



Digital Business Telephone Systems

# **CTX100 and CTX670 Programming Manual**

**Includes information for CTX WinAdmin**

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## **Notes to Users**

## **Typical Programming Scenarios Guide For TOSHIBA Strata CTX**

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# Introduction

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This manual provides information required to program the Strata CTX670 business telephone system using Toshiba's proprietary CTX WinAdmin™ software.

**Important!** *This Programming Manual only applies to WinAdmin versions greater than version 1.10. If you have WinAdmin 1.10, refer to previous versions of this manual: Part Number CTX-MA-PRGRM-VA.*

## Organisation

This manual is organised as follows:

- ◆ **Chapter 1 – CTX WinAdmin Overview** provides general information about CTX WinAdmin's software capabilities.
- ◆ **Chapter 2 – Installation** discusses system hardware and software requirements for CTX WinAdmin and includes the installation steps needed to install CTX WinAdmin.
- ◆ **Chapter 3 – Strata CTX Programming Guidelines** describes auto-recognition features, order of programming, and overview of WinAdmin general operation.
- ◆ **Chapter 4 – System** provides system programming information.
- ◆ **Chapter 5 – Station** discusses station and station feature programming.
- ◆ **Chapter 6 – Trunks** explains trunk programming information including T1, ISDN Basic Rate Interface (BRI) and Primary Rate Interface (PRI).
- ◆ **Chapter 7 – Attendant** describes Attendant Console support and settings available in CTX WinAdmin.
- ◆ **Chapter 8 – Services** discusses programming of services available to Strata CTX through CTX WinAdmin.
- ◆ **Chapter 9 – Operation** explains system setup options available to CTX WinAdmin users. System initialisation, SmartMedia formatting, system software upgrades and Internet Protocol (IP) configuration are among the topics discussed.
- ◆ **Chapter 10 – Maintenance** provides system and component trace program information. CTX WinAdmin Configuration and Flash Memory Testing are also described.
- ◆ **Chapter 11 – Tools and Profile** discusses Strata CTX Tools and Utilities to help manage your Strata CTX System more efficiently.
- ◆ **Appendix A – Button Programming** provides limited information for the button programming interface for Strata CTX programming.

- ◆ [Appendix B – System Error Codes](#) is a reference for error codes encountered during CTX WinAdmin programming.
- ◆ [Notes to Users](#)
- ◆ [Typical Programming Scenarios Guide](#)
- ◆ [Index](#)

## Conventions

Conventions	Description
<b>Note</b>	Elaborates specific items or references other information. Within some tables, general notes apply to the entire table and numbered notes apply to specific items.
<b>Important!</b>	<i>Calls attention to important instructions or information.</i>
<b>CAUTION!</b>	Advises you that hardware, software applications, or data could be damaged if the instructions are not followed closely.
<b>WARNING!</b>	Alerts you when the given task could cause personal injury or death.
[DN]	Represents any Directory Number button, also known as an extension or intercom number.
[PDN]	Represents any Primary Directory Number button (the extension number for the telephone).
[SDN]	Represents any Secondary appearance of a PDN. A PDN which appears on another telephone is considered an SDN.
[PhDN]	Represents any Phantom Directory Number button (an additional DN).
<b>Arial Bold</b>	Represents telephone buttons.
<b>Courier</b>	Shows a computer keyboard entry or screen display.
“Type”	Indicates entry of a string of text.
“Press”	Indicates entry of a single key. For example: Type <b>prog</b> then press <b>Enter</b> .
Plus (+)	Shows a multiple PC keyboard or phone button entry. Entries without spaces between them show a simultaneous entry. Example: <b>Esc+Enter</b> . Entries with spaces between them show a sequential entry. Example: <b># + 5</b> .
Tilde (~)	Means “through.” Example: 350~640 Hz frequency range.
➤	Denotes the step in a one-step procedure.
➤	Denotes a procedure.
Start > Settings > Printers	Denotes a progression of buttons and/or menu options on the screen you should select.
<a href="#">See Figure 10</a>	Grey words within the printed text denote cross-references. In the electronic version of this document (Library CD-ROM or FYI Internet download), cross-references appear in blue hypertext.

## Related Documents/Media

**Note** Some documents listed here may appear in different versions on the CD-ROM or in print. To find the most current version, check the version/date in the Publication Information on the back of the document's title page.

### General Description

- ◆ Strata CTX General Description

### Installation and Programming

- ◆ Strata CTX Installation and Maintenance Manual

### User Guides

- ◆ Strata CTX DKT3000/2000-series Digital Telephone
- ◆ Strata CTX DKT3001/2001 Digital Single Line Telephone
- ◆ Strata CTX DKT2104-CT Cordless Telephone (*For use in the US only*)
- ◆ Strata CTX DKT2004-CT Cordless Telephone (*For use in the US only*)
- ◆ Strata CTX Standard Telephone

### Quick Reference Guides

- ◆ Strata CTX DKT3000/2000-series Digital Telephone

### CD-ROMs

- ◆ Strata CTX WinAdmin Application Software and CTX Documentation Library
- ◆ Strata CTX ACD Application Software and Documentation Library (includes Strata CTX ACD software and documentation, Net Server software and documentation, and Voice Assistant software and documentation.)
- ◆ OAISYS (includes software and documentation of OAISYS Chat, Call Router, and Net Phone)
- ◆ Strata CTX Quote

For *authorised users*, Internet site FYI (<http://www.telecoms.toshiba.co.uk>) contains all current Strata CTX documentation and enables you to view, print and download current publications.



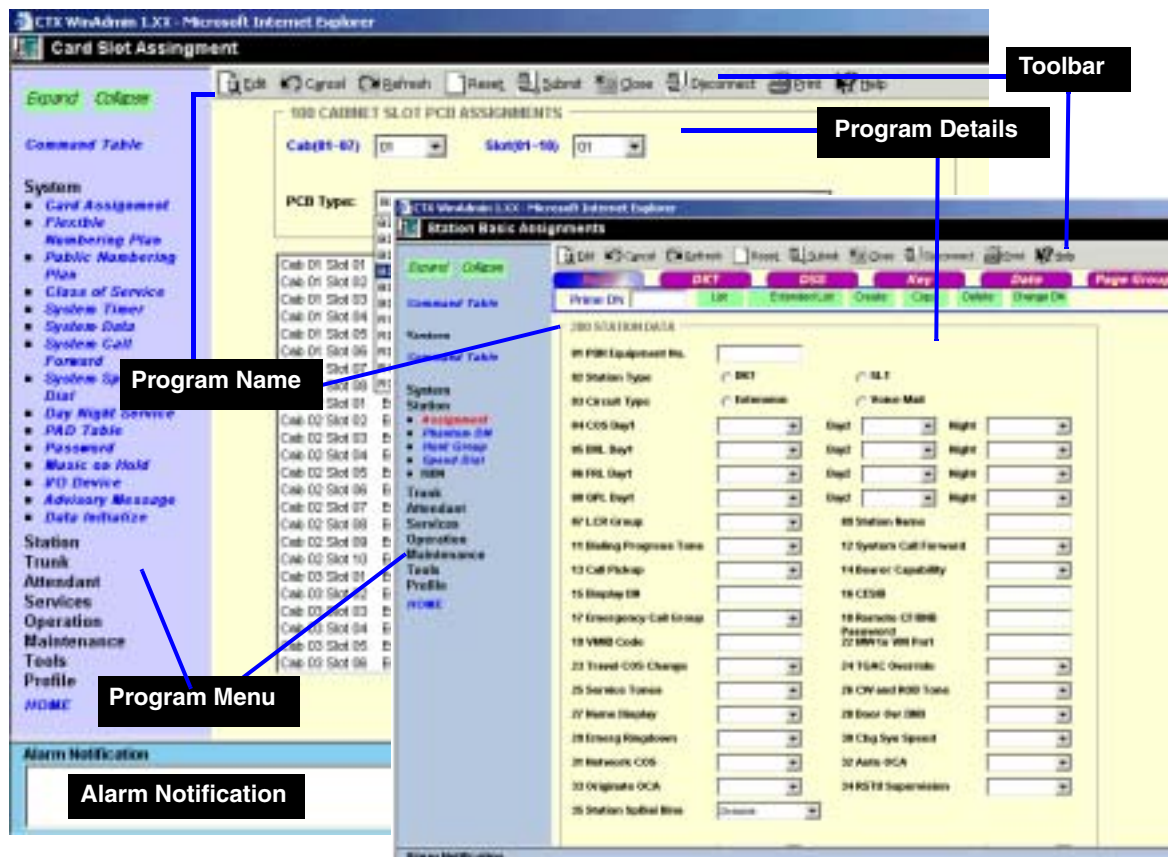
CTX WinAdmin is a powerful Microsoft® Windows® based telephone system management tool used to program, maintain and upgrade the Strata CTX Digital Business Telephone System. CTX WinAdmin uses a variety of networking and software technologies as follows:

- ◆ **Virtual Local Area Network (LAN)** – System Administrators can connect their PC to Strata CTX via a network interface jack or modem. CTX WinAdmin views the Strata CTX system as a LAN providing a stable environment in which to program and access data.
- ◆ **Windows Management Instrumentation (WMI)** – enables query-based information retrieval and event notification. WMI is an access mechanism which enables CTX WinAdmin to access, monitor, command and control Strata CTX.
- ◆ **Virtual Web Server and Manager** – creates a virtual World Wide Web environment in Strata CTX. This technology enables CTX WinAdmin to view Strata CTX as if it were an Internet Service Provider (ISP), providing secure passage for System Administrators.
- ◆ **Microsoft Internet Explorer® browser access** – Virtual Web Service enables System Administrators to access Strata CTX using the Internet Explorer browser.
- ◆ **CTX WinAdmin Graphical User Interface (GUI)** – Sophisticated programming tasks are just a click-of-the-mouse away with CTX WinAdmin's GUI.
- ◆ **Mobile Access** – enables System Administrators to program, maintain, and/or upgrade a Strata CTX from any mobile location with an Internet connection—without ever leaving the office.

CTX WinAdmin's tight integration of the above technologies provide System Administrators with convenient, stable, user friendly and comprehensive access to Strata CTX system information.

# CTX WinAdmin Application Software

The CTX WinAdmin operates in a user friendly Windows environment featuring interactive GUI pages.



## Flexible Communication Interface

CTX WinAdmin can connect directly to your Strata CTX Digital Business Telephone System via Network Interface (included with Strata CTX's BECU board and required on your PC), Modem Interface. Mobile System Administrators can access a Strata CTX system from any location that provides Internet access.

## Internet Access

CTX WinAdmin uses Microsoft IP technology to enable access to your Strata CTX as easy as browsing the World Wide Web.

- ◆ Personal Web Server and Manager – Microsoft's Personal Web Server and Manager option package enables you to build a web environment between your Strata CTX and your PC.
- ◆ Internet Explorer – Internet Explorer provides a stable environment in which to program, maintain and upgrade your Strata CTX.



This chapter shows you how to install CTX WinAdmin software on your PC and discusses how to connect that PC to the Strata CTX system.

## PC Hardware Requirements

The following table shows the minimum PC requirements for CTX WinAdmin to operate properly:

Hardware	Windows XP Professional	Windows 2000
<b>Computer/Processor</b>	300 MHz or higher processor clock speed. Intel Pentium or Celeron processors; or AMD K6, Athlon or Duron processors are recommended.	133 MHz or higher Pentium
<b>Memory</b>	128MB RAM	64MB RAM
<b>Hard Disk</b>	1.5GB of available space	2GB hard drive with a minimum of 650MB of free space
<b>SVGA Card and Monitor</b>	Yes	Yes
<b>CD-ROM Drive</b>	Yes	Yes
<b>Network Interface Card (NIC) and/or PC Modem</b>	Yes	Yes

## PC Software Requirements

The “Install CTX WinAdmin...” selection on the CTX WinAdmin CD-ROM runs a Pre-installation Check to determine if your PC meets the minimum software requirements for CTX WinAdmin to operate properly. The Pre-installation Check tests for the following:

- ◆ **Windows Operating System** – CTX WinAdmin requires a Microsoft Windows XP Professional or Windows 2000 Operating System (OS).
- ◆ **Windows Option Components** – The Pre-installation Check tests to see if Windows Option Components, such as Internet Information Services and Management and Monitoring Tools are installed on your PC. If they are not installed, your Windows OS CD-ROM will be required; or if your PC has an Original Equipment Manufacturer (OEM) version of Windows, you may need the CD-ROM that came with your PC.

**Disclaimer:** *WinAdmin has not been tested with Windows NT 4.0. This OS is not recommended. We recommend that you upgrade your OS to Windows XP Pro or Windows 2000 Pro. If you must use Windows NT 4.0, refer to the earlier version of this Manual, Part Number CTX-MA-PRGRM-VA.*

**Note** CTX WinAdmin *does not work* on these operating systems: Windows XP Home, Windows ME, Windows 98, Windows 95, and MS-DOS.

- ◆ Windows 2000 Service Pack 2 (SP2) – If not found, follow the steps given on the CTX WinAdmin CD-ROM to install SP2.
- ◆ **Internet Explorer (IE)** – If IE 5.5 or greater is not found, follow the steps given on the CTX WinAdmin CD-ROM and install it from there.

**Note** Windows XP Professional automatically installs IE 6.0 so installing IE 5.5 is not needed.

## Step 1: Install CTX WinAdmin Software

1. Insert the CTX WinAdmin CD-ROM into your CD-ROM drive. Click “Install CTX WinAdmin...”. The CD-ROM will run a Pre-installation check, first determining which OS you have, then checking for all other software requirements.

If the correct OS and all requirements were found on your PC, the “Pre-installation Check Complete!” screen displays. This can result in any of the following four conditions.

- ◆ **First-time installation:** click “Install Now”. Follow the prompts. Choose “Custom” to browse to the drive on which you want to install the software or “Complete” to install immediately on the C: drive.
- ◆ **If upgrading from a previous version:** click “Upgrade Now”. Select Complete to install the new version on the C drive, select Custom to select another drive. The CTX WinAdmin Custom Profile folders will remain on the C drive or copied to the selected drive.
- ◆ **If installing over the same version:** click Install Now. You will be prompted to Repair or Remove. Repair will fix corrupted files and registry entries. Remove will remove the existing version to allow you to reinstall the same version as a new clean install.
- ◆ **If your PC did not pass the Pre-installation check and a requirement was not found:** see the details in [“Requirements Not Found” on Page 2-3](#).

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**CAUTION!** Installation takes several minutes. Opening and/or running other applications during installation may corrupt the installation and/or other software on your PC.

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2. Once installation is complete, if the Windows Internet Wizard is displayed when you click on the CTX WinAdmin icon, enter the settings below if using a NIC or modem connection. This establishes a preliminary path to bring up the CTX WinAdmin log-in screen.

**Windows XP Pro:** If the Windows “Welcome to the New Connection Wizard” comes up, you have not yet configured your Internet connection. Follow the prompts and select: Next > Connect to Internet > Next > Set up my connection manually > Next > Connect using broadband connect that is always on > Finish. Exit the wizard screen.

**Windows 2000:** If the Windows “Welcome to the Internet Connection Wizard” comes up, you have not yet configured your Internet connection. Follow the prompts and select: I want to set up my Internet connection manually > Next > I want to connect through a local area network > Next > Automatic discovery of Proxy server > Next and No to Setup Your Internet Email Account > Next > Finish.

3. Go on to [Step 2: Set Up LAN Connection to Strata CTX on page 2-5](#).

## Requirements Not Found

### Service Pack 2 Not Found - Windows 2000

If Service Pack 2 was not found on your Windows 2000 OS, follow these steps.

1. Click the “Windows 2000 Service Pack 2 Not Found” line. A help screen appears. Locate and click the “Install SP2 Now” link. SP2 installation will begin.
2. Follow the prompts to install SP2.
3. At the end of installation you will be prompted to restart your PC. Do so, log back into Windows 2000, then reinsert the WinAdmin CD-ROM and select “Install WinAdmin...” from the Main Menu.

### Internet Explorer (IE) 5.5 or Greater Not Found - Windows 2000

1. Click the “Internet Explorer 5.5 or Greater Not Found” line. A help screen will appear. Locate and click the “Upgrade to IE 5.5 Now”. The upgrade will begin. Follow the prompts to upgrade to IE 5.5.
2. At the end of installation you will be prompted to restart your PC. Do so, log back into Windows 2000.
3. Reinsert the WinAdmin CD-ROM and select “Install WinAdmin...” from the Main Menu.

### Internet Information Services (IIS) Not Found - Windows XP Pro/Windows 2000

If IIS was not found, follow the steps below.

---

**CAUTION!** Installing Internet Information Services (IIS) on PCs connected to a LAN and/or the Internet may cause security issues - such as your PC becoming more susceptible to intrusion and/or computer viruses. A direct connection between your PC and Strata CTX ensures less security issues.

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- ◆ In all cases, *always* have a virus program with the latest virus tables running real-time on your PC.
- ◆ An NTFS file system is recommended if you are connected to a LAN and/or Internet. See your Windows Help files for more details.
- ◆ Consult the Microsoft Knowledge Base on the Internet for updates on Windows security issues.

Have your Windows OS CD-ROM ready as you will be asked to insert it.

1. Windows XP Pro and Windows 2000: Click Start > Settings (2000 only)> Control Panel > Add/Remove Programs > Add/Remove Windows Components. Checkmark Internet Information Services (IIS). If Management and Monitoring Tools were also Not Found you may checkmark this too. Click “Next”.

2. Follow the prompts and have your Windows OS CD-ROM ready as you will be asked to insert it. If the Windows autoplay menu runs after inserting the CD-ROM, close this screen.
3. Once installation is complete, reinsert the WinAdmin CD-ROM and select “Install WinAdmin...” from the Main Menu.

**Note** If your PC displays this erroneous message (shown right), insert the Windows OS CD-ROM that came with your computer (Recovery or Companion type) and not the Service Pack2 CD-ROM. Follow the prompts to browse, open and install files.



### Management and Monitoring Tools Not Found - Windows XP Pro/Windows 2000

If Management and Monitoring Tools were not found, follow the steps below.

1. Windows XP Pro and Windows 2000: Click Start > Settings (2000 only)> Control Panel > Add/Remove Programs > Add/Remove Windows Components. Checkmark Management and Monitoring Tools. If Internet Information Services (IIS) were also Not Found you may checkmark this too. Click “Next”.
2. Follow the prompts and have your Windows OS CD-ROM ready as you will be asked to insert it. If the Windows autoplay menu runs after inserting the CD-ROM, close this screen.
3. Once installation is complete, reinsert the WinAdmin CD-ROM and select “Install WinAdmin...” from the Main Menu.

### WMI SNMP Provider Not Found - Windows 2000

If the WMI SNMP Provider was not found on your Windows 2000 PC, follow the steps below. Have your Windows 2000 CD-ROM ready, you’ll be asked to insert it.

1. Click the “WMI SNMP Provider Not Found” line. A help screen will appear.
2. Locate and click the “Install WMI SNMP Provider”. Follow the prompts to install WMI SNMP Provider. Once complete, reinsert the WinAdmin CD-ROM and select “Install WinAdmin...” from the Main Menu.

**Important!** Go on to choose [Step 2: Set Up LAN Connection to Strata CTX on page 2-5](#) and/or [Step 3: Set up Modem Connection on page 2-8](#). You can choose either or both, but you must choose one.

## Step 2: Set Up LAN Connection to Strata CTX

### Step 2A: Connect CTX WinAdmin PC to Strata CTX Processor NIC

1. Connect the RJ45 cable between your PC's NIC jack and the Strata CTX Network Interface jack. If you are connecting to Strata CTX directly without using a Network hub, use an RJ45 cross-pinned cable. If you're connecting to the Strata CTX via a hub, use a straight-pinned RJ45 cable. See Figures 2-1 and 2-2.

#### WinAdmin PC or Server, Direct Connection to Strata CTX

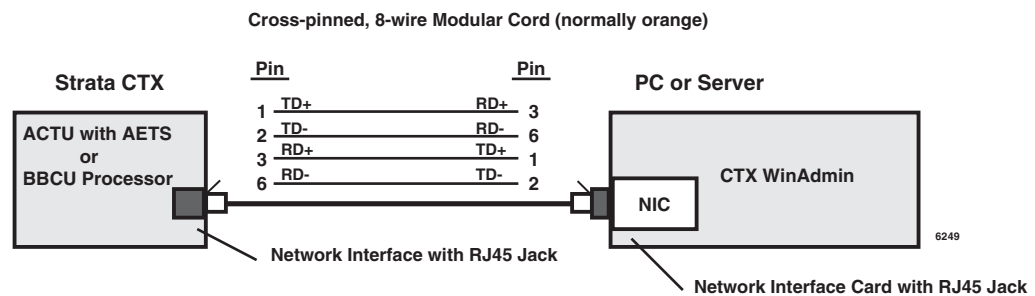


Figure 2-1 Direct Connection to Strata CTX

#### WinAdmin PC or Server, Network or HUB Connection to Strata CTX

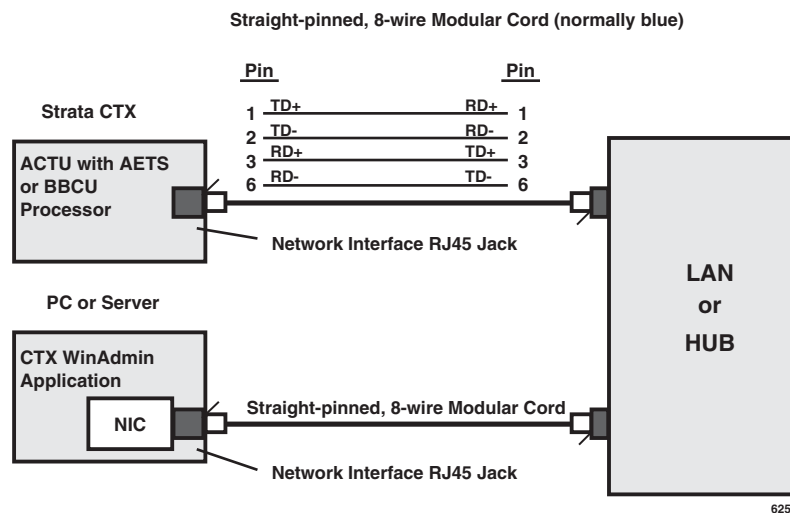


Figure 2-2 Network Interface Connection

## Step 2B: Set Up IP Address of CTX NIC

1. Connect a 20-button LCD DKT to the Strata CTX System.
2. Enter the programming mode by pressing **Hold \*#\*#1\*2\*3\***.
3. At the **PASSWORD=** prompt, enter **0000**.
4. Press **Hold**.
5. At the **PROG=** prompt enter **916** and press **Hold**.
6. Press Feature Button 1.
7. At the TCP IP1= prompt enter **a. Spkr, b. Spkr, c. Spkr, d.** and **Hold**.  
Possible Values of CTX TCP/IP address octets a.b.c.d = 0~255.  
Default = 192.168.254.253, where a = 192, b = 168, c = 254, d = 253

Example: At the TCP IP1= prompt the LCD displays 192. This is the first octet of the default CTX IP address. Pressing Spkr key three more times will display the remaining octets in succession as follows: 192.168.254.253

8. Press Feature Button 2.
9. At the **SNM IP1=** prompt enter **e. Spkr, f. Spkr, g. Spkr, h.** and **Hold**.  
Possible Values of CTX Subnet mask octets e.f.g.h = 0~255  
Default = 255.255.255.0, where e = 255, f = 255, g = 255, h = 0
10. Press Feature Button 3.
11. At the **DGW IP1=** prompt enter **i. Spkr, j. Spkr, k. Spkr, l.** and **Hold**.  
Possible Values for CTX Gateway octets i.j.k.l = 0~255  
Default = 0.0.0.0, where i = 0, j = 0, k = 0, l = 0
12. Press **Hold** (twice).

**Important!** *Windows XP: Choose Step 2C; Windows 2000: Choose Step 2D.*

## Step 2C: Set Up IP Address of CTX WinAdmin PC NIC (Windows XP)

Follow the steps below to set up PC Network settings on your WinAdmin PC.

1. Click Start > Control Panel > Network and Internet Connections > Network Connections > Broadband Connection.
2. At the Broadband Connection screen, click on Properties tab, then click the Networking tab.
3. Select Internet Protocol (TCP/IP).
4. Click on the Properties tab.
5. Select "Use the following IP Address."
6. In the IP address field enter **a.b.c.x**  
where a.b.c = 0~255 and x = 0~252.  
Example: 192.168.254.x.

**Note** The first three octets a.b.c. have to be exactly the same as the first three octets of the CTX IP address set in [Step 7 of Step 2B](#). X cannot be 253 or above and it cannot be equal to octet d of the CTX TCP/IP address set in [Step 7 of Step 2B](#). This is the static IP Address of your PC.

7. Click OK and exit.

## Step 2D: Set Up IP Address of CTX WinAdmin PC NIC (Windows 2000)

Follow the steps below to set up PC Network settings on your WinAdmin PC.

1. Click Start > Settings > Network and Dial-up Connections > Local Area Connections.
2. Right click on Local Area Connections to select Properties.
3. Local Area Connection Properties Connection screen displays. Ensure Internet Protocol (TCP/IP) is checked. Highlight TCP/IP, then click the Properties button.
4. On the General tab click the “Use the following IP Address” radio button (shown right).
5. In the IP address field enter **a.b.c.x** where a.b.c = 0~255 and x = 0~252. Example: 192.168.254.x.



**Note** The first three octets a.b.c. have to be exactly the same as the first three octets of the CTX IP address set in [Step 7](#) of [Step 2B](#). x cannot be 253 or above and it cannot be equal to octet d of the CTX TCP/IP address set in [Step 7](#) of [Step 2B](#). This is the static IP Address of your PC.

6. Enter **e.f.g.h.** in the Subnet Mask field. The Subnet Mask should be exactly the same as the CTX Subnet Mask set in [Step 9](#) of [Step 2B](#). Possible Values of Subnet mask octets e.f.g.h = 0~255 Example: 255.255.255.0
7. Leave the DNS Server addresses blank.
8. Click OK (to accept all screens).
9. Go to [Step 4: Establish Communication with Strata CTX on page 2-12](#).

CTX WinAdmin is now ready to communicate and program your Strata CTX System.

## Step 3: Set up Modem Connection

### Step 3A: Connect CTX WinAdmin PC to Strata CTX Modem

Connect an RJ11 cable from your PC modem to an active phone line or RSTU port. See figure below.

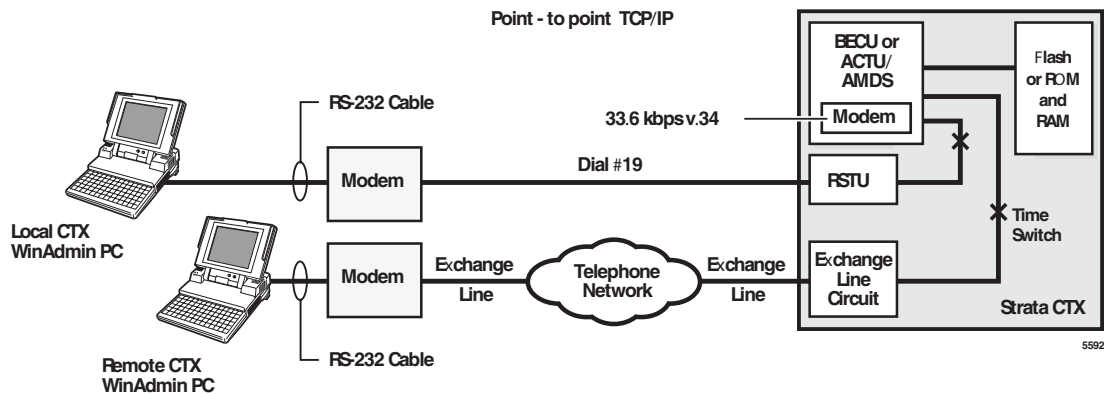


Figure 2-3 CTX WinAdmin Modem Interface Connection

### WinAdmin PC Modem to CTX Modem Call Setup – CTX Programming and Operation

- ◆ Direct ring connection over Exchange lines
  - ✦ DDI lines: in PRG 309, assign “Built-in Modem” as the Audio Day1, Day, and/or Night destination type.
  - ✦ DIT ground/loop start lines: in PRG 310 assign “Built-in Modem” as the Day1, Day2, and/or Night destination type.
  - ✦ Direct Ring when connected to RSTU or DISA line: put #19 in CTX WinAdmin Phone Number dial string.
- ◆ Transfer a WinAdmin call to the CTX modem from a CTX auto attendant or telephone
 

After receiving the call from the WinAdmin user, press **Cnf/Trn** or recall and dial #19 then hang up after receiving CTX modem tone.

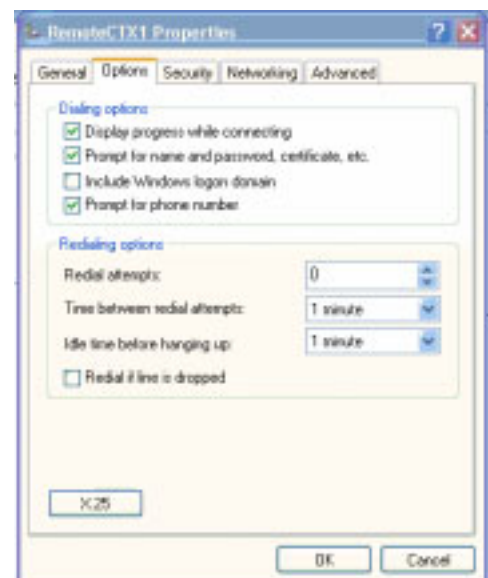
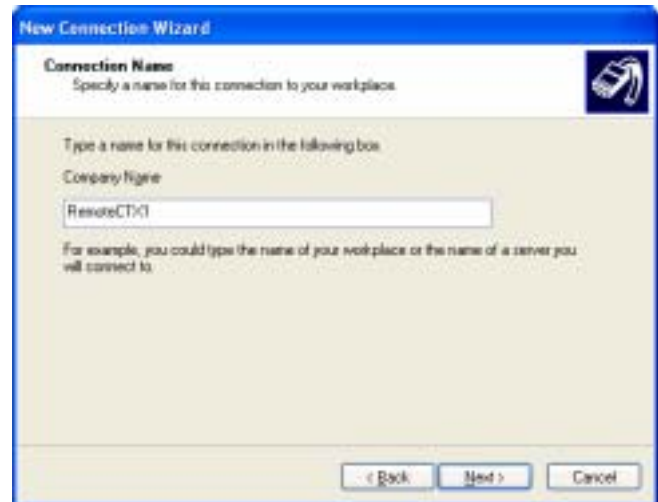
**Note** If calling an auto attendant put “xxxxxxx,,,,,, #19” in CTX WinAdmin Phone Number dial string. Where “xxxxxxx” is the site phone number and each “,” adds a three-second delay before dialling #19 to connect to the modem.

**Important!** *Windows XP: Choose Step 3B; Windows 2000: Choose Step 3C.*



## Step 3B: Set up IP Address of CTX WinAdmin PC Modem (Windows XP)

1. Set up PC modem settings for CTX WinAdmin. Click Start > Control Panel > Network and Internet Connection > Network Connections > Create a New Connection (under Network Tasks).
2. At the New Connection screen, click Next. Select radio button *Connect to the network at my workplace* and click Next.
3. Select radio button *Dial-up Connection* and click Next.
4. Enter the company name as "Remote CTX1", then click Next.
5. Leave the Phone Number to Dial field blank. Click Next.
6. Click Finish.
7. At the *Connect Remote CTX1* screen, click Properties.
8. At the RemoteCTX1 Properties screen, select the PC modem that should be used to connect to the CTX modem.
9. Click the Networking tab.
10. Select Internet Protocol (TCP/IP).
11. Click Properties.
12. Select Use the following IP Address.
13. Enter an IP Address 192.168.255.x (where x can be 1~252. It cannot be 253 or above. It cannot be the same as the CTX IP address in Program 916 for CTX NIC Connections). This is the static IP Address of your PC when using the modem connection. Click OK.
14. At the *CTX1 Properties* screen, click the Options tab and set up options to the recommended settings shown as shown right.
15. Click Ok.  
You can go back and change these settings latter if needed.
16. At the CTX1 Properties screen, click Ok and exit.
17. Go to [Step 4: Establish Communication with Strata CTX on page 2-12](#).



## Step 3C: Verify Modem Hardware Settings

Using the steps below verify that the modem hardware settings are set correctly to communicate with the CTX built-in modem.

1. Go to Start > Settings (Windows 2000 only) > Control Panel.
2. Click “Phone and Modem Options.”
3. Click the Modem tab.
4. Select the modem used by CTX WinAdmin.
5. Click the Properties button.
6. Click the Advanced tab to verify hardware settings on the screen (shown right).
7. Click Ok and exit.



## Step 3D: Set up IP Address of CTX WinAdmin PC Modem (Windows 2000)

1. Setup PC modem settings for CTX WinAdmin. Click Start > Settings > Network and Dial-up Connection > Make New Connection.
2. Click Next. Select radio button *Dial-up to private network* and click Next.
3. From the “Select a Device Screen” highlight the modem to be used to make a WinAdmin dial-up connection and click Next.
4. Do not enter Phone number, then click Next.

**Note** The phone number for Dial up is entered when setting up the Profile in Strata CTX WinAdmin. See [“User Management” on Page 2-14](#).

5. Select radio button *For all users*, then click Next.
6. Use the recommended setting (*Enable on-demand dialling*) and click Next.
7. Type RemoteCTX1 as the name in Connection Wizard (shown right), then click Finish.
8. The Connect RemoteCTX1 screen displays.



**Note** The User name field on this screen will automatically be populated.

9. Click on the Properties button of the Connect RemoteCTX1 screen.
10. The RemoteCTX1 screen is displayed. Click on the Networking tab and select *Internet Protocol (TCP/IP)* in the Components checked are used by this connection box. Then click Properties button.
11. The Internet Protocol (TCP/IP) Properties screen is displayed. Select “Use the following IP Address” and enter the IP address (192.168.255.x, where x can be 1~252. It cannot be 253 or above. It cannot be the same as the CTX IP address in Program 916 for CTX NIC Connections). This IP address is the static IP address for the PC when using this modem connection. Click OK..
12. The initial setup screen displays. Click Properties.
13. Click the Options tab and set up options to the recommended settings (shown right).



**Note** Set “Idle time before hanging up” to more than one minute if you are transferring CTX WinAdmin calls to the CTX built-in modem versus direct calls to the modem.

14. The initial setup screen is displayed, click Ok and exit.
15. Go to [Step 3C: Verify Modem Hardware Settings](#).
16. Go to [“Establish Communication with Strata CTX” on Page 2-12](#).

## Step 4: Establish Communication with Strata CTX

Make sure you have completed the Strata CTX to WinAdmin set procedures described in the first part of this chapter before proceeding.

### ► To communicate with Strata CTX

1. Open Internet Explorer and point the browser to [http://localhost/Ctmc\\_Local/Default.htm](http://localhost/Ctmc_Local/Default.htm) as shown in the figure below or click on the CTX WinAdmin desk top icon. If the Internet Connection Wizard is displayed, refer to [Step 2](#) under [Step 1: Install CTX WinAdmin Software on page 2-2](#)



2. Click Go. The Login screen displays (shown right).
3. To log into WinAdmin for the first time, enter *administrator* in User Name field and *password* in the Password field.



4. Click on the Login button. The CTX WinAdmin Title screen displays.
5. Click CTX (shown right) to go to the connection setup screen.



6. From the Connection Options Menu (shown at right) enter the following:

- ✦ Community Name – communityName (entry is case sensitive). This is the default community name for CTX systems.
- ✦ CTX IP/Name – 192.168.254.253 (NIC). This is the default IP Address of the CTX that is set in CTX Program 916.
- ✦ IP Address – 192.168.255.254 This is the CTX built-in modem fixed IP address for Dial-up connections. It cannot be changed.



### Notes

- If you are connecting to Strata CTX using your modem, click in the Use Dial-Up box and enter the phone number to connect to your Strata CTX. The CTX IP address in the CTX IP Name field automatically defaults to the Strata CTX modem's static IP address.
  - If you have set up the Profile User Management screen with CTX site information, click on the CTX Host name and IP address of the CTX listed in the box at the bottom of the screen.
  - Adding and Saving a new CTX connection can be done by clicking Profile > User Management. For details see [“User Management” on Page 2-14](#).
7. Click on Connect Now.

**Important!** *If you are not able to connect after clicking on the Connect Now button, then re-check the set up steps described in this chapter.*

# Step 5: Use Profile to Add Users and CTX Systems

## User Management

**Prerequisite Program:** None

This program lets the *Administrator only* add or remove users to CTX WinAdmin.

1. From the Program Menu, click Profile > Users Management.
2. Enter new User Name, Password, Confirm Password, and FAC Group/Level fields.

**Note** The Administrator screen will display like the screen on the right. The Administrator can add new users using this screen. This screen is only accessible when logged in as Administrator only.

3. Click *Save*.
4. Enter the remaining fields.
5. Click *Add/Modify/Remove*.

The screen (shown right) is accessible to users.



FIELD	DESCRIPTION
<b>User Name</b>	<p>Enter the new User name. The initial user name of the Administrator is <i>administrator</i>. This name cannot be changed.</p> <p>Possible values: Alpha characters.</p> <p><b>Note</b> The Administrator is the only user that can add new users. The administrator user name cannot be changed.</p>
<b>Password</b>	<p>Enter the new password. The initial password is <i>password</i>. This password can be changed by the administrator or user. The password is case sensitive.</p> <p>To protect User Passwords, open Internet Explorer and go to Tools &gt; Internet Options &gt; Content &gt; Autocomplete. Uncheck User Names and Password on forms, then click on Clear Passwords.</p> <hr/> <p><b>CAUTION!</b> Record all your passwords for CTX WinAdmin and passwords for any other applications that use Internet Explorer.</p> <hr/> <p>Possible values: Alpha characters.</p>
<b>Confirm Password</b>	<p>Repeat password entered in Password field.</p> <p>Possible values: Alpha characters.</p>
<b>FAC Group Level</b>	<p>Select the FAC Group Level.</p> <p>Possible values: Level 1, Level 2, Level 3, Level 4 (default = No value.)</p> <p>In the current version of CTX WinAdmin, all levels are the same and provide access to all WinAdmin functions.</p>
<b>CTX Host Name</b>	<p>Enter CTX Host Name (name to identify the CTX or customer).</p> <p>Possible values: Alpha characters.</p>
<b>CTX IP/Name</b>	<p>Enter the IP Address of the CTX system. For the CTX NIC connection, enter the IP Address of the CTX as set in Program 916. For Modem connections, always enter 192.168.255.254.</p> <p>Possible values: Refer to <a href="#">"916 TCP/IP Configuration" on Page 9-12</a>.</p>
<b>Community Name</b>	<p>Enter the Community Name of the host.</p> <p>Possible values: Alpha characters (default = communityName).</p> <p>communityName is the default community name for all CTX systems. CTX community names are assigned in the Operation section of WinAdmin.</p>
<b>DialUp Number</b>	<p>Enter the telephone number for Dial Up access.</p> <p>Possible values: Any telephone number (digits 0~9 and * or # and",," for three-second pauses.)</p> <p><b>Note</b> The CTX modem number is #19</p>
<b>Confirm Community Name</b>	<p>Re-enter the Community Name.</p> <p>Possible values: Alpha characters.</p>

➤ **To exit CTX WinAdmin**

1. From the Program Menu click Home.
2. Click on Exit at the CTX Management Console page.
3. Close your browser.





This chapter discusses Strata CTX programming basics using Strata CTX WinAdmin and takes you through initial setup procedures. Programming sequence tables are provided to streamline your programming tasks.

## Step 1: Use Default Auto-Programming to Start up

This feature reduces the programming time to install Strata CTX systems. The Strata CTX system will automatically program specific default data in a number of programs based on the PCBs that are installed in the system before processor initialisation. The default data and procedure for auto-programming is provided in this section.

1. Install all line, station and optional PCBs that should be recognised for auto programming.
2. Power-on the system and initialise auto-programming for the system (Program 900, Level 1).
3. Verify [“Station and BIOU Auto-Programming” on Page 3-2.](#)
4. Verify [“Station PDN Auto-Programming” on Page 3-3](#)
5. Verify [“Exchange Line Auto Programming” on Page 3-3.](#)
6. Verify [“CTX Processor NIC Interface TCP/IP Auto Programming” on Page 3-6.](#)

### Notes

- The type of PCB, its cabinet and slot position are automatically recognised upon system initialisation; or, when powering the CTX processor for the first time.
- Each installed PCB circuit equipment number is set in numerical order based on the cabinet and slot position of the PCB.
- Station Primary Directory Numbers (PDN) and exchange line numbers are set in numerical order according to their equipment cabinet/slot positions.
- Other default data, such as the Strata CTX LAN and modem interface IP address, station and line class of service, outgoing and incoming line groups, etc. are automatically set for the optional hardware originally installed.

## Limitations

The following are the limitations of Strata CTX Auto-Programming.

- ◆ The CTI programs are not programmed automatically.
- ◆ Strata CTX cannot configure unique LAN requirements automatically. Strata CTX's LAN system data, CTX IP address and Community Name are set to a default.

**Note** The DND is only assigned on 20-button telephones.

- ◆ When the system is initialised it takes a few minutes to recognise the mounted hardware.
- ◆ The Prime DN on the first button and DND on the last button are assigned telephone buttons; all other buttons have no assigned feature.
- ◆ Slot 101 must always have a BDKU, ADKU or PDKU. The BDKU is assigned if no PCB is installed.

## Station and BIOU Auto-Programming

Table 3-1 shows the Station and BIOU PCBs that will be recognised and set in Program 100 during auto-programming.

**Note** No special assignments are set for BIOU during auto-programming.

**Important!** *PCBs must be installed per the rules in the Strata CTX I/M manual, Configuration Chapter, Worksheet 6 and Worksheet 7.*

**Table 3-1 Auto-Programming for Station and BIOU PCB Recognition (Program 100)**

PCB Code	PCB Name	PCB Circuit Type	Parameter Setting	Comments
000		No PCB or RRCU		None or Remote Cabinets
002	RSTU	8 Standard Telephone circuits		Standard telephone no VM interface settings
003	PDKU2	8 Digital Telephone	PCM Highway: 8	DKT2000 or DKT3000 without S-OCA (DKT300 imitations: DKT2000, 16 character LCD display on DKT3000, DKT3000 LCD Feature key does not function, DKT3014 large screen LCD does not display).
004	Not used	Not used		
017	BDKU	8 digital telephones	8, 1B circuits	DKT2000 or DKT3000 without S-OCA
018	BDKU1+BDKS	16 digital telephones	16, 1B circuits	DKT2000 or DKT3000 without S-OCA
019	BIOU	Page/MOH/Relay interface#1		No functions assigned
020	BIOU2	Page/MOH/Relay interface#2		No functions assigned. Strata CTX 100 assigns a virtual BIOU2 into a virtual location, Cabinet 02, Slot 05, to provide control of the ACTU relay.

## Station PDN Auto-Programming

When auto programming recognises installed station PCBs it assigns PDNs in numerical order as follows:

- ◆ Auto programming assigns PDNs to station PCB equipment numbers (cabinet, slot, circuit) in equipment number order. All installed station PCB circuits will be assigned a PDN regardless of the circuit type, digital (BDKU/BDKS, PDKU) or analogue (RSTU).
- ◆ PDN 200 or PDN 2000 (depending on the system size) is assigned to the station circuit having the lowest equipment number in the system, then the PDN is incremented by one digit and assigned to the next highest station equipment number and so on. See [Table 3-2](#).
- ◆ Program 205 Feature Button Setting – A Prime DN (PDN) is assigned to **FB01** on each digital telephone according to its equipment number (cabinet, slot, circuit) position. DND is assigned to FB20 on 20-button telephones and is not assigned on 10- and 14-button telephones.

**Table 3-2 Auto-Programming for Station Prime Directory Number**

First digit	CTX100 and CTX670 without BBMS and BEXS installed on processor	CTX670 with BBMS and BEXS installed on processor (First digit is 2)
2	Prime DNs (3-digits) 200~299 depending on quantity of station PCBs installed	Prime DNs (4-digit) 2000~2571 depending on qty. of station PCBs installed
3	Prime DN (3-digits) 300~399 depending on qty. of station PCBs installed	

## Exchange Line Auto Programming

[Table 3-3](#) shows the Exchange line PCBs that will be recognised and set in Program 100 during auto-programming. The default data for Exchange line Incoming Line Groups (ILG), Outgoing Line Groups (OLG), and exchange line service type is set as shown in [Table 3-4](#).

**Important!** *PCBs must be installed per the rules in the CTX I/M manual, Configuration Chapter, Worksheet 6 and Worksheet 7. (*

**Table 3-3 Auto-programming for Exchange line PCB Recognition (Program 100)**

PCB Code	PCB Name	PCB Circuit Type	Parameter setting	Comments
000	~	No PCB or RRCU		None or Remote cabinets
001	RCOU, RGLU	4 analogue Loop or ground start lines		Direct Incoming Termination (DIT) lines
005	RCOU+RCOU	8 analogue loop start lines		Direct Incoming Termination (DIT) lines
006	RDDU	4 analogue DDI lines		Direct Inward Dial lines
007*	RDTU2	16 or 24 digital T1 lines	PCM Highway: 16 or 24 <sup>1</sup>	T1 Direct Incoming Termination (DIT) lines
<b>Note</b> * Not available in the uk & Europe				

**Table 3-3 Auto-programming for Exchange line PCB Recognition (Program 100) (Continued)**

PCB Code	PCB Name	PCB Circuit Type	Parameter setting	Comments
008	RDSU <sup>1</sup>	4 Standard telephone and for digital telephone		Standard telephone and DKT2000 and DKT3000 without S-OCA (DKT300 imitations: DKT2000, 16 character LCD display on DKT3000, DKT3000 LCD Feature key does not function, DKT3014 large screen LCD does not display).
009	RCIU2+RCIS <sup>1</sup>	4 or 8 Caller ID interface		Caller ID interface for RCOU/RCOS and RGLU analogue CLID lines. Note: The same Prg100 code (009) is used for RCIU2 with or without RCIS.
010	RMCU+RCMS <sup>1</sup>	2 or 4 E911/999 analogue CAMA lines		CAMA lines Note: The same Prg100 code (009) used for RCIU2 with or without RCIS.
010	REMU, BVPU	4 analogue Tie lines, 4 VoIP circuits		Tie lines
012	RBSU	2 ISDN BRI (S/T) circuits	TEI Type: Two TEIs	ISDN BRI exchange lines
013	RBSU+RBSS	4 ISDN BRI (S/T) circuits	TEI Type: Two TEIs	ISDN BRI exchange lines
015	RBUU <sup>1</sup>	2 ISDN BRI (U) circuits	TEI Type: Two TEIs	ISDN BRI exchange lines
016	RBUU+RBUS <sup>1</sup>	4 ISDN BRI (U) circuits	TEI Type: Two TEIs	ISDN BRI exchange lines
022	RPTU 1F/2F <sup>2</sup>	30 Channels ISDN PRI circuit	PCM Highway: 30	ISDN PRI/Qsig lines

<sup>1</sup> These units are only supported in the US.

<sup>2</sup> If the RPTU1/2F is installed in CTX100 slot 103 then the next slot 104 can be used for an extension card.

If the RPTU1/2F is installed in other CTX100 slots then the next slot MUST be left vacant.

If RPTU1/2F is installed in a CTX670 slot the following slot MUST be left vacant

**Table 3-4 Auto Programming of Line Groups and Service Types**

exchange line type	OLG Prg 306	ILG Prg. 304	exchange service type
RCOU/RCOS and RGLU ( <i>US only</i> ) analogue loop and ground start	1	1	Direct In Termination (DIT) to the first PDN. (200 or 2000 – see Table 5)
RDDU analogue DDI ( <i>US only</i> )	1	2	DDI, wink – no default DDI numbers
RDTU (T1) <b>Note</b> Not available in the UK & Europe.	1	3	DDI – no default DDI numbers
RMCU/RMCS analogue CAMA	1	-	Direct In Termination (DIT) to the first PDN. (200 or 2000 – see next table)
RBUU/RBUS ( <i>US only</i> ). RBSU/RBSS and RBSU/ISDN BRI - set as exchange side	2	4	DDI – no default DDI numbers
ISDN PRI/Qsig ( <i>US only</i> )	2	5	DDI – no default DDI numbers
REMU analogue E&M	3	6	Non-Qsig
PACU analogue AC15	3	6	Non-Qsig
1. The line number is assigned to all lines in the numerical order according to the line PCB cabinet placements. Example line number 1 will be on the first circuit of the line PCB placed in the lowest cabinet/slot number. 2. OLG:1 is created even if there are no analogue line PCBs installed.			

**Table 3-5 Auto Programming of Miscellaneous Line Parameters**

Item	Settings
DIT line ringing assignment Program 310	All of the ringing destinations of DIT lines are the first PDN: PDN 200 for Strata CTX100 and 2-cabinet Strata CTX670 PDN2000 for 2~7 cabinet CTX670.
DDI numbers - not assigned. Program 309	The destination of DDI is not assigned. DDI numbers and ringing destinations must be assigned manually from CTX WinAdmin or the programming telephone.
Format Setting for DIT (T1) <b>Note</b> Not available in the UK & Europe	Zero code Surpress = B8ZS, Frame Format = ESF.
Setting for CAMA	The destination of internal notification is the first DN 200 or 2000 in the all operation mode (DAY1, Day2, and Night.)
Setting for ISDN BRI Exchange	Common D channel is not assigned. 1 channel group is assigned to each BRI PCB installed. The channel group number is assigned in order to each BRI interface in the order in which the BRI PCBs are installed. The destination of DDI is not assigned.
Setting for ISDN PRI Exchange	Common D channel is not assigned. 1 channel group is assigned to each PRI PCB installed. The channel group number is assigned in order to each PRI interface in the order in which the PRI PCBs are installed. The destination of DDI is not assigned.
Setting for EM Tie lines	The node number and the other setting for networking are not assigned automatically.

The destination of Program 318, No Calling Party Number and Out Of Search for DDI number, is assigned to the first Prime DN of the system (200 or 2000) in the all system operating modes (DAY1, DAY2, and Night).

The Direct In Termination line (ground and loop) DIT destinations of all trunks which generated automatically are set as the first PDN 200 or 2000 depending on the system size – [See Table 3-4](#).

## CTX Processor NIC Interface TCP/IP Auto Programming

The following are the initial values of the LAN data that is automatically created for the system.

- ◆ Network TCP/IP. [See “916 TCP/IP Configuration” on Page 9-12](#).
  - ◆ IP address – **192.168.254.253**
  - ◆ Sub network master – **255.255.255.0**
  - ◆ Default gateway – **0.0.0.0**
  - ◆ IP routing table – Not used.
- ◆ SNMP Agent settings
  - ◆ Community name – **communityName**
  - ◆ IP address – **0.0.0.0** (not restricted by the IP address of the access source)
  - ◆ Privileges – **WRITE**
  - ◆ community-id – **1**
  - ◆ User level – **Super user**
- ◆ Trap destination
  - ◆ Community name – Nothing
  - ◆ IP address – Nothing
- ◆ Modem PPP Server settings
  - ◆ IP Address – **192.168.255.254** (Strata CTX modem fixed IP address for Dial-up connections).

### Public Numbering Plan Analysed Digit Numbers (Program 117)

Public Numbering Plan Analysed Number	Public Numbering Plan Analysed Digit Number
1NXX	11
N11	3
NXX	7
N = 2~9 and X = 0~9	

### E911/999 Emergency Call to Outgoing Line Group (Program 550)

Emergency Call Group Number	OLG1
1	1

### 999 Emergency Call Destination (Program 400)

System Mode	Emergency Call Called Number Index	Emergency Call Called Number
DAY1	1	200 or 2000 (the first PDN)
DAY2	1	200 or 2000 (the first PDN)
NIGHT	1	200 or 2000 (the first PDN)
The emergency call destination is set for the first PDN as 200 or 2000 in the all operatopn mode DAY1, DAY2, NIGHT).		

### Default Feature Access Codes Default

Refer to “[102 Flexible Numbering Plan Access Codes](#)” on Page 4-6.

**Note** For DKTs, assign only the Primary DN (PDN) numbers. Do not program any other Flexible Buttons or features in to the phones. Strata CTX automatically recognises and sets up digital telephone stations.

## Step 2: Plan Your System Requirements

Plan for your Strata CTX system requirements in detail before beginning your installation. Use record sheets wherever they are provided to document your installation requirements. The following are some areas to consider:

- ◆ **Flexible Numbering Plan (102)** – Planning your Flexible Numbering requirements is essential to a smooth install. Trunk Group access and Station range requirements are especially important areas of consideration.
- ◆ **COS (103)** – Determine the Class of Service (COS) requirements for your station and trunk groups. There are up to 32 possible COS plans.
- ◆ **DRL (111)** – Define up to 16 Destination Restriction Level (DRL) assignments.

**Important!** *Destination Restriction is an expanded feature of what has traditionally been known as Toll Restriction. Toll Restriction is only one facet of Strata CTX’s Destination Restriction feature. Refer to Destination Restriction in this manual when programming Toll Restriction requirements.*

- ◆ **FRL (and Queuing Priority Level (QPL) (506)** – Define up to 16 Facilities Restriction Level (FRL) and Queuing Priority Level (QPL) assignments.

## Step 3: Program CTX for First Time

Follow the steps below to set up Strata CTX for the first time. Following this initial setup procedure enables you to perform a standard Strata CTX setup with common System and Station default assignments. Toshiba recommends adherence to these procedures for initial setup.

1. **Card Assignments (100)** – Choose System > Card Assignment. It is not necessary to physically install PCBs prior to programming Strata CTX.

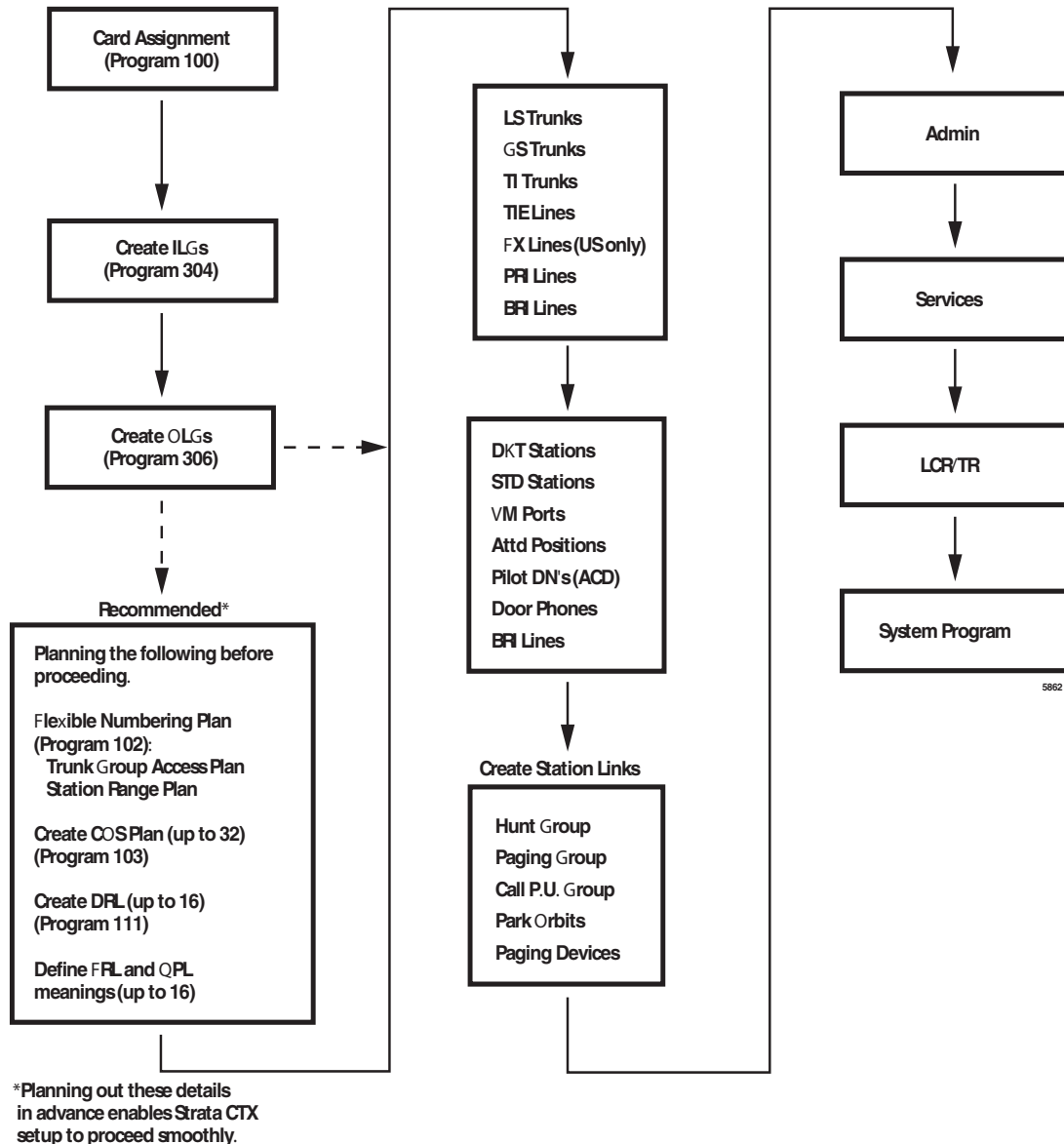
If you physically install your PCBs prior to initial setup, CTX WinAdmin automatically recognises PDKU, BDKU/BDKS, RSTU, RCOU/RCOS and RGLU PCBs and assigns default stations and trunks automatically. All other PCBs are assigned manually. See “[100 Cabinet Slot PCB Assignments](#)” on Page 4-1 for more details.

2. **ILG Assignment (304)** – Choose Trunk > ILG to assign Incoming Line Groups (ILG). See [“304 Incoming Line Group Assignment” on Page 6-2](#) for more details. ILGs enable line groupings of shared Class of Service features for incoming call handling.
3. **OLG Assignment (306)** – Choose Trunk > OLG to assign Outgoing Line Groups (OLG). See [“306 Outgoing Line Groups” on Page 6-5](#) for more details.
4. **Trunk Assignment (300)** – Choose Trunk > Basic. Set up your Trunks in the following order (see [“300 Trunk Assignment” on Page 6-8](#) for more details):
  - ♦ LS Trunks
  - ♦ GS Trunks
  - ♦ T1 Trunks (*Not available in the UK & Europe*)
  - ♦ Tie lines
  - ♦ FX lines (*US only*)
  - ♦ PRI lines
  - ♦ BRI lines
5. **Station Assignment (200)** – Choose Station > Basic. Set up your stations in the following order (see [“Assignment” on Page 5-1](#) for more details):
  - ♦ DKT Stations
  - ♦ Standard Stations
  - ♦ Voice Mail (VM) Ports
  - ♦ Attendant Positions
  - ♦ Automatic Call Distribution (ACD) Pilot DNs
  - ♦ Door Phones
6. **Create Station Links** – Create the following groups where ever applicable and set stations to link as necessary.
  - ♦ Hunt Groups using programs 209 and 218
  - ♦ Paging Groups using program 502
  - ♦ Call Pickup Groups using program 210
  - ♦ Park Orbits using program 102
  - ♦ Paging Devices using program 503
7. **Backup Data** – Choose Operation\Data Backup. Make sure the SmartMedia card is properly formatted (see [“908 SmartMedia” on Page 9-5](#)) prior to running backup. See [“910 Data Backup” on Page 9-11](#) for details.
8. Continue programming Strata CTX details.



## Review Program Flow

The basic program flow needed to set up Strata CTX is shown below. The figure displays the most critical programs in the left column and migrates right to optional programs. Also, programming flows from specific (left) to general (right).



## Step 4: Identify Program Sequences

Use the following tables to quickly identify the programs needed to fulfill your setup requirements. See the Index to correlate program numbers and their functions.

### Station Setup

Use the following table to quickly access the programs needed to set up Station requirements.

Station Type	Assignment	Run Programs in Sequence from left to right.							
DKT	PDN	100	200	204	208	205			
	PhDN	205	206						
	DADM	204	213						
	DDSS	214	215						
	Attd	100	200	204	208				
	Ext	100	200	208					
	VM	100	200	204	206	209	218	579	580
ISDN	Ext	100	202	217					
Pilot DN		540							
Station Hunting		209	218						
Call Pickup Groups		210							
Emergency Ringdown		216							
Paging Groups		502							
Station Speed Dial		516							

### Trunk Setup – Analogue

Use the following table to quickly access the programs needed to set up analogue Trunk requirements.

Trunk Type	Assignment	Run Programs in Sequence from left to right.							
LS/GS	Basic	100	304	306	300				
	Ring	310							
	Timer	308							
	DISA	311							
Tie line	Basic	100	304	306	300				
	Timer	308							
	DISA	311							
DDI	Basic	100	304	306	300				
	Ring	310							
	Timer	308							
	DISA	311							
	DNSI/ANI	313							
	Intercept	318	319						

## Trunk Setup – T1

**Note** (Not available in the UK & Europe)

Use the following table to quickly access the programs needed to set up T1 Trunk requirements.

Trunk Type	Assignment	Run Programs in Sequence from left to right.						
LS/GS	Basic	100	304	306	300			
	Data	315						
	Ring	310						
	Timer	308						
	DISA	311						
Tie line	Basic	100	304	306	300			
	Data	315						
	Timer	308						
	DISA	311						
DDI	Basic	100	304	306	300			
	Data	315						
	Ring	309						
	Timer	308						
	DISA	311						
	DNIS/ANI	313						
	Intercept	318	319					

## Trunk Setup – ISDN PRI

Use the following table to quickly access the programs needed to set up ISDN PRI Trunk requirements.

Trunk Type	Assignment	Run Programs in Sequence from left to right.						
DDI	Basic	100	304	306	302	320		
	Ring	309						
	Timer	308						
	DISA	311						
	DNIS/ANI	313						
	Intercept	318	319					
	CNIS	321	322					
Tie line	Basic	100	304	306	302	320		
	Ring	309						
	Timer	308						
D-share		100	304	306	302	320	316	
CBC		100	304 <sup>1</sup>	306 <sup>1</sup>	302 <sup>2</sup>	320	323 <sup>3</sup>	
<b>Notes</b> 1. Each CBC Group may require one ILG and one OLG. 2. Do not assign ILG/OLG using this program. 3. Assign ILG and OLG using Program 323.								

## Miscellaneous

Use the following table to quickly access the programs needed to set up other Strata CTX features.

Feature	Run Programs in Sequence from left to right.									
Account-Codes	570	571	103	506	306					
Automatic Busy Redial (ABR)	103	208	104							
Automatic Call Back (ACB)	104									
Automatic Camp-On	304									
Auto-Release of Exchnage Line	308									
Background-Music (BGM)	102	103	109							
Call Forwarding	103	200	217							
Call History	204	205								
Call Park Orbit	104	102								
Call Xfer W/ Camp-On	103									
COS-Station	200	202								
COS-Exchange Line	304	306								
Credit-Card Calling	105	111	306							
Day/Night service	500	106	112	113	103	105				
Identification Services	309	318	579							
Digital PAD	107	114								
Direct Dialling Inward	309	318	304							
DISA	311									
Direct Inward Termination	304	310								
Do not Disturb (DND)	103	204	205	102						
Door Lock Control	104	204	508	205						
Door Phones	102	507	573							
DTMF DP Compatible	104									
DTMF BackTone	204									
DTMF Signal Time	579	104								
Emergency 999	105	200 202	217	550	104	306				
Executive Override	103	105								
External Ringing Repeat	300	204								
Recall	308	205	102	103						
Flexible Numbering	102									
Group Paging	502	503	102							
Least-Cost-Routing (LCR)	520	521	522	523	524	525	526	528	529	103
Line Group	304	305	306	307	317	302	323	300		
Message-Waiting Light	204	102	579							

Feature	Run Programs in Sequence from left to right.									
Music-on-Hold	102	105	109	309	310					
Off-Hook Camp-on	104	200	217							
Network Call – Incoming	102	656								
Network Call – Outgoing	102	651	653	654	655					
Out-Going calls	200	217	104							
Ringing-Transfer	105									
SMDI	200	202	579	580						
Station Exchange Line Access	204									
SMDR	512	513	514							
Tandem Connection	103	104	300							
DR Override by System's Speed Dial	105									
Destination Restriction	200	202	306	650	530	531	532	533	534	
Tone-First/Voice-First	204	206								
Travelling COS	105	200	510							
Voice-Mail Interface	200	206	309	318	579	580				
Emergency Ring-Down	216									
Relay Services	515									
System Call-Forward	200	217	104	500	504					
Call Pick Up	210	103	200	205	102					
Multiple Call Group	517	518								
★ to delete			519							

## Step 5: Review CTX WinAdmin's Main Screen Display



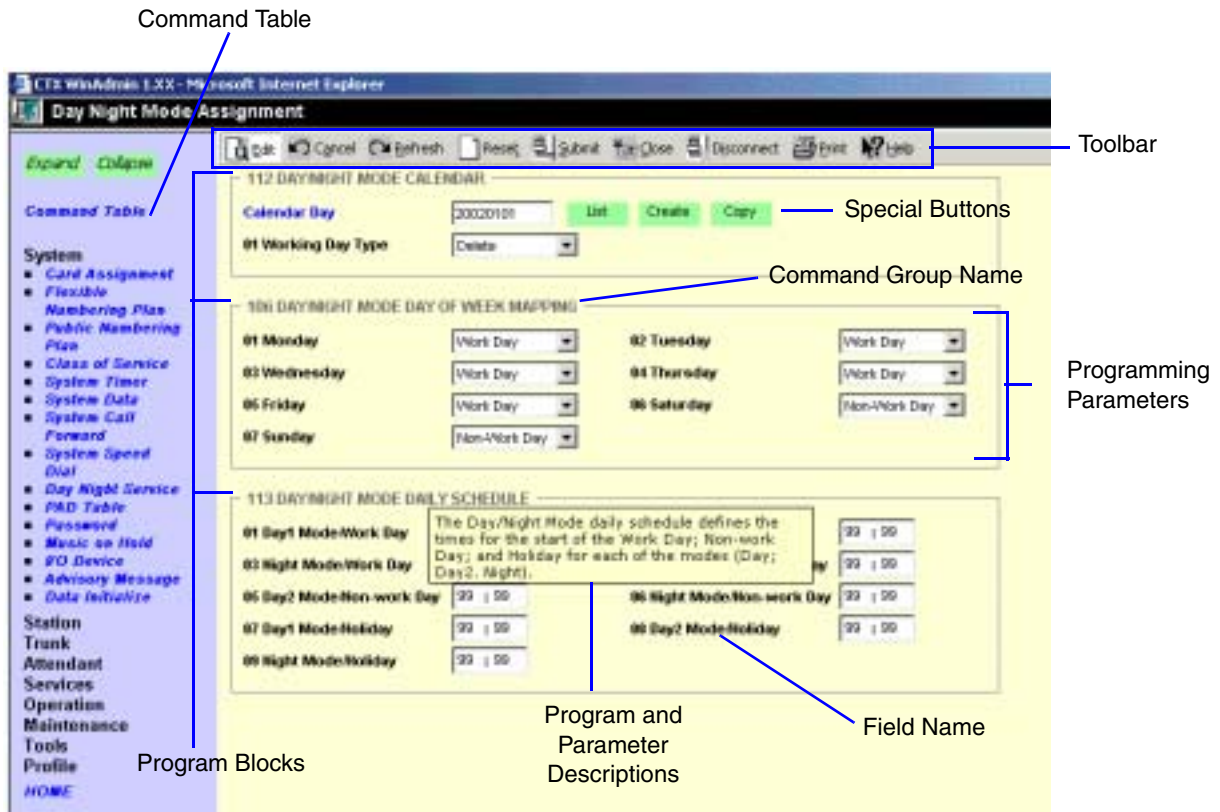
- ◆ **Program Menu** – The Program Menu is the primary tool used to navigate through CTX WinAdmin.
- ◆ **Program Viewer** – This area is where the various programs and parameters are displayed as you navigate through CTX WinAdmin.
- ◆ **Alarm Notification** – Not used.

### Notes

- You can verify the Strata CTX system type (CTX100 or CTX670) and the software version on the Title screen shown above.
- The Software version is organized as follows:
  - ◆ A = Country code (USA, Canada, Mexico).
  - ◆ R1.01 = CTX Release 1.01
  - ◆ M000xx.00 = Strata CTX software version.

## Step 6: Review Program Viewer GUI

The Program Viewer's Graphical User Interface (GUI) is arranged to streamline the Strata CTX programming process. Programming functions can be accessed by clicking on the appropriate link in the Program Menu. The Day Night Service (Program 112, 106 and 113) page is shown in the sample below.

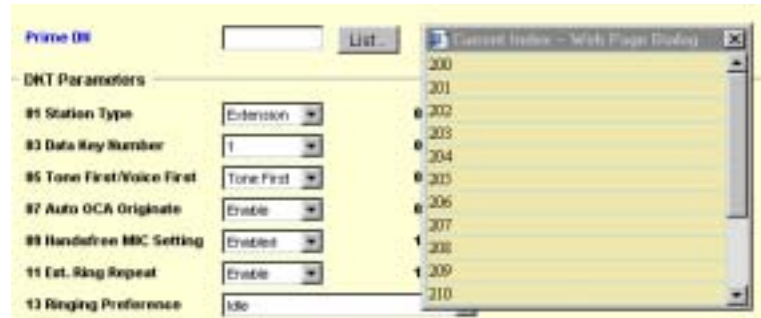


## CTX WinAdmin Pages

The following features enable you to browse and program CTX WinAdmin efficiently.

- ◆ **Program Blocks** – CTX WinAdmin arranges many related programs in blocks to enable the programmer to view essential and related settings in one screen.
- ◆ **Programming Parameters** – Choose values from scroll down menus.
- ◆ **Command Group Name** – Each program number and title are prominently displayed for easy reference.
- ◆ **Field Name** – Each Field Name or parameter is displayed and coded with a prefix (a.k.a. FB) number for easy referencing.
- ◆ **Program and parameter descriptions** – Every program and parameter description is displayed in a pop-up window by placing the mouse cursor over the program or parameter information.

- ◆ **Special Buttons** – Many CTX WinAdmin menus provide Special Buttons to access the most common programming tasks quickly. For example, click on the **List** button to view the Current Index Web Page dialogue box (shown right).



## CTX WinAdmin Toolbar

The CTX WinAdmin Toolbar (shown above) provides Strata CTX updates with a click of your mouse button. The following are the options provided.

- ◆ **Edit** – CTX WinAdmin defaults to the Edit mode used to program, maintain, or upgrade your Strata CTX System.
- ◆ **Cancel** – Cancels the previous entry made by clicking on this button.
- ◆ **Refresh** – to see the latest updates you just entered.
- ◆ **Reset** – resets to set your Strata CTX to manufacturer's default.

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**CAUTION!** By pressing the Reset button, you are authorising all data to be reset to manufacturing defaults. Any data that has been entered is lost.

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- ◆ **Submit** – New data is held in CTX WinAdmin's memory. Your Strata CTX is not updated with the new settings until the Submit button is pressed.
- ◆ **Close** – Exit CTX WinAdmin and return to CTX Management Console Menu.
- ◆ **Disconnect** – Disconnect CTX WinAdmin from Strata CTX and terminate TCP/IP Communications.
- ◆ **Help** – Enables the CTX WinAdmin Help files.

## Command Table Link

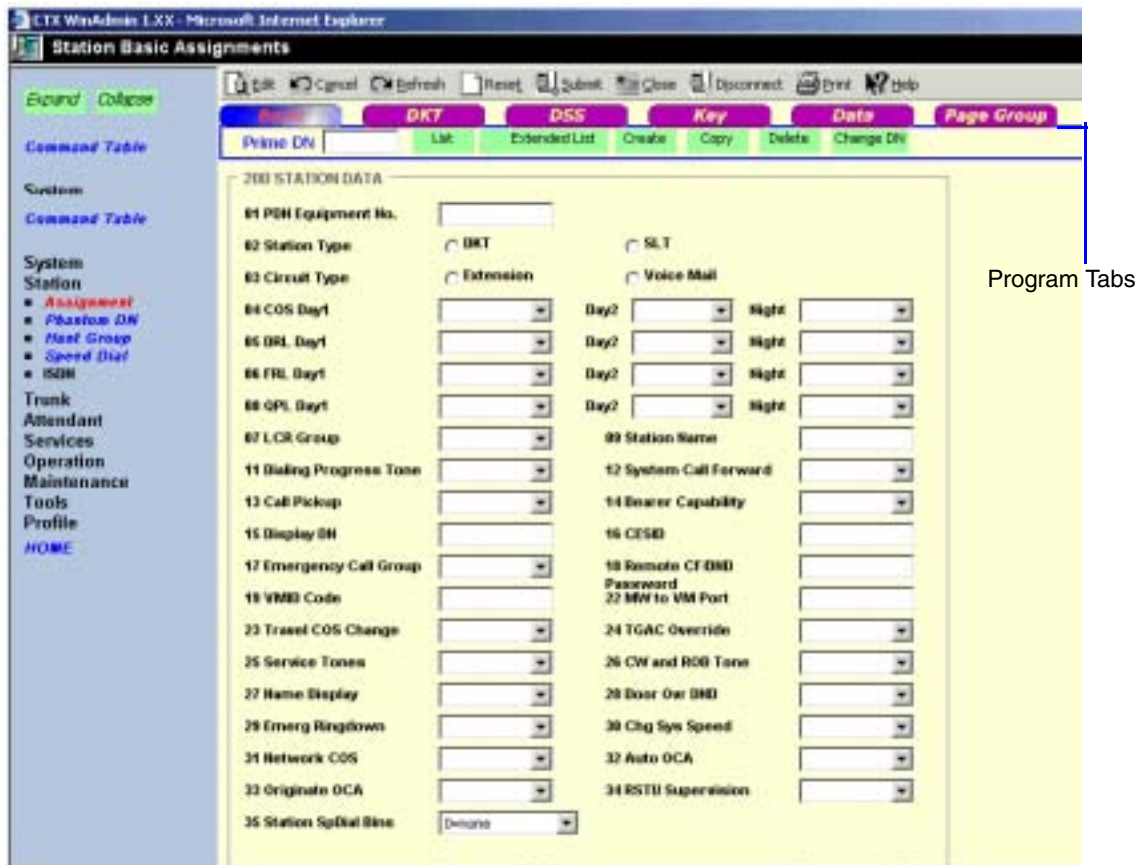
This convenient button links to a table (shown right) that associates CTX WinAdmin programs with the appropriate program reference numbers. These associations help you to efficiently maneuver through the CTX WinAdmin Program Menu.

