisation code :
2. Authorisation code :
3. Authorisation code :
4. Authorisation code :
5. Authorisation code :
6. Authorisation code :
7. Authorisation code :
8. Authorisation code :
9. Authorisation code :
10. Authorisation code :

<Esc> Return to the PSTN Access menu

Select >

Settings

- **Authorisation code:** *[up to 16 digits]*
Used to enter the authorisation code required by a PSTN service provider.

Network

Network Facilities Menus

- Network

NETWORK FACILITIES MENU

1. Routing Table > See page 48.
2. VPN Numbers > See page 49.

<ESC> Return to MAIN MENU

Select >

Network Routing Table

The network routing table details the route to nodes in the private network of which the switch is part. Each switch in the network has its own unique node number (set as the **Site network number** – see “*Installation Menu*” on page 16).

Incoming calls prefixed with a node number are passed to the Network Routing Table for onward routing if that node number does not match the switch’s own node number. On outgoing calls a node number can be added by ARS or by direct dialling of the node number.

The switch can use PSTN digital links to create a virtual private network (VPN) if leased line links do not exist between the local and remote switch.

- Network > Routing table > Routing digits [up to 6 digits] > Network Address Length [0-16] > Network route directory number [dn or address] > Enter VPN reference number [1-100 or ↵, none]

NETWORK ROUTING TABLE - Page 1/1

Node	Len	Dn	VPN
66	5	700	

<TAB> for next page

Routing digits [up to 6 digits] >

Settings

Each node number entry consists of four parts:

- **Node:** [up to 6 digits]
The node number of another switch on the network. It may be connect to out switch via another switch or using PSTN links (*ie. VPN*).
- **Len:** [0-16]
This value should match the number of digits in the remote switch’s node number plus the number of extension digits used on that switch. This value must be set in order to enable the correct operation of many VPN features. Enter 0 if the number of digits sent is unknown or not fixed. Using a value of 0 however will inhibit some features on INDeX to INDeX links.
- **Dn:** [dn]
This sets the trunk or trunk group that should be used to route network calls to the remote switch or an intermediate switch.
- **VPN:** [1-100]
Specifies a VPN number that should be dialled if the PSTN is being used to route network calls to the remote switch.

VPN Numbers Menu

The VPN menu is used when a network node is reached via the PSTN public lines rather than leased lines. The use of VPN requires entry of the **VPN access** licence key (see “*Switch Licences*” on page 22) unless using voice compression. The **Network Routing Table** (see “*Network Routing Table*” on page 48) is used to specify which network nodes are reached via a PSTN number in the VPN Numbers menu.

The VPN menu can store up to 100 PSTN numbers (with no external dialling prefix). These are the PSTN numbers of the remote switches. Each VPN number can also specify whether voice compression (VC) should be used if both the local and remote switch are fitted with VCC cassettes.

- Network > VPN Numbers > Number [up to 16 digits] > Use Voice Compression [Y/N]

VPN NUMBERS - Page 1/3

	Number	VC		Number	VC
1.	1234567812345678	Y	18.		
2.			19.		
3.			20.		
4.			21.		
5.			22.		
6.			23.		
7.			24.		
8.			25.		
9.			26.		
10.			27.		
11.			28.		
12.			29.		
13.			30.		
14.			31.		
15.			32.		
16.			33.		
17.			34.		

<TAB> for next page

Select >

Permissions List

Permissions List menu

The permissions list defines which programming menus can be accessed by the user of each programming password (*see “Passwords Menu” on page 14*). The list can be used to control access to menus, sub-menus and options within menus.

Enter just the menu number to display its sub-menus and options. Enter the menu number followed by */password number* to toggle the setting of a password level (**X** indicates access allowed). Entering **DEFAULT** resets the permissions list to its default values.

A * indicates that the option includes a sub-menu or sub-menus.

- Permissions list

PERMISSION LIST for :		Password Level							
		1	2	3	4	5	6	7	8
*1.	Reports	x	x	x	x	x	x	x	x
*2.	System	x	x	x	x	x	x	x	x
*3.	Users	x	x	x	x	x	x	x	x
*4.	Terminals	x	x	x	x	x	x	x	x
*5.	Trunks	x	x	x	x	x	x	x	x
*6.	Groups	x	x	x					
*7.	Call Control	x	x	x	x	x	x	x	x
*8.	Directory	x	x						
*9.	Maintenance	x	x						
*10.	PSTN Access	x	x						
*11.	Network	x	x	x					
*12.	Permissions list	x							
*13.	Night Service	x	x	x					
*14.	Automatic Route Selection	x	x	x	x	x	x	x	x
*15.	Automatic Call Announcing	x	x	x	x	x	x	x	x
*16.	Database Management	x	x	x	x	x	x	x	x
*17.	Linecard Information	x	x	x	x	x	x	x	x

Toggle access [menu(*), menu/level, DEFAULT] >

Night Service

Night Service Menu

Night service is used in various ways by the switch:

- To vary the call barring applied to a users' outgoing calls (*see "Day-Time Outdialling" on page 26*).
- To alter the routing of incoming calls through **Call Control Plan** dispositions (*see "Call Distribution" on page 35*).
- To change the ACA Announcer plan played to waiting calls (*see "Call Distribution" on page 35*).
- Night Service

NIGHT SERVICE MENU

1. Night service selections > *See page 51.*
2. Night service time table 1 > *See page 52.*
3. Night service time table 2
4. Night service time table 3
5. Night service time table 4

<ESC> Return to MAIN MENU

Select >

Night Service Selections

Each tenancy area on the switch is associated with one of the switch's four night service timetables. That timetable then controls the night service times of the trunks and terminals in that area.

The appearance of the **Night Service Selections** menu will vary according to the tenant-area ratio set on the system (*see "Tenant-Area Ratio" on page 18*). Note that changing the tenant-area ratio on a switch erases all entries from the night service selection menu.

Display terminals users with their **User Type** set to **System Manager** (*see "Personal Status - User Type" on page 25*) can change an area in their tenancy between day and night service independent of the area's associated night service timetable.

- Night service > Night service selections > [tenancy/area/timetable]

NIGHT SERVICE TABLE ALLOCATION

		AREA												
		1	3	5	7	9	11	13	15	17	19	21	23	25
A	1	.	.	.	.	.	.	.	.	.	.	.	.	.
R	26	.	.	.	.	.	.	.	.	.	.	.	.	.
E	51	.	.	.	.	.	.	.	.	.	.	.	.	.
A	76	.	.	.	.	.	.	.	.	.	.	.	.	.
	101	.	.	.	.	.	.	.	.	.	.	.	.	.
	126	.	.	.	.	.	.	.	.	.	.	.	.	.
	151	.	.	.	.	.	.	.	.	.	.	.	.	.
	176	.	.	.	.	.	.	.	.	.	.	.	.	.
	201	.	.	.	.	.	.	.	.	.	.	.	.	.
	226	.	.	.	.	.	.	.	.	.	.	.	.	.

area/timetable [1-250/1-4] >

Night Service Time Table

The switch supports four night service timetables. Each timetable can be associated with any of the tenancy areas on the switch.

Each timetable covers seven days with two periods of night service for each day. Period 1 details the start and end times for a lunch period on each day. If no lunch period of night service is required then Period 1 should be left blank. Period 2 details the start and end times for the overnight period of night service (ie. the end time is in the morning of the next day).

- Night service > Night service time table 1/2/3/4

NIGHT SERVICE TIME TABLE 1				
	Period 1		Period 2	
	start	end	start	end
1. Mon	..:..	..:..	..:..	..:..
2. Tue	..:..	..:..	..:..	..:..
3. Wed	..:..	..:..	..:..	..:..
4. Thu	..:..	..:..	..:..	..:..
5. Fri	..:..	..:..	..:..	..:..
6. Sat	..:..	..:..	..:..	..:..
7. Sun	..:..	..:..	..:..	..:..

<Esc> Return to the N/S facility menu

After Selection, Press <TAB> to move right

Select > _

Settings

- After selecting a day in the time table, the switch will respond "Night service start time [hh:mm]" for **Period 1** of that day. Either enter a time or press **TAB** to skip entry. The switch then displays "Night service end time [hh:mm]". After entering an end time the process will repeat for **Period 2**. If you press **TAB** you will finish time entry for Period 1 and that day.