Command Table Link	System	WinAdmin Menu Page
100-0000-0000	System	System Management - 100-0000-0000
100-0000-0001	System	System Management - 100-0000-0001
100-0000-0002	System	System Management - 100-0000-0002
100-0000-0003	System	System Management - 100-0000-0003
100-0000-0004	System	System Management - 100-0000-0004
100-0000-0005	System	System Management - 100-0000-0005
100-0000-0006	System	System Management - 100-0000-0006
100-0000-0007	System	System Management - 100-0000-0007
100-0000-0008	System	System Management - 100-0000-0008
100-0000-0009	System	System Management - 100-0000-0009
100-0000-0010	System	System Management - 100-0000-0010
100-0000-0011	System	System Management - 100-0000-0011
100-0000-0012	System	System Management - 100-0000-0012
100-0000-0013	System	System Management - 100-0000-0013
100-0000-0014	System	System Management - 100-0000-0014
100-0000-0015	System	System Management - 100-0000-0015
100-0000-0016	System	System Management - 100-0000-0016
100-0000-0017	System	System Management - 100-0000-0017
100-0000-0018	System	System Management - 100-0000-0018
100-0000-0019	System	System Management - 100-0000-0019
100-0000-0020	System	System Management - 100-0000-0020
100-0000-0021	System	System Management - 100-0000-0021
100-0000-0022	System	System Management - 100-0000-0022
100-0000-0023	System	System Management - 100-0000-0023
100-0000-0024	System	System Management - 100-0000-0024
100-0000-0025	System	System Management - 100-0000-0025
100-0000-0026	System	System Management - 100-0000-0026
100-0000-0027	System	System Management - 100-0000-0027
100-0000-0028	System	System Management - 100-0000-0028
100-0000-0029	System	System Management - 100-0000-0029
100-0000-0030	System	System Management - 100-0000-0030
100-0000-0031	System	System Management - 100-0000-0031
100-0000-0032	System	System Management - 100-0000-0032
100-0000-0033	System	System Management - 100-0000-0033
100-0000-0034	System	System Management - 100-0000-0034
100-0000-0035	System	System Management - 100-0000-0035
100-0000-0036	System	System Management - 100-0000-0036
100-0000-0037	System	System Management - 100-0000-0037
100-0000-0038	System	System Management - 100-0000-0038
100-0000-0039	System	System Management - 100-0000-0039
100-0000-0040	System	System Management - 100-0000-0040
100-0000-0041	System	System Management - 100-0000-0041
100-0000-0042	System	System Management - 100-0000-0042
100-0000-0043	System	System Management - 100-0000-0043
100-0000-0044	System	System Management - 100-0000-0044
100-0000-0045	System	System Management - 100-0000-0045
100-0000-0046	System	System Management - 100-0000-0046
100-0000-0047	System	System Management - 100-0000-0047
100-0000-0048	System	System Management - 100-0000-0048
100-0000-0049	System	System Management - 100-0000-0049
100-0000-0050	System	System Management - 100-0000-0050
100-0000-0051	System	System Management - 100-0000-0051
100-0000-0052	System	System Management - 100-0000-0052
100-0000-0053	System	System Management - 100-0000-0053
100-0000-0054	System	System Management - 100-0000-0054
100-0000-0055	System	System Management - 100-0000-0055
100-0000-0056	System	System Management - 100-0000-0056
100-0000-0057	System	System Management - 100-0000-0057
100-0000-0058	System	System Management - 100-0000-0058
100-0000-0059	System	System Management - 100-0000-0059
100-0000-0060	System	System Management - 100-0000-0060
100-0000-0061	System	System Management - 100-0000-0061
100-0000-0062	System	System Management - 100-0000-0062
100-0000-0063	System	System Management - 100-0000-0063
100-0000-0064	System	System Management - 100-0000-0064
100-0000-0065	System	System Management - 100-0000-0065
100-0000-0066	System	System Management - 100-0000-0066
100-0000-0067	System	System Management - 100-0000-0067
100-0000-0068	System	System Management - 100-0000-0068
100-0000-0069	System	System Management - 100-0000-0069
100-0000-0070	System	System Management - 100-0000-0070
100-0000-0071	System	System Management - 100-0000-0071
100-0000-0072	System	System Management - 100-0000-0072
100-0000-0073	System	System Management - 100-0000-0073
100-0000-0074	System	System Management - 100-0000-0074
100-0000-0075	System	System Management - 100-0000-0075
100-0000-0076	System	System Management - 100-0000-0076
100-0000-0077	System	System Management - 100-0000-0077
100-0000-0078	System	System Management - 100-0000-0078
100-0000-0079	System	System Management - 100-0000-0079
100-0000-0080	System	System Management - 100-0000-0080
100-0000-0081	System	System Management - 100-0000-0081
100-0000-0082	System	System Management - 100-0000-0082
100-0000-0083	System	System Management - 100-0000-0083
100-0000-0084	System	System Management - 100-0000-0084
100-0000-0085	System	System Management - 100-0000-0085
100-0000-0086	System	System Management - 100-0000-0086
100-0000-0087	System	System Management - 100-0000-0087
100-0000-0088	System	System Management - 100-0000-0088
100-0000-0089	System	System Management - 100-0000-0089
100-0000-0090	System	System Management - 100-0000-0090
100-0000-0091	System	System Management - 100-0000-0091
100-0000-0092	System	System Management - 100-0000-0092
100-0000-0093	System	System Management - 100-0000-0093
100-0000-0094	System	System Management - 100-0000-0094
100-0000-0095	System	System Management - 100-0000-0095
100-0000-0096	System	System Management - 100-0000-0096
100-0000-0097	System	System Management - 100-0000-0097
100-0000-0098	System	System Management - 100-0000-0098
100-0000-0099	System	System Management - 100-0000-0099
100-0000-0100	System	System Management - 100-0000-0100



## Station Assignment Menu

CTX WinAdmin conveniently arranges Station Programs in one convenient area as shown in the figure below. Programmers can access a variety of station programs and features by clicking on the six tabs described below.



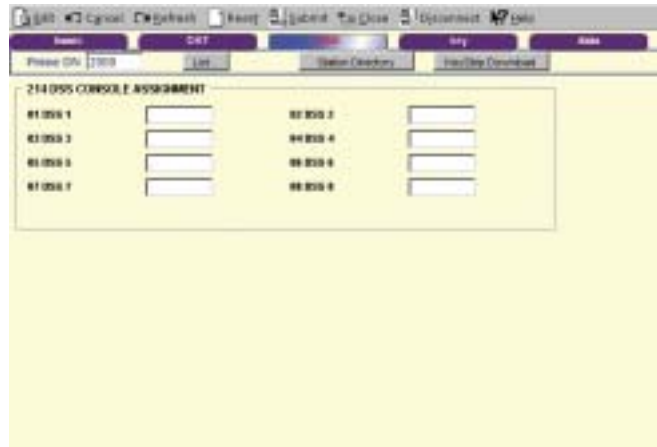
### Program Tabs

There are five program tabs as follows:

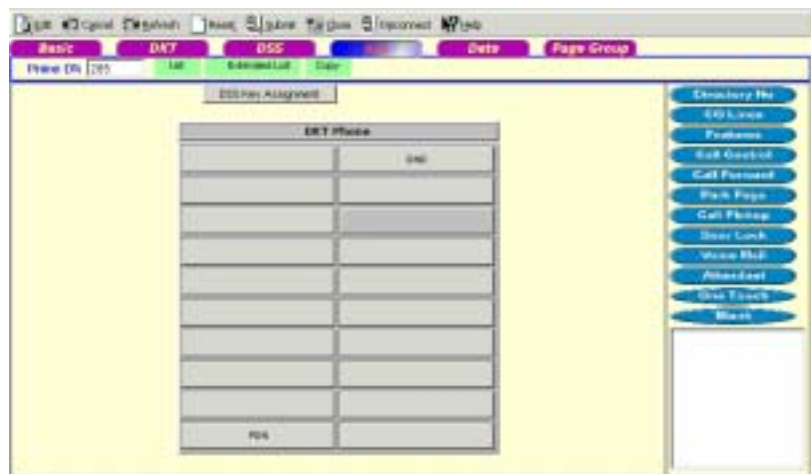
- ◆ **Basic** – The station assignment page defaults to the basic tab (Program 200) shown in the figure above. Station Data is programmed from this page.
- ◆ **DKT** – Clicking on this tab (shown right) brings you to Program 204, DKT Parameters. Program your DKT telephone here.



- ◆ **DSS** – This tab (shown right) brings you to Program 214, DSS Console Assignment.



- ◆ **Key** – This tab (shown right) brings you to Program 205, Station Feature Button Assignment (shown below). This special display enables programmers to easily assign features to the DKT telephone by selecting the appropriate blue feature button as shown to the right in the figure below. The following options are available:

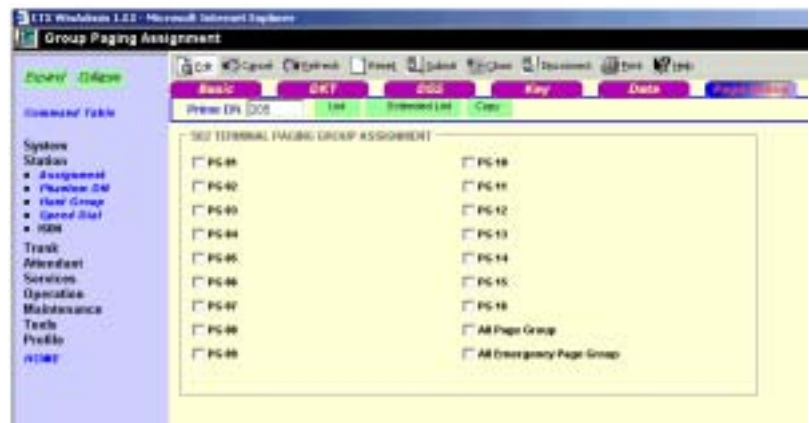


- ◆ Program individual phone buttons by entering the phone's Prime DN in the upper left field.
- ◆ Program DSS buttons by clicking on the DSS Key Assignment button.
- ◆ Download Keystrips and print custom keystrips for each DKT.
- ◆ View the entire station directory by clicking on the Station Directory button.

- ◆ **Data** – This tab (shown right) features Station Timer Assignment (Program 208), Group Call Pickup (Program 210), Emergency Ringdown (Program 216) and Terminal Paging Group Assignment (Program 502).



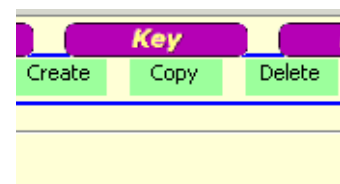
- ◆ **Page Group** – This tab (shown right) assigns Prime DNs to Paging Group(s), Program 502.



## Create, Copy and Delete

The Create, Copy and Delete feature (shown right) of CTX WinAdmin enables programmers to:

- ◆ **Create** – Creates a new record using system default values.
- ◆ **Copy** – Copy the existing record on display to an existing record on the database.
- ◆ **Delete** – Remove the current record on display from the database.







5. Select the PCB Type. Use the drop down menu to select the PCB type. WinAdmin will start a refresh cycle, watch the progress bar (lower right corner on PC screen) to verify when WinAdmin is complete. The PCB type that was selected will appear in the PCB Type field.
6. Click Submit to save your data.

## Card Assignment Record Sheets

The following record sheets are designed for both CTX WinAdmin and Button Programming users. PCB Code and Options are provided for Button Programmers only.

### CTX670 Base Cabinet 1: Location – Local/Remote \_\_\_\_\_

Slot Number	B101	B102	S101	S102	S103	S104	S105	S106	S107	S108
PCB Name	BECU	BBCU								
PCB Code (FB01)	n/a	n/a								
Options	FB02	n/a	n/a							
	FB03	n/a	n/a							
	FB04	n/a	n/a							
Line/Channel Number	n/a	n/a								
Port Station Number	n/a	n/a								
<b>Notes</b> <ul style="list-style-type: none"> <li>Use the record sheet to record the CTX100 configuration slots 101~104 for base and slots 105~108 for expansion cabinet.</li> <li>The designated BECU slot is B101 and the BBCU slot is B102.</li> <li>Slot S101 is designated for PDKU, BDKU or BDKU/BDKS.</li> </ul>										

### CTX670 Expansion Cabinet 2: Location – Local/Remote \_\_\_\_\_

Slot Number	S_01	S_02	S_03	S_04	S_05	S_06	S_07	S_08	S_09	S_10
PCB Name										
PCB Code (FB01)										
Options	FB02									
	FB03									
	FB04									
Line/Channel Number										
Port Station Number										

### CTX670 Expansion Cabinet 3: Location – Local/Remote \_\_\_\_\_

Slot Number	S_01	S_02	S_03	S_04	S_05	S_06	S_07	S_08	S_09	S_10
PCB Name										
PCB Code (FB01)										
Options	FB02									
	FB03									
	FB04									
Line/Channel Number										
Port Station Number										

**CTX670 Expansion Cabinet 4: Location – Local/Remote \_\_\_\_\_**

Slot Number		S_01	S_02	S_03	S_04	S_05	S_06	S_07	S_08	S_09	S_10
PCB Name											
PCB Code (FB01)											
Options	FB02										
	FB03										
	FB04										
Line/Channel Number											
Port Station Number											

**CTX670 Expansion Cabinet 5: Location – Local/Remote \_\_\_\_\_**

Slot Number		S_01	S_02	S_03	S_04	S_05	S_06	S_07	S_08	S_09	S_10
PCB Name											
PCB Code (FB01)											
Options	FB02										
	FB03										
	FB04										
Line/Channel Number											
Port Station Number											

**CTX670 Expansion Cabinet 6: Location – Local/Remote \_\_\_\_\_**

Slot Number		S_01	S_02	S_03	S_04	S_05	S_06	S_07	S_08	S_09	S_10
PCB Name											
PCB Code (FB01)											
Options	FB02										
	FB03										
	FB04										
Line/Channel Number											
Port Station Number											

**CTX670 Expansion Cabinet 7: Location – Local/Remote \_\_\_\_\_**

Slot Number		S_01	S_02	S_03	S_04	S_05	S_06	S_07	S_08	S_09	S_10
PCB Name											
PCB Code (FB01)											
Options	FB02										
	FB03										
	FB04										
Line/Channel Number											
Port Station Number											

**Notes**

- ◆ RDTU (Not available in the UK & Europe), RPTU and RWIU (up to 16 handsets) allowed slots are: S\_01, S\_03, S\_05 and S\_07. The adjacent slot must be vacant to reach maximum capacity.
- ◆ RWIU (*US only*) slots for up to 32 handsets are S105 and S\_07. Up to three adjacent slots must be vacant to reach maximum capacity.
- ◆ All Base Cabinet slots support Speaker OCA. Speaker OCA is supported in slots S\_01~S\_06 for Expansion Cabinets.

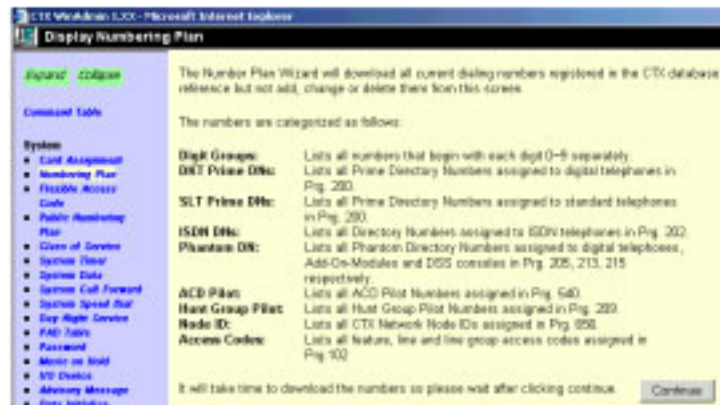
# Numbering Plan

**Prerequisite Program:** *None*

The Numbering Plan lets you download all current dialling numbers registered in the CTX database.

The Numbering Plan screen (shown right) gives you details on the different categories of Numbers.

The table below contains the information shown on the screen to the right.



Number Type	Description
Digit Groups	Lists all numbers that begin with each digit 0~9 separately.
DKT Prime DNs	Lists all Prime Directory Numbers assigned to a digital telephone in Program 200.
SLT Prime DNs	Lists all Prime Directory Numbers assigned to a standard telephone in Program 200.
ISDN DNs	Lists all Directory Numbers assigned to ISDN telephones in Program 202.
Phantom DNs	Lists all Phantom Directory Numbers assigned to digital telephones, Add-On-Modules and DSS consoles in Programs 205, 213, 215 respectively.
ACD Pilot	Lists all ACD Pilot Numbers assigned in Program 540.
Hunt Group Pilot	Lists all Hunt Group Pilot Numbers assigned in Program 209.
Node ID	Lists all CTX Network Node IDs assigned in Program 666.
Access Codes	Lists all feature, line and line group access codes assigned in Program 102.

➤ Click Continue to view the next screen.



To the right is an example of all the numbers programmed in the CTX system.

You are able to view all the DNs and other numbers used.

Name	Number	Occupied Number
Digit group 0	0	
Digit group 1		
Digit group 2	200-210	
Digit group 3		
Digit group 4	440-441	
Digit group 5		
Digit group 6		
Digit group 7	7000-7010	
Digit group 8	0	
Digit group 9	0	
EXT Private DN	200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215	
SLT Private DN		
RODN Private DN		
Private DN		
WCD Private		
Hard Group-Word		
Station ID	0 440 441 7000 7001 7002 7003 7004 7005 7006 7007 7008 7009 7010 7011 7012 7013 7014 7015 7016 7017 7018 7019 7020 7021 7022 7023 7024 7025 7026 7027 7028 7029 7030 7031 7032 7033 7034 7035 7036 7037 7038 7039 7040 7041 7042 7043 7044 7045 7046 7047 7048 7049 7050 7051 7052 7053 7054 7055 7056 7057 7058 7059 7060 7061 7062 7063 7064 7065 7066 7067 7068 7069 7070 7071 7072 7073 7074 7075 7076 7077 7078 7079 7080 7081 7082 7083 7084 7085 7086 7087 7088 7089 7090 7091 7092 7093 7094 7095 7096 7097 7098 7099 7100 7101 7102 7103 7104 7105 7106 7107 7108 7109 7110 7111 7112 7113 7114 7115 7116 7117 7118 7119 7120 7121 7122 7123 7124 7125 7126 7127 7128 7129 7130 7131 7132 7133 7134 7135 7136 7137 7138 7139 7140 7141 7142 7143 7144 7145 7146 7147 7148 7149 7150 7151 7152 7153 7154 7155 7156 7157 7158 7159 7160 7161 7162 7163 7164 7165 7166 7167 7168 7169 7170 7171 7172 7173 7174 7175 7176 7177 7178 7179 7180 7181 7182 7183 7184 7185 7186 7187 7188 7189 7190 7191 7192 7193 7194 7195 7196 7197 7198 7199 7200 7201 7202 7203 7204 7205 7206 7207 7208 7209 7210 7211 7212 7213 7214 7215 7216 7217 7218 7219 7220 7221 7222 7223 7224 7225 7226 7227 7228 7229 7230 7231 7232 7233 7234 7235 7236 7237 7238 7239 7240 7241 7242 7243 7244 7245 7246 7247 7248 7249 7250 7251 7252 7253 7254 7255 7256 7257 7258 7259 7260 7261 7262 7263 7264 7265 7266 7267 7268 7269 7270 7271 7272 7273 7274 7275 7276 7277 7278 7279 7280 7281 7282 7283 7284 7285 7286 7287 7288 7289 7290 7291 7292 7293 7294 7295 7296 7297 7298 7299 7300 7301 7302 7303 7304 7305 7306 7307 7308 7309 7310 7311 7312 7313 7314 7315 7316 7317 7318 7319 7320 7321 7322 7323 7324 7325 7326 7327 7328 7329 7330 7331 7332 7333 7334 7335 7336 7337 7338 7339 7340 7341 7342 7343 7344 7345 7346 7347 7348 7349 7350 7351 7352 7353 7354 7355 7356 7357 7358 7359 7360 7361 7362 7363 7364 7365 7366 7367 7368 7369 7370 7371 7372 7373 7374 7375 7376 7377 7378 7379 7380 7381 7382 7383 7384 7385 7386 7387 7388 7389 7390 7391 7392 7393 7394 7395 7396 7397 7398 7399 7400 7401 7402 7403 7404 7405 7406 7407 7408 7409 7410 7411 7412 7413 7414 7415 7416 7417 7418 7419 7420 7421 7422 7423 7424 7425 7426 7427 7428 7429 7430 7431 7432 7433 7434 7435 7436 7437 7438 7439 7440 7441 7442 7443 7444 7445 7446 7447 7448 7449 7450 7451 7452 7453 7454 7455 7456 7457 7458 7459 7460 7461 7462 7463 7464 7465 7466 7467 7468 7469 7470 7471 7472 7473 7474 7475 7476 7477 7478 7479 7480 7481 7482 7483 7484 7485 7486 7487 7488 7489 7490 7491 7492 7493 7494 7495 7496 7497 7498 7499 7500 7501 7502 7503 7504 7505 7506 7507 7508 7509 7510 7511 7512 7513 7514 7515 7516 7517 7518 7519 7520 7521 7522 7523 7524 7525 7526 7527 7528 7529 7530 7531 7532 7533 7534 7535 7536 7537 7538 7539 7540 7541 7542 7543 7544 7545 7546 7547 7548 7549 7550 7551 7552 7553 7554 7555 7556 7557 7558 7559 7560 7561 7562 7563 7564 7565 7566 7567 7568 7569 7570 7571 7572 7573 7574 7575 7576 7577 7578 7579 7580 7581 7582 7583 7584 7585 7586 7587 7588 7589 7590 7591 7592 7593 7594 7595 7596 7597 7598 7599 7600 7601 7602 7603 7604 7605 7606 7607 7608 7609 7610 7611 7612 7613 7614 7615 7616 7617 7618 7619 7620 7621 7622 7623 7624 7625 7626 7627 7628 7629 7630 7631 7632 7633 7634 7635 7636 7637 7638 7639 7640 7641 7642 7643 7644 7645 7646 7647 7648 7649 7650 7651 7652 7653 7654 7655 7656 7657 7658 7659 7660 7661 7662 7663 7664 7665 7666 7667 7668 7669 7670 7671 7672 7673 7674 7675 7676 7677 7678 7679 7680 7681 7682 7683 7684 7685 7686 7687 7688 7689 7690 7691 7692 7693 7694 7695 7696 7697 7698 7699 7700 7701 7702 7703 7704 7705 7706 7707 7708 7709 7710 7711 7712 7713 7714 7715 7716 7717 7718 7719 7720 7721 7722 7723 7724 7725 7726 7727 7728 7729 7730 7731 7732 7733 7734 7735 7736 7737 7738 7739 7740 7741 7742 7743 7744 7745 7746 7747 7748 7749 7750 7751 7752 7753 7754 7755 7756 7757 7758 7759 7760 7761 7762 7763 7764 7765 7766 7767 7768 7769 7770 7771 7772 7773 7774 7775 7776 7777 7778 7779 7780 7781 7782 7783 7784 7785 7786 7787 7788 7789 7790 7791 7792 7793 7794 7795 7796 7797 7798 7799 7800 7801 7802 7803 7804 7805 7806 7807 7808 7809 7810 7811 7812 7813 7814 7815 7816 7817 7818 7819 7820 7821 7822 7823 7824 7825 7826 7827 7828 7829 7830 7831 7832 7833 7834 7835 7836 7837 7838 7839 7840 7841 7842 7843 7844 7845 7846 7847 7848 7849 7850 7851 7852 7853 7854 7855 7856 7857 7858 7859 7860 7861 7862 7863 7864 7865 7866 7867 7868 7869 7870 7871 7872 7873 7874 7875 7876 7877 7878 7879 7880 7881 7882 7883 7884 7885 7886 7887 7888 7889 7890 7891 7892 7893 7894 7895 7896 7897 7898 7899 7900 7901 7902 7903 7904 7905 7906 7907 7908 7909 7910 7911 7912 7913 7914 7915 7916 7917 7918 7919 7920 7921 7922 7923 7924 7925 7926 7927 7928 7929 7930 7931 7932 7933 7934 7935 7936 7937 7938 7939 7940 7941 7942 7943 7944 7945 7946 7947 7948 7949 7950 7951 7952 7953 7954 7955 7956 7957 7958 7959 7960 7961 7962 7963 7964 7965 7966 7967 7968 7969 7970 7971 7972 7973 7974 7975 7976 7977 7978 7979 7980 7981 7982 7983 7984 7985 7986 7987 7988 7989 7990 7991 7992 7993 7994 7995 7996 7997 7998 7999 8000	

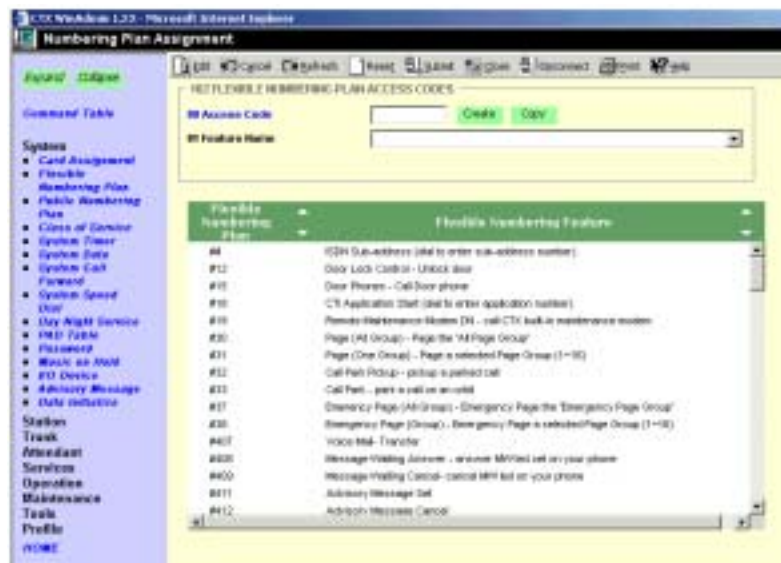
# 102 Flexible Numbering Plan Access Codes

**Prerequisite Program:** None

Strata CTX comes with pre-assigned Flexible Access Codes that the telephone dials to access features. This enables programmers to create customised Flexible Numbering plans. The Strata CTX Flexible Numbering Plan associates features stored in memory (i.e., “Store Code,” see [Table 4-1](#)) to a Flexible Numbering Code assigned by the user.

**Note** Flexible Numbering Plan access codes cannot conflict with DN assignments.

1. Enter your customised Flexible Numbering Plan in the “Programmed Value” column of [Table 4-1](#) below.
2. From the Program Menu click System > Flexible Numbering Plan. The Numbering Plan Assignment screen displays (shown at right).
3. *00 Flexible Numbering Plan* – Enter the digits to be dialled (0~9,#,\*) to access a feature or an OLG. To delete, select ‘No Data’ in ‘01 Feature Name’. Conflict with an assigned DN will produce an error.
4. *01 Flexible Numbering Feature* – Select the Flexible Numbering Feature (see [Table 4-1](#) below) to which the access code is being assigned.



**Note** To assign an access code to an OLG, select “Line Group access code - one access code for each OLG”. To assign the prefix digit(s) for the access code of individual lines, select “Line access code - leading digit(s) to access individual lines”. Example: If #7 is selected as the line access prefix, the users will dial #7xxx to access an individual line (where xxx is the line number).

5. *02 OLG Number* – Enter the Outgoing Line Group number to which the OLG access code is being assigned. This field is only required if you chose “Line Group Access Code – one access code for each OLG” for the Flexible Numbering Feature in [Step 4](#) above. Enter a 0 in this field if a Feature Code other than 551 was selected.

**Note** 02 OLG Number (1~128) field appears only when 01 Feature Name Line Group Access Code – one access code for each OLG is selected.

6. Click Submit.

## Creating New Feature Codes

1. Click on the Create button.
2. Enter new feature/access code. Click Ok. WinAdmin will start a refresh cycle, when your complete screen will change to a gray (edit mode) colour and the feature/access code will be red.
3. From the Feature Name drop down menu select the feature to be assigned.
4. Submit your data.

**Note** To range program feature/access codes use a “\*” between a range of values and a “,” for an additional entry not in a range.

## Flexible Numbering Default Settings

Table 4-1 shows the default Flexible Numbering Feature and Flexible Numbering Plan code relationships. Pressing the Flexible Numbering Plan code from any station enables users to directly access the Flexible Numbering Feature. The Feature Index Codes will display on the LCD of the telephone once the Default Access Codes are entered.

**Note** These three-digit Feature Index Numbers should not be confused with the Program 205 three-digit Button Codes.

**Table 4-1 Flexible Numbering Plan Default Settings**

Flexible Numbering Feature	Feature Index	Default Access Code	Programmed Value
No Data			
ABR - Activate	150	<b>#441</b>	
ABR - Cancel	151	<b>#442</b>	
Call Park Orbits - Activate	170	<b>#33</b>	
Call Park Orbits - Park Answer (Retrieve Parked Call)	173	<b>#32</b>	
System Orbit Number	174	<b>7000~7019</b>	
DND -Local Activation	180	<b>#6091</b>	
DND -Local Cancellation	181	<b>#6092</b>	
DND -Remote Activation	182	<b>#6191</b>	
DND -Remote Cancellation	183	<b>#6192</b>	
Door Lock Control -Unlock	190	<b>#12</b>	
Door Phones -Call	191	<b>#15</b>	
Recall -short	200	<b>#450</b>	
Recall -long	210	<b>#451</b>	
Group Paging -Invoke All Group Paging	220	<b>#30</b>	
Group Paging -Invoke Individual Group Paging	230	<b>#31</b>	
Answer for External Group Paging	232	<b>#5#36</b>	
Emergency Page -Invoke All Emergency Paging	240	<b>#37</b>	
Emergency Page -Invoke Individual Emergency Paging	250	<b>#38</b>	
Originate Call by Terminal Speed Dial (Index: 00-99)	260	<b>.1</b>	
Originate Call by System Speed Dial (Index: 000-099)	261	<b>.2</b>	
Originate Call by System Speed Dial (Index: 100-199)	262	<b>.3</b>	

**Table 4-1 Flexible Numbering Plan Default Settings (Continued)**

Flexible Numbering Feature	Feature Index	Default Access Code	Programmed Value
Originate Call by System Speed Dial (Index: 200-299)	263	<b>.4</b>	
Originate Call by System Speed Dial (Index: 300-399)	264	<b>.5</b>	
Originate Call by System Speed Dial (Index: 400-499)	265	<b>.6</b>	
Originate Call by System Speed Dial (Index: 500-599)	266	<b>.7</b>	
Originate Call by System Speed Dial (Index: 600-699)	267	<b>.8</b>	
Originate Call by System Speed Dial (Index: 700-799)	268	<b>.9</b>	
Register Speed Dial	269	<b>#66</b>	
Call Forward (CF-A; Any Call) - Activation	340	<b>#6011</b>	
Call Forward (CF-B; Any Call) - Activation	341	<b>#6021</b>	
Call Forward (CF-NA; Any Call) - Activation	342	<b>#6031</b>	
Call Forward (CF-B/NA; Any Call) - Activation	343	<b>#6041</b>	
Call Forward (CF-A; External Call) - Activation	350	<b>#6013</b>	
Call Forward CF-B; External Call) - Activation	351	<b>#6023</b>	
Call Forward (CF-NA; External Call) - Activation	352	<b>#6033</b>	
Call Forward (CF-B/NA; External Call) - Activation	353	<b>#6043</b>	
Call Forward (CF-A; Any Call) - Remote Activation	360	<b>#6012</b>	
Call Forward (CF-B; Any Call) - Remote Activation	361	<b>#6022</b>	
Call Forward (CF-NA; Any Call) - Remote Activation	362	<b>#6032</b>	
Call Forward (CF-B/NA; Any Call) - Remote Activation	363	<b>#6042</b>	
Call Forward (CF-A; External Call) - Remote Activation	370	<b>#6014</b>	
Call Forward (CF-B; External Call) - Remote Activation	371	<b>#6024</b>	
Call Forward (CF-NA; External Call) - Remote Activation	372	<b>#6034</b>	
Call Forward (CF-B/NA; External Call) - Remote Activation	373	<b>#6044</b>	
Call Forward (Any Call) - Cancellation	380	<b>#6051</b>	
Call Forward (External Call) - Cancellation	390	<b>#6053</b>	
Call Forward (Any Call) - Remote Cancellation	400	<b>#6052</b>	
Call Forward (External Call) - Remote Cancellation	410	<b>#6054</b>	
Change Password for Remote Activation/Cancellation	420	<b>#670</b>	
Input Account Code	530	<b>#46</b>	
Change DISA Security Code	540	<b>#658</b>	
Outgoing Call by Directing Individual Trunk	550	<b>#7</b>	
Outgoing Call by Directing Outgoing Line Group	551	<b>None</b>	
Three Way Conferencing (Override to Tandem Connection)	560	<b>#494</b>	
Enter User Programming Mode	570	<b>#9876</b>	
LCR -Outgoing Call	580	<b>9</b>	
Set Voice Mail Message Waiting (activate MW without ringing for VM)	591	<b>#63</b>	
Release Received Message Waiting	592	<b>#409</b>	
Release Sent Message Waiting (Cancel MW without ringing for VM))	593	<b>#64</b>	
MW Answer access code (Retrieve Received Message Waiting)	594	<b>#408</b>	
Cancel ACB	600	<b>#431</b>	

**Table 4-1 Flexible Numbering Plan Default Settings (Continued)**

Flexible Numbering Feature	Feature Index	Default Access Code	Programmed Value
Start BGM	610	<b>#490</b>	
Stop BGM	611	<b>#491</b>	
Start BGM for External Paging Device	612	<b>#492</b>	
Stop BGM for External Paging Device	613	<b>#493</b>	
Built-in modem	630	<b>#19</b>	
Night Ring Answer	640	<b>#5#39</b>	
Travelling Class Override Code Input Number	650	<b>#471</b>	
Change Travelling Class Override Code	651	<b>#69</b>	
Activate System Call Forward	670	<b>#620</b>	
Cancel System Call Forward	671	<b>#621</b>	
Call Pickup for Incoming Call -Group Pickup	680	<b>#5#34</b>	
Call Pickup for Incoming Call -Directed Terminal	681	<b>#5#5</b>	
Call Pickup for Incoming Call -Directed Group	682	<b>#5#32</b>	
Call Pickup for Incoming Call -Directed DN	683	<b>#5#22</b>	
Call Pickup for Incoming Call -Any External Call	684	<b>#5#9</b>	
Call Pickup for On-Hold Call -Directed Exchange Line Retrieve	685	<b>#5#73</b>	
Call Pickup for On-Hold Call -Local Retrieve	686	<b>#5#71</b>	
Call Pickup for On-Hold Call -Remote Retrieve	687	<b>#5#72</b>	
Call Pickup for On-Hold Call -Directed DN Retrieve	688	<b>#5#74</b>	
Transfer to Voice Mail	690	<b>#407</b>	
Repeat Last Number Dialed	700	<b>.0</b>	
Volume Control for BEEP	710	<b>#6101</b>	
Change LCD Display Language	720	<b>#495</b>	
Advisory Message - Activation	730	<b>#411</b>	
Advisory Message - Cancellation	731	<b>#412</b>	
Emergency Call	740	<b>#911</b>	
Attendant Console Group Access Code	750	<b>0</b>	
Private Network Access Code	760	<b>8</b>	
Node ID (Coordinated Directory Number Prefix)	770	<b>None</b>	
Substitution of Dial *	780	<b>441</b>	
Substitution of Dial #	781	<b>440</b>	
Originate Call with Sub Address -Outgoing Call/Internal Call	782	<b>##</b>	
Application starting access code	800	<b>#18</b>	
Set Lock Password access code	850		
Reset Lock Password access code	851		

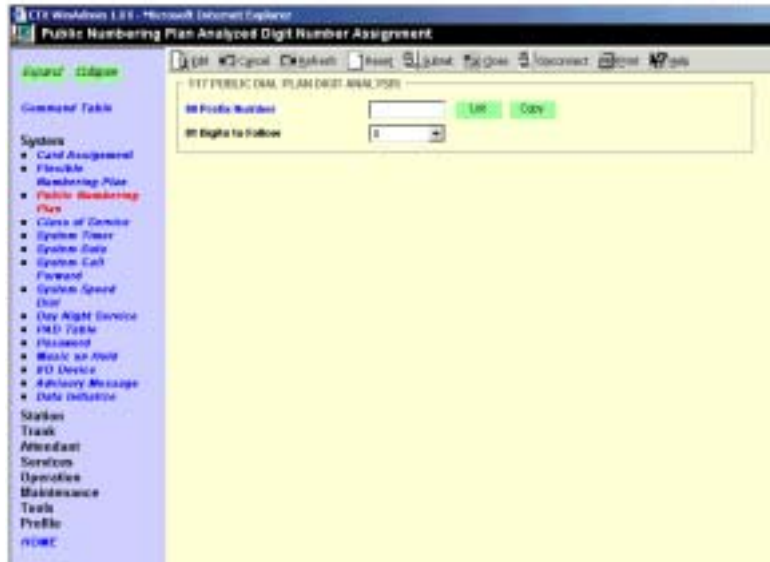
# 117 Public Dial Plan Digit Analysis

**Prerequisite Program:** *None*

This command is used to prevent users from circumventing Destination Restriction (DR) by sending tones directly to the PSTN before DR analysis is complete. It defines the number of digits expected in PSTN numbers beginning with identified sequences.

For example, a number starting with the toll prefix “1” would be expected to be 11 digits long. Calls will be cut through to the public network only after the expected number of digits have been received.

1. From the Program Menu click System > Public Numbering Plan. The Public numbering Plan Analysed Digit Number Assignment screen displays (shown at right).
2. Enter the *Prefix Number* used for external calls.
3. Select *Digits to Follow*.
4. Click Submit.



FIELD	DESCRIPTION
<b>00 Prefix Number</b>	Enter the initial, identifying external digits. 1 to 7 digits may include wild cards “X” and “N”.. Possible values: 1~ 7 (N = 2~9 and X = 0~9) (default = no value).
<b>01 Digits to Follow</b>	Select the number of digits to follow the prefix number established above. It is the total number of digits in a number beginning with the Prefix Number above. Possible values: 0~64 (default = 0)

## 118 Lock Password

**Prerequisite Program:** *None*

FIELD	DESCRIPTION
<b>01 Master ID Code</b>	Set or delete the Master Identification code. Possible values: Max 10 ASCII characters (default = 0000)

**Note** If the user shuts off the power supply and switches on, this command setting is saved.

## 119 Initialise Lock Password

**Prerequisite Program:** *None*

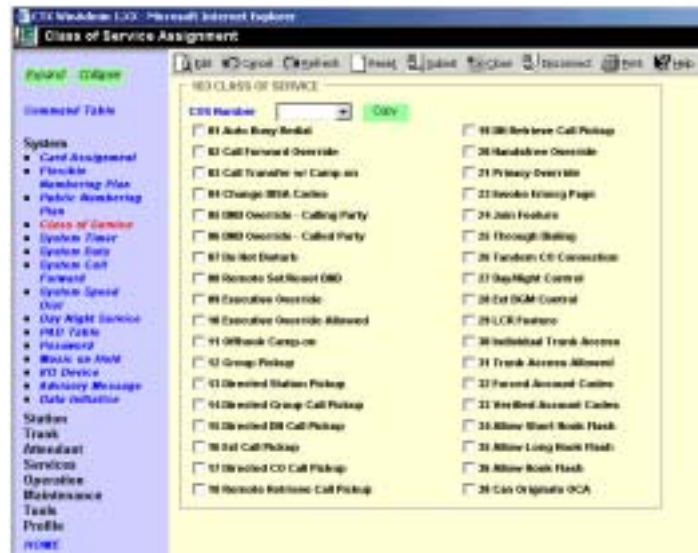
FIELD	DESCRIPTION
<b>01 initialisation</b>	Initialise the Lock Password. Possible values: 1:None 2:Initialise Lock Password (default = option 1)

# 103 Class of Service

**Prerequisite Program:** None

Class of Service (COS) assignments are a registration of feature capabilities to a specific user or group of users. Up to 32 COS feature sets can be registered.

1. Enter your COS assignments in the provided record sheet.
2. From the Program Menu click System > Class of Service The Class of Service Assignment screen displays (shown right).
3. COS Number – Select the COS Number (1~32).
4. Place a check mark in each of the services you wish to enable.
5. Click Submit.



FIELD	DESCRIPTION
<b>01 Auto Busy Redial</b>	Enable Automatic Busy Redial after dialling a busy outside destination.
<b>02 Call Forward Override</b>	Enable Call Forward Override. If enabled, this station does not forward calls from a calling station with System or Station Call Forward activated. This includes when dialling from the dial pad or DSS button located on the telephone or DSS console.
<b>03 Call Transfer w/ Camp-on</b>	Allows a call transferred by a station to Camp-on to a busy destination.
<b>04 Change DISA Codes</b>	Enable stations to change the DISA Security Code.
<b>05 DND Override - Calling Party</b>	Permits a caller to override the DND status of a station.
<b>06 DND Override - Called Party</b>	Permits calling parties with DND Override privileges to override DND status.
<b>07 Do Not Disturb</b>	Enables user to place stations on DND mode.
<b>08 Remote Set/Reset DND</b>	Enables stations with the ability to set/reset DND on other phones.
<b>09 Executive Override</b>	Enable Executive Override on a call.
<b>10 Executive Override Allowed</b>	Permit Executive Override for incoming callers.
<b>11 Offhook Camp-on</b>	Enable Off-hook Camp-on when encountering a busy destination.
<b>12 Group Pickup</b>	Enable stations for Group Call Pickup within one's own group.
<b>13 Directed Station Pickup</b>	Enable stations to pick another specific ringing station.



FIELD	DESCRIPTION
<b>14 Directed Group Call Pickup</b>	Enable stations to pick up a ringing station in a specified group.
<b>15 Directed DN Call Pickup</b>	Enable stations to pick up a specified DN.
<b>16 Ext Call Pickup</b>	Enable stations to pick up any incoming trunk call.
<b>17 Directed Exchange Call Pickup</b>	Enable stations to pick up a specific incoming trunk call.
<b>18 Remote Retrieve Call Pickup</b>	Enable stations to retrieve any call placed on Hold at a designated terminal (PDN).
<b>19 DN Retrieve Call Pickup</b>	Enable stations to retrieve a held call on another DN.
<b>20 Handsfree Override</b>	Permit stations to override Hands Free Answerback with Ringing mode.
<b>21 Privacy Override</b>	Enable stations to override a private call.
<b>23 Invoke Emergency Page</b>	Enable the Emergency Page feature. <b>Note</b> Not in use in release 1.
<b>24 Join Feature</b>	Enable the Join feature (Attendant Feature).
<b>25 Through Dialling</b>	Enable the Perform Through Dialling (Attendant Feature).
<b>26 Tandem Exchange Connection</b>	Set up a Trunk-to-Trunk connection.
<b>27 Day/Night Control</b>	Enable Day/Night Mode changing privilege.
<b>28 Ext BGM Control</b>	Permit BGM over external speakers to be turned on/off.
<b>29 LCR Feature</b>	Enable access to LCR.
<b>30 Individual Trunk Access</b>	Enable Dial individual trunk access codes to access specific lines.
<b>31 Trunk Access Allowed</b>	Enable Access trunk groups by trunk access codes.
<b>32 Forced Account Codes</b>	Use Forced Account Codes for placing external calls.
<b>33 Verified Account Codes</b>	Verify Account Codes before an external call is placed.
<b>34 Allow Short Recall</b>	Use a Short Recall signal over outside lines.
<b>35 Allow Long Recall</b>	Use a Long Recall signal over outside lines.
<b>36 Allow Recall</b>	Receive Recall over Exchange Lines, and enable telephones and voice mail ports to perform recall.
<b>38 Can Originate OCA</b>	Permission for others to call this station using Off-hook Call Announce.
<b>39 LCR on Direct Trunk Access</b> (Future Feature)	Whether to use LCR on Direct Trunk Access or not.
<b>40 Outgoing Call Disconnect Option</b> (Only for China)	Whether to disconnect the talking of outgoing call or not.

## COS Record Sheet

COS Assignment Code: _____					
Service Name	Enable	Disable	Service Name	Enable	Disable
Auto Busy Redial			DN Retrieve Call Pickup		
Call Forward Override			Handsfree Override		
Call Transfer w/ Camp-on			Privacy Override		
Change DISA Codes			Invoke Emerg Page <sup>1</sup>		
DND Override - Calling Party			Join Feature		
DND Override - Called Party			Through Dialling		
Do Not Disturb			Tandem Exchange Line Connection		
Remote Set/Reset DND			Day/Night Control		
Executive Override			Ext BGM Control		
Executive Override Allowed			LCR Feature		
Offhook Camp-on			Individual Trunk Access		
Group Pickup			Trunk Access Allowed		
Directed Station Pickup			Forced Account Codes		
Directed Group Call Pickup			Verified Account Codes		
Directed DN Call Pickup			Allow Short Recall		
Ext Call Pickup			Allow Long Recall		
Directed Exchange Line Call Pickup			Allow Recall		
Remote Retrieve Call Pickup			Can Originate OCA		

1. Not used in Release 1.

# 104 System Timer

**Prerequisite Program:** None

This command assigns the system timers. System timers set a variety of times to control calls and features for the Strata CTX.

1. From the Program Menu click System > System Timer. System Timer Assignment screen displays (shown right).
2. Select the desired timer value for each of the 19 fields.
3. Click Submit.



FIELD	DESCRIPTION
<b>01 ACB Callback Timer</b>	Select the Automatic Callback (ACB) timer. A callback will be attempted for this specified amount of time before being cancelled. Possible values: 5~180 sec. (default = 30)
<b>02 ACB Cancel Recall Timer</b>	Select the ACB overall timer value. This value establishes a limit for registering a callback. Once the timer expires, the callback will be cancelled. Possible values: 5~180 sec. (default = 30)
<b>03 Park Recall Timer</b>	Select the Park timer value. This sets the length of time a call can remain in Park. Possible values: 10~600 sec. (default = 120)
<b>04 Camp-on Timer</b>	Select Camp-on timer value. This sets the time needed to remain off-hook prior to Camp-on being automatically activated. Possible values: 5~15 sec. (default = 10)
<b>05 SMDR Valid Call Timer</b>	The SMDR Answer timer sets a default time for when an outgoing call will be considered to be answered for SMDR reporting when a true answer signal is not returned from the public network. Setting the time short will include calls that may not be completed, setting the time too long may exclude short calls that are answered and terminated in a short time. Possible values: 0~180 (default = 10)
<b>06 Tandem Timer #1</b>	Select timer for a Trunk-to-trunk connection for which neither Exchange Line has release supervision, a timer is needed to release the call if no user monitoring has taken place. Possible values: 0~3600 sec. (default = 0)
<b>07 Tandem Timer #2</b>	This timer provides a time to allow an external user to dial a digit to extend the disconnect time when the connection is unsupervised. This feature is used primarily with DISA service. Possible values: 0~180 (default = 30)

FIELD	DESCRIPTION
<b>08 Call Forward No Ans Time</b>	The System Call Forward No Answer timer specifies the time period that a phone will ring prior to invoking the Call Forward operation. Possible values: 1~180 sec. (default = 30)
<b>09 Dial Input Timer</b>	This timer permits dial input for a telephone and trunk using DTMF. Possible values: 0~60 (default = 20)
<b>10 Delay 1 Ringing Timer</b>	This timer specifies the time to wait before applying ringing to the designated phones. Possible values: 1~60 (default = 12)
<b>11 Delay 2 Ringing Timer</b>	Select the time to wait before applying ringing to the designated phones. Possible values: 1~60 (default = 24)
<b>12 Door Unlock Timer</b>	Select the length of time to send an electrical signal to a door for releasing the lock. Possible values: 1~30 (default = 6)
<b>13 9+11 Judgement Timer</b>	The 9+11 Inter-digital timer provides a timing value (1~30 seconds) for the system to wait for additional digits to be dialled looking for the 911 or 9+911 dialled codes for treatment using the E911/999 procedures rather than normal dialling treatment. Possible values: 1~30 (default = 5)
<b>14 Emergency Call Timer</b>	The Emergency Call timer sets a time for advancing the call to the next station in a list of destinations for the call. Possible values: 10~180 (default = 30)
<b>15 ABR Busy Detection Time</b>	The Destination Busy Detection timer sets the time to wait while looking for a busy condition on an external call. If detected, it will trigger the initiation of the Automatic Busy Redial cycle. Possible values: 1~30 (default = 5)
<b>16 Lost Call Timer</b>	The Lost Call timer sets the time that a failed transfer recall will ring on the originating station prior to attempting to recall a secondary location. Possible values: 1~600 (default = 180)
<b>17 Lost Call Final Timer</b>	The Lost Call Final timer sets the time that a failed transfer recall will ring on the secondary location before being automatically disconnected. Possible values: 1~600 (default = 30) <b>Note</b> Toshiba recommend for UK use, this timer be set to its maximum value.
<b>18 DTMF Tone Sending Time</b>	The DTMF tone sending duration for dialling on Exchange Lines. Possible values: 80msec (default) or 160msec
<b>19 Auto Disconnect</b>	Time after which an unsupervised trunk may be automatically released. Possible values: 0~60 (default = 0)
<b>20 Preset Pause Timer (AC15)</b>	Set Preset Pause Timer for AC15 Tie Trunk. Possible values: 1:Time200msec 2:Time800msec 3:Time1600msec (default1:Time200msec)
<b>21 Answer Wait Timer</b>	Answer Wait Timer to connect from impossible Exchange Line of Release Supervision to possible Exchange Line of Release Supervision. Possible values: 0~300 sec. (default = 40)

# 105 System Data

**Prerequisite Program:** None

This command assigns system settings for your Strata CTX.

1. From the Program Menu click System > System Data. The System Data Assignment screen displays (shown right).

2. Enter System Parameter data using the table below.

3. Click Submit.

FIELD	DESCRIPTION
<b>01 Executive Override</b>	Enable break in warning tone for Executive Override. Possible values: Enable (default) or Disable
<b>02 Station MOH</b>	Select MOH for private lines and stations. Possible values: Quiet Tone; External 1~15, or Internal. (default = Internal)
<b>03 Ring Transfer Tone</b>	Select tones for the transferred party to hear after a ringing transfer takes place. Possible values: RBT (default) or MOH
<b>05 Privacy Override</b>	Enable Privacy Override Attendant Monitor warning. Possible values: Enable or Disable (default)
<b>06 Credit Card Code</b>	Enter Service Identifier for Credit Card Calling. If no value is entered in this field any previously programmed data is lost. Possible values: Up to 32 digits (default = no value)
<b>07 Credit Card Digits</b>	Enter the Minimum Dial Digits for Credit Card Calling. Possible values: 1~66 (default = 21)
<b>08 E911/999 Service</b>	Enable E911/999 Service availability. Possible values: Enable (default) or Disable
<b>09 DR Override by SSD</b>	Enable DR Override by System Speed Dial. Possible values: Enable (default) or Disable
<b>10 Auto Station Release</b>	Enable Automatic Station Release. Possible values: Enable (default) or Disable
<b>11 ISDN SPID</b>	Enable Auto Service Profile Identifier (SPID). Possible values: Operable or Not Operable (default)

FIELD	DESCRIPTION
<b>12 Night Mode Relay</b>	<p>Assign BIOU Relay as the Night Relay. This relay activates when the system is in the Night Mode.</p> <p>Possible values: 1~8 (default = 0) BIUO1 provides relays 1 to 4; BIUO2 provides relays 5 to 8</p> <p><b>Note</b> On CTX100 the ACTU built-in relay is programmed as relay 5. For this operation, in Program 100 the BIOU2 must be installed in Cabinet 2, Slot 5, PCB code 20.</p>
<b>13 BGM External Paging</b>	<p>Set the External Page Group Number that includes the external paging zones to which BGM will be sent. See Program 503</p> <p>Possible values: 0~16 (default = 0)</p>
<b>14 Lost Call Destination</b>	<p>Enter Lost Call Destination. If no value is entered in this field any previously programmed data is lost.</p> <p>Possible values: Up to 5 digits (default = no value)</p>
<b>15 COS Override Code</b>	<p>Select Class of Service Override Code.</p> <p>Possible values: 1~8 (default = 1)</p>
<b>16 Multi-Conference</b>	<p>Enable Multi-Conference capabilities for Analogue Internal Calls and Outgoing Calls.</p> <p>Possible values: Enable or Disable (default)</p>
<b>17 Caller Number Display</b>	<p>Enable Caller Number Display. If a soft key display competes with a Caller ID, the Caller ID is displayed.</p> <p>Possible values: Enable (default) or Disable</p>
<b>18 Night Bell Relay</b>	<p>Assign BIOU Relay as the Night Bell Relay; this relay activates whenever Night Ringing takes place.</p> <p>Possible values: 0~8 (default = 0) BIUO1 provides relays 1 to 4; BIUO2 provides relays 5 to 8</p> <p><b>Note</b> On CTX100 the ACTU built-in relay is programmed as relay 5. For this operation, in Program 100 the BIOU2 must be installed in Cabinet 2 Slot 5, PCB code 20.</p>
<b>19 Display Preference</b>	<p>Select Display Preference.</p> <p>Possible values: DNIS (default) or Caller ID</p>
<b>20 Transit Counter</b>	<p>Select the Networking Transit Counter. This device limits the number of nodes through which a QSIG call can pass before being terminated as a lost call.</p> <p>Possible values: 0~128 (default = 1)</p>

FIELD	DESCRIPTION
<b>21 Primary Clock</b> <b>22 Secondary Clock</b>	<p>For feature buttons/fields 21~22 enter the cabinet, slot and channel number of the PCB designated as the systems Primary and Secondary T1 (not available in the UK &amp; Europe)/PRI/BRI clock as xxyyzz.</p> <p>Possible values: xx = Cabinet 01~07; yy = Slot 01~10;            zz = Circuit 01 if clock source is RPTU or RDTU (Not available in the UK &amp; Europe).            zz = Circuit 01, 02, 03, or 04 if clock source is RBUU/RBUS or RBSU/RBSS            Cabinet – Select 01 for Base and Expansion cabinet (Strata CTX 100)            Select 01 for Base and 02~07 respectively for each Expansion cabinet (Strata CTX670).            Slot – Select 01~04 for Base slots and 05~08 for Expansion slots (Strata CTX 100).            Select 01~08 for Base slots and 01~10 for Expansion slots (Strata CTX 670), (default = no value).</p>
<b>23 Call History Prefix 1 (Not in UK)</b>	<p>Add the dialling prefix 1 when using the callback feature in Call History.</p> <p>Possible values: Add or Do Not Add (default)</p>
<b>24 Emergency Digits Sent</b>	<p>Enter an alternative emergency dialling string. If no value is entered in this field any previously programmed value is overwritten.</p> <p>Possible values: Up to 5 digits (default = 911)</p>
<b>25 DP Make Ratio</b>	<p>Select the Dial Pulse Make/Break ratio.</p> <p>Possible values: 33% (default) or 40%</p>
<b>26 Call Button Jumping</b>	<p>Select whether to execute Jumping LED.</p> <p>Possible values: Enable (default) or Disable</p> <ul style="list-style-type: none"> <li>If enabled, line calls move from a telephone DN button to a line button after they are answered. After answering the call, the DN button is cleared to receive another call.</li> </ul> <p>With this operation the DN acts as an answer button for the telephone. This operation only applies if the line that is answered has a button (CO/GCO/Pooled) appearance on the telephone.</p> <ul style="list-style-type: none"> <li>If disabled, line calls remain on the DN after they are answered.</li> </ul>
<b>27 National Code</b>	<p>Set Domestic Code to use when referring Calling Party Number IE.</p> <p>Possible values: Max 8 ASCII characters. Any dial strings of 1~8 digits. (default = 0)</p>
<b>28 International Code</b>	<p>Set International Code to use when referring Calling Party Number IE.</p> <p>Possible values: Max 8 ASCII characters. Any dial strings of 1~8 digits. (default = 00)</p>
<b>29 Identification by CPN</b>	<p>Number Plan Identification On Called party Number.</p> <p>Possible values: 1:Unknown            2:ISDN Telephony Numbering Plan (default = option 2)</p>
<b>30 Hook Mode</b>	<p>Whether to change from Hooking to On Hook or Off Hook code.</p> <p>Possible values: 1:Hooking            2:On Hook Off Hook (default = option 1, depends on Program 915)</p>
<b>31 Analogue Trunk Hunting</b>	<p>Set Hunt Mode for Analogue Trunks</p> <p>Possible values: 1:Terminal            2:Cyclic (default = option 1)</p>

FIELD	DESCRIPTION
<b>33 Tandem Connection</b>	Whether to set the timer to maintain a connection between an Analogue Trunk that does not have Release Supervision and Analogue Exclusive Line by Tandem. Possible values: Enable or Disable (default)



# System Call Forward

**Program Number(s): 500 and 504**

Set up System Call Forward (SCF) parameters using the following programs.

1. Complete the “[System Call Forward Record Sheets](#)” on [Page 4-22](#).
2. From the Program Menu, click System > System Call Forward. The System Call Forward Destination screen displays (shown right).
3. Enter Program 500 data.
4. Enter Program 504 data
5. Click Submit.

## 500 System Call Forward Assignment

**Prerequisite Program:** *None*

This assignment is used to configure up to 32 system call forward patterns. Station DNs are assigned to these patterns in the station COS assignments.

**Note** The Administrator programs the condition of transfer by setting Call Type, Period and Telephone Status. Destinations 1 and 2 should be programmed after transfer conditions are set.

FIELD	DESCRIPTION
<b>00 SCF Number</b>	Select the SCF pattern number to configure. Possible values: 1~32 (default = no value)
<b>01 Call Type</b>	Select the type of call that should forward in this pattern. Possible values: Exchange Loop or Grd, DDI, Tie, Ring Transfer and Internal (default = no value)
<b>02 Period</b>	Select the system time period in which this SCF pattern should operate. Possible values: Day1, Day2 or Night (default = no value)
<b>03 Telephone Status</b>	Select the telephone DN status that should cause this SCF pattern to operate. Possible values: Busy, No Answer, Busy No Answer or DND (default = no value)
<b>04 Destination 1</b>	Select the first destination to which the call should forward. Possible values: Up to 32 digits (default = no value)
<b>05 Destination 2</b>	Select an alternate destination to which the call should forward. Possible values: Up to 32 digits (default = no value)

## 504 System Call Forward Operation Status

**Prerequisite Program:** *None*

This command assigns System Call Forward Type for the pattern.

FIELD	DESCRIPTION
<b>00 SCF Number</b>	Select the SCF pattern number to configure. Possible values: 1~32 (default = no value)
<b>01 Telephone Status</b>	Select the status or state in which the telephone should be for this system call forward pattern to activate. Possible values: No Data (default), Busy, No Answer, Busy No Answer or DND

## System Call Forward Record Sheets

Program 500 Values						Program 504 Values
00 SCF Number	01 Call Type	02 Period	03 Tel Status	04 Destination 1	05 Destination 2	01 Telephone Status
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						

# 501 System Speed Dial

**Prerequisite Program:** None

System Speed Dial consists of up to 800 pre-programmed numbers each containing up to 32 digits. If the number being entered exceeds the 32 digits, the next speed dial location will automatically be appended to create longer numbers. One other speed dial location can be nested within the number for dialling a common routine with the number (see “516 Station Speed Dial” on Page 5-34 for more information about nesting).

1. Complete the “System Speed Dial Record Sheet” on Page 4-24.
2. From the Program Menu, click System > System Speed Dial. The System Speed Dial screen displays (shown right).
3. Enter Program 501 data.
4. Click Submit.



FIELD	DESCRIPTION
<b>00 Speed Dial Bin</b>	Enter the speed dial bin location. Possible values: 000~799 (default = no value)
<b>01 Number</b>	This is the dialable number stored in the speed dial bin. Possible values: Up to 32 digits, 0~9, *, # and Pauses (default = no value) To enter pauses enter Px, where x equals 1~9 (seconds), which is the length of the pause.
<b>02 Name</b>	This is the Name that appears on Telephone LCD dial directories. Possible values: Up to 8 ASCII characters (default = no value)

## System Speed Dial Record Sheet

[illegible]

# Day Night Service

**Program Number(s): 112, 106 and 113**

The programs that follow are used to set up Day and Night modes in Strata CTX.

1. Complete the “[Day/Night Mode Record Sheet](#)” on [Page 4-27](#).
2. From the Program Menu click System > Day Night Services. The Day Night Mode Assignment screen displays (shown right).
3. Enter the Calendar Day (YYYYMMDD) to assign a Working Day Type schedule.  
...or Click on one of the following buttons.
  - ✦ List – view a summary list of programmed Calendar days.
  - ✦ Create – Assign a new Calendar Day with custom settings.
  - ✦ Copy – Copies the currently viewed record to another record(s).
4. Enter remaining Program 112 data.
5. Enter Program 106 data.
6. Enter Program 113 data.
7. Click Submit.

## 112 Day/Night Mode Calendar

**Prerequisite Program:** 106 [on page Page 4-26](#)

This program enables you to assign Working Day Types for up to 128 unique Calendar Days. These settings override the default system schedules in Strata CTX to enable Day/Night scheduling for unique circumstances.

FIELD	DESCRIPTION
<b>00 Calendar Day</b>	Enter the Calendar Day for which to assign a Working Day Type schedule. Possible values: YYYY = Year, MM = Month, DD = Day (default = no value)
<b>01 Working Day Type</b>	Select the Working Day Type. Possible values: Delete (default), Work Day, Non-Work Day or Holiday

## 106 Day/Night Mode “Type of Day” Mapping Table Assignment

**Prerequisite Program:** 113 [on page Page 4-26](#)

The Day of the Week schedule defines each day as the type of day the schedule shall follow. These types of days are called Work Day, Non-work Day, and Holiday. Each day of the week can be classified.

FIELD	DESCRIPTION
<b>01 Monday</b>	Assign the type of day schedule that is to be used for each day of the week. Possible values: Work Day (default), Non-work Day or Holiday
<b>02 Tuesday</b>	
<b>03 Wednesday</b>	
<b>04 Thursday</b>	
<b>05 Friday</b>	
<b>06 Saturday</b>	Assign the type of day schedule that is to be used for each day of the weekend. Possible values: Work Day, Non-work Day (default) or Holiday
<b>07 Sunday</b>	

## 113 Day/Night Mode Daily Schedule Assignment

**Prerequisite Program:** None

The Day/Night Mode daily schedule defines the times for the start of the Work Day, Non-work Day, and Holiday for each of the modes (Day, Day2, Night). Each “type of day” defined in [“106 Day/Night Mode “Type of Day” Mapping Table Assignment” on Page 4-26](#) requires an assigned schedule.

**Note** The start time for Day 1 mode equals the end time for Night mode.

FIELD	DESCRIPTION
<b>Work Day</b>	Enter the Day1, Day2 and Night Mode start time for Work Day day type.
<ul style="list-style-type: none"> <li><b>01 Day 1 Mode</b></li> <li><b>02 Day2 Mode</b></li> <li><b>03 Night Mode</b></li> </ul>	Possible values: hhmm; hh = hour (00~23, 99), mm = minutes (00~59, 99) (default = 9999)  <b>Note</b> Enter 9999 to delete or skip mode.
<b>Non-Work Day</b>	Enter the Day1, Day2 and Night Mode start times for Non-Work Day day type.
<ul style="list-style-type: none"> <li><b>04 Day 1 Mode</b></li> <li><b>05 Day2 Mode</b></li> <li><b>06 Night Mode</b></li> </ul>	Possible values: hhmm; hh = hour (00~23, 99), mm = minutes (00~59, 99) (default = 9999)  Enter 9999 to delete or skip mode.
<b>Holiday</b>	Enter the Day1, Day2 and Night Mode start times for Holiday Day day type.
<ul style="list-style-type: none"> <li><b>07 Day 1 Mode</b></li> <li><b>08 Day2 Mode</b></li> <li><b>09 Night Mode</b></li> </ul>	Possible values: hhmm; hh = hour (00~23, 99), mm = minutes (00~59, 99) (default = 9999)  Enter 9999 to delete or skip mode.

## Day/Night Mode Record Sheet

[illegible]

Program 106 Values	
Day	Work Day, Non-Work Day or Holiday
01 Monday	
02 Tuesday	
03 Wednesday	
04 Thursday	
05 Friday	
06 Saturday	
07 Sunday	

Program 113 Values			
Type of Day	Day 1 Mode	Day 2 Mode	Night Mode
Work Day			
Non-Work Day			
Holiday			

# PAD Table

**Program Number(s): 107, 108 and 114**

Assign PAD groups, PAD Tables and PAD Conference Tables using these programs.

1. From the Program Menu click System > PAD Table. The PAD Table Assignment screen displays (shown right).
2. Enter Program 107 data.
3. Enter Program 108 data.
4. Enter Program 114 data.
5. Click Submit.

**Note** Clicking \*Note displays [Table 4-2](#) for Program 107 and [Table 4-3](#) for Program 108.

## 107 PAD Table Assignment

**Prerequisite Program:** None

Assigns additional Sender and Receiver PAD values to PAD groups in the PAD table.

FIELD	DESCRIPTION
<b>01 Sender PAD Device Number</b>	Enter Sender PAD Device Number from PAD Table. Possible values: Up to 3 digits. 101~132 (CTX670), 101~106 (CTX100), (default = no value), see <a href="#">Table 4-2</a> below.
<b>02 Receiver PAD Device Number</b>	Enter Receiver PAD Device Number from PAD Table. Possible values: Up to 3 digits. 101~132 (CTX670), 101~106 (CTX100) (default = no value), see <a href="#">Table 4-2</a> below.
<b>03 PAD Loss</b>	Enter PAD Value (See <a href="#">Table 4-2</a> below, or click on the drop down menu). The value shown shows the net effect.  <b>Note</b> To pad is to insert loss; therefore, "negative loss" equals net gain. Possible values: 1 = 6 dB Net Gain, 2 = 3dB Net Gain, 3 = 0dB, 4 = 3dB Net Loss, 5 = 6dB Net Loss, 6 = 9dB Net Loss, 7 = 12dB Net Loss or 8 = 15dB Net Loss (default = no value).



Table 4-2 PAD Table

PAD Device Number		1	2	3	4	5	6	7	8	9	101	102	131	132
PAD Device Number	Receiver (Listener)	Analogue Telephone		Analogue Trunk										
	Sender (Speaker)		DKT		T1 Trunk*	ISDN Station	ISDN Trunk	CONF Bridge	Music Source	Ext. Paging	PAD Group 1	PAD Group 2	PAD Group 31	CPAD Group 32
1	Analogue Telephone	0	0	0	6	6	6	X	-	0				
2	DKT	0	0	0	6	6	6	0	-	0				
3	Analogue Trunk	0	0	6	6	6	6	X	-	6				
4	T1 Trunk*	6	6	6	0	0	0	0	-	6				
5	ISDN Station	6	6	6	0	0	0	0	-	6				
6	ISDN Trunk	6	6	6	0	0	0	0	-	6				
7	Conference Bridge	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)				
8	Music Source	0	0	0	0	0	0	0	0	0				
9	Ext. Paging	0	0	6	6	6	6	0	0	0				
101	PAD Group 1													
102	PAD Group 2													
:	:													
131	PAD Group 31													
132	PAD Group 32													
<b>Note</b> "X" data set for PAD Conference table Assignment														
* Not available in the UK & Europe.														

## 108 PAD Group Assignment

**Prerequisite Program:** *None*

You can enter up to 32 additional devices to the PAD table to deal with exceptions to the default table.

FIELD	DESCRIPTION
<b>00 PAD Group Device Type</b>	Enter the Device Type from <a href="#">Table 4-3</a> below. Possible values: Up to 6 digits. x = Device Type; yyyyy = Device number (default = no value)
<b>01 PAD Group Number</b>	Enter the PAD Group Number Possible values: 0~32 (CTX670), 0~6 (CTX100) (default = 0)

Table 4-3 PAD Group Device Type Examples

Device Name	Device Type	Device Number	Example
DKT, SLT, ISDN, Station	1	0~99999 (PDN)	if DKT device = 200, value = 1200.
ISDN Trunk	2	1~128 (Channel Group Number)	if Channel Group # = 10, value = 210.
Analogue Trunk, T1 Trunk*	3	1~264 (Trunk Number)	if Trunk # = 120, value = 3120.
Conference Bridge	4	none (Conference Bridge is only one)	value = 4.
Music Source	5	1~15 (Music Port)	if Music port = 8, value = 58.
External Paging Device	6	1~8 (Zone Relay Number)	if External Paging Device = 3, value = 63.
* Not available in the UK & Europe.			

## 114 PAD Conference Assignment

### Prerequisite Program:

This command enables you to assign PAD values for combinations of analogue trunks and telephones in conference.

FIELD	DESCRIPTION
<b>01 PAD Conference Trunks</b>	Enter the number of analogue trunks using <a href="#">Table 4-4</a> below. Possible values: 0~6 (default = 0)
<b>02 PAD Conference Telephone</b>	Enter the number of analogue telephones. See <a href="#">Table 4-4</a> below. Possible values: 0~8 (default = 0)
<b>03 PAD Conference Value</b>	Enter the desired PAD Value for the combination of analogue trunks and telephones specified in <i>PAD Conference Trunks</i> and <i>Telephones</i> above. The value shown shows the net effect.  <b>Note</b> To pad is to insert loss; therefore, “negative loss” equals net gain. Possible values: 1 = 6 dB Net Gain, 2 = 3dB Net Gain, 3 = 0dB, 4 = 3dB Net Loss, 5 = 6dB Net Loss, 6 = 9dB Net Loss, 7 = 12dB Net Loss or 8 = 15dB Net Loss (default = no value).

Table 4-4 PAD Conference Table

		Number of Analogue Telephones								
		0	1	2	3	4	5	6	7	8
Number of Analog Trunks	0	0	0	0	0	0	3	3	6	6
	1	0	0	0	0	3	3	3	6	
	2	3	3	3	3	3	6	6		
	3	6	6	6	6	6	9			
	4	9	9	9	9	9				
	5	9	9	9	9					
	6	9	9	9						

# 110 Password

**Prerequisite Program:** *None*

This command assigns the password. The system has two passwords levels for. Logging into the system with the Level 1 password enables the user to administer all system programs while the level 2 password provides restricted program administration.

1. From the Program Menu click System > Password.
2. Enter *00 Password Level*.
3. Enter *01 Password*.
4. Click Submit.



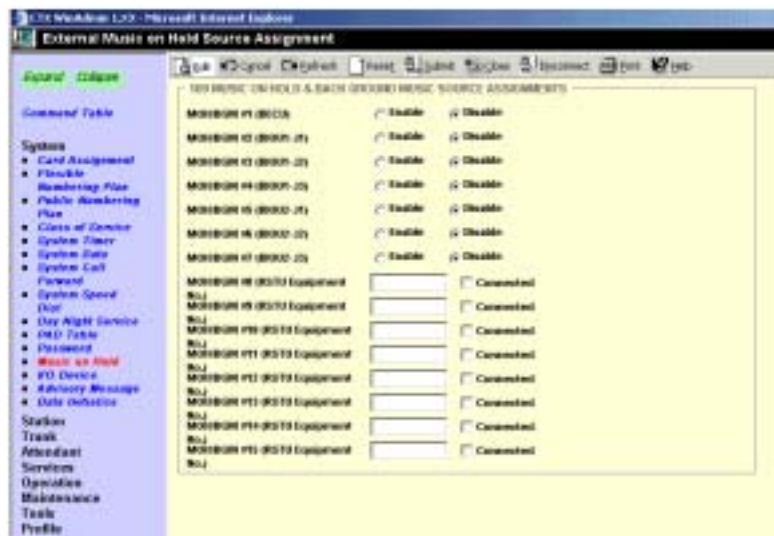
FIELD	DESCRIPTION
<b>00 Password Level</b>	<p>Enter the digit 1 or 2 for the password as follows:</p> <p>Possible values: Enter 1 to set an unrestricted administration password.</p> <p>Enter 2 to set a restricted administration password</p> <p>Level 2 users can administer all programs but are restricted from initialising the CTX and from updating the CTX software (default = no value).</p>
<b>01 Password</b>	<p>Enter the desired password.</p> <p><b>Note</b> Only one password can be set for each level.</p> <p>Possible values: Up to 16 ASCII character (default = no value)</p>

# 109 Music on Hold

**Prerequisite Program:** None

This command assigns external Music on Hold (MOH) and Background Music (BGM) sources.

1. From the Program Menu click System > Music on Hold. The External Music on Hold Source Assignment screen displays (shown right).
2. For fields 01~07, click in the adjacent radio button to activate MOH/BGM.
3. For fields 08~15, enter the equipment location identifier and check the Connected box to activate.
4. Click Submit.



FIELD	DESCRIPTION
<b>MOH/BGM #1 (BECU)</b>	For MOH/BGM #1~#7, click in the radio button to enable MOH/BGM for the specified PCB.  Possible values:    Enable (default) or Disable
<b>MOH/BGM #2 (BIOU1-J1)</b>	
<b>MOH/BGM #3 (BIOU1-J2)</b>	
<b>MOH/BGM #4 (BIOU1-J3)</b>	
<b>MOH/BGM #5 (BIOU2-J1)</b>	
<b>MOH/BGM #6 (BIOU2-J2)</b>	
<b>MOH/BGM #7 (BIOU2-J3)</b>	
<b>MOH/BGM #8 (RSTU)</b>	Enter the RSTU equipment number to which MOH/BGM source #8~#15 is connected.  Possible values:    xx = Cabinet 01~07; yy = Slot 01~10; zz = Circuit 01~08 (default = no value) Cabinet – Select 01 for Base and Expansion cabinet. (Strata CTX100) Select 01 for Base and 02~07 respectively for each Expansion cabinet. Slot – Select 01~04, 09 for Base slots (Slot09:Only for ASTU and CTX 100). Select 01~08 for Base slots and 01~10 for Expansion slots (Strata CTX 670).
<b>MOH/BGM #9 (RSTU)</b>	
<b>MOH/BGM #10 (RSTU)</b>	
<b>MOH/BGM #11 (RSTU)</b>	
<b>MOH/BGM #12 (RSTU)</b>	
<b>MOH/BGM #13 (RSTU)</b>	
<b>MOH/BGM #14 (RSTU)</b>	
<b>MOH/BGM #15 (RSTU)</b>	
<b>Notes</b>	
<ul style="list-style-type: none"><li>• A PDN can not be assigned to an RSTU equipment number if it is to be a MOH circuit.</li><li>• If a PDN is assigned to an MOH/BGM circuit, you must first delete the PDN using PRG201</li></ul>	

# I/O Device

## Program Number(s): 801, 803 and 804

These commands assign LAN devices, RS-232C devices and device relationships for I/O Logical Devices SMDR, SMDI, CTI and physical ports.

1. From the Program Menu click System > I/O Device. The Equipment Assignment screen displays (shown right).
2. Enter Program 801 data.
3. Enter Program 803 data.
4. Enter Program 804 data.
5. Click Submit.

## 801 Network Jack LAN Device Assignment

**Prerequisite Program:** 803 [on page Page 4-34](#).

This screen assigns Strata CTX LAN parameters, enabling PC applications to connect to the BECU network jack.

FIELD	DESCRIPTION
<b>00 LAN Port Number</b>	Enter the port number of the LAN device to be assigned. Refer to <a href="#">“803 SMDR SMDI CTI Port Assignments” on Page 4-34</a> . Possible values: 1~9 (default = no value)
<b>01 Protocol</b>	Select communication Protocol. Possible values: TCP (default) or UDP
<b>02 PC Operation Type</b>	Select the Operation Type. <ul style="list-style-type: none"> <li>• If Server is selected, enter <i>04 Server Port Number</i>.</li> <li>• If Client is selected, enter the <i>05 Client IP Address</i>.</li> </ul> Possible values: Server (default) or Client
<b>03 Data Flow</b>	Select the data flow protocol for CTX and PC communications. <b>Note</b> If the logical device set up in <a href="#">“803 SMDR SMDI CTI Port Assignments” on Page 4-34</a> is set to CTI, this field must be set to Asynchronous data flow. Possible values: Synchronisation or Asynchronisation (default = Asynchronisation)

FIELD	DESCRIPTION
<b>04 Server Port Number</b>	Enter the Server Port Number and proceed to <i>07 Read Retry Number</i> . This field is required if Server was selected in <i>02 PC Operation Type</i> above. If not, leave this field blank and proceed to <i>05 Client IP Address</i> .  Possible values: 0~65535 (default = 0)
<b>05~08 Client IP Address</b>	Enter the Client LAN IP Address. This field is required if Client was selected in <i>02 PC Operation Type</i> above.  Possible values: 0~255 for each octet (default = 0)
<b>09 Client Port Number</b>	Enter the Client Port number. This field is required if Client was selected in <i>02 PC Operation Type</i> above.  Possible values: 0~65535 (default = 0)
<b>10 Read Retry Number</b>	Select the Read Retry counter.  Possible values: 0~10 (default = 1)
<b>10 Write Retry Number</b>	Select the Write Retry counter.  Possible values: 0~10 (default = 1)

## 803 SMDR SMDI CTI Port Assignments

**Prerequisite Program:** *804 on page Page 4-36.*

This program assigns one of the following:

- ◆ SMDR and SMDI to the logical device and BSIS, RS-232 port numbers.
- ◆ WinAdmin, ACD server, and Attendant Console to BECU, Network Jack logical device and LAN port numbers.

FIELD	DESCRIPTION
<b>00 Logical Device Number</b>	Select the 3 digit logical device number for SMDR, SMDI, and LAN devices or PC application. See <a href="#">Table 4-5</a> .  Possible values: 100 = SMDR 300 = SMDI 200~208 = CTI LAN devices or PCs (default = no value)
<b>01 Device Connection</b>	Select the Device Connection type.  Possible values: None (default), LAN or RS-232 <ul style="list-style-type: none"> <li>• Select <i>LAN</i> for CTX WinAdmin, ACD Server or a PC Attendant Console. These devices are connected to the BECU network jack.</li> <li>• Select <i>RS-232</i> for SMDR/SMDI devices or PCs. These devices connect to the BSIS RS-232 ports.</li> </ul>

FIELD	DESCRIPTION
<b>02 Device Port Number</b>	<p>Select the Device Port numbers (one port per device).</p> <p>Possible values: For a RS-232 connection: 1~4 (default = 1) For an LAN connection: 1~9 (default = 1)</p> <p><b>Notes</b></p> <ul style="list-style-type: none"> <li>SMDR and SMDI devices can be assigned to any BSIS RS-232 Port.</li> <li>LAN devices and PCs can be assigned to logical Ports 1~9 according to the following logical device number assignments:  LAN Port1 = device 200  LAN Port2 = device 201  LAN Port3 = device 202  LAN Port4 = device 203  LAN Port5 = device 204  LAN Port6 = device205  LAN Port7 = device206  LAN Port8 = device207</li> </ul>

Table 4-5 Device Table

Logical Device	Logical Device Serial Number	Physical Device				Define I/O Logical Device Number
		LAN	PPP	RS-232C	Smart Media	
<b>SMDR</b>	0	-	-	OK	-	100
<b>CTI</b>	0	OK	-	-	-	200
	1	OK	-	-	-	201
	2	OK	-	-	-	202
	3	OK	-	-	-	203
	4	OK	-	-	-	204
	5	OK	-	-	-	205
	6	OK	-	-	-	206
	7	OK	-	-	-	207
	8	OK	-	-	-	208
<b>SMDI</b>	0	OK	-	OK	-	300
	1	OK	-	OK	-	301

## 804 BSIS RS-232 Serial Port Setup

**Prerequisite Program:** *None*

Use this screen to setup the RS-232 serial ports on the BSIS PCB.