Automatic Route Selection

ARS Facilities Menu

Automatic Route Selection (ARS) is used to control the routing of calls and from the switch to the PSTN and network. The only route to dial calls off-switch to the PSTN is via ARS routing (except for VPN routes).

- Automatic Route Selection

ARS FACILITIES MENU

1. String Analysis > *See page 54.*
2. Plan Based Analysis > *See page 56.*
3. Plan Names > *See page 57.*
4. Time Analysis > *See page 58.*
5. Route Lists > *See page 61.*
6. Digit Translation > *See page 62.*

7. Default ARS

<ESC> Return to MAIN MENU

Select >

- **Default ARS:** *[Sure, Y/N]*

Returns the switch's ARS settings to their default values.

String Analysis

String analysis is applied to all dialling by users (including system speed dial digits). It is also applied to all incoming DDI digits (except on DPNSS). When the leading digits are matched to a stored string, the call follows the routing associated with that string. If no string match exists then the digits are dialled on-switch (to find a matching directory number or entry in the network routing table).

String analysis distinguishes between strings that share the same leading digits, eg. 9017xxxx and 901xxxxx can have separate settings. It only confirms a string match after receiving the first non-matching digit.

ARS ignores any * or # characters in the dialling unless there is a specific string also containing the same characters. For example: Dialling 901*0x follows the same routing as dialling 9010x unless an ARS string for 901*0 exists.

- Automatic Route Selection > String Analysis

STRING ANALYSIS		Information	
1. Display another string			
2. Change string processing			
3. Delete this string			
4. Insert new string			
<TAB> Display next string			
<Esc> Return to the ARS menu			
String	Type	No.	Name
9	Route List	1	Unrestricted

Select >

Settings

- **Display another string:** *[up to 16 digits]*
Select another string for display.
- **Change string processing:** *Enter string processing > See "String Analysis - String Processing Options" on page 55.*
Change the processing applied to the string.
- **Delete this string:** *[Sure, Y/N]*
Delete the string from string processing.
- **Insert new string:** *Enter new string [up to 16 digits] > See "String Analysis - String Processing Options" on page 55.*
Add a new string and specify the processing that should be applied.

String Analysis - String Processing Options

- Automatic Route Selection > String Analysis > Change string processing
- Automatic Route Selection > String Analysis > Insert new string [up to 16 digits]

STRING ANALYSIS		String Processing Options	
1. Display another string		1. Apply on-switch translation	
2. Change string processing		2. Use route list	
3. Delete this string		3. Send untranslated over network	
4. Insert new string		4. Prefix with network node number	
		5. Use time analysis	
		6. Apply translation over network	
		7. Use plan based analysis	
<TAB> Display next string			
<Esc> Return to the ARS menu			

String	Type	No.	Name
9	Route List	1	Unrestricted

Enter string processing >

Settings

- **Apply on-switch translation:** *[Translation number, 1-250]*
Apply a digital translation to the call and then dial on-switch.
- **Use route list:** *[Route list number, 1-50]*
Route the call to a route list.
- **Send untranslated over network:** *[Sure, Y/N]*
Send the call as dialled to the Network Routing Table.
- **Prefix with network node number:** *[Network node number, 0-9999]*
Add a specified node number to the call digits and then send to the Network Routing Table.
- **Use time analysis:** *[Time analysis process, 1-50]*
Route the call to a time analysis process.
- **Apply translation over network:** *[Translation number, 1-250]*
Apply a digit translation to the call and then send to the Network Routing Table.
- **Use plan based analysis:** *[Plan based analysis number, 1-50]*
Route the call to a Plan Based Analysis process.

Plan Based Analysis

Plan based analysis allows the routing of calls based which user is dialling. Each plan based analysis process can include separate routing options for six plan numbers. The associated plan number of the dialling device determine which plan option is applied to the call.

For each user, the plan number is set through the **Dialling plan** option (*see “User Menu” on page 23*). For trunks, the **Dialling plan** is set through the associated **Call Control Plan** (*see “Call Control” on page 34*).

- Automatic Route Selection > Plan Based Analysis [process, 1-50]

PLAN BASED ANALYSIS : 1 NO NAME		Information
1. Change analysis processing		-----
2. Clear this plan based analysis		
3. Change this analysis name		
<TAB> Display next analysis		|
<Esc> Return to the ARS menu		

Plan	Type	No. | Name
1. NO NAME	Undefined	|
2. NO NAME	Undefined	|
3. NO NAME	Undefined	|
4. NO NAME	Undefined	|
5. NO NAME	Undefined	|
6. NO NAME	Undefined	|

Select >

Settings

- **Change analysis processing:** [plan number, 1-6] > *See "Plan Based Analysis - Analysis Processing Options" on page 57.*
Change the processing option for one of the plan numbers within the plan based analysis process.
- **Clear this plan based analysis:** [Sure, Y/N]
Removes are settings from the plan based analysis process.
- **Change this analysis name:** [Plan based analysis name, up to 8 characters]
Sets the name for the plan that is then shown in other parts of automatic route selection.

Plan Based Analysis - Analysis Processing Options

- Automatic Route Selection > Plan Based Analysis [1-50] > Change analysis processing

PLAN BASED ANALYSIS : 1 NO NAME		Analysis Processing Options	
1. Change analysis processing		1. Apply on-switch translation	
2. Clear this plan based analysis		2. Use route list	
3. Change this analysis name		3. Send untranslated over network	
		4. Prefix network node number	
		5. Use time analysis	
		6. Apply translation over network	
<TAB> Display next analysis			
<Esc> Return to the ARS menu			

Plan	Type	No.	Name
* 1. NO NAME	Undefined		
2. NO NAME	Undefined		
3. NO NAME	Undefined		
4. NO NAME	Undefined		
5. NO NAME	Undefined		
6. NO NAME	Undefined		

Enter processing option [1-6]>

Settings

- **Apply on-switch translation:** *[Translation number, 1-250]*
Apply a digital translation to the call and then dial on-switch.
- **Use route list:** *[Route list number, 1-50]*
Route the call to a route list.
- **Send untranslated over network:** *[Sure, Y/N]*
Send the call as dialled to the Network Routing Table.
- **Prefix with network node number:** *[Network node number, 0-9999]*
Add a specified node number to the call digits and then send to the Network Routing Table.
- **Use time analysis:** *[Time analysis process, 1-50]*
Route the call to a time analysis process.
- **Apply translation over network:** *[Translation number, 1-250]*
Apply a digit translation to the call and then send to the Network Routing Table.

Plan Names

Each of the six plan options can be named to aid identification during programming. The plan names are shown in the Plan Based Analysis process display (see “Plan Based Analysis” on page 56).

- Automatic Route Selection > Plan Name

PLAN NAMES	
1. Plan name :	
2. Plan name :	
3. Plan name :	
4. Plan name :	
5. Plan name :	
6. Plan name :	

Select >

Settings

- **Plan name:** *[up to 8 characters]*

Time Analysis

Time analysis allows a calls routing to be determined according to day, date and time of day.

- Automatic Route Selection > Time Analysis

TIME ANALYSIS

1. Time Analysis Processes > See page 58.
2. Time Category Maps > See page 59.

<ESC> Return to ARS FACILITIES MENU

Select >

Time Analysis - Time Analysis Process

Up to forty time analysis processes can be defined. Using the processes associated time map, calls are routed according to which of six time categories applies at the time of the call.

- Automatic Route Selection > Time Analysis > Time Analysis process [1-40] >

Time Analysis Process : 1 for NO NAME

Menu	Information
1. Clear all processing	
2. Change processing for category	
3. Clear processing for category	
4. Change the time map	
5. Change the name	
<TAB> Display next analysis	
<Esc> Return to the ARS menu	

|Time|	time categories
|Map|	A B C D E F

| 1 |	

Settings

- **Clear all processing:** *[Sure, Y/N]*
Removes all processing from the time categories in the time analysis process.
- **Clear processing for category:** *[Category, A-F] > [Sure, Y/N]*
Remove all processing from a specific category in the time analysis process.
- **Change the time map:** *[Time map number, 1-4]*
Sets which time map to associate with the time analysis process.
- **Change the name:** *[Name, up to 8 characters]*
Sets the name for the time analysis process.
- **Change the processing for category:** *[Category, A-F]*
Allow the processing for a time category to be selected. Following the selection of the category, the processing options are:
 - **Use route list:** *[Route list number, 1-50]*
Route the call to a route list.
 - **Send untranslated over network:** *[Sure, Y/N]*
Send the call as dialled to the Network Routing Table.
 - **Prefix with network node number:** *[Network node number, 0-9999]*
Add a specified node number to the call digits and then send to the Network Routing Table.
 - **Apply translation over network:** *[Translation number, 1-250]*
Apply a digit translation to the call and then send to the Network Routing Table.