FIELD	DESCRIPTION
<b>00 BSIS Port (1~4)</b>	Enter the BSIS PCB port number. Possible values: 1~4 (default = no value)
<b>01 Port Speed</b>	Select the data speed for the BSIS port in bits per second (bps). Possible values: 300, 1200, 2400, 4800, 9600 (default), 19200, 38400 or 57600
<b>02 Port Parity</b>	Select the parity error checking method used by the BSIS port. Possible values: None, Even or Odd (default)
<b>03 Data Bits</b>	Select Data Length. Possible values: 7 Bits (default) or 8 Bits
<b>04 Flow Control</b>	This setting indicates the type of flow control used between the BSIS port and the SMDI or SMDR device. To enable Strata CTX to buffer call records, set this field to Flow. Possible values: None (default) or Flow
<b>05 Wait Timer</b>	Select the maximum time to wait for connection. The Timer value can be one through 255 seconds. Select 0 to set to permanent waiting. Possible values: 0~255 (default = 30)



# 115 Advisory Messages

**Prerequisite Program:** None

This command specifies a set of messages that users may apply to their telephone to provide status information when others call your station. These messages can be customised to include a directory number, time or date as part of the message.

1. From the Program Menu click System > Advisory Messages. The Advisory Message Assignment screen displays (shown right).
2. Select the *Message Number*.
3. Enter the desired message in *01 Message*.
4. Select *02 Additional Digits Type*.
5. Click Submit.

Number	Message	Additional Digits Type
0	OUT TO LUNCH	None
1	IN A MEETING	None
2	CALL	DN
3	BACK AT	Time
4	RETURN ON	Date
5		None
6		None
7		None
8		None
9		None

FIELD	DESCRIPTION
<b>Message Number</b>	Select from 5 pre-programmed messages or 5 custom messages. See <a href="#">Table 4-6</a> below for details. Possible values: 0~4 = pre programmed messages, 5~9 = custom messages (default = 0)
<b>01 Message</b>	Enter the Advisory Message to be displayed on the receiving parties LCD. Possible values: Up to 16 ASCII characters (default = no value)
<b>02 User Entered Variable</b>	Select the type of Additional Digits that can be appended to complete the Advisory Message. The total message cannot exceed 16 characters total. Possible values: None, DN, Time or Date (default = None)

**Table 4-6 Advisory Message Default Code Table**

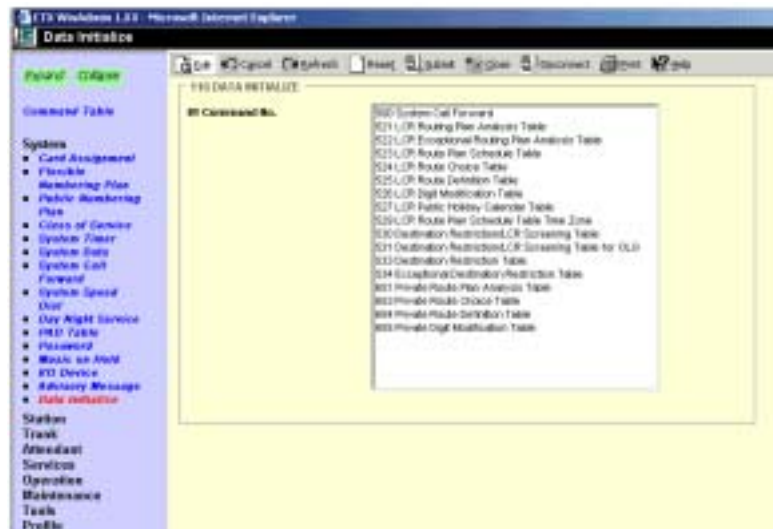
#	Advisory Message	Type of Additional
0	OUT TO LUNCH	None
1	IN A MEETING	None
2	CALL	Directory Number
3	BACK AT	Time
4	RETURN ON	Date
5	(No Data)	None
6	(No Data)	None
7	(No Data)	None
8	(No Data)	None
9	(No Data)	None

# 116 Data Initialise

**Prerequisite Program:** None

This program is used to initialise the tables of selected programs in the Strata CTX system.

1. From the Program Menu click System > Data Initialise. The Data Initialise screen displays (shown right).
2. Select a Program to Initialise from the 01 Command No. dialogue box.
3. Click Submit.



**Table 4-7 Data Initialise Programs**

Program Number	Program Name	Page #
500	"500 System Call Forward Assignment"	4-21
520	"520 LCR Local Route Plan Assignment"	8-11
521	"521 LCR Route Plan Digit Analysis Assignment"	8-12
522	"522 LCR Exception Number Route Plans"	8-12
523	"523 LCR Route Plan Schedule Assignment"	8-16
524	"524 Route Table to Route Definition Assignment"	8-13
525	"525 LCR Route Definition Assignment"	8-14
526	"526 Modified Digits Table Assignment"	8-14
527	"527 LCR Holiday Table"	8-18
529	"529 LCR Route Plan Time Zone Assignment"	8-18
530	"530 DR LCR Screening Table Assignment"	8-24
531	"531 DR Screening Table for OLG"	8-25
533	"533 DR Level Table Assignment"	8-27
534	"534 DRL Exception Table Assignment"	8-28
651	"651 Private Routing Plan Analysis"	8-43
653	"653 Private Route Choice Table Assignment"	8-44
654	"654 Private Route Definition Table Assignment"	8-45
655	"655 Private Network Digit Modification Table Assignment"	8-45

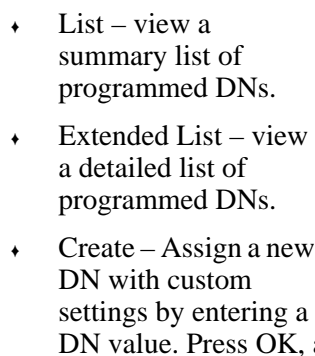
# Assignment

The following Programs Assign Station data.

**Prerequisite Program:** 100 on Page 4-1

1. Use the “Basic Station Record Sheets” on Page 5-6 to record your desired Station settings.

- ...or click one of the following buttons:



- ✦ Copy – Enter a DN in the *Prime DN* field and click Copy to make a new DN assignment with settings copied from the DN entered in the *Prime DN* field.
- ✦ Delete – Enter a Prime DN or a range of Prime DNs to delete and click OK.

- ♦ Change DN – Enter a DN in the *Prime DN* field and click Change DN. Enter the new DN assignment and click OK.
- 5. Setup the DN by adding values to the remaining fields.
- 6. Click Submit.

FIELD	DESCRIPTION
<b>01 PDN Equipment No.</b>	<p>Enter the PDN equipment number as xxyyzz (cabinet, slot, and circuit)</p> <p>Possible values: xx = Cabinet 01~07; yy = Slot 01~10; zz = Circuit 01~16.            Cabinet – Select 01 for Base and Expansion cabinet (Strata CTX100)            Select 01 for Base and 02~07 respectively for each Expansion cabinet (Strata CTX 670)            Slot – Select 01~04, 09 for Base slots            (Slot09: Only for ASTU and CTX 100)            Select 01~08 for Base slots and 01~10 for Expansion slots (Strata CTX 670); zz = Circuit 01~16 (default = no value)</p> <p><b>Note</b> BDKU/BDKS, PDKU, or RSTU interface PCB to which the PDN is, or should be, assigned.</p>
<b>02 Station Type</b>	<p>Select Station Type.</p> <p>Possible values: DKT (default) or SLT</p>
<b>03 Circuit Type</b>	<p>Select Extension or Assign Voice Mail attributes to analogue circuits</p> <p>Possible values: Extension (default) or Voice Mail</p> <ul style="list-style-type: none"> <li>• Extension – Should be assigned to PDNs that are associated with Digital or Standard telephones.</li> <li>• Voice Mail – Should be assigned to PDNs associated with Voice Mail RSTU circuits.</li> </ul>
<b>04 COS Day1</b>	<p>Assign COS to Day1, Day 2 and Night modes.</p>
• Day2	Possible values: 1~32 (default = 1)
• Night	
<b>05 DRL Day1</b>	<p>DRL for DAY1, Day 2 and Night; Used for Credit card calling</p>
• Day2	Possible values: 1~16 (default = 1)
• Night	
<b>06 FRL Day1</b>	<p>Assign FRL to Day1, Day 2 and Night modes.</p>
• Day2	Possible values: 1~16 (default = 1)
• Night	
<b>07 LCR Group</b>	<p>Station LCR Group Number</p> <p>Possible values: 1~16 (default = 1)</p>
<b>08 QPL Day1</b>	<p>QPL for Day1, Day 2 and Night modes.</p>
• Day2	Possible values: 1~16 (default = 1)
• Night	
<b>09 Station Name<sup>1</sup></b>	<p>Enter Station Name to be displayed on LCD.</p> <p>Possible values: Up to eight ASCII characters (default = no value)</p>
<b>10 Call Waiting Tone</b>	<p>Select desired waiting tone for Offhook Campon.</p> <p>Possible values: None (default), Singular or Continuity</p>

FIELD	DESCRIPTION
<b>11 Dialling Progress Tone</b>	Select type of Tone to hear after dialling LCR access code Possible values: Dial Tone (default), Entry Tone or Silence
<b>12 System Call Forward.</b>	Select the System Call Forward Group number. Possible values: 0~32 (CTX670), 0~4 (CTX100) (default = 0)
<b>13 Call Pickup</b>	The station privilege to activate Call Pickup. Possible values: Permitted (default), Group Only or Not Permitted
<b>14 Bearer Capability</b>	ISDN Bearer Capability the PSTN is expecting from non ISDN stations. Possible values: 3.1kHzAudio (default) or Speech
<b>15 Display DN</b>	Enter the number to be displayed on the calling telephone that rings this PDN number. This number is will be overridden by Program 209, 04 (if assigned) and if the PDN is in a hunt group. Possible values: Up to 5 ASCII characters (default = no value)
<b>16 Caller Emergency Service Identification (CESID)</b>	Enter the E911/999 Calling Party Information identifier for this station (CESID). Possible values: Up to 16 ASCII characters (default = no value)
<b>17 Emergency Call Group</b>	Enter the Emergency call group that this station belongs to. Possible values: 1~8 (default = 1)
<b>18 Remote CF/DND Password</b>	Enter password to set or cancel DND or station Call Forward from another CTX station; or, for Call Forward only, from a external DSIA line. Possible values: Up to 4 ASCII characters (default = no value) <b>Note</b> DND can not be set/canceled remotely from a DISA line.
<b>19 VMID Code SMDI</b>	Enter the voice mail box number that should answer calls when this PDN calls voice mail; or, when this PDN is called and then forwards to voice mail (this number is prefixed by codes in Program 579, 11~16) Possible values: Digits 0~9, * and #, up to 16 characters (default = no value). <b>Note</b> This VMID code is sent to the voice mail device in SMDI packets or DTMF tones on direct calls to voice mail from the PDN; and on calls to the PDN that forward to voice mail. See Program 580 for SMDI or DTMF choice.
<b>22 MW to VM Port</b>	Enter the Message Waiting center DN. Possible values: Up to 5 ASCII characters (default = no value)
<b>23 Travelling COS Change</b>	Enable this station with the privilege to change the Travelling COS Override Code. Possible values: Enable or Disable (default)
<b>24 TGAC Override<sup>1</sup></b>	Enable Trunk Group Access Code (TGAC) override (for Attendant console) from this station. Possible values: Enable or Disable (default)
<b>25 Service Tones</b>	Disable Service Tone for Data Privacy. Possible values: Enable (default) or Disable <b>Note</b> Service tone such as Call Waiting should be disabled for modems, faxes, and similar devices.

FIELD	DESCRIPTION
<b>26 CW and ROB Tone</b>	<p>Enable/Disable the station to receive Call Waiting (Campon) and Ring Over Busy Tone.</p> <p>Possible values: Enable (default) or Disable</p> <p><b>Notes</b></p> <ul style="list-style-type: none"> <li>• CW tone is always two beeps.</li> <li>• ROB tone can be two beeps or continuous as set in PRG 204, 27.</li> </ul>
<b>27 Name Display</b>	<p>Enable this station with the privilege to put the user name in the Directory Assistance display of a large LCD.</p> <p>Possible values: Enable (default) or Disable</p>
<b>28 Door Ovr DND</b>	<p>Enable DND override by door phone.</p> <p>Possible values: Override or Do not Override (default)</p>
<b>29 Emerg Ringdown</b>	<p>Enable Emergency Ringdown.</p> <p>Possible values: Enable or Disable (default)</p>
<b>30 Chg Sys Speed</b>	<p>Enable this station to use System Speed Dial.</p> <p>Possible values: Enable or Disable (default)</p>
<b>31 Network COS</b>	<p>Select Network COS value.</p> <p>Possible values: 1~32 (default = 1)</p>
<b>32 Auto OCA</b>	<p>OCA occurs automatically when making a call to a busy station that allows OCA calls to be received.</p> <p>Possible values: Enable or Disable (default = Enable)</p>
<b>33 Originate OCA</b>	<p>Enable this station with the privilege to make OCA calls to other stations.</p> <p>Possible values: Enable (default) or Disable</p>
<b>34 RSTU Supervision</b>	<p>This enables the auto disconnect Tandem timer in Program 104, FB06 for these types of Connections.</p> <p>Possible values: Received (default) or Not Received</p> <p>Possible values: Devices connected to RSTU circuits that do not automatically hang up, and connect to Exchange lines that do not provide disconnect supervision, should be set with "Not Received."</p>
<b>35 Station SpDial Bins</b>	<p>The number of station speed dial bins allocated to this station:</p> <p>Possible values: Up to 100 (default = 0)</p>
<b>36 SLT Type</b>	<p>Set 2-wire dial method.</p> <p>Possible values: 1:DTMF (default) 2:DP</p>
<b>37 Call Forward Dial Tone</b>	<p>Enable Call Forward to send Dial Tone</p> <p>Possible values: Enable or Disable (default)</p>
<b>38 Dialling Digit Restriction</b>	<p>Enable Digit Dialling Restriction</p> <p>Possible values: Enable or Disable (default)</p>

1. Cannot be entered from DKT in Release 1.

#### Notes

1. When a required DN as programmed objects is not assigned, DN is regard as new station.
2. When "Station Type" field is DKT, DKT's data which are not covered by this command are assigned with default value of DKT DATA ASSIGNMENT command automatically.
3. If card type is not assigned, fitted card for "Station Type" is assigned. (Example: DKT->DKU, SLU->STU). If Administrator want to assign Hi-brid card (Example:DSU), card type must be assigned by CARD ASSIGNMENT command, before this command.
4. When "Card Type" is inputted, card type is checked. If card type does not match, system outputs error.
5. "Equipment Location" and "Station Type" are mandatory data. Administrator must set these parameters first time. Other parameters can't set until these are assigned.
6. Default value of STATION TIMER ASSIGNMENT command and STATION FEATURE KEY ASSIGNMENT command are assigned automatically.
7. "Station Type" field can not be modified. If administrator modify the station type, the station must be deleted.
8. If no data is entered in FK9, 15, 16, 18, 19, 20, 21 or 22 the data of FK9, 15, 16, 18, 19, 20, 21 or 22 that was assigned on Strata CTX is deleted.
9. If you select "1:DKT" for FK2, FK3 is invalid.
- 10.As FK4, FK5, FK6 and FK8 have plural parameters, the input of data uses the "Spkr" key.
- 11.In R1, FK9 (Station Name) is not supported from DKT.
- 12.Parameter of FK32, FK33 are able to change from Prog204 (FK7,FK8) as well when DN is DKT.
- 13.In FK35 (The number of registration of Station Speed Dial). If the value except 10 multiples is inputted, the value rounds up to the nearest whole number.
 

0:	In the case of that Station Speed Dial is not used.
1-10:	10 is registered. Station Speed Dial Index that is able to use is 00 to 09.
1-20:	20 is registered. Station Speed Dial Index that is able to use is 00 to 19.
1-30:	30 is registered. Station Speed Dial Index that is able to use is 00 to 29.
1-40:	40 is registered. Station Speed Dial Index that is able to use is 00 to 39.
1-50:	50 is registered. Station Speed Dial Index that is able to use is 00 to 49.
1-60:	60 is registered. Station Speed Dial Index that is able to use is 00 to 59.
1-70:	70 is registered. Station Speed Dial Index that is able to use is 00 to 69.
1-80:	80 is registered. Station Speed Dial Index that is able to use is 00 to 79.
1-90:	90 is registered. Station Speed Dial Index that is able to use is 00 to 89.
1-100:	100 is registered. Station Speed Dial Index that is able to use is 00 to 99.
- 14.When the parameter of FK1 on Prog915 is each country in Asia, the parameter of FK38 is effective.

## Basic Station Record Sheets

<b>Prime DN:</b> _____								
01 PDN Equipment No.		08 QPL	Day 1		17 Emerg Call Group		31 Network COS	
02 Station Type			Day 2		18 Remote CF/DND PW		32 Auto OCA	
03 Circuit Type			Night		19 VMID Code SMDI		33 Originate OCA	
04 COS	Day 1		07 LCR Group			20 MW to VM Port		34 RSTU Supervision
	Day 2		09 Station Name			23 Travel COS Change		35 Station Sp Dial Bins
	Night		10 Call Waiting Tone			24 TGAC Override		
05 DRL	Day 1		11 Dialling Progress Tone			25 Service Tones		
	Day 2		12 System Call Forward			26 CW and ROB Tone		
	Night		13 Call Pickup			27 Name Display		
06 FRL	Day 1		14 Bearer Capability			28 Door over DND		
	Day 2		15 Display DN			29 Emerg Ringdown		
	Night		16 CESID			30 Chg Sys Speed		

<b>Prime DN:</b> _____								
01 PDN Equipment No.		08 QPL	Day 1		17 Emerg Call Group		31 Network COS	
02 Station Type			Day 2		18 Remote CF/DND PW		32 Auto OCA	
03 Circuit Type			Night		19 VMID Code SMDI		33 Originate OCA	
04 COS	Day 1		07 LCR Group			20 MW to VM Port		34 RSTU Supervision
	Day 2		09 Station Name			23 Travel COS Change		35 Station Sp Dial Bins
	Night		10 Call Waiting Tone			24 TGAC Override		
05 DRL	Day 1		11 Dialling Progress Tone			25 Service Tones		
	Day 2		12 System Call Forward			26 CW and ROB Tone		
	Night		13 Call Pickup			27 Name Display		
06 FRL	Day 1		14 Bearer Capability			28 Door over DND		
	Day 2		15 Display DN			29 Emerg Ringdown		
	Night		16 CESID			30 Chg Sys Speed		

<b>Prime DN:</b> _____								
01 PDN Equipment No.		08 QPL	Day 1		17 Emerg Call Group		31 Network COS	
02 Station Type			Day 2		18 Remote CF/DND PW		32 Auto OCA	
03 Circuit Type			Night		19 VMID Code SMDI		33 Originate OCA	
04 COS	Day 1		07 LCR Group			20 MW to VM Port		34 RSTU Supervision
	Day 2		09 Station Name			23 Travel COS Change		35 Station Sp Dial Bins
	Night		10 Call Waiting Tone			24 TGAC Override		
05 DRL	Day 1		11 Dialling Progress Tone			25 Service Tones		
	Day 2		12 System Call Forward			26 CW and ROB Tone		
	Night		13 Call Pickup			27 Name Display		
06 FRL	Day 1		14 Bearer Capability			28 Door over DND		
	Day 2		15 Display DN			29 Emerg Ringdown		
	Night		16 CESID			30 Chg Sys Speed		

<b>Prime DN:</b> _____								
01 PDN Equipment No.		08 QPL	Day 1		17 Emerg Call Group		31 Network COS	
02 Station Type			Day 2		18 Remote CF/DND PW		32 Auto OCA	
03 Circuit Type			Night		19 VMID Code SMDI		33 Originate OCA	
04 COS	Day 1		07 LCR Group			20 MW to VM Port		34 RSTU Supervision
	Day 2		09 Station Name			23 Travel COS Change		35 Station Sp Dial Bins
	Night		10 Call Waiting Tone			24 TGAC Override		
05 DRL	Day 1		11 Dialling Progress Tone			25 Service Tones		
	Day 2		12 System Call Forward			26 CW and ROB Tone		
	Night		13 Call Pickup			27 Name Display		
06 FRL	Day 1		14 Bearer Capability			28 Door over DND		
	Day 2		15 Display DN			29 Emerg Ringdown		
	Night		16 CESID			30 Chg Sys Speed		



## 204 DKT Parameters

**Prerequisite Program:** 200 on Page 5-1

This command is used to set up DKT digital telephones station parameters.

1. Use the “[DKT Parameters Record Sheet](#)” on Page 5-11 to record your desired DKT settings.

2. From the Program Menu, click Station > Assignment.

3. Click on the DKT tab (shown right).

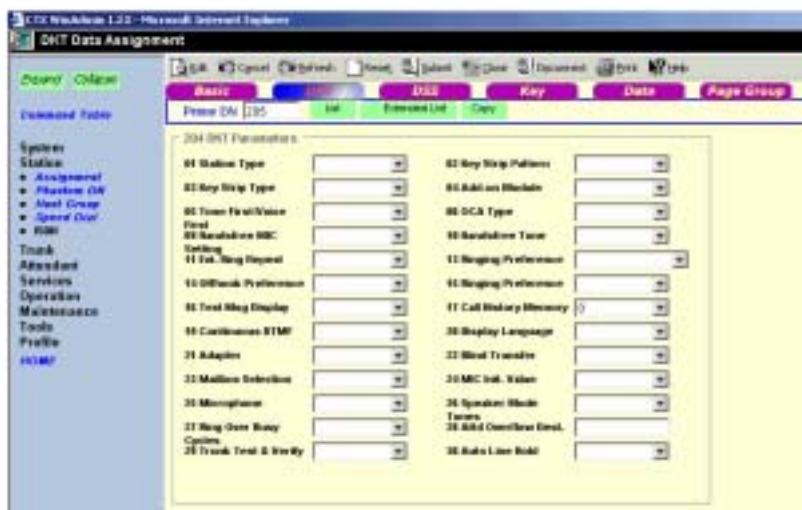
4. Enter a DN number in the *Prime DN* field

...or click one of the following buttons:

- ✦ List – view a summary list of programmed DKTs.

- ✦ Extended List – view a detailed list of programmed DKTs.

- ✦ Copy – Enter a DN in the *Prime DN* field and click Copy to make a new DKT assignment with settings copied from the DN entered into.



5. Setup the DKT by adding values to the remaining fields.

6. Click Submit.

FIELD	DESCRIPTION
<b>01 Station Type</b>	Select the Station Type. When set to Attendant, the system can support four circuits.  Possible values: Extension (default) or Attendant
<b>02 Key Strip Pattern</b>	Assign the Key strip pattern that is used by this DKT. See “ <a href="#">Feature Button Patterns</a> ” on Page 5-12 for pattern details.  Possible values: Pattern 1, 2 or None (default)
<b>03 Key Strip Type</b>	Select the number of feature buttons to assign to this station.  <b>Note</b> Although the scroll down menu enables you to choose any value from 1~24, valid values are 10, 14 and 20.  Possible values: 1, 3, 10, 14 or 20 (default)
<b>04 Add on Modules</b>	Select the number of Add On Modules (ADM) assigned to this station. This field is required if you want to program ADM FBs in Program 213. See “ <a href="#">Key</a> ” on Page 5-15.  Possible values: None (default), 1 unit, or 2 units
<b>05 Tone 1st /Voice 1st</b>	Select Tone First or Voice First signalling.  Possible values: Tone or Voice (default)
<b>06 OCA Type</b>	Select the OCA type. This field must be programmed with Auto OCA Originate below.  Possible values: Handset (default) or Speaker

FIELD	DESCRIPTION
<b>09 Handsfree MIC Setting</b>	<p>If you call a station configured for Voice First signalling, you can use this parameter to enable the called parties microphone from your DKT.</p> <p>Possible values: Enable (default) or Disable</p>
<b>10 Handsfree Tone</b>	<p>If you call a DKT configured for Voice First signalling, you can use this parameter to send a splash tone to the called party.</p> <p>Possible values: Enable (default) or Disable</p>
<b>11 Ext. Ring Repeat</b>	<p>Enable repetitive ringing for incoming Exchange / PBX / Centrex signals. Disabling this parameter defaults to standard Exchange line ringing pattern (1 sec on / 3 sec Off).</p> <p>Possible values: Enable or Disable (default)</p>
<b>13 Off Hook Preference</b>	<p>Select Off Hook Preference.</p> <p>Possible values: Idle, Ringing, Prime, No Preference, Prime and Idle, Prime and Ringing or Ringing and Idle (default)</p> <p>When a digital telephone user goes off hook, presses the Spkr Button or dials a digit while the telephone is idle (Hot Dial Pad), the telephone will select an idle PDN or Line button, or answer an incoming call, according to the preferences set in this command.</p> <p>This command works in conjunction with the "14 PDN/Line preference" and "15 Call Answer Preference" programs.</p> <p>The possible values are described as follows:</p> <ul style="list-style-type: none"> <li>• Idle – The telephone will select an idle DN or Line button depending on the "14 PDN or Line preference" choice. In either case priority is always the lowest numbered button that is idle. The telephone will not answer ringing calls automatically.</li> <li>• Ringing – The telephone will answer a ringing call (any PDN, secondary DN, PhDN, or any Line type button) by call type or longest ringing button depending on the "15 Call Answer Preference" choice. The telephone will not automatically select a DN or Line button when going off hook to originate a call.</li> <li>• Prime DN – The telephone will automatically try to select the PDN button, if idle or ringing, no matter what the status is of other buttons on the telephone.</li> <li>• No Preference – The telephone will not select any button when the user goes off hook or presses the Spkr button. This selection will also disable the telephone's Hot Dial Pad feature.</li> <li>• Prime DN and Idle – The telephone will automatically try to select the PDN button, if idle or ringing. If the PDN is busy the telephone will select an idle Line button (14 PDN or Line preference - Line Preference) or another idle DN button (14 PDN or Line preference - PDN Preference).</li> <li>• Prime DN and Ringing – The telephone will automatically try to select the PDN button, if idle or ringing. If the PDN is busy the telephone will select a ringing Line button (14 PDN or Line preference - Line Preference) or a ringing DN button (14 PDN or Line preference - PDN Preference).</li> <li>• Ringing and Idle – The telephone will always answer any ringing call according to "15 Call Answer Preference". If a call is not ringing it will select an idle Line button (14 PDN or Line preference - Line Preference) or idle DN button (14 PDN or Line preference - PDN Preference).</li> </ul>

FIELD	DESCRIPTION
<b>14 PDN/Line Preference</b>	<p>Offhook preference button Type.</p> <p>Possible values: Exchange Line Key or DN Key (default)</p> <ul style="list-style-type: none"> <li>Exchange Line Line buttons - Line buttons (any type Exchange Line, Pooled or Group Exchange Line line button) have priority over DN buttons with "13 Off Hook Preference" choices. The lowest numbered line button on the telephone has priority over other line buttons for idle selection.</li> <li>Prime DN button - DN buttons (any type PDN, Secondary DN or PhDN button) have priority over Line buttons with "13 Off Hook Preference" choices. The PDN button has first priority for idle selection, the lowest numbered DN button on the telephone has priority over other DN buttons for idle selection if the PDN button is busy.</li> </ul> <p><b>Note</b> Off hook ringing selections are also based on "15 Call Answer Preference" choices.</p>
<b>15 Ringing Preference</b>	<p>Ringing call answer preference.</p> <p>Possible values: Longest or Call Type (default)</p> <ul style="list-style-type: none"> <li>Longest Ringing - any call type - Calls are answered in order of the longest ringing line no matter what type of call (FIFO).</li> <li>Longest Ringing - by call type priority - Call Type priority is applied to the longest ringing button.</li> <li>Call Type Priorities are fixed in software as shown below:</li> <li>Emergency Calls</li> <li>Hands Free Calls (after it is switched to ringing by the caller).</li> <li>ACD calls</li> <li>Recalls (Hold recall, Automatic call back, ABR, etc.)</li> <li>External Calls (DDI, DIT DISA line calls etc.)</li> <li>Internal Calls (station, Attendant, Tie line, door phone, etc.)</li> </ul>
<b>16 Text Message Display</b>	<p>Select whether to display an LCD text message. Immediate displays the message. Not immediate does not display the message.</p> <p>Possible values: Immediate (default) or Not Immediate</p>
<b>17 Call History Memory</b>	<p>Enter the number of calls to be stored in memory for this station.</p> <p>Possible values: 0~100 (default = 0)</p>
<b>18 DTMF Back Tone</b>	<p>Enables audible DTMF when dialling from a DKT to a trunk or Voice Mail port. Padded dialling mutes the volume level to the caller not the called trunk or VM device.</p> <p>Possible values: Padded, DTMF Tone (default) or No Tone</p>
<b>19 Continuous DTMF</b>	<p>Select Continuous DTMF setting.</p> <p>Possible values: Continuous (default) or Not Continuous</p>
<b>20 Display Language</b>	<p>Select the LCD Display Language.</p> <p>Possible values: English (default), British English or French</p>
<b>21 Adapter</b>	<p>Select the Adapter Type (Desktop OAI or Attendant Console).</p> <ul style="list-style-type: none"> <li>BPCI – for USB interface.</li> <li>BATI – for PC Attendant Console Interface.</li> </ul> <p>Possible values: None (default), BPCI or BATI</p>

FIELD	DESCRIPTION
<b>22 Blind Transfer</b>	Set Blind Transfer Action (Attendant Type Only). Possible values: Leave or Separate (default)
<b>23 Mail Box Selection</b>	Select the method to enter the destination Mailbox for Manual Voice Recording. <b>Notes</b> <ul style="list-style-type: none"> <li>The DN assigned as the MSG center in Basic Station (200) is used to call the VM port or Hunt Group.</li> <li>When set to Auto, the VM-ID of the station checking the record function is sent to Stratagy ES as the destination mailbox.</li> </ul> Possible values: Auto or Manual (default)
<b>24 MIC Init. Value</b>	Turn on the microphone automatically when making a speaker phone call. <b>Note</b> The microphone must be enabled. Possible values: On (default) or Off
<b>25 Microphone</b>	Enable microphone. Possible values: Enable (default) or Disable
<b>26 Speaker Mode Tones</b>	Enable telephone to receive Call Waiting (Camp-on) and Ring Over Busy Tone while on a speaker phone call. Possible values: Yes (default) or No
<b>27 Ring Over Busy Cycles</b>	Set ROB to ring two times or continuously. Possible values: Two Cycles or Continuous (default) <b>Note</b> See PRG200, 26 to enable ROB to be sent to individual telephones.
<b>28 Attd Overflow Dest.</b>	Select overflow destination for attendant. Possible values: Up to 32 ASCII characters (default = none)
<b>29 Trunk Test and Verify</b>	Allow Trunk Tests and Verification. Possible values: Yes or No (default)
<b>30 Auto Line Hold</b>	Enable Automatic Line Hold. This parameter allows a station to "line hop" from one call to another automatically by placing the first call on hold. Possible values: Enable or Disable (default)
<b>31 Busy Mode Criteria</b>	Select mode by which to determine a DKT station to be in BUSY state. Similar to PDN/DKT mode in Strata CT. Possible values: 1:Terminal Mode 2:Line Mode (default)

1. Required DN as programmed objects must be DKT.
2. Attendant can set 8 for the system.
3. If you select "1:Extension" for FK1, FK22 is invalid.
4. When the feature key pattern is modified by FK2 (Feature Key Pattern), the choice of pattern is decided on the feature key number that was registered by FK3 (set Feature Key Number).
5. When the feature key number is modified by FK3, the contents of feature key are not modified. But the contents of key that is reduced are deleted when key number is reduced.
6. The value of FK2 (Feature Key Pattern) indicates "4.NONE" always.
7. FK7, FK8 and FK12 are not used and LED does not light. If these keys are pushed, error is indicated.

## DKT Parameters Record Sheet

Prime DN: _____							
01 Station Type		11 Ext. Ring Repeat		19 Continuous DTMF		27 Ring Over Busy Cycles	
02 Key Strip Pattern		12 Not Used		20 Display Language		28 Attd. Overflow Dest.	
03 Key Strip Type		13 Ringing Line Preference		21 Adapter		29 Trunk Test and Verify	
04 Add-on Modules		14 Off-hook Preference		22 Blind Transfer		30 Auto Line Hold	
05 Tone/Voice First		15 Ringing Preference.		23 Mail Box Selection			
06 OCA Type		16 Text Message Display		24 MIC Init. Value			
09 Handsfree MIC		17 Call History Memory		25 Microphone			
10 Handsfree Tone		18 DTMF Back Tone		26 Speaker Mode Tones			

Prime DN: _____							
01 Station Type		11 Ext. Ring Repeat		19 Continuous DTMF		27 Ring Over Busy Cycles	
02 Key Strip Pattern		12 Not Used		20 Display Language		28 Attd. Overflow Dest.	
03 Key Strip Type		13 Ringing Line Preference		21 Adapter		29 Trunk Test and Verify	
04 Add-on Modules		14 Off-hook Preference		22 Blind Transfer		30 Auto Line Hold	
05 Tone/Voice First		15 Ringing Preference.		23 Mail Box Selection			
06 OCA Type		16 Text Message Display		24 MIC Init. Value			
09 Handsfree MIC		17 Call History Memory		25 Microphone			
10 Handsfree Tone		18 DTMF Back Tone		26 Speaker Mode Tones			

Prime DN: _____							
01 Station Type		11 Ext. Ring Repeat		19 Continuous DTMF		27 Ring Over Busy Cycles	
02 Key Strip Pattern		12 Not Used		20 Display Language		28 Attd. Overflow Dest.	
03 Key Strip Type		13 Ringing Line Preference		21 Adapter		29 Trunk Test and Verify	
04 Add-on Modules		14 Off-hook Preference		22 Blind Transfer		30 Auto Line Hold	
05 Tone/Voice First		15 Ringing Preference.		23 Mail Box Selection			
06 OCA Type		16 Text Message Display		24 MIC Init. Value			
09 Handsfree MIC		17 Call History Memory		25 Microphone			
10 Handsfree Tone		18 DTMF Back Tone		26 Speaker Mode Tones			

Prime DN: _____							
01 Station Type		11 Ext. Ring Repeat		19 Continuous DTMF		27 Ring Over Busy Cycles	
02 Key Strip Pattern		12 Not Used		20 Display Language		28 Attd. Overflow Dest.	
03 Key Strip Type		13 Ringing Line Preference		21 Adapter		29 Trunk Test and Verify	
04 Add-on Modules		14 Off-hook Preference		22 Blind Transfer		30 Auto Line Hold	
05 Tone/Voice First		15 Ringing Preference.		23 Mail Box Selection			
06 OCA Type		16 Text Message Display		24 MIC Init. Value			
09 Handsfree MIC		17 Call History Memory		25 Microphone			
10 Handsfree Tone		18 DTMF Back Tone		26 Speaker Mode Tones			

Prime DN: _____							
01 Station Type		11 Ext. Ring Repeat		19 Continuous DTMF		27 Ring Over Busy Cycles	
02 Key Strip Pattern		12 Not Used		20 Display Language		28 Attd. Overflow Dest.	
03 Key Strip Type		13 Ringing Line Preference		21 Adapter		29 Trunk Test and Verify	
04 Add-on Modules		14 Off-hook Preference		22 Blind Transfer		30 Auto Line Hold	
05 Tone/Voice First		15 Ringing Preference.		23 Mail Box Selection			
06 OCA Type		16 Text Message Display		24 MIC Init. Value			
09 Handsfree MIC		17 Call History Memory		25 Microphone			
10 Handsfree Tone		18 DTMF Back Tone		26 Speaker Mode Tones			

Prime DN: _____							
01 Station Type		11 Ext. Ring Repeat		19 Continuous DTMF		27 Ring Over Busy Cycles	
02 Key Strip Pattern		12 Not Used		20 Display Language		28 Attd. Overflow Dest.	
03 Key Strip Type		13 Ringing Line Preference		21 Adapter		29 Trunk Test and Verify	
04 Add-on Modules		14 Off-hook Preference		22 Blind Transfer		30 Auto Line Hold	
05 Tone/Voice First		15 Ringing Preference.		23 Mail Box Selection			
06 OCA Type		16 Text Message Display		24 MIC Init. Value			
09 Handsfree MIC		17 Call History Memory		25 Microphone			
10 Handsfree Tone		18 DTMF Back Tone		26 Speaker Mode Tones			

## Feature Button Patterns

The following tables show the various feature button patterns available for **FB02** above.

**Table 5-1 20 Button (when FB03 value is 20)**

	PATTERN1	PATTERN2	PATTERN3
<b>FB01</b>	Prime DN	Prime DN	Prime DN
FB02	CO 1	CO 1	No Data
FB03	CO 2	CO 2	No Data
FB04	CO 3	CO 3	No Data
FB05	CO 4	CO 4	No Data
FB06	CO 5	CO 5	No Data
FB07	CO 6	CO 6	No Data
FB08	CO 7	CO 7	No Data
FB09	CO 8	CO 8	No Data
FB10	CO 9	CO 9	No Data
FB11	CO 10	CO 10	No Data
FB12	CO 11	CO 11	No Data
FB13	CO 12	CO 12	No Data
FB14	CO 13	Single Touch Button	No Data
FB15	CO 14	Single Touch Button	No Data
FB16	CO 15	Single Touch Button	No Data
FB17	CO 16	Single Touch Button	No Data
FB18	CO 17	Single Touch Button	No Data
FB19	CO 18	Single Touch Button	No Data
FB20	Do Not Disturb	Do Not Disturb	No Data

**Table 5-2 10 Button (when FB03 value is 10)**

	PATTERN1	PATTERN2	PATTERN3
<b>FB01</b>	Prime DN	Prime DN	Prime DN
<b>FB02</b>	CO 1	CO 1	No Data
<b>FB03</b>	CO 2	CO 2	No Data
<b>FB04</b>	CO 3	CO 3	No Data
<b>FB05</b>	CO 4	CO 4	No Data
<b>FB06</b>	CO 5	Single Touch Button	No Data
<b>FB07</b>	CO 6	Single Touch Button	No Data
<b>FB08</b>	CO 7	Single Touch Button	No Data
<b>FB09</b>	CO 8	Single Touch Button	No Data
<b>FB10</b>	Do Not Disturb	Do Not Disturb	No Data

**Table 5-3 14 Button (when FB03 value is 14)**

	<b>PATTERN1</b>	<b>PATTERN2</b>	<b>PATTERN3</b>
<b>FB01</b>	Prime DN	Prime DN	Prime DN
<b>FB02</b>	CO 1	No Data	No Data
<b>FB03</b>	CO 2	No Data	No Data
<b>FB04</b>	CO 3	No Data	No Data
<b>FB05</b>	CO 4	No Data	No Data
<b>FB06</b>	CO 5	No Data	No Data
<b>FB07</b>	No Data	No Data	No Data
<b>FB08</b>	CO 7	No Data	No Data
<b>FB09</b>	CO 8	No Data	No Data
<b>FB10</b>	CO 9	No Data	No Data
<b>FB11</b>	CO 10	No Data	No Data
<b>FB12</b>	CO 11	No Data	No Data
<b>FB13</b>	Do Not Disturb	No Data	No Data
<b>FB14</b>	No Data	No Data	No Data

## 214 DSS Console Assignment

**Prerequisite Program:** 200 on Page 5-1

This assignment allows up to eight Direct Station Selection (DSS) Consoles to be assigned to a station. The assignment is referenced to the station's Prime DN.

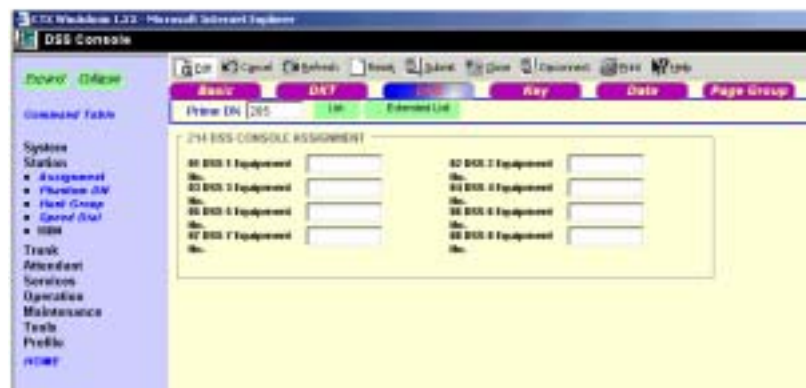
1. From the Program Menu, click Station > Assignment.
2. Click on the DSS tab (shown right).

3. Enter a DN number in the *Prime DN* field

...or click one of the following buttons:

- ✦ List – view a summary list of programmed DSSs.
- ✦ Extended List – view a detailed list of programmed DSSs.

4. Enter the Equipment number in which the DSS(s) is installed.
5. Click Submit.



FIELD	DESCRIPTION
<b>Prime DN</b>	Enter the Prime Directory Number of the station that is to be associated with the DSS console(s). Possible values: Any string up to 5 digits (default = no value).
<b>01~08 DSS Equipment No. 1~8</b>	Enter the DSS equipment number as xxyyzz. Possible values: xx = Cabinet 01~07; yy = Slot 01~10; zz = Circuit 01~16 Cabinet – Select 01 for Base and Expansion cabinet (Strata CTX 100). Select 01 for Base and 02~07 respectively for each Expansion cabinet (Strata CTX 670). Slot – Select 01~04 for Base slots and 05~08 for Expansion slots (Strata CTX 100). Select 01~08 for Base slots and 01~10 for Expansion slots. (default = no value)  Example: If the DSS console should be connected to a PDKU or BDKU/BDKS in cabinet shelf 5, slot 2, circuit 3, enter 050203.  <b>Note</b> If a PDN is assigned to the DSS equipment number it must be deleted, using PRG201, before attempting to assign the DSS console.



## Key

**Program Number(s): 205/213/215**

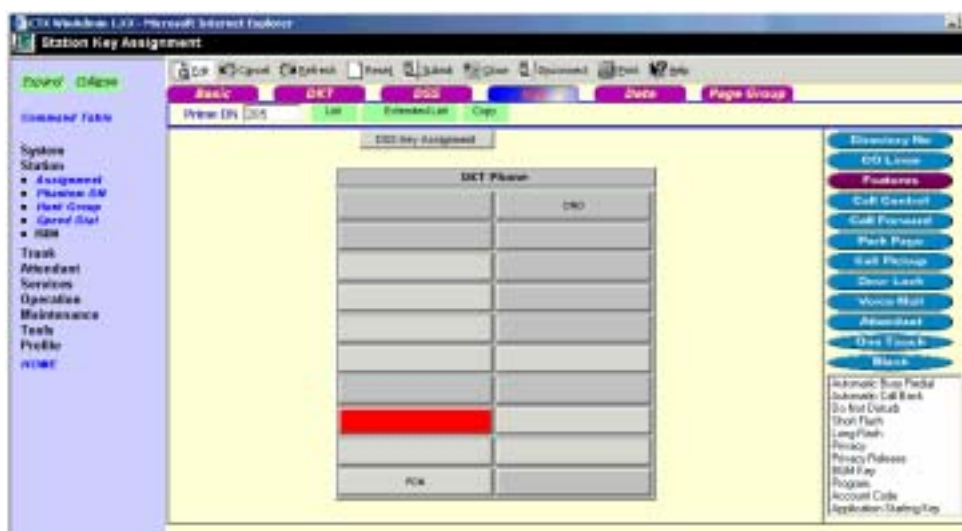
**Prerequisite Program:** 200 *on Page 5-1* and 204 *on Page 5-7*

The Feature Button assignments enable each button on the telephone to be addressed and coded to represent a function or feature to be performed. Some feature buttons require additional parameters to completely define the key (e.g., a Phantom DN needs a directory number, ringing assignment, and the tone pitch when ringing occurs).

1. Use the “[Feature Button Record Sheet](#)” *on Page 5-19* to plan your FB assignments.
2. From the Program Menu, click Station > Assignment.
3. Click on the Key tab (shown below).

### Notes

- ◆ To Program DSS buttons, Program 214 should be completed.
- ◆ To program ADM buttons (ADM 1 or ADM 2 shown below), FB04 *Add on Modules* in Program 204 must be set to One or Two.



4. Enter one of the following in the *Prime DN* field:
  - ✦ Prime DN to program DKT FBs.
  - ✦ Prime DN plus an ADM number to Program ADM FBs.
  - ✦ Prime DN plus DSS Key Assignment button to program DSS FBs
 ...or click one of the following buttons:
  - ✦ List – view a summary list of programmed DKTs.
  - ✦ Extended List – view a detailed list of programmed DKTs.
  - ✦ Copy – After entering the source DN in the *Prime DN* field, click Copy and designate which FB buttons to copy (click the DKT Phone header to select all). Enter the destination DN and click OK. (Range is permitted.)

5. Click on the FB to program (the button turns from yellow to red).
6. Click the desired option from the blue parameter buttons on the right.
  - ♦ Directory No – Assign a Prime DN key, Secondary/Phantom DN, Phantom DN Message Waiting, or DSS key to this FB. See [“Directory Number Sub-parameters” on Page 5-17](#) for more details.
  - ♦ Exchange Line – Assign FB as an Exchange Line, GCO or a Pooled Line. See [“Exchange Lines Sub-parameters” on Page 5-18](#) for more details.
  - ♦ Features – Assign ABR, ACB, DND, Short Flash, Long Flash, Privacy, Privacy Release, BGM Key, Program Access, Account Code or Application Starting Key feature to this FB.
  - ♦ Call Control – Activate Speed Dial, Release Button, Release/Answer, Cancel, Source Party, Destination Party, CLID or Night Transfer from this FB.
  - ♦ Call Forward – Set Call Forwarding assignments for this FB. Forward All Calls, Forward Busy, Forward No Answer, Forward Busy No Answer, Forward Ext/All Call, Forward Ext/Busy, Forward Ext/No Answer and Forward Ext/Busy No Answer are available selections.
  - ♦ Park Page – Assign Call Park Orbit, All Paging, Group Paging, All Emergency Paging, Individual Emergency Paging and Paging Answer Feature access to this FB.
  - ♦ Call Pickup – Assign FB to a Pickup-Group, Pickup-Directed Terminal, Pickup-Directed Group, Pickup-Directed DN, Pickup-Any External, Pickup-Exchange Line Retrieve, Pickup-Local Retrieve, Pickup-Remote, Pickup-Directed DN Retrieve and Pickup-On Hold and Incoming.
  - ♦ Door Lock – Enable FB to unlock Door Lock. See [“Door Lock Sub-parameters” on Page 5-18](#) for more details.
  - ♦ Voice Mail – Enable FB to Record or Pause/Resume Voice Mail.
  - ♦ Attendant – Assign Out Dial, Attendant Answer, Overflow, Position Busy, Trunk Test, Attendant Loop or Supervised Loop Key Attendant features to this FB.
  - ♦ One Touch – Assign FB to be used as a One Touch button.
  - ♦ Blank – Clear FB assignment.
7. Click on one feature in the sub-parameter dialogue box. If no other settings are required, the FB displays an abbreviation for the selected feature.

...or if you select Directory No, Exchange Lines or Door Lock parameters, additional fields are required. See the tables that follow for more details. Follow the directions in each pop-up dialogue box.
8. Click Submit.

## Directory Number Sub-parameters

FIELD	DESCRIPTION
<b>Primary DN</b>	<ol style="list-style-type: none"> <li>1. Select <i>Ringling Assignment</i> for <i>Day1</i>, <i>Day2</i> and <i>Night</i>. Possible values: No Ring, Immediate Ring, Delayed Ring1 and Delayed Ring2.</li> <li>2. Select <i>Tone Pitch</i> for External Call. Possible values: 01~02, 11~18 (default = 11)</li> <li>3. Select <i>Tone Pitch</i> for Internal Call. Possible values: 01~02, 11~18 (default = 01)</li> </ol>
<b>Secondary/Phantom DN</b>	<ol style="list-style-type: none"> <li>1. Enter <i>DN Number</i>. Possible values: Any string up to 5 digits</li> <li>2. Select <i>Ringling Assignment</i> for <i>Day1</i>, <i>Day2</i> and <i>Night</i>. Possible values: No Ring, Immediate Ring, Delayed Ring1 and Delayed Ring2.</li> <li>3. Select <i>Tone Pitch</i> for External Call. Possible values: 01~02, 11~18 (default = 11)</li> <li>4. Select <i>Tone Pitch</i> for Internal Call. Possible values: 01~02, 11~18 (default = 01)</li> </ol>
<b>Phantom DN Message Warning</b>	<p>Enter <i>Phantom DN No</i>.</p> <p>Possible values: Any string up to 5 digits</p>
<b>DSS Key</b>	<p>Enter <i>DSS Prime DN No</i>.</p> <p>Possible values: Any string up to 5 digits</p>

## Exchange Lines Sub-parameters

FIELD	DESCRIPTION
<b>Exchange Line</b>	<ol style="list-style-type: none"> <li>1. Select <i>Exchange Line #</i>. Possible values: 1~264 (CTX670), 1~64 (CTX100) (default = no value)</li> <li>2. Enter <i>Owner DN</i>. Possible values: Any string up to 5 digits</li> <li>3. Select <i>Ringling Assignment</i> for <i>Day1</i>, <i>Day2</i> and <i>Night</i>. Possible values: No RIng, Immediate Ring, Delayed Ring1 and Delayed Ring2.</li> <li>4. Select <i>Tone Pitch</i>. Possible values: 01~02, 11~18 (default = 11)</li> </ol>
<b>GCO</b>	<ol style="list-style-type: none"> <li>1. Select <i>GCO No</i>. Possible values: 1~128 (CTX670), 1~32 (CTX100) (default = no value)</li> <li>2. Select <i>Index</i>. Possible values: 1~128 (CTX670), 1~32 (CTX100) (default = no value)</li> <li>3. Enter <i>Owner DN</i>. Possible values: Any string up to 5 digits</li> <li>4. Select <i>Ringling Assignment</i> for <i>Day1</i>, <i>Day2</i> and <i>Night</i>. Possible values: No RIng, Immediate Ring, Delayed Ring1 and Delayed Ring2.</li> <li>5. Select <i>Tone Pitch</i>. Possible values: 01~02, 11~18 (default = 11)</li> </ol>
<b>Pooled Line Key</b>	<ol style="list-style-type: none"> <li>1. Select <i>Pool Line No</i>. Possible values: 1~128 (CTX670), 1~32 (CTX100) (default = no value)</li> <li>2. Select <i>Ringling Assignment</i> for <i>Day1</i>, <i>Day2</i> and <i>Night</i>. Possible values: No RIng, Immediate Ring, Delayed Ring1 and Delayed Ring2.</li> <li>3. Select <i>Tone Pitch</i>. Possible values: 01~02, 11~18 (default = 11)</li> </ol>

## Door Lock Sub-parameters

FIELD	DESCRIPTION
<b>Door Unlock</b>	<p>Select <i>Door Lock No</i>.</p> <p>Possible values: 1~10 (default = 1)</p>

[illegible]

## Button Assignment Record Sheets

Use the following record sheets together with the [“Record Sheets for 10-button and 20-button Telephones” on Page 5-20](#) and [“Record Sheets for the DKT3014” on Page 5-21](#) to plan your Station Flexible Button Assignments.

### Record Sheets for 10-button and 20-button Telephones

PDN No. _____		10 <input type="checkbox"/>	20 <input type="checkbox"/>	DSS <input type="checkbox"/>	ADM <input type="checkbox"/>
Location:					
Button	Code	Button	Code		
10		20			
09		19			
08		18			
07		17			
06		16			
05		15			
04		14			
03		13			
02		12			
01		11			

PDN No. _____		10 <input type="checkbox"/>	20 <input type="checkbox"/>	DSS <input type="checkbox"/>	ADM <input type="checkbox"/>
Location:					
Button	Code	Button	Code		
10		20			
09		19			
08		18			
07		17			
06		16			
05		15			
04		14			
03		13			
02		12			
01		11			

PDN No. _____		10 <input type="checkbox"/>	20 <input type="checkbox"/>	DSS <input type="checkbox"/>	ADM <input type="checkbox"/>
Location:					
Button	Code	Button	Code		
10		20			
09		19			
08		18			
07		17			
06		16			
05		15			
04		14			
03		13			
02		12			
01		11			

PDN No. _____		10 <input type="checkbox"/>	20 <input type="checkbox"/>	DSS <input type="checkbox"/>	ADM <input type="checkbox"/>
Location:					
Button	Code	Button	Code		
10		20			
09		19			
08		18			
07		17			
06		16			
05		15			
04		14			
03		13			
02		12			
01		11			

PDN No. _____		10 <input type="checkbox"/>	20 <input type="checkbox"/>	DSS <input type="checkbox"/>	ADM <input type="checkbox"/>
Location:					
Button	Code	Button	Code		
10		20			
09		19			
08		18			
07		17			
06		16			
05		15			
04		14			
03		13			
02		12			
01		11			

PDN No. _____		10 <input type="checkbox"/>	20 <input type="checkbox"/>	DSS <input type="checkbox"/>	ADM <input type="checkbox"/>
Location:					
Button	Code	Button	Code		
10		20			
09		19			
08		18			
07		17			
06		16			
05		15			
04		14			
03		13			
02		12			
01		11			

PDN No. _____		10 <input type="checkbox"/>	20 <input type="checkbox"/>	DSS <input type="checkbox"/>	ADM <input type="checkbox"/>
Location:					
Button	Code	Button	Code		
10		20			
09		19			
08		18			
07		17			
06		16			
05		15			
04		14			
03		13			
02		12			
01		11			

PDN No. _____		10 <input type="checkbox"/>	20 <input type="checkbox"/>	DSS <input type="checkbox"/>	ADM <input type="checkbox"/>
Location:					
Button	Code	Button	Code		
10		20			
09		19			
08		18			
07		17			
06		16			
05		15			
04		14			
03		13			
02		12			
01		11			

PDN No. _____		10 <input type="checkbox"/>	20 <input type="checkbox"/>	DSS <input type="checkbox"/>	ADM <input type="checkbox"/>
Location:					
Button	Code	Button	Code		
10		20			
09		19			
08		18			
07		17			
06		16			
05		15			
04		14			
03		13			
02		12			
01		11			

PDN No. _____		10 <input type="checkbox"/>	20 <input type="checkbox"/>	DSS <input type="checkbox"/>	ADM <input type="checkbox"/>
Location:					
Button	Code	Button	Code		
10		20			
09		19			
08		18			
07		17			
06		16			
05		15			
04		14			
03		13			
02		12			
01		11			

PDN No. _____		10 <input type="checkbox"/>	20 <input type="checkbox"/>	DSS <input type="checkbox"/>	ADM <input type="checkbox"/>
Location:					
Button	Code	Button	Code		
10		20			
09		19			
08		18			
07		17			
06		16			
05		15			
04		14			
03		13			
02		12			
01		11			

PDN No. _____		10 <input type="checkbox"/>	20 <input type="checkbox"/>	DSS <input type="checkbox"/>	ADM <input type="checkbox"/>
Location:					
Button	Code	Button	Code		
10		20			
09		19			
08		18			
07		17			
06		16			
05		15			
04		14			
03		13			
02		12			
01		11			

## Record Sheets for the DKT3014

PDN No. _____			
Location:			
Button	Code	Button	Code
07		14	
06		13	
05		12	
04		11	
03		10	
02		09	
01		08	

PDN No. _____			
Location:			
Button	Code	Button	Code
07		14	
06		13	
05		12	
04		11	
03		10	
02		09	
01		08	

PDN No. _____			
Location:			
Button	Code	Button	Code
07		14	
06		13	
05		12	
04		11	
03		10	
02		09	
01		08	

PDN No. _____			
Location:			
Button	Code	Button	Code
07		14	
06		13	
05		12	
04		11	
03		10	
02		09	
01		08	

PDN No. _____			
Location:			
Button	Code	Button	Code
07		14	
06		13	
05		12	
04		11	
03		10	
02		09	
01		08	

PDN No. _____			
Location:			
Button	Code	Button	Code
07		14	
06		13	
05		12	
04		11	
03		10	
02		09	
01		08	

PDN No. _____			
Location:			
Button	Code	Button	Code
07		14	
06		13	
05		12	
04		11	
03		10	
02		09	
01		08	

PDN No. _____			
Location:			
Button	Code	Button	Code
07		14	
06		13	
05		12	
04		11	
03		10	
02		09	
01		08	

PDN No. _____			
Location:			
Button	Code	Button	Code
07		14	
06		13	
05		12	
04		11	
03		10	
02		09	
01		08	

PDN No. _____			
Location:			
Button	Code	Button	Code
07		14	
06		13	
05		12	
04		11	
03		10	
02		09	
01		08	

PDN No. _____			
Location:			
Button	Code	Button	Code
07		14	
06		13	
05		12	
04		11	
03		10	
02		09	
01		08	

PDN No. _____			
Location:			
Button	Code	Button	Code
07		14	
06		13	
05		12	
04		11	
03		10	
02		09	
01		08	

PDN No. _____			
Location:			
Button	Code	Button	Code
07		14	
06		13	
05		12	
04		11	
03		10	
02		09	
01		08	

PDN No. _____			
Location:			
Button	Code	Button	Code
07		14	
06		13	
05		12	
04		11	
03		10	
02		09	
01		08	

PDN No. _____			
Location:			
Button	Code	Button	Code
07		14	
06		13	
05		12	
04		11	
03		10	
02		09	
01		08	

PDN No. _____			
Location:			
Button	Code	Button	Code
07		14	
06		13	
05		12	
04		11	
03		10	
02		09	
01		08	

PDN No. _____			
Location:			
Button	Code	Button	Code
07		14	
06		13	
05		12	
04		11	
03		10	
02		09	
01		08	

PDN No. _____			
Location:			
Button	Code	Button	Code
07		14	
06		13	
05		12	
04		11	
03		10	
02		09	
01		08	

PDN No. _____			
Location:			
Button	Code	Button	Code
07		14	
06		13	
05		12	
04		11	
03		10	
02		09	
01		08	

PDN No. _____			
Location:			
Button	Code	Button	Code
07		14	
06		13	
05		12	
04		11	
03		10	
02		09	
01		08	

## Data

### Program Number(s): 208, 210 and 216

Assign Timers, Paging and other related station data using the programs that follow.

1. Complete the Station Data record sheet provided on [Page 5-35](#).
2. From the Program Menu click Station > Assignment.
3. Click on the Data tab (shown right).
4. Enter a DN number in the *Prime DN* field.

...or select an existing record by clicking one of the following buttons:

- ✦ List – view a summary list of programmed DKTs.
- ✦ Extended List – view a detailed list of programmed DKTs.
- ✦ Copy – Enter a DN in the *Prime DN* field and click Copy. Enter a new DN to assign existing Station Timer settings.

5. Select the desired values. See descriptions below.
6. Click Submit.

### 208 Station Timer Assignments

**Prerequisite Program:** 200 on [Page 5-1](#)

Assigns timing parameters to Prime DNs.

FIELD	DESCRIPTION
<b>Prime DN</b>	Enter the Prime DN. Possible values: Up to 5 digits (default = no value)
<b>01 ABR Retry Count</b>	Enter the number of retry attempts made by ABR when dialling a busy telephone number. Possible values: 2~20 (default = 15)
<b>02 ABR Retry Interval Timer</b>	Select the amount of time (in seconds) ABR waits between dialling attempts. Possible values: 30~180 (default = 60)
<b>03 ABR Recall Timer</b>	Select the number of seconds ABR will call back the station after receiving ring back tone from the dialled number. Possible values: 5~60 (default = 20)
<b>04 Hold Recall Timer</b>	Select the number of seconds before a call is placed on hold recalls. Possible values: 0~255 (default = 60)



FIELD	DESCRIPTION
<b>05 First Interdigit Timer</b>	Select the amount of time a Station has to dial a feature access code after going off hook before a call is terminated (ROT is heard). Possible values: 1~180 (default = 15)
<b>06 Second Interdigit Timer</b>	Select the amount of time the system waits between dialled digits before terminating a call (ROT is heard). Possible values: 1~180 (default = 5)
<b>07 Ring Xfer No Answer Timer</b>	Select the Ring Transfer Idle station or Busy station (Camp-on) Recall Time (in seconds) Possible values: 1~600 (default = 32)

**Note**

1. Administrator inputs invalid value then system output error.
2. In Assignment of Hold Recall Timer(FK4), if 0 is registered, Hold Recall is not activated.

**210 Group Call Pickup**

**Prerequisite Program:** 200 [on Page 5-1](#)

The Call Pickup Group assignment specifies which group numbers this station will participate when either the Group Call Pickup or the Group Directed Call Pickup features are invoked. A user may be assigned to more than one group.

FIELD	DESCRIPTION
<b>01~32</b>	Click in the radio button to Indicate which Call Pickup Group(s) this stations is to participate in. A station can be assigned to more than one group. Possible values: check = On or unchecked = Off (default)

**216 Emergency Ringdown Assignment**

**Prerequisite Program:** 200 [on Page 5-1](#)

Assigns Emergency Ring Down parameters to Prime DN's.

FIELD	DESCRIPTION
<b>01 Emergency Ringdown</b>	Enable an Emergency Ringdown Number. Possible values: Enable or Disable (default)
<b>02 Emergency Ringdown Timer</b>	Enter the length of off-hook time that will cause a DN to originate an Emergency Possible values: 0~60 (default = 0)
<b>03 Destination</b>	Enter the destination DN for the Emergency Ringdown. Possible values: Up to 5 digits (default = no value)

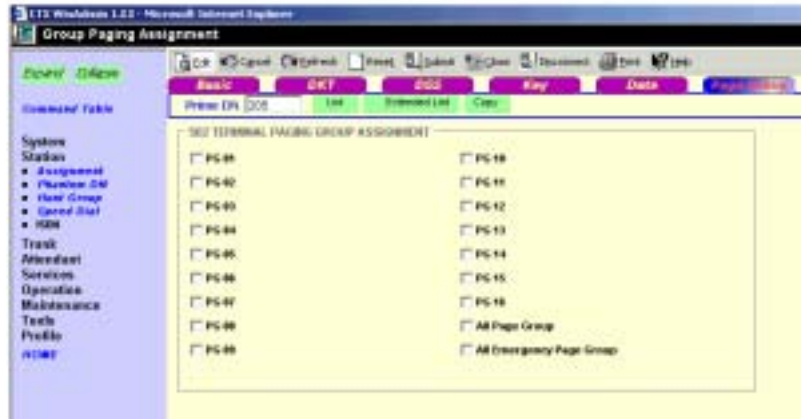
## Page Group

## 502 Terminal Paging Group Assignment

**Prerequisite Program:** 200 *on Page 5-1*

### Assigns Prime DNs to Paging Group(s).

1. Complete the Station Data record sheet provided on [Page 5-35](#).
2. From the Program Menu click Station > Assignment.
3. Click on the Page Group tab (shown right).
4. Enter a DN number in the *Prime DN* field.



...or select an existing record by clicking one of the following buttons:

- ✦ List – view a summary list of programmed DKTs.
  - ✦ Extended List – view a detailed list of programmed DKTs.
  - ✦ Copy – Enter a DN in the *Prime DN* field and click Copy. Enter a new DN(s) to assign existing Paging Group settings.
5. Select the desired values. See descriptions below.
6. Click Submit.

FIELD	DESCRIPTION
<b>00 Prime DN</b>	<p>Enter the Prime DN of the station to be assigned to Paging Groups. A station may belong to more than one paging group</p> <p>Possible values: Up to 5 ASCII characters (default = no value)</p>
<b>01 PG01~16</b>	<p>Check the Paging Group(s) this station belongs too.</p> <p>Possible values: check = On or unchecked = Off (default)</p>
<b>17 All Paging Group</b>	<p>Check this radio button to enter this station in all Paging Groups.</p> <p>Possible values: check = On or unchecked = Off (default)</p>
<b>18 All Emergency Page Group</b>	<p>Check this radio button to enter this station in all Emergency Paging Groups.</p> <p>Possible values: check = On or unchecked = Off (default)</p>

## 206 Phantom DN

**Prerequisite Program:** 200 on Page 5-1

This command assigns Phantom DN parameters.

1. Complete the “Phantom DN Record Sheet” on Page 5-27.

2. From the Program Menu, click Station > Phantom DN. The Station Phantom DN screen displays (shown right).



3. Enter a *Phantom DN* number  
...or click one of the following buttons:
  - ✦ List – view a summary list of programmed Phantom DN's.
  - ✦ Copy – Enter the Phantom DN to copy data from, then click Copy and designate a Phantom DN to copy the data too. Click OK.
4. Click Submit.

FIELD	DESCRIPTION
<b>Phantom DN</b>	Enter Phantom DN. Possible values: Up to 5 ASCII characters (default = no value)
<b>01 Owned PDN</b>	Set PhantomDN's Owner Station Possible values: Up to 5 ASCII characters (default = no value)
<b>02 Tone/Voice First</b>	Select from Tone first, or Voice first signalling. Possible values: Tone First (default) or Voice First
<b>04 Display DN</b>	Enter the number displayed on the calling telephone that rings this Phantom DN number. Possible values: Up to 5 ASCII characters (default = no value) This number is overridden by the number in Program 209, FB04 (if assigned) and if the Phantom DN is in a hunt group. When calling from this Phantom DN, the number displayed on the called telephone appears in order of priority as follows: This number in Program 209, FB04 (if assigned) and if the PhDN is in a hunt group. ...or This number in Program 200, FB15 (if assigned). ...or The calling telephone's PDN.
<b>05 System Call Forward</b>	Select the System Call Forward value. Possible values: 0~32 (default = 0)

FIELD	DESCRIPTION
<b>06 VM ID Code</b>	<p>Enter the voice mail box number that should answer calls when this PhDN calls voice mail; or, when this PhDN is called and then forwards to voice mail (This number is prefixed by codes in Program 579, <b>FB11~FB16</b>).</p> <p>Possible values: Digits 0~9, * and #, up to 16 characters (default = no value).</p> <p>This VMID code is sent to the voice mail device in SMDI packets or DTMF tones on direct calls to voice mail from the PhDN; and on calls to the PhDN that forward to voice mail (see Program 580 for SMDI or DTMF choice).</p> <p><b>Note</b> Do not enter a VMID code in this field if this PhDN is associated with a PDN in a multiple DN hunt group (Program 209, <b>FB06</b>).</p> <p>The associated PDN's VMID code (Program 200, <b>FB19</b>) will be sent to voice mail.</p>
<b>09 Message Center</b>	<p>Enter the Message Waiting Centre DN, VM Pilot Number or lowest member of VM hunt group.</p> <p>Up to 5 ASCII characters (default = no value)</p>
<b>10 User Name</b>	<p>Enter user name.</p> <p>Possible values: Up to 8 ASCII characters (default = no value)</p>
<b>11 Display Name</b>	<p>Select radio button for user name to be included in the list display of Large LCD (Directory Assistance)</p> <p>Possible values: Enable or Disable (default)</p>

[illegible]

## 209 Hunt Group

**Prerequisite Program:** 200 on Page 5-1

This command assigns Station Hunting Group data.

1. Complete the “[Hunt Group Record Sheet](#)” on Page 5-30.
2. From the Program Menu, click Station > Hunt Group. The Station Hunt Group displays.
3. Click on the Group tab (shown right).
4. Enter a *Group Number* for an existing record

...or click one of the following buttons:

- ♦ List – view a summary list of programmed Hunt Groups.
  - ♦ Create – Assign a new Hunt Group with custom settings.
5. Click Submit.

FIELD	DESCRIPTION
<b>Group Number</b>	Hunt Group Number Possible values: 1~640 (CTX670), 1~90 (CTX100) (default = no value)
<b>01 Hunt Method</b>	Select Hunt Method Possible values: Distributed (for Voice Mail hunt groups) or Circular (for Multiple DN hunt groups) (default)
<b>02 Pilot Number</b>	Enter Pilot Directory Number. This is the number that is dialed to call the hunt group. Possible values: Up to 5 ASCII characters (default = no value) any type of hunt group can have a pilot number. <b>Note</b> Any type of hunt group can have a pilot number. Distributed hunt groups must have a pilot number. Voice Mail hunt groups should be Distributed with a Pilot Number. Multiple DN Hunt groups should be Circular with no Pilot Number.
<b>04 Number to Display</b>	Enter the number that is displayed when called by, or when calling any member of the hunt group. Possible values: Up to 5 ASCII characters (default = no value) <b>Note</b> This number should be the DH Group Pilot number for Voice Mail hunt groups. This number could be the PDN of a Multiple DN Hunt group, in which case the number would override the number assigned in Program 200, FB15 for PDNs and Program 206, FB04 for Phantom DNs.

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FIELD	DESCRIPTION
<b>05 Pilot No. SCFwd</b>	Allows you to assign a System Call Forward pattern to the Pilot Number of a Hunt Group. Possible values: 0~32 (default = 0)
<b>06 Multiple DN Hunt</b>	Enable if hunt group is created for multiple DN operation. Multiple DN hunt groups should be circular with no pilot number. Possible values: Enable or Disable (default)
<b>07 DHG Auto Camp-on</b>	Whether to execute Automatic Camp On to the Distributed Hunt Group or not. Possible values: Enable or Disable (default) Should be applied to VM Distributed Hunt Groups so callers automatically camp on to Voice Mail when all VM ports are busy. Does not apply to Circular or Serial hunt groups.

# Hunt Group Record Sheet

[illegible][illegible]



## 517 Multiple Calling Group Assignments

FIELD	DESCRIPTION
<b>00 Index Number</b>	Set MC Group index number Possible values: 1~64 (default = blank)
<b>01 Pilot Number</b>	Assign pilot number to MC Group. Possible values: numeric characters - maximum of 5 ASCII characters. (default = blank)
<b>02 Delay 1 Timer</b>	Set delay 1 timer for MC Group. Possible values: 1~180 sec (default = 12 sec)
<b>03 Delay 2 Timer</b>	Set delay 2 timer for MC Group. Possible values: 1~180 sec (default = 24 sec)
<b>04 System CF Index</b>	Assign a System Call Forward Template to a MC Group Index Number. Possible values: 0~32 (default = 0)
<b>05 VM ID</b>	Assign VM ID to MC Group Possible values: alphanumeric characters -maximum of 16 ASCII characters. (default = blank)
<b>06 MW Centre Port</b>	Assign MW Centre Port to MC Group. Possible values: numeric characters - maximum of 5 ASCII characters. (default = blank)
<b>07 COS Day 1</b>	Set COS for Day 1. Possible values: 1~32 (default = 1)
<b>COS Day 2</b>	Set COS for Day 2. 1~32 (default = 1)
<b>COS Night</b>	Set COS for Night. 1~32 (default = 1)

### Note

1. If the administrator sets new FK1 (Multiple Calling Group Number), he has to input always.
2. If the administrator sets new FK1 (Multiple Calling Group Number), the System outputs error.
3. On setting FK1, if the administrator sets existing MCP NO. and DN already, the system outputs error.

## 518 Multiple Calling Group Member Assignments

FIELD	DESCRIPTION
<b>00 Index Number</b>	Set MC Group index number Possible values: 1~64 (default = blank)
<b>01 Destination List Index Number</b>	Set member index number within the MC Group Possible values: 1~25 (default = blank)
<b>02 Destination Type</b>	Define destination type Possible values: No Data or Dialling Digits (default = No Data)
<b>Destination Number</b>	Define destination number. Possible values: maximum of 32 ASCII characters (default = blank)
<b>03 Destination Call Type</b>	Set destination call termination type Possible values: 1: Immediate(default) 2: Delay 1 3: Delay 2

### Note

1. When the administrator doesn't do setting that the destination list index is the 1, if he is setting the destination list index of after the 2, the system outputs error.
2. When the destination list index is the 1, the call type of destination is immediate always.
3. On setting destination number, the administrator can set an only external line.
4. On setting the destination list index, the administrator cannot set an external line to the destination number.
5. On setting the destination list index, the administrator can only change the destination number.
6. On setting the destination number, if DKT and SLT, ISDN station doesn't exist, the system output error.
7. When the administrator set, if the setting of Multiple Calling Group (prog 518) is no data, the system output error.

## 519 Delete Multiple Calling Group

FIELD	DESCRIPTION
<b>01 Delete Index Number</b>	Delete MC Group index number Possible values: 1~64 (default = blank)

## 218 Station Hunt Assignments

**Prerequisite Program:** 209 on Page 5-28

This program assigns station DNs to Hunt Groups using Program 209, and assigns the rotation order in which DNs are hunted.

1. Complete the “[Hunt Group Record Sheet](#)” on Page 5-30.
2. From the Program Menu, click Station > Hunt Group Assignment. The Station Hunt Group Assignment screen displays.
3. Click on the Member tab (shown right).
4. Enter a *Member Number* for an existing record  
...or click one of the following buttons:



- ✦ List – view a summary list of programmed Hunt Groups.
- ✦ Add – Assign a new station DN to the Hunt Group number entered above.
- ✦ Append – Assign a new DN as the last DN in a Hunt Group’s hunt order.
- ✦ Modify – Highlight an existing DN in the Hunt Order and change the station DN assignment.
- ✦ Delete – Delete station DN assignment to Hunt Order number.

5. Click Submit.

FIELD	DESCRIPTION
<b>Hunt Group Number</b>	Enter an existing Hunt Group number or use the List, Add, Append, Modify, or Delete buttons as described above.  Possible values: 1~640 (default = no value)
<b>01 Hunt Order</b>	This field assigns a station DNs position within a Hunt Group’s Hunt Order. The Hunt Order is selected automatically by CTX WinAdmin. Programmers should assign the last station in the Hunt Order first and assign the first station in the Hunt Order last.  Possible values: 1~560 (default = no value)
<b>02 DN</b>	By selecting the Insert button you can add a new DN to the Hunt Group’s Hunt Order. Enter the desired DN in the pop-up dialogue box.  To modify an existing entry, use the Modify button as described above.  Possible values: Up to 5 ASCII characters (default = no value)
<b>03 DN Set Type</b>	Modify (replace) an existing assignment.  Possible values: Modify (default) or Insert

## 516 Station Speed Dial

**Prerequisite Program:** 200 *on Page 5-1*

Up to 100 pre-programmed Speed Dial numbers (up to 32 digits each) can be assigned to each station. Speed Dial numbers are stored in “Bins” and each station accesses the Speed Dial numbers by entering the Speed Dial Bin number from their respective stations. The following advanced Speed Dialling features are available in Strata CTX.

- ◆ **Speed Dial Bin Linking** – Whenever a Speed Dial number exceeds the 32-digit Speed Dial Bin memory limitation, the digits exceeding the 32 digit limitation are automatically stored into the adjacent Speed Dial Bin. The entire string is activated by using the primary Speed Dial Bin number.

**Note** Bin linking is automatic. Any previously programmed data in the “adjacent Speed Dial Bin” as described above is overwritten. Furthermore, if a number exceeding the maximum allowable dial digit length is overwritten with a new number which complies to the 32-digit restriction, the excess digits recorded in the next Bin (from the previous entry) is treated as a unique Speed Dial record.

- ◆ **Speed Dial Number Nesting – A**  
Speed Dial number can be nested into another Speed Dial number. For example, if an international dialling prefix is used often, program the prefix in any Speed Dial Bin. Then in the another Speed Dial Bin, program the first Bin number + the number to dial. When the second Speed Dial Bin is activated, Strata CTX first retrieves and dials the international dialling prefix from the first Bin location, then adds the numbers to dial.



1. From the Program Menu, click Station > Speed Dial. The Station Speed Dial screen displays (shown right).
2. Enter Program 516 data.
3. Click Submit.

FIELD	DESCRIPTION
<b>Prime DN</b>	Select the PDN assigned the speed dial number.
<b>01 Speed Dial Bin</b>	<p>Enter the station speed dial bin number. A station can have up to 100 speed dial bins.</p> <p>Possible values: 00~99 (default = no value)</p> <p><b>Note</b> Adding bin numbers here will automatically increment the number of speed dial bins available to the station in increments of 10 speed dial bins. The number of speed dial bins available to the station can also be assigned and displayed in Prog 200, 35 - Station SpDial Bins. Example: If bin number 50 is entered here, 50 speed dial bins will automatically be assigned to the station and will be displayed in Prog 200, 35.</p>

03 Name

## Station Data Record Sheets

[illegible]



# ISDN

The following programs assign ISDN data to stations.

**Program Number(s): 202 and 217**

## 202 ISDN BRI Station

**Prerequisite Program:** 100 on Page 4-1

This command assigns ISDN BRI stations.

1. Complete the “ISDN BRI Station Record Sheets” on Page 5-42.

2. From the Program Menu, click Station > ISDN > Basic. The ISDN Basic Station Assignment screen displays (shown right).

3. Enter a *Prime DN* for an existing record

...or click one of the following buttons:

- ✦ List – view a summary list of programmed DN’s.
- ✦ Create – Assign a new Prime DN with custom BRI Station settings.
- ✦ Copy – Enter a DN in the *Prime DN* field and click Copy to make a new DN assignment with BRI Station settings copied from the DN entered in the *Prime DN* field.
- ✦ Delete – Enter a ISDN Prime DN to delete and click OK.
- ✦ Change DN – Enter a DN in the *Prime DN* field and click Change DN to assign a new DN to the ISDN BRI Station.