Time Analysis - Time Category Map

ARS supports four time maps. Each map consists of day types, a week plan and exception days.

- Automatic Route Selection > Time Category Maps [Map, 1-4]

TIME CATEGORY MAP

1. Segmentation plan for day types > See page 59.
2. Generic week plan of day types > See page 60.
3. Year plan of exception days > See page 60.

<ESC> Return to TIME ANALYSIS

Select >

Time Analysis - Time Category Map - Day Type

Each time map can contain six day types. Each day type divides into up to four segments with a different time category (A-F) for each segment.

- ARS > Time Category Maps [Map, 1-4] > Segmentation plan for day types [Day type, 1-6]

Day Type : 1 Weekday for time map : 1

1. Default the partitioning
2. Change the day type name
3. Split a time segment
4. Remove a time segment
5. Change a time segment category

NO.	FROM	TO	Category
1	00:00	23:59	A

Settings

- **Default the partitioning:** *[sure, Y/N]*
Removes all processing from the day type segmentation plan.
- **Change the day type name:** *[name, up to 8 characters]*
Sets a name for the day type.
- **Split a time segment:** *[new segment start time, hh:mm] > [category, A-F]*
Allows a new time segment to be added to the day type and sets the processing category for that segment.
- **Remove a time segment:** *[segment number, 1-4]*
Removes a segment to the day type.
- **Change a time segment category:** *[segment number, 1-4] > [category, A-F]*
Changes the processing category for a time segment.

Time Analysis - Time Category Map - Generic Week

Selecting one of the days in the Generic Week causes the switch to request "Day type [1-6]". The day type (*see "Time Analysis - Time Category Map - Day Type" on page 59*) and day type name are displayed in the generic week plan.

- ARS > Time Category Maps [Map, 1-4] > Generic week plan of day types

Generic Week for time map : 1

1. Monday : Day Type 1 NO NAME
2. Tuesday : Day Type 1 NO NAME
3. Wednesday : Day Type 1 NO NAME
4. Thursday : Day Type 1 NO NAME
5. Friday : Day Type 1 NO NAME
6. Saturday : Day Type 2 Saturday
7. Sunday : Day Type 3 Sunday

Select >

Time Analysis - Time Category Map - Year Plan of Exception Days

This section of each time map is used to change the day type applied to days that need to differ from the generic week plan. The year plan of exception days covers the 12 months of the current year.

- ARS > Time Category Maps [Map, 1-4] > Year plan of exception days [month, 1-12]

Year Plan for time map : 1

Menu	Information						
1. Default this month	-----						
2. Change a day type	January						
<TAB> Display next month	Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5	6
	7	8	9	10	11	12	13
	14	15	DT1	17	18	19	20
	21	22	23	24	25	26	27
	28	29	30	31			

Select >

Settings

- **Default this month:** [sure, Y/N]
Defaults all days of the current month to follow the time maps generic week plan.
- **Change a day type:** [Day of month, 1-31] > [Day type, 1-6]
Selects a day to use a day type other than that in the time maps generic week plan.

Route Lists

All calls off-switch except network calls must be routed via an ARS route list.