4. Set up ISDN BRI Station using the Program Detail table below.

5. Click Submit.

FIELD	DESCRIPTION
<b>Prime DN</b>	Enter the PDN. When a required DN is not programmed, the DN is regarded as a new station. The System assigns default data as defined in <a href="#">“217 ISDN Station Data”</a> . Possible values: Up to 5 digits (default = no value)
<b>01 PDN Equipment No.</b>	Enter the BRI equipment number assigned to this PDN as xxyyzz. Possible values: xx = Cabinet 01~07; yy = Slot 01~10; zz = Circuit 01~04 Cabinet – Select 01 for Base and Expansion cabinet (Strata CTX 100). Select 01 for Base and 02~07 respectively for each Expansion cabinet (Strata CTX 670). Slot – Select 01~04 for Base slots and 05~08 for Expansion slots (Strata CTX 100). Select 01~08 for Base slots and 01~10 for Expansion slots (Strata CTX 670). (default = no value)  <b>Note</b> This is the cabinet, slot, and circuit number of the RBUU/RBUS or RBSU/RBSS interface PCB to which the PDN is, or should be, assigned.
<b>02 ISDN Channel Group</b>	Enter the ISDN Channel Group number. Possible values: 1~128 (default = 1)
<b>03 ISDN Protocol</b>	Select the ISDN protocol. Only Bearer capabilities specified by the protocol can be entered in this field. The Initial value for ISDN Protocol corresponds to information set in the hardware level. Possible values: Nat'l ISDN (default), ETSI, TTC or Nat'l ISDN Nortel  <b>Note</b> National ISDN = North America, ETSI = England and TTC = Japan.
<b>04 Type Connection</b>	Select connection type. Possible values: Point to point (default) or Point to Multi-point
<b>05 BRI Station COS</b>	Select the BRI Station COS Day assignments. Possible values: 1~32 (default = 1)
<ul style="list-style-type: none"> <li>• Day1 COS</li> <li>• Day2 COS</li> <li>• Night COS</li> </ul>	
<b>06 BRI Station DRL</b>	Select the BRI Station DRL Day assignments. Possible values: 1~16 (default = 1)
<ul style="list-style-type: none"> <li>• Day1 DRL</li> <li>• Day2 DRL</li> <li>• Night DRL</li> </ul>	
<b>07 BRI Station FRL</b>	Select the BRI Station FRL Day assignments. Possible values: 1~16 (default = 1)
<ul style="list-style-type: none"> <li>• Day1 FRL</li> <li>• Day2 FRL</li> <li>• Night FRL</li> </ul>	
<b>09 BRI Station QPL</b>	Select the BRI Station QPL Day assignments. Possible values: 1~16 (default = 1)
<ul style="list-style-type: none"> <li>• Day1 QPL</li> <li>• Day2 QPL</li> <li>• Night QPL</li> </ul>	



FIELD	DESCRIPTION
<b>08 LCR Group</b>	Select the LCR Group number to which this BRI Station belongs. Possible values: 1~16 (default = 1)
<b>10 Speech Capability</b>	Enable speech capability. See <a href="#">Table 5-4 on Page 5-41</a> . Possible values: Enable (default) or Disable
<b>11 3.1 KHz Audio</b>	Enable 3.1 KHz audio capability. See <a href="#">Table 5-4 on Page 5-41</a> . Possible values: Enable (default) or Disable
<b>12 7 KHz Audio</b>	Enable 7 KHz audio capability. See <a href="#">Table 5-4 on Page 5-41</a> . Possible values: Enable or Disable (default)
<b>13 64Kbps Unrestricted</b>	Enable one of the unrestricted capabilities. See <a href="#">Table 5-4 on Page 5-41</a> . Possible values: Enable (default) or Disable
<b>14 56Kbps Unrestricted</b>	
<b>15 2 x 64Kbps Unrestricted</b>	
<b>16 B Channel Selection</b>	Select originating B Channel method. Possible values: <ul style="list-style-type: none"> <li>• Exclusive – (default) Channel is indicated, and no alternative is acceptable.</li> <li>• Preferred – Channel is indicated, and any alternative is acceptable.</li> <li>• Any Channel – Channel is indicated, and any channel is acceptable.</li> </ul>
<b>17 Idle B Channel Selection</b>	Choose Idle B Channel selection method. Possible values: Forward Cyclic, Backward Cyclic, Forward Terminal or Backward Terminal (default) <ul style="list-style-type: none"> <li>• Select Forward Cyclic (from lowest to highest number of B-channel).</li> <li>• Select Backward Cyclic (from highest to lowest number of B-channel).</li> <li>• Select Forward Terminal for the lowest number B-channel (The Low-Low B-channel selection).</li> <li>• Select Backward Terminal for the highest number B-channel. (The High-High B-channel selection)</li> </ul>
<b>18 Interdigit Timer 1</b>	Select the Interdigit timer value, to time-out during dial tone. Possible values: 1~180 (default = 15)
<b>19 Interdigit Timer 2</b>	Interdigit timer value to time-out after the first digit is dialled. Possible values: 1~180 (default = 5)
<b>20 CESID</b>	Enter the CESID value for 911 calls. Possible values: Up to 16 ASCII characters (default = no value)
<b>21 Number Voice Calls Allowed</b>	Select the Number of Voice Calls Allowed. If a selection is not made, previously written data in this field is erased. Possible values: One or Two (default) <b>Note</b> If One is selected, the other channel is reserved for Data.

FIELD	DESCRIPTION
<b>22 Service Tone Permission</b>	Enable Service Tone Permission. Select Disable for modems and faxes. Possible values: Enable or Disable (default)
<b>23 TGAC Override</b>	Enable TGAC Override. Possible values: Enable or Disable (default)
<b>24 Change System Speed</b>	Enable System Speed Dial changing permission. Possible values: Enable or Disable (default)
<b>25 Network COS</b>	Enter the Network COS value. If a selection is not made, previously written data in this field is erased. Possible values: 1~32 (default = 1)
<b>26 DN2~32 DN8</b>	Add a DN to this BRI Station. When a DN is entered into one of the seven available fields, default data as defined in <a href="#">“217 ISDN Station Data”</a> is applied to the DNs. If a selection is not made, any previously written data in this field is erased. Possible values: Up to 5 ASCII characters (default = no value)
<b>33 Auto OCA</b>	Enable OCA to occur automatically when making a call to a busy station that allows calls to be received. Possible values: Enable (default) or Disable
<b>34 Originate OCA</b>	Enable this station to make OCA calls to other stations. Possible values: Enable or Disable (default)
<b>36 BRI Station Call</b>	Set ISDN Basic Rate station call forward to send Dial Tone. Possible values: Enable or Disable (default)
<b>37 BRI Station Dialling Digit Restriction</b>	Enable Dialling Digit Restriction. Possible values: Enable or Disable (default)
<b>38 BRI Station TEI</b> (Not supported on UK software)	Assign ISDN Basic Rate Station Terminal End Point Enable Dialling Digit Restriction. Possible values: 1:TEI Fixed 2:TEI Auto (default)

### Notes

- When a required DN as programmed objects is not assigned, DN is regard as new station. System set default data, it defined in ISDN INDIVIDUAL STATION DATA ASSIGNMENT command.
- Port must be assigned ISDN. If port assigned non-ISDN, system outputs error.
- The specifiable bearer capability is only those provided by the protocol. See “bearer capability of ISDN”.
- If you select “2:Point to Multi Point” for FK4, you can set FK26 to FK32.
- If you select “1:Point to Multi Point” for FK4, you can not set FK26 to FK32.
- When you input “Additional DN(FK26,FK27,FK28,FK29,FK30,FK31 or FK32)” data, system set default data, it defined in ISDN INDIVIDUAL STATION DATA ASSIGNMENT ON command.
- If no data is entered in FK20,FK26,FK27,FK28,FK29,FK30,FK31 or FK32 the data of FK20,FK26,FK27,FK28,FK29,FK30,FK31 or FK32 that was assigned on Strata CTX is deleted.
- As FK5,FK6,FK7 and FK9 have plural parameters, the input of data uses the “Spkr” key.
- In the registration of a new station, FK1(Equipment), FK2(Channle Group) and FK3(Protocol) are mandatory data.

10. In FK35 (The number of registration of Station Speed Dial). If the value except 10 multiples is inputted, the value rounds up to the nearest whole number.

- 0: In the case of that Station Speed Dial is not used.
- 1-10: 10 is registered. Station Speed Dial Index that is able to use is 00 to 09.
- 1-20: 20 is registered. Station Speed Dial Index that is able to use is 00 to 19.
- 1-30: 30 is registered. Station Speed Dial Index that is able to use is 00 to 29.
- 1-40: 40 is registered. Station Speed Dial Index that is able to use is 00 to 39.
- 1-50: 50 is registered. Station Speed Dial Index that is able to use is 00 to 49.
- 1-60: 60 is registered. Station Speed Dial Index that is able to use is 00 to 59.
- 1-70: 70 is registered. Station Speed Dial Index that is able to use is 00 to 69.
- 1-80: 80 is registered. Station Speed Dial Index that is able to use is 00 to 79.
- 1-90: 90 is registered. Station Speed Dial Index that is able to use is 00 to 89.
- 1-100: 100 is registered. Station Speed Dial Index that is able to use is 00 to 99.

11. When the parameter of FK1 on Prog915 is each country in Asia, the parameter of FK37 is effective.

**Table 5-4 BRI Bearer Capability of ISDN**

Bearer Services			Bellcore Nat'l ISDN	ETSI	TTC
Circuit Mode	Speech		X	X	X
	3.1kHz Audio		X	X	X
	7kHz Audio			X	X
	Unrestricted Digital Information	64 kbps	X	X	X
		Rate adaptation from 56 kbps	X		
		2x64		X	X

## ISDN BRI Station Record Sheets

Prime DN: _____							
01 Equipment		07 FRL	Day 1		14 56Kbps Unrestricted		25 Network COS
02 ISDN Ch Grp			Day 2		15 2x64Kbps Unrestricted		26 Additional DN2
03 ISDN Protocol			Day 3		16 B Channel Selection		27 Additional DN3
04 Type Connection		09 QPL	Day 1		17 Idle B Ch Selection		28 Additional DN4
05 COS	Day 1		Day 2		18 Interdigit Timer 1		29 Additional DN5
	Day 2		Day 3		19 Interdigit Timer 2		30 Additional DN6
06 DRL	Day 3	08 LCR Group			20 CESID		31 Additional DN7
	Day 1	10 Speech Capability			21 Voice Calls Allowed		32 Additional DN8
	Day 2	11 3.1 KHz Audio			22 Svc Tone Permission		33 Auto OCA
	Day 3	12 7 KHz Audio			23 TGAC Override		
		13 64Kbps Unrestricted			24 Ch Sys Speed		

Prime DN: _____							
01 Equipment		07 FRL	Day 1		14 56Kbps Unrestricted		25 Network COS
02 ISDN Ch Grp			Day 2		15 2x64Kbps Unrestricted		26 Additional DN2
03 ISDN Protocol			Day 3		16 B Channel Selection		27 Additional DN3
04 Type Connection		09 QPL	Day 1		17 Idle B Ch Selection		28 Additional DN4
05 COS	Day 1		Day 2		18 Interdigit Timer 1		29 Additional DN5
	Day 2		Day 3		19 Interdigit Timer 2		30 Additional DN6
06 DRL	Day 3	08 LCR Group			20 CESID		31 Additional DN7
	Day 1	10 Speech Capability			21 Voice Calls Allowed		32 Additional DN8
	Day 2	11 3.1 KHz Audio			22 Svc Tone Permission		33 Auto OCA
	Day 3	12 7 KHz Audio			23 TGAC Override		
		13 64Kbps Unrestricted			24 Ch Sys Speed		

Prime DN: _____							
01 Equipment		07 FRL	Day 1		14 56Kbps Unrestricted		25 Network COS
02 ISDN Ch Grp			Day 2		15 2x64Kbps Unrestricted		26 Additional DN2
03 ISDN Protocol			Day 3		16 B Channel Selection		27 Additional DN3
04 Type Connection		09 QPL	Day 1		17 Idle B Ch Selection		28 Additional DN4
05 COS	Day 1		Day 2		18 Interdigit Timer 1		29 Additional DN5
	Day 2		Day 3		19 Interdigit Timer 2		30 Additional DN6
06 DRL	Day 3	08 LCR Group			20 CESID		31 Additional DN7
	Day 1	10 Speech Capability			21 Voice Calls Allowed		32 Additional DN8
	Day 2	11 3.1 KHz Audio			22 Svc Tone Permission		33 Auto OCA
	Day 3	12 7 KHz Audio			23 TGAC Override		
		13 64Kbps Unrestricted			24 Ch Sys Speed		

Prime DN: _____							
01 Equipment		07 FRL	Day 1		14 56Kbps Unrestricted		25 Network COS
02 ISDN Ch Grp			Day 2		15 2x64Kbps Unrestricted		26 Additional DN2
03 ISDN Protocol			Day 3		16 B Channel Selection		27 Additional DN3
04 Type Connection		09 QPL	Day 1		17 Idle B Ch Selection		28 Additional DN4
05 COS	Day 1		Day 2		18 Interdigit Timer 1		29 Additional DN5
	Day 2		Day 3		19 Interdigit Timer 2		30 Additional DN6
06 DRL	Day 3	08 LCR Group			20 CESID		31 Additional DN7
	Day 1	10 Speech Capability			21 Voice Calls Allowed		32 Additional DN8
	Day 2	11 3.1 KHz Audio			22 Svc Tone Permission		33 Auto OCA
	Day 3	12 7 KHz Audio			23 TGAC Override		
		13 64Kbps Unrestricted			24 Ch Sys Speed		

## 217 ISDN Station Data

**Prerequisite Program:** 202 on Page 5-37

Set ISDN Station parameters to define ISDN capabilities.

1. Complete the “ISDN Station Data Record Sheet” on Page 5-45.

2. From the Program Menu, click Station > ISDN > Station Data. The ISDN Individual Station Data Assignment screen displays (shown right).

3. Enter a *Prime DN* for an existing record

...or click one of the following buttons:

- ✦ List – view a summary list of programmed Hunt Groups.
- ✦ Copy – Enter a DN in the *Prime DN* field and click Copy to make a new DN assignment with BRI Station settings copied from the DN entered in the *Prime DN* field.

4. Set up ISDN Station Data using the Program Detail table below.
5. Click Submit.

FIELD	DESCRIPTION
<b>Prime DN</b>	Enter Prime DN. Possible values: Up to 5 digits (default = no value)
<b>01 Station Name</b>	Enter a name for this station. Possible values: Up to 9 ASCII characters (default = no value)
<b>02 Dial Method</b>	Select the audible tone when dialling. Possible values: Dial Tone (default), Entry Tone or No Tone
<b>03 System Call Forward</b>	Select the System Call Forward assignment for this station. Possible values: 0–32 (default = 0)
<b>04 CF Password</b>	Protect the System Call Forward settings by creating a password. Possible values: Up to 4 digits (default = no value)
<b>05 Door Phone Override DND</b>	Enable the Door Phone ringing indicator to override Do Not Disturb. Possible values: Enable or Disable (default)
<b>06 Emerg Call Group</b>	Select this station's emergency call group. Possible values: 1–8 (default = 1)
<b>07 COS Override Code</b>	Enable Class of Service override. Possible values: Enable or Disable (default)

FIELD	DESCRIPTION
<b>08 Display DN</b>	Enter the DN to be displayed on the LCD. Possible values: Up to 5 digits (default = no value)
<b>09 VMID Code SMDI</b>	Enter the voice mail box number that should answer calls when this PDN calls voice mail; or, when this PDN is called and then forwards to voice mail (this number is prefixed by codes in Program 579, 11~16). Possible values: Digits 0~9, * and #, up to 16 characters (default = no value). <b>Note</b> This VMID code is sent to the voice mail device in SMDI packets or DTMF tones on direct and forwarded calls to the PDN. See Program 580 for SMDI or DTMF choice.
<b>12 Name Display</b>	Whether to put the user name in the list display. Possible values: Enable or Disable (default)
<b>13 CPN IE Content</b>	Present CPN to S-bus. Possible values: 1:DN (default) 2: CPN 3:DN and CPN

**Note**

1. DN must be assigned to the ISDN stations connected by “ISDN Basic Station Assignment” command. If DN is not assigned, system outputs error.
2. If no data is entered in FK1, the data of FK1 that was assigned on Strata CTX is deleted.
3. If no data is entered in FK4, the data of FK4 that was assigned on Strata CTX is deleted.
4. If no data is entered in FK8, the data of FK8 that was assigned on Strata CTX is deleted.
5. If no data is entered in FK9, the data of FK9 that was assigned on Strata CTX is deleted.
6. If no data is entered in FK10, the data of FK10 that was assigned on Strata CTX is deleted.
7. If no data is entered in FK11, the data of FK11 that was assigned on Strata CTX is deleted.
8. In R1, FK1(Station Name) is not supported from DKT.

## ISDN Station Data Record Sheet

[illegible]





# ILG

ILG is a line selection feature which enables the use of external trunk or private line groups for incoming service.

- 
- The screenshot displays the Cisco IOS configuration interface for Trunk Incoming Line Groups (ILG). The interface is divided into two main sections: a left-hand menu and a right-hand configuration area.
- Left-hand Menu:**
- System
  - Status
  - Trunk
    - All
    - ILG
    - Basic
    - Caller ID
    - DDI
    - DDI Overview
    - Service
    - Transfer
    - T1
    - TDM
  - Advanced
  - Services
  - Operations
  - Maintenance
  - Tools
  - Profile
  - Help
- Right-hand Configuration Area:**
- The configuration area is titled "381 INCOMING LINE GROUP ASSIGNMENT". It features four tabs: "List", "Create", "Copy", and "Delete". The configuration options are organized into two columns, each with a "Group Number" and a "Line Type".
- | Group Number               | Line Type     |
|----------------------------|---------------|
| 01 Group Type              | Answer        |
| 02 Service Type            | OT            |
| 03 COS Key Number          | 0             |
| 04 COS Key                 | 1             |
| 05 BRL Day1                | 1             |
| 06 BRL Day2                | 1             |
| 07 BRL Day3                | 1             |
| 08 BRL Day4                | 1             |
| 09 BRL Day5                | 1             |
| 10 BRL Day6                | 1             |
| 11 BRL Night               | 0             |
| 12 Delay1 Ringing Time     | 12            |
| 13 Interdigit 1 Time       | 1             |
| 14 Auto Cancel             | Disable       |
| 15 Intercept               | Disable       |
| 16 TOSAC Override          | Disable       |
| 17 LCR Group               | 1             |
| 18 Spd Stat Codes          | Disable       |
| 19 Transfer Line Type Mode | Out Line      |
| 20 Line Type               | CO            |
| 21 Service Type            | Standard      |
| 22 Preced Key Group        | 0             |
| 23 COS Day1                | 1             |
| 24 BRL Day1                | 1             |
| 25 BRL Day2                | 1             |
| 26 BRL Day3                | 1             |
| 27 BRL Day4                | 1             |
| 28 BRL Day5                | 1             |
| 29 BRL Day6                | 1             |
| 30 Speed/Dialing           | Auto          |
| 31 Delay1 Ringing Time     | 24            |
| 32 Interdigit 2 Time       | 5             |
| 33 Calling Number ID       | User Provided |
| 34 Speed Stat Time         | Disable       |
| 35 Network COS             | 1             |
| 36 Change COS Dis.         | Disable       |
| 37 Orignator COS           | Disable       |

- ◆ List – view a summary list of programmed ILGs.

- Copy – Enter an ILG in the *Group Number* field and click Copy to make a new ILG assignment with settings copied from the ILG entered in *Group Number*.

4. Enter Program 304 data.

5. Click Submit.

## 304 Incoming Line Group Assignment

**Prerequisite Program:** *None*

This assignment is used to configure ILGs only, OLGs are configured in the Outgoing Line Group Assignment 306. The same line can be placed in an ILG and OLG.

FIELD	DESCRIPTION
<b>Group Number</b>	Enter the group number of the line group that should be configured. Possible values: 1~128 (default = no value)
<b>01 Group Type</b>	Select the ILG Type. Possible values: Analogue (default) or ISDN
<b>02 Trunk Type</b>	Select the Trunk Type. Possible values: Exchange (default) or Tie
<b>03 Service Type</b>	Select Exchange Line Trunk Service Type. Possible values: DDI or DIT (default)
<b>04 Private Service Type</b>	Select the Tie Trunk Service Type. This field is required when Trunk Type is set to Tie. Possible values: Standard (default) or QSIG
<b>05 GCO Key Number</b>	Select ILG GCO Key Group for DIT mode (see Trunk Type above). The same GCO cannot belong to different ILGs. Possible values: 0~128 (CTX670), 0~32 (CTX100) (default = 0)
<b>06 Pooled Key Number</b>	Select ILG Pooled Line Key Group for DIT mode. The same Pooled Line Group cannot belong to different ILGs. Possible values: 0~128 (CTX670), 0~32 (CTX100) (default = 0)
<b>07 COS</b>	Select Day 1, Day 2 and Night Values. Possible values: 1~32 (default = 1)
<b>08 DRL</b>	Select Day 1, Day 2 and Night Values. Possible values: 1~16 (default = 1)
<b>09 FRL</b>	Select Day 1, Day 2 and Night Values. Possible values: 1~16 (default = 1)
<b>10 QPL</b>	Select Day 1, Day 2 and Night Values. Possible values: 1~16 (default = 1)
<b>11 DDI Digits</b>	Select number of DDI digits received from Exchange. Possible values: 0~7 (default = 0)
<b>12 Speech/3.1 KHz</b>	Select Bearer Capability 3.1 KHz Audio or Speech. Possible values: Audio (default) or Speech
<b>13 Ringing Timer Delay 1</b>	Select time to ring the Delay 1 destination. Possible values: 1~60 sec. (default = 12)
<b>14 Ringing Timer Delay 2</b>	Select time to ring the Delay 2 destination. Possible values: 1~60 sec. (default = 24)
<b>15 Interdigit 1 Timer</b>	Select Interdigit 1 timer value. Possible values: 1~180 sec. (default = 15)

FIELD	DESCRIPTION
<b>16 Interdigit 2 Timer</b>	Select Interdigit 2 timer value. Possible values: 1~180 sec. (default = 5)
<b>17 Auto Camp-on</b>	Select in box to toggle Automatic Camp-on. Possible values: On (default) or Off
<b>18 Calling Number ID</b>	Select Calling Number Identification source. Possible values: User Provided (default) or Network Provided
<b>19 Intercept</b>	Enable Intercept. A call is transferred to a special destination called intercept position when the destination of a trunk line call is not determined with DDI, DIT or DISA. Intercept is also activated when the destination is determined, but the call cannot be terminated due to a defect or an incorrect number. If the system has a simplified attendant console, the attendant console is usually specified to terminate the call. This function ensures termination of a trunk line call. Possible values: Enable or Disable (default)
<b>20 Send Dial Tone</b>	Enable Send Dial Tone. Possible values: Enable or Disable (default)
<b>21 TGAC Override</b>	Enable Trunk Group Access Code (TGAC) override. Possible values: Enable or Disable (default)
<b>22 Network COS</b>	Enter the Network COS number. Possible values: 1~32 (default = 1)
<b>23 LCR Group</b>	Enter the LCR Group number. Calls from this ILG cannot tandem if this field is not entered. Possible values: 1~16 (default = 1)
<b>24 Change COS Override Code</b>	Enable authority to change COS Override Code. Possible values: Enable or Disable (default)
<b>25 Register Speed Dial Codes</b>	Enable authority to create system speed dial codes. Possible values: Enable or Disable (default)
<b>26 Originator Invoke OCA</b>	Enable authority for the originator of a call to invoke OCA when encountering a busy station. Possible values: Enable or Disable (default)
<b>27 Senderised Tone Mode</b>	Send DTMF tones as a complete number rather than digit-by digit. Possible values: Dial Tone (default), Entry Tone or Silence

## ILG Record Sheet

Program 304 Values									
ILG: _____									
01 Group Type		08 DRL	Day 1		11 DDI Digits			20 Send Dial Tone	
02 Trunk Type			Day 2		12 Speech/3.1KHz			21 TGAC Override	
03 Service Type			Night		Ringing Timer	13 Delay 1		22 Network COS	
04 Private Svc Type		09 FRL	Day 1			14 Delay 2		23 LCR Group	
05 GCO Key Number			Day 2		Interdigit Timer	15 Timer 1		24 Change COS Ovr Code	
06 Pooled Key Number			Night			16 Timer 2		25 Reg Speed Dial Codes	
07 COS	Day 1	10 QPL	Day 1		17 Auto Camp-on			26 Originator Invoke OCA	
	Day 2			18 Calling Number ID			27 Senderized Tone Mode		
	Night			19 Intercept					
Program 513 Values									
01 Generate SMDR Records		02 DNIS Field Indication		03 B Record for Incoming Call		04 Abandoned Call Record Output		05 Display Xsferred Call Records	

Program 304 Values									
ILG: _____									
01 Group Type		08 DRL	Day 1		11 DDI Digits			20 Send Dial Tone	
02 Trunk Type			Day 2		12 Speech/3.1KHz			21 TGAC Override	
03 Service Type			Night		Ringing Timer	13 Delay 1		22 Network COS	
04 Private Svc Type		09 FRL	Day 1			14 Delay 2		23 LCR Group	
05 GCO Key Number			Day 2		Interdigit Timer	15 Timer 1		24 Change COS Ovr Code	
06 Pooled Key Number			Night			16 Timer 2		25 Reg Speed Dial Codes	
07 COS	Day 1	10 QPL	Day 1		17 Auto Camp-on			26 Originator Invoke OCA	
	Day 2			18 Calling Number ID			27 Senderized Tone Mode		
	Night			19 Intercept					
Program 513 Values									
01 Generate SMDR Records		02 DNIS Field Indication		03 B Record for Incoming Call		04 Abandoned Call Record Output		05 Display Xsferred Call Records	

Program 304 Values									
ILG: _____									
01 Group Type		08 DRL	Day 1		11 DDI Digits			20 Send Dial Tone	
02 Trunk Type			Day 2		12 Speech/3.1KHz			21 TGAC Override	
03 Service Type			Night		Ringing Timer	13 Delay 1		22 Network COS	
04 Private Svc Type		09 FRL	Day 1			14 Delay 2		23 LCR Group	
05 GCO Key Number			Day 2		Interdigit Timer	15 Timer 1		24 Change COS Ovr Code	
06 Pooled Key Number			Night			16 Timer 2		25 Reg Speed Dial Codes	
07 COS	Day 1	10 QPL	Day 1		17 Auto Camp-on			26 Originator Invoke OCA	
	Day 2			18 Calling Number ID			27 Senderized Tone Mode		
	Night			19 Intercept					
Program 513 Values									
01 Generate SMDR Records		02 DNIS Field Indication		03 B Record for Incoming Call		04 Abandoned Call Record Output		05 Display Xsferred Call Records	

Program 304 Values									
ILG: _____									
01 Group Type		08 DRL	Day 1		11 DDI Digits			20 Send Dial Tone	
02 Trunk Type			Day 2		12 Speech/3.1KHz			21 TGAC Override	
03 Service Type			Night		Ringing Timer	13 Delay 1		22 Network COS	
04 Private Svc Type		09 FRL	Day 1			14 Delay 2		23 LCR Group	
05 GCO Key Number			Day 2		Interdigit Timer	15 Timer 1		24 Change COS Ovr Code	
06 Pooled Key Number			Night			16 Timer 2		25 Reg Speed Dial Codes	
07 COS	Day 1	10 QPL	Day 1		17 Auto Camp-on			26 Originator Invoke OCA	
	Day 2			18 Calling Number ID			27 Senderized Tone Mode		
	Night			19 Intercept					
Program 513 Values									
01 Generate SMDR Records		02 DNIS Field Indication		03 B Record for Incoming Call		04 Abandoned Call Record Output		05 Display Xsferred Call Records	

## 306 Outgoing Line Groups

**Prerequisite Program:** None

OLG is a line selection feature which enables the use of external trunk or private line groups for outgoing service. Assign and configure up to 128 OLGs (the same line can be placed in an OLG and an ILG).

1. Complete the “[OLG Record Sheet](#)” on Page 6-7.
2. From the Program Menu, click Trunk > OLG. The Trunk Outgoing Line Groups (OLG) screen displays (shown right).
3. Enter an OLG number in the *Group Number* field for an existing record

...or click one of the following buttons:

- ✦ List – view a summary list of programmed OLGs.
  - ✦ Create – Assign a new OLG with default settings.
  - ✦ Copy – Enter an OLG in the *Group Number* field and click Copy to make a new OLG assignment with settings copied from the OLG entered in *Group Number*.
  - ✦ Delete – Delete an OLG.
4. Enter Program 306 data.
  5. Enter Program 531. See “[531 DR Screening Table for OLG](#)” on Page 8-25 for details.
  6. Enter Program 514. See “[514 SMDR for OLG Assignment](#)” on Page 8-50 for details.
  7. Click Submit.

FIELD	DESCRIPTION
<b>Group Number</b>	Enter the OLG Group number. Possible values: 1~128 (default = no value)
<b>01 Group Type</b>	Select the OLG Type. Possible values: Analogue (default) or ISDN
<b>02 Trunk Type</b>	Select the Trunk Type. Possible values: Exchange (default) or Tie
<b>03 Private Service Type</b>	TIE Trunk Service Type. Possible values: Standard (default) or QSIG
<b>04 GCO Key1 Number</b>	Select the first GCO Key Group number. Possible values: 0~128 (CTX670), 0~32 (CTX100) (default = 0)
<b>06 Pooled Key1 Number</b>	Select first Pooled Line Key Group number. Possible values: 0~128 (CTX670), 0~32 (CTX100) (default = 0)

FIELD	DESCRIPTION
<b>07 Pooled Key2 Number</b>	Select second Pooled Line Key Group number. Possible values: 0~128 (CTX670), 0~32 (CTX100) (default = 0)
<b>08 COS</b>	Select Day 1, Day 2 and Night Values. Possible values: 1~32 (default = 1)
<b>09 FRL</b>	Select Day 1, Day 2 and Night Values. Possible values: 1~16 (default = 1)
<b>10 QPL</b>	Select Day 1, Day 2 and Night Values. Possible values: 1~16 (default = 1)
<b>11 Speech/3.1 KHz</b>	Bearer Capability 3.1 KHz Audio or Speech. Possible values: Audio (default) or Speech
<b>12 MOH Source</b>	Select MOH Source. Possible values: Silence, External1~15, Internal (default = Internal)
<b>13 Account Codes</b>	Enable Trunk forced Account Codes. Possible values: Enable or Disable (default)
<b>14 Destination Restriction</b>	Enable Destination Restriction. Possible values: Enable or Disable (default)
<b>15 Credit Card Calling</b>	Enable Credit Card Calling. Possible values: Enable or Disable (default)
<b>16 Send CESID</b>	Enable CESID sending. Possible values: Enable or Disable (default)
<b>17 QSIG Sending Type</b>	Digit sending Mode for QSIG only. Possible values: Cut Through or Senderised (default = Cut through)
<b>18 Network COS</b>	Select Network COS number. Possible values: 1~32 (default = 1)
<b>19 Exclusive Line Flash/ Recall</b>	Enable Analogue Trunk exclusive line Recall. Possible values: Enable or Disable (default)

#### Note

1. Pooled Line Group is usually impossible to belong to two or more OLGs. PoolLineGroup:OLG is 2:1.
2. GCO is impossible to belong to two or more OLGs. GCO:OLG is 2:1. (R1 is able to assign only 1 GCO. Accordingly, FK5 is not used and LED does not light. If this key is pushed, error is indicated.)
3. As FK8-FK12 have plural parameters, the input of data uses the "Spkr" key.
4. If trunk belongs to OLG, data of FK2(Trunk Type) is not able to modify.
5. If Pool Line Key Group that was assigned on FK6 is deleted, Pool Line Key Group that was assigned on FK7 shifts to FK6.

## OLG Record Sheet

Group Number: _____							
01 Group Type			08 COS	Day 1		11 Speech 3.1KHz	
02 Trunk Type				Day 2		12 MOH Source	
03 Pvt Service Type				Night		13 Account Code	
GCO Number	04 Key 1		09 FRL	Day 1		14 DR	
	05 Key 2			Day 2		15 Credit Card Calling	
Pool Number	06 Key 1			Night		16 Send CESID	
	07 Key 2		10 QPL	Day 1		17 QSIG Sending Type	
		Day 2			18 Network COS		
		Night					

Group Number: _____							
01 Group Type			08 COS	Day 1		11 Speech 3.1KHz	
02 Trunk Type				Day 2		12 MOH Source	
03 Pvt Service Type				Night		13 Account Code	
GCO Number	04 Key 1		09 FRL	Day 1		14 DR	
	05 Key 2			Day 2		15 Credit Card Calling	
Pool Number	06 Key 1			Night		16 Send CESID	
	07 Key 2		10 QPL	Day 1		17 QSIG Sending Type	
		Day 2			18 Network COS		
		Night					

Group Number: _____							
01 Group Type			08 COS	Day 1		11 Speech 3.1KHz	
02 Trunk Type				Day 2		12 MOH Source	
03 Pvt Service Type				Night		13 Account Code	
GCO Number	04 Key 1		09 FRL	Day 1		14 DR	
	05 Key 2			Day 2		15 Credit Card Calling	
Pool Number	06 Key 1			Night		16 Send CESID	
	07 Key 2		10 QPL	Day 1		17 QSIG Sending Type	
		Day 2			18 Network COS		
		Night					

Group Number: _____							
01 Group Type			08 COS	Day 1		11 Speech 3.1KHz	
02 Trunk Type				Day 2		12 MOH Source	
03 Pvt Service Type				Night		13 Account Code	
GCO Number	04 Key 1		09 FRL	Day 1		14 DR	
	05 Key 2			Day 2		15 Credit Card Calling	
Pool Number	06 Key 1			Night		16 Send CESID	
	07 Key 2		10 QPL	Day 1		17 QSIG Sending Type	
		Day 2			18 Network COS		
		Night					

Group Number: _____							
01 Group Type			08 COS	Day 1		11 Speech 3.1KHz	
02 Trunk Type				Day 2		12 MOH Source	
03 Pvt Service Type				Night		13 Account Code	
GCO Number	04 Key 1		09 FRL	Day 1		14 DR	
	05 Key 2			Day 2		15 Credit Card Calling	
Pool Number	06 Key 1			Night		16 Send CESID	
	07 Key 2		10 QPL	Day 1		17 QSIG Sending Type	
		Day 2			18 Network COS		
		Night					

## 300 Trunk Assignment

**Prerequisite Program:** 100 [on page 4-1](#)

Assigns an analogue or T1\* trunk (line) and its parameters to the system.

(\*not available in the UK & Europe)

**Note** Trunk is another name for Line in CTX.

1. Complete the “[Trunk Assignment Record Sheet](#)” on [Page 6-11](#).

2. From the Program Menu, click Trunk > Basic. The Trunk Basic Assignments screen displays (shown right).

3. Enter a *Trunk Number*

...or click one of the following buttons:

- ✦ List – view a summary list of programmed Trunks.
  - ✦ Create – Assign a new Trunk with default settings.
  - ✦ Copy – Enter an *Trunk Number* and click Copy to make a new Trunk assignment with settings copied from the OLG entered in *Group Number*.
  - ✦ Delete – Delete an Trunk.
4. Enter Trunk Assignment Data.
  5. Click Submit.
  6. Click the *Go Timer/DIT* link to view Programs 308 and 310 (see “[Timer/DIT](#)” on [Page 6-23](#) for details).

FIELD	DESCRIPTION
<b>Line Number</b>	Enter the Line Number. Possible values: 1~264 (default = no value)



FIELD	DESCRIPTION
<b>01 Line Equipment No.</b>	<p>Enter the line equipment number as xxyyzz. Equipment numbers are required when assigning a new trunk to the system. It can also be used to display the equipment location of existing trunks.</p> <p>Example: If the trunk should be connected to an RCOU in cabinet shelf 5, slot 2, circuit 3, enter 050203.</p> <p>Possible values: xx = Cabinet 01~07; yy = Slot 01~10; zz = Circuit 01~08 ...or zz = T1 (not available in the UK &amp; Europe) Circuit 01~24 (CTX670). xx = Cabinet 01; yy = Slot 01~8; zz = Circuit 01~08 (CTX100) (default = no value).</p> <p>Cabinet numbers:</p> <ul style="list-style-type: none"> <li>• CTX100 – Select 01 for Base and Expansion cabinet.</li> <li>• CTX670 – Select 01 for Base and 02~07 respectively for each Expansion cabinet.</li> </ul> <p>Slot numbers:</p> <ul style="list-style-type: none"> <li>• CTX100 – Select 01~04 for Base slots and 05~08 for Expansion slots.</li> <li>• CTX670 – Select 01~08 for Base slots and 01~10 for Expansion slots.</li> </ul>
<b>02 Incoming Line Group</b>	<p>Assign the trunk to Incoming Line Group. Two-way trunks need to be members of one incoming and one outgoing line group.</p> <p>Possible values: 0~128 (CTX670), 0~32 (CTX100) (default = 0)</p>
<b>03 Outgoing Line Group</b>	<p>Assign the trunk to Outgoing Line Group. Two-way trunks need to be members of one incoming and one outgoing line group.</p> <p>Possible values: 0~128 (CTX670), 0~32 (CTX100) (default = 0)</p>
<b>04 Dial Mode</b>	<p>Enter the Dial Mode.</p> <p>Possible values: DP 10PPS, DP 20PPS or DTMF (default)</p> <ul style="list-style-type: none"> <li>• DP 10 PPS = Rotary Dial, 10 PPS</li> <li>• DP 20 PPS = Rotary Dial, 20 PPS</li> </ul>
<b>05 Signalling</b>	<p>Enter the signalling type.</p> <p>Possible values: DDI, Loop (default), Ground, Tie, LP (Japan), SR (Japan) or ACU (UK)</p>
<b>06 Start Method</b>	<p>Enter the Start Method. This setting defines the start protocol method used between the PSTN and this trunk. For DDI/Tie trunks.</p> <p>Possible values: Immediate Start (default), Timing Start or Wink Start</p>
<b>07 Release Supervision</b>	<p>Enable Release Supervision from the Exchange Line.</p> <p>Possible values: Received or Not Received (default)</p>
<b>08 Answer Supervision</b>	<p>Enable Answer Supervision from the Exchange Line.</p> <p>Possible values: Received or Not Received (default)</p>
<b>09 Trunk Name</b>	<p>Enter the trunk name.</p> <p>Possible values: Up to 14 ASCII characters (default = no value)</p>
<b>10 External Ring Repeat</b>	<p>Supply the External Ringing Signal pattern to stations. For behind PBX/Centrex trunks.</p> <p>Possible values: Supplied (default) or Not Supplied</p>
<b>11 DTMF Back Tone</b>	<p>Select DTMF Back Tone type.</p> <p>Possible values: Padded, DTMF Tone (default) or No Tone</p>

FIELD	DESCRIPTION
<b>12 Hunt Order</b>	Change the trunk hunting order sequence for this Trunk. Possible values: 1~264 or Last One (default = 1)
<b>13 Immediate Cut-Through</b>	<p>This option should be enabled on a line only if the talk-path must be established immediately after seizing a selected outgoing line. Example, a line connected to a an Exchange Line Ringdown circuit. Possible values: Enable, Disable (default)</p> <hr/> <p><b>CAUTION! This option will bypass Destination Restriction and Emergency 999 digit analysis. Do not enable this option on a line where these functions are required.</b></p> <hr/> <p>This option is available only on ground and loop, analogue or T1 circuits. It should not be enabled on Tie, DDI, ISDN and QSIG lines. Available with CTX R1.01, M22 and above software.</p>

[illegible]

## 313 Caller ID Assignment

(Available in the US only)

**Prerequisite Program:** 300 on page 6-8

This program assigns Caller ID circuits to the Exchange Line to which the circuit is connected. The ANI, DNIS, DDI formats for TI and analogue DDI Exchange Lines are also defined.

1. Complete the “[Caller ID Assignment Record Sheet](#)” on Page 6-13.

2. From the Program Menu, click Trunk > Caller ID. The Trunk Caller ID Assignments screen displays (shown right).



3. Enter a Trunk Number in *Trunk Index* for an existing record.  
...or click one of the following buttons:
  - ♦ List – to view a summary list of programmed Trunks.
  - ♦ Copy – Enter the Trunk Number in the *Trunk Number* field and click Copy to make new Caller ID trunk numbers.
4. Enter Caller ID Assignment data.
5. Click Submit.

FIELD	DESCRIPTION
<b>Trunk Number</b>	Enter the Trunk Number. Possible values: 1~264 (default = no value)
<b>01 Signalling Method</b>	Specify the format for the interface being used. Possible values: Nothing (default), ANI/DNIS-MCI, ANI/DNIS-Sprint or CLASS (Caller ID)
<b>02 Signalling Contents</b>	Specify the contents of the ANI/DNIS format. Possible values: ANI and DNIS, ANI only, DNIS only or DDI only (default = no value).
<b>03 CLASS Equipment No.</b>	If the CLASS type is chosen, the trunk must be assigned to a Caller ID circuit. Enter the RCIU/RCIS equipment number as xxyyzz. Possible values: xx = Cabinet 01~07; yy = Slot 01~10; zz = Circuit 01~08  <b>Notes</b> <ul style="list-style-type: none"> <li>• CLASS equipment numbers are required when assigning a trunk to a RCIU/RCIS circuit.</li> <li>• It can also be used to display the equipment location of existing caller ID circuit to trunk assignments. Example: If the trunk should be connected to a caller ID circuit (RCIU/RCIS) in cabinet shelf 5, slot 2, circuit 3, enter 050203.</li> </ul>



## 309 Direct Inward Dialling

This command assigns DDI number analysis tables to ILGs.

1. Complete the “[DDI Assignment Record Sheet](#)” on Page 6-17.
2. From the Program Menu, click Trunk > DDI. The Trunk DDI Assignments screen displays (shown right).
3. Select an ILG Number.
4. Enter a DDI Number in the *01 DDI Number* field  
...or click one of the following buttons:
  - ✦ List – view a list of programmed DDIs.
  - ✦ Create – Make a new DDI assignment using default settings.
  - ✦ Copy – Enter a DDI Number in *01 DDI Number* and click Copy to make a new DDI assignment with settings copied from the DDI Number entered.
  - ✦ Delete – Delete a DDI.
5. Enter DDI Assignment data.
6. Click Submit.

FIELD	DESCRIPTION
<b>ILG Group Number</b>	Select the ILG number. Possible values: 1~128 (default = no value)
<b>01 DDI Number</b>	Enter a DDI number. This field is mandatory. These Numbers must not conflict with any Called Party Number (CPN). No CPN and Out of Search are assigned other Command. Possible values: Up to 7 ASCII characters (default = no value) Wild Card uses “?”
<b>02 MOH Source</b>	Set Music On Hold for Analogue ISDN DDI Trunk Possible values: Quiet Tone or External 1~1or Internal (default = Internal)
<b>03 GCO Key Group</b>	GCO Key Group number. Possible values: 0~128 (default = 0)
<b>04 Pool Key Group</b>	Pooled Line Key Group Possible values: 0~128 (default = 0)
<b>05 Audio Day1 Dst Type</b>	Select the Destination Type for Audio/Speech calls
<b>06 Audio Day2 Dst Type</b>	Possible values: No Data (default), Dialling Digits, DISA, Built-in Modem or Night Bell
<b>07 Audio Night Dst Type</b>	

FIELD	DESCRIPTION
<b>Audio Day1 Destination</b>	Enter the Destination Directory Number or Access Code.
<b>Audio Day2 Destination</b>	Possible values: Up to 32 digits (default = no value)
<b>Audio Night Destination</b>	<p>If Dialling Digits is the Destination Type enter the Directory Number that the line should ring. If the line should ring over external page, enter #31xx, where xx is the External Page group number. If the default page access code #31 was changed, use the new page access code as the leading digits.</p> <p>Line access codes and network routing numbers can also be entered to route incoming calls back to a public or private network number.</p>
<b>08 Data Day1 Dst Type</b>	Select the Destination Type for data calls
<b>09 Data Day2 Dst Type</b>	Possible values: No Data (default), Dialling Digits, DISA, Built-in Modem or Night Bell
<b>10 Data Night Dst Type</b>	
<b>Data Day1 Destination</b>	Enter the Destination Directory Number or Access Code.
<b>Data Day2 Destination</b>	Possible values: Up to 32 digits (default = no value)
<b>Data Night Destination</b>	<p>If Dialling Digits is the Destination Type enter the Directory Number that the line should ring. If the line should ring over external page, enter #31xx, where xx is the External Page group number. If the default page access code #31 was changed, use the new page access code as the leading digits.</p> <p>Line access codes and network routing numbers can also be entered to route incoming calls back to a public or private network number.</p>
<b>11 DNIS VMID Code</b>	<p>Enter the VM mail box number which should answer calls for this DDI/DNIS number.</p> <p>Possible values: Up to 10 digits (default = no value)</p> <p><b>Note</b> This code is only sent if using SMDI VM integration in Program 580, 01. This code will be replaced, after voice mail answers, by the DTMF code set in Program 309, 15 DDI/DNIS DTMF VMID code - if programmed; therefore, if using Program 309, 15 code, this VMID code is not necessary.</p> <p>This mail box number will be sent to voice mail on a DDI/DNIS call that rings directly to voice mail; and, on a direct DDI/DNIS call to a DN that forwards to voice mail before it is answered by the DN.</p> <p>If a DDI/DNIS call is answered by a station and then transferred to a DN that forwards to voice mail, this mail box number of the DDI/DNIS number or the forwarding DN's mail box number will be sent to voice mail per Program 579, 01.</p> <p>If this VMID code is not set, direct DDI/DNIS calls will go to the VM general greeting and DDI/DNIS calls that forward from a DN to VM will go to the DN's VMID mail box.</p> <p>This Voice Mail box number is added to SMDI packets direct and forwarded DDI/DNIS calls to voice mail as explained above.</p>
<b>12 DNIS Name</b>	<p>Enter DNIS name. DNIS names can be assigned from the WinAdmin (not from programming phones).</p> <p>Possible values: Up to 16 ASCII characters (default = no value)</p>

FIELD	DESCRIPTION
<b>15 VM Dial</b>	<p>Enter the VM mail box number which should answer calls for this DDI/DNIS number.</p> <p>Possible values: Digits 0~9, * and #. For a pause enter Px, where x=0~9 (seconds), up to 16 characters (default = no value).</p> <p>This mail box number will be sent to voice mail on a DDI/DNIS call that rings directly to voice mail; and, on a direct DDI/DNIS call to a DN that forwards to voice mail before it is answered by the DN.</p> <p>If a DDI/DNIS call is answered by a station and then transferred to a DN that forwards to voice mail, this mail box number of the DDI/DNIS number or the forwarding DN's mail box number will be sent to voice mail per Program 579, 01.</p> <p>If this VMID code is not set, direct DDI/DNIS calls will go to the VM general greeting and DDI/DNIS calls that forward from a DN to VM will go to the DN's VMID mail box. This voice mail box number is sent to the VM port, as DTMF digits, after the VM port answers a DDI/DNIS call as explained above. These digits are sent to the VM port if the CTX is set for SMDI or DTMF integration in Program 580, 01.</p>

**Note**

1. "DDI Number" field is mandatory data. Administrator must set the "DDI Number" field at first, and can not set other parameters until it is assigned.
2. For DDI, one of the above parameters 3-10 must be set destination at least.
3. Parameter 3-10 can be set at a time.
4. Feature key 5-10 must set two parameters the "Destination Type" and the "Destination" according to circumstance. The input of data uses the "Spkr" key.
5. If no data is entered in FK11FK12,FK13 or FK14, the data of FK11,FK12,FK13 or FK14 that was assigned on Strata CTX is deleted.
6. "2:Dialling Digits" of "Destination Type" is used, when Destination id dialling digits. (example:Station Number, Trunk access, etc.)
7. Wild card uses "?". In R1, the assignment of wild cards is not able to assign from DKT.
8. In R1, the assignment of FK12(Destination Name) is not able to assign from DKT.



# DDI Assignment Record Sheet

ILG _____		Audio Destination Type						Data Destination Type					
01 DDI Num		05 Day 1		06 Day 2		07 Night		08 Day 1		09 Day 2		10 Night	
02 MOH Source		Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest
03 GCO Key Group													
04 Pool Key Group													
						11 DNIS VMID				12 DNIS NAME			

ILG _____		Audio Destination Type						Data Destination Type					
01 DDI Num		05 Day 1		06 Day 2		07 Night		08 Day 1		09 Day 2		10 Night	
02 MOH Source		Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest
03 GCO Key Group													
04 Pool Key Group													
						11 DNIS VMID				12 DNIS NAME			

ILG _____		Audio Destination Type						Data Destination Type					
01 DDI Num		05 Day 1		06 Day 2		07 Night		08 Day 1		09 Day 2		10 Night	
02 MOH Source		Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest
03 GCO Key Group													
04 Pool Key Group													
						11 DNIS VMID				12 DNIS NAME			

ILG _____		Audio Destination Type						Data Destination Type					
01 DDI Num		05 Day 1		06 Day 2		07 Night		08 Day 1		09 Day 2		10 Night	
02 MOH Source		Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest
03 GCO Key Group													
04 Pool Key Group													
						11 DNIS VMID				12 DNIS NAME			

ILG _____		Audio Destination Type						Data Destination Type					
01 DDI Num		05 Day 1		06 Day 2		07 Night		08 Day 1		09 Day 2		10 Night	
02 MOH Source		Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest
03 GCO Key Group													
04 Pool Key Group													
						11 DNIS VMID				12 DNIS NAME			

ILG _____		Audio Destination Type						Data Destination Type					
01 DDI Num		05 Day 1		06 Day 2		07 Night		08 Day 1		09 Day 2		10 Night	
02 MOH Source		Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest
03 GCO Key Group													
04 Pool Key Group													
						11 DNIS VMID				12 DNIS NAME			

ILG _____		Audio Destination Type						Data Destination Type					
01 DDI Num		05 Day 1		06 Day 2		07 Night		08 Day 1		09 Day 2		10 Night	
02 MOH Source		Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest
03 GCO Key Group													
04 Pool Key Group													
						11 DNIS VMID				12 DNIS NAME			

ILG _____		Audio Destination Type						Data Destination Type					
01 DDI Num		05 Day 1		06 Day 2		07 Night		08 Day 1		09 Day 2		10 Night	
02 MOH Source		Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest
03 GCO Key Group													
04 Pool Key Group													
						11 DNIS VMID				12 DNIS NAME			

ILG _____		Audio Destination Type						Data Destination Type					
01 DDI Num		05 Day 1		06 Day 2		07 Night		08 Day 1		09 Day 2		10 Night	
02 MOH Source		Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest
03 GCO Key Group													
04 Pool Key Group													
						11 DNIS VMID				12 DNIS NAME			

## 318 DDI Intercept Assignments

**Prerequisite Program:** 304 [on page 6-2](#)

This command assigns the DDI Routing table when DDI numbers are undefined or not received.

1. Complete the “[DDI Intercept Assignment Record Sheet](#)” on [Page 6-21](#).
2. From the Program Menu, click Trunk > DDI Intercept. The DDI Intercept Assignments screen displays (shown right).
3. Enter an ILG Number  
...or click List to view a summary list of programmed ILGs.
4. Enter DDI Type in the *01 Type* field.
5. Enter DDI Intercept Assignment data.
6. Click Submit.

FIELD	DESCRIPTION
<b>ILG Number</b>	Enter ILG number. Possible values: 1~128 (default = no value)
<b>01 Type</b>	Select Routing Type. Possible values: No DDI (default) or Not Determined
<b>02 MOH Source</b>	Select Music On Hold Possible values: Quiet tone, External 1~15, Internal (default = Internal)
<b>03 Group Exchange Line Destination</b>	GCO Key Group number. Possible values: 0~128 (default = 0)
<b>04 Pooled Line Group</b>	POOL Line Key Group Number. Possible values: 0~128 (default = 0)
<b>05 Audio Day1 Dst Type</b>	Select the Audio/Speech call Day1 destination type.
<b>06 Audio Day2 Dst Type</b>	Possible values: No Data (default), Dialling Digits, DISA, Built-in Modem or Night Bell
<b>07 Audio Night Dst Type</b>	<ul style="list-style-type: none"> <li>• No Data - no destination will ring when the line rings into the system.</li> <li>• Dialling Digits - assigns the line to ring the directory number or access code defined in the “Destination Digits” assignment.</li> <li>• DSIA - assigns the line to ring in as a DSIA call. DSIA dial tone will be returned to the caller.</li> <li>• Modem - assigns the line to ring the remote maintenance modem on the CTX processor. Used to call the system with a WinAdmin PC and modem.</li> <li>• Night Bell - assigns the line to cause the night relay to pulse (one-sec.close/3-sec.open)</li> </ul>

FIELD	DESCRIPTION
<b>Audio Day1 Dst. DN</b> <b>Audio Day2 Dst DN</b> <b>Audio Night Dst DN</b>	Enter the Destination Directory Number. Destination DN is only required if the destination type is "Dialling Digits" Possible values: Up to 32 ASCII characters (default = no value)
<b>08 Data Day1 Dst Type</b> <b>09 Data Day2 Dst Type</b> <b>10 Data Night Dst Type</b>	Select the data call Day1 destination type Possible values: No Data (default), Dialling Digits, DISA, Built-in Modem or Night Bell <ul style="list-style-type: none"> <li>No Data - no destination will ring when the line rings into the system.</li> <li>Dialling Digits - assigns the line to ring the directory number or access code defined in the "Destination Digits" assignment.</li> <li>DISA - assigns the line to ring in as a DISA call. DISA dial tone will be returned to the caller.</li> <li>Modem - assigns the line to ring the remote maintenance modem on the CTX processor. Used to call the system with a WinAdmin PC and modem.</li> <li>Night Bell - assigns the line to cause the night relay to pulse (one-sec.close/3-sec.open)</li> </ul>
<b>Data Day1 Dst DN</b> <b>Data Day2 Dst DN</b> <b>Data Night Dst DN</b>	Enter the Destination Directory Number. Destination DN is only required if the destination type is "Dialling Digits" Possible values: Up to 32 ASCII characters (default = no value) <p><b>Note</b></p> <ol style="list-style-type: none"> <li>"No DDI or Out of Search" field is mandatory data. Administrator must set the "No DDI or Out of Search" field value at first, and can not set other parameters until it is assigned.</li> <li>For DDI, one of the above parameters 3-10 must be set destination at least.</li> <li>Parameters 3-10 can be set at a time.</li> <li>Feature key 5-10 must set two parameters the "Destination" according to circumstance. The input of data uses the "Spkr" key.</li> <li>If no data is entered in FK11,FK12,FK13 or FK14, the data of FK11,FK12,FK13 or FK14 that was assigned on Strata CTX is deleted.</li> <li>"2:Dialling Digits" of "Destination Type" is used, when Destination is dialling digits. (example:Station Number, Trunk access, etc.)</li> <li>In R1, the assignment of FK12(Destination Name) is not able to assign from DKT.</li> </ol>

FIELD	DESCRIPTION
<b>11 DDI/DNIS No. VMID</b>	<p>Enter the VM mail box number which should answer calls for this DDI/DNIS number.</p> <p>Possible values: Up to 10 digits (default = no value).</p> <p><b>Note</b> This code is only sent if using SMDI VM integration in Program 580, 01. This code will be replaced, after voice mail answers, by the DTMF code set in Program 318, 15 DDI/DNIS DTMF VMID code - if programmed; therefore, if using Program 318, 15 code, this VMID code is not necessary.</p> <p>This mail box number will be sent to voice mail on a DDI/DNIS call that rings directly to voice mail; and, on a direct DDI/DNIS call to a DN that forwards to voice mail before it is answered by the DN.</p> <p>If a DDI/DNIS call is answered by a station and then transferred to a DN that forwards to voice mail, this mail box number of the DDI/DNIS number, or the forwarding DN's mail box number will be sent to voice mail per Program 579, 01.</p> <p>If this VMID code is not set, direct DDI/DNIS calls will go to the VM general greeting and DDI/DNIS calls that forward from a DN to VM will go to the DN's VMID mail box.</p> <p>This Voice Mail box number is added to SMDI packets of direct and forwarded DDI/DNIS calls to voice mail as explained above.</p>
<b>12 DDI/DNIS Name</b>	<p>Enter DNIS Name. DNIS names can be assigned from the WinAdmin (not from programming phones).</p> <p>Possible values: Up to 16 ASCII characters (default = no value)</p>
<b>15 DDI/DNIS No. DTMF VMID</b>	<p>Enter the VM mail box number which should answer calls for this DDI/DNIS number.</p> <p>Possible values: Digits 0~9, * and #. For a pause enter Px, where x=0~9 (seconds), up to 16 characters (default = no value).</p> <p>This mail box number will be sent to voice mail on a DDI/DNIS call that rings directly to voice mail; and, on a direct DDI/DNIS call to a DN that forwards to voice mail before it is answered by the DN.</p> <p>If a DDI/DNIS call is answered by a station and then transferred to a DN that forwards to voice mail, the mail box number of the DDI/DNIS number or the forwarding DN's mail box number will be sent to voice mail per Program 579, 01.</p> <p>If this VMID code is not set, direct DDI/DNIS calls will go to the VM general greeting and DDI/DNIS calls that forward from a DN to VM will go to the DN's VMID mail box.</p> <p>This voice mail box number is sent to the VM port, as DTMF digits, after the VM port answers a DDI/DNIS call as explained above. These digits are sent to the VM port if the CTX is set for SMDI or DTMF integration in Program 580, 01.</p>

## DDI Intercept Assignment Record Sheet

ILG Number _____		Audio Destination						Data Destination					
01 Type		05 Day 1		06 Day 2		07 Night		08 Day 1		09 Day 2		10 Night	
02 MOH Source		Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest
03 GCO Key Group													
04 Pool Key Group													
						11 VMID for DNIS				12 DNIS Name			

ILG Number _____		Audio Destination						Data Destination					
01 Type		05 Day 1		06 Day 2		07 Night		08 Day 1		09 Day 2		10 Night	
02 MOH Source		Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest
03 GCO Key Group													
04 Pool Key Group													
						11 VMID for DNIS				12 DNIS Name			

ILG Number _____		Audio Destination						Data Destination					
01 Type		05 Day 1		06 Day 2		07 Night		08 Day 1		09 Day 2		10 Night	
02 MOH Source		Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest
03 GCO Key Group													
04 Pool Key Group													
						11 VMID for DNIS				12 DNIS Name			

ILG Number _____		Audio Destination						Data Destination					
01 Type		05 Day 1		06 Day 2		07 Night		08 Day 1		09 Day 2		10 Night	
02 MOH Source		Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest
03 GCO Key Group													
04 Pool Key Group													
						11 VMID for DNIS				12 DNIS Name			

ILG Number _____		Audio Destination						Data Destination					
01 Type		05 Day 1		06 Day 2		07 Night		08 Day 1		09 Day 2		10 Night	
02 MOH Source		Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest
03 GCO Key Group													
04 Pool Key Group													
						11 VMID for DNIS				12 DNIS Name			

ILG Number _____		Audio Destination						Data Destination					
01 Type		05 Day 1		06 Day 2		07 Night		08 Day 1		09 Day 2		10 Night	
02 MOH Source		Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest
03 GCO Key Group													
04 Pool Key Group													
						11 VMID for DNIS				12 DNIS Name			

ILG Number _____		Audio Destination						Data Destination					
01 Type		05 Day 1		06 Day 2		07 Night		08 Day 1		09 Day 2		10 Night	
02 MOH Source		Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest
03 GCO Key Group													
04 Pool Key Group													
						11 VMID for DNIS				12 DNIS Name			

ILG Number _____		Audio Destination						Data Destination					
01 Type		05 Day 1		06 Day 2		07 Night		08 Day 1		09 Day 2		10 Night	
02 MOH Source		Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest
03 GCO Key Group													
04 Pool Key Group													
						11 VMID for DNIS				12 DNIS Name			

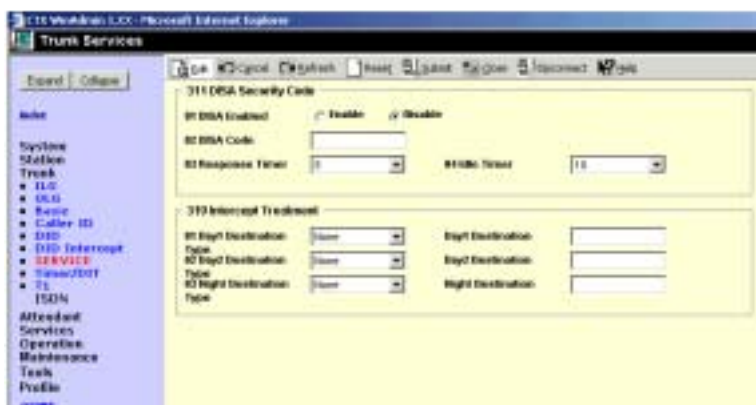
ILG Number _____		Audio Destination						Data Destination					
01 Type		05 Day 1		06 Day 2		07 Night		08 Day 1		09 Day 2		10 Night	
02 MOH Source		Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest	Type	Dest
03 GCO Key Group													
04 Pool Key Group													
						11 VMID for DNIS				12 DNIS Name			

# Service

**Program Number(s): 311 and 319**

These commands assign Assigns Direct Inward System Access (DISA) properties.

1. From the Program Menu, click Trunk > Service. The Trunk Services screen displays (shown right).
2. Enter Program 311 data.
3. Enter Program 319 data.
4. Click Submit.



## 311 DISA Security Code

**Prerequisite Program:** None

Assigns DISA parameters.

FIELD	DESCRIPTION
<b>01 DISA Enabled</b>	Enable DISA security code. Possible values: Enable or Disable (default)
<b>02 DISA Code</b>	Enter DISA security code. Possible values: Up to 15 digits (default = no value)
<b>03 Response Timer</b>	Enter the time, in seconds, for Strata CTX to respond to a call. Possible values: 0~30 (default = 5)
<b>04 Idle Timer</b>	Enter the time in seconds to wait for idle DTMF. Possible values: 0~60 (default = 10)

## 319 Intercept Treatment

**Prerequisite Program:** None

This command assigns Intercept positions for Strata CTX Day/Night schedules. Intercept positions are used when the destination of a trunk line call is not determined with DDI or DIT.

FIELD	DESCRIPTION
<b>01 Day1 Destination Type</b> <b>02 Day2 Destination Type</b> <b>03 Night Destination Type</b>	Select Destination Type for each. Possible values: None (default), Dialling Digits or Night Bell
<b>Day1 Destination</b> <b>Day2 Destination</b> <b>Night Destination</b>	Enter Destination for each. Possible values: Up to 32 ASCII characters (default = no value) <ul style="list-style-type: none"> <li>• To intercept with a DN use 0~99999</li> <li>• To intercept with a Network DN use 1~32</li> <li>• To intercept with Dial Digits Paging 1~16</li> </ul>

# Timer/DIT

**Program Number(s): 308 and 310**

These commands assign Trunk timers.

1. Complete the “Trunk Timer/DIT Record Sheet” on Page 6-26.
2. From the Program Menu, click Trunk > Timer/DIT. The Trunk Timer and DIT Assignments screen displays (shown right).
3. Enter Trunk equipment number field. Enter Program 308 data.
4. Enter Program 310 data.
  - ✦ List – to view a summary list of programmed Trunks timers.
  - ✦ Copy – to copy to trunk timer ports.
5. Click Submit.

## 308 Trunk Timer

**Prerequisite Program:** 300 on page 6-8

Assigns trunk timers for analogue and T1\* trunks

(\*not available in the UK & Europe) .

FIELD	DESCRIPTION
<b>Trunk Equipment No.</b>	<p>Enter the trunk equipment number.</p> <p>Possible values: xx = Cabinet 01~07; yy = Slot 01~10; zz = Circuit 01~08 or zz=T1 Circuit 01~24 (CTX670) xx = Cabinet 01; yy = Slot 01~08; zz = Circuit 01~24 (CTX100) (default = no value)</p> <p><b>Note</b> Equipment numbers are required when assigning a new trunk to the system. It can also be used to display the equipment location of existing trunks.</p>
<b>01 Auto Release</b>	<p>Select the Automatic Release timing.</p> <p>Possible values: Disable, Detect 95ms or Detect 450ms (default)</p> <p><b>Note</b> Select Disable if the Exchange does not send the automatic release signal to the loop start trunk.</p>
<b>02 Short Recall</b>	<p>Select Short Recall Time.</p> <p>Possible values: 0~15, where 1 = 100msec. (default = 5, which is .5 seconds) 0=no recall, 1=.1 sec. - 15=1.5 sec. 5 is the most common duration of a recall signal.</p> <p>When a telephone initiates the short recall signal to the Exchange Line it is connected to (using the short recall feature button or access code #450) the duration of a short recall is determined by this command. Normally this signal is used to recall a centrex line. The short recall range is 0 to 1.5 seconds in increments of 0.1 seconds.</p>

FIELD	DESCRIPTION
<b>03 Long Recall</b>	<p>Select Long Recall Time</p> <p>Possible values: 0, 5, 10, 15, 20, 25 and 30, where 5 = 5. seconds. (default = 5)</p> <p>When a telephone initiates the long recall signal to the Exchange Line it is connected to (using the long recall feature button or access code #451) the duration of a long recall is determined by this command. Normally this signal is used to disconnect the line. The long recall range is 0 to 3 seconds in increments of 0.5 seconds. Possible values: 0=no recall, 5=.5 sec., 10=1sec., 15=1.5sec., 20=2sec., 25=2.5sec., 30=3sec.</p>
<b>04 Pause after Recall</b>	<p>Pause time after recall; After a recall signal is sent to an Exchange Line, this timer determines when the line will start to send the dialled digits to the other end.</p> <p>Possible values: 0~5, 0=immediately sent, and 1sec.delay to 5sec.delay</p> <p>(default = 1 second delay before sending digits)</p>
<b>05 Response Information</b>	<p>The response timer is for analogue DDI/Tie lines that have the "start method" set for "Timing" in Prog300-6. After a line is seized this timer determines when the line will start to send the dialled digits to the other end.</p> <p>Possible values: 0=immediately sent, and 50msec.delay to 500msec.delay</p> <p>(default = 500msecond delay before sending digits)</p>

## 310 DIT Assignment

**Prerequisite Program:** 300 [on page 6-8](#)

This command assigns DIT Number Analysis Table for DIT trunks. DIT trunks are ground and loop start trunks.

FIELD	DESCRIPTION
<b>Line Equipment No.</b>	<p>Enter the trunk equipment number. Equipment numbers are required when assigning a new trunk to the system. It can also be used to display the equipment location of existing trunks.</p> <p>Example: If a line should be assigned to an RCOU in cabinet shelf 5, slot 2, circuit 3, enter 050203.</p> <p>Possible values: xx = cabinet 01~07; yy =slot 01~10; zz = circuit 01~08 or Channel 01~24 (CTX670).</p> <p>xx = cabinet 01; yy =slot 01~08; zz = circuit 01~24 or Channel (CTX100)</p> <p>(default = no value).</p> <p>Cabinet numbers:</p> <ul style="list-style-type: none"> <li>• CTX100 – Select 01 for Base and Expansion cabinet.</li> <li>• CTX670 – Select 01 for Base and 02~07 respectively for each Expansion cabinet.</li> </ul> <p>Slot numbers:</p> <ul style="list-style-type: none"> <li>• CTX100 – Select 01~04 for Base slots and 05~08 for Expansion slots.</li> <li>• CTX670 – Select 01~08 for Base slots and 01~10 for Expansion slots.</li> </ul>



FIELD	DESCRIPTION
<b>01 Day1 Destination Type</b> <b>02 Day2 Destination Type</b> <b>03 Night Destination Type</b>	<p>Select Destination Type for each.</p> <p>Possible values: : No Data (default), Dialling Digits, DISA, Built-in Modem, or Night Bell</p> <ul style="list-style-type: none"> <li>No Data - no destination will ring when the line rings into the system.</li> <li>Dialling Digits - assigns the line to ring the directory number or access code defined in the "Destination Digits" assignment.</li> <li>DSIA - assigns the line to ring in as a DSIA call. DSIA dial tone will be returned to the caller.</li> <li>Modem - assigns the line to ring the remote maintenance modem on the CTX processor. Used to call the system with a WinAdmin PC and modem.</li> <li>Night Bell - assigns the line to cause the night relay to pulse (one-sec.close/3-sec.open)</li> </ul>
<b>Day1 Destination Digits</b> <b>Day2 Destination Digits</b> <b>Night Destination Digits</b>	<p>Enter Destination, Directory number or access codes for each, only if Dialling Digits is selected as Destination Type.</p> <ul style="list-style-type: none"> <li>If Dialling Digits is the Destination Type, enter the Directory Number that the line should ring. If the line should ring over external page, enter #31xx, where xx is the external Page group number.</li> <li>If the default page access code #31 was changed, use the new page access code as the leading digits.</li> <li>Line access codes and network routing numbers can also be entered to route incoming calls back out to a public or private network number.</li> </ul> <p>Possible values: Up to 32 digits (default = no value)</p>
<b>04 MOH Source</b>	<p>Select the MOH source for Analogue DIT Trunk. The Scroll key must be used to select MOH sources indicated by 10 or higher.</p> <p>Possible values: Quiet tone, External1~15 Internal (default = Internal)</p>

### Note

- For DIT, one of the above parameters 1-3 must be set destination at least.
- Parameter 1-3 can be set at a time.
- Feature key 1-3 must set two parameters the "Destination" according to circumstance. The input of data uses the "Spkr" key.
- "2:Dialling Digits" of Destination Type" is used, when Destination id Dialling digits. (example:Station Number, Trunk access, etc.)

## Trunk Timer/DIT Record Sheet

[illegible]

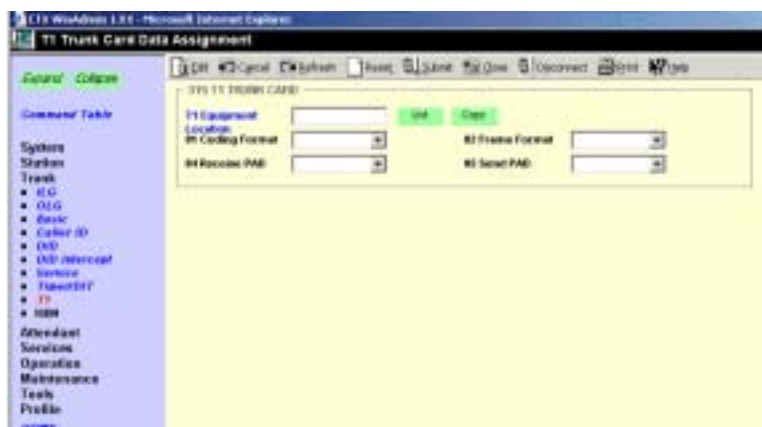
## 315 T1 Trunk Card

**Note** T1 is not available in the UK & Europe.

**Prerequisite Program:** 100 on [page 4-1](#)

This command assigns T1 Trunk Card Data to the system.

1. Complete the “[Trunk Timer/DIT Record Sheet](#)” on [Page 6-26](#).
2. From the Program Menu, click Trunk > T1. The T1 Trunk Card Data Assignment screen displays (shown right).
3. Enter T1 card location in *Shelf/Slot* field (xxyy). The selected slot requires a DTU Card.



✦ xx = Cabinet 01~07

✦ yy = Slot 01~10

...or click the following buttons:

- ✦ List – to view a summary list of programmed Trunks.
- ✦ Copy – to T1 trunk equipment.

4. Enter values for Program 315.
5. Click Submit.

FIELD	DESCRIPTION
<b>T1 Equipment Location</b>	<p>Enter the RDTU PCB equipment location.</p> <p>Possible values: xx = cabinet 01; yy =slot 03, 05, or 07 ...or xx = cabinet 02~07; yy =slot 01, 03, or 05</p> <p>Cabinet – Select 01 for Base and Expansion cabinet (Strata CTX 100). Select 01 for Base and 02~07 respectively for each Expansion cabinet (Strata CTX 670). Slot – Select 01~04 for Base slots and 05~08 for Expansion slots (Strata CTX 100). Select 01~08 for Base slots and 01~10 for Expansion slots (Strata CTX 670) (default = no value)</p>
<b>01 Coding Format</b>	<p>Select the Coding Format.</p> <p>Possible values: None, PZC, B8ZS (default) or ZCS</p>
<b>02 Frame Format</b>	<p>Select the Frame Format.</p> <p>Possible values: SF Mode or ESF Mode (default)</p>
<b>04 Receive PAD</b>	<p>Select the Receive PAD values.</p> <p>Possible values: None, Plus 6 dB, Plus 3 dB, Zero dB (default), Minus 3 dB, Minus 6 dB, Minus 9 dB, Minus 12 dB or Minus 15 dB</p>

FIELD	DESCRIPTION
<b>05 Send PAD</b>	Select the Send PAD values. Possible values: None, Plus 6 dB, Plus 3 dB, Zero dB (default), Minus 3 dB, Minus 6 dB, Minus 9 dB, Minus 12 dB or Minus 15 dB

## ISDN

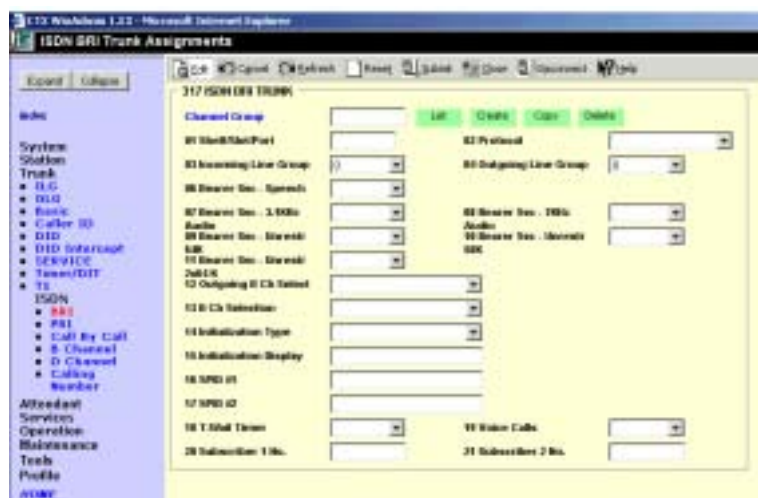
The following program enables set up for ISDN related system settings.

### 317 ISDN BRI Trunk

**Prerequisite Program:** 100 on page 4-1

This command assigns ISDN BRI TE Trunks.

- Complete the “[ISDN BRI Record Sheet](#)” on Page 6-32.
- From the Program Menu, click Trunk > ISDN > BRI.
- Enter Channel Group number  
...or click one of the following buttons:
  - ✦ List – view a summary list of programmed Trunks.
  - ✦ Create – Assign a new Trunk with default settings.
  - ✦ Copy – Enter a *Channel Group* number and click Copy to make a new Trunk assignment with settings copied from the Channel Group you entered.
  - ✦ Delete – Delete an Trunk.
- Enter data.
- Click Submit.



FIELD	DESCRIPTION
<b>Channel Group</b>	Enter the BRI channel Group Number. Possible values: 1~128 (CTX670), 1~32 (CTX100) (default = no value)
<b>01 Equipment Number</b>	Enter the equipment number xxyyzz to which the ISDN BRI Trunk is to be assigned. Example: If the RBUU is installed in cabinet shelf 5, slot 3, enter 050301 for circuit 1. Possible values: xx = Cabinet 01~07; yy = Slot 01~10; zz = Circuit 01~04 (CTX670) xx = Cabinet 01; yy = Slot 01~08; zz = Circuit 01~04 (CTX100) (default = no value).  Cabinet numbers: <ul style="list-style-type: none"> <li>• CTX100 – Select 01 for Base and Expansion cabinet.</li> <li>• CTX670 – Select 01 for Base and 02~07 respectively for each Expansion cabinet.</li> </ul> Slot numbers: <ul style="list-style-type: none"> <li>• CTX100 – Select 01~04 for Base slots and 05~08 for Expansion slots.</li> <li>• CTX670 – Select 01~08 for Base slots and 01~10 for Expansion slots.</li> </ul>
<b>02 Protocol</b>	Select the ISDN protocol. Only Bearer capabilities specified by the protocol can be entered in this field. The Initial value for ISDN Protocol corresponds to information set in the hardware level. Possible values: Nat'l ISDN (default), ETSI, TTC or Nat'l ISDN Nortel National ISDN = North America, ETSI = England and TTC = Japan.
<b>03 ILG</b>	ILG assignments must be made for basic ISDNs to process the calls being received. Possible values: 0~128 (CTX670), 0~32 (CTX100), (default = no value).
<b>04 OLG</b>	OLG assignments must be made for basic ISDNs to process the calls being originated. Possible values: 0~128 (CTX670), 0~32 (CTX100), (default = no value).
<b>06 Bearer Svc - Speech</b>	Enable speech capability. See <a href="#">Table 6-1 on Page 6-33</a> . Possible values: Enable (default) or Disable
<b>07 Bearer Svc - 3.1 KHz Audio</b>	Enable 3.1 KHz audio capability. See <a href="#">Table 6-1 on Page 6-33</a> . Possible values: Enable (default) or Disable
<b>08 Bearer Svc - 7 KHz Audio</b>	Enable 7 KHz audio capability. See <a href="#">Table 6-1 on Page 6-33</a> . Possible values: Enable or Disable (default)
<b>09 Bearer Svc - Unrestricted 64K</b>	Enable one of the unrestricted capabilities. See <a href="#">Table 6-1 on Page 6-33</a> . Possible values: Enable (default) or Disable bearer capabilities for the channel group.
<b>10 Bearer Svc - Unrestricted 56K</b>	Possible values: Enable (default) or Disable
<b>11 Bearer Svc - Unrestricted 2x64K</b>	

FIELD	DESCRIPTION
<b>12 Outgoing B Ch Select</b>	<p>Select originating B Channel method.</p> <p>Possible values:</p> <ul style="list-style-type: none"> <li>• Explicit – Channel is indicated, and no alternative is acceptable.</li> <li>• Preferred – (default) Channel is indicated, and any alternative is acceptable.</li> <li>• Any Channel – Channel is indicated, and any channel is acceptable.</li> </ul>
<b>13 B Ch Selection</b>	<p>Choose Idle B Channel selection method.</p> <p>Possible values: Forward Cyclic, Backward Cyclic, Forward Terminal or Backward Terminal (default = Backward Terminal)</p> <ul style="list-style-type: none"> <li>• Select Forward Cyclic (from lowest number to highest number of B-channel).</li> <li>• Select Backward Cyclic (from highest number to lowest number of B-channel).</li> <li>• Select Forward Terminal for the lowest numbered B-channel.</li> </ul> <p>Select Backward Terminal for the oldest number B-channel. (The High-High B-channel selection)</p>
<b>14 Initialise Type</b>	<p>Enter the Service Profile Identifier (SPID) type of initialisation.</p> <p>Possible values: User Entry (Auto SPID On), User Entry (Auto SPID Off), Auto SPID or None (default)</p>
<b>15 Initialisation Display</b>	<p>Enter the text to be displayed for SPID Initialisation.</p> <p>Possible values: Up to 4 ASCII characters (default = User)</p>
<b>16 SPID #1</b>	<p>Enter the SPID value. These fields are required if you selected National ISDN in Protocol. When no data is entered, any previously entered information is overwritten.</p> <p>Possible values: Up to 20 ASCII characters (default = No Value)</p>
<b>17 SPID #2</b>	
<b>18 T-Wait Timer</b>	<p>Enable the T-Wait Timer. This field is needed if you selected National ISDN in Protocol above. This timer, used along with the SPID, assigns random initializing SPID times to prevent BRI interfaces from re-initialise at the same time after a reset or power outage.</p> <p>Possible values: Enable or Disable (default)</p>
<b>19 Voice Calls</b>	<p>Select the number of simultaneous voice (speech) calls that can exist at the same time on this interface.</p> <p>Possible values: One or Two (default)</p>
<b>20 Trunk Subscriber 1</b>	<p>Enter the telephone number for subscriber 1. Telephone number should be consistent with D channel data. If no data is entered in this field any previously programmed information is lost.</p> <p>Possible values: Up to 10 digits (default = no value)</p>
<b>21 Trunk Subscriber 2</b>	<p>Enter the telephone number for subscriber number 2. If no data is entered in this field any previously programmed information is lost.</p> <p>Possible values: Up to 10 digits (default = no value)</p>
<b>22 Short Line Break</b>	<p>Assign short break support to compensate for layer 1 errors.</p> <p>Possible values: Enable (default) or Disable.</p>
<b>23 TEI Assignment</b>	<p>Configure BRI Trunk TEI</p> <p>Possible values: TEI Fixed; Single TEI; Two TEI.</p> <p>(default = If the protocol is Bellcore National ISDN, the default data is "Two TEI". For other protocols, the default data is "TEI Fixed.")</p>

**Note**

1. Port must be housing ISDN. If Port housing non-ISDN trunk, system outputs error.
2. The specifiable bearer capability is only those provided by the protocol. See “bearer capability of ISDN”.
3. FK16 and FK17 are used only for Bellcore National ISDN.
4. If TEI is “TEI Fixed” or “Single TEI”, you can set one SPID(FK16). “two TEIs”, you can set two SPIDs (FK16,FK17).
5. “T-WAIT” in FK18 field is used only for Bellcore National ISDN.
6. ILG and OLG can set ISDN ILG and ISDN OLG only.
7. If no data is entered in FK16 or FK17, the data of FK16 or FK17 that was assigned on Strata CTX is deleted.
8. FK15 displays ISDN SPID Initialise Type, displays Type is the following.
  - “USER” (User Entry of SPID)
  - “AUTO” (Auto SPID)
9. When new ISDN trunk is assigned, Equipment Location, Protocol and ILG or OLG are mandatory data.
10. Default value in FK14 is depends on protocol. “1:User Entry of SPID Auto SPID ON” for Bellcore National ISDN. “4:None” for TTC and ETSI.
11. If no data is entered in FK20, the data of FK20 that was assigned on Strata CTX is deleted.
12. If no data is entered in FK21, the data of FK21 that was assigned on Strata CTX is deleted.
13. In FK24(TEI assign), if the protocol is Bellcore National ISDN, the default data is “3:two”, if the protocol is other protocol, the default data is “1TEI Fixed”.

## ISDN BRI Record Sheet

<b>Channel Group:</b> _____							
01 Equipment Number		07 3.1KHz Audio		12 Outgoing B Channel		17 SPID 2	
02 Protocol		08 7KHz		13 B CH Selection		18 T-Wait Timer	
03 ILG		09 Unrestricted 64K		14 Initialise Type		19 Voice Calls	
04 OLG		10 Unrestricted 56K		15 Initialisation Display		20 Trunk Subscriber 1	
06 Speech		11 Unrestricted 2x64K		16 SPID 1		21 Trunk Subscriber 2	

<b>Channel Group:</b> _____							
01 Equipment Number		07 3.1KHz Audio		12 Outgoing B Channel		17 SPID 2	
02 Protocol		08 7KHz		13 B CH Selection		18 T-Wait Timer	
03 ILG		09 Unrestricted 64K		14 Initialise Type		19 Voice Calls	
04 OLG		10 Unrestricted 56K		15 Initialisation Display		20 Trunk Subscriber 1	
06 Speech		11 Unrestricted 2x64K		16 SPID 1		21 Trunk Subscriber 2	

<b>Channel Group:</b> _____							
01 Equipment Number		07 3.1KHz Audio		12 Outgoing B Channel		17 SPID 2	
02 Protocol		08 7KHz		13 B CH Selection		18 T-Wait Timer	
03 ILG		09 Unrestricted 64K		14 Initialise Type		19 Voice Calls	
04 OLG		10 Unrestricted 56K		15 Initialisation Display		20 Trunk Subscriber 1	
06 Speech		11 Unrestricted 2x64K		16 SPID 1		21 Trunk Subscriber 2	

<b>Channel Group:</b> _____							
01 Equipment Number		07 3.1KHz Audio		12 Outgoing B Channel		17 SPID 2	
02 Protocol		08 7KHz		13 B CH Selection		18 T-Wait Timer	
03 ILG		09 Unrestricted 64K		14 Initialise Type		19 Voice Calls	
04 OLG		10 Unrestricted 56K		15 Initialisation Display		20 Trunk Subscriber 1	
06 Speech		11 Unrestricted 2x64K		16 SPID 1		21 Trunk Subscriber 2	

<b>Channel Group:</b> _____							
01 Equipment Number		07 3.1KHz Audio		12 Outgoing B Channel		17 SPID 2	
02 Protocol		08 7KHz		13 B CH Selection		18 T-Wait Timer	
03 ILG		09 Unrestricted 64K		14 Initialise Type		19 Voice Calls	
04 OLG		10 Unrestricted 56K		15 Initialisation Display		20 Trunk Subscriber 1	
06 Speech		11 Unrestricted 2x64K		16 SPID 1		21 Trunk Subscriber 2	

<b>Channel Group:</b> _____							
01 Equipment Number		07 3.1KHz Audio		12 Outgoing B Channel		17 SPID 2	
02 Protocol		08 7KHz		13 B CH Selection		18 T-Wait Timer	
03 ILG		09 Unrestricted 64K		14 Initialise Type		19 Voice Calls	
04 OLG		10 Unrestricted 56K		15 Initialisation Display		20 Trunk Subscriber 1	
06 Speech		11 Unrestricted 2x64K		16 SPID 1		21 Trunk Subscriber 2	

<b>Channel Group:</b> _____							
01 Equipment Number		07 3.1KHz Audio		12 Outgoing B Channel		17 SPID 2	
02 Protocol		08 7KHz		13 B CH Selection		18 T-Wait Timer	
03 ILG		09 Unrestricted 64K		14 Initialise Type		19 Voice Calls	
04 OLG		10 Unrestricted 56K		15 Initialisation Display		20 Trunk Subscriber 1	
06 Speech		11 Unrestricted 2x64K		16 SPID 1		21 Trunk Subscriber 2	

<b>Channel Group:</b> _____							
01 Equipment Number		07 3.1KHz Audio		12 Outgoing B Channel		17 SPID 2	
02 Protocol		08 7KHz		13 B CH Selection		18 T-Wait Timer	
03 ILG		09 Unrestricted 64K		14 Initialise Type		19 Voice Calls	
04 OLG		10 Unrestricted 56K		15 Initialisation Display		20 Trunk Subscriber 1	
06 Speech		11 Unrestricted 2x64K		16 SPID 1		21 Trunk Subscriber 2	

<b>Channel Group:</b> _____							
01 Equipment Number		07 3.1KHz Audio		12 Outgoing B Channel		17 SPID 2	
02 Protocol		08 7KHz		13 B CH Selection		18 T-Wait Timer	
03 ILG		09 Unrestricted 64K		14 Initialise Type		19 Voice Calls	
04 OLG		10 Unrestricted 56K		15 Initialisation Display		20 Trunk Subscriber 1	
06 Speech		11 Unrestricted 2x64K		16 SPID 1		21 Trunk Subscriber 2	



Table 6-1 Bearer Capability Table

Bearer Services			Belcore National ISDN	ETSI	TTC
Circuit Mode	Speech		X	X	X
	3.1 KHz		X	X	X
	7 KHz			X	X
	Unrestricted Digital Information	64 Kbps	X	X	X
		Rate adaptation from 56 Kbps	X		
		2x64 Kbps		X	X

## 302 PRI Trunks

**Prerequisite Program:** 100 on page 4-1

The PRI Interface card needs to have a number of assignments for defining its operation. These include which channels are available for use and the location of the D channel or signalling channel. A number of optional functional capabilities also need to be enabled or disabled.

D Channel exists on the circuit assigned in this command.

**Note** PRI ILGs and OLGs are assigned using “Call-by-Call” on Page 6-38. Therefore, ILG and OLG must be set to 0.

- Complete the “PRI Trunks Record Sheet” on Page 6-37.
- From the Program Menu, click Trunk > ISDN > PRI.
- Enter Channel Group number  
...or click one of the following buttons:
  - ✦ List – view a summary list of programmed Trunks.
  - ✦ Create – Assign a new Trunk with default settings.
  - ✦ Copy – Enter an *Channel Group* number and click Copy to make a new Trunk assignment with settings copied from the Channel Group entered.
  - ✦ Delete – Delete an Trunk (Trunks 1~128 for CTX670 and 1~32 for CTX100).
- Enter data.

## 5. Click Submit.

FIELD	DESCRIPTION
<b>Channel Group</b>	Channel Group Number Possible values: 1 - 128 (default = no value)
<b>01 RPTU Equipment No.</b>	Enter the ISDN RPTU equipment number as xxyyzz. Possible values: xx = cabinet 01; yy = 03, 05, or 07; zz = Circuit 01 ...or xx = cabinet 02~07; yy = 01, 03, or 05; zz = Circuit 01 (default = no value)  <b>Note</b> zz = Channel 01 is always used to assign RPTU parameters Example: If the RPTU is installed in cabinet shelf 5, slot 3, enter 050301. Enter the equipment number xxyyzz to which the ISDN PRI Trunk is to be assigned. Equipment numbers are required when assigning ISDN RPTU parameters in the system. It can also be used to display the equipment location of existing RPTU PCBs.
<b>02 Protocol</b>	The Protocol to be followed defines the type of interface expected based upon the equipment type at the distant end of the connection. Possible values: National ISDN, ETSI, TTC, National ISDN Nortel or Q-Sig (default = None)
<b>03 ILG</b>	Primary ISDN needs to have Trunk Group assignments to process the calls being received. If multiple trunk groups are used within the Channel Group, then Call-by-Call Services must be used. Possible values: 0~128 (default = 0)
<b>04 OLG</b>	Primary ISDN needs to have Trunk Group assignments to process the calls being originated. If multiple trunk groups are used within the Channel Group, then Call-by-Call Services must be used. Possible values: 0~128 (default = 0)
<b>05 Trunk ID Type</b>	Identify whether the communication with the PSTN requires an identifier. Select Explicit to require an identifier. Possible values: Implicit (default) or Explicit
<b>06 Trunk ID</b>	An identifier must be used as part of the addressing when an "explicit" identifier is used to communicate with the PSTN which channel on which link is used for the given call. This identifier is assigned by the connected PSTN. Possible values: 0 ~ 126 (default = 0)
<b>07 D Ch Position</b>	PRI includes a 64-kbps D-channel (for transfer of signal information). Select the channel position to be used for D channel signalling. <b>Note</b> This field is used only when the span interface speed is 1.5M. If the span interface speed is 2M the value is fixed at 16. Possible values: 1 ~ 24 (default = 24)
<b>08~13 Bearer Services:</b>	1. Enable the Bearer Capabilities allowed for this PRI Trunk channel group. Possible values: Enable (default) or Disable
• <b>Speech</b>	
• <b>3.1 KHz Audio</b>	2. Select the Channel Method (map) to identify the channels.
• <b>7 KHz Audio</b>	<b>Note</b> In North America, only Channel Number map is used (Channel Number). See <a href="#">Table 6-2</a> .
• <b>Unrestr. 64K</b>	Possible values: Channel Number (default) or Slot Number
• <b>Unrestr. 56K</b>	
• <b>Unrestr. 2x64K</b>	

FIELD	DESCRIPTION
<b>14~18 Bearer Services:</b> <ul style="list-style-type: none"> <li>• <b>Unrestr. 384K</b></li> <li>• <b>Unrestr. 1536K</b></li> <li>• <b>Unrestr. 1920K</b></li> <li>• <b>Restr. Digital</b></li> <li>• <b>Video</b></li> </ul>	<p>1. The Bearer Capabilities (384k Unrestricted(H0), 1536k Unrestricted(H11), 1920k Unrestricted, Restricted Digital Info, Trunk Video, and Unrestricted Multirate) are not used and should remain disabled.</p> <p>Possible values: Enable or Disable (default)</p> <p>2. Select the Channel Method (map) to identify the channels.</p> <p><b>Note</b> In North America, only Channel Number B map is used. See <a href="#">Table 6-2</a>.</p> <p>Possible values: Channel Number B (default), Channel Number H, Slot Map B or Slot Map H</p>
<b>19 Bearer Svc Multirate Unrestricted</b>	<p>The Bearer Capabilities 384k Unrestricted (H0), 1536k Unrestricted (H11), 1920k Unrestricted, Restricted Digital Info, Trunk Video and Unrestricted Multirate are not used and should remain disabled. See <a href="#">Table 6-2</a>.</p> <p>Possible values: Enable or Disable (default)</p>
<b>20 B Ch Selection Method</b>	<p>The method used for selecting an idle 'B' channel and the reaction if the PSTN indicates the channel is not available needs to be chosen to originate a call from CTX.</p> <p>Possible values: Explicit (default), Preferred or Any Channel</p> <p>Preferred option is recommended, unless PSTN needs other choice.</p>
<b>21 B-Ch Selection</b>	<p>The search method for choosing an idle 'B' channel shall also be specified. Backward Terminal is the normal method with the PSTN following a Forward Terminal method.</p> <p>Possible values: Forward Cyclic, Backward Cyclic, Forward Terminal or Backward Terminal (default)</p>
<b>22 T1 Time Slot Pattern</b>	<p>1544 Time Slot Pattern.</p> <p>Possible values: Fixed1 (default), Flexible or Floating</p>
<b>23 E1 Time Slot Pattern</b>	<p>2048 Time Slot Pattern</p> <p>Possible values: Fixed1 (default), Fixed2 or Flexible</p>
<b>24 T-Wait Timer</b>	<p>Specify whether the T-Wait timer is to be enabled or disabled. This field is only valid for Nat'l ISDN.</p> <p>Possible values: Enable (default) or Disable</p>
<b>25 RBT on Incoming Call</b>	<p>Enable Ringback Tone when terminating a call. This field is only valid for Nat'l ISDN.</p> <p>Possible values: Enable or Disable (default)</p>
<b>26 Network Mode</b>	<p>Set this span as Master or Slave for Layer 2 of a QSIG PRI. The opposite value must be set for the node in which this QSIG PRI terminates. This governs call setup activity and is not related to clock synchronization.</p> <p>Possible values: Master (default) or Slave</p>
<b>27 Negotiation Priority</b>	<p>Sets this span as Side A or Side B for Layer 3 of a QSIG PRI. The opposite value must be set for the node in which this QSIG PRI terminates.</p> <p>Possible values: Side A (default) or Side B</p>
<b>28 Short Line Break</b>	<p>Assign Short Line Break support to compensate for layer 1 errors.</p> <p>Possible values: Enable (default) or Disable.</p>

**Table 6-2 Bearer Services Table**

Bearer Services		Nat'l ISDN	ETSI	TTC
Circuit Mode	Speech	X	X	X
	3.1 KHz Audio	X	X	X
	7 KHz Audio		X	X
	unrestricted digital information	64 kbps	X	X
		Rate adaptation from 56 kbps	X	
		2x64	X	X
		384kbp (H0)	X	X
		1536kbps (H11)	X	X
		1920kbps (H12)	X	
		multirate (n x 64 kbps)	X	
	Restricted digital Information		X	X
	Video		X	X
Packet Mode	Shelf/Slot/Circuit			

**Note**

- The inputted "Equipment" must be PTU card.
- The specifiable bearer capability is only those provided by the protocol. See "bearer capability of ISDN".
- "I/f ID Number" field is used only when sharing D-channel.
- "I/f ID Number" field's value is depends on protocol. 0-19 for Bellcore. 1-126 for TTC. Unnecessary for ESTI.
- "Dch Position" field is used only in case of I/f speed is 1.5M. Default value is 24. If I/f speed is 2M the value is fixed at "16".
- "T-WAIT" field is used only for Bellcore National ISDN.
- "RBT to the network on terminating a call" field is used only for Bellcore National ISDN.
- "Channel identifier number/slot map, channel type. B,H0,H11,H12" field's default is depends on protocol.  
Bellcore National ISDN only allows "Channel slot map" in "B channel unit" for H0,H11 and multi-rate. It only allows "Channel number" in "B channel unit" for other bearer capabilities.  
ESTI allows "Channel number" in H0/H11/H12 channel unit" for H0,H11 and H12. It allows "Channel number" in "B Channel unit" for other bearer capabilities.  
TTC allows any combination of "Channel number/Channel slot map" and "B/H0/H11/H12 channel units".  
Initial value is "Channel number" in "H0/H11 channel unit" for H0 and H11 and "Channel number" in "B channel unit" for other bearer capabilities.
- When 2048-kbps interface, "D-channel position" value can be assigned only "16".
- IF speed is 1544kbps for Bellcore National ISDN protocol and TTC protocol, 2048kbps for ETSI protocol. Qsig protocol can select 1544kbps or 2048kbps for IF speed.
- Bearer capabilities 384kbps "channel number H" means "channel number H0".  
Bearer capabilities 1536kbps "channel number H" means "channel number H11".  
Bearer capabilities 1920kbps "channel number H" means "channel number H12".
- If you use Call by Call service, you must set "0" in FK3 and FK4. Because ILG and OLG assigns "CALL BY CALL SERVICE ASSIGNMENT".
- "Set the master/slave of layer 2 of QSIG TIE line(FK26)" and "Prefernce line of collision of B channel of QSIG TIE line(FK27) are used by QSIG TIE line.
- As FK8-FK18 have plural parameters, the input of data uses the "Spkr" key.
- In the registration of new ISDN trunk, FK1(Equipment), FK2(Protocol), FK3(ILG) and FK4(OLG) are mandatory data.

## PRI Trunks Record Sheet

Channel Group: _____			Enable/Disable		Ch Method				Enable/Disable		Ch Method					
			En	Dis	Ch	Slt			En	Dis	CB	CH	SB	SH		
01 RPTU Equip		08 Speech					14 Unrestricted 384K								21 B Ch Select	
02 Protocol		09 3.1KHz Audio					15 Unrestricted 1536K								22 T1 Time Slot	
03 ILG		10 7KHz Audio					16 Unrestricted 1920K								23 E1 Time Slot	
04 OLG		11 Unrestricted 64K					17 Restricted Digital								24 T-Wait Timer	
05 Trunk ID Type		12 Unrestricted 56K					18 Video								25 RBT on Incoming	
06 Trunk ID		13 Unrestricted 2x64K					19 Multirate Unrest.								26 Network Mode	
07 D Ch Position							20 B Ch Sel Method								27 Negotiation Priority	

Channel Group: _____			Enable/Disable		Ch Method				Enable/Disable		Ch Method					
			En	Dis	Ch	Slt			En	Dis	CB	CH	SB	SH		
01 RPTU Equip		08 Speech					14 Unrestricted 384K								21 B Ch Select	
02 Protocol		09 3.1KHz Audio					15 Unrestricted 1536K								22 T1 Time Slot	
03 ILG		10 7KHz Audio					16 Unrestricted 1920K								23 E1 Time Slot	
04 OLG		11 Unrestricted 64K					17 Restricted Digital								24 T-Wait Timer	
05 Trunk ID Type		12 Unrestricted 56K					18 Video								25 RBT on Incoming	
06 Trunk ID		13 Unrestricted 2x64K					19 Multirate Unrest.								26 Network Mode	
07 D Ch Position							20 B Ch Sel Method								27 Negotiation Priority	

Channel Group: _____			Enable/Disable		Ch Method				Enable/Disable		Ch Method					
			En	Dis	Ch	Slt			En	Dis	CB	CH	SB	SH		
01 RPTU Equip		08 Speech					14 Unrestricted 384K								21 B Ch Select	
02 Protocol		09 3.1KHz Audio					15 Unrestricted 1536K								22 T1 Time Slot	
03 ILG		10 7KHz Audio					16 Unrestricted 1920K								23 E1 Time Slot	
04 OLG		11 Unrestricted 64K					17 Restricted Digital								24 T-Wait Timer	
05 Trunk ID Type		12 Unrestricted 56K					18 Video								25 RBT on Incoming	
06 Trunk ID		13 Unrestricted 2x64K					19 Multirate Unrest.								26 Network Mode	
07 D Ch Position							20 B Ch Sel Method								27 Negotiation Priority	

Channel Group: _____			Enable/Disable		Ch Method				Enable/Disable		Ch Method					
			En	Dis	Ch	Slt			En	Dis	CB	CH	SB	SH		
01 RPTU Equip		08 Speech					14 Unrestricted 384K								21 B Ch Select	
02 Protocol		09 3.1KHz Audio					15 Unrestricted 1536K								22 T1 Time Slot	
03 ILG		10 7KHz Audio					16 Unrestricted 1920K								23 E1 Time Slot	
04 OLG		11 Unrestricted 64K					17 Restricted Digital								24 T-Wait Timer	
05 Trunk ID Type		12 Unrestricted 56K					18 Video								25 RBT on Incoming	
06 Trunk ID		13 Unrestricted 2x64K					19 Multirate Unrest.								26 Network Mode	
07 D Ch Position							20 B Ch Sel Method								27 Negotiation Priority	

Channel Group: _____			Enable/Disable		Ch Method				Enable/Disable		Ch Method					
			En	Dis	Ch	Slt			En	Dis	CB	CH	SB	SH		
01 RPTU Equip		08 Speech					14 Unrestricted 384K								21 B Ch Select	
02 Protocol		09 3.1KHz Audio					15 Unrestricted 1536K								22 T1 Time Slot	
03 ILG		10 7KHz Audio					16 Unrestricted 1920K								23 E1 Time Slot	
04 OLG		11 Unrestricted 64K					17 Restricted Digital								24 T-Wait Timer	
05 Trunk ID Type		12 Unrestricted 56K					18 Video								25 RBT on Incoming	
06 Trunk ID		13 Unrestricted 2x64K					19 Multirate Unrest.								26 Network Mode	
07 D Ch Position							20 B Ch Sel Method								27 Negotiation Priority	

Channel Group: _____			Enable/Disable		Ch Method				Enable/Disable		Ch Method					
			En	Dis	Ch	Slt			En	Dis	CB	CH	SB	SH		
01 RPTU Equip		08 Speech					14 Unrestricted 384K								21 B Ch Select	
02 Protocol		09 3.1KHz Audio					15 Unrestricted 1536K								22 T1 Time Slot	
03 ILG		10 7KHz Audio					16 Unrestricted 1920K								23 E1 Time Slot	
04 OLG		11 Unrestricted 64K					17 Restricted Digital								24 T-Wait Timer	
05 Trunk ID Type		12 Unrestricted 56K					18 Video								25 RBT on Incoming	
06 Trunk ID		13 Unrestricted 2x64K					19 Multirate Unrest.								26 Network Mode	
07 D Ch Position							20 B Ch Sel Method								27 Negotiation Priority	

## Call-by-Call

### Program Number(s): 324 and 323

Call-by-Call service allows multiple facilities to share a PRI channel group. Traffic requirements of different facilities vary at different times, and sharing B channels on a call-by-call basis makes it possible to use fewer B channels to perform an equivalent service to the discrete counterpart.

1. Complete the “324 CBC Time Zones” on Page 6-39.
2. From the Program Menu, click Trunk > ISDN > Call by Call. The ISDN Call by Call Service screen displays (shown right).
3. Enter Channel Group number.
4. Enter Program 323 data.
5. Enter Program 324 data.
6. Click Submit.

### 323 CBC Service

**Prerequisite Program:** 302 on page 6-33

To accomplish CBC services, each facility needs to be defined, its related Line Group assigned and minimum and maximum values for the services provided. These service parameters may be set for three different time zones, thus allowing fewer or more services of different types at different times of the day.

FIELD	DESCRIPTION
<b>Channel Group</b>	Enter the Channel Group Number. Possible values: 1~128 (CTX670), 1~32 (CTX100) (default = no value)
<b>01 Index</b>	Enter the CBC Service Index, or click one of the following buttons: <ul style="list-style-type: none"> <li>List – view a summary list of programmed Trunks.</li> <li>Create – Assign a new Trunk with default settings.</li> </ul> Possible values: 1~128 (CTX670), 1~32 (CTX100) (default = no value)
<b>02 Type of Service</b>	Select the CBC Service Type. <b>Note</b> To delete CBC, set this field to 1: No Data. Possible values: No data (default), POTS, FX, Tie Line (Enbloc), Tie Line (Cut through), Intra LATA Out WATS, Banded Out WATTS, Inter LATA Out WATS or INWATS
<b>03 Facility Code</b>	Enter the supplied Facility code value from the PSTN. If no data is entered in this field, any previously entered data is deleted. Possible values: 00~31 (default = no value)

FIELD	DESCRIPTION
<b>04 Service Parameter</b>	Enter the Service parameters supplied from PSTN. If no data is entered in this field, any previously entered data is deleted. Possible values: Up to 5 digits (default = no value)
<b>05 Network ID</b>	Enter the Network ID code supplied from PSTN (this field is required if you selected "Inter LATA Out WATS" Type of Service. If no data is entered in this field, any previously entered data is deleted. Possible values: 3 to 4 digits (default = no value)
<b>06 ILG</b>	Specify the ILG for this facility. Possible values: 0~128 (CTX670), 0~32 (CTX100) (default = 0)
<b>07 OLG</b>	Specify the OLG for this facility. Possible values: 1~128 (CTX670), 1~32 (CTX100) (default = 0)
<b>08 Min Calls Zone 1</b>	Select the minimum number of Bch in Time Zone 1. Possible values: 0~47 (default = 0)
<b>09 Max Calls Zone 1</b>	Select the maximum number of Bch in Time Zone 1. Possible values: 0~47 (default = 47)
<b>10 Min Calls Zone 2</b>	Select the minimum number of Bch in Time Zone 2. Possible values: 0~47 (default = 0)
<b>11 Max Calls Zone 2</b>	Select the maximum number of Bch in Time Zone 2. Possible values: 0~47 (default = 47)
<b>12 Min Calls Zone 3</b>	Select the minimum number of Bch in Time Zone 3. Possible values: 0~47 (default = 0)
<b>13 Max Calls Zone 3</b>	Select the maximum number of Bch in Time Zone 3. Possible values: 0~47 (default = 47)

### 324 CBC Time Zones

This command assigns Call-by-Call Time Zone.

FIELD	DESCRIPTION
<b>Channel Group</b>	Channel Group Number Possible values: 1~128 (CTX670), 1~32 (CTX100) (default = no value)
<b>01 Start Zone 1</b>	Enter the Time Zone Starting Time (hhmm). Possible values: hh = 00~23, 99 (hour)
<b>02 Start Zone 2</b>	mm = 00~59, 99 (minutes)
<b>03 Start Zone 3</b>	9999 = delete time zone, (default = no value)

## Call-by-Call Record Sheet

[illegible]

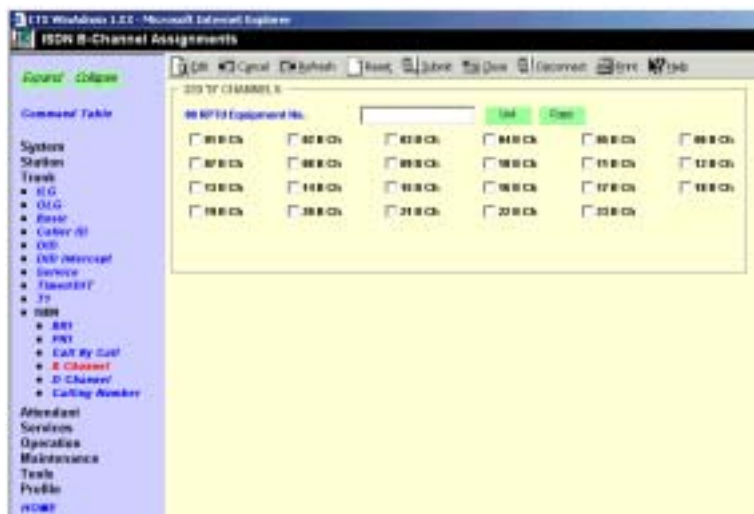


## 320 B Channel

**Prerequisite Program:** 302 [on page 6-33](#)

PRI interfaces are purchased on per interface and channel basis. The B channel assignments allow for a flexible activation of channels to match the subscribed services from the PSTN.

1. Complete the “B Channel Select Record Sheet” below.
2. From the Program Menu, click Trunk > ISDN > B Channel. The ISDN B-Channel Assignments screen displays (shown right).
3. Enter the Equipment Number, or click List to see a summary of programmed circuits.
4. Click the B Channel numbers that you want to activate (see [Table 6-3](#) below for T1 and E1 B Channel default settings).
5. Click Submit.



### B Channel Select Record Sheet

Channel Group: _____ (Enter a check mark to indicate activated B Channels)										
01 B Ch		02 B Ch		03 B Ch		04 B Ch		05 B Ch		06 B Ch
07 B Ch		08 B Ch		09 B Ch		10 B Ch		11 B Ch		12 B Ch
13 B Ch		14 B Ch		15 B Ch		16 B Ch		17 B Ch		18 B Ch
19 B Ch		20 B Ch		21 B Ch		22 B Ch		23 B Ch		24 B Ch to 31 B Ch for UK

**Table 6-3 B Channel Defaults**

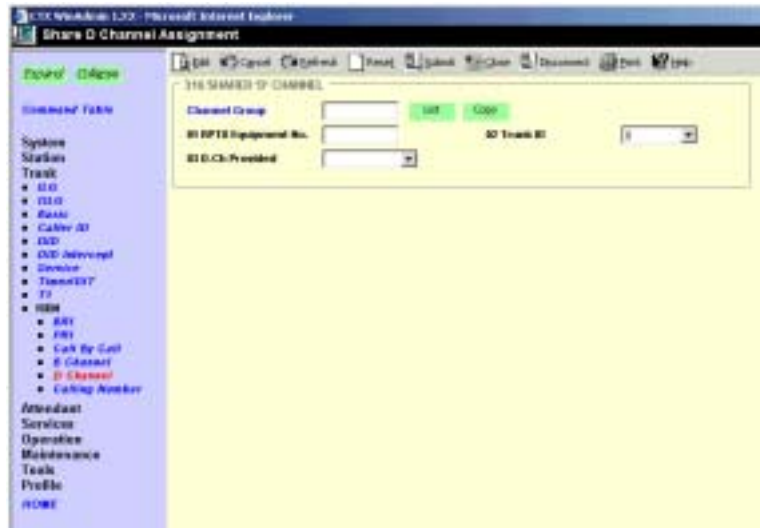
B Channel Position Span Interface Speed	01~08	09~15	16	17~31
2.0M (E1)	ON	OFF	OFF (Dch Pos)	OFF

## 316 Shared D Channel

**Prerequisite Program:** 302 on page 6-33

The PRI Interface can be extended to include an additional PRI card to expand the total number of channels to 47 on a Channel Group. This second PRI may optionally offer a backup D channel.

1. Complete the “[Shared D Channel Record Sheet](#)” on Page 6-43.
2. From the Program Menu, click Trunk > ISDN > D Channel. The Share D Channel Assignment screen displays (shown right).
3. Enter the Channel Group number (1~128, default = no value), or click the *List* button to view a summary list of programmed Channel Groups.
4. Enter data.
5. Click Submit.



FIELD	DESCRIPTION
<b>Channel Group</b>	Channel Group Number. Possible values: 1~128 (default = no value)
<b>01 Equipment Number</b>	Enter the ISDN RPTU equipment number as xxyyzz: Possible values: xx = Cabinet 01, yy = 03, 05, or 07 and zz = Channel 01 is always used to assign RPTU parameters ...or xx = Cabinet 02~10, yy = 01, 03, or 05 and zz = Channel 01 is always used to assign RPTU parameters (default = no value)  Example: If the RPTU is installed in cabinet shelf 5, slot 3, enter 050301. Equipment numbers are required when assigning ISDN RPTU parameters in the system. It can also be used to display the equipment location of existing RPTU PCBs.
<b>02 Trunk ID</b>	An identifier must be used as part of the addressing to communicate with the PSTN which channel on which link is used the given call. This identifier is assigned by the connected PSTN. Possible values: 1~ 126 (default = 1)
<b>03 D-Ch Provided</b>	If a backup 'D' Channel is to be used, it needs to be enabled. Possible values: D-channel or No D-channel (default)

## Shared D Channel Record Sheet

[illegible]

## Calling Number

### Program Number(s): 321 and 322

When calls are made using ISDN services, the telephone number for which the call originates must be identified to the PSTN.

1. Complete the “Calling Number Record Sheets” on Page 6-46.
2. From the Program Menu, click Trunk > ISDN > Calling Number. The ISDN Calling Number Identification screen displays (shown right).
3. Enter the OLG Number, or click the *List* button to view a summary list of programmed OLGs.
4. Enter Program 321 data.
5. Enter Program 322 data.
6. Click Submit.

### 321 Calling Number Identification

**Prerequisite Program:** 306 on page 6-5

The Calling Number ID is what is defined as the user supplied Calling Number. This number may be optionally screened by the PSTN to ensure only calls from valid billable telephone numbers are allowed to originate calls.

FIELD	DESCRIPTION
<b>OLG Number</b>	Enter the OLG Number. Possible values: 1~128 (default = no value)
<b>01 Default Number</b>	Enter the telephone number to use by default when originating a call. This is the number that the PSTN has registered for billing purposes. Possible values: Up to 10 ASCII characters (default = no value)
<b>02 Number Prefix</b>	Enter the prefix telephone number for which a DDI number will be appended to create a User Identified telephone number. Possible values: Up to 10 ASCII characters (default = no value)  This number may or may not be a billed number, but is used for Caller ID at the distant end and could be used for returning your call.
<b>03 Number Verification</b>	Specify whether the number provided should be screened by the PSTN before the call is to proceed. Possible values: Enable or Disable (default)
<b>04 Default Number 2</b>	Enter the second telephone number to use by default when originating a call. Possible values: Up to 10 ASCII characters (default = no value)  This is the number that the PSTN has registered for billing purposes. The second number is for BRI only

### 322 Called Number Table

**Prerequisite Program:** 306 [on page 6-5](#)

When calls are received from the PSTN, a Called Number is supplied as part of the Setup Message. This Called Number may be used for directing the call to the appropriate service with Strata CTX.

FIELD	DESCRIPTION
<b>OLG Number</b>	OLG Number. Possible values: 1~128 (default = no value)
<b>01 Destination Type</b>	Enter Destination Type. Possible values: Prime DN, Group Exchange Line or Pool Line Group (default = no value)
<b>02 Destination</b>	Specify which device is assigned this PDN, GCO or Pooled Line number. Possible values: Entries for this field depend on the Destination Type chosen. There are no default values for this field (default = no value). <ul style="list-style-type: none"><li>• PDN: 0~99999</li><li>• GCO: 1~128</li><li>• POOL: 1~128</li></ul>
<b>03 DDI Number</b>	Specify the number of digits received for reaching this service. Possible values: Up to 7 digits (default = no value) <b>Note</b> Destination Type and Destination must be entered before a DDI number can be assigned.

## Calling Number Record Sheets

[illegible][illegible]

This chapter provides programming information for Strata CTX attendants.

## 404 Attendant Group Assignment

**Prerequisite Program:** None

This program establishes Attendant Groups, distribution methods and alternate destinations.

1. Complete the “[Attendant Group Record Sheet](#)” on [Page 7-2](#).
2. From the Program Menu, click Attendant > Group Assignment. The Attendant Group Assignment screen displays (shown right).
3. Select the Attendant Group Member.  
...or click one of the following buttons.
  - ♦ List – to view data list window.
  - ♦ Copy – to attendant group numbers.
4. Enter Program 404 data.
5. Click Submit.

FIELD	DESCRIPTION
<b>00 Attendant Group Member</b>	Select the Attendant Group Member Number. Possible values: 1~8 (CTX670), 1 (CTX100) (default = no value)
<b>01 Call Distribution Method</b>	Select the Call Distribution Method for attendant console. Possible values: Most Idle First (default), Next Available First or Broadcast
<b>02 Alternate Destination</b>	Enter the Alternate Attendant Destination (DN, Network DN or Group Pilot Number). If no data is entered in this field, any previous entries are overwritten. Possible values: Up to 32 digits (default = no value)

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## 400 Emergency Call Destination Assignment

**Prerequisite Program:** None

This command assigns Emergency Call destinations to Emergency Call groups. There is one group for each Day mode (Day1, Day2 and Night).

1. From the Program Menu, click Attendant > Emergency Call. The Emergency Call screen displays (shown right).

2. Enter Program 400 data.

...or click on of the following buttons:

- ✦ Insert - assigns the destination for the select index.
- ✦ Modify - assigns a new destination to the selected index.
- ✦ Remove - removes the assigned destination from the table.

3. Click Submit.



FIELD	DESCRIPTION
<b>01 Day/Night Mode</b>	Select Mode. Possible values: Day1, Day2, Night (default = no value)
<b>02 Called Number Index</b>	Enter the Emergency Call Group Number. Possible values: 1~4 (default = no value)
<b>03 Emergency Call Destination</b>	Enter the destination DN for the emergency call. Possible values: Up to 32 ASCII characters (default = no value)



# Services

# 8

This chapter covers a variety of services offered by Strata CTX. Automatic Call Distribution (ACD), Voice Mail, Least Cost Routing (LCR), DR (DR), Networking, Station Message Detail Reporting (SMDR), External Devices, System Parameters and other miscellaneous services are discussed.

**Important!** *Advanced Strata CTX programming topics are covered in this chapter. Programmers should make sure each section is thoroughly understood before proceeding to programming.*

## 540 Pilot DN Assignment

**Prerequisite Program:** None

Pilot DNs are directory numbers that have no physical appearance, they are true virtual numbers. They can be used in CTI and Voice Mail applications. In ACD Pilot Numbers are used as ACD group numbers. In Voice Mail applications Pilot DNs are used to call directly to, or transfer calls directly to specific voice mail boxes – this is done by setting VM as the alternate destination and using the VMID to send the call to a specific VM box.

### Maximum Pilot DNs

CTX100: R1.00 & R1.01 = 5 max./R1.02 = 100 Max.

CTX670 Basic: R1.00 & R1.01 = 10max./R1.02 = 200max.

CTX670 with BBMS/BEXS: R1.00 & R1.01 = 32max./R1.02 = 256max.

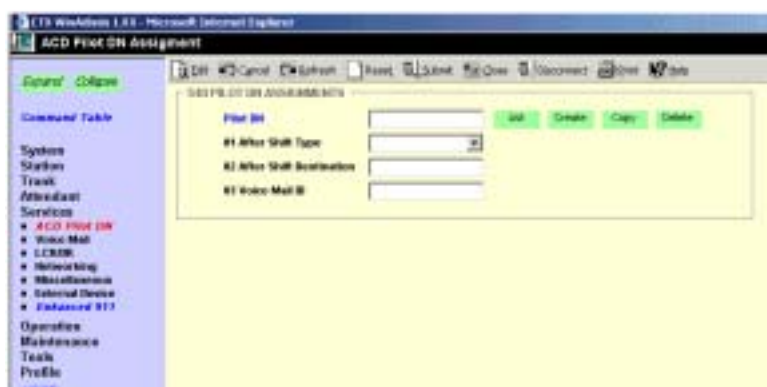
1. Complete the “[Pilot DN Assignment Record Sheet](#)” on [Page 8-3](#).

2. From the Program Menu, click Services > ACD Pilot DN.

3. Enter a Pilot DN Number

...or click one of the following buttons:

- ✦ List – view a summary list of programmed Pilot DNs.
- ✦ Create – Assign a new Pilot DN with default settings.
- ✦ Copy – Enter a *Pilot DN* number and click Copy to make a new Pilot DN assignment with settings copied from the Pilot DN entered.



- ♦ Delete – Enter a Pilot DN and click OK.
- 4. Enter Program 540 data.
- 5. Click Submit

FIELD	DESCRIPTION
<b>Pilot DN</b>	<p>Pilot DNs are directory numbers that have no physical appearance. They are true virtual numbers. They can be used in CTI and Voice Mail applications. In ACD, Pilot Numbers are used as ACD group numbers. In Voice Mail applications they are used to call directly to or transfer calls directly to specific voice mail boxes - this is done by setting VM as the alternate destination and using the VMID to send the call to a specific VM box.</p> <p>Possible values: Maximum characters for Pilot DNs: CTX100: R1.00 &amp; R1.01=5 max./R1.02=100 Max.. CTX670 Basic: R1.00 &amp; R1.01=10max./R1.02=200max. CTX670 with BBMS/BEXS: R1.00 &amp; R1.01=32max./ R1.02=256max</p>
<b>01 Alternate Destination</b>	<p>Calls to the Pilot DN will be routed to the Alternate Destination if the Pilot DN is not available (example: ACD After Shift). If Dialling Digits is selected, enter the appropriate DN in the Alternate DN assignment.</p> <p>Possible values: No Data (default), Dialling Digits or Night Bell</p>
<b>Alternate DN</b>	<p>If Dialling digits is selected as the Alternate Destination, enter the PDN, PhDN or Hunt Group pilot number to which the call should be routed.</p> <p>Possible values: Up to 32 ASCII characters (default = no value)</p>
<b>02 Voice Mail ID</b>	<p>If the Alternate Destination is Voice Mail, enter the Voice Mail ID that should be sent.</p> <p>Possible values: Up to 16 ASCII characters (default = no value)</p>

## Pilot DN Assignment Record Sheet

[illegible]

## Voice Mail

The following steps are provided as a guideline to programming System Voice Mail settings. These steps are identified for two purposes: [“Voice Mail Ports Only”](#) and [“Telephone Station Ports”](#). A sequence of Voice Mail programs are also listed under [“Station Setup”](#) on Page 3-10.

### Voice Mail Ports Only

1. Program 100 Cabinet Slot PCB Assignments.
2. Program 200 Station Data.
  - ✦ 03 Circuit Type – Assigns Voice Mail to be assigned to PDNs associated with Voice Mail RSTU circuits.
  - ✦ 15 Display DN – DN to be displayed and assigned to Hunt Group.
3. Program 579 System Voice Mail Data.
  - ✦ 10 Central Message Callback – Used for centralised voice mail SMDI only.

**Note** DTMF – Message Waiting Call Back DN across Qsig TIE lines. DTMF integration uses the number that is displayed in Program 200, field 15.

4. Program 580 Voice Mail Port Data.
5. Program 579 System Voice Mail Data.
  - ✦ Complete 1~17. See [“579 System Voice Mail Data”](#) on Page 8-5.
6. Program 209 Station Hunting Group. Voice Mail Group is determined by the Hunt Group.
7. Program 218 Station Hunt Assignments.
8. Program 803 SMDR SMDI CTI Port Assignments. Assign BSIS RS-232 port for SMDI.

**Note** System only provides Code 300 for SMDI. Code 301 is not supported.

9. Program 804 BSIS RS-232 Serial Port setup.
10. Program 309 Direct Inward Dialling.
11. Program 313 Caller ID Assignment. The ANI, DNIS, DDI formats for T1 (not available in the UK & Europe) and analogue DDI Exchange Lines are also defined.
12. Program 318 DDI Intercept Assignments.

### Telephone Station Ports

1. Program 200 Station Data.
  - ✦ 19 VMID Code SMDI – Voice Mail ID number to send in SMDI and DTMF in-band integration for forwarded and direct calls.
  - ✦ 22 MW to VM Port – Message Waiting center DN.
2. Program 579 System Voice Mail Data.
  - ✦ Complete 11~15. See [“579 System Voice Mail Data”](#) on Page 8-5.
3. Program 204 DKT Parameters.
  - ✦ 23 Mailbox Selection – Used for the Voice Recording Feature. Uses the VM ID from Program 200 if set to Auto or allows the user to enter any valid mailbox on Strategy followed by #.
4. Program 206 Phantom DN.

- ✦ 06 VM ID Code – Voice Mail ID number to send in SMDI and DTMF in-band integration for forwarded and direct calls.
- ✦ 09 Message Centre – Message Waiting center DN.

## 579 System Voice Mail Data

**Prerequisite Program:** None

This command assigns DTMF/SMDI Voice Mail interface parameters for the system.

1. Complete the “[System Voice Mail Record Sheet](#)” on [Page 8-7](#).
2. From the Program Menu, click Services > Voice Mail > System Voice Mail Data.
3. Enter Program 579 data.
4. Click Submit.

FIELD	DESCRIPTION
<b>01 DDI/DNIS VMID Option</b>	<p>Select DN VMID to send the DN's VMID to voice mail on DDI/DNIS calls that are answered and then transferred to a DN which then forwards to voice mail.</p> <p>Select DDI/DNIS VMID to send the DDI/DNIS number's VMID to voice mail on DDI/DNIS calls that are answered and then transferred to a DN which then forwards to voice mail.</p> <p>Possible values: DN VMID (default), DDI/DNIS VMID.</p> <p>If a DDI/DNIS call is answered by a station and then transferred to a DN which then forwards to voice mail, the VMID of the DDI/DNIS number (Program 309, <b>FB11</b> or <b>FB15</b>) or the VMID of the forwarding DN (Program 200, <b>FB19</b> or 206, <b>FB06</b>) will be sent to voice mail per this option.</p> <p><b>Note</b> The DDI/DNIS number's VMID (Program. 309, <b>FB11</b> or <b>FB15</b>) is always sent to voice mail on DDI/DNIS calls that ring directly to voice mail or ring a DN which then forwards to voice mail before it is ever answered.</p>
<b>02 Cancellation Method for VM MW</b>	<p>Select the method used to cancel Voice Mail message waiting indication.</p> <p>Possible values: Auto and Access Code Cancel or Access Code Cancel (default)</p>
<b>03 Message Desk Number</b>	<p>Enable to send the SMDI Message Desk Number (001) in the SMDI packet; otherwise, 000 for a station call or the 3-digit Exchange line number is sent.</p> <p>Possible values: Enable or Disable (default)</p>
<b>04 Output of CLASS / ANI and DNIS</b>	<p>Enable to include Caller ID/ANI numbers in SMDR records.</p> <p>Possible values: Enable or Disable (default)</p>

FIELD	DESCRIPTION
<b>05 Calling Number Digits Sent to VM</b>	<p>Select how many calling number digits to send to the VM unit.</p> <p>Possible values: 2~10 digits (default = 10)</p> <p><b>Note</b> If <i>04 Output of CLASS / ANI and DNIS</i> is enabled, this value must be 10.</p>
<b>06 Blank Digits Sent to VM</b>	<p>Send SMDI-Bellcore Standard VM Interface.</p> <p>Possible values: 1 or 2 (default).</p> <ul style="list-style-type: none"> <li>1 = 1985 (single space)</li> <li>2 = 1991 (two spaces).</li> </ul>
<b>07 Auto Cancel of VM and MW<sup>1</sup></b>	<p>Setting of auto cancel of VM and MW.</p> <p>Possible values: Enable (default) or Disable</p>
<b>08 DTMF Duration</b>	<p>Select VM ID Code and System DTMF Signal Time.</p> <p>Possible values: 80 ms (default) or 160 ms</p>
<b>09 LCD Control of Voice Mail</b>	<p>Enables Toshiba SMDI+ and integration for LCD control of VM. To enable this feature you must have Stratagy Enterprise Server Release 3.x or higher.</p> <p>Possible values: Enable (default) or Disable</p>
<b>10 Central VM Callback</b>	<p>Enter the pilot DN for the centralised voice mail system. If this field is left blank, the previously stored number will be deleted.</p> <p>Possible values: Up to 7 ASCII characters (default = no value)</p>
<b>11 CF - All Call Record</b>	<p>Enter DTMF VM-ID prefix string for calls arriving to voice mail via "Call Fwd All Calls."</p> <p>Possible values: Up to 4 ASCII characters (default = no value)</p>
<b>12 CF - Busy Record</b>	<p>Enter DTMF VM-ID prefix string for calls arriving to voice mail via "Call Fwd Busy."</p> <p>Possible values: Up to 4 ASCII characters (default = no value)</p>
<b>13 CF - No Answer Record</b>	<p>Enter DTMF VM-ID prefix string for calls arriving at the voice mail via "Call Fwd No Answer."</p> <p>Possible values: Up to 4 ASCII characters (default = no value)</p>
<b>14 Direct Call</b>	<p>Enter DTMF VM-ID string for a call arriving at the voice mail as a Direct Call.</p> <p>Possible values: Up to 4 ASCII characters (default = no value)</p>
<b>15 Retrieve Messages</b>	<p>Enter DTMF VM-ID string for calls arriving at the voice mail to retrieve messages.</p> <p>Possible values: Up to 4 ASCII characters (default = no value)</p>
<b>16 Voice Main DN</b>	<p>Use a VM Pilot DN as a transfer destination.</p> <p>Possible values: Up to 7 ASCII characters (default = no value)</p>
<b>17 Length of VM ID</b>	<p>Select the number of characters in VM-ID string.</p> <p>Possible values: 1~10 (default = 10)</p>

1. Not supported in this Release.



## System Voice Mail Record Sheet

System Name: _____		System Type: _____		Date: _____	
01 VM ID to DDI/DNIS		07 Auto Cancel		13 CF No Answer Record	
02 Cancellation Method		08 DTMF Duration		14 Direct Call	
03 Message Desk No.		09 LCD Control of VM		15 Retrieve Messages	
04 CLASS Output		10 Central VM Callback		16 Voice Mail DN	
05 Calling Number Digits		11 CF All Call Record		17 Length of VMID	
06 Blank Digits		12 CF Busy Record			

## 580 Voice Mail Port Data

**Prerequisite Program:** None

Assign characteristics of individual voice mail ports.

1. Complete the “Voice Mail Port Data Record Sheet” on Page 8-8.

2. From the Program Menu, click Services > Voice Mail > Voice Mail Port Data.

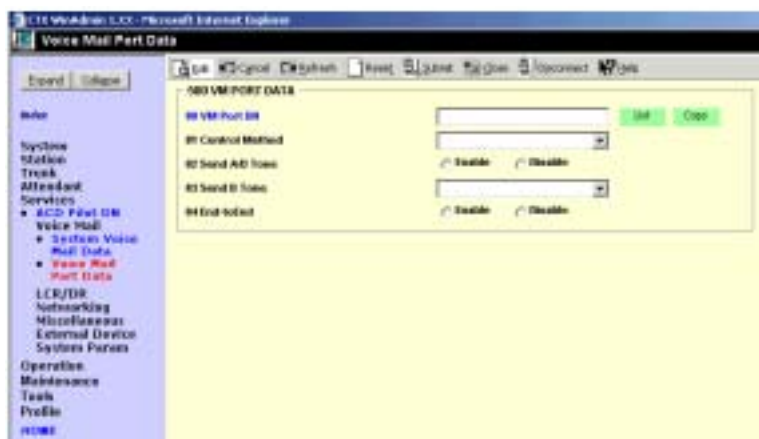
3. Enter a VM Port DN

...or click one of the following buttons:

- ✦ List – view a summary list of programmed VM Port DNs.
- ✦ Copy – Enter an VM Port DN value in the field with the same name. Click Copy to make a new VM Port DN assignment with settings copied from the Port entered in *VM Port DN*.

4. Enter Program 580 data.

5. Click Submit.



FIELD	DESCRIPTION
<b>00 VM Port DN</b>	Enter the DN of an individual VM port. <b>Note</b> Do not enter a Pilot DN. Possible values: Up to 5 digits (default = no value)
<b>01 Control Method</b>	Specify In-band or SMDI integration. Possible values: Inband or SMDI (default = Inband)
<b>02 Send A/D Tone</b>	Select whether Strata CTX sends A or D tone when a station connecting to voice mail answers or disconnects. Possible values: Enable (default) or Disable
<b>03 Send B Tone</b>	Enable Strata CTX to send B tones in the event of a Blind Transfer Recall. Possible values: B Tone, No Tone (default) or B Tone and Extension Number

FIELD	DESCRIPTION
<b>04 End-to-end</b>	<p>Enable Strata CTX to send DTMF tones to voice mail in response to key presses from a digital telephone.</p> <p>Possible values: Enable (default) or Disable</p>

## Voice Mail Port Data Record Sheet

[illegible]

# Least Cost Routing/Destination Restriction

The programs that follow control Strata CTX's Least Cost Routing (LCR) and Destination Restriction (DR) capabilities.

## LCR/DR Overview

Programming LCR/DR features in Strata CTX requires an advanced knowledge of telephone programming. Make sure you have a thorough understanding of the discussion that follows before attempting to program these features. For details on DR, see [“DR Overview” on Page 8-20](#)

## LCR Analysis Process

The flowchart below represents the process by which Strata CTX analyses dialled digits and makes LCR decisions. The graphic is divided into four areas each described below. DR and Call Connection are described elsewhere in this document and are shown here only for their roles in the LCR process.

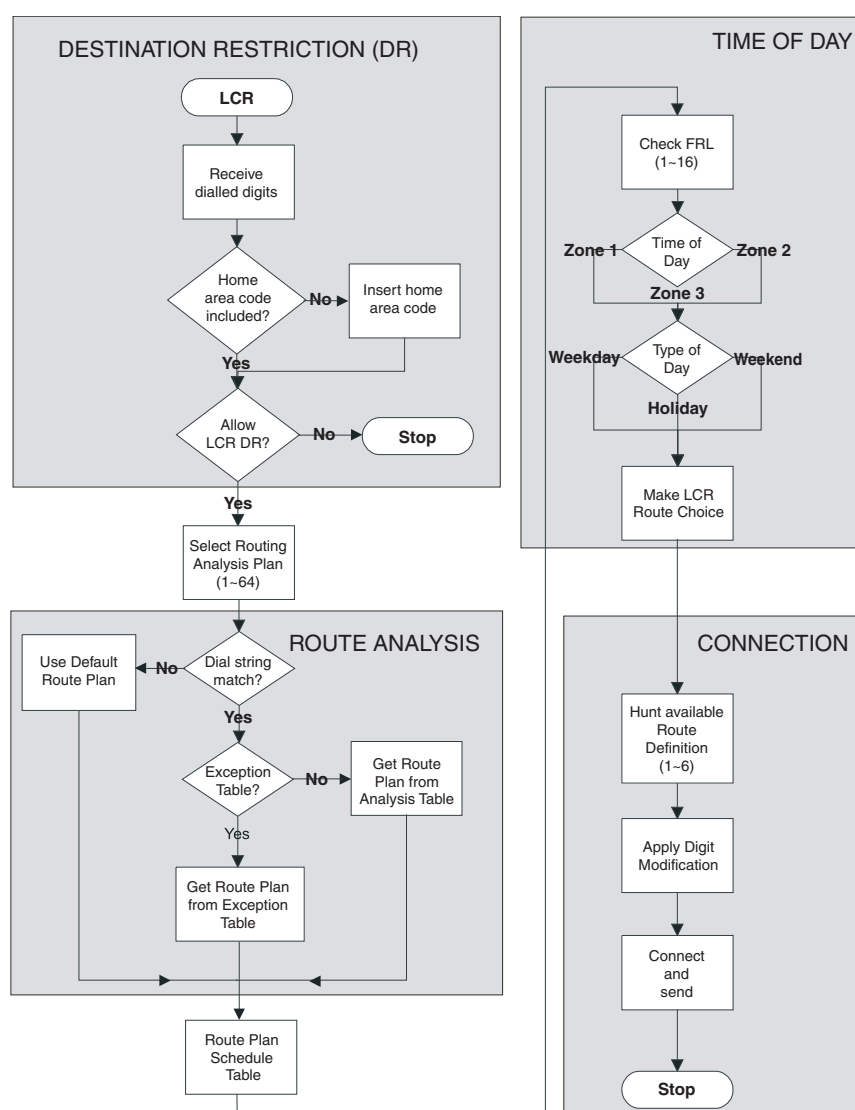


Figure 8-1 LCR Analysis Process Flow

## **DR**

LCR begins with the receipt of a dial string from a facility capable of originating an outgoing call: station, automated attendant, Tie trunk, DISA trunk, DDI trunk, etc. The dial string is identified as an LCR call by the presence of the LCR Feature Access Code—typically **9**. The LCR Access Code is removed and the remaining external digits are processed.

## **Route Analysis**

Route Analysis chooses a Route Plan based on the dialled digits. The Routing Analysis Plan becomes the index into the time/date calculations described in the next section. If the Strata CTX is unable to match the dial string, it uses the default route plan which assures a route out of the system. If a match is found, Strata CTX determines if an exception table is associated with the dial string. If the dial string appears in the exception table, the call is assigned to the Route Plan stored in the exception table. Otherwise, the Route Plan stored in the initial table is used.

## **Time of Day**

The Strata CTX maintains time and day values for LCR separate from those for the general system. One day can be divided into three zones, and each day can be categorised as a Weekday, Weekend, or Holiday.

## **Connection**

Selection of a Route Choice Table begins the process of actually connecting the call to an outgoing trunk. Each Route Choice Table consists of six Route Definitions which operate in terminal hunt fashion to select an OLG and to apply a digit modification treatment.

## LCR Assignment

**Program Number(s): 520, 521 and 522**

User access to LCR is determined by programming the following:

- ◆ **103 COS Assignment** – 29 LCR Feature (see [Page 4-13](#)) enables access to LCR COS.
- ◆ **200 Station Assignment** – 07 LCR Group (see [Page 5-2](#)) assigns a station to an LCR Group.
- ◆ **304 ILG Assignment** – 23 LCR Group (see [Page 6-3](#)) assigns an LCR Group to an ILG.

**Note** Appropriate COS, DRL and FRL assignments must be made to all LCR stations and trunks.

1. Complete the “LCR Time Zone Record Sheets” on [Page 8-19](#).
2. From the Program Menu, click Services > LCR/DR > Assignment.
3. Enter Program 520 data.
4. Enter Program 521 data.
5. Enter Program 522 data.
6. Click Submit.

### 520 LCR Local Route Plan Assignment

**Prerequisite Program:** None

There are 64 LCR route plans. This assignment is used to select which LCR route plan should be used to route local calls. The Local Route Plan, which must be defined in the route definition assignment, determines which Exchange line group is used for local outgoing calls.

FIELD	DESCRIPTION
<b>01 Local Area Code</b>	Enter the area code for the dialling area in which the system is installed. This is the area code for the exchange that provides local exchange lines to the system. If no data is entered in this field, any previously programmed data is lost.  Possible values: 3 digits (default = no value)
<b>02 Local Route Plan</b>	Enter the LCR Route Plan number that should be used to route local calls. Local calls are made by dialling 7-digit public telephone numbers that do not require an Area Code. There are 64 LCR Route Plans from which to choose.  Possible values: 1~64 (default = 1)

## 521 LCR Route Plan Digit Analysis Assignment

**Prerequisite Program:** 520 [on page 8-11](#)

This program builds the basic LCR Analysis Table.

FIELD	DESCRIPTION
<b>00 Analysis Digits</b>	<p>Enter the external digit strings (area codes, destination prefixes, service codes, etc.) to be assigned to a Route Plan Analysis Table.</p> <p>Route Plan Analysis Tables may have 1280 members. A digit string can only be in one table at a time. Wild cards (n &amp; X) may be used from CTX WinAdmin only.</p> <p>Possible values: Up to 7 ASCII characters (default = no value) Wild Card uses <b>n</b> and <b>x</b>.</p>
<b>01 Route Plan Number</b>	<p>Enter the Route Plan number to which to assign the Analysis Digits.</p> <p><b>Note</b> Entering 0 deletes the Analysis Digits from the table to which they had been assigned.</p> <p>Possible values: 0-64 (default = 0)</p>

## 522 LCR Exception Number Route Plans

**Prerequisite Program:** 521 [on page 8-12](#)

This command assigns up to 1280 dialled external digit strings to the Route Plan Exception Analysis Table which assigns each string to 1 of 64 Route Choice Tables. The values expressed here are exceptions to the values established in Program 521.

FIELD	DESCRIPTION
<b>00 Exception Digits</b>	<p>Enter the external digit strings (area codes, destination prefixes, service codes, etc.) to be assigned to a Route Plan Exception Analysis Table.</p> <p>Strings may be up to 32 digits long. The Exception Route Plan Analysis Table may have 1280 members. A digit string can only be in one table at a time.</p> <p>Possible values: Up to 11 ASCII characters (default = no value) Wild Card uses <b>n</b> and <b>x</b></p>
<b>01 Exception Table</b>	<p>Enter the Route Plan Table in which to assign the Exception Digits.</p> <p><b>Note</b> Entering 0 deletes the Exception Digits from the table.</p> <p>Possible values: 1-64 (default = 0)</p>

### LCR Assignment Record Sheets

Program 520 Values		Program 521 Values	
01 Local Area Code		00 Analysis Digits	
02 Local Route Plane		01 Route Plan Number	
Program 522 Values			
00 Exception Digits			
01 Exception Table			

## Route Define

**Program Number(s): 524, 525 and 526**

Define the participants in the LCR Route Plan. Complete the “[LCR Time Zone Record Sheets](#)” on [Page 8-19](#).

1. From the Program Menu, click Services > LCR/DR > Route Define.
2. Enter Program 524 data.
3. Enter Program 525 data.
4. Enter Program 526 data.
5. Click Submit.

### 524 Route Table to Route Definition Assignment

**Prerequisite Program:** 525 below

This command defines up to six possible Route Definitions for a given Route Table.

FIELD	DESCRIPTION
<b>00 Route Choice Table</b>	Enter the Route Choice Table to be defined. Possible values: 1~128
<b>01 Route Definition 1</b>	Enter Route Definitions to be assigned to this Route Table.
<b>02 Route Definition 2</b>	Possible values: 1~128, 0 = Delete (default = 1)
<b>03 Route Definition 3</b>	
<b>04 Route Definition 4</b>	
<b>05 Route Definition 5</b>	
<b>06 Route Definition 6</b>	

## 525 LCR Route Definition Assignment

**Prerequisite Program:** 520 [on page 8-11](#)

This command assigns Route Definitions for LCR. A Route Definition consists of an OLG and a Digit Modification index.

FIELD	DESCRIPTION
<b>00 Route Definition</b>	Select the Route Definition number. Possible values: 1~128 (default = no value)
<b>01 OLG Number</b>	Select the OLG Number associated with this Route Definition. Possible values: 1~128 (default = 1)
<b>02 Digit Mod Index</b>	Select the Digit Modification number associated with this Route Definition. Possible values: 1~128 (default = 1)

## 526 Modified Digits Table Assignment

**Prerequisite Program:** 521 [on page 8-12](#)

This command modifies LCR dialled numbers by deleting digits from and adding digits to the dialled numbers.

FIELD	DESCRIPTION
<b>00 Digit Modification Index</b>	Select the Digit Modification Index used by the LCR Route Choice table to determine the digit modification treatment to be applied. Leading digits of a dialled number may be deleted; leading and trailing digits may be added to the dialled number. Possible values: 1~128 (default = no value)
<b>01 Delete Digits</b>	Select the quantity of digits to be deleted from the beginning of dialled number. Possible values: 0~10 (default = 0)
<b>02 Add Leading Digits</b>	Enter the digit string to be inserted at the beginning of the number. Possible values: Up to 23 ASCII characters. PDN: "PDN" Authorisation Code: A01~A08 Pauses are entered as P+x - P=0~9 and x=10(s). (default = blank)
<b>03 Add Trailing Digits</b>	Enter the digit string to be inserted at the end of the number. Possible values: Up to 23 ASCII characters. PDN: "PDN" Authorisation Code: A01~A08 Pauses are entered as P+x - P=0~9 and x=10(s). (default = blank)

### Note

1. If no data is entered in FK2, the data of FK2 that was assigned on Strata CTX is deleted.
2. If no data is entered in FK3, the data of FK3 that was assigned on Strata CTX is deleted.



## Routing Definition Record Sheets

[illegible][illegible][illegible]

## Route Schedule

**Program Number(s): 523 and 528**

1. Complete the “[LCR Time Zone Record Sheets](#)” on [Page 8-19](#).
2. From the Program Menu, click **Services > LCR/DR > Route Schedule**.
3. Enter Program 523 data.
4. Enter Program 528 data.
5. Click **Submit**.

### 523 LCR Route Plan Schedule Assignment

**Prerequisite Program:** *None*

This command assigns Route Plan Schedule Tables for LCR. Each table is a 3-dimensional array of 144 values (3 Types of Day x 3 Times of Day x 16 LCR Groups).

FIELD	DESCRIPTION
<b>00 Route Plan</b>	Enter the Route Plan Number to build a schedule indexed by Time of Day, Type of Day and LCR Group. Possible values: 1~64 (default = no value)
<b>01 Type of Day</b>	Select the Type of Day. Possible values: Weekday (default), Weekend or Holiday
<b>02 LCR Time of Day</b>	Select the Time Zone. Possible values: Time Zone 1, Time Zone 2 or Time Zone 3 (default = no value)
<b>03 Station LCR Group</b>	Select the Station LCR Group. Possible values: 1~16 (default = 1)
<b>04 Route Choice Table</b>	Enter the Route Choice Table Number to be used with this combination of time, type and LCR group. Possible values: 1~128, 0 = delete (default = 1)

## 528 LCR Public Day of Week Mapping Table

**Prerequisite Program:** 520 [on page 8-11](#)

This command defines the days of the week as weekdays, weekend days or holidays for LCR.

FIELD	DESCRIPTION
<b>01 Monday</b>	Select the Day Type to assign to this day.
<b>02 Tuesday</b>	Possible values: Weekday (default), Weekend or Holiday
<b>03 Wednesday</b>	
<b>04 Thursday</b>	
<b>05 Friday</b>	
<b>06 Saturday</b>	Select the Day Type to assign to this day. Weekday, Weekend (default) or Holiday
<b>07 Sunday</b>	Select the Day Type to assign to this day. Weekday, Weekend (default) or Holiday

## Route Schedule Record Sheets

Program 528 Values						
Mon	Tues	Wed	Thur	Fri	Sat	Sun

Program 523 Values																							
LCR Group 1			LCR Group 2			LCR Group 3			LCR Group 4			LCR Group 5			LCR Group 6			LCR Group 7			LCR Group 8		
Day Type			Day Type			Day Type			Day Type			Day Type			Day Type			Day Type			Day Type		
T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3
Rte Choice			Rte Choice			Rte Choice			Rte Choice			Rte Choice			Rte Choice			Rte Choice			Rte Choice		
LCR Group 9			LCR Group 10			LCR Group 11			LCR Group 12			LCR Group 13			LCR Group 14			LCR Group 15			LCR Group 16		
Day Type			Day Type			Day Type			Day Type			Day Type			Day Type			Day Type			Day Type		
T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3
Rte Choice			Rte Choice			Rte Choice			Rte Choice			Rte Choice			Rte Choice			Rte Choice			Rte Choice		

## Public Holidays and LCR Time Zones

**Program Number(s):** 527 and 529

1. Complete the “[LCR Time Zone Record Sheets](#)” on [Page 8-19](#).
2. From the Program Menu, click **Services > LCR/DR > Public Holidays and LCR Time Zones**.
3. Enter Program 527 data.
4. Enter Program 529 data.
5. Click Submit.

### 527 LCR Holiday Table

**Prerequisite Program:** *None*

This command assigns up to 128 holidays for LCR processing. These assignments are related to the Day assignments established in Program 523.

FIELD	DESCRIPTION
<b>00 Holiday</b>	Enter Date (YYYYMMDD). A maximum of 128 dates is allowed. Possible values: YYYY = Year, MM = Month and DD = Day (default = no value)
<b>01 Add/Delete</b>	Choose to add or delete this date from the holiday table. Expired dates remain in the table unless deleted. Possible values: Add or Delete (default)

### 529 LCR Route Plan Time Zone Assignment

**Prerequisite Program:** 520 [on page 8-11](#)

This command creates a three-dimensional array (Day, Time & LCR Group) for each Route Plan.

FIELD	DESCRIPTION
<b>00 Route Plan</b>	Select the LCR Route Plan Number to assign to this time zone. Possible values: 1~64 (default = no value)
<b>01 Day Type for Time Zone</b>	Select a Day Type for which to define a time zone. Possible values: Weekday, Weekend or Holiday (default = no value)
<b>02 Time Zone</b>	Select a Time Zone. Possible values: Zone 1, Zone 2 or Zone 3 (default = no value)
<b>03 Time Zone Start Time</b>	Enter the start time for the selected Time Zone (hhmm). <b>Note</b> Enter your Day Type and Time Zone selections before entering data in to this field. Possible values: hh = hour (0-23) and mm = minutes (0-59) (default = 0000)

## LCR Time Zone Record Sheets

Program 527 Values							
00 Holiday		00 Holiday		00 Holiday		00 Holiday	
Date	Desc	Date	Desc	Date	Desc	Date	Desc

Program 529 Values							
00 Route Plan	01 Day Type	02 Time Zone	03 Start Time	00 Route Plan	01 Day Type	02 Time Zone	03 Start Time

## DR Overview

Strata CTX offers DR as a major expansion of traditional Toll Restriction. Toll Restriction was used to prevent the unauthorized use of toll prefixes to the PSTN as follows:

- ◆ **1** – long distance
- ◆ **0** – operator assistance
- ◆ **011** – international

Strata CTX has expanded this to include restriction based on any string of dialled digits. Strata CTX can restrict any string of up to 11 dialled digits including \* and #.

Eleven-digit screening allows control of access to individual telephone numbers in remote Area Codes. Restriction of \* and # controls users' access to vertical service codes from the central office such as Camp On and Call Forwarding.

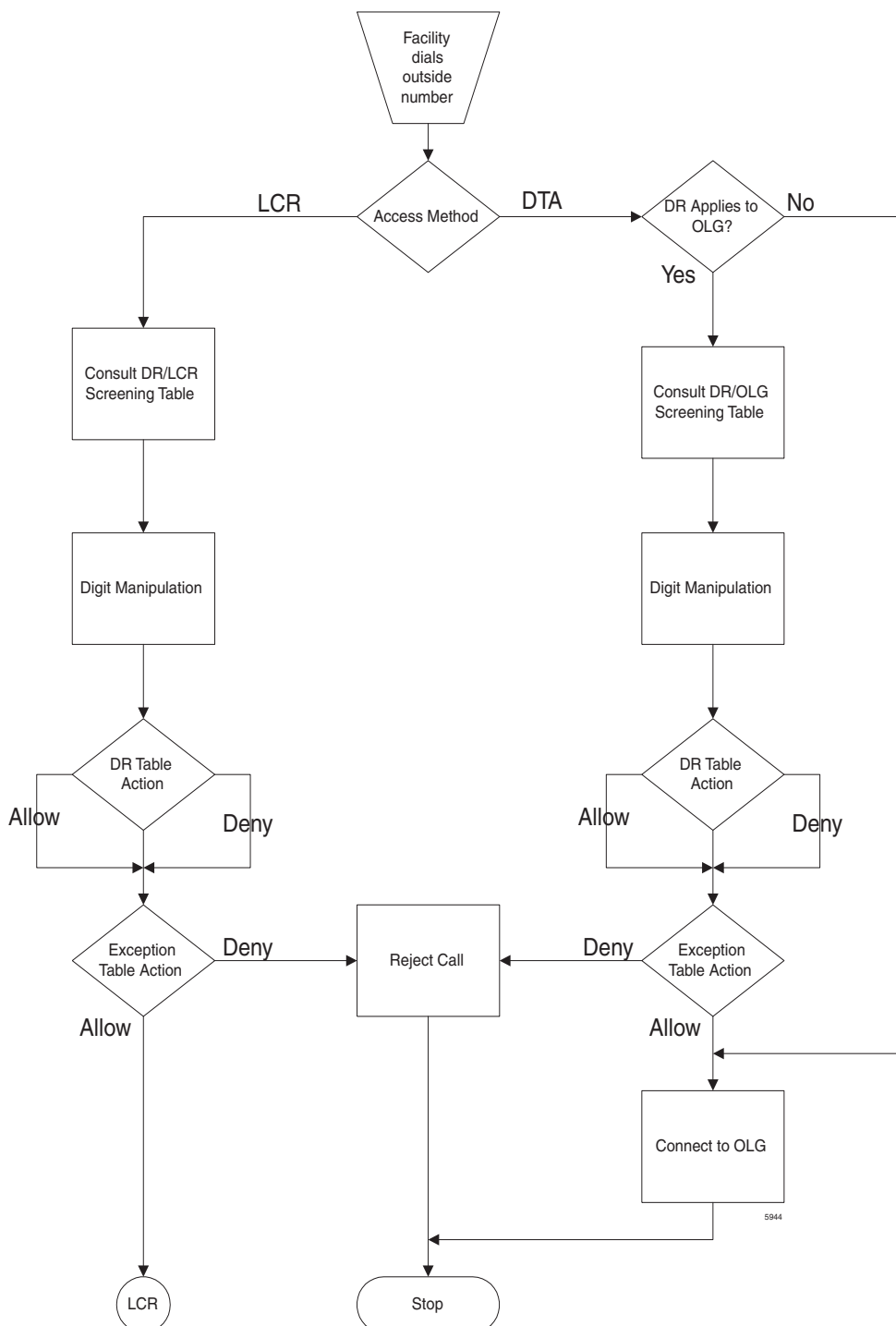
DR is always applied to calls originated through LCR and may be applied to calls originated through Trunk Group Access, Individual Trunk Access, Exchange Key, Group Exchange Key, Pooled Line Key, and Strata Net private networking. Special screening tables allow restriction of calls placed through Centrex or PBXs to which the Strata CTX may be connected.

Each OLG can be programmed to require or not require DR in [“306 Outgoing Line Groups” on Page 6-5](#). If a trunk group requires DR, a table must then be established using [“531 DR Screening Table for OLG” on Page 8-25](#).

DR is controlled by a DR Level (DRL) that is assigned to any station or trunk capable of making an outside call. Each of the 16 DRLs relate to a DR Table. A DR Table may be an Allow or Deny table and may be associated with an Exception Table. A Deny Toll Restriction Table contains a list of dial strings that are prohibited. Its associated Exception Table lists the dial strings within the Deny Table ranges that would be allowed. For example, a Deny table might deny access to all of Area Code **1-800**. Its exception table could permit access to specific office codes within that area such as **1-800-234**.

## Basic Operation

The flow chart below describes the basic logic by which calls are connected or rejected as a result of DR.



## Tables

Strata CTX uses two or three tables to apply DR:

- ◆ Screening Tables. There are two types of screening tables as follows:
  - ✦ LCR Screening Tables.
  - ✦ OLG-Specific Screening Tables.
- ◆ DR Table or Exception Table to the DR Table.