- Automatic Route Selection > Route Lists [1-50]

Route List : 1 Unrestricted for local calls

User class of service : 1, 2, 3

1. Clear the route list
2. Change access for user class
3. Change the call type
4. Change the route list name
5. Add the next route
6. Remove a route
7. Insert another route
8. Modify a route

<TAB> for next route

Route	Dn	Min Access	Wait Access	Busy Period
1. Translation 1	90	1	1	0

Select >

Settings

- **Clear the route list:** *[sure, Y/N]*
Removes all routing options from the route list.
- **Change access for user class:** *[class, 1-8]*
Adds or removes a user class from the **User class of service** list in screen. Indicates which user classes can use the route list (*see "Day-Time Outdialling" on page 26*).
- **Change the call type:** *[Unclassified] or [Local] or [National] or [International]*
Provides the call type classification for SMDR and statistics reports (*see "Set Up Statistics Parameters" on page 5 and "Report Statistics" on page 7*).
- **Change the route list name:** *[name, up to 15 characters]*
Adds a name to the route list to aid its identification.
- **Add the next route:** *See "Route Lists - Route Processing Options" on page 62.*
Displays the routing options for a new route from the route list. The new route is added after existing routes.
- **Remove a route:** *[route, 1-6]*
Remove a route from the route list.
- **Insert another route:** *[before route, 1-6] > See "Route Lists - Route Processing Options" on page 62.*
Add a new route before an existing route.
- **Modify a route:** *[route, 1-6] > See "Route Lists - Route Processing Options" on page 62*
Change the processing applied to an existing route.

Route Lists - Route Processing Options

- Automatic Route Selection > Route Lists [1-50] > Add the next route
- Automatic Route Selection > Route Lists [1-50] > Insert another route [before route, 1-6]
- Automatic Route Selection > Route Lists [1-50] > Modify a route [route, 1-6]

Route 1 for List 1

1. Apply a translation
2. Prefix with a network node number
3. Send untranslated over the network
4. Apply translation over the network
5. Send digits as dialled

<Esc> Return to the ROUTE LIST menu

Select >

- **Apply translation:** *[Translation number, 1-250]*
Apply a digital translation to the call before dialling out.
- **Send untranslated over network:** *[Sure, Y/N]*
Send the call as dialled to the Network Routing Table.
- **Prefix with network node number:** *[Network node number, 0-9999]*
Add a specified node number to the call digits and then send to the Network Routing Table.
- **Apply translation over network:** *[Translation number, 1-250]*
Apply a digit translation to the call and then send to the Network Routing Table.
- **Send digits as dialled:**
Outputs the digits dialled without applying any digit translation.

Digit Translation

ARS Digit translations can be applied to PSTN, network and on-switch calls. Up to 250 digits translations can be set up, each consisting of up to eleven steps. As well as digit replacement, steps can include the insertion of authorisation codes, pauses and extension numbers (see “Digit Translation - Translation Step” on page 63).

- Automatic Route Selection > Digit Translation [1-250]

TRANSLATION 1

TRANSLATION STEPS

MENU

1. Clear the translation
2. Add the next step
3. Remove a step
4. Insert another step
5. Replace a step
6. Select a translation

<TAB> Display next translation

<Esc> Return to the ARS menu

1. DELETE 9

Select >

- **Clear the translation:** *[sure, Y/N]*
Removes all existing processing from the translation.
- **Add the next step:** See “Digit Translation - Translation Step” on page 63.
Adds a new step to the end of the digit translation process.
- **Remove a step:** *[step, 1-11]*
Removes an existing step from the digit translation.
- **Insert another step:** *[before step, 1-10]* > See “Digit Translation - Translation Step” on page 63.
Add a new step before an existing step.
- **Replace a step:** *[step, 1-11]* > See “Digit Translation - Translation Step” on page 63.
Change the processing applied by a step in the digit translation.
- **Select a translation:** *[translation, 1-250]*
Display the settings for another digit translation.

Digit Translation - Translation Step

- ARS > Digit translation [1-250] > Add the next step
- ARS > Digit translation [1-250] > Insert another step [before step, 1-11]
- ARS > Digit translation [1-250] > Replace a step [step, 1-11]

TRANSLATION STEP

1. Insert string
2. Insert authorisation code
3. Insert extension number
4. Delete the following string
5. Replace the following string
6. Wait for time period
7. Replace the next n digit(s)

<Esc> Return to the TRANSLATION MENU

Select >

Settings

- **Insert string:** *[string, up to 6 digits] > [before, 1-16]*
Add a string of up to 6 digits to a specified position in the original string.
- **Insert authorisation code:** *[before, 1-16]*
Insert the user's associated authorisation code (*see "Authorisation Codes" on page 47*) before the specified position in the original string.
- **Insert extension number:** *[before, 1-16]*
Insert the user's directory number before the specified position in the original string.
- **Delete the following string:** *[string, up to 6 digits]*
Remove the matching string from the original string digits.
- **Replace the following string:** *[string, up to 6 digits] > [with, up to 6 digits]*
match and replace a string in the original string digits with another string.
- **Wait for Time Period:** *[time, 0-255 10th/second] > [before, 1-16]*
Insert a time delay into the digit string at the specified position.
- **Replace the First n Digits:** *[no of digits, n] > [with, up to 6 digits]*
Replace the first *n* digits of the original string with another specified string of up to 6 digits.