Screening tables are used in Behind Centrex/PBX operations to detect access codes required by the Centrex/PBX and processes them appropriately in a way that is transparent to end users.

### DR/LCR Screening

DR is applied to all LCR calls using [“530 DR LCR Screening Table Assignment” on Page 8-24](#). It analyzes the digits dialed after the LCR access code (typically **9**).

Example: A station user dials **9\*72 1-617-234-5678**. The outgoing line will serve as an incoming line that this user is attempting to forward to his home. The System Administrator has created an LCR/Screening entry to prevent the forwarding of this line to the users home. With Skip & Apply under DR action and a Skip Length of 0, the call will be forced to present **\*72** to the DR table where the call will be rejected. *Apply* under LCR Action ensures that the entire string will be processed by LCR. In this case, Digit Modification is irrelevant.

### DR Screening for OLG Table

An OLG-specific DR Screening Table is used when a call is originated through a Line Key, Pooled Line Key, Group Exchange Key, Trunk Group Access Code or Direct Trunk Access Code and a Exchange line is chosen that requires DR. The decision to apply DR to an OLG is made in [“306 Outgoing Line Groups” on Page 6-5](#). If the OLG does not require DR, the call is connected to the desired line and all dialed digits, minus the Strata CTX access code, are sent.

The OLG-specific table performs two functions:

- ◆ It manipulates the digits that will be screened by the DR table.
- ◆ It creates a Pause Value that ensures that the Centrex or PBX which is the source of the trunk will receive and interpret the digits correctly. This is used to compensate for older, slower equipment.

Example: A station user dials 81-9-1-617-234-5678 where 81 is the Trunk Group Access Code for a Centrex trunk group. 9 is the Centrex' LCR access code. The Skip Length of 1 tells the system how many of the first digits constitute an access code or other digits that may be ignored. The DR Action of Skip & Apply tells the system to ignore the 9 and present 16172345678 to the DR Table use in the next step in the process. The Pause Value of two seconds tells the system that, if it passes the DR Tables and is connected to a trunk, it is to pause two seconds after outdialling the 9 and before outdialling 16172345678.

Dial String	DR Action	Skip Length	Pause Value
9	Skip & Apply	1	2



## DR Table

Each DRL is associated with a DR Table that defines the destinations to which a holder of that DRL is entitled to place a call. Permission may be expressed in Allow or Deny tables depending on the field technician's choices. The DR Table is activated by defining the table as Allow or Deny through [“523 LCR Route Plan Schedule Assignment” on Page 8-16](#). The table is then populated one string at a time through [“533 DR Level Table Assignment” on Page 8-27](#). The table may have up to 100 entries. Entries may include any DTMF character including \* and #.

As soon as Strata CTX finds a match in the table, it acts upon it. Therefore, entering **1** in a Deny table will deny all 1+ calling to users with that DRL whereas entering **1-888** denies calls to the 888 Area Code. Exceptions can be created in the DRL Exception Table.

**DRL Exception Table Assignment** – Once a DR Table has been established for a DRL, its exception table can be created using [“534 DRL Exception Table Assignment” on Page 8-28](#). Exceptional DR Tables are optional. Dial Strings in Exception tables may be as long as 11 digits. If a field technician wanted to deny access to every office code in the 617 area code except Directory Assistance, he would first create a deny table that included 617 and then create an associated exception table that allowed 617-555-1212. See the table below for more examples.

## Interaction With Other Features

### Behind Centrex Operation

Behind Centrex operation for OLGs is defined in. The CTX will use the values stored here to strip local and Centrex access codes from the dial string and determine the external number being dialled. This external number will then be processed according to the DR rules described above.

**Note** The Centrex to which the OLG is attached may impose its own DRs.

### Credit Card Calling

If a valid credit card number is detected, the CTX will not apply DR to a call because the charges for such a call are applied to the credit card rather than the outgoing line used.

## LCR/DR Screening

**Program Number(s): 530 and 531**

These programs enable and set up screening for DR and LCR.

1. Complete the “[DR LCR Screening Record Sheet](#)” on [Page 8-26](#).
2. From the Program Menu, click **Services > LCR/DR > LCR/DR Screening**.
3. Enter Program 530 and 531 data

...or click one of the following buttons:

- ✦ **List** – view a summary list of programmed Screened Dial Strings or Behind Centrex Access Codes.
- ✦ **Copy** – Enter a Screened Dial String or Behind Centrex Access Code in the field with the corresponding name. Click Copy to make a new assignment.

4. Click Submit.

### 530 DR LCR Screening Table Assignment

**Prerequisite Program:** None

This command screens dialled digits for access codes such as Carrier Identification Codes or Behind Centrex/PBX access codes. Used only in LCR calls.

FIELD	DESCRIPTION
<b>00 Screening Dial String</b>	Enter the string of external digits to be screened. Possible values: Up to 7 ASCII characters (default = no value)
<b>01 Add String to Table</b>	Add the Screening Dial String to the DR LCR Screening Table. Possible values: Add or Delete (default)
<b>02 DR Action</b>	Select DR Action. Possible values: Bypass (default) or Skip and Apply <ul style="list-style-type: none"> <li>• Bypass – Do not apply DR.</li> <li>• Skip and Apply – Apply DR to the dialled digits excluding the number of digits specified in Skip Length.</li> </ul>
<b>03 LCR Action</b>	Select LCR Action. Possible values: ) <ul style="list-style-type: none"> <li>• Apply – (default) Apply LCR to all of the external dialled digits.</li> <li>• Skip and Apply – Apply LCR to the dialled digits excluding the number of digits specified in Skip Length.</li> </ul>

FIELD	DESCRIPTION
<b>04 Digit Modification Action</b>	Select Digit Modification application. Possible values: <ul style="list-style-type: none"> <li>• Apply – (default) Apply Digit Modification from the first digit.</li> <li>• Retain – Retain the skipped digits and apply Digit Modification starting from the next digit specified by Skip Length.</li> <li>• Discard – Discard the skipped digits and apply Digit Modification starting from the next digit specified by Skip Length.</li> </ul>
<b>05 Skip Length</b>	Specify the number of digits at the beginning of the dial string to be ignored before DR, Digit Modification, or LCR is applied. Possible values: 0~5, 0 = delete (default = 0)

### 531 DR Screening Table for OLG

**Prerequisite Program:** *None*

Assigns DR Screening Table for an OLG. Up to four codes may be assigned per line group. Used for outgoing calls other than LCR.

FIELD	DESCRIPTION
<b>00 OLG</b>	Enter the OLG Number. Possible values: 1~128 (CTX670), 1~32 (CTX100) (default = no value)
<b>01 Behind Centrex Access Code</b>	Enter the access code expected by an attached Centrex PBX. Possible values: Up to 8 ASCII characters (default = no value)
<b>02 Add or Delete Code</b>	Add or Delete the Code entered above. Leaving the field empty removes an existing code. Activation requires entries in OLG Group number and 01 Behind Centrex Access Code above. Possible values: Add or Delete (default)
<b>03 DR Action for Centrex</b>	Apply DR to the dialled digits. Possible values: <ul style="list-style-type: none"> <li>• Bypass (default) – does not apply DR.</li> <li>• Skip and Apply– applies DR to the dialled digits excluding the number of digits specified in Skip Length.</li> </ul>
<b>04 Skip Length</b>	Enter the number of leading digits to be ignored by DR. Possible values: 0~8 (default = 0)
<b>05 Pause Insertion</b>	Enter the length of the pause to be inserted between dialling digits. Possible values: 0~10 (default = 0)

## DR LCR Screening Record Sheet

Program 530 Values						
00 Screening Dial String	01 Add String		02 DR Action	03 LCR Action	04 Digit Mod Action	05 Skip Length
	Add	Delete				

Program 531						
00 OLG	01 Behind Centrex Access Code	02 Code		03 DR Action for Centrex	04 Skip Length	05 Pause Length
		Add	Del			

## DR

**Program Number(s): 532, 533, 534 and 111**

Assign DR features for the Strata CTX.

1. Complete the “DR Record Sheets” on Page 8-29.
2. From the Program Menu, click Services > LCR/DR > Destination Restriction.
3. Enter *00 DR Level (DRL)*.
4. Enter Program 532 data.
5. Enter Program 533 data. Click *List* to view a summary list of programmed Dial Strings.
6. Enter Program 534 data. Click *List* to view a summary list of programmed Dial Strings.
7. Enter Program 111 data.
8. Click Submit.



### 532 DR Table Allow/Deny Definition

**Prerequisite Program:** 533 below.

Specify the DR Table Type using this command.

FIELD	DESCRIPTION
<b>00 DRL Number</b>	Select the DRL Number. Possible values: 1 ~ 16 (default = no value).
<b>01 Type of Table</b>	Specify whether this DR Table is an Allow Table or Deny Table. Possible values: Allow or Deny (default).

### 533 DR Level Table Assignment

**Prerequisite Program:** None

This program adds or deletes entries in the DR Table associated with the DRL entered in [Step 3](#) above.

FIELD	DESCRIPTION
<b>00 Destination Restriction Level</b>	Choose the DRL. Possible values: 1 ~ 16 (default = no value)
<b>01 Dial String</b>	Enter the string of dialled digits to be added. Possible values: Up to 7 ASCII characters (default = no value) Wild card uses <b>n</b> and <b>x</b>
<b>02 Add/Delete</b>	Add or delete the string entered in <i>01 Dial String</i> above to the DR Table. Possible values: Add or Delete (default)

### 534 DRL Exception Table Assignment

**Prerequisite Program:** 533 above

This program assigns a DRL Exception Table to an existing DRL table. If the DRL Table is an allow table, its Exception Table must be a deny table and vice versa.

FIELD	DESCRIPTION
<b>00 Destination Restriction Level</b>	Enter the DRL for which you want to populate an Exception Table. Possible values: 1~16 (default = no value)
<b>01 Dial String</b>	Add the dial string you wish to be treated as an exception. Possible values: Up to 11 ASCII characters (default = no value)
<b>02 Add/Delete</b>	Add or delete the string entered in <i>01 DR Exception Table</i> above to the DR Exception Table. Possible values: Add or Delete (default)

### 535 PDN and Authorisation Access Assignment.

FIELD	DESCRIPTION
<b>01 PDN Code</b>	Set PDN Code when LCR is activated from External and Tie trunk. Possible values: Maximum of 3 ASCII characters. (default = blank)
<b>02 ACC 1</b>	Set Authorisation Access Code 1. Possible values: Maximum of 22 ASCII characters. (default = blank)
<b>03 AAC 2</b>	Set Authorisation Access Code 2. Possible values: Maximum of 22 ASCII characters. (default = blank)
<b>04 AAC 3</b>	Set Authorisation Access Code 3. Possible values: Maximum of 22 ASCII characters. (default = blank)
<b>05 AAC 4</b>	Set Authorisation Access Code 4. Possible values: Maximum of 22 ASCII characters. (default = blank)
<b>06 AAC 5</b>	Set Authorisation Access Code 5. Possible values: Maximum of 22 ASCII characters. (default = blank)
<b>07 AAC 6</b>	Set Authorisation Access Code 6. Possible values: Maximum of 22 ASCII characters. (default = blank)
<b>08 AAC 7</b>	Set Authorisation Access Code 7. Possible values: Maximum of 22 ASCII characters. (default = blank)
<b>09 AAC 8</b>	Set Authorisation Access Code 8. Possible values: Maximum of 22 ASCII characters. (default = blank)

## 111 DR Level

**Prerequisite Program:** *None*

This program enables credit card calling for a DRL.

FIELD	DESCRIPTION
<b>DRL Number</b>	Enter the DRL number. Possible values: 1~16 (default = no value)
<b>01 Credit Card Calling</b>	Enable Credit Card Calling for this DRL. Possible values: Enable or Disable (default)

### DR Record Sheets

Program 532 Values			Program 533 Values			Program 534 Values		
00 DRL	01 Type		01 Dial String	02 Action		01 DRE Table	02 Action	
	Allow	Deny		Add	Delete		Add	Delete

Program 111 Values					
DRL Number	Credit Card Calling		DRL Number	Credit Card Calling	
	Enable	Disable		Enable	Disable
<b>01</b>			<b>09</b>		
<b>02</b>			<b>10</b>		
<b>03</b>			<b>11</b>		
<b>04</b>			<b>12</b>		
<b>05</b>			<b>13</b>		
<b>06</b>			<b>14</b>		
<b>07</b>			<b>15</b>		
<b>08</b>			<b>16</b>		

## Account Codes

**Program Number(s): 570, 506 and 571**

Assign Account Code data to Strata CTX.

1. Complete the “[Strata Net Private Networking](#)” on [Page 8-35](#).
2. From the Program Menu, click **Services > LCR/DR > Account Codes**.
3. Enter Program 570 data.
4. Enter Program 506 data. Click *List* to view a summary list of programmed Account Codes.
5. Enter Program 571 data.
6. Click Submit.

### 570 Account Code Digit Length

**Prerequisite Program:** *None.*

Accounting Codes need to be specified for the number of digits that are expected to be used for registering a number. This allows dialling within Strata CTX to proceed automatically once the correct account code is dialled. The following numbers are then dialled digits used for making the phone call.

A second length is provided to allow the number of digits to be used for verification of the code to be less than the total code entered; thus, the code may contain two parts, one required and one part optional to the user.

FIELD	DESCRIPTION
<b>01 Verified Digit Length</b>	<p>The Verified Digit Length sets a number of digits to verify with a pre-set list. This number may be the same or smaller than the account code digits set to be entered for creating a complete accounting code.</p> <p><b>Note</b> This field is not changed, when “<a href="#">506 Verified Account Codes</a>” on <a href="#">Page 8-31</a> are registered.</p> <p>Possible values: 4~15 (default = 4)</p>
<b>02 Registered Digit Length</b>	<p>The Registered Digit Length sets a number for the digits to be entered to make a complete accounting code entry.</p> <p><b>Note</b> The Registered Digit Length (<b>FB02</b>) must be greater than or equal to the Verified Digit Length (<b>FB01</b>).</p> <p>Possible values: 4~15 (default = 6)</p>



## 506 Verified Account Codes

**Prerequisite Program:** 570 [on page 8-31](#)

This program adds or deletes entries in the DR Table associated with the DRL entered in [Step 3 on page 8-27](#).

FIELD	DESCRIPTION
<b>Account Code</b>	Enter a valid accounting code that the user will be expected to dial. Digits 0~9 can be used.  <b>Note</b> The Account Code is set to the same digit length as the Verified Digit Length in Program 570 above.  Possible values: Up to 15 ASCII characters (default = no value)
<b>01 Verified Flag</b>	The Account Code Flag determines whether the number entered is to be used as a verified account code or not. Some applications may allow users to dial an accounting code which changes the restriction level for the call allowing it to be placed.  Possible values: Set or No Set (default)  <b>Note</b> To delete a Verified Account Code set this field to No Set.
<b>02 DRL</b>	The DRL assigned to an accounting code allows users to override their stations assigned DRL enabling a call to be placed.  Possible values: 0~16 (default = 0)
<b>03 FRL</b>	The FRL assigned to an accounting code enables users to override the station assigned FRL.  Possible values: 0~16 (default = 0)
<b>04 Network COS</b>	Assign the Network COS to be used by this accounting code.  Possible values: 1~32 (default = 1)

## 571 Exception Numbers for Forced Account Codes

**Prerequisite Program:** 506 [on page 8-31](#)

Up to four telephone numbers can be programmed as exceptions to the forced and /or verified account code entries (including 911). These special codes enable numbers to bypass the verification process and proceed unhindered.

FIELD	DESCRIPTION
<b>01 Exception Number 1</b>	Enter a Forced Account Code Exception.
<b>02 Exception Number 2</b>	Possible values: Up to 4 digits Exception 1 default = 911
<b>03 Exception Number 3</b>	Exception 2~4 default = no value
<b>04 Exception Number 4</b>	<b>Note</b> One of the assigned exception numbers should be 911. Exception Numbers for Forced Account Code fields cannot be duplicated.

## 509 DR Override by System Speed Dial

**Prerequisite Program:** *None*

This command assigns the COS, DRL, FRL and QPL values used by DR Override by Speed Dial.

1. From the Program Menu, click Services > LCR/DR > DR Override by System Speed Dial.
2. Select the COS, DRL, FRL and QPL override values.
3. Click Submit.



FIELD	DESCRIPTION
<b>01 Override COS</b>	Select the override COS value. Possible values: 1~32 (default =1)
<b>02 Override DRL</b>	Select the override DRL value. Possible values: 1~16 (default =1)
<b>03 Override FRL</b>	Select the override FRL value. Possible values: 1~16 (default =1)
<b>04 Override QPL</b>	Select the override QPL value. Possible values: 1~16 (default =1)

## 510 COS Override Assignment

**Prerequisite Program:** None

Assigns Class of Service Overrides and their parameters (COS, FRL, DRL, QPL).

1. Complete the “[COS Override Code Record Sheet](#)” on Page 8-34.
2. From the Program Menu, click Services > System Param > COS Override.
3. Enter Program 510 data or Select a COS Override Index and click *Copy* to copy settings from the selected COS Override Index.
4. Click Submit.



FIELD	DESCRIPTION
<b>00 COS Override Index</b>	Select the COS Override index. Possible values: 1~16 (default = no value)
<b>01 COS Override Code</b>	Select the COS Override Code as entered by users. If no data is entered in this field, any previously entered data is erased. Possible values: Up to 8 ASCII characters (default = no value)
<b>02 Set COS</b>	Select COS number for this override code. Possible values: 1~32 (default = 1)
<b>03 Set DRL</b>	Select DRL number for this override code. Possible values: 1~16 (default = 1)
<b>04 Set FRL</b>	Select FRL number for this override code. Possible values: 1~16 (default = 1)
<b>05 Set QPL</b>	Select QPL number for this override code. Possible values: 1~16 (default = 1)
<b>06 Set Network COS</b>	Select Network COS index for this override code. Possible values: 1~32 (default = 1)

**COS Override Code Record Sheet**

00 COS Override	01 COS Override Code	02 Set COS	03 Set DRL	04 Set FRL	05 Set QPL	06 Network COS
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						

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# Networking

Strata CTX enables networking of resources using Strata Net Private Networking. Read the following discussion before programming Strata CTX networking features.

## Strata Net Private Networking

The Strata CTX introduces robust private networking, Strata Net, to the Toshiba family of telecommunications products. Based on an international standard, QSIG, Strata Net will allow multiple Strata CTX systems to share voice mail systems and attendants, share features and a coordinated numbering plan and route calls simply and easily throughout the enterprise. Strata Net is distinguished from CTX Basic Networking which provides interconnection of nodes through conventional, E&M tie lines.

### QSIG

Toshiba has adopted QSIG as the basis for Strata Net. QSIG is an open, international standard for networking PBXs. It was begun in 1994 with a memo of understanding between twelve leading PBX manufacturers. The QSIG Handbook may be found on the web at <http://www.qsig.ie/>. The standards were developed and are maintained by the European Computer Manufacturers Association (ECMA), an international, Europe-based industry association founded in 1961 and dedicated to the standardisation of information and communication systems. ECMA may be found on the web at <http://www.ecma.ch>.

QSIG is an intelligent and powerful signalling system, providing great flexibility in terms of network architecture. Any network node can establish routes to 128 other nodes and segmented networks can grow beyond that. New nodes can be added to the network as business needs dictate. The use of QSIG does not impose the use of a specific network topology and it can be used with any network configuration: meshed, star, main and satellite, etc.

Toshiba, like most of its competitors, has chosen to implement QSIG over Primary Rate Interface. Strata Net supports QSIG Basic Call Control that allows it to interoperate with other PBXs that conform to the QSIG standard.

### Node ID

The basic logical element in Strata Net routing is the Node ID. It functions similarly to the address in a packet data network. As a call is routed through the network, each node examines the leading received digits for a Node ID defined in its Flexible Numbering Plan. After first discerning a Node ID, the Strata CTX then determines whether the Node ID is for itself or for a remote node. If it is a remote Node ID, the call goes through a routing process that selects an OLG, manipulates the digits and sends the call to the next node in the network. If the call contains the local Node ID, the Strata CTX manipulates the number according to the Overlap Code and delivers the call to a local station, trunk or feature.

The Node ID is 1 to 6 digits long. The Strata CTX knows that a Node ID to which an Overlap Code has been assigned is for the local node and that all others are for the remote nodes.

Strata Net bases its routing decisions exclusively on the Node ID and makes no attempt to analyze or restrict the remaining dialled digits. These remaining digits are not processed until delivered to the destination Strata Net node. This provides a simple, powerful tool because the programmer does not need to consider local conditions in transit nodes and does not need to fear interference with the call regardless of the path it takes through the network.

## Network Directory Number

A Network Directory number consists of two elements: the Node ID and the local directory number. A Node ID is a string of 1 to 6 digits that identifies one node on the network. A Network DN may be a simple concatenation of the two elements in which the complete Node ID precedes the complete extension or the two elements may overlap. In the event of an overlap, an Overlap Code identifies the digits to be substituted for the received Node ID.

The Node ID allows a call to route through multiple Strata Net nodes until its destination node recognises it as a local call. Local Node IDs are programmed using Command 656 "Node ID." Remote Node IDs are programmed in Command 651 "Network Routing Plan Analysis" to define the appropriate outgoing route to the desired destination. Digits received after the Node ID are passed on to the distant node without analysis.

One node may have up to four Node IDs. A unique Overlap Code is programmed for each Node ID. The Overlap Code allows the programmer to control the number of digits to be dialled for network calls and to create a coordinated dialling scheme across the network. If the Network DN is to be a simple concatenation with no overlap, the Overlap Code field is left blank. All Node IDs, local and remote, must be defined as such in the Flexible Numbering Plan.

The following are examples of concatenated and overlapped Node IDs.

Concatenated:

- ◆ Node ID = 789
- ◆ Extension = 2345
- ◆ Overlap Code = BLANK
- ◆ Network DN = 7892345

Overlapped:

- ◆ Node ID = 789
- ◆ Network DN = 789345
- ◆ Overlap Code = 2
- ◆ Local Extension = 2345

This simple, powerful, logical tool will support large, complex networks. It is the means by which a Coordinated Numbering Plan can be established across all Strata Net nodes including existing systems with established numbering plans.

## Network Feature Access Code

The Network Feature Access Code is similar to the Network DN but is used to access features in a remote Strata Net node. Features may include routing features, such as Trunk Group Access and Least Cost Routing, or user features such as Message Waiting and Paging.

The Network FAC format is:

Node ID (1~6 digits) + Local FAC (1~5 digits) + Parameters (unlimited)

For example, **789 9 16175551212** access' Node ID 789 and uses that node's LCR (**9**) to dial directory assistance in Boston.

Given their variability, Network Faces are usually processed without Overlap Codes. If a Node ID with an Overlap Code has been established for local extensions, it cannot be used for feature access; a separate Node ID must be established. If no Overlap Codes are used, one Node ID will serve for all purposes.

## Digit Manipulation

Digit Manipulation is the term for the altering of an original string of dialled digits in order to re-route a call or connect it to a specific service. Digit Manipulation is usually applied to the leading digits in the string which appear left-most in written form. Strata Net uses two forms of manipulation: Overlap Codes, described above, for inbound calls and Network Digit Modification Tables for outbound calls. The Network Digit Modification Tables contain up to 64 treatments in each of which as many as 10 leading digits may be deleted and as many as 23 leading digits substituted. These 64 treatments may be applied to any of 64 Route Definitions.

## Travelling Class Mark

Calling privileges, restrictions and priorities may be imposed across Strata Net using the Travelling Class Mark. The Travelling Class Mark accompanies all calls across the network. When the call reaches its terminating node, that node uses the Travelling Class Mark to determine whether the originator of the call is entitled to the dialled facility. The mark is a single information element concatenated from the following:

- ◆ Network Class of Service
- ◆ Network DR Level
- ◆ Network Facility Restriction Level
- ◆ Network Queuing Priority Level

All nodes contain tables to translate between local and network DR Levels, Facility Restriction Levels and Queuing Priority Levels. DRL, FRL and QPL each require two tables: one to translate from the local level to the network level for outgoing calls and one to translate from network to local level for incoming calls.

Network Class of Service is an exception for two reasons. First, at the originating node, each station is assigned a Network Class of Service; there is no translation. The terminating node does contain a table to translate the received Network Class of Service to a local Class of Service but it adds parameters to the local Class of Service before determining how to process the call. Those parameters are:

- ◆ Permission for Off-Hook Call Announce
- ◆ Ability to register System Speed Dial numbers in the terminating node
- ◆ Ability to register Class of Service Override in the terminating node and
- ◆ Trunk Group Override Access

Time of day considerations are handled at the originating node. If a call originates in a node that is in Night Mode and terminates in another node, it will deliver the Night Mode values regardless of the condition of the terminating node.

## Centralised Voice Mail

Users in multiple network nodes may use the services of a single voice mail system attached to one node. The network transmits the Voice Mail ID (VMID) for remote stations and the calling conditions under which the call is being directed to voice mail (Call Forward All Calls, Busy, etc.). The centralised voice mail system can control message waiting indications and provide automated attendant services throughout the network through its integration with a single node.

Centralised Voice Mail requires a Coordinated Numbering Plan throughout the network for proper operation. The Coordinated Numbering Plan allows the voice mail to interact with the entire network as if it were on large PBX. Basic operations include:

- ◆ **Forward to Voice Mail** – A forwarded, busy or unanswered extension may forward across the network to the voice mail unit. Centralised Voice Mail notifies the voice mail of the source and calling conditions and the voice mail returns the greeting of the original target extension. Notification of calling conditions requires SMDI integration.
- ◆ **Message Retrieval** – A user can press the a Message button on his phone and be directed to a voice mail system connected to his own or a remote node. The call will be correctly identified as a retrieval for the correct VMID and the user will be prompted for his security code. The same operation may be programmed for PhDNs in Station Programming.
- ◆ **Message Waiting** – The voice mail system can control message waiting indications in distant switches by accessing the remote node via Node ID, registering the Message Waiting Feature Access Code and specifying the desired station.
- ◆ **Automated Attendant** – Automated attendant calls to the voice mail may be transferred to stations or services in distant nodes using the Network Directory Number. If the automated attendant transfers the call to a busy destination, it can activate Call Transfer with Camp-on across the network simply by hanging up.

Not all Strategy features available to a single switch are available to remote Strata Net nodes. This is a result of the local node being directly integrated to the voice mail system. The following table shows the availability of voice mail features across the Strata Net.

Strategy Feature	Attached Node	Remote Node
Message Lamp Control	X	X
Forward to Voice Mail	X	X
Message Retrieval	X	X
Automated Attendant	X	X
Manual Voice Recording	X	
LCD Control of Voice Mail	X	
Transfer Direct to Voice Mail	X	

**Multiple Voice Mail Systems** – More than one voice mail system may be connected to one network node and one or more voice mail systems may be connected to multiple nodes. Access, integration and message waiting are controlled on a call-by-call basis according to parameters assigned to individual extensions. There is nothing to prevent a single DKT from having access to four voice mail systems, each connected to a remote node. The Prime DN and three PhDNs are each programmed with independent voice mail destinations, Voice Mail IDs and Record and Playback codes. See the Programming Manual for details.



## Centralised Attendant

It is possible for one Attendant to serve an entire Strata Net. Station users anywhere in the network can simply dial **0** to reach the centralised attendant. Calls to the attendant are identified with calling number and name. Incoming trunk calls to any node in the network can be routed to one attendant and then extended anywhere in the network.

## Path Replacement

Known also as Route Optimisation and Release Link, Path Replacement makes the most efficient use of talk paths between network nodes. For example, if a series of transfers around the network results in a conversation between two stations in the same node, all of the tie line circuits are released and a simple station-to-station call is established in the one node. This efficiency reduces the number of facilities to be provided and improves transmission quality by minimising the number of links over which loss could occur.

Path Replacement applies to:

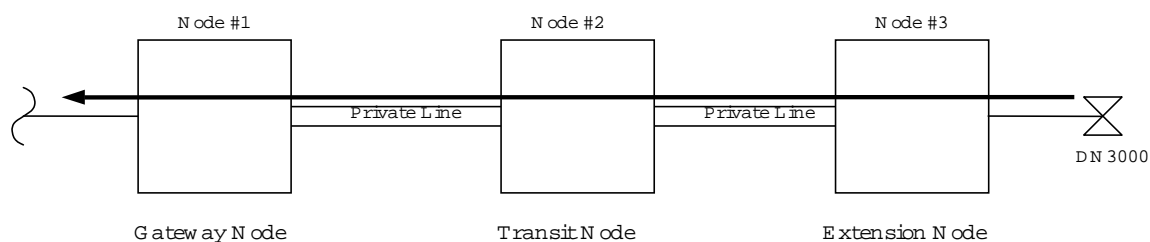
- ◆ Call Transfer
- ◆ Ring Transfer
- ◆ Station Call Forward
- ◆ System Call Forward

## Coordinated Numbering Plan

A Coordinated Numbering Plan rationalises the dialling patterns required of network users and relieves them of the need to know complicated access codes to navigate the network. The basic mechanism is the Network Directory Number described above. The combination of Node ID and Directory Number appear to the user as simple extension dialling. The ability to overlap the two components reduces the number of dialled digits. If it is necessary to preserve legacy extension ranges at individual nodes, a Network Access Code can be used to resolve numbering conflicts with other nodes.

## Station Message Detail Recording (SMDR)

Strata Net generates call records for incoming or outgoing calls from the nodes in which they originated or terminated. For example, if a station user in Node 3 makes an outside call that is routed through transit Node 2 to gateway Node 1 for connection to the public network, Nodes 1 and three generates SMDR records; Node 2 does not.



The record in Node #3 will include the Network DN of the calling station, the dialled digits and the OLG number and Channel Group number used to access Node #2. The record in Node #1 will include the ILG number and Channel Group number of the Strata Net trunk on which the call was received and the PSTN trunk to which it was connected. The record format and conditions are the same as for a single node system using the new format adopted for Strata CTX.

Station-to-station calls across Strata Net are considered internal calls and do not generate SMDR records in any nodes. Abandoned Call SMDR records are only generated for incoming calls over local trunks.

Unforced account codes are generated from the node in which they originated. Forced account codes are included in the records of the node that required them. Similarly, the node which provides DISA services is responsible for checking the DISA Security code and for generating the SMDR record. The remote node and the transit node will not generate the SMDR record.

Plowable buffers are usually attached to each network node and polled by a central call accounting system. If the buffer is not available, the Strata CTX will buffer up to 1000 records. Equipment numbers, time stamps and call type designations assist the call accounting system in associating records for the same call from different nodes.

### Network Feature Content

The following is a list of Strata CTX features that operate across multi-node Strata Net connections.

- |  |  |
|--|--|
| ◆ Account Codes Forced/Voluntary/Verified* | ◆ DISA Security Code Revision*                   |
| ◆ Automatic Busy Redial*                   | ◆ Do Not Disturb *                               |
| ◆ Automatic Camp-on                        | ◆ Do Not Disturb Override*                       |
| ◆ Automatic Release of Exchange Line       | ◆ Door Lock Control                              |
| ◆ Call Forward                             | ◆ Executive Override*                            |
| ◆ Call Park Orbits Park and Page           | ◆ External Ring Repeat                           |
| ◆ Call Transfer                            | ◆ Flexible Numbering                             |
| ◆ Call Transfer Immediate                  | ◆ Intercept                                      |
| ◆ Call Transfer With Camp-on*              | ◆ Least Cost Routing *                           |
| ◆ Call Waiting                             | ◆ Lost Call Treatment                            |
| ◆ Caller Identification                    | ◆ Message Waiting                                |
| ◆ Class Of Service                         | ◆ Offhook Camp-on*                               |
| ◆ Conference On Hold                       | ◆ Outgoing Call                                  |
| ◆ Conferencing                             | ◆ Recall Treatment                               |
| ◆ Consultation Hold Manual                 | ◆ Speed Dial System/Station                      |
| ◆ Credit Card Calling*                     | ◆ Station Exchange Line Access                   |
| ◆ Day/Night Modes*                         | ◆ Station To Station Connection                  |
| ◆ Dial For Quick Launch                    | ◆ System Call Forward                            |
| ◆ Dialed Number Identification Service     | ◆ Tandem Exchange Line Connection                |
| ◆ Digital PAD                              | ◆ DR   |
| ◆ Direct Dialling Inward                   | ◆ Toll Restriction Override by System Speed Dial |
| ◆ Direct Inward System Access              | ◆ Travelling Class Of Service                    |
| ◆ Direct Inward Termination                | ◆ Trunk Access*                                  |
| ◆ Directory Number Presentation            | ◆ Trunk Group Access*                            |

\* Features that can be limited by Network Class of Service.

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## Configuration

### RPTU2 PCB

The Strata CTX will use a new Primary Rate Interface printed circuit board that can terminate either a Strata Net connection or a public PRI: the RPTU-2F. The RPTU-2F is backwardly compatible with the RPTU-1F for standard ISDN operation. The mode of operation (standard or QSIG) is controlled by a programming parameter named "Private Service Type." This parameter must be chosen in establishing both incoming and OLGs.

### Circuits

When used for Q-Sig connections the RPTU2F can be connected to BT's Megastream or n x 64 Kilo-stream service. The RPTUsF requires a G703 120 ohm balanced pair type interface.

## Strata Net Programming Overview

Follow the sequences below to program Strata Net.

### Step 1: Basic Incoming Network Calls

1. Establish the Node ID as part of the Flexible Numbering Plan (Program 102).

**Note** Node ID is located under *01 Feature Name* as "Node ID (CTX network number prefix)."

2. Establish up to four Local Node IDs (Program 656) for the local node. Each Node ID can have a unique Overlap Code.
3. Process the digit string as manipulated by the Overlap Code from Flexible Numbering Plan. The resulting number can be an extension call, feature activation, or tandem call.

### Step 2: Basic Outgoing Network Calls

1. Establish the Node ID as part of 102 Flexible Numbering Plan.
2. Use Program 651 Routing Plan Analysis Table Assignment to associate each Remote Node ID with a Private Route Choice table which will provide up to six routing choices to the desired node.
3. Use Program 653 to define a Private Route Choice table. The table should contain up to six Route Definitions. The system steps through these Route Definitions in terminating hunt fashion to find a route to the desired private networking node.
4. Use Program 654 to define a Private Route Definition consisting of an OLG and a pointer into the Private Digit Modification table.
5. Use Program 655 to set up Private Digit Modification tables containing up to 64 entries. Each entry specifies the number of leading digits to be deleted from the dialled number and the dial string to be added as leading digits.

## 656 Node ID Assignment

**Prerequisite Program:** 102 [on page -4](#)

This program assigns up to four Network Node IDs to process incoming network calls. Each Node ID has an overlap code. Strata CTX will substitute the Overlap Code for the Node ID before processing the call further. A Network Directory Number consists of a Node ID and the desired node.

1. From the Program Menu, click Services > Networking > Node ID.
2. Enter Program 656 data.
3. Click Submit.

FIELD	DESCRIPTION
<b>01 Primary Node ID</b>	Enter the Primary Node ID for this node. This Node ID identifies the node used for administering Strata Net. Possible values: Up to 6 ASCII characters (default = no value)
<b>Primary Overlap Code</b>	Enter the Overlap Code associated with the Primary Node ID. An Overlap Code is the string of digits that replaces the Node ID to continue call processing. Possible values: Up to 4 ASCII characters (default = no value)
<b>02 Node ID 2</b>	Enter Node ID 2 for this node. Possible values: Up to 6 ASCII characters (default = no value)
<b>Overlap Code 2</b>	Enter Overlap Code for Node ID 2. Possible values: Up to 4 ASCII characters (default = no value)
<b>03 Node ID 3</b>	Enter Node ID 3 for this node. Possible values: Up to 6 ASCII characters (default = no value)
<b>Overlap Code 3</b>	Enter Overlap Code for Node ID 3. Possible values: Up to 4 ASCII characters (default = no value)
<b>04 Node ID 4</b>	Enter Node ID 4 for this node. Possible values: Up to 6 ASCII characters (default = no value)
<b>Overlap Code 4</b>	Enter Overlap Code for Node ID 4. Possible values: Up to 4 ASCII characters (default = no value)

651 Private Routing Plan Analysis

Prerequisite Program: 656 on page 8-42 and 306 on page -5

Assigns the Node IDs to Route Choice Tables for Private Networking.

- 1. Complete the “Private Routing Plan Analysis Table Record Sheet” on Page 8-43.
- 2. From the Program Menu, click Services > Networking > Route Plan Analysis.
- 3. Enter the Node ID number (six digit numeral) to add to the Private Routing Plan Analysis Table.

Click *List* to see a summary list of programmed Node IDs or click *Copy* to copy data from an existing Node ID.



- 4. Select the Private Route Choice Table in which to add the Node ID entered in Step 3 above. Possible values are 1~64, 0 = Delete and default = 0.
- 5. Click Submit.

Private Routing Plan Analysis Table Record Sheet

00 Node ID	01 Route Choice Table	00 Node ID	01 Route Choice Table	00 Node ID	01 Route Choice Table

## Private Route Choice Definition

**Program Number(s):** 653, 654 and 655

Use these command to define Private Network Routing parameters.

1. Complete the “[Route Choice Definition Record Sheet](#)” on [Page 8-46](#).
2. From the Program Menu, click Services > Networking > Route Choice Definition.
3. Enter Program 653, 654 and 655 data.
4. Select the Private Network.
5. Click Submit.

### 653 Private Route Choice Table Assignment

**Prerequisite Program:** None

Use this command to define a Private Route Choice Table. A Private Route Choice Table contains up to six Route Definitions. The system will step through these Route Definitions in terminating hunt fashion to find a route to the desired private networking node. There may be up to 64 Route Choice Tables.

FIELD	DESCRIPTION
<b>00 Pvt Ntwk Route Choice Table Number</b>	Select the Private Network Route Choice Table Number. Possible values: 1~64 (default = no value)
<b>01~06 Route Definition Tables</b>	Select Route Definition Tables 1~6 to be used for this Private Network Route Choice. Possible values: 1~64, 0 = delete (default)

## 654 Private Route Definition Table Assignment

**Prerequisite Program:** *None*

Use this command to define a Private Route Definition. A Private Route Definition consists of an OLG and a pointer into the Private Digit Modification Table that contains the dialled digits to be deleted and/or inserted before being communicated to the distant node.

FIELD	DESCRIPTION
<b>00 Private Network Route Definition</b>	Select the number of the Private Route Definition to be defined or deleted. Possible values: 1~64 (default = no value)
<b>01 OLG</b>	Select the OLG to be used by this route. Possible values: 1~128 (CTX670), 1~32 (CTX100) 0 = delete (default = 0)
<b>02 Digit Modification Table</b>	Select the Digit Modification Table to be used by this route. Possible values: 1~64, 0 = delete (default)

## 655 Private Network Digit Modification Table Assignment

**Prerequisite Program:** *None*

This command assigns Digit Modification Tables for Private Networking.

FIELD	DESCRIPTION
<b>00 Private Digit Modification Table</b>	Select the Private Network Digit Modification Table to be defined. Possible values: 1~64 (default = no value)
<b>01 Deleted Digits</b>	Select the number of leading digits to be deleted. Possible values: 1~10, 0 = delete (default)
<b>02 Insert Leading Digits</b>	Select the leading digits to be inserted. Possible values: Up to 23 digits (default = no value)

## Route Choice Definition Record Sheet

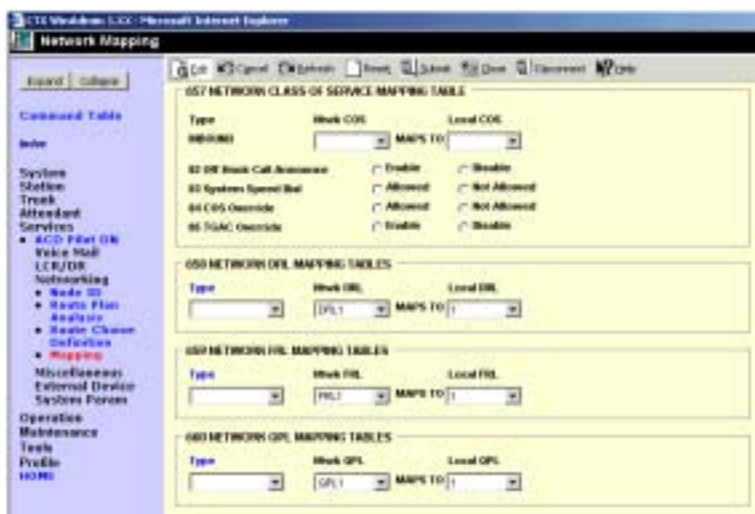
[illegible]

## Mapping

**Program Number(s): 657, 658, 659 and 660**

The following programs map network and local COS, DRL, FRL and QPL settings to each other.

1. Complete the “[Network Mapping Record Sheets](#)” on [Page 8-48](#).
2. From the Program Menu, click **Services > Networking > Mapping**.
3. Enter Program 657 data.
4. Enter Program 658 data.
5. Enter Program 659 data.
6. Enter Program 660 data.
7. Click **Submit**.





## 657 Network COS Mapping Table

**Prerequisite Program:** *None*

This table maps a Network COS received as part of a Traveling Class Mark to a local Class of Service for access to local services. There is no translation of Outgoing Network COS.

FIELD	DESCRIPTION
<b>Ntwk COS</b>	Enter the Network COS to be mapped. Possible values: 1~32 (default = no value)
<b>01 Local COS</b>	Enter the Local COS to be used in place of the received Network COS. Possible values: 1~32 (default = no value)
<b>02 Off-hook Call Announce</b>	Choose whether an incoming call with this Network COS can activate OCA. Possible values: Enable or Disable (default)
<b>03 System Speed Dial</b>	Choose whether an incoming call with this Network COS can use a System Speed Dial number to make an outgoing call. Possible values: Enable or Disable (default)
<b>04 COS Override</b>	Choose whether an incoming call with this Network COS can use Class of Service Override. Possible values: Enable or Disable (default)
<b>05 TGAC Override</b>	Choose whether an incoming call with this Network COS can override local Trunk Group Access Control. Typically an attendant function. Possible values: Enable or Disable (default)

## 658/659/660 Network DRL/FRL/QPL Mapping Tables

**Prerequisite Program:** *None*

These commands are used to establish two mapping tables to equate local DRLs, FRLs and QPLs with network DRLs, FRLs and QPLs for both outbound and inbound network calls.

FIELD	DESCRIPTION
<b>Type</b>	Select the Network DRL/FRL/QPL type. Possible values: Outbound or Inbound (default = no value) <ul style="list-style-type: none"> <li>Outbound – maps a local DRL/FRL/QPL to a Network DRL/FRL/QPL.</li> <li>Inbound – maps a Network DRL/FRL/QPL to a local DRL/FRL/QPL.</li> </ul>
<b>Network DRL/FRL/QPL</b>	Enter the Network DRL/FRL/QPL (for outbound) you want to map to a Local DRL/FRL/QPL. Possible values: DRL/FRL/QPL1~DRL/FRL/QPL16 (default = 1~16)
<b>Local DRL/FRL/QPL</b>	Enter the Local DRL/FRL/QPL (for inbound) you want to map to the Network DRL/FRL/QPL selected in the <i>Network DRL/FRL/QPL</i> field above. Possible values: 1~16 (default = 1~16)

## Network Mapping Record Sheets

Program 657 Values					
Network COS	Local COS	02 OCA	03 Sys SD	04 COS Override	05 TGAC Override

Program 658 Values	
Table Type:	
DRL1	
DRL2	
DRL3	
DRL4	
DRL5	
DRL6	
DRL7	
DRL8	
DRL9	
DRL10	
DRL11	
DRL12	
DRL13	
DRL14	
DRL15	
DRL16	

Program 659 Values	
Table Type:	
FRL1	
FRL2	
FRL3	
FRL4	
FRL5	
FRL6	
FRL7	
FRL8	
FRL9	
FRL10	
FRL11	
FRL12	
FRL13	
FRL14	
FRL15	
FRL16	

Program 660 Values	
Table Type:	
QPL1	
QPL2	
QPL3	
QPL4	
QPL5	
QPL6	
QPL7	
QPL8	
QPL9	
QPL10	
QPL11	
QPL12	
QPL13	
QPL14	
QPL15	
QPL16	

## Miscellaneous

The Strata CTX system can monitor SMDR, Call History and Behind Centrex. Use the following programs to set up these services.

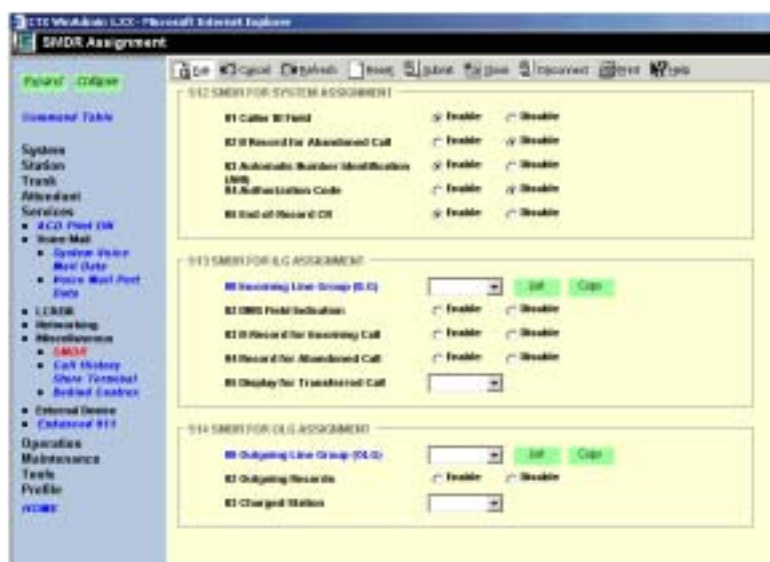
### SMDR

The following enable programming for SMDR, Call History and Behind Connection settings.

#### Program Number(s): 512, 513 and 514

The following programs assigns system-wide SMDR parameters.

1. From the Program Menu, click Services > Miscellaneous > SMDR.
2. Enter Program 512 data.
3. Enter Program 513 data.
4. Enter Program 514 data.
5. Click Submit.



### 512 SMDR for System Assignment

**Prerequisite Program:** None

This table translates a Network COS received as part of a Travelling Class Mark to a local Class of Service for access to local services. There is no translation of Outgoing Network COS.

FIELD	DESCRIPTION
<b>01 Caller ID Field</b>	Include Caller ID records in SMDR. Possible values: Enable (default) or Disable
<b>02 B-Record for Abandoned Call</b>	Generate B Record for an abandoned call. Possible values: Enable or Disable (default)
<b>03 Automatic Number Identification (ANI)</b>	Include ANI in SMDR record. Possible values: Enable (default) or Disable
<b>04 Authorisation Code</b>	Include authorisation codes in SMDR records. Possible values: Enable or Disable (default)
<b>05 End-of-Record CR</b>	Include a Carriage Return (CR) at the end of an SMDR record. Possible values: Enable (default) or Disable

### 513 SMDR for ILG Assignment

**Prerequisite Program:** *None*

This program assigns SMDR parameters for ILGs.

FIELD	DESCRIPTION
<b>00 Incoming Line Group (ILG)</b>	Specify the ILG for which to set SMDR parameters. Possible values: 1~128 (CTX670), 1~32 (CTX100) (default = no value)
<b>01 Generate SMDR Records</b>	Enable to generate records for this ILG Possible values: Enable (default) or Disable
<b>02 CPN Field Indication</b>	Check to include CPN information in records for this ILG. Possible values: Enable (default) or Disable
<b>03 B Record for Incoming Call</b>	Enable B Record generation for incoming calls with or without incoming SMDR being enabled. Possible values: Enable or Disable (default)
<b>04 Abandoned Call Record Output</b>	Enable record generation for abandoned calls. Incoming SMDR must be turned on. Abandoned call records will be generated whether or not incoming SMDR has been set. Possible values: Enable or Disable (default)
<b>05 Display Transferred Call Records</b>	Select whether to charge a transferred call to the source or destination party. Possible values: Source (default) or Destination

#### Note

1. In the programming to control whether to output the B-record for the abandoned call, the setting "output of B-record for the abandoned call" for each group has priority over the setting "B-record output for the abandoned call".
2. To output the B-record for the abandoned call, the setting of output of SMDR record for the incoming call must be "ON".

### 514 SMDR for OLG Assignment

**Prerequisite Program:** *None*

This command assigns SMDR parameters for OLGs.

FIELD	DESCRIPTION
<b>00 Outgoing Line Group (OLG)</b>	Specify the OLG for which to set SMDR parameters. Possible values: 1~128 (CTX670), 1~32 (CTX100)
<b>02 Outgoing Records</b>	Generate B-records for outgoing calls. SMDR Record Display must be Enabled. Possible values: Enable or Disable (default)
<b>03 Charged Station</b>	Apply the SMDR record of a transferred call to its source or its destination. Possible values: Source (default) or Destination
<b>04 Abandoned Call for Outgoing Call</b>	B Record Output for Cancelled Outgoing Call Possible values: Enable or Disable (default)

#### Note

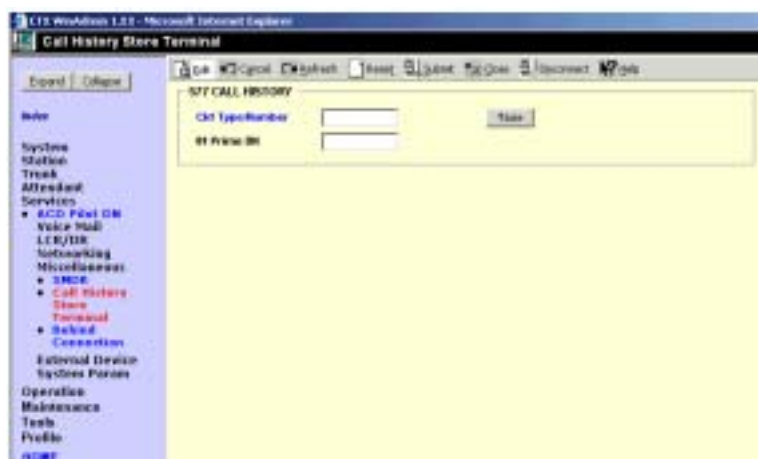
1. To output the SMDR record for the answered outgoing call, the setting of "Output of SMDR record for the outgoing call" must be "ON".

## 577 Caller History

**Prerequisite Program:** None

Accounting Codes need to be specified for the number of digits that are expected to be used for registering the number. This allows the dialling within the system to proceed automatically once the correct account code is dialled, the following numbers are then dialled digits used for making the phone call. A second length is provided to allow the number of digits to be used for verification of the code to be less than the total code entered, thus the code may contain two parts, one required and one part optional to the user.

1. Complete the “Call History Record Sheet” below.
2. From the Program Menu, click Services > Miscellaneous > Behind Connection.
3. Click Submit.



FIELD	DESCRIPTION
<b>Ckt Type/Number</b>	Enter the Circuit Type and number. See the <a href="#">Table 8-1</a> below. Possible values: Up to 6 digits (default = no value)
<b>01 Prime DN</b>	Enter Station DN to store call history data. Possible values: Up to 5 digits (default = no value)

**Table 8-1 Circuit Type Code Definitions**

Circuit Name	Circuit Type	Circuit Number	Example
DN	1	0~99999 (DN)	if DN is 200, value is 1200
Exchange Line	2	1~264 (Trunk Number)	if Exchange is 30, value is 230
GCO	3	1~128 (GCO Key Group Number)	if GCO is 50, value is 350
POOL	4	1~128 (POOL Key Group Number)	if POOL is 80, value data is 480

## Call History Record Sheet

Circuit Type	01 PDN	Circuit Type	01 PDN	Circuit Type	01 PDN

**650 Behind Centrex Assignment****Prerequisite Program:** *None*

This feature allows Strata CTX to connect to the station side of a PBX or Centrex using a physical loop trunk interface. DR and Least Cost Routing may need to account for access codes required by the PBX or Centrex before connecting to the public network.

1. Complete the “Behind Centrex Assignment Record Sheet” below.
2. From the Program Menu, click Services > Miscellaneous > Behind Centrex Assignment.
3. Click Submit.



FIELD	DESCRIPTION
<b>00 OLG Number</b>	Select OLG that is attached to a Centrex (or other PBX). Possible values: 1~128 (CTX670), 1~32 (CTX100), (default = no value)
<b>01 Behind Centrex</b>	Enable Behind Centrex Operation for this OLG. Possible values: Enable or Disable (default)
<b>02 Assume 9</b>	Enable the Assume 9 feature. Possible values: Enable or Disable (default)

## Behind Centrex Assignment Record Sheet

00 OLG Number	01 Behind Centrex	02 Assume 9	03 Pause Timer

00 OLG Number	01 Behind Centrex	02 Assume 9	03 Pause Timer

## External Devices

### Door Phones

**Program Number(s): 507, 576 and 508**

This command assigns Door Phone parameters.

1. Complete the “[Door Phone Assignment Record Sheet](#)” on [Page 8-57](#).

2. From the Program Menu, click Services > External Device > Door Phones.

3. Enter Door Phone Number  
...or click one of the following buttons:

- ✦ List – view a summary list of programmed Door Phones.
- ✦ Create – Assign a new Door Phone with default settings.
- ✦ Copy – Enter an existing Door Phone Number in the corresponding and click *Copy* to copy settings from an existing Door Phone.
- ✦ Delete – Delete a Door Phone.

4. Enter remaining Program 507 data.
5. Enter Program 576 data.
6. Enter Program 508 data.
7. Click Submit.

## 507 Door Phone Assignment

**Prerequisite Program:** *None*

This assignment configures Door Phone Control Boxes (DDCBs) and Door Phones (MDFBs). DDCBs can be connected to ADKU, PDKU and/or BDKU interface PCBs. Up to three MDFBs can be connected to one DDCB. A Door lock control relay may be assigned to the B output of the DDCB in place of a MDFB door phone (see [“508 Door Lock Control Assignment” on Page 8-56](#)).

FIELD	DESCRIPTION
<b>00 Door Phone Number</b>	<p>Enter the door phone number.</p> <p>Possible values: 1~24 (default = no value)</p> <p>Door phone numbering for both CTX100 and CTX670 is as follows:</p> <ul style="list-style-type: none"> <li>DDCB 1 provides door phone numbers 1~3, 2 can be a door phone or door lock.</li> <li>DDCB 2 provides door phone numbers 4~6, 5 can be a door phone or door lock.</li> </ul> <p>Door phone numbering for CTX670 only is as follows:</p> <ul style="list-style-type: none"> <li>DDCB 3 provides door phone numbers 7~9, 8 can be a door phone or door lock.</li> <li>DDCB 4 provides door phones 10~12, 11 can be a door phone or door lock.</li> <li>DDCB 5 provides door phones 13~15, 14 can be a door phone or door lock.</li> <li>DDCB 6 provides door phones 16~18, 17 can be a door phone or door lock.</li> <li>DDCB 7 provides door phones 19~21, 20 can be a door phone or door lock.</li> <li>DDCB 8 provides door phones 22~24, 23 can be a door phone or door lock.</li> </ul> <p>DDCBs are numbered by the system automatically by DDCB Equipment (Shelf/Slot/Circuit). DDCB1 is assigned to the lowest DDCB Equipment and DDCB2 to the next lowest, etc.</p> <p>If DDCB Circuit B is set to Door Lock, a Door Phone cannot be set.</p>
<b>01 DDCB Equipment No.</b>	<p>Enter the DDCB equipment number to which the Door phone should be assigned.</p> <p>Possible values: xx = cabinet 01~07; yy = slot 01~10; zz = circuit 01~16 (default = no value)</p> <p>Example: If the DDCB interface should be connected to a PDKU or BDKU/BDKS in cabinet shelf 5, slot 2, circuit 3, enter 050203.</p> <p><b>Notes</b></p> <ul style="list-style-type: none"> <li>This is the cabinet, slot, and circuit number of the BDKU/BDKS or PDKU interface PCB to which the DDCB is to be connected.</li> <li>If a PDN is assigned to the DDCB equipment number it must be deleted, using Program 201, before attempting to assign the DDCB console.</li> </ul> <p>Cabinet numbers:</p> <ul style="list-style-type: none"> <li>CTX100 – Select 01 for Base and Expansion cabinet.</li> <li>CTX670 – Select 01 for Base and 02~07 respectively for each Expansion cabinet.</li> </ul> <p>Slot numbers:</p> <ul style="list-style-type: none"> <li>CTX100 – Select 01~04 for Base slots and 05~08 for Expansion slots.</li> <li>CTX670 – Select 01~08 for Base slots and 01~10 for Expansion slots.</li> </ul>



FIELD	DESCRIPTION
<b>02 Tenant Number</b>	Select the Tenant Number for which the door phone should ring over external page in the system Night mode. Possible values: 1~8 (default = 1)
<b>04 Ring Duration</b>	Select the time that the door phone should ring destination devices when the door phone button is pressed. The ring time can be 3 to 30 seconds set in 3 second intervals - each 3 second interval provides one ring to the destination. Destination devices include selected DNs and Page groups. Possible values: 3~30 (default = 9)
<b>05 LCD Name Display</b>	Enter the Door Phone name that should display on LCD telephones when the door phone rings the telephones; or, when the telephone calls the door phone. Possible values: Up to 16 characters (default = no value)
<b>06 Day1 Destination</b> <b>07 Day2 Destination</b> <b>08 Night Destination</b>	1. Select Destination Type – Select the type of destination that should ring when the door phone button is pressed during the system Day1, Day2 or Night mode. Possible values: None (default), DN or Paging Group  2. Enter the Destination Number – If the ring destination type is a PDN or PhDN, enter the directory number. If the ring destination type is Page, enter the Page Group number. Possible values: Up to 5 ASCII characters (default = no value)

### 576 Door Phone Night Ring Over External Page

This command assigns a Page Group to ring during system Night Mode when a door phone button is pressed. The assignment can be made independently for each Tenant.

FIELD	DESCRIPTION
<b>00 Tenant Number</b>	Select the system Tenant number to be assigned Door Phone to Page Group/ Night Ringing. Possible values: 1~8 (CTX670) or 1 (CTX100) (default = no value)
<b>01 Page Group Number</b>	Select the system Page Group number that should ring for the selected Tenant when a door phone button is pressed during the system Night Mode. Possible values: 0~16 (default = 0)

## 508 Door Lock Control Assignment

This assignment is used to configure up to 10 door lock control relays. The contacts of these relays are used to control electrical door locks. One door lock relay can be assigned to each of the eight Door Phone Control Boxes (DDCB, Port -B) and/or one to each of the two BIOU PCBs (any one of the four control relays).

**Note** If a door lock is assigned to a DDCB, the second jack (Port B) will provide the door lock relay contacts. This jack can not be used to connect an MDFB door phone.

FIELD	DESCRIPTION
<b>00 Door Lock Number</b>	Enter the door lock control number to configure. Possible values: 1~10 (default = no value)
<b>01 Interface Type</b>	Enter the system Page Group number that should ring for the selected tenant when a door phone button is pressed during the system Night Mode. Possible values: None (default), BIOU or DDCB
<b>02 BIOU Relay Number</b>	Assign BIOU control relay as a Door Lock Relay. This relay activates when the Door Lock button is pressed or a Door Lock access code is dialed. Possible values: 0~8 (default = 0) BIOU1 provides control relays 1~4 BIOU2 provides control relays 5~8.  <b>Note</b> Note: The CTX100 ACTU built-in relay is programmed as relay 5. For this relay operation BIOU2 is installed as default in a virtual equipment position Cabinet 2, Slot 5, PCB code 20, in Program 100. To install an actual BIOU2 and disable the ACTU built-in relay, use the programming telephone to remove the virtual BIOU2 and then install the actual BIOU2 in Cabinet 01/slot 01~08 in the normal manner. BIOU relay functions are assigned in <a href="#">"515 View BIOU Control Relay Assignments" on Page 8-58</a> . This field is required if you selected BIOU in <i>01 Interface Type</i> above.
<b>03 DDCB Equipment No.</b>	Enter the DDCB equipment number to which the Door Lock should be assigned. This is the cabinet, slot, and circuit number of the BDKU/BDKS or PDKU interface PCB to which the DDCB is to be connected. Possible values: xx = Cabinet 01~07; yy = Slot 01~10; zz = Circuit 01~16 (default = no value)  Example: If the DDCB interface should be connected to a PDKU or BDKU/BDKS in cabinet shelf 5, slot 2, circuit 3, enter 050203.  <b>Notes</b> <ul style="list-style-type: none"> <li>This is the cabinet, slot, and circuit number of the BDKU/BDKS or PDKU interface PCB to which the DDCB is to be connected.</li> <li>If a PDN is assigned to the DDCB equipment number it must be deleted, using PRG201, before attempting to assign the DDCB console.</li> </ul>

## Door Phone Assignment Record Sheet

[illegible]

Program 576 Values	
00 Tenant Number	01 Page Group
1	
2	
3	
4	
5	
6	
7	
8	

Program 508 Values			
00 Door Lock	01 Interface	02 BIOU Relay	03 DDCB Equip
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

## 515 View BIOU Control Relay Assignments

**Prerequisite Program:** 100 [on page -1](#), and 105 [on page -13](#)

This assignment is used to view functions of the four control relays on each BIOU PCB set in Program 105 12 Night Relay and 18 Night Bell Relay; Program 508 Door Lock Control Assignment; and Program 503 19 BGM Mute Relay. The system allows up to two BIOU PCBs to provide a total of eight control relays. The control relays can be configured as an external BGM mute control, Night Bell control, Night Mode Control, and Door Lock Control.

### Notes

- BIOU-1 relays are identified as Control Relays 1~4.
- BIOU-2 relays are identified as Control Relays 5~8.

1. From the Program Menu, click Services > External Device > BIOU Relay Type.
2. Enter Program 515 data.
3. Click Submit.



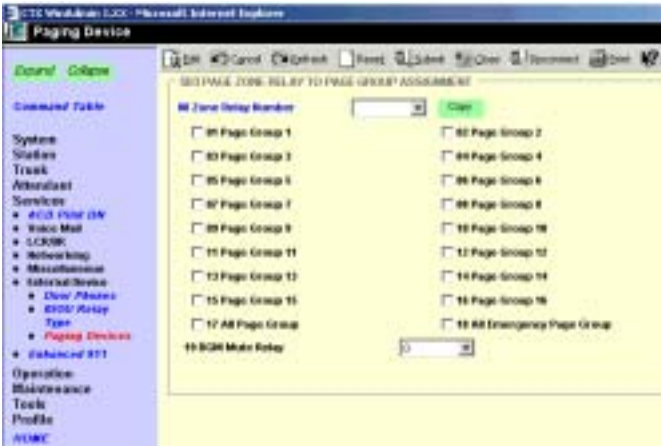
FIELD	DESCRIPTION
<b>00 BIOU (1 or 2)</b>	<p>Enter the BIOU PCB number.</p> <p>Possible values: 1 or 2 (default = no value)</p> <p><b>Note</b> BIOU 1 and BIOU 2 are assigned in Program 100 - Card Assignment.</p>
<b>01 BIOU Relay 1 or 5</b>	View the function of BIOU1, control relay 1 or BIOU2, control relay 5:
<b>02 BIOU Relay 2 or 6</b>	View the function of BIOU1, control relay 2 or BIOU2, control relay 6:
<b>03 BIOU Relay 3 or 7</b>	View the function of BIOU1, control relay 3 or BIOU2, control relay 7:
<b>04 BIOU Relay 4 or 8</b>	<p>View the function of BIOU1, control relay 4 or BIOU2, control relay 8:</p> <p>Possible values: Not Use, Ext Paging, Night Bell, Night Relay or Door Lock (default = no value)</p> <ul style="list-style-type: none"> <li>• NOT USE – if the relay is not used.</li> <li>• PAGE MUTE – External BGM mute control activates during an external page (see <a href="#">“503 Paging Devices Group Assignments” on Page 8-59</a>).</li> <li>• NIGHT BELL – Night Bell control activates during the system Night Mode only when incoming Exchange lines ring (see <a href="#">“102 Flexible Numbering Plan Access Codes” on Page 4-6</a>).</li> <li>• NIGHT RELAY – Night Mode Control activates continuously during the system Night Mode (see <a href="#">“105 System Data” on Page 4-17</a>).</li> <li>• DOOR LOCK – Door Lock Control activates when a telephone's Door Unlock button is pressed (see <a href="#">“508 Door Lock Control Assignment” on Page 8-56</a>).</li> </ul>

# 503 Paging Devices Group Assignments

**Prerequisite Program:** 502 [on page -22](#)

Assigns BIOU Page Zone Relays to Page Groups.

- 1. Complete the “[Door Phone Assignment Record Sheet](#)” on [Page 8-57](#).
- 2. From the Program Menu, click Services > External Device > Paging Devices.
- 3. Enter *00 Zone Relay Number*.
- 4. Check the Paging Groups that you wish to activate.
- 5. Select the external generic relay number.
- 6. Click Submit.



FIELD	DESCRIPTION
<b>00 Zone Relay Number</b>	Select the BIOU Page Zone relay that should be assigned to the Page Groups below. This relay activates whenever the selected Page Group is paged. <ul style="list-style-type: none"><li>• BIOU1 = Zone Relays 1~4.</li><li>• BIOU2 = Zone Relays 5~8.</li></ul> Possible values: 1~8 (default = no value)
<b>01 PG 1~16 PG 16 17 All Page Group 18 All Emergency Page Group</b>	Check the box if the selected BIOU Page Zone Relay should activate with this Page Group. Possible values: On or Off (default)
<b>19 BGM Mute Relay</b>	Assign BIOU generic relay as the BGM mute relay. This relay activates whenever the external page is in use. <ul style="list-style-type: none"><li>• BIOU1 = Generic Relays 1~4.</li><li>• BIOU2 = Generic Relays 5~8.</li></ul> Possible values: 1~8 (default = 0) <b>Note</b> The CTX100 ACTU built-in relay is programmed as relay 5. For this relay operation, BIOU2 is installed, as default, in a virtual equipment position - Cabinet 2, Slot 5, PCB code 20, in Program 100. To install an actual BIOU2 and disable the ACTU built-in relay, use the programming telephone to remove the virtual BIOU2 and then install the actual BIOU2 in Cabinet 01 Slot 01~08 in the normal manner.

### Paging Device Group Assignment Record Sheet

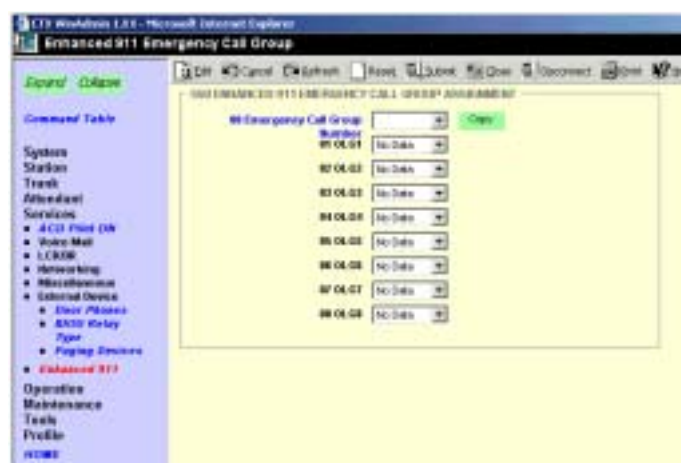
00 Zone Relay	Paging Groups (Enter Check to turn On)																17 Include in All Paging Group	18 All Emerg Page Group	19 Ext Generic Relay Number
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16			
1																			
2																			
3																			
4																			
5																			
6																			
7																			
8																			

## 550 Enhanced 911/Emergency 999 Call Group

**Prerequisite Program:** None

This command assigns OLGs to the Enhanced 911/ Emergency 999 Call Group.

1. Complete the “Emergency Call Group Assignment Record Sheet” on Page 8-60.
2. From the Program Menu, click Services > Enhanced 911.
3. Select Program 550 data.
4. Click Submit.



FIELD	DESCRIPTION
<b>00 Emergency Call Group Number</b>	Specify the Emergency Call Group. Possible values: 1~8 (default = no value)
<b>01 OLG1~08 OLG8</b>	Specify the first through eighth OLG to be chosen for an E911/999 call. Possible values: 1~128 (CTX670), 1~32 (CTX100) (default = 0)

### Emergency Call Group Assignment Record Sheet

00 E-Call Group	OLG Number							
	01	02	03	04	05	06	07	08
1								
2								
3								
4								
5								
6								
7								
8								

## 551 Emergency Network Access Code

FIELD	DESCRIPTION
<b>01 ENA Code 1</b>	Set Emergency Network Access Code 1. Possible values: Maximum of 5 ASCII characters (default = 999)
<b>02 ENA Code 2</b>	Set Emergency Network Access Code 2. Possible values: Maximum of 5 ASCII characters (default = blank)
<b>03 ENA Code 3</b>	Set Emergency Network Access Code 3. Possible values: Maximum of 5 ASCII characters (default = blank)





This chapter discusses CTX WinAdmin's operational programming functions.

## System Setup

**Program Number(s): 900, 901 and 902**

These programs enable programmers to simulate system Power Off/On, initialise Strata CTX, check software versions and set system clock and date.

1. From the Program Menu, click Operation > System Setup.
2. Click *Restart CTX* to reset Strata CTX.  
...or click *Initialise CTX* to delete programmed data and revert to default settings.
3. 901 CTX Version data is for viewing only.
4. Set Strata CTX date and time.
5. Click Submit.

The screenshot shows the 'System Setup' web page in a Microsoft Internet Explorer browser. The page has a left-hand navigation menu with options like 'General Table', 'System', 'Status', 'Track', 'Advanced', 'Services', 'Operation', 'Maintenance', 'Tools', and 'Profile'. The main content area is titled 'System Setup' and contains several sections: '900 CTX Restart' with 'Restart CTX' and 'Initialise CTX' buttons; '901 CTX Version and Processor Hardware' with fields for 'System Type', 'Active Software', 'Standalone Software', 'STAMP', '9001C Version', '9001S', '9001L', '9001M', and 'Modem'; '902 CTX Date' with fields for 'Year (2000-2039)', 'Month (1-12)', 'Day (1-31)', 'Day of Week', and 'Leap Year'; and '903 CTX Time' with fields for 'Hour (0-23)', 'Minute (0-59)', and 'Second (0-59)'. A 'Submit' button is at the bottom right.

## 900 CTX Restart

**Prerequisite Program:** *None*

This program enables you to reset hardware and initialises or restores programmed data.

---

**CAUTION! Both commands will drop all existing calls.**

---

FIELD	DESCRIPTION
<b>Restart CTX</b>	Clicking on this button initialises a System Power Off/Power On sequence to reset hardware. This is also known as an Initialise Level 2.
<b>Initialise CTX</b>	<p>Clicking on this button invokes an Initialise Level 1 sequence which erases programmed data and enters default data into the Strata CTX System.</p> <p>If a Toshiba SmartMedia is installed in the available slot, using this option restores data from backed up data from the SmartMedia (see “Restoring Data from SmartMedia” below).</p>

**Important!** *Choosing Initialise CTX without installing a SmartMedia Card deletes all programmed data and returns your Strata CTX to factory default settings. All previously programmed data is lost (See [“Restoring Data from SmartMedia” on Page 9-2](#)).*

### Restoring Data from SmartMedia

When initialising with Initialise CTX, you can restore custom data that was previously programmed and stored on a SmartMedia card. To do so, follow the steps below.

1. Insert a SmartMedia card that contains the **Progdata** directory with the **default.dat** file. The **default.dat** file contains your custom settings and can be created by running Data Backup. See [“910 Data Backup” on Page 9-11](#).
2. Run System Initialisation by clicking Initialise CTX.

#### Notes

- ◆ Restoring data from the SmartMedia card may take an hour or more.
- ◆ During the restore process, the telephone LCD may display date and time data. This does not necessarily indicate completion of the restore process.
- ◆ To verify completion of the restore process access the Programming Mode from a telephone and enter your password. If the system enables you to continue, the data restore process is complete.

## 901 Display Version

**Prerequisite Program:** *None*

This program enables you to view the Active and Standby software versions installed on the Strata CTX system processor.

FIELD	DESCRIPTION
<b>System Type</b>	Displays the system that is connected.  Possible values: Strata CTX670, Strata CTX100 (Active only).
<b>Active Software</b>	Displays the software versions.
<b>Standby Software</b>	These fields indicate the following: A = Indicates software for USA, Canada or Mexico. Rx.xx = Indicates the CTX release level. M0011.00 = The software version number.  <b>Note</b> The Active software does not always have to be the same as the Standby software, although the Active and Standby software versions may be the same when you get it from Toshiba.
<b>DTMF, BBMS, BEXS, BSIS, Ethernet, and Modem</b>	The check marks in these boxes indicate the hardware that is installed on the Strata CTX processor.  <b>Notes</b> <ul style="list-style-type: none"> <li>On the Strata CTX100: Ethernet means AETS is installed on ACTU.</li> <li>Modem means AMDS is installed on ACTU.</li> <li>DTMF means ARCS is installed on ACTU.</li> </ul>
<b>DREC Version</b>	Indicates the DTMF/ABR software.
<b>IPL Version</b>	Indicates basic boot-up software version.

## 902 Set Time and Date

**Prerequisite Program:** *None*

This program enables you to change the system clock in Strata CTX.

FIELD	DESCRIPTION
<b>CTX Date</b>	Set Strata CTXs current date. <ul style="list-style-type: none"> <li>Set the current date (YYYYMMDD). Possible values: YYYY = Year, MM = Month and DD = Day (default = no value)</li> <li>Current Day of Week will display once the Year, Month and Day parameters have been entered. Possible values: Sunday ~ Saturday (Read only) (default = no value).</li> <li>Leap Year will display based on the year entered. Possible values: Leap, Leap Next x, where x = 1,2 or 3. X. is the number of years since the previous leap year (Read only) (default = no value).</li> </ul>
<b>CTX Time</b>	Set Strata CTXs current time (hhmmss).  Possible values: hh = hour, mm = minutes and ss = seconds (default = no value).

## 915 Regional Selection

**Prerequisite Program:** *None*

This program enables you to select the country.

FIELD	DESCRIPTION
<b>01 Region</b>	Set regional setting for Strata CTX. Possible values: 0 US 1 Canada 2 Mexico 3 Taiwan 4 Hong Kong 5 Thailand 6 Japan 7 Singapore 8 Malaysia 9 Indonesia 10 Sri Lanka 11 India 12 China 13 UK (default = 13)
<b>02</b>	US Settings
<b>03</b>	US Settings
<b>04 Current Setting</b>	Check on current regional settings. Possible values: 0 US 1 Canada 2 Mexico 3 Taiwan 4 Hong Kong 5 Thailand 6 Japan 7 Singapore 8 Malaysia 9 Indonesia 10 Sri Lanka 11 India 12 China 13 UK (default = 13)

### Note

1. 0(US), 1(Canada), 2(Mexico), 3(Taiwan), 4(Hong\_kong), 5(Thailand), 6(Japan), 7(Singapore), 8(Malaysia), 9(Indonesia), 10(Sri\_lanka), 11(India), 12(China), 13(UK).
2. Can not select "Japan"
3. Regions are changed when RestartWithClearData. In other words, not affected to the system before RestartWithClearData.
4. FK1 shows new region after RestartWithClearData in future.
5. FK4 shows current region.

---

## 908 SmartMedia

This program enables you to format and perform file management tasks on a SmartMedia card while it is installed in the CTX processor.

### SmartMedia Card

The SmartMedia card is a small memory card that is used in digital cameras, MP3 players etc. It is available in most retail stores that sell digital cameras, personal computers supplies, etc. The capacities of standard SmartMedia cards are 32MB, 64MB and 128MB.

#### Notes

- ◆ 32MB or 64MB must be used for Strata CTX maintenance functions.
- ◆ The Strata CTX does not use Compact Recall or other similar types of small storage devices.

#### Functions

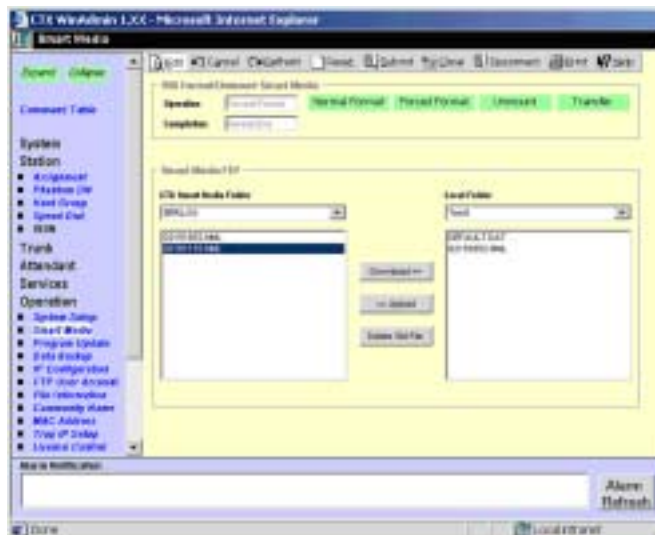
A SmartMedia Card(s) is required for most of the important Strata CTX maintenance functions such as:

- ◆ Saving (Backup) and re-loading (Restore) the programmed database of a particular Strata CTX system.
- ◆ Saving Event trace data files for troubleshooting problems.
- ◆ Updating or upgrading the Strata CTX operating software version.