Automatic Call Announcing

Call Announcing Menu

Announcer plans are played to incoming callers waiting to be answered. Which plan is played is set through the Day announcer plan and Night announcer plan options of each Call Control Plan (see “Call Distribution” on page 35). ACA and DMOH modules provide the steps within the announcer plan along with pause and music options. In this view the **Tab** key is used to select the next DMOH/ACA Cassette.

- Automatic Call Announcing.

CALL ANNOUNCING

MAIN MENU

1. View ACA card

2. Edit message name

3. Toggle secure

4. Toggle type

5. View plan

6. Edit plan

NBR	NAME	LEN	TYP	SEC
...
...
...
...
...
...
...

PLAN

STEP	ACTION	LENGTH	CUT
		SECS	IN

<TAB> for next card or step, <ESC> for main menu

Select>

Settings

- **View ACA card:** [card, address]
Display the modules on an ACA card. The directory number, name, maximum length and secure status of each module is shown.
- **Edit message name:** [message, dn] > [name, up to 16 characters]
Sets the message name associated with an ACA module.
- **Toggle secure:** [message, dn] > [secure, yes/no]
ACA modules can only be recorded to when their secure setting is **No**. Whilst not secure, any ACA plan that use the message module will not run.
- **Toggle type:** [message, dn]
Allows the function of an ACA cassette module to be switched between ACA message and DMOH source.
- **View plan:** [plan, 1-16]
Displays the steps of an ACA plan.
- **Edit plan:** [plan, 1-16]
Displays the steps of an ACA plan and the options to edit that plan. See "Call Announcing - Edit Plan Menu" on page 65.

Call Announcing - Edit Plan Menu

In this view the **Tab** key is used to select which step of the announcer plan is selected (shown by the => symbol).

- Automatic Call Announcing > Edit plan [plan, 1-16]

CALL ANNOUNCING																																																	
EDIT PLAN MENU			PLAN																																														
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<TAB> for next card or step, <ESC> for main menu Select>																																																	

Settings

- **Enter action:** *[wait n seconds, Wn] or [music for n seconds, Mn] or [goto step n, n] or [play message, dn]*
 Enters the action to perform for a particular step in the announcer plan. The music option uses the **Music on hold** source of the call control plan using the announcer plan (see "Call Control" on page 34).
- **Enter duration:** *[duration, 1-255 seconds]*
 Alter the duration of a music or wait step.
- **Toggle cut in:** *[yes/no]*
 For steps sets to **no**, the switch will not connect the caller to a disposition until the step has been completed.
- **Delete step:** *[step, 1-10] or [All]*
 Removes a specified step or all steps from an announcer plan.
- **Clear plan:**
 Removes all processing from an ACA announcer plan.

Database Management

Database Management Menu

- Database management

*** DATABASE MANAGEMENT MENU ***

Main Database
Present : YES
Time : 00:00 2-JAN-98

Flash Database status : Idle
Automatic daily backup at : 00:00

1. Database Backup
2. Set backup time
3. Erase database
4. Database download
5. Database upload
6. Select options from uploaded db
7. Restart System with uploaded db
8. Delete uploaded db
9. Database Verification