#### Administration and use

- ◆ SmartMedia card read/writer installed in or connected to a PC can be used to perform a basic format and administer SmartMedia files. (SmartMedia card read/writers are available in most computer supply retail stores. They come with USB, PCI, floppy disk, and other types of PC interfaces).
- ◆ When the SmartMedia card is used to perform one of its functions, it is installed in the SmartMedia slot of the Strata CTX processor. It must be first formatted for Strata CTX operation by running Forced Format (program 908).
- ◆ The Strata CTX format will create five special folders. These folders and how to use them are explained below and in the [Chapter 10 – Maintenance on page 10-1](#) .

1. Install the SmartMedia Card into the designated slot of the Strata CTX processor.
2. From the Program Menu, click Operation > SmartMedia.
3. Click one of the following:
  - ✦ Normal Format – creates any CTX SmartMedia directory that does not exist already. Existing directories are not overwritten by this procedure.
  - ✦ Forced Format – erases any existing directories and files. All existing data is overwritten. It then creates the five Strata CTX directories. See “[CTX SmartMedia Folders](#)” on Page 9-7 for more information.
  - ✦ Unmount – copies the CTX event and alarm log files from the CTX processor buffers (RAM) to the SmartMedia card and then clears the buffers. It then stops CTX from writing to the SmartMedia Card so it can be removed without damaging it.



**CAUTION!** Always run unmount before removing the SmartMedia card to prevent damage to the card. Failure to comply can cause damage to the card.

- ✦ Transfer – copies the CTX event and alarm log files from the CTX processor buffers (RAM) to the SmartMedia card and then clears the buffers.

FIELD	DESCRIPTION
<b>Operation</b>	Displays the procedure selected. Possible values: Normal Format, Forced Format, Unmount and Transfer.
<b>Completion</b>	Displays the progress and status of the procedure selected. Possible values: Processing or Complete
<b>CTX SmartMedia Folder</b>	Contains files in the CTX SmartMedia Folder. Possible values: Files listed under Admlog, Errlog, Evtnttrc, Progdata, and Program folders.
<b>Local Folder</b>	You must manually create a new folder on your PC under ctx folder > WinAdmin > Ctmc > Ctmc_Local > SmartMedia > New Folder  The created folders will be available in the Local Folder drop-down box. You can store CTX SmartMedia files on these folders (See details below).

## Smart Media Card FTP File Management

1. The Smart card files can be copied from the Smart media card to your WinAdmin PC and vice versa using the WinAdmin Smart Media FTP function. The Smart Media card must be installed in the CTX processor and formatted using Program 908 before it can be used. After it is installed and formatted the CTX will automatically store files under the Admlog, Errolog and Evnttrce folder of the Smart Media card - see CTX Smart Media folders below for details.
2. New folders must be created (with your own chosen names) on the WinAdmin PC using Windows Explorer before you can use the Smart Media FTP screen. The folders must be created under the following path which already exists on the WinAdmin PC:  
CTX>WinAdmin>Ctmc\_Local>SmartMedia>Your Folder Name.
3. After the SM card has been formatted and your folders have been created on the WinAdmin PC you can manage files as described below:
  - ◆ **Download:** Copy files from the CTX Smart Media Card to your WinAdmin PC.
    - ✦ From the CTX Smart Media drop down, select the CTX Smart Media folder and file(s) that should be copied to the WinAdmin PC.
    - ✦ From the Local Folder drop down, select the CTX WinAdmin PC folder to which the files should be copied to - then click on Download.
  - ◆ **Upload:** Copy files from the WinAdmin PC to the CTX Smart Media card
    - ✦ From the Local Folder drop down, select the WinAdmin PC Smart Media folder and file(s) that should be copied to the CTX Smart Media card.
    - ✦ From the CTX Smart Media Folder drop down, select the CTX Smart Media folder to which the files should be copied to - then click on Upload.
  - ◆ **Delete SM File:** Delete files stored on the CTX Smart Media card.
    - ✦ From the CTX Smart Media drop down, select the CTX Smart Media folder and file(s) that should be deleted - then click Delete SM file.

## CTX SmartMedia Folders

Running the Normal and Forced options of this program creates five folders on the SmartMedia card as follows:

- ◆ **Admlog** – The Admlog folder saves a history of CTX Administration (programming) command entries in xxx.SNP and xxx.DKT files. SNP files provide a log of CTX WinAdmin entries and DKT files provide a log of programming Telephone entries.
  - ◆ **Errlog** – System error logs are saved into this folder. See Maintenance chapter, Event Trace Control Programs 903, 904 and 905 to set up trace.
  - ◆ **Evnttrce** – CTX WinAdmin Event Trace files are saved into this folder.
  - ◆ **Progdata** – Your Strata CTX programmed settings are all saved in this folder. When a backup is performed, Strata CTX saves programmed data to the **Progdata** folder as a default.dat file.
- Note** To perform the backup function you must first delete any existing default.datfiles to allow CTX to create a new default.dat file.
- ◆ **Program** – The operating software of the Strata CTX is saved in this folder as a nhs.prg file.

## SmartMedia Errors

Any error causes the SmartMedia LED to recall (0.25sec ON – 0.25sec OFF continuous), except if the SmartMedia Volume Label is UPDATE; in this case the SmartMedia LED will always recall.

### SmartMedia LED Specification

SmartMedia LED, located near the SmartMedia slot on the CTX processor, is lit when the following occurs:

- ◆ When the SmartMedia is accessed for read and write.
- ◆ When the errors are detected. See above for the detail of errors.
- ◆ When SmartMedia is inserted into the slot, SmartMedia LED blinks once. This is because the system accesses the media to read the house keeping data. When it does not blink, it means that the SmartMedia is not detected by the system at all. If the blink does not stop, it means that any of above error is detected or the SmartMedia volume label is UPDATE.

## 911 Remote Program Update

This program enables you to update the CTX software version. The process allows you to send the new software to the CTX processor standby memory (Strata CTX670) or SmartMedia card (Strata CTX100) while the system is in use without interrupting service. After the new software is loaded into memory it can be activated at any time.

---

**CAUTION!** Activation of the new software requires a clear-reboot operation that will drop all existing calls and take the system out of service from 15 minutes to an hour.

---

### Prerequisite

1. At the CTX site install a SmartMedia card on the Strata CTX670 or Strata CTX100 processor. All existing files on this SmartMedia card should be saved on a PC incase they are needed later. The label on this SmartMedia card can be anything except PRGUPDATE.
2. A CTX FTP account must be created using WinAdmin before starting the Remote Update procedure, see [“FTP User Accounts” on Page 9-13](#) (This is only necessary when using WinAdmin 1.10. Later versions of WinAdmin do not require an FTP account).



► **To go to the Remote Program Update screen from CTX WinAdmin and to perform the Update**

1. From the Program Menu, click Operation > Program Update.

2. Obtain the update file from Toshiba. This is a zipped Unix file about 4MB. It is named CTX100-Mxx-rmobj.tgz or CTX670-Mxx-rmobj.tgz.

3. On the Strata CTX WinAdmin PC, under the WinAdmin “Upload” folder, create a new sub folder named CTX100-Mxx or CTX670-Mxx (where xx is the version number of the Strata CTX software that will be updated). Create the new folder on the C: drive or whichever drive Strata CTX WinAdmin is installed, in this path:  
CTX\WinAdmin\ctmc\ctmc\_Local\Upload\CTX100-Mxx.



4. Unzip the CTX100-Mxx-rmobj.tgz file into the CTX100-Mxx folder – approximately 236 files should be unzipped. The text file is a header which contains the Strata CTX software version number. These individual files will be sent to the Strata CTX processor standby side of flash memory (Strata CTX 670) or SmartMedia card (Strata CTX 100) during the Update process.

5. From the SmartMedia selection in Strata CTX WinAdmin (Program 908), format the SmartMedia with the Strata CTX format using “Forced Format.”

6. From the Backup Data selection in WinAdmin (Program 910), backup the Strata CTX program database onto the SmartMedia card using “Back Up.”

**Note** Keep this SmartMedia card installed on the Strata CTX processor to allow the programmed data to be restored automatically following the remote Update and Clear-Reboot process.

7. Update the Strata CTX software remotely from the Remote Update screen.

- ✦ From the “Upload From Folders” drop-down menu select the folder that you created in Step 3 above.
- ✦ Click on *Start Remote Program Update*.

**Note** Do not change the CTX Admin screen after the update process has started. Changing the screen, touching the keyboard etc, will cause the process to stop and fail.

- ✦ WinAdmin indicates the status of the Remote Update process in the “Files Updated” box. Remote Update can take from 15 minutes to more than one hour, depending on the transmission speed of the connection (i.e; modem or LAN speed).

8. A message will display to indicate that the new software version has been sent to the CTX processor memory successfully (to the Strata CTX670 standby side of flash memory or Strata CTX100 SmartMedia PROGRAM folder).

- ✦ To activate the new software from this message screen, click OK (WinAdmin 1.10) or Clear-Reboot (WinAdmin 1.11 or later). Either button starts the Clear-Reboot process - see Warning below. Also on WinAdmin version 1.11 and above, a Clear-Reboot Later button is provided on the message screen to allow you to activate the new software a later time to prevent service interruption.

---

**CAUTION!** The Clear-Reboot process will drop all calls and take the Strata CTX out of service from 15 minutes to an hour depending on size of the backup data file.

After clear-reboot is complete, the Strata CTX will run on the new software version (this is now the active side of flash memory). The backup data will have been restored from the SmartMedia card to the Strata CTX processor memory. On the Strata CTX670 only, the original software version will be on the standby side of flash memory.

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9. Test the system to verify that the new software is running properly. If the system is operating correctly, switch the Active Software to "Normal". (If your CTX WinAdmin screen does not provide this function, use the programming telephone. See Program 911, FB04.
- ◆ If the new version of software is not performing properly, on the Strata CTX670 only, you can activate the old version of software again by initiating a Clear-Reboot (CTX WinAdmin 1.11 and above). Clear-Reboot swaps the active and standby sides of flash memory. You must install a SmartMedia card containing a copy of the current backup data before initiating a clear reboot or all programmed data will be erased.

FIELD	DESCRIPTION
<b>Upload from Folder</b>	Select the Strata CTX type. Possible values: CTX100-MxxS, CTX 670-Mxx, where xx = software version number (default = no value).
<b>Version Number</b>	Software version number is displayed.
<b>Number of Files</b>	Displays number of files uploaded. This field is dynamic and will change during the process.
<b>Files Uploaded</b>	Displays number of files uploaded.
<b>Operation Completion</b>	View operation status.
<b>Copied blocks</b>	View number of blocks copied. Possible values: 0~65536 (default = 0)
<b>Total Blocks</b>	View total blocks to be updated. Possible values: 0~65536 (default = 0)
<b>Active Side ID</b>	Active Side Number. Possible values: 0 or 1 (default = 0)
<b>Active Side Status</b>	Backup Type Display. Possible values: Normal (default), Trial, Fault, Don't care or Error
<b>Standby Side Status</b>	Standby Backup Type. This field will display only when connected to a Strata CTX 670. It will not display when connected to Strata CTX 100. Possible values: Normal (default), Trial, Fault, Don't Care or Error

# 910 Data Backup

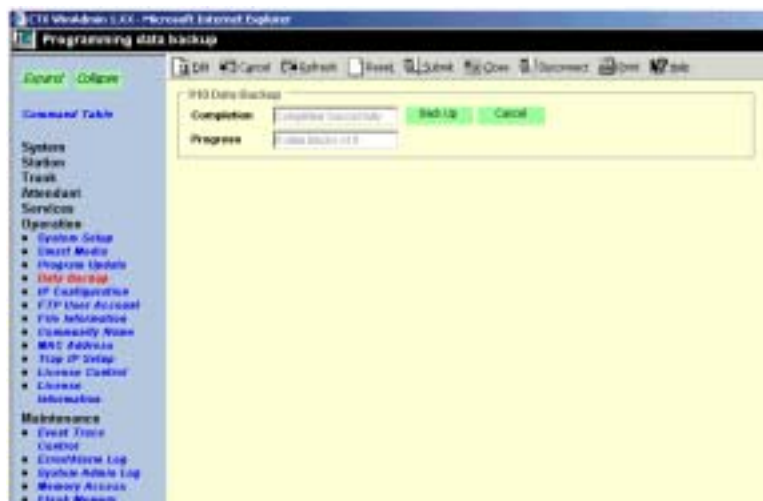
**Prerequisite Program:** 908 on page 9-5

This program enables you to backup programmed data from Strata CTX to a SmartMedia Card.

1. Install the SmartMedia Card into the designated slot of the Strata CTX processor.

**Note** The SmartMedia card must be formatted by Strata CTX and the “Progdata” directory must be empty (no Default.dat file)

2. From the Program Menu, click Operation > Data Backup.
3. Select the Backup button. Click Cancel to interrupt the selected function.
4. Click Backup.
5. The Progress field displays the progress of the selected function.



FIELD	DESCRIPTION
<b>Backup</b>	<p>Select one of the following buttons. When performing a Backup, you must use a formatted SmartMedia card.</p> <ul style="list-style-type: none"> <li>• Backup – Backup Strata CTX data to SmartMedia card. This creates a <b>Default.dat</b> file under the <b>Progdata</b> directory of the SmartMedia card.</li> </ul> <p><b>Notes</b></p> <ul style="list-style-type: none"> <li>• <b>Default.dat</b> is the name of the file that is created and it contains all Strata CTX programmed data. It is not default data. It is data that is currently programmed in the Strata CTX.</li> <li>• The <b>Progdata</b> directory on the SmartMedia card must be empty before trying to backup data. You can use FTP to copy and delete an existing default.dat file.</li> <li>• Cancel – Cancel the Backup/Restore function.</li> </ul>
<b>Completion</b>	<p>Current Status of Backup.</p> <p>Possible values:</p> <ul style="list-style-type: none"> <li>• All_Ok – Backup completed with no errors.</li> <li>• Partial_Ok – Backup has completed with errors.</li> <li>• NG – Backup has failed.</li> <li>• Cancel – Cancel Backup.</li> <li>• Importing – Program data is being restored.</li> <li>• Exporting – Program data is being sent out.</li> </ul>

## 916 TCP/IP Configuration

**Prerequisite Program:** *None*

This program displays Network Communication IP address configuration. This program applies to the Strata CTX Network (NIC) jack connection only. It does not apply to the CTX maintenance modem. To change TCP/IP settings see [“Step 2B: Set Up IP Address of CTX NIC” on Page 2-6](#).

1. From the Program Menu, click Operation > IP Configuration.
2. The following Strata CTX default address displays:
  - ♦ IP Address – **192.168.254.253** (NIC/Ethernet only).
  - ♦ IP Address – **a.b.c.d** where a.b.c.d = 0~255. This IP Address is for the NIC/Ethernet only. (default = 192.168.254.253).
  - ♦ **192.168.255.254** is the Strata CTX modem fixed IP address for Dial-up connections. Do not enter this IP address on this screen.
  - ♦ Subnet Mask – **e.f.g.h** where e.f.g.h = 0~255 (default = 255.255.255.0). Octet “h” in SubNet Mask cannot be the same as octet “d” in the IP address
  - ♦ Default Gateway (default = 0.0.0.0).



3. Select another program from the Program Menu.

# FTP User Accounts

**Prerequisite Program:** *None*

This program establishes up to four FTP users for the built-in Strata CTX FTP server function located on the Strata CTX processor. These Strata CTX FTP accounts allow FTP access to the Strata CTX SmartMedia card. This allows administration of the Strata CTX SmartMedia folders and files.

1. From the Program Menu, click Operation > FTP User Account.
2. Select the FTP Index. Up to four FTP Users can be established.
3. Assign the FTP User's Account Name.
4. Assign the FTP User a Password.
5. Enter the default directory to which this FTP account is to access. This should be /0/ which is the root directory of the Strata CTX SmartMedia card.
6. Click Submit.

**Note** FTP User Accounts are stored in memory on the Strata CTX processor and are intentionally deleted for security when the Strata CTX is powered off/on or initialised.



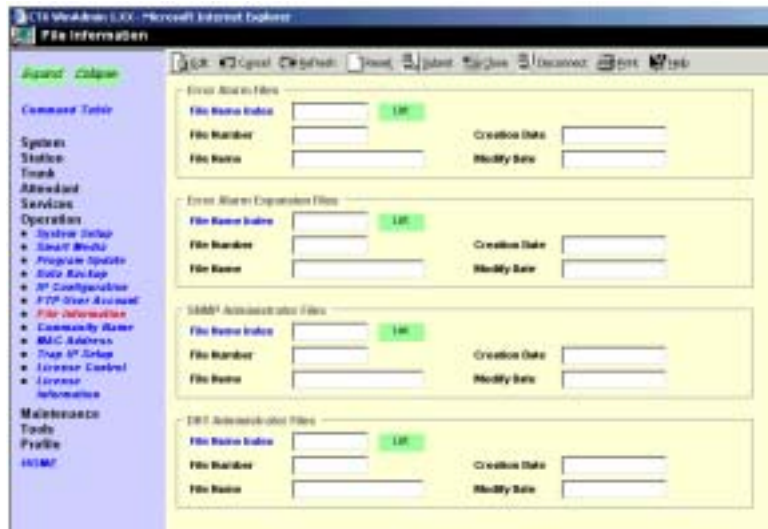
# File Information

**Prerequisite Program:** *None*

This program enables you to view lists of Alarm and Administration files stored on the Strata CTX SmartMedia card. See [“908 SmartMedia” on Page 9-5](#) for more information about these files.

1. From the Program Menu, click Operation > File Information.
2. Select from one of the following options  
...or click List to see a summary list of Files already programmed into the system. View the file name index, number, name, and creation and modification dates under each of the categories listed below.

- ♦ Error Alarm Files.
- ♦ Error Alarm Expansion Files.
- ♦ SNMP Administrator Files (CTX WinAdmin log).
- ♦ DKT Administrator Files (Programming telephone log).



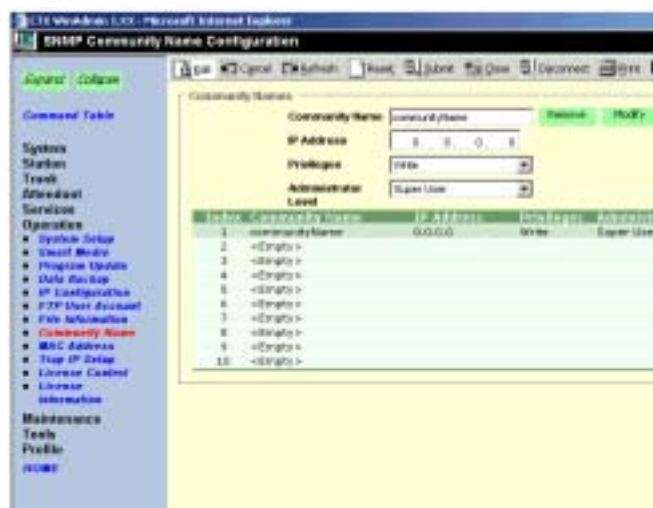
**Note** For a detailed description on Trace function go to [“Trace Function” on Page A-56](#).

# Community Name

**Prerequisite Program:** None

This program enables you to create and set up a Community Name (or passwords) to allow access to specific Strata CTX systems.

1. From the Program Menu, click Operation > Community Name.
2. Select the ID Number to assign to the Community or click one of the following buttons:
  - ✦ Remove – highlight an existing community from the table and click this button to remove the selected community from the index.
  - ✦ Modify – highlight an existing community from the table and click this button to modify the IP Address, Privileges and Administrator Level settings for this community.
3. Enter the remaining fields and click
4. Click Submit.



FIELD	DESCRIPTION
<b>Community Name</b>	Enter the Community name. The Community Name is a password that is stored in the Strata CTX. To communicate with a Strata CTX, the WinAdmin PC must send a legal community name to the CTX when attempting to connect. The default community name stored in the CTX is communityName (case sensitive). The Strata CTX can store up to 10 community names.
<b>IP Address</b>	<p>Enter the IP Address of the Community Name. Each community name is associated with an IP Address. This IP address is stored in the CTX with its associated community name.</p> <p>Possible values: a.b.c.d.; a = 0~255, b = 0~255, c = 0~255, d = 0~255</p> <p><b>Notes</b></p> <ul style="list-style-type: none"> <li>• To allow any CTX WinAdmin PC to connect to the Strata CTX with a particular community name, enter 0.0.0.0 as the IP address for that Community Name.</li> <li>• To allow only a specific WinAdmin PC to connect to the CTX with a particular community name, enter the static IP address of that PC for that community name.</li> </ul>
<b>Privileges</b>	<p>Select User Privilege Levels. These privileges are to assign the community name or IP address to an internal Strata CTX level.</p> <p>Possible values: Read (default) or Write</p> <p><b>Note</b> Read – The user cannot modify Strata CTX data regardless of the WinAdmin User level 1~4. Write – The user can modify Strata CTX data according to the WinAdmin user level 1~4.</p>



FIELD	DESCRIPTION
<b>Administrator Level</b>	<p>Select Administrator Level. This level is to assign the community name or IP address to an internal Strata CTX access level.</p> <p>Possible values: Super User (default) or Ordinary User</p> <p><b>Notes</b></p> <ul style="list-style-type: none"> <li>• Super User – Strata CTX allows the user access to all Strata CTX commands. Super Users can only view ordinary user community names and their own community name but not other Super User community names.</li> <li>• Ordinary User – Strata CTX allows the user access to all Strata CTX programs except 900 Initialisation/Restart and 911 Update. Ordinary users can only view their own community name.</li> </ul>

## 909 MAC Address

**Prerequisite Program:** *None*

This program enables you to view the Media Access Control (MAC) Address assigned to your Strata CTX System processor PCB. The MAC address is a unique serial number that is electronically coded in the CTX processor memory at the factory – it cannot be changed. The MAC Address is also printed on the back of the processor card that is used for the Strata CTX 670 (Processor Part Number BBCU1A) and Strata CTX 100 (Processor Part Number ACTU1A). A MAC Address must be converted to the applicable serial number utilised in Internet FYI for License code generation.

1. From the Program Menu, click Operation > MAC Address.
2. Enter your system serial number.

**Note** The serial number is printed on the invoice and bar code of the product shipment.

3. MAC Address is displayed as shown to the right. AABBCCDDEEFF = Hex a Decimal values 0~9, A~F.
4. Click another program from the Program Menu.



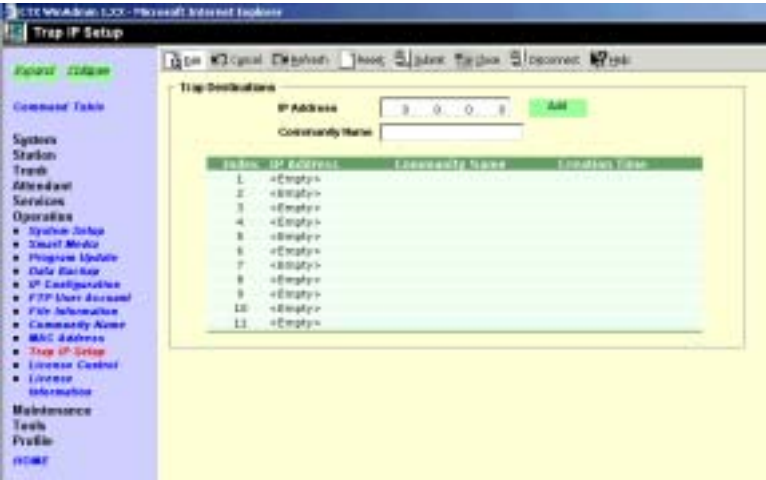


# Trap Destinations

**Prerequisite Program:** None

This program enables you to setup Trap IPs.

1. From the Program Menu, click Operation > Trap IP Setup.
2. Select a Trap IP Index number or click Add to add a Trap IP index.
3. Click Submit.



FIELD	DESCRIPTION
Community Name	Enter the Name of the Community. Possible values: Alpha characters (default = no value).
IP Address	Enter the IP Address for remote connection. Possible values: a.b.c.d.; a = 0~255, b = 0~255, c = 0~255, d = 0~255

# License Control

**Program Number(s): 913 and 914**

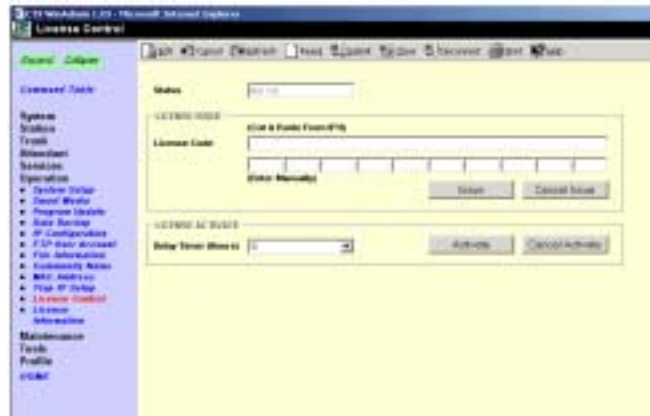
The following programs enable you to issue and maintain License Activation settings for CTX WinAdmin users.

**Prerequisite Program:** *None*

This program enables you to issue new licenses.

1. From the Program Menu, click Operation > License Control.
2. Issue a License by cutting and pasting or manually entering the 60-character string in the License Code text box.

**Note** If you are not adding the License Code to WinAdmin immediately, copy and save the code onto a disk. Save code in Notepad using Fixdsys font.



3. Click one of the following buttons:
  - ✦ Issue – to issue the License Code.
  - ✦ Cancel Issue – to cancel the License Code issue.
4. Activate the License entered above by selecting the delay timer.
5. Click one of the following buttons:
  - ✦ Activate – for license activation.
  - ✦ Cancel Activate – to cancel license activation.

## License Issue

**Prerequisite Program:** *None*

This program enables System Administrators to issue Licenses for CTX WinAdmin users.

FIELD	DESCRIPTION
Status	<p>Displays Licensing Status:</p> <p>Possible values: Not yet, Issue Stand by, Issue Finished, Cancel Issue, Activate Stand by, Activate Finished or Cancel Activate</p>
License Code	<p>Cut and paste the License code text string or manually enter the License Code (six characters per box).</p> <p>Possible values: 60 characters.</p> <p><b>Note</b> The License Code will have to be generated from Toshiba's FYI website (<a href="http://fyi.tsd.toshiba.com">http://fyi.tsd.toshiba.com</a>). After obtaining the License code from FYI save it as a Text file. Cut and paste the License code obtained from Toshiba's FYI website. The License Code is made up of the MAC Address and the number of ports. The License Code that is generated for a particular MAC Address is only good for the processor that contains that MAC Address.</p>

## License Activate

**Prerequisite Program:** 913 above

This program enables activation of CTX WinAdmin licenses issued in Program 913.

FIELD	DESCRIPTION
Delay Timer	<p>Select Activation Delay Timer in hours.</p> <p>Possible values: 0~24 (default = 0)</p> <p><b>Notes</b></p> <ul style="list-style-type: none"> <li>Enter <b>0</b> to issue or activate the license immediately or 1~24 to set the automatic delay activation feature, where 1 = 1 hour delay; 2 = 2 hour delay, etc.</li> <li>After the license is activated, use the License Information screen below to check that all Ports and features have been activated properly.</li> </ul>

## License Information

The following programs enable you to set up Licensing details for CTX WinAdmin users.

**Prerequisite Program:** None

1. From the Program Menu, click Operation > License Information.
2. View Licensing details for this Strata CTX account.
3. Click Submit.



This chapter discusses CTX WinAdmin's maintenance functions.

## Trace Function

To analyze Strata CTX problems efficiently, Toshiba needs to get the event trace data and ISDN trace data. These data sets enable analysis of the problems Strata CTX may experience. It is helpful for troubleshooting problems that are difficult to duplicate.

Please contact Toshiba Technical Support to coordinate the running of the procedures that appear in this section. Technical Support will walk you through the required steps.

### Trace Data

By running traces when tests are conducted on your Strata CTX system, you ensure that data are being kept in the event your system encounters a problem. This data can be sent to Toshiba Tech Support for analysis and troubleshooting.

Strata CTX can collect the following trace data:

- ◆ Error Log (including crash dump)
- ◆ Event Trace
- ◆ ISDN L3 trace

Event traces can be performed by running Program 903 [“Event Trace Control” on Page 10-3](#), through Program 908 [“Format/Unmount SmartMedia” on Page A-63](#).

### Error Log

When Strata CTX detects an error, the information is stored automatically without executing a program. However, if the system locks up, you must restart the system to save the data to SmartMedia.

### Start/Stop/Store Trace Data

Whenever you execute a test, start recording the trace data by enabling the “Event Trace Control” (Program 903). see [Page 10-3](#). If you use ISDN extensions or trunks, please record ISDN trace data by starting [“904 ISDN Trace Location” on Page 10-4](#).

➤ **To test and retrieve trace data**

**Note** This procedure requires use of optional SmartMedia reading hardware and software or FTP management with a personal computer. See [“908 SmartMedia” on Page 9-5](#).

1. Start your test. If a problem occurs, stop the trace (please refer to the “Event Trace Control” and “904 ISDN Trace Location” program instructions in this manual).
2. Verify the results by running the same test(s) again. If the problem can be duplicated the information contained in the trace data becomes more useful.
3. Unmount data to SmartMedia using [“Format/Unmount SmartMedia” on Page A-63](#).
4. Remove the SmartMedia card from Strata CTX. Use caution. The SmartMedia device can be damaged if removed incorrectly.
5. Insert the SmartMedia card into your SmartMedia reader.
6. Locate the **Evnttrce** folder and save all files ending with **.sdt** and **.mdt** to your PC's hard drive.
7. Locate the Crash Dump in the **errlog** folder. File extensions are **.exp** and **.mnl** and append to your hard drive.
8. E-mail the files to your Toshiba support person.

If you start recording trace data after a problem occurs, the previous data is overwritten. Make sure the required data files are stored to SmartMedia and saved to disk prior to starting another trace.

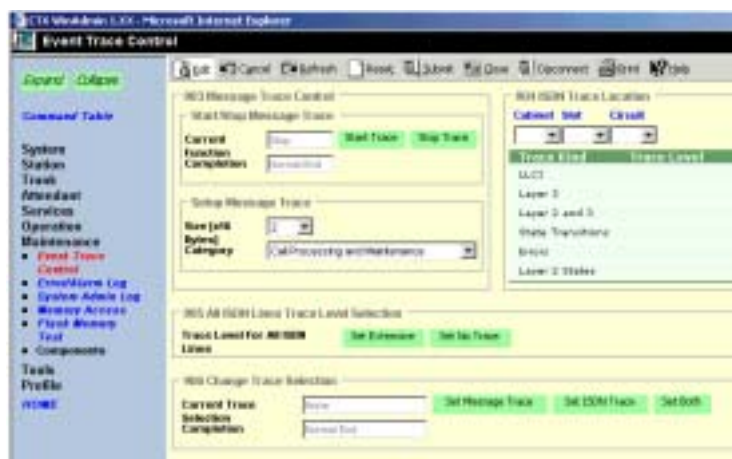
# Event Trace Control

**Program Number(s):** 903/904/905/906

**Prerequisite Program:** None

This program enables you to trace message events occurring in Strata CTX. Program Numbers 903, 904, 905 and 906 are consolidated in one CTX WinAdmin screen (shown below).

1. Install the SmartMedia Card into the designated slot of the Strata CTX processor.
2. From the Program Menu, click Maintenance > Event Trace Control.
3. Enter Program 903 data.
4. Enter Program 904 data.
5. Enter Program 905 data.
6. Enter Program 906 data.
7. Trace data is displayed in the dialogue boxes.



## 903 Start/Stop Trace

FIELD	DESCRIPTION
<b>Start/Stop Trace</b>	Click in the appropriate button to Start or Stop Message Trace. Start Trace indicates that the system's trace data collection process has begun. Stop indicates the trace data collection process is terminated.  Before removing the SmartMedia card run Program 908. See <a href="#">"908 SmartMedia" on Page 9-5</a> .
<b>Size</b>	Possible values: Start Trace or Stop Trace (default)  Set the trace data size. Toshiba recommends leaving this parameter at the default setting which provides approximately 15 minutes of trace data.  Possible values: 1~256 bytes with 1 unit = 16 bytes (default = 2)
<b>Category</b>	Select Trace data type to be stored.  Possible values: Call Processing, Maintenance, and Call Processing and Maintenance (default)

## 904 ISDN Trace Location

ISDN protocol event trace collection conditions are established using this program.

**Note** This trace can be performed on BSU and PTU cards only.

FIELD	DESCRIPTION
<b>Cabinet/Slot/Port</b>	Enter the Equipment Location to be traced (xxyyzz). Possible values: xx = Cabinet 01~07; yy = Slot 01~10; zz = Circuit 01~04
<b>Trace Kind</b>	Select the trace collection level. Possible values: LLCI Trace, Layer 2, Layer 2 & Layer 3 Trace, State Transitions Trace, ERRORS Trace, Layer 2 Trace.
<b>Trace Level</b>	Select the extent to which the trace collects information. Possible values: No Trace (default), Brief or Extensive

## 905 All ISDN Trunk Trace Selection

FIELD	DESCRIPTION
<b>Trace all ISDN Trunks</b>	Select whether to trace all ISDN PRI and BRI trunks. Possible values: On (default) or Off

## 906 Change Trace Side

FIELD	DESCRIPTION
<b>Trace side</b>	Select Trace side change. Possible values: Message Trace (default), ISDN Trace or Both



# Error Alarm Log

**Prerequisite Program:** None

This program enables you to trace errors and alarms in Strata CTX.

1. Install the SmartMedia Card into the designated slot of the Strata CTX processor.
2. From the Program Menu, click Operation > Maintenance > Error/Alarm Logs.
3. Click Submit.

FIELD	DESCRIPTION
<b>Start Date</b>	Enter the date (YYMMDD) and time (hhmmss) on which to start the log. Possible values: YY = Year, MM = Month and DD = day (default = no value) hh = Hour, mm = Minutes and ss = seconds (default = no value)
<b>End Date</b>	Enter the date and time on which to end the log. Possible values: YY = Year, MM = Month and DD = day (default = no value) hh = Hour, mm = Minutes and ss = seconds (default = no value)
<b>Start Rank Code</b>	Prioritise by selecting a Rank Code. Possible values: 1~99 (default = no value)
<b>End Rank Code</b>	Organise by selecting an End Rank Code. Possible values: 1~99 (default = no value)
<b>Error Code</b>	This field logs the number of error codes. Possible values: n (default = 0)
<b>Org. Code</b>	This field reflects the Error origination code. Possible values: 1~10 (default = no value)
<b>Search Number</b>	Displays the search sequence. Possible values: n (default = 0)
<b>Search Result Number</b>	This field displays the Search result number. Possible values: 1~16 (default = no value)
<b>Normal Log</b>	This field displays the log information.
<b>Expand Log</b>	This field displays details of the logged data.
<b>Search Result</b>	Search results are displayed in this field.

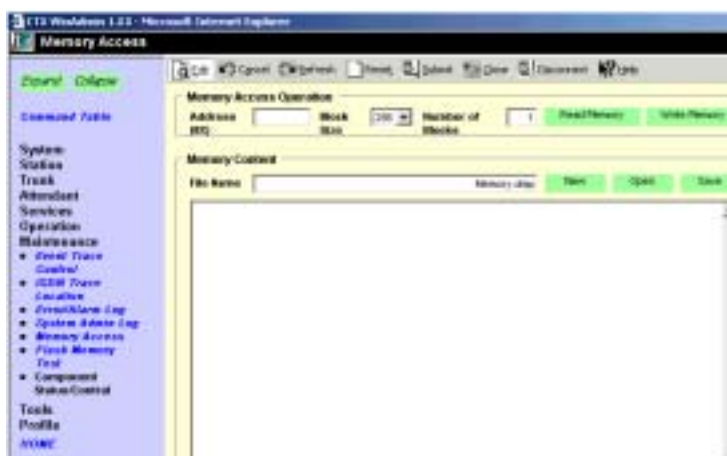


# Memory Access Operation

**Prerequisite Program:** None

This program enables you to manipulate memory settings.

1. From the Program Menu, click Maintenance > Memory Access.
2. Click the Read Memory or Write Memory button to access memory.
3. Enter the memory Address to be accessed.
4. Select size of memory to access (1~256, default = no value).
5. Click one of the following buttons:
  - ✦ New – click this button to create a new Memory Access filename.
  - ✦ Open – click this button to open an existing Memory Access file.
6. Click Submit.
7. Click Save to save Memory Access file.



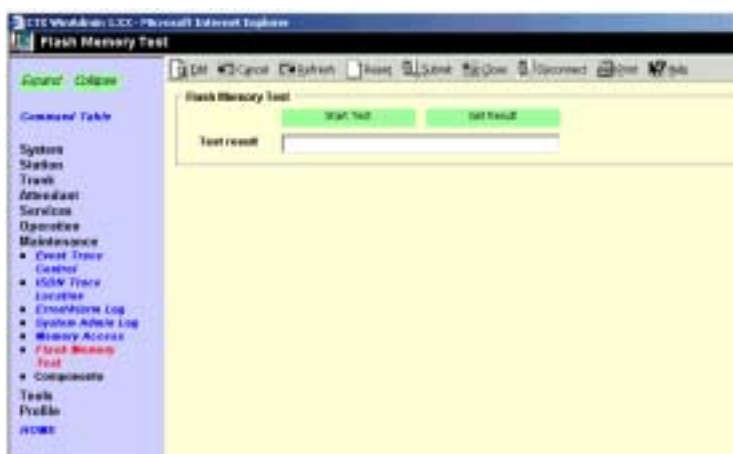
**Note** The Content box displays the contents of the memory address selected.

# Flash Memory Test

**Prerequisite Program:** None

This program enables you test the system Flash memory.

1. From the Program Menu, click Maintenance > Flash Memory Test.
2. Click Start Test.
3. In the Flash Test Result dialogue box, wait for “Press Get Result Button” to display.
4. Click Get Result.
5. Flash Memory Test Results (OK or failed) are displayed in the Flash Test Result dialogue box.



# Components

**Prerequisite Program:** *None*

The following programs enable you to monitor the status of individual Strata CTX slots and ports.

This is the main system slot/port monitor. The Components screen allows each cabinet card slot and each card slot port to be monitored, enabled or disabled. The card slot and port failure codes are provided in the Table below.

- From the Program Menu, click Maintenance > Components > Cabinets 1~7.



## Auto Fault Detection/Disable

When an error occurs in hardware resources used for a station or line, the Strata CTX system will make them busy. In this case the Strata CTX system will automatically disable the card slot or card port (circuit or channel). The Component Status/Control screen will indicate the card or port failure status with “Disabled by Fault xx” where xx is the status code in the table below. When a digital telephone is disabled the telephone’s LCD will display “Make Busy”. The station or line PCB can be disabled temporarily to perform maintenance or parts replacements as well.

**Note** The port or slot to which your programming phone is connected cannot be set to Make Busy.

The table below states the possible error codes that can be displayed in the *Status* column of the Main Components screen shown above.

Component Type	Status Code	Description
Expansion Cabinet	CP	Cabinet power failure
Line/Station/Option PCB	CR	Card PCB set in Program 100, but not installed
Port (ISDN)	IL	ISDN loss of signal
Port (ISDN)	IF	ISDN frame sync failure
Port (ISDN)	IA	ISDN AIS
Port (ISDN-U)	UM	ISDN-U maintenance mode
Port (ISDN-U)	UE	ISDN-U Eoc maintenance mode

Component Type	Status Code	Description
Port (ISDN-U)	UA	ISDN-U Act
Port (ISDN-U)	UB	ISDN-U aib
Port (T1)*	TY	T1* Yellow alarm
Port (T1)*	TB	T1* Blue alarm
Port (T1*)	TF	T1* Frame sync. failure
Port (DKT)	DO	Digital Telephone not connected.
* Not available in the UK & Europe		

### Manual Disable/Enable

The components screen allows you to enable or disable any card slot or port.

- ◆ When disabled by Disable or Forced Disable, line or stations are made busy and the status will display “disable by cmd” on the screen. On the telephone LCD, it will display “Make busy.”
  - ✦ *Disable* will disable an idle port or slot and cause ports/slots that are in use to go to Pending Disable – which go to Make Busy after they go idle. Disable waits till a call clears to disable it.
  - ✦ *Forced Disable* will disable an idle port or a port that is in-use (the call will be disconnected).
- ◆ *Enable* – removes the Make Busy condition if the slot or port is manually disabled.

**Note** You cannot enable a slot or port if the system automatically disabled it. The status on the screen will display “Disabled by Fault.”



This chapter discusses Tools and Utilities to customise and manage your Strata CTX System.

## Tools

The download tool provided in CTX WinAdmin enables you to download databases stored in system memory into a WinAdmin folder named “Download”. These downloaded databases can then be viewed in your PC to check for errors or other anomalies. The downloaded commands are saved as files on the C: drive or on whichever drive Strata CTX WinAdmin is installed, in this *path*: CTX\WinAdmin\ctmc\ctm c\_Local\DownLoad. They may be opened and viewed using Excel, Word or some other application.

### Download

**Prerequisite Program:** None

1. From the Program Menu, click Tools > Download.
2. A list of all CTX WinAdmin programs is displayed as shown to the right.
3. Click on the program to be downloaded. Selected programs are highlighted in green and the word *Selected* is displayed to the right as shown in the figure to the right. The following buttons are also available:
  - ✦ Clear All – click this button to clear all previously selected files.
  - ✦ Select All – click this button to select all programs for downloading.
4. Click the Start Dowloading button in the top right corner of the display.
5. The system prompts you when the download is complete.



# Profile

The Programs included in the Profile menu enables you to change GUI display settings in CTX WinAdmin and change the system IP Address.

## Customise

**Prerequisite Program:** *None*

Customise the look and feel of CTX WinAdmin using this program.

1. From the Program Menu, click Profile > Customise.
2. Select your customised settings.
3. Click Save Changes.



FIELD	DESCRIPTION
<b>ASP Idle Time</b>	<p>CTX WinAdmin is designed to automatically log off any inactive users after the time set in this field.</p> <p>Possible values: Default = 120, value in minutes</p>
<b>Back Ground Colour</b>	<p>Select the background Colour from the scroll down menu.</p> <p>Possible values: Aqua, Yellow, Sky Blue, Light Sky Blue, Light Blue, Medium Spring Green, Light Green, Powder Blue, Light Goldenrod Yellow (default), Misty Rose, Lavender.</p>
<b>Group Name Colour</b>	<p>Select the colour in which to display the Group Name (see figure above).</p> <p>Possible values: Black, White, Dim Grey (default), Red, Dark Red, Blue, Indigo, Navy, Purple, Maroon, Teal, Fuchsin, Dark Green.</p>
<b>Label Colour</b>	<p>Select the colour with which to display the field name text.</p> <p>Possible values: Black (default), White, Dim Grey, Red, Dark Red, Blue, Indigo, Navy, Purple, Maroon, Teal, Fuchsin, Dark Green.</p>

## User Management

For information on User Management, refer to [Chapter 2 “User Management” on Page 2-14](#).



# Button Programming

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# A

This appendix discusses the button programming interface provided with Strata CTX. Toshiba highly recommends using Strata CTX WinAdmin to program your Strata CTX telephone system.

## Programming Section Layout

**Note** Some common program sections also include examples for your convenience.

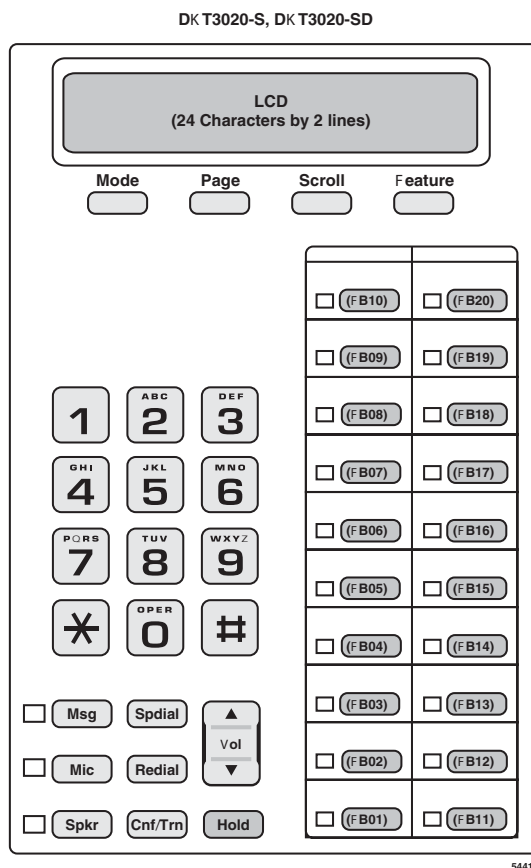
**Figure A-1 System Record Sheet Sample**

## Telephone Button Overview

Strata CTX programmers can access programming mode from any station with an LCD equipped DKT telephone. A 20-button model as shown in [Figure A-2](#) below is required to ensure full access to all programming parameters. The telephone button programming interface allows limited programming capabilities over ranges of stations or trunks.

**Note** Telephones connected to an RDSU or PESU cannot be used to program Strata CTX.

[Figure A-2](#) shows the telephone button pad for the DKT3020-SD series digital telephone.



**Figure A-2** DKT3000 Telephone Button Pad

## Telephone Button Commands

Use the following buttons to execute the following commands.

- ◆ **Hold** – Enter.
- ◆ **Page/Scroll** – Scroll up or down.
- ◆ **Spkr** – This delimiter moves cursors between sub-parameter values.
- ◆ **Vol▲** – Escape.
- ◆ **Vol▼** – Back space for line editing.
- ◆ **# # Hold** – Cancel.
- ◆ **\*** – Use this button between values to specify a range of objects to be programmed (e.g., 1001\*1005 enables programming of stations 1001 through 1005).
- ◆ **\*\*** – Use this button between values to specify a set of objects to be programmed (e.g., 1001\*\*1005\*\*1012 enables programming of stations 1001, 1005 and 1012).
- ◆ Off-hook – lift and replace the handset to immediately exit programming mode.

Keep the following in mind as you maneuver through Strata CTX programs.

- ◆ Default and/or current settings are displayed on the telephone LCD with an asterisk.
- ◆ Some Strata CTX Programs have more than 20 programmable parameters. To toggle from parameters **FB01~FB20** and **FB21~FB40** press the **Scroll** or **Page** button after entering Program Mode.
- ◆ To view parameter options on your telephone LCD, press the desired **FB** button and press the **Scroll** or **Page** button.
- ◆ Each parameter shows a number to the left (e.g., **2:DISABLE**). Program the desired parameter by pressing the number button (in this example **2**) that corresponds to your desired parameter.
- ◆ To enter data, use the number keys.
- ◆ To submit your program entry press **Hold**. To confirm a submitted entry, press **Hold** again.
- ◆ To exit a program press **# # Hold**.
- ◆ To enter the **#** character in your data string press the **Vol▲** and the **#** button simultaneously. A **¥** sign appears in your LCD. Press the **#** button, then enter the remaining data.
- ◆ If you get an error code, press **Hold** (twice) to continue programming. See “[System Error Codes](#)” on page B-1 for error code details.

### Programming Parameters

Programs can have between one and 40 programmable parameters, each represented by the **FBnn** buttons. The LEDs light up for each **FBnn** button that features a programmable parameter. Each parameter is programmed by entering values into the LCD from the telephone button pad.

1. At the **SELECT PARAM** prompt, press the appropriate **FBnn** button.
2. Enter the appropriate value from the telephone button pad using the Parameter Fields tables supplied with each program.
3. Press **Hold** to submit.
4. Press another **FBnn** button to program more parameters  
...or press **Hold** again to program.

## Programming Sub-parameters

Some commands enable programming of Sub-parameters to further refine Strata CTX settings. Internet or Network IP addresses are entered using sub-parameter data. IP addresses are displayed as four three digit values, or Octets, separated by “periods” (e.g., **192.168.255.253**). Your programming telephone’s LCD is only capable of displaying the IP information three digits, or one Octet, at a time.

For example, selecting **FB01** in Program 916 displays the first Octet, **192**, on the LCD. To view or change the next Octet (in this example **168**) in the IP Address, press the **Spkr** button. Pressing **Spkr** again, displays the following Octet (in this example **255**).

The following is an example from Program 200, **FB04** (see [“Assignment” on page 5-1](#) for details). **FB04** is broken down into three sub-parameters as follows COS DAY1, COS DAY2 and COS NIGHT.

1. At the **SELECT PARAM** prompt, press **FB04**.
2. At the **COS DAY1=** prompt enter a value from one~32.
3. Press **Spkr**.
4. At the **COS DAY2=** prompt enter a value from one~32.
5. Press **Spkr**.
6. At the **COS NIGHT=** prompt enter a value from one~32.
7. Press **Hold** to submit.
8. Press another **FBnn** button to program more parameters  
...or press **Hold** again to program a new DN.

**Note** To change one of the sub-parameters, you must proceed through all three sub-parameters before pressing **Hold**. For example, to change the value of COS DAY1, you must change the COS DAY1 value, then press **Spkr** twice, and finally, press **Hold**.

# Button Programming Examples

The following examples show you how to use the Strata CTX button programming interface. Toshiba highly recommends the use of Strata CTX WinAdmin to meet the demands of your telephone system programming.

Suppose a customer needed to assign a DKT Station to a PDN. Based on the [“Identify Program Sequences” on page 3-10](#), you can immediately identify the Program numbers and sequence required to complete this basic task. Login to the Button Programming Mode using the directions on [page A-8](#) and follow the steps below.

## Program 100

Reference [“Program 100” on page A-9](#). For this example, an eight station BDKU PCB is assigned to Slot 01/Cabinet 01 (xxyy).

1. At the **PROG=** prompt enter 100 and press Hold.
2. At the **EQUIP=** prompt enter 0101 (xxyy) and press Hold.  
  
“Program 100” on page A-9 tells us that a three digit PCB code (nnn) is required. From the table, “PCB Codes” on page A-10, we can derive that the PCB code for a BDKU is “017.” Furthermore, the “Program 100” table shows us the button sequence required for programming a BDKU in the fourth row of the table.
3. Press **FB01**. Enter **017** and press **Hold**.  
  
“Program 100” on page A-9 also informs us that an “n” value is required to complete the PCB assignment. These “n” values are listed in the column titled “Value(s).” When you look in the fourth row of the “Value(s)” column there are five “n” value choices. For this example, select “2. 8 DKT no OCA.”
4. Press **FB03**. Enter **2** and press **Hold** twice.
5. Press **##Hold** to return to the **PROG=** prompt.

## Program 200

Reference [“Program 200” on page A-18](#) and [“Basic/200 Station Data” on page 5-1](#). A DKT assignment (DN = 1000) is made to Circuit 01, Slot 01, and Cabinet 01 for the BDKU Card installed in Step 1 above. The

1. At the **PROG=** prompt enter **200** and press **Hold**.
2. At the **DN=** prompt enter **1000** (n) and press **Hold**.
3. Press **FB01**. At the **EQUIP=** prompt enter 010101 (xxyyzz) and press **Hold**.
4. Press **FB02**. Press **1** to select a DKT and press **Hold**.
5. Press **FB03**. Press **1** to select Extension as the Circuit Type and press **Hold**.

For this example, only the above **FBs** need to be assigned. Press **Hold** again before proceeding to the next step.

6. Press **##Hold** to return to the **PROG=** prompt.

**Note** Additional assignments can be made to fine tune this DKT assignment. See [“Basic/200 Station Data” on page 5-1](#) for field descriptions and default values. If specific assignments are not made, the system automatically assigns the default value.

## Program 204

Reference [“Program 204” on page A-21](#) and [“204 DKT Parameters” on page 5-7](#). This program enables you to setup the DKT parameters.

1. At the **PROG=** prompt enter **204** and press **Hold**.
2. At the **DN=** prompt enter **1000** (n) and press **Hold**.
3. Press **FB01**. Press **1** to select a Extension and press **Hold**.
4. Press **FB02**. Press **3** to select Pattern 3 for this DKT and press **Hold**.

For this example, we are using a 20-button DKT. There are three button patterns to choose from (see [“Feature Button Patterns” on page 5-12](#)) for each type of digital telephone.

Only the above **FBs** need to be assigned. Press **Hold** again before proceeding to the next step.

5. Press **##Hold** to return to the **PROG=** prompt.

**Note** Additional assignments can be made to fine tune DKT parameters. See [“204 DKT Parameters” on page 5-7](#) for field descriptions and default values. If specific assignments are not made, the system automatically assigns the default value.

## Program 208

Reference [“Program 208” on page A-27](#) and [“208 Station Timer Assignments” on page 5-22](#). This program assigns timing parameters to Prime DNs.

1. At the **PROG=** prompt enter 208 and press **Hold**.
2. At the **DN=** prompt enter 1000 (n) and press **Hold**.
3. Press **FB01**. Press **10** to set the number of ABR attempts and press **Hold**.
4. Press **FB02**. Press **60** to set ABR to attempt redials in 60 second increments and press **Hold**.
5. Press **FB03**. Press **20** to set the ABR Recall Timer and press **Hold**.
6. Press **FB04**. Press **60** to set the Hold Recall Timer and press **Hold**.
7. Press **FB05**. Press **15** to set the First Interdigit Timer and press **Hold**.
8. Press **FB06**. Press **5** to set the Second Interdigit Timer and press **Hold**.
9. Press **FB07**. Press **32** to set the Ring Transfer No Answer Timer and press **Hold** twice.
10. Press **##Hold** to return to the **PROG=** prompt.

## Program 205

Reference [“Program 205/213/215” on page A-22](#), [“Feature/Button Code Sub-parameter Assignments” on page A-23](#) and [“Flexible Button Assignment Feature Code Table” on page A-25](#). This program assigns features and parameters to the FB buttons on your DKT telephone. In this example, the **FB10** button on your DKT will be programmed to act as a GCO button.

1. At the **PROG=** prompt enter **205** and press **Hold**.
2. At the **DN=** prompt enter **1000** (n) and press **Hold**.
3. Press **FB10**. Enter **130** to assign a GCO and press **Spkr**.

To select the n1, n2, n3, n4 and n5 values required in [“Program 205/213/215” on page A-22](#), see [“GCO” in the table titled “Feature/Button Code Sub-parameter Assignments” on page A-23](#).

4. Enter **1** to assign a GCO number and press **Spkr**.
5. Enter **1** to assign a GCO index and press **Spkr**.
6. Enter **2** to enable immediate ringing for this GCO and press **Spkr**.
7. Enter **11** to assign a soft ring tone to this GCO and press **Spkr**.
8. Enter **900** to assign an Owner DN to this GCO number and press **Hold** twice.
9. Press **##Hold** to return to the **PROG=** prompt.
10. Press **##Hold** again to exit Button Programming Mode.

Now that you are more familiar with the Strata CTX button programming interface, begin programming your Strata CTX system beginning with Step 1 below.

## Button Programming Procedures

### Step 1: Enter Program Mode

Enter the button sequence displayed below to enter the Strata CTX670 programming interface from a DKT station.

1. Log in by pressing: **Hold \*##\*1\*2\*3\***.
2. At the **PASSWORD=** prompt, enter your password. Default is **0000**.
3. press **Hold**

### Step 2: Enter Program Number

1. At the **PROG=** prompt enter the three digit program code (e.g., **200**) and press **Hold**.
2. Programmable parameters are identified by the FB LEDs that are illuminated on the DKT. Go to [“Choose a Button Sequence” on page A-8](#) Press on the related **FBnn** button to program a parameter.  
...or if there are no illuminated FB LEDs, continue to Step 3.

### Step 3: Enter FB00 Parameters

**FB00** parameters designate a specific station, trunk, or circuit to be programmed. The **FB00** prompt (e.g., **EQUIP=**, **DN=**, **INDEX=**, etc.) appears automatically in the LCD screen.

1. At the **FB00** prompt, enter the desired value using the telephone number pad.
2. Press **Hold**.

### Step 4: Choose a Button Sequence

- Select the button sequences based on the programs required for programming the Strata CTX from the Telephone. For 100~800 series programs, refer to [page A-9~page A-49](#), and for the 900 series programs, refer to [page A-56~page A-70](#).



# 100 Series Programs

Program 100	Button Sequence	Value(s)
Equipment Number	xyyy, <b>Hold</b> .	xx = Cabinet (01~07) yy = Slot (01~10)
Assign one of the following: <ul style="list-style-type: none"> <li>BIOU1 or BIOU2 Page/MOH/BGM Relay Control.</li> <li>RSTU or PSTU w/ 8 standard phones.</li> <li>All Analogue Exchange Line OCBs.</li> <li>BVPU with 4 VoIP circuits.</li> <li>RBSU/RBSS with 4 BRI S/T interface.</li> <li>Delete PCB</li> </ul>	<b>FB01</b> , nnn, <b>Hold</b> , <b>Hold</b>	nnn = 3 digit PCB Code. Valid Codes: 000, 001, 002, 005, 006, 009, 010, 011, 013.
Assign one of the following: <ul style="list-style-type: none"> <li>PDKU with OCA toggle</li> <li>RDТУ* or RPTU, T1* or PRI Channel</li> </ul> <i>(*not available in the UK &amp; Europe)</i>	<b>FB01</b> , nnn, <b>Hold</b> , <b>FB02</b> , n, <b>Hold</b> , <b>Hold</b>	nnn = 3 digit PCB Code. Valid Codes: 003, 007, 014 n = <ol style="list-style-type: none"> <li>None</li> <li>DKT no OCA or 8 Ch</li> <li>DKT w/ OCA or 16 Ch</li> <li>24 Ch (n/a for PDKU)</li> <li>30 Ch (n/a for PDKU)</li> </ol>
Assign BDKU or BDKS	<b>FB01</b> , nnn, <b>Hold</b> , <b>FB03</b> , n, <b>Hold</b> , <b>Hold</b>	nnn = 3 digit PCB Code Valid Codes: 003, 007, 014 n = <ol style="list-style-type: none"> <li>None</li> <li>8 DKT no OCA</li> <li>8 DKT w/ OCA</li> <li>16 DKT no OCA</li> <li>16 DKT w/ OCA</li> </ol>
Assign RBUU/RBUS or RBSU/RBSS.	<b>FB01</b> , nnn, <b>Hold</b> , <b>FB04</b> , n, <b>Hold</b> , <b>Hold</b>	nnn = 3 digit PCB Code. Valid Codes: 012, 013, 015, 016 n = <ol style="list-style-type: none"> <li>None</li> <li>8 DKT no OCA</li> <li>8 DKT w/ OCA</li> <li>16 DKT no OCA</li> <li>16 DKT w/ OCA</li> </ol>

**Table A-1 PCB Codes**

Code	PCB Type	Assigned Name	Circuit/Type
000	None	No Card or Delete Card	n/a
001	COU	RCOU RGLU2	4 Loop Lines 8 Gnd./Loop Lines
002	STU	RSTU2	8 Stations
003	DKU	PDKU2 RWIU	8 Stations 8 or 32 wireless
004	Not used	n/a	n/a
005	8COU	RCIOU+RCO S	8 Loop Exchange Lines
006	DDU	RDDU	4 DDI Lines
007*	DTU	RDTU2	8, 16, 24 and 30 channel T1
008	DSU	RDSU	4 Standard Ports 4 Digital Ports
009	CIU	RCIU2	4 or 8 Circuit Caller ID
010	MCU	RMCU	2 or 4 E911/999 CAMA Lines

Code	PCB Type	Assigned Name	Circuit/Type
011	EMU	REMU BVPU	4 Circuits
012	BSU	RBSU	2 S/T interfaces
013	BSU_BSS	RBSU+RBSS	4 S/T interfaces
014	PTU	RPTU	8, 16 and 24 PRI Lines
015	BUU	RBUU	2 U Interfaces
016	BUU_BUS	RBUU+RBUS	4 U Interfaces
017	NEW_DKU_8	BDKU1	8 Stations
018	NEW_DKU_1 6	BDKU1+BDK S1	16 Stations
019	IOU1	BIOU	Page/MOH/BGM Relay
020	IOU2	BIOU	Page/MOH/BGM Relay
022	PTU1F	RPTU1F	30 PRI Lines
023	ACU	PACU	4 Circuits

\* Not available in the UK & Europe.

Program 102	Button Sequence	Value(s)
Assign Flexible Numbering Plan	n, <b>Hold, FB01</b> , nnn, <b>Hold, Hold</b>	n = Up to 5-digit Flexible Numbering Plan nnn = 3 digit Feature Code
Assign Flexible Numbering OLG	n, <b>Hold, FB01</b> , nnn, <b>Hold, FB02</b> , n1, <b>Hold, Hold</b>	n = Up to 5-digit Flexible Numbering Plan nnn = 551 n1 = 0~128

Program 103	Button Sequence	Value(s)
Assign COS	n, <b>Hold, FB01~FB38</b> , n1, <b>Hold Hold</b> <b>FB39</b> : For Future Feature <b>FB40</b> : Only for China	n = 1~32 (COS Number) 3 digit Feature Code n1 = 1. Enable 2. Disable

Program 104	Button Sequence	Value(s)
01 ACB Callback Timer	<b>FB01, n, Hold</b>	n = 5~180 sec.
02 ACB Cancel Recall Timer	<b>FB02, n, Hold</b>	n = 5~180 sec.
03 Park Recall Timer	<b>FB03, n, Hold</b>	n = 10~600 sec.
04 Camp-on Timer	<b>FB04, n, Hold</b>	n = 5~15 sec.
05 SMDR Valid Call Timer	<b>FB05, n, Hold</b>	n = 0~180 sec.
06 Tandem Connection #1	<b>FB06, n, Hold</b>	n = 0~3600 sec.
07 Tandem Connection #2	<b>FB07, n, Hold</b>	n = 0~180 sec.
08 Call Forward No Ans Time	<b>FB08, n, Hold</b>	n = 1~180 sec.
09 Dial Input Timer	<b>FB09, n, Hold</b>	n = 0~60 sec.
10 Delay 1 Ringing Timer	<b>FB10, n, Hold</b>	n = 1~60 sec.
11 Delay 2 Ringing Timer	<b>FB11, n, Hold</b>	n = 1~60 sec.
12 Door Unlock Timer	<b>FB12, n, Hold</b>	n = 1~30 sec.
13 9+11 Judgement Timer	<b>FB13, n, Hold</b>	n = 1~30 sec.
14 Emergency Call Timer	<b>FB14, n, Hold</b>	n = 10~180 sec.
15 ABR Busy Detection Time	<b>FB15, n, Hold</b>	n = 1~30 sec.
16 Lost Call Timer	<b>FB16, n, Hold</b>	n = 1~600 sec.
17 Lost Call Final Timer	<b>FB17, n, Hold</b>	n = 1~600 sec.
18 DTMF Tone Sending Time	<b>FB18, n, Hold</b>	n = 1. 80 ms 2. 160 ms
19 Auto Disconnect	<b>FB19, n, Hold, Hold</b>	n = 0~60 sec.
20 Preset Pause Time	<b>FB20, n, Hold</b>	n = 1. 200 ms (Default) 2. 800 ms 3. 1600 ms
21 Answer Wait Time	<b>FB21, n, Hold</b>	n = 0~300 sec. Default 40 sec.
22 Special Timer for China	<b>FB22, n, Hold</b>	n = 060~1800 sec. Default 180 sec.

Program 105	Button Sequence	Value(s)
01 Executive Override	<b>FB01, n, Hold,</b>	n = 1. Enable 2. Disable
02 Station MOH	<b>FB02, n, Hold,</b>	n = 1. Quiet Tone 2. External 1 3. External 2 4. External 3 5. External 4 6. External 5 7. External 6 8. External 7 9. External 8 10. External 9 11. External 10 12. External 11 13. External 12 14. External 13 15. External 14 16. External 15 17. Internal 17
03 Ringing Transfer	<b>FB03, n, Hold</b>	n = 1. RBT 2. MOH
04 Transfer Privacy Not supported in Release 1	<b>FB04, n, Hold</b>	n = 1. Enable 2. Disable
05 Privacy Override	<b>FB05, n, Hold</b>	n = 1. Enable 2. Disable

Program 105	Button Sequence	Value(s)
06 Credit Card Code	<b>FB06, n, Hold</b>	n = Up to 32 digits
07 Credit Card Digits	<b>FB07, n, Hold</b>	n = 1~66 digits
08 E911/999 Service	<b>FB08, n, Hold</b>	n = 1. Enable 2. Disable
09 DR Override by SSD	<b>FB09, n, Hold</b>	n = 1. Enable 2. Disable
10 Auto Station Release	<b>FB10, n, Hold</b>	n = 1. Enable 2. Disable
11 ISDN SPID	<b>FB11, n, Hold</b>	n = 1. Operable 2. Not Operable
12 Night Mode Relay	<b>FB12, n, Hold</b>	n = 0~8
13 BGM External Paging	<b>FB13, n, Hold</b>	n = 0~8
14 Lost Call Destination	<b>FB14, n, Hold</b>	n = Up to 5 ASCII characters
15 COS Override Code	<b>FB15, n, Hold</b>	n = 1~8
16 Multi-Conference	<b>FB16, n, Hold</b>	n = 1. Enable 2. Disable
17 Caller Number Display	<b>FB17, n, Hold</b>	n = 1. Enable 2. Disable
18 Night Bell Relay	<b>FB18, n, Hold</b>	n = 0~8
19 Display Preference	<b>FB19, n, Hold</b>	n = 1. DNIS 2. Caller ID
20 Transit Counter	<b>FB20, n, Hold</b>	n = 0~128
21 Primary Clock	<b>FB21, xxyyzz, Hold</b>	xx = Cabinet (01~07) yy = Slot (01~10) zz = Circuit ((01~31)
22 Secondary Clock	<b>FB22, n, Hold</b>	n = 1. Add 2. Do not Add
23 Call History Prefix 1	<b>FB23, n, Hold</b>	n = 1. Enable 2. Disable
24 Emergency Digits Sent	<b>FB24, n, Hold</b>	n = 1. Enable 2. Disable
25 DP Make Ratio	<b>FB25, n, Hold</b>	n = 1. DPMakeRatio33 2. DPMakeRatio40
26 Call Button Jumping	<b>FB26, n, Hold, Hold</b>	n = 1. Enable 2. Disable
27 Insert National Identifier in CLI Data for I/C Calls	<b>FB27, n, Hold</b>	n = Any number upto 8 digits. For UK = 0
28 Insert International Identifier in CLI Data for I/C Calls	<b>FB28, n, Hold</b>	n = Any number upto 8 digits. For UK = 00
29 Numbering Plan Identifier for ISDN Calls	<b>FB29, n, Hold</b>	n = 1. Unknown 2. ISDN Telephony Numbering Plan (Default)
30 Interpretation of Recall Signal on SLT Port	<b>FB30, n, Hold</b>	n = 1. Hooking (Default) 2. On Hook Off Hook
31 Analogue Trunk Selection Method	<b>FB31, n, Hold</b>	n = 1. Terminal (Default) 2. Cyclic
32 Display Check Sum Error	<b>FB32, n, Hold</b>	n = 1. Enable 2. Disable (Default)
33 Analogue Trunk Tandem Connection Timer	<b>FB33, n, Hold</b>	n = 1. Enable 2. Disable (Default)

Program 106	Button Sequence	Value(s)
01 Monday	<b>FB01, n, Hold</b>	n = 1. Working Day 1 2. Working Day 2 3. Holiday
02 Tuesday	<b>FB02, n, Hold</b>	n = 1. Working Day 1 2. Working Day 2 3. Holiday
03 Wednesday	<b>FB03, n, Hold</b>	n = 1. Working Day 1 2. Working Day 2 3. Holiday
04 Thursday	<b>FB04, n, Hold</b>	n = 1. Working Day 1 2. Working Day 2 3. Holiday
05 Friday	<b>FB05, n, Hold</b>	n = 1. Working Day 1 2. Working Day 2 3. Holiday
06 Saturday	<b>FB06, n, Hold</b>	n = 1. Working Day 1 2. Working Day 2 3. Holiday
07 Sunday	<b>FB07, n, Hold, Hold</b>	n = 1. Working Day 1 2. Working Day 2 3. Holiday

Program 107	Button Sequence	Value(s)
01 Sender PAD Device Number	<b>FB01, n, Hold, FB02, n1, Hold, FB03, n2, Hold, Hold</b> See <a href="#">Table 4-2 on Page 4-29</a>	n = Up to 5 ASCII characters
02 Receiver PAD Device Number		n1 = Up to 5 ASCII characters
03 PAD Loss		n2 = 1. 6 dB Net Gain 2. 3 dB Net Gain 3. 0 dB 4. 3 dB Net Loss 5. 6 dB Net Loss 6. 9 dB Net Loss 7. 12 dB Net Loss 8. 15 dB Net Loss

Program 108	Button Sequence	Value(s)
00 PAD Group Device Type	n, <b>Hold, FB01, n1, Hold, Hold</b> See <a href="#">Table 4-3 on Page 4-30</a>	n = Up to 6 ASCII characters
01 PAD Group Number		n1 = 0~32

Program 109	Button Sequence	Value(s)
MOH/BGM #1 (BECU)	<b>FB01, n, Hold</b>	n = 1. Enable 2. Disable
MOH/BGM #2 (BIOU1-J1)	<b>FB02, n, Hold</b>	n = 1. Enable 2. Disable
MOH/BGM #3 (BIOU1-J2)	<b>FB03, n, Hold</b>	n = 1. Enable 2. Disable
MOH/BGM #4 (BIOU1-J3)	<b>FB04, n, Hold</b>	n = 1. Enable 2. Disable
MOH/BGM #5 (BIOU2-J1)	<b>FB05, n, Hold</b>	n = 1. Enable 2. Disable
MOH/BGM #6 (BIOU2-J2)	<b>FB06, n, Hold</b>	n = 1. Enable 2. Disable
MOH/BGM #7 (BIOU2-J3)	<b>FB07, n, Hold</b>	n = 1. Enable 2. Disable

Program 109	Button Sequence	Value(s)
MOH/BGM #8 (RSTU)	<b>FB08</b> , xxyyzz, <b>Spkr</b> , n, <b>Hold</b>	xx = Cabinet (01~07) yy = Slot (01~10) zz = Circuit ((01~31) n = 1. Connected 2. Disconnected
MOH/BGM #9 (RSTU)	<b>FB09</b> , xxyyzz, <b>Spkr</b> , n, <b>Hold</b>	xx = Cabinet (01~07) yy = Slot (01~10) zz = Circuit ((01~31) n = 1. Connected 2. Disconnected
MOH/BGM #10 (RSTU)	<b>FB10</b> , xxyyzz, <b>Spkr</b> , n, <b>Hold</b>	xx = Cabinet (01~07) yy = Slot (01~10) zz = Circuit ((01~31) n = 1. Connected 2. Disconnected
MOH/BGM #11 (RSTU)	<b>FB11</b> , xxyyzz, <b>Spkr</b> , n, <b>Hold</b>	xx = Cabinet (01~07) yy = Slot (01~10) zz = Circuit ((01~31) n = 1. Connected 2. Disconnected
MOH/BGM #12 (RSTU)	<b>FB12</b> , xxyyzz, <b>Spkr</b> , n, <b>Hold</b>	xx = Cabinet (01~07) yy = Slot (01~10) zz = Circuit ((01~31) n = 1. Connected 2. Disconnected
MOH/BGM #13 (RSTU)	<b>FB13</b> , xxyyzz, <b>Spkr</b> , n, <b>Hold</b>	xx = Cabinet (01~07) yy = Slot (01~10) zz = Circuit ((01~31) n = 1. Connected 2. Disconnected
MOH/BGM #14 (RSTU)	<b>FB14</b> , xxyyzz, <b>Spkr</b> , n, <b>Hold</b>	xx = Cabinet (01~07) yy = Slot (01~10) zz = Circuit ((01~31) n = 1. Connected 2. Disconnected
MOH/BGM #15 (RSTU)	<b>FB15</b> , xxyyzz, <b>Spkr</b> , n, <b>Hold</b>	xx = Cabinet (01~07) yy = Slot (01~10) zz = Circuit ((01~31) n = 1. Connected 2. Disconnected

Program 110	Button Sequence	Value(s)
00 Select Password Level 01 Enter Password	n, <b>Hold</b> , <b>FB01</b> , n1, <b>Hold</b> , <b>Hold</b>	n = 1. Unrestricted Admin 2. Restricted Admin  n1 = Up to 16 digits

Program 111	Button Sequence	Value(s)
DRL Number 01 Credit Card Calling	n, <b>Hold</b> , <b>FB01</b> , n1, <b>Hold</b> , <b>Hold</b>	n = 1~16 n1 = 1. Enable 2. Disable

Program 112	Button Sequence	Value(s)
00 Enter Calendar Day 01 Working Day Type	YYYYMMDD, <b>Hold</b> , <b>FB01</b> , n, <b>Hold</b> , <b>Hold</b>	YYYY = Year MM = Month DD = Day n = <ol style="list-style-type: none"> <li>1. Delete</li> <li>2. Work Day</li> <li>3. Non-Working Day</li> <li>4. Holiday</li> </ol>

Program 113		Button Sequence	Value(s)
Work Day	01 Enter Day 1 Mode Start Time	<b>FB01</b> , hhmm, <b>Hold</b>	hh = hour (00~23) mm = minute (00~59) 9999 to delete
	02 Enter Day 2 Mode Start Time	<b>FB02</b> , hhmm, <b>Hold</b>	hh = hour (00~23) mm = minute (00~59) 9999 to delete
	03 Enter Night Mode Start Time	<b>FB03</b> , hhmm, <b>Hold</b>	hh = hour (00~23) mm = minute (00~59) 9999 to delete
NonWork Day	04 Enter Day 1 Mode Start Time	<b>FB04</b> , hhmm, <b>Hold</b>	hh = hour (00~23) mm = minute (00~59) 9999 to delete
	05 Enter Day 2 Mode Start Time	<b>FB05</b> , hhmm, <b>Hold</b>	hh = hour (00~23) mm = minute (00~59) 9999 to delete
	06 Enter Night Mode Start Time	<b>FB06</b> , hhmm, <b>Hold</b>	hh = hour (00~23) mm = minute (00~59) 9999 to delete
Holiday	07 Enter Day 1 Mode Start Time	<b>FB07</b> , hhmm, <b>Hold</b>	hh = hour (00~23) mm = minute (00~59) 9999 to delete
	08 Enter Day 2 Mode Start Time	<b>FB08</b> , hhmm, <b>Hold</b>	hh = hour (00~23) mm = minute (00~59) 9999 to delete
	09 Enter Night Mode Start Time	<b>FB09</b> , hhmm, <b>Hold</b> , <b>Hold</b>	hh = hour (00~23) mm = minute (00~59) 9999 to delete

Program 114		Button Sequence	Value(s)
01 PAD Conference Trunks	02 PAD Conference Telephone 03 PAD Conference Value	<b>FB01</b> , n, <b>Hold</b> , <b>FB02</b> , n1, <b>Hold</b> , <b>FB03</b> , n2, <b>Hold</b> , <b>Hold</b> see <a href="#">Table 4-4 on Page 4-30</a>	n = 0~6
			n1 = 0~8
			n2 = <ol style="list-style-type: none"> <li>1. 6 dB Net Gain</li> <li>2. 3 dB Net Gain</li> <li>3. 0 dB</li> <li>4. 3 dB Net Loss</li> <li>5. 6 dB Net Loss</li> <li>6. 9 dB Net Loss</li> <li>7. 12 dB Net Loss</li> <li>8. 15 dB Net Loss</li> </ol>



Program 115	Button Sequence	Value(s)
Message Number 01 Message 02 Additional Digits	This Program can only be accessed through Strata CTX WinAdmin. Please see <a href="#">“115 Advisory Messages” on page 4-37</a>	

Program 116	Button Sequence	Value(s)
01 Command Number	<b>FB01</b> , n, <b>Hold</b> , <b>Hold</b> See <a href="#">Table 4-7 on Page 4-38</a>	n = 3 digit Program Number

Program 117	Button Sequence	Value(s)
00 Prefix Number 01 Digits to Follow	<b>FB01</b> , n, <b>Hold</b> , n1, <b>Hold</b> , <b>Hold</b>	n = Up to 7 digits (Wild Cards n and x) n1 = 1~64

Program 118	Button Sequence	Value(s)
01 Set Master Lock Password	<b>FB01</b> , n, <b>Hold</b>	n = Enter upto 10 ASCII characters. Default: 0000

Program 119	Button Sequence	Value(s)
01 Initialise Lock Password	<b>FB01</b> , n, <b>Hold</b>	n = <ol style="list-style-type: none"> <li>1. None</li> <li>2. Initialise the password Default: None</li> </ol>