Select>

Settings

- **Database backup:**
Starts a database backup. The **Flash Database** status will change to "Backing up" during the process.
- **Set backup time:** *[Backup time, hh:mm]*
Sets the time for the automatic daily backup. Automatic backup can be disabled by leaving the field blank, however this is only used for test systems and should never be done on customer installations.
- **Erase database:** *[sure, Y/N]*
Erases the backup flash database. This action should be immediately followed by a **Database Backup** action.
- **Database download:**
Puts the switch into download mode, ready to download the current database via port 1.
- **Database upload:**
Puts the switch into upload mode, ready to upload a database to the switch upload buffer via port 1.
- **Select options from uploaded db:**
Allows specific sections of an upload database to be selected for inclusion prior to use of the Restart System with uploaded db command (*see below*).
- **Restart System with uploaded db:**
Following a database upload, restarts the system using the uploaded database (or those sections of the uploaded database selected using **Select options from uploaded db**).
- **Delete uploaded db:**
Removes an uploaded database from the switch's upload buffer.
- **Database verification:**
Starts a verification process across the current switch database. If the switch finds settings that it considers to be anomalies it will prompt you as to whether it should attempt a fix or ignore the anomaly.

Linecard Information

Linecard Information Menu

This menu shows the type, version and status of each device cassette in the system.

- Linecard Information

```

*** LINECARD INFORMATION ***

Shelf 1
1. DSLC 8 1.4 Running
2. ALOG 10 2.4 Running
3.
4.
5.
6.
7.

Shelf 2
1. DSLC 8 1.4 Running
2.
3.
4.
5.
6.
7.

Shelf 3
1. DSLC 8 1.4 Running
2.
3.
4.
5.
6.
7.

Shelf 4
1.
2.
3.
4.
5.
6.
7.

Shelf 5
1.
2.
3.
4.
5.
6.
7.

1. Linecard details      > See page 68.
2. System Shutdown

Select>

```

Settings

- **System shutdown:** *[sure, Y/N]*

Begins a polite shutdown of all cassettes in the switch. The green LED on each cassette flashes whilst its device's are being shutdown. The LED goes off when the cassette is shutdown. The switch must be powered off and then on to restart the cassettes.

Linecard Information

Display additional details of an individual device cassette.

- Linecard Management > Linecard information

*** LINECARD INFORMATION ***

Linecard at 1/1 DSLC

Configuration : 8 Channels
Software rev : 1.4
Description :

Card Status : Running
Installed : 12:00 1-JAN-98
Lock Status : Locked
Last Sign On : 13:44 2-JAN-98
Last Reset : 12:00 1-JAN-98

1. Select card
2. Enter description
3. Toggle lock status
4. Card shutdown
5. Channel details > See page 69.
6. Linecard setup
7. Deallocate line card

<TAB> for next card

Select>

Settings

- **Select card:** *[address]*
Select another device cassette for display.
- **Enter description:** *[up to 30 characters]*
Associates a name with the cassette to aid identification.
- **Toggle lock status:** *[Locked] or [Unlocked]*
Once a cassette is inserted into a slot, the slot will only support that type and capacity of cassette. This is shown by the Lock Status changing to Locked. The **Toggle lock status** command is used to unlock a slot.
- **Card shutdown:** *[sure, Y/N]*
Begins the polite shutdown of all devices in the cassette, ie. a device is not shutdown until it is not in use. The cassette's green LED flashes during shutdown and goes off once the shutdown is complete. If the LED remains flashing it indicates that devices on the cassette are still involved in use. To restart the cassette it must either be removed and then reinserted or use **Card shutdown** again.
- **Linecard setup:**
Displays settings shared by all devices in the cassette. These vary according to the cassette type and are detailed where appropriate in the INDeX Installation & Maintenance Manual.
- **Deallocate line card:** *[sure, Y/N]*
Removes the cassette and its device's settings from the switch. The **Card shutdown** command should be used first to allow the slot to be used by different types of cassettes.

Channel Details

Displays the type of device on each channel (circuit) of a cassette. The software level and associated device directory number are also shown.

- Linecard information > Linecard details > Channel details

*** LINECARD INFORMATION ***

Linecard at 1/1 DSLC

1. DT 5 Rev 2.4 208	17.
2. DT 5 Rev 2.3 209	18.
3. DT 5 Rev 2.4 210	19.
4. 212	20.
5. 213	21.
6.	22.
7.	23.
8.	24.
9.	25.
10.	26.
11.	27.
12.	28.
13.	29.
14.	30.
15.	31.
16.	32.

Select channel (or * for all) to allocate/deallocate
<TAB> for next card

Select>

For digital trunk devices, this menu is also used to allocated/deallocate directory numbers.

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