## 200 Series Programs

Program 200	Button Sequence	Value(s)
Prime DN	n, <b>Hold</b>	n = Up to 5 ASCII characters
01 PDN Equipment Number	<b>FB01</b> , xxyyzz, <b>Hold</b>	xx = Cabinet (01~07) yy = Slot (01~10) zz = Circuit (01~08)
02 Station Type	<b>FB02</b> , n, <b>Hold</b>	n = 1. DKT 2. SLT
03 Circuit Type	<b>FB03</b> , n, <b>Hold</b>	n = 1. Extension 2. Voice Mail
04 Station COS • Day1 COS • Day2 COS • Night COS	<b>FB04</b> , n, <b>Spkr</b> , n, <b>Spkr</b> , n, <b>Hold</b>	n = 1~32
05 Station DRL • Day1 DRL • Day2 DRL • Night DRL	<b>FB05</b> , n, <b>Spkr</b> , n, <b>Spkr</b> , n, <b>Hold</b>	n = 1~16
06 Station FRL • Day1 FRL • Day2 FRL • Night FRL	<b>FB06</b> , n, <b>Spkr</b> , n, <b>Spkr</b> , n, <b>Hold</b>	n = 1~16
07 LCR Group	<b>FB07</b> , n, <b>Hold</b>	n = 1~16
08 Station QPL • Day1 QPL • Day2 QPL • Night QPL	<b>FB08</b> , n, <b>Spkr</b> , n, <b>Spkr</b> , n, <b>Hold</b>	n = 1~16
09 Station Name	<b>FB09</b> , n, <b>Hold</b> Strata CTX WinAdmin is required to program this field.	n = Up to 9 ASCII characters
10 Call Waiting Tone for Off-hook Camp-on	<b>FB10</b> , n, <b>Hold</b>	n = 1. None 2. Singular 3. Continuity
11 Dialling Progress Tone	<b>FB11</b> , n, <b>Hold</b>	n = 1. Dial Tone 2. Entry Tone 3. Quiet Tone
12 System Call Forward Group Number	<b>FB12</b> , n, <b>Hold</b>	n = 0~32
13 Call Pickup	<b>FB13</b> , n, <b>Hold</b>	n = 1. Permitted 2. Group Only 3. Not Permitted
14 Bearer Capability – 3.1KHz	<b>FB14</b> , n, <b>Hold</b>	n = 1. Audio 2. Speech
15 Display DN	<b>FB15</b> , n, <b>Hold</b>	n = Up to 5 ASCII characters
16 Caller Emergency Service Identification (CESID)	<b>FB16</b> , n, <b>Hold</b>	n = Up to 16 ASCII characters
17 Emergency Call Group	<b>FB17</b> , n, <b>Hold</b>	n = 1~8
18 Remote CF DND Password	<b>FB18</b> , n, <b>Hold</b>	n = Up to 4 digits
19 VMID Code SMDI	<b>FB19</b> , n, <b>Hold</b>	n = Up to 16 ASCII characters
22 Message Waiting to VM Port	<b>FB22</b> , n, <b>Hold</b>	n = Up to 5 ASCII characters
23 Travelling COS Change	<b>FB23</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable

Program 200	Button Sequence	Value(s)
24 TGAC Override	<b>FB24, n, Hold</b>	n = 1. Enable 2. Disable
25 Service Tones	<b>FB25, n, Hold</b>	n = 1. Enable 2. Disable
26 Call Waiting and ROB Tone	<b>FB26, n, Hold</b>	n = 1. Enable 2. Disable
27 Name Display	<b>FB27, n, Hold</b>	n = 1. Enable 2. Disable
28 Door Ovr DND	<b>FB28, n, Hold</b>	n = 1. Override 2. Do not Override
29 Emergency Ringdown	<b>FB29, n, Hold</b>	n = 1. Enable 2. Disable
30 Change System Speed Dial	<b>FB30, n, Hold</b>	n = 1. Enable 2. Disable
31 Network COS	<b>FB31, n, Hold</b>	n = 1~32
32 Auto OCA	<b>FB32, n, Hold</b>	n = 1. Enable 2. Disable
33 Originate OCA	<b>FB33, n, Hold</b>	n = 1. Enable 2. Disable
34 RSTU Supervision	<b>FB34, n, Hold</b>	n = 1. Received 2. Not Received
35 Station Speed Dial Bins	<b>FB35, n, Hold, Hold</b>	n = 0~100
36 SLT Port Signalling	<b>FB36, n, Hold</b>	n = 1. DTMF (Default) 2. DP
37 Use Dial Tone to Advise Call Forward Set	<b>FB37, n, Hold</b>	n = 1. Enable 2. Disable (Default)
38 Special Timer for China	<b>FB38, n, Hold</b>	n = 1. Enable 2. Disable (Default)

Program 201	Button Sequence	Value(s)
01 Prime DN	<b>FB01, n, Hold, Hold</b>	n = Up to 5 digits

Program 202	Button Sequence	Value(s)
00 Prime DN	n, <b>Hold</b>	n = Up to 5 digits
01 Equipment	<b>FB01, xxyyzz, Hold</b>	xx = Cabinet (01~07) yy = Slot (01~10) zz = Circuit (01~08)
02 ISDN Channel Group	<b>FB02, n, Hold</b>	n = 1~128
03 ISDN Protocol	<b>FB03, n, Hold</b>	n = 1. Nat'l ISDN 2. ETSI 3. TTC 4. Nat'l ISDN - Nortel
04 Type Connection	<b>FB04, n, Hold</b>	n = 1~128
05 BRI Station COS • Day1 COS • Day2 COS • Night COS	<b>FB05, n, Spkr, n, Spkr, n, Hold</b>	n = 1~32

Program 202	Button Sequence	Value(s)
06 BRI Station DRL • Day1 DRL • Day2 DRL • Night DRL	<b>FB06</b> , n, <b>Spkr</b> , n, <b>Spkr</b> , n, <b>Hold</b>	n = 1~16
07 BRI Station FRL • Day1 FRL • Day2 FRL • Night FRL	<b>FB07</b> , n, <b>Spkr</b> , n, <b>Spkr</b> , n, <b>Hold</b>	n = 1~16
08 LCR Group	<b>FB08</b> , n, <b>Hold</b>	n = 1~16
09 BRI Station QPL • Day1 QPL • Day2 QPL • Night QPL	<b>FB09</b> , n, <b>Spkr</b> , n, <b>Spkr</b> , n, <b>Hold</b>	n = 1~16
10 Speech Capability	<b>FB10</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
11 3.1 KHz Audio	<b>FB11</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
12 7 KHz Audio	<b>FB12</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
13 64Kbps Unrestricted	<b>FB13</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
14 56Kbps Unrestricted	<b>FB14</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
15 2 x 64Kbps Unrestricted	<b>FB15</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
16 B Channel Selection	<b>FB16</b> , n, <b>Hold</b>	n = 1. Exclusive 2. Preferred 3. Any Channel
17 Idle B Channel Selection	<b>FB17</b> , n, <b>Hold</b>	n = 1. Forward Cyclic 2. Backward Cyclic 3. Forward Terminal 4. Backward Terminal
18 Interdigit Timer 1	<b>FB18</b> , n, <b>Hold</b>	n = 1~180
19 Interdigit Timer 2	<b>FB19</b> , n, <b>Hold</b>	n = 1~180
20 CESID	<b>FB20</b> , n, <b>Hold</b>	n = Up to 16 ASCII characters
21 Number Voice Calls Allowed	<b>FB21</b> , n, <b>Hold</b>	n = 1. One 2. Two
22 Service Tone Permission	<b>FB22</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
23 TGAC Override	<b>FB23</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
24 Change System Speed	<b>FB24</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
25 Network COS	<b>FB25</b> , n, <b>Hold</b>	n = 1~32
26 Additional DN2	<b>FB26</b> , n, <b>Hold</b>	n = Up to 5 ASCII characters
27 Additional DN3	<b>FB27</b> , n, <b>Hold</b>	n = Up to 5 ASCII characters
28 Additional DN4	<b>FB28</b> , n, <b>Hold</b>	n = Up to 5 ASCII characters
29 Additional DN5	<b>FB29</b> , n, <b>Hold</b>	n = Up to 5 ASCII characters
30 Additional DN6	<b>FB30</b> , n, <b>Hold</b>	n = Up to 5 ASCII characters
31 Additional DN7	<b>FB31</b> , n, <b>Hold</b>	n = Up to 5 ASCII characters
32 Additional DN8	<b>FB32</b> , n, <b>Hold</b>	n = Up to 5 ASCII characters
33 Auto OCA	<b>FB33</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable

Program 202	Button Sequence	Value(s)
34 Originate OCA	<b>FB33, n, Hold</b>	n = 1. Enable 2. Disable
35 Assign Speed Dial Locations to S-Bus Extns	<b>FB35, n, Hold</b>	n = 0 to 100 each value represents a multiple of 10 (Default)
36 USe Dial Tone to Advise Call Forward Set	<b>FB36, n, Hold</b>	n = 1. Enable 2. Disable
37 Apply Dialling Restriction to S-Bus Extns	<b>FB37, n, Hold</b>	n = 1. Enable 2. Disable (Default)
38 TEI Assignment Procedure	<b>FB38, n, Hold</b>	n = 1. Fixed TEI Assignment (Default = 1) 2. Auto TEI Assignment

Program 203	Button Sequence	Value(s)
00 Prime DN	n, <b>Hold, FB01, n1, Hold, Hold</b>	n = Up to 5 digits
01 New PDN		n1 = Up to 5 digits

Program 204	Button Sequence	Value(s)
00 Prime DN	n, <b>Hold</b>	n = Up to 5 digits
01 Station Type	<b>FB01, n, Hold</b>	n = 1. Extension 2. Attendant
02 Key Strip Pattern	<b>FB02, n, Hold</b> See <a href="#">"Feature Button Patterns" on page 5-12</a>	n = 1. Pattern1 2. Pattern2 3. Pattern3
03 Key Strip Type	<b>FB03, n, Hold</b>	n = 1~24
04 Add on Modules	<b>FB04, n, Hold</b>	n = 1. None 2. One Unit 3. Two Units
05 Tone 1st /Voice 1st	<b>FB05, n, Hold</b>	n = 1. Tone 2. Voice
06 OCA Type	<b>FB06, n, Hold</b>	n = 1. Handset 2. Speaker
09 Handsfree MIC Setting	<b>FB09, n, Hold</b>	n = 1. Enable 2. Disable
10 Handsfree Tone	<b>FB10, n, Hold</b>	n = 1. Enable 2. Disable
11 Ext. Ring Repeat	<b>FB11, n, Hold</b>	n = 1. Enable 2. Disable
12 Not Used		n =
13 Ringing Line Preference	<b>FB13, n, Hold</b>	n = 1. Idle 2. Ringing 3. Prime 4. No Preference 5. Prime and Idle 6. Prime and Ringing 7. Ringing and Idle
14 Off-hook Preference	<b>FB14, n, Hold</b>	n = 1. Exchange Key 2. DN Key
15 Ringing Preference	<b>FB15, n, Hold</b>	n = 1. Longest 2. Call Type
16 Text Message Display	<b>FB16, n, Hold</b>	n = 1. Immediate 2. Not Immediate

Program 204	Button Sequence	Value(s)
17 Call History Memory	<b>FB17, n, Hold</b>	n = 0~100
18 DTMF Back Tone	<b>FB18, n, Hold</b>	n = 1. Padded 2. DTMF Tone 3. No Tone
19 Continuous DTMF	<b>FB19, n, Hold</b>	n = 1. Continuous 2. Not Continuous
20 Display Language	<b>FB20, n, Hold</b>	n = 1. English 2. British English 3. French
21 Adapter	<b>FB21, n, Hold</b>	n = 1. BPCI 2. BATI
22 Blind Transfer	<b>FB22, n, Hold</b>	n = 1. Leave 2. Separate
23 Mail Box Selection	<b>FB23, n, Hold</b>	n = 1. Auto Input 2. Manual Input
24 MIC Init. Value	<b>FB24, n, Hold</b>	n = 1. On 2. Off
25 Microphone	<b>FB25, n, Hold</b>	n = 1. Enable 2. Disable
26 Speaker Mode Tones	<b>FB26, n, Hold</b>	n = 1. Yes 2. No
27 Ring Over Busy Cycles	<b>FB27, n, Hold</b>	n = 1. Two Cycles 2. Continuous
28 Attd Overflow Dest.	<b>FB28, n, Hold</b>	n = Up to 32 ASCII characters
29 Trunk Test and Verify	<b>FB29, n, Hold</b>	n = 1. Yes 2. No
30 Auto Line Hold	<b>FB30, n, Hold</b>	n = 1. Enable 2. Disable
31		1.

Program 205/213/215	Button Sequence	Value(s)
00 Prime DN	n, <b>Hold</b>	n = Up to 5 digits
Assign Feature Code	Select one of the following:	
• Assign a PDN (100)	<b>FB01~FB20, 100, Spkr, n1, Spkr, n2, Spkr, n3, Hold, Hold</b>	n1 = 1. No Ring 2. Immediate 3. Delay 1 4. Delay 2 n2 = 01~02, 11~18 n3 = 01~02, 11~18
• Assign a PhDN (110)	<b>FB01~FB20, 110, Spkr, n1, Spkr, n2, Spkr, n3, Spkr, n4, Hold, Hold</b>	n1 = PhDN (Up to 5 digits) n2 = 1. No Ring 2. Immediate 3. Delay 1 4. Delay 2 n3 = 01~02, 11~18 n4 = 01~02, 11~18
• Assign an Exchange Line (120)	<b>FB01~FB20, 120, Spkr, n1, Spkr, n2, Spkr, n3, Spkr, n4, Hold, Hold</b>	n1 = 0~264 n2 = 1. No Ring 2. Immediate 3. Delay 1 4. Delay 2 n3 = 01~02, 11~18 n4 = Up to 5 digits

Program 205/213/215	Button Sequence	Value(s)
• Assign a GCO (130)	<b>FB01~FB20, 130, Spkr, n1, Spkr, n2, Spkr, n3, Spkr, n4, Spkr, n5, Hold, Hold</b>	n1 = 0~128 n2 = 0~128 n3 = 1. No Ring 2. Immediate 3. Delay 1 4. Delay 2 n4 = 01~02, 11~18 n5 = Up to 5 digits
• Assign a Pooled Line Button	<b>FB01~FB20, 140, Spkr, n1, Spkr, n2, Spkr, n3, Hold, Hold</b>	n2 = 0~128 n3 = 1. No Ring 2. Immediate 3. Delay 1 4. Delay 2 n4 = 01~02, 11~18
• Assign Door Lock Cancel (540)	<b>FB01~FB20, 540, Spkr, n, Hold, Hold</b>	n = 1~10
• Assign PhDN Message Waiting (560)	<b>FB01~FB20, 560, Spkr, n, Hold</b>	n = Up to 5 digits
• Assign DSS Button (610)	<b>FB01~FB20, 610, Spkr, n, Hold</b>	n = Up to 5 digits
• Assign Start Application (900)	<b>FB01~FB20, 900, Spkr, n, Hold</b>	n = 0~99
• Assign other Feature Codes	<b>FB01~FB20, n, Hold, Hold</b> See <a href="#">“Flexible Button Assignment Feature Code Table” on page A-25</a> for details.	n = 3 digit Feature Code

Table A-2 Feature/Button Code Sub-parameter Assignments

Feature	Button Code	Sub-parameters	Description	Values	LCD Prompt
PDN	100	Sub-parameter 1	Set ring pattern.	1. No Ring 2. Immediate 3. Delay 1 4. Delay 2	PITCH=  Enter a value of 01~02, 11~18.
		Sub-parameter 2	Set ring tone.		
		Sub-parameter 3			
PhDN	110	Sub-parameter 1	Set PhDN.	Maximum 5 digit number.	DN=  PITCH=
		Sub-parameter 2	Set ring pattern.	1. No Ring 2. Immediate 3. Delay 1 4. Delay 2	
		Sub-parameter 3	Set ring tone.	Enter a value of 01~02, 11~18.	
		Sub-parameter 4			
CO	120	Sub-parameter 1	Set Exchange number.	Enter a value of 0~264.	LINE NO=  PITCH=  OWNER DN=
		Sub-parameter 2	Set ring pattern.	1. No Ring 2. Immediate 3. Delay 1 4. Delay 2	
		Sub-parameter 3	Set ring tone.	Enter a value of 01~02, 11~18.	
		Sub-parameter 4	Owner DN.	Max 5 characters	

**Table A-2 Feature/Button Code Sub-parameter Assignments**

Feature	Button Code	Sub-parameters	Description	Values	LCD Prompt
GCO	<b>130</b>	Sub-parameter 1 Sub-parameter 2 Sub-parameter 3  Sub-parameter 4 Sub-parameter 5	Set GCO number. GCO Index. Set ring pattern.  Set ring tone. Owner DN.	Enter a value of 0~128. Enter a value of 0~128. 1. No Ring 2. Immediate 3. Delay 1 4. Delay 2  Enter a value of 01~02, 11~18. Max 5 characters	GCO NO= INDEX=   PITCH= OWNER DN=
Pooled Line Button	<b>140</b>	Sub-parameter 1 Sub-parameter 2  Sub-parameter 3	Pooled Line number. Set ring pattern.  Set ring tone.	Enter a value from 0~128. 1. No Ring 2. Immediate 3. Delay 1 4. Delay 2  Enter a value of 01~02, 11~18.	POOL NO=   PITCH
Door Lock Cancel	<b>540</b>	Sub-parameter 1	Door Lock number.	Enter a value from 1~10.	NUMBER=
PhDN Message Waiting	<b>560</b>	Sub-parameter 1	Set PhDN number.	Max 5 characters.	PH DN=
DSS Button	<b>610</b>	Sub-parameter 1	DSS Button PDN number.	You cannot set the same DN in DSS Key for one station.	PDN=
Start Application	<b>900</b>	Sub-parameter 1	Enter Application number.	Enter a value between 0~99.	APL NO=



**Table A-3 Flexible Button Assignment Feature Code Table**

Feature	Buttons Code
No Data/Delete Code	<b>000</b>
<b>Account Code</b> (Frequently used codes)	<b>660</b>
Attendant Console Group Access Code	n/a
Automatic Attendant (The extension terminal having the simplified attendant console attribute must set at least the ATT-ANSWER button)	
• Answer	<b>700</b>
• Overflow	<b>790</b>
Automatic Busy Redial	<b>150</b>
Automatic Callback Cancel	<b>160</b>
BGM	<b>530</b>
Call Forward	
• All Call	<b>340</b>
• All Call (Remotely)	<b>350</b>
• Busy (External Call Activation)	<b>390</b>
• Busy CF-A (External Call Activation)	<b>380</b>
• No Answer	<b>360</b>
• No Answer (External Call Activation)	<b>400</b>
• Busy No Answer	<b>370</b>
• Busy No Answer (External Call Activation)	<b>420</b>
Call Handling	
• Cancel	<b>290</b>
• Release	<b>270</b>
• Destination Party	<b>310</b>
• Release/Answer	<b>280</b>
• Privacy	<b>320</b>
• Privacy Release	<b>330</b>
• Source Party	<b>300</b>
Call Park	
• System Orbit	<b>170</b>
Call Pickup	
• Incoming - Group Pickup	<b>430</b>
• Incoming - Directed Terminal Pickup	<b>440</b>
• Incoming - Directed Group Pickup	<b>450</b>
• Incoming - Directed DN Pickup	<b>460</b>

**Table A-3 Flexible Button Assignment Feature Code Table (Continued)**

Feature	Buttons Code
• On hold - Local Retrieve	<b>490</b>
• On hold - Remote Retrieve	<b>500</b>
• On hold - Outside line Retrieve	<b>480</b>
• On hold - Directed DN Retrieve	<b>510</b>
• On hold and Incoming - Any External Call	<b>470</b>
• On hold and Incoming -	<b>520</b>
Calling Number Identification (CLID)	<b>580</b>
Dialling	
• Dial Out	<b>620</b>
Do Not Disturb (DND)	<b>180</b>
Door Lock Cancel	<b>540</b>
Recall - Short	<b>200</b>
Recall - Long	<b>210</b>
• Attendant	<b>820</b>
• Supervised	<b>830</b>
Message Waiting	
• Phantom (PhDN) Message Waiting	<b>560</b>
Night Transfer	<b>600</b>
Paging	
• Page All Groups	<b>220</b>
• Page Individual Groups	<b>230</b>
• Emergency Page - Individual Group	<b>250</b>
• Emergency Page - All Groups	<b>240</b>
• Answer Feature	<b>590</b>
Position Busy	<b>800</b>
<b>Programming Mode</b> (Enter User Programming Mode)	<b>650</b>
Single-touch Button	<b>570</b>
Speed Dial (register Speed Dial)	<b>260</b>
Start Application	<b>900</b>
Trunk Test	<b>810</b>
Voice Mail	
• Auto Voice Mail Playback	<b>640</b>
• Auto Voice Mail Record	<b>630</b>
• Lock Key	<b>850</b>

Table A-3 Flexible Button Assignment Feature Code Table (Continued)

Feature	Buttons Code
<b>Notes</b> 1. T = Telephone type PCB 2. L = Exchange line type PCB 3. * = Allowed T1 ( <i>not available in the UK &amp; Europe</i> )/PRI slots 4. The Base cabinet allows Speaker OCA and DIU data with PDKU in all slots; expansion cabinets provide these features in slots S_01~S_06 only. 5. Last available slot: B1C=S108, B2C=206, B3C=310, and B5C=510.	

Program 206	Button Sequence	Value(s)
00 PhDN	n, <b>Hold</b>	n = Up to 5 digits
01 Owned PDN	<b>FB01</b> , n, <b>Hold</b>	n = Up to 5 digits
02 Tone/Voice First	<b>FB02</b> , n, <b>Hold</b>	n = 1. Tone First 2. Voice First
04 Display DN	<b>FB04</b> , n, <b>Hold</b>	n = Up to 5 digits
05 System Call Forward	<b>FB05</b> , n, <b>Hold</b>	n = 0~32
06 VM ID Code	<b>FB06</b> , n, <b>Hold</b>	n = Up to 16 ASCII characters
09 Message Center	<b>FB09</b> , n, <b>Hold</b>	n = Up to 16 ASCII characters
10 User Name	<b>FB10</b> , n, <b>Hold</b>	n = Up to 16 ASCII characters
11 Display Name	<b>FB11</b> , n, <b>Hold</b> , <b>Hold</b>	n = Up to 16 ASCII characters

Program 208	Button Sequence	Value(s)
00 Prime DN	n, <b>Hold</b>	n = 1~640
01 ABR Retry Count	<b>FB01</b> , n, <b>Hold</b>	n = 2~20
02 ABR Retry Interval Timer	<b>FB02</b> , n, <b>Hold</b>	n = 30 ~ 180
03 ABR Recall Timer	<b>FB03</b> , n, <b>Hold</b>	n = 5 ~ 60
04 Hold Recall Timer	<b>FB04</b> , n, <b>Hold</b>	n = 0 ~ 255
05 First Interdigit Timer	<b>FB05</b> , n, <b>Hold</b>	n = 1~180
06 Second Interdigit Timer	<b>FB06</b> , n, <b>Hold</b>	n = 1~180
07 Ring Xfer No Answer Timer	<b>FB07</b> , n, <b>Hold</b> , <b>Hold</b>	n = 1 ~ 600

Program 209	Button Sequence	Value(s)
Group Number	n, <b>Hold</b>	n = Up to 5 digits
01 Hunt Method	<b>FB01</b> , n, <b>Hold</b>	n = 5~20
02 Pilot Number	<b>FB02</b> , n, <b>Hold</b>	n = 30~180
04 Number to Display	<b>FB04</b> , n, <b>Hold</b>	n = 1~120
05 Pilot No. SCF	<b>FB05</b> , n, <b>Hold</b>	n = 1~180
06 Multiple DN Hunt	<b>FB06</b> , n, <b>Hold</b>	n = 1~180
07 DHG Auto Camp-on	<b>FB07</b> , n, <b>Hold</b> , <b>Hold</b>	n = 1~600

Program 210	Button Sequence	Value(s)
00 Prime DN	n, <b>Hold</b>	n = Up to 5 digits
01 Group 1~32 Group 32	<b>FB01~FB32</b> , n, <b>Hold</b> , <b>Hold</b>	n = 1. On 2. Off

Program 213	Button Sequence	Value(s)
00 PDN + ADM	See "Program 205/213/215" on page A-22 for details. <b>FB04</b> in Program 204 must be set to 1 or 2 for ADM settings to be valid.	

Program 214	Button Sequence	Value(s)
00 Prime DN	n, <b>Hold</b>	n = Up to 5 digits
01 DSS 1~08 DSS 8	<b>FB01~FB08</b> , xxyyzz, <b>Hold</b> , <b>Hold</b>	xx = Cabinet (01~07) yy = Slot (01~10) zz = Circuit (01~08)

Program 215	Button Sequence	Value(s)
00 DSS	See "Program 205/213/215" on page A-22 for details. <b>FB04</b> in Program 204 must be set to 1 or 2 for ADM settings to be valid.	

Program 216	Button Sequence	Value(s)
00 Prime DN	n, <b>Hold</b>	n = Up to 5 digits
Assign Emergency Ringdown	<b>FB01</b> , n, <b>Hold</b> , <b>FB02</b> , n1, <b>Hold</b> , <b>FB03</b> , n2, <b>Hold</b> , <b>Hold</b>	n = 1. Enable 2. Disable n1 = 5~60 n2 = Up to 5 ASCII characters

Program 217	Button Sequence	Value(s)
Prime DN	n, <b>Hold</b>	n = Up to 5 digits
01 Station Name	<b>FB01</b> , n, <b>Hold</b> ,	n = Up to 9 digits
02 Dial Method	<b>FB02</b> , n, <b>Hold</b> ,	n = 1. Dial Tone 2. Entry Tone 3. No Tone
03 System Call Forward	<b>FB03</b> , n, <b>Hold</b> ,	n = 0~32
04 CF Password	<b>FB04</b> , n, <b>Hold</b> ,	n = Up to 4 ASCII characters
05 Door Phone Override DND	<b>FB05</b> , n, <b>Hold</b> ,	n = 1. Enable 2. Disable
06 Emerg Call Group	<b>FB06</b> , n, <b>Hold</b> ,	n = 1~8
07 COS Override Code	<b>FB07</b> , n, <b>Hold</b> ,	n = 1. Enable 2. Disable
08 Display DN	<b>FB08</b> , n, <b>Hold</b> ,	n = Up to 5 digits
09 VMID Code SMDI	<b>FB09</b> , n, <b>Hold</b> ,	n = Up to 16 ASCII characters
12 Name Display	<b>FB12</b> , n, <b>Hold</b> , <b>Hold</b>	n = 1. Enable 2. Disable
13 Format of CPN on S-Bus Extns	<b>FB13</b> , n, <b>Hold</b>	n = 1. DN only (default) 2. Network CPN 3. DN+Network CPN

Program 218	Button Sequence	Value(s)
Hunt Group Number	n, <b>Hold</b>	n = 1~640
01 Hunt Order	<b>FB01</b> , n, <b>Hold</b> ,	n = 1~560
02 DN	<b>FB02</b> , n, <b>Hold</b> ,	n = Up to 5 ASCII characters
03 DN Set Type	<b>FB03</b> , n, <b>Hold</b> , <b>Hold</b>	n = 1. Modify 2. Insert

## 300 Series Programs

Program 300	Button Sequence	Value(s)
Trunk Number	n, <b>Hold</b>	n = 1~264
01 Trunk Equipment Number	<b>FB01</b> , xxyyzz, <b>Hold</b>	xx = Cabinet (01~07) yy = Slot (01~10) zz = Circuit (01~08)
02 ILG	<b>FB02</b> , n, <b>Hold</b> , <b>Hold</b>	n = 0~128
03 OLG	<b>FB03</b> , n, <b>Hold</b> , <b>Hold</b>	n = 0~128
04 Dial Mode	<b>FB04</b> , n, <b>Hold</b> , <b>Hold</b>	n = 1. Rotary Dial 10PPS 2. Rotary Dial 20PPS 3. DTMF
05 Signalling	<b>FB05</b> , n, <b>Hold</b> , <b>Hold</b>	n = 1. DDI 2. Loop 3. Ground 4. Tie 5. LP (Japan) 6. SR (Japan) 7. ACU (UK)
06 Start Method	<b>FB06</b> , n, <b>Hold</b> , <b>Hold</b>	n = 1. Immediate Start 2. Timing Start 3. Wink Start
07 Release Supervision	<b>FB07</b> , n, <b>Hold</b> , <b>Hold</b>	n = 1. Receive 2. Do not Receive
08 Answer Supervision	<b>FB08</b> , n, <b>Hold</b> , <b>Hold</b>	n = 1. Receive 2. Do not Receive
09 Trunk Name	<b>FB09</b> , n, <b>Hold</b> , <b>Hold</b>	n = Up to 14 ASCII characters
10 External Ring Repeat	<b>FB10</b> , n, <b>Hold</b> , <b>Hold</b>	n = 1. Supply 2. Do not Supply
11 DTMF Back Tone	<b>FB11</b> , n, <b>Hold</b> , <b>Hold</b>	n = 1. Padded 2. DTMF Tone 3. No Tone
12 Hunt Order	<b>FB12</b> , n, <b>Hold</b> , <b>Hold</b>	n = 1~264 999 = last position

Program 302	Button Sequence	Value(s)
Channel Group	n, <b>Hold</b>	n = 1~128
01 RPTU Equipment No.	<b>FB01</b> , xxyzz, <b>Hold</b>	xx = Cabinet (01~07) yy = Slot (01~10) zz = Circuit (01~08)
02 Protocol	<b>FB02</b> , n, <b>Hold</b>	n = 1. Nat'l ISDN 2. ETSI 3. TTC 4. Nat'l ISDN - Nortel 5. QSIG
03 ILG	<b>FB03</b> , n, <b>Hold</b>	n = 0~128
04 OLG	<b>FB04</b> , n, <b>Hold</b>	n = 0~128
05 Trunk ID Type	<b>FB05</b> , n, <b>Hold</b>	n = 1. Implicit 2. Explicit
06 Trunk ID	<b>FB06</b> , n, <b>Hold</b>	n = 0~126
07 D Ch Position	<b>FB07</b> , n, <b>Hold</b>	n = 1~24
08 ~ 13 Bearer Services: • Speech • 3.1 KHz Audio • 7 KHz Audio • Unrestr. 64K • Unrestr. 56K • Unrestr. 2x64K	<b>FB08~FB13</b> , n, <b>Spkr</b> , n1, <b>Hold</b> see <a href="#">Table 6-2 on Page 6-36</a> .	n = 1. Enable 2. Disable n1 = 1. Channel Number 2. Slot Map
14 ~ 18 Bearer Services: • Unrestr. 384K • Unrestr. 1536K • Unrestr. 1920K • Restr. Digital • Video	<b>FB14~FB18</b> , n, <b>Spkr</b> , n1, <b>Hold</b> see <a href="#">Table 6-2 on Page 6-36</a>	n = 1. Enable 2. Disable n1 = 1. Channel Number B 2. Channel Number H 3. Slot Map B 4. Slot Map H
19 Bearer Svc Multirate Unrestricted	<b>FB19</b> , n, <b>Hold</b> see <a href="#">Table 6-2 on Page 6-36</a>	n = 1. Enable 2. Disable
20 B Ch Selection Method	<b>FB20</b> , n, <b>Hold</b>	n = 1. Explicit 2. Preferred 3. Any Channel
21 B Ch Selection	<b>FB21</b> , n, <b>Hold</b> see <a href="#">Table 6-2 on Page 6-36</a> for more details	n1 = 1. Forward Cyclic 2. Backward Cyclic 3. Forward Terminal 4. Backward Terminal
22 T1* Time Slot Pattern (*not available in the UK & Europe)	<b>FB22</b> , n, <b>Hold</b>	n = 1. Fixed1 2. Fixed2 3. Flexible
23 E1 Time Slot Pattern	<b>FB23</b> , n, <b>Hold</b>	n = 1. Fixed1 2. Fixed2 3. Flexible
24 T-Wait Timer	<b>FB24</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
25 RBT on Incoming Call	<b>FB25</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
26 Network Mode	<b>FB26</b> , n, <b>Hold</b>	n = 1. Master 2. Slave
27 Negotiation Priority	<b>FB27</b> , n, <b>Hold</b>	n = 3. Side A 4. Side B
28 Ignore Short Line Breaks on PRI Trunks	<b>FB28</b> , n, <b>Hold</b>	n = 1. Enable (Default) 2. Disable

<b>Program 304</b>	<b>Button Sequence</b>	<b>Value(s)</b>
Group Number	n, <b>Hold</b>	n = 1~128
01 Group Type	<b>FB01</b> , n, <b>Hold</b>	n = 1. Analogue 2. ISDN
02 Trunk Type	<b>FB02</b> , n, <b>Hold</b>	n = 1. CO 2. Tie
03 Service Type	<b>FB03</b> , n, <b>Hold</b>	n = 1. DDI 2. DIT
04 Private Service Type	<b>FB04</b> , n, <b>Hold</b>	n = 1. non-QSIG 2. QSIG
05 GCO Key Number	<b>FB05</b> , n, <b>Hold</b>	n = 0~128
06 Pooled Key Number	<b>FB06</b> , n, <b>Hold</b>	n = 0~128
07 COS	<b>FB07</b> , n, <b>Spkr</b> , n, <b>Spkr</b> , n, <b>Hold</b>	n = 1~32
08 DRL	<b>FB08</b> , n, <b>Spkr</b> , n, <b>Spkr</b> , n, <b>Hold</b>	n = 1~16
09 FRL	<b>FB09</b> , n, <b>Spkr</b> , n, <b>Spkr</b> , n, <b>Hold</b>	n = 1~16
10 QPL	<b>FB10</b> , n, <b>Spkr</b> , n, <b>Spkr</b> , n, <b>Hold</b>	n = 1~16
11 DDI Digits	<b>FB11</b> , n, <b>Hold</b>	n = 0~7
12 Speech/3.1 KHz	<b>FB12</b> , n, <b>Hold</b>	n = 1. Audio 2. Speech
13 Ringing Timer Delay 1	<b>FB13</b> , n, <b>Hold</b>	n = 0~60 sec.
14 Ringing Timer Delay 2	<b>FB14</b> , n, <b>Hold</b>	n = 0~60 sec.
15 Interdigit 1 Timer	<b>FB15</b> , n, <b>Hold</b>	n = 1~180 sec.
16 Interdigit 2 Timer	<b>FB16</b> , n, <b>Hold</b>	n = 1~180 sec.
17 Auto Camp-on	<b>FB17</b> , n, <b>Hold</b>	n = 1. On 2. Off
18 Calling Number ID	<b>FB18</b> , n, <b>Hold</b>	n = 1. User Provided Number 2. Network Provided Number
19 Intercept	<b>FB19</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
20 Send Dial Tone	<b>FB20</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
21 TGAC Override	<b>FB21</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
22 Network COS	<b>FB22</b> , n, <b>Hold</b>	n = 1~32
23 LCR Group	<b>FB23</b> , n, <b>Hold</b>	n = 1~16
24 Change COS Override Code	<b>FB24</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
25 Register Speed Dial Codes	<b>FB25</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
26 Originator Invoke OCA	<b>FB26</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
27 Senderised Tone Mode	<b>FB27</b> , n, <b>Hold</b>	n = 1. Dial Tone 2. Entry Tone 3. Silence

Program 306	Button Sequence	Value(s)
Group Number	n, <b>Hold</b>	n = 1~128
01 Group Type	<b>FB01</b> , n, <b>Hold</b>	n = 1. Analogue 2. ISDN
02 Trunk Type	<b>FB02</b> , n, <b>Hold</b>	n = 1. Exchange Line 2. Tie
03 Private Service Type	<b>FB03</b> , n, <b>Hold</b>	n = 1. DDI 2. DIT
04 GCO Key Number	<b>FB04</b> , n, <b>Hold</b>	n = 1. non-QSIG 2. QSIG
06 Pooled Key1 Number	<b>FB06</b> , n, <b>Hold</b>	n = 0~128
07 Pooled Key2 Number	<b>FB07</b> , n, <b>Hold</b>	n = 0~128
08 COS	<b>FB08</b> , n, <b>Spkr</b> , n, <b>Spkr</b> , n, <b>Hold</b>	n = 1~32
09 FRL	<b>FB09</b> , n, <b>Spkr</b> , n, <b>Spkr</b> , n, <b>Hold</b>	n = 1~16
10 QPL	<b>FB10</b> , n, <b>Spkr</b> , n, <b>Spkr</b> , n, <b>Hold</b>	n = 1~16
11 Speech/3.1 KHz	<b>FB11</b> , n, <b>Hold</b>	n = 1. Audio 2. Speech
12 MOH Source	<b>FB12</b> , n, <b>Hold</b>	n = 1. Quiet Tone 2. External 1 3. External 2 4. External 3 5. External 4 6. External 5 7. External 6 8. External 7 9. External 8 10. External 9 11. External 10 12. External 11 13. External 12 14. External 13 15. External 14 16. External 15 17. Internal 17
13 Account Code	<b>FB13</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
14 Destination Restriction	<b>FB14</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
15 Credit Card Calling	<b>FB15</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
16 Send CESID	<b>FB16</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
17 QSIG Sending Type	<b>FB17</b> , n, <b>Hold</b>	n = 1. Cut through 2. Senderized
18 Network COS	<b>FB18</b> , n, <b>Hold</b> , <b>Hold</b>	n = 1~32
19 Allow Flash/Recall on Exclusive Analogue Trunks	<b>FB19</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable (Default)



Program 308	Button Sequence	Value(s)
Trunk Equipment No.	xyyyzz, <b>Hold</b>	xx = Cabinet (01~07) yy = Slot (01~10) zz = Circuit (01~08)
01 Auto Release	<b>FB01</b> , n, <b>Hold</b> ,	n = 1. Disable 2. Detect 95ms 3. Detect 450ms
02 Short Recall	<b>FB02</b> , n, <b>Hold</b> ,	n = 0~15
03 Long Recall	<b>FB03</b> , n, <b>Hold</b>	n = 0~30
04 Pause after Recall	<b>FB04</b> , n, <b>Hold</b>	n = 0~5
05 Response Information	<b>FB05</b> , n, <b>Hold</b> , <b>Hold</b>	n = 0~3000 (in increments of 50ms)

Program 309	Button Sequence	Value(s)
ILG Number	n, <b>Hold</b> ,	n = 1~128
01 DDI Number	<b>FB01</b> , n, <b>Hold</b>	n = Up to 7 ASCII characters
02 MOH Source	<b>FB02</b> , n, <b>Hold</b>	n = 1. Quiet Tone 2. External 1 3. External 2 4. External 3 5. External 4 6. External 5 7. External 6 8. External 7 9. External 8 10. External 9 11. External 10 12. External 11 13. External 12 14. External 13 15. External 14 16. External 15 17. Internal 17
03 GCO Key Group	<b>FB03</b> , n, <b>Hold</b>	n = 0~128
04 Pool Key Group	<b>FB04</b> , n, <b>Hold</b>	n = 0~128
05 Audio/Speech – Day 1 Destination~10 Data – Night Destination	<b>FB05~FB10</b> , n, <b>Spkr</b> , n1, <b>Hold</b>	n = 1. No Data 2. Dialling Digits 3. DISA 4. Built-in modem 5. Night Bell  n1 = Up to 32 ASCII characters
11 DNIS VMID Code	<b>FB11</b> , n, <b>Hold</b>	n = Up to 16 ASCII characters
12 DNIS Name	<b>FB12</b> , n, <b>Hold</b> , <b>Hold</b>	n = Up to 16 ASCII characters

Program 310	Button Sequence	Value(s)
Trunk Equipment No.	xyyyzz, <b>Hold</b>	xx = Cabinet (01~07) yy = Slot (01~10) zz = Circuit (01~08)
01 Day 1~ 03 Day 3	<b>FB01~FB03</b> , n, <b>Spkr</b> , n1, <b>Hold</b>	n = 1. Disable 2. Detect 95ms 3. Detect 450ms n1 = Up to 32 ASCII characters
04 MOH Source	<b>FB04</b> , n, <b>Hold</b>	n = 1. Quiet Tone 2. External 1 3. External 2 4. External 3 5. External 4 6. External 5 7. External 6 8. External 7 9. External 8 10. External 9 11. External 10 12. External 11 13. External 12 14. External 13 15. External 14 16. External 15 17. Internal 17

Program 311	Button Sequence	Value(s)
01 DISA Enabled	<b>FB01</b> , n, <b>Hold</b>	n = 1. Necessary 2. Unnecessary
02 DISA Code	<b>FB02</b> , n, <b>Hold</b>	n = Up to 15 ASCII characters
03 Response Timer	<b>FB03</b> , n, <b>Hold</b>	n = 0~30
04 Idle Timer	<b>FB04</b> , n, <b>Hold</b> , <b>Hold</b>	n = 0~60

Program 313	Button Sequence	Value(s)
Trunk Number	n, <b>Hold</b> ,	n = 1~32
01 Signalling Method	<b>FB01</b> , n, <b>Hold</b>	n = 1. Nothing 2. ANI-MCI 3. ANI-Sprint 4. CLASS
02 Signalling Contents	<b>FB02</b> , n, <b>Hold</b>	n = 1. ANI and DNIS 2. ANI 3. DNIS 4. DDI
03 CLASS Equipment Position	<b>FB03</b> , xyyzz, <b>Hold</b>	xx = Cabinet (01~07) yy = Slot (01~10) zz = Circuit (01~08)

Program 315	Button Sequence	Value(s)
T1* Equipment Location (*not available in the UK & Europe)	yyzz, <b>Hold</b>	yy = Slot (01~10) zz = Circuit (01~08)
01 Coding Format	<b>FB01</b> , n, <b>Hold</b>	n = 1. None 2. PZC 3. B8ZS 4. ZCS
02 Frame Format	<b>FB02</b> , n, <b>Hold</b>	n = 1. None 2. SF mode 3. ESF mode
03 Time Slots	<b>FB03</b> , n, <b>Hold</b>	n = 1. None 2. 8 Time Slots 3. 16 Time Slots 4. 24 Time Slots
04 Receive PAD and 05 Send Pad	<b>FB04</b> or <b>FB05</b> , n, <b>Hold</b> , <b>Hold</b>	n = 1. None 2. Plus 6 dB 3. Plus 3 dB 4. Zero dB 5. Minus 3 dB 6. Minus 6 dB 7. Minus 9 dB 8. Minus 12 dB 9. Minus 15 dB

Program 316	Button Sequence	Value(s)
Channel Group	n, <b>Hold</b>	n = 1~128
01 Equipment Number	<b>FB01</b> , xxyyzz, <b>Hold</b>	xx = Cabinet (01~07) yy = Slot (01~10) zz = Circuit (01~08)
02 Trunk ID	<b>FB02</b> , n, <b>Hold</b>	n = 0~127
03 D Channel Provided	<b>FB03</b> , n, <b>Hold</b>	n = 1. D-Channel 2. SF mode
04 Backup D Channel Position	<b>FB04</b> , n, <b>Hold</b> , <b>Hold</b>	n = 1~24

Program 317	Button Sequence	Value(s)
Channel Group	n, <b>Hold</b> see <a href="#">Table 6-1 on Page 6-33</a> for details.	n = 1~128
01 Equipment Number	<b>FB01</b> , xxyyzz, <b>Hold</b>	xx = Cabinet (01~07) yy = Slot (01~10) zz = Circuit (01~08)
02 Protocol	<b>FB02</b> , n, <b>Hold</b>	n = 1. National ISDN 2. ETSI 3. TTC 4. National ISDN (Nortel)
03 ILG	<b>FB03</b> , n, <b>Hold</b>	n = 0~128
04 OLG	<b>FB04</b> , n, <b>Hold</b>	n = 0~128
06 Bearer Svc - Speech	<b>FB06</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
07 Bearer Svc - 3.1 KHz Audio	<b>FB07</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
08 Bearer Svc - 7 KHz Audio	<b>FB08</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
09 Bearer Svc - Unrestricted 64K	<b>FB09</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
10 Bearer Svc - Unrestricted 56K	<b>FB10</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
11 Bearer Svc - Unrestricted 2x64K	<b>FB11</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
12 Outgoing B Ch Select	<b>FB12</b> , n, <b>Hold</b>	n = 1. Explicit 2. Preferred 3. Any Channel
13 B Ch Selection	<b>FB13</b> , n, <b>Hold</b>	n = 1. Forward Cyclic 2. Backward Cyclic 3. Forward Terminal 4. Backward Terminal
14 Initialise Type	<b>FB14</b> , n, <b>Hold</b>	n = 1. User Entry Of SPID Auto SPID ON 2. User Entry Of SPID Auto SPID OFF 3. Auto SPID 4. None
15 Initialisation Display	<b>FB15</b> , n, <b>Hold</b>	n = Up to 4 ASCII characters
16 SPID #1	<b>FB16</b> , n, <b>Hold</b>	n = Up to 20 ASCII characters
17 SPID #2	<b>FB17</b> , n, <b>Hold</b>	n = Up to 20 ASCII characters
18 T-Wait Timer	<b>FB18</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
19 Voice Calls	<b>FB19</b> , n, <b>Hold</b>	n = 1. One 2. Two
20 Trunk Subscriber 1	<b>FB20</b> , n, <b>Hold</b>	n = Up to 10 ASCII characters
21 Trunk Subscriber 2	<b>FB21</b> , n, <b>Hold</b>	n = Up to 10 ASCII characters
22 Ignore Short Line Breaks on BRI Trunks	<b>FB22</b> , n, <b>Hold</b>	n = 1. Enable (Default) 2. Disable
23 TEI Assignment Procedure	<b>FB23</b> , n, <b>Hold</b>	n = 1. Fixed TEI Assignment (Default = 1) 2. Single TEI 3. Two TEI

Program 318	Button Sequence	Value(s)
ILG Number	n, <b>Hold</b>	n = 1~128
01 Type	<b>FB01</b> , n, <b>Hold</b>	n = 1. No DDI 2. Not Determined
02 MOH Source	<b>FB02</b> , n, <b>Hold</b>	n = 1. Quiet Tone 2. External 1 3. External 2 4. External 3 5. External 4 6. External 5 7. External 6 8. External 7 9. External 8 10. External 9 11. External 10 12. External 11 13. External 12 14. External 13 15. External 14 16. External 15 17. Internal 17
03 GCO Destination	<b>FB03</b> , n, <b>Hold</b>	0~128
04 Pooled Line Group	<b>FB04</b> , n, <b>Hold</b>	0~128
05 Audio Day1 ~ 10 Data Night	<b>FB05~FB10</b> , n, <b>Spkr</b> , n1, <b>Hold</b>	n = 1. No Data 2. Dialling Digits 3. DISA 4. Built-in modem 5. Night Bell n1 = Up to 32 ASCII characters
11 VMID for DNIS No.	<b>FB11</b> , n, <b>Hold</b>	n = Up to 16 ASCII characters
12 DNIS Name	<b>FB12</b> , n, <b>Hold</b> , <b>Hold</b>	n = Up to 16 ASCII characters
13 Not Used		
14 Not Used		

Program 319	Button Sequence	Value(s)
01 Day1 Destination 02 Day2 Destination 03 Night Destination	<b>FB01~FB03</b> , n, <b>Spkr</b> , n1, <b>Hold</b> , <b>Hold</b>	n = 1. None 2. Dialling Digits 3. Night Bell n1 = Up to 32 ASCII characters

Program 320	Button Sequence	Value(s)
00 RPTU Equipment No.	xyyyzz, <b>Hold</b>	xx = Cabinet (01~07) yy = Slot (01~10) zz = Circuit (01~08)
01~23 B Channel	<b>FB01~FB23</b> , n, <b>Hold</b> , <b>Hold</b> see <a href="#">Table 6-3 on Page 6-41</a> for details.	n = 1. Enable 2. Disable

Program 321	Button Sequence	Value(s)
OLG Number	n, <b>Hold</b>	n = 1~128
01 Default Number	<b>FB01</b> , n, <b>Hold</b>	n = Up to 10 digits
02 Number Prefix	<b>FB02</b> , n, <b>Hold</b>	n = Up to 10 digits
03 Number Verification	<b>FB03</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
04 Default Number 2	<b>FB04</b> , n, <b>Hold</b> , <b>Hold</b>	n = Up to 10 digits

Program 322	Button Sequence	Value(s)
OLG Number	n, <b>Hold</b>	n = 1~128
01 Destination Type	<b>FB01</b> , n, <b>Hold</b>	n = <ol style="list-style-type: none"> <li>1. Prime DN (0~99999)</li> <li>2. Group Exchange (1~128)</li> <li>3. Pooled Line Group (1~128)</li> </ol>
02 Destination	<b>FB02</b> , n, <b>Hold</b>	n = Up to 5 ASCII characters
03 DDI Number	<b>FB03</b> , n, <b>Hold</b> , <b>Hold</b>	n = Up to 7 ASCII characters

Program 323	Button Sequence	Value(s)
Channel Group	n, <b>Hold</b>	n = 1~128
01 Index	<b>FB01</b> , n, <b>Hold</b>	n = 1~128
02 Type of Service	<b>FB02</b> , n, <b>Hold</b>	n = <ol style="list-style-type: none"> <li>1. No Data</li> <li>2. POTS</li> <li>3. FX</li> <li>4. Tie line (Enbloc)</li> <li>5. Tie line (Cut through)</li> <li>6. Intra LATA Out WATS</li> <li>7. Banded Out WATS</li> <li>8. Inter LATA Out WATS</li> <li>9. INWATS</li> </ol>
03 Facility Code	<b>FB03</b> , n, <b>Hold</b>	n = 00~31
04 Service Parameter	<b>FB04</b> , n, <b>Hold</b>	n = Up to 5 digits
05 Network ID	<b>FB05</b> , n, <b>Hold</b>	n = 3~4 digits
06 ILG	<b>FB06</b> , n, <b>Hold</b>	n = 0~128
07 OLG	<b>FB07</b> , n, <b>Hold</b>	n = 0~128
08 Min Calls Zone 1	<b>FB08</b> , n, <b>Hold</b>	n = 0~47
09 Max Calls Zone 1	<b>FB09</b> , n, <b>Hold</b>	n = 0~47
10 Min Calls Zone 2	<b>FB10</b> , n, <b>Hold</b>	n = 0~47
11 Max Calls Zone 2	<b>FB11</b> , n, <b>Hold</b>	n = 0~47
12 Min Calls Zone 3	<b>FB12</b> , n, <b>Hold</b>	n = 0~47
13 Max Calls Zone 3	<b>FB13</b> , n, <b>Hold</b> , <b>Hold</b>	n = 0~47

Program 324	Button Sequence	Value(s)
Channel Group	n, <b>Hold</b>	n = 1~128
01 Start Zone 1	<b>FB01</b> , hhmm, <b>Hold</b>	hh = hour (00~23) mm = minute (00~59) 9999 to delete
02 Start Zone 2	<b>FB02</b> , hhmm, <b>Hold</b>	
03 Start Zone 3	<b>FB03</b> , hhmm, <b>Hold</b> , <b>Hold</b>	

## 400 Series Programs

Program 400	Button Sequence	Value(s)
01 Day/Night Mode	<b>FB01</b> , n, <b>Hold</b>	n = 1. Day 1 2. Day 2 3. Night
02 Called Number Index	<b>FB02</b> , n, <b>Hold</b>	n = 1~4
03 Emergency Call Destination	<b>FB03</b> , n, <b>Hold</b>	n = Up to 32 ASCII characters
04 Action	<b>FB04</b> , n, <b>Hold</b> , <b>Hold</b>	n = 1. Modify 2. Insert

Program 404	Button Sequence	Value(s)
00 Attendant Group Member	n, <b>Hold</b>	n = 1~8
01 Call Distribution Method	<b>FB01</b> , n, <b>Hold</b>	n = 1. Most Idle First 2. Next Available First 3. Broadcast
02 Alternate Attendant Destination	<b>FB02</b> , n, <b>Hold</b>	n = Up to 32 ASCII characters
03 Overflow Time	<b>FB03</b> , n, <b>Hold</b>	n = 0~180
04 Group Overflow Destination	<b>FB04</b> , n, <b>Hold</b>	n = Up to 32 ASCII characters
05 VMID Code SMDI	<b>FB05</b> , n, <b>Hold</b>	n = Up to 10 ASCII characters
08 ICI1~17 ICI10 • ILG1 • ILG2 • ILG3 • ILG4	<b>FB01</b> , n, <b>Hold</b> , <b>Hold</b>	n = 0~128

## 500 Series Programs

Program 500	Button Sequence	Value(s)
00 SCF Number	n, <b>Hold</b>	n = 1~32
01 Call Type	<b>FB01</b> , n, <b>Hold</b>	n = 1. Exchange Loop Grd 2. DDI 3. Tie 4. Ring Transfer 5. Internal
02 Period	<b>FB02</b> , n, <b>Hold</b>	n = 1. Day 2. Off Day2 3. Night
03 Telephone Status	<b>FB03</b> , n, <b>Hold</b>	n = 1. Busy 2. Off No Answer 3. Busy No Answer 4. DND
04 Destination 1	<b>FB04</b> , n, <b>Hold</b>	n = Up to 32 ASCII characters
05 Destination 2	<b>FB05</b> , n, <b>Hold</b> , <b>Hold</b>	n = Up to 32 ASCII characters

Program 501	Button Sequence	Value(s)
00 Speed Dial Bin	n, <b>Hold</b>	n = 000~799
01 Number	<b>FB01</b> , n, <b>Hold</b>	n = Up to 32 digits
02 Name	<b>FB02</b> , n, <b>Hold</b> , <b>Hold</b>	n = Up to 8 ASCII characters

Program 502	Button Sequence	Value(s)
00 Prime DN	n, <b>Hold</b>	n = Up to 5 digits
01 PG01~16 PG16	<b>FB01~FB16</b> , n, <b>Hold</b>	n = 1. On 2. Off
17 All Paging Group	<b>FB17</b> , n, <b>Hold</b>	
18 All Emergency Page Group	<b>FB18</b> , n, <b>Hold</b> , <b>Hold</b>	

Program 503	Button Sequence	Value(s)
00 Zone Relay Number	n, <b>Hold</b>	n = 1~8 • BIOU1 = 1~4 • BIOU2 = 5~8
01 PG01~16 PG16	<b>FB01~FB16</b> , n, <b>Hold</b>	n = 1. On 2. Off
17 All Page Group	<b>FB17</b> , n, <b>Hold</b>	
18 All Emergency Page Group	<b>FB18</b> , n, <b>Hold</b>	
19 BGM Mute Relay	<b>FB18</b> , n, <b>Hold</b> , <b>Hold</b>	n = 0~8 • BIOU1 = 1~4 • BIOU2 = 5~8

Program 504	Button Sequence	Value(s)
00 SCF Number	n, <b>Hold</b>	n = 1~32
01 Telephone Status	<b>FB01</b> , n, <b>Hold</b> , <b>Hold</b>	n = 1. No Data 2. Busy 3. No Ans 4. Busy No Ans 5. DND

Program 506	Button Sequence	Value(s)
Account Code	n, <b>Hold</b>	n = Up to 15 ASCII characters
01 Verified Flag	<b>FB01</b> , n, <b>Hold</b>	n = 1. Set 2. No Set
02 DRL	<b>FB02</b> , n, <b>Hold</b>	n = 0~16
03 FRL	<b>FB03</b> , n, <b>Hold</b>	n = 0~16
04 Network COS	<b>FB04</b> , n, <b>Hold</b> , <b>Hold</b>	n = 1~32

Program 507	Button Sequence	Value(s)
00 Door Phone Number	n, <b>Hold</b>	n = 1~24
01 DDCB Equipment No.	<b>FB01</b> , xxyyzz, <b>Hold</b>	xx = Cabinet (01~07) yy = Slot (01~10) zz = Circuit (01~08)
02 Tenant Number	<b>FB02</b> , n, <b>Hold</b>	n = 0~8
04 Ring Duration	<b>FB04</b> , n, <b>Hold</b>	n = 3~30
05 LCD Name Display	<b>FB05</b> , n, <b>Hold</b>	n = 1~16
06 Day1 Destination	<b>FB06</b> , n, <b>Hold</b>	n = Up to 5 ASCII characters
07 Day2 Destination	<b>FB07</b> , n, <b>Hold</b>	n = Up to 5 ASCII characters
08 Night Destination	<b>FB08</b> , n, <b>Hold</b> , <b>Hold</b>	n = Up to 5 ASCII characters



Program 508	Button Sequence	Value(s)
00 Door Lock Number	n, <b>Hold</b>	n = 1~10
01 Interface Type	<b>FB01</b> , n, <b>Hold</b>	n = 1. None 2. BIOU 3. DDCB
02 BIOU Relay Number	<b>FB02</b> , n, <b>Hold</b>	n = 0~8
03 DDCB Equipment	<b>FB03</b> , xxyyzz, <b>Hold</b>	xx = Cabinet (01~07) yy = Slot (01~10) zz = Circuit (01~08)

Program 509	Button Sequence	Value(s)
01 Override COS	<b>FB01</b> , n, <b>Hold</b>	n = 1~32
02 Override DRL	<b>FB02</b> , n, <b>Hold</b>	n = 1~16
03 Override FRL	<b>FB03</b> , n, <b>Hold</b>	n = 1~16
04 Override QPL	<b>FB04</b> , n, <b>Hold</b> , <b>Hold</b>	n = 1~16

Program 510	Button Sequence	Value(s)
00 COS Override Index	n, <b>Hold</b>	n = 1~16
01 COS Override Code	<b>FB01</b> , n, <b>Hold</b>	n = Up to 8 ASCII characters
02 Set COS	<b>FB02</b> , n, <b>Hold</b>	n = 1~32
03 Set DRL	<b>FB03</b> , n, <b>Hold</b>	n = 1~16
04 Set FRL	<b>FB04</b> , n, <b>Hold</b>	n = 1~16
05 Set QPL	<b>FB05</b> , n, <b>Hold</b>	n = 1~16
06 Set Network COS	<b>FB06</b> , n, <b>Hold</b> , <b>Hold</b>	n = 1~32

Program 512	Button Sequence	Value(s)
01 Caller ID Field	<b>FB01</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
02 B Record for Abandoned Call	<b>FB02</b> , n, <b>Hold</b>	
03 ANI	<b>FB03</b> , n, <b>Hold</b>	
04 Authorisation Code	<b>FB04</b> , n, <b>Hold</b>	
05 End-of-Record CR	<b>FB05</b> , n, <b>Hold</b> , <b>Hold</b>	

Program 513	Button Sequence	Value(s)
00 ILG	n, <b>Hold</b>	n = 1~128
01 Generate SMDR Records	<b>FB01</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
02 CPN Field Indication	<b>FB02</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
03 B Record for Incoming Call	<b>FB03</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
04 Abandoned Call Record Output	<b>FB04</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
05 Display Transferred Call Records	<b>FB05</b> , n, <b>Hold</b> , <b>Hold</b>	n = 1. Source 2. Destination

Program 514	Button Sequence	Value(s)
00 OLG	n, <b>Hold</b>	n = 1~128
01 SMDR Record Display	<b>FB02</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
02 Outgoing Records	<b>FB03</b> , n, <b>Hold</b> , <b>Hold</b>	n = 1. Enable 2. Disable
03 Charged Station	<b>FB03</b> , n, <b>Hold</b> , <b>Hold</b>	n = 1. Source 2. Destination
04 Record O/G Calls that are Abandoned During Set Up	<b>FB04</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable (Default)

Program 515	Button Sequence	Value(s)
00 BIOU (1 or 2)	n, <b>Hold</b>	n = 1 or 2
01 BIOU Relay 1 or 5	<b>FB01</b> , n, <b>Hold</b>	n = 1. Not Use 2. Ext Paging 3. Night Bell 4. Night Relay 5. Door Lock
02 BIOU Relay 2 or 6	<b>FB02</b> , n, <b>Hold</b>	
03 BIOU Relay 3 or 7	<b>FB03</b> , n, <b>Hold</b>	
04 BIOU Relay 4 or 8	<b>FB04</b> , n, <b>Hold</b> , <b>Hold</b>	

Program 516	Button Sequence	Value(s)
00 PDN	n, <b>Hold</b>	n = Up to 5 ASCII characters
01 Speed Dial Bin	<b>FB01</b> , n, <b>Hold</b>	n = 00~99
02 Number	<b>FB02</b> , n, <b>Hold</b>	n = Up to 32 ASCII characters
03 Name	<b>FB03</b> , n, <b>Hold</b> , <b>Hold</b>	n = Up to 8 ASCII characters

Program 517	Button Sequence	Value(s)
00 Multiple Calling Group, (MCG), Index	<b>FB00</b> , n, <b>Hold</b>	n = 1~64 (Default None)
01 MCG Pilot Number	<b>FB01</b> , n, <b>Hold</b>	n = 1~5 digits (Default None)
02 MCG Delay 1 Timer Value	<b>FB02</b> , n, <b>Hold</b>	n = 1~180 sec (Default 12 sec)
03 MCG Delay 1 Timer Value	<b>FB03</b> , n, <b>Hold</b>	n = 1~180 sec (Default 24 sec)
04 MCG System Call Forward Template	<b>FB04</b> , n, <b>Hold</b>	n = 1~32 sec (Default 0)
05 MCG Voice Mail ID	<b>FB05</b> , n, <b>Hold</b>	n = 1~16 ASCII characters (Default No Data)
06 MCG Voice Mail MW Port	<b>FB06</b> , n, <b>Hold</b>	n = 1~5 Digits (Default No Data)
07 MCG COS Day 1 Mode	<b>FB07</b> , n, <b>Hold</b>	n = 1~32 (Default 1)
08 MCG COS Day 2 Mode	<b>FB08</b> , n, <b>Hold</b>	n = 1~32 (Default 1)
09 MCG COS Night Mode	<b>FB09</b> , n, <b>Hold</b>	n = 1~32 (Default 1)

Program 518	Button Sequence	Value(s)
00 Multiple Calling Group, (MCG), Index	<b>FB00</b> , n, <b>Hold</b>	n = 1~64 (Default None)
01 MCG List Index Number	<b>FB01</b> , n, <b>Hold</b>	n = 1~25 digits (Default None)
02 MCG Destination Type	<b>FB02</b> , n, <b>Spkr</b> , <b>xxxxx Hold</b>	n = N=1: No Data, 2: Dialling Digits X= 1~5 digits, i.e Extension number
03 MCG Ringing Option	<b>FB03</b> , n, <b>Hold</b>	n = 1. Immediate 2. Delay 1 3. Delay 2

Program 519	Button Sequence	Value(s)
00 PDN	n, <b>Hold</b>	n = Up to 5 ASCII characters
01 Delet a Multiple Calling Group, (MCG), Index	<b>FB01</b> , n, <b>Hold</b>	n = 1~64 (Default None)
02 Number	<b>FB02</b> , n, <b>Hold</b>	n = Up to 32 ASCII characters
03 Name	<b>FB03</b> , n, <b>Hold</b> , <b>Hold</b>	n = Up to 8 ASCII characters

Program 520	Button Sequence	Value(s)
01 Local Area Code	<b>FB01</b> , n, <b>Hold</b>	n = 3 digits
02 Local Route Plan	<b>FB02</b> , n, <b>Hold</b> , <b>Hold</b>	n = 1~64

Program 521	Button Sequence	Value(s)
00 Analysis Digits	n, <b>Hold</b>	n = Up to 11 ASCII characters Wild Card uses <b>n</b> and <b>X</b>
01 Route Plan Number	<b>FB01</b> , n, <b>Hold</b>	n = 0~64

Program 522	Button Sequence	Value(s)
00 Exception Route Plan Table	n, <b>Hold</b>	n = Up to 11 ASCII characters Wild Card uses <b>n</b> and <b>X</b>
01 Exception Route Plan	<b>FB01</b> , n, <b>Hold</b>	n = 1~64

Program 523	Button Sequence	Value(s)
00 Route Plan	n, <b>Hold</b>	n = 1~64
01 Type of Day	<b>FB01</b> , n, <b>Hold</b>	n = 1. Weekday 2. Weekend 3. Holiday
02 LCR Time of Day	<b>FB02</b> , n, <b>Hold</b>	n = 1. Time Zone1 2. Time Zone2 3. Night
03 Station LCR Group	<b>FB03</b> , n, <b>Hold</b>	n = 1~16
04 Route Choice Table	<b>FB04</b> , n, <b>Hold</b> , <b>Hold</b>	n = 1~128

Program 524	Button Sequence	Value(s)
00 Route Choice Table	n, <b>Hold</b>	n = 1~128
01 Route Definition 1	<b>FB01</b> , n, <b>Hold</b>	n = 1~128
02 Route Definition 2	<b>FB02</b> , n, <b>Hold</b>	n = 1~128
03 Route Definition 3	<b>FB03</b> , n, <b>Hold</b>	n = 1~128
04 Route Definition 4	<b>FB04</b> , n, <b>Hold</b>	n = 1~128
05 Route Definition 5	<b>FB05</b> , n, <b>Hold</b>	n = 1~128
06 Route Definition 6	<b>FB06</b> , n, <b>Hold</b> , <b>Hold</b>	n = 1~128

Program 525	Button Sequence	Value(s)
00 Route Definition	n, <b>Hold</b>	n = 1~128
01 OLG Number	<b>FB01</b> , n, <b>Hold</b>	n = 1~128
02 Digit Mod Index	<b>FB02</b> , n, <b>Hold</b> , <b>Hold</b>	n = 1~128

Program 526	Button Sequence	Value(s)
00 Digit Modification Index	n, <b>Hold</b>	n = 1~128
01 Delete Digits	<b>FB01</b> , n, <b>Hold</b>	n = 1~10
02 Add Leading Digits	<b>FB02</b> , n, <b>Hold</b>	n = Up to 23 ASCII characters
03 Add Trailing	<b>FB03</b> , n, <b>Hold</b> , <b>Hold</b>	n = Up to 23 ASCII characters

Program 527	Button Sequence	Value(s)
00 Holiday 01 Add/Delete	YYYYMMDD, <b>Hold</b> , <b>FB01</b> , n, <b>Hold</b> , <b>Hold</b>	YYYY = Year MM = Month DD = Day n = 1. Add 2. Delete

Program 528	Button Sequence	Value(s)
01 Monday~07 Sunday	<b>FB01</b> ~ <b>FB07</b> , n, <b>Hold</b> , <b>Hold</b>	n = 1. Weekday 2. Weekend 3. Holiday

Program 529	Button Sequence	Value(s)
00 Route Plan Time Zone	n, <b>Hold</b>	n = 1~64
01 Day Type for Time Zone	<b>FB01</b> , n, <b>Hold</b>	n = 1. Weekday 2. Weekend 3. Holiday
02 Time Zone	<b>FB02</b> , n, <b>Hold</b>	n = 1. Zone1 2. Zone2 3. Zone3
03 Time Zone Start Time	<b>FB03</b> , hhmm, <b>Hold</b> , <b>Hold</b>	hh = hour (00~23) mm = minute (00~59)

Program 530	Button Sequence	Value(s)
00 Screening Dial String	n, <b>Hold</b>	n = Up to 7 ASCII characters
01 Add String to Table	<b>FB01</b> , n, <b>Hold</b>	n = 1. Add 2. Delete
02 DR Action	<b>FB02</b> , n, <b>Hold</b>	n = 1. Bypass 2. Skip and Apply
03 LCR Action	<b>FB03</b> , n, <b>Hold</b>	n = 1. Apply 2. Skip and Apply
04 Digit Modification Action	<b>FB04</b> , n, <b>Hold</b>	n = 1. Apply 2. Retain 3. Discard
05 Skip Length	<b>FB05</b> , n, <b>Hold</b> , <b>Hold</b>	n = 0~5

Program 531	Button Sequence	Value(s)
00 OLG	n, <b>Hold</b>	n = 1~128
01 Behind Centrex Access Code	<b>FB01</b> , n, <b>Hold</b>	n = Up to 8 ASCII characters
02 Add or Delete Code	<b>FB02</b> , n, <b>Hold</b>	n = 1. Add 2. Delete
03 DR Action for Centrex	<b>FB03</b> , n, <b>Hold</b>	n = 1. Bypass 2. Skip and Apply
04 Skip Length	<b>FB04</b> , n, <b>Hold</b>	n = 0~8
05 Pause Insertion	<b>FB05</b> , n, <b>Hold</b> , <b>Hold</b>	n = 0~10

Program 532	Button Sequence	Value(s)
00 DRL Number	n, <b>Hold</b> , <b>FB01</b> , n1, <b>Hold</b> , <b>Hold</b>	n = Up to 8 digits
01 Table Type		n1 = 1. Allow 2. Deny

Program 533	Button Sequence	Value(s)
00 DRL Number	n, <b>Hold</b> , <b>FB01</b> , n1, <b>Hold</b> , n2, <b>Hold</b> , <b>Hold</b>	n = Up to 8 digits
01 Dial String		n1 = 1. Allow 2. Deny
02 Add or Delete		n2 = 1. Add 2. Delete

Program 534	Button Sequence	Value(s)
00 DRL Number	n, <b>Hold</b> , <b>FB01</b> , n1, <b>Hold</b> , n2, <b>Hold</b> , <b>Hold</b>	n = Up to 8 digits
01 Dial String		n1 = Up to 11 digits
02 Add/Delete		n2 = 1. Add 2. Delete

Program 535	Button Sequence	Value(s)
01 Set Extn No to Used when LCR Call is Source, is from a Trunk or Tie Line Circuit	<b>FB01</b> , n, <b>Hold</b>	n = 1~3 digits (Default No Data)
02 LCR PIN Number 1	<b>FB02</b> , n, <b>Hold</b>	n = 1~22 digits (Default No Data)
03 LCR PIN Number 2	<b>FB03</b> , n, <b>Hold</b>	n = 1~22 digits (Default No Data)
04 LCR PIN Number 3	<b>FB04</b> , n, <b>Hold</b>	n = 1~22 digits (Default No Data)
05 LCR PIN Number 4	<b>FB05</b> , n, <b>Hold</b>	n = 1~22 digits (Default No Data)
06 LCR PIN Number 5	<b>FB06</b> , n, <b>Hold</b>	n = 1~22 digits (Default No Data)
07 LCR PIN Number 6	<b>FB07</b> , n, <b>Hold</b>	n = 1~22 digits (Default No Data)
08 LCR PIN Number 7	<b>FB08</b> , n, <b>Hold</b>	n = 1~22 digits (Default No Data)
09 LCR PIN Number 8	<b>FB09</b> , n, <b>Hold</b>	n = 1~22 digits (Default No Data)

Program 540	Button Sequence	Value(s)
00 Pilot DN	n, <b>Hold</b>	n = Up to 8 ASCII characters
01 After Shift Type	<b>FB01</b> , n, <b>Hold</b>	n = 1. No Data 2. Dialling Digits 3. Night Bell
02 After Shift Destination	<b>FB02</b> , n, <b>Hold</b>	n = Up to 32 ASCII characters
03 Voice Mail ID	<b>FB03</b> , n, <b>Hold</b> , <b>Hold</b>	n = Up to 16 ASCII characters

Program 550	Button Sequence	Value(s)
00 Emergency Call Group Number	n, <b>Hold</b>	n = 1~8
01 OLG1~08 OLG8	<b>FB01~FB08</b> , n, <b>Hold</b> , <b>Hold</b>	n = Expanded = 1~128 Basic = 1~47

Program 551	Button Sequence	Value(s)
01 Emergency Access Code 1	<b>FB01~FB08</b> , n, <b>Hold</b>	n = 1~5 digits. UK = 999 or 112 (Default No Data)
02 Emergency Access Code 2	<b>FB02~FB08</b> , n, <b>Hold</b>	n = 1~5 digits. UK = 999 or 112 (Default No Data)
03 Emergency Access Code 3	<b>FB03~FB08</b> , n, <b>Hold</b>	n = 1~5 digits. UK = 999 or 112 (Default No Data)

Program 570	Button Sequence	Value(s)
01 Verified Digit Length	<b>FB01</b> , n, <b>Hold</b>	n = 4~15
02 Registered Digit Length	<b>FB02</b> , n, <b>Hold</b> , <b>Hold</b>	n = 4~15

Program 571	Button Sequence	Value(s)
01 Exception Number 1	<b>FB01</b> , n, <b>Hold</b>	n = Up to 4 digits
02 Exception Number 2	<b>FB02</b> , n, <b>Hold</b>	
03 Exception Number 3	<b>FB03</b> , n, <b>Hold</b>	
04 Exception Number 4	<b>FB04</b> , n, <b>Hold</b> , <b>Hold</b>	

Program 576	Button Sequence	Value(s)
00 Tenant Number	n, <b>Hold</b>	n = 1~8
01 Page Group Number	<b>FB01</b> , n, <b>Hold</b> , <b>Hold</b>	n = 0~16

Program 577	Button Sequence	Value(s)
Ckt Type/Number	n, <b>Hold</b>	n = Up to 6 digits
01 Prime DN	<b>FB01</b> , n, <b>Hold</b> , <b>Hold</b>	n = Up to 5 digits

Program 579	Button Sequence	Value(s)
01 VM ID to DDI/DNIS Association	<b>FB01</b> , n, <b>Hold</b>	n = 1. Before Answer 2. Before and After
02 Cancellation Method for VM MW	<b>FB02</b> , n, <b>Hold</b>	n = 1. Auto and Access Code Cancel 2. Access Code Cancel
03 Message Desk Number	<b>FB03</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
04 Output of CLASS, ANI and DNIS	<b>FB04</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable

Program 579	Button Sequence	Value(s)
05 Calling Number Digits Sent to VM	<b>FB05, n, Hold</b>	n = 2~10
06 Blank Digits Sent to VM	<b>FB06, n, Hold</b>	n = 1. 1985 2. 1991
07 Auto Cancel of VM and MW	<b>FB07, n, Hold</b>	n = 1. Enable 2. Disable
08 DTMF Duration	<b>FB08, n, Hold</b>	n = 1. 80 ms 2. 160 ms
09 LCD Control of Voice Mail	<b>FB09, n, Hold</b>	n = 1. Enable 2. Disable
10 Central VM Callback	<b>FB10, n, Hold</b>	n = Up to 7 ASCII characters
11 CFWD All Call Record	<b>FB11, n, Hold</b>	n = Up to 4 ASCII characters
12 CFWD Busy Record	<b>FB12, n, Hold</b>	n = Up to 4 ASCII characters
13 CFWD No Answer Record	<b>FB13, n, Hold</b>	n = Up to 4 ASCII characters
14 Direct Call	<b>FB14, n, Hold</b>	n = Up to 4 ASCII characters
15 Retrieve Messages	<b>FB15, n, Hold</b>	n = Up to 4 ASCII characters
16 Voice Main DN	<b>FB16, n, Hold</b>	n = Up to 7 ASCII characters
17 Length of VM ID	<b>FB17, n, Hold, Hold</b>	n = 1~10

Program 580	Button Sequence	Value(s)
00 VM Port DN	n, <b>Hold</b>	n = Up to 5 ASCII characters
01 Control Method	<b>FB01, n, Hold</b>	n = 1. Inband 2. SMDI
02 Send A/D Tone	<b>FB02, n, Hold</b>	n = 1. Enable 2. Disable
03 Send B Tone	<b>FB03, n, Hold</b>	n = 1. B Tone 2. No Tone 3. B Tone and Extension Number
04 End-to-end	<b>FB04, n, Hold</b>	n = 1. Enable 2. Disable

## 600 Series Programs

Program 650	Button Sequence	Value(s)
00 OLG Number	n, <b>Hold</b>	n = 1~128
01 Behind Centrex	<b>FB01, n, Hold</b>	n = 1. Enable 2. Disable
02 Assume 9	<b>FB02, n, Hold</b>	n = 1. Enable 2. Disable
03 Pause Timer	<b>FB03, n, Hold, Hold</b>	n = 0~5

Program 651	Button Sequence	Value(s)
00 Node ID	n, <b>Hold</b>	n = Up to 6 ASCII characters
01 Pvt Ntwk Route Choice Table Number	<b>FB01, n, Hold, Hold</b>	n = 1~64, 0 = delete

Program 653	Button Sequence	Value(s)
00 Private Route Choice Table Number	n, <b>Hold</b>	n = 1~64, 0 = delete
01 Route Definition Table~06 Route Definition Table	<b>FB01~FB06</b> , n, <b>Hold, Hold</b>	n = 1~64, 0 = delete

Program 654	Button Sequence	Value(s)
00 Private Network Route Definition	n, <b>Hold</b>	n = 1~64
01 OLG	<b>FB01</b> , n, <b>Hold</b>	n = 1~128 for Strata CTX670 1~32 for Strata CTX100 0 = delete
02 Digit Modification Table	<b>FB02</b> , n, <b>Hold, Hold</b>	n = 1~64, 0 = delete

Program 655	Button Sequence	Value(s)
00 Private Digit Modification Table	n, <b>Hold</b>	n = 1~64
01 Deleted Digits	<b>FB01</b> , n, <b>Hold</b>	n = 1~10, 0 = delete
02 Insert Leading Digits	<b>FB02</b> , n, <b>Hold, Hold</b>	n = Up to 23 digits

Program 656	Button Sequence	Value(s)
01 Primary Node ID	<b>FB01</b> , n, <b>Hold</b>	n = Up to 6 ASCII characters
02 Primary Overlap Code	<b>FB02</b> , n, <b>Hold</b>	n = Up to 4 ASCII characters
03 Node ID 2 Overlap Code 2	<b>FB03</b> , n, <b>Spkr</b> , n1, <b>Hold</b>	n = Up to 6 ASCII characters n1 = Up to 4 ASCII characters
04 Node ID 3 Overlap Code 3	<b>FB04</b> , n, <b>Spkr</b> , n1, <b>Hold</b>	n = Up to 6 ASCII characters n1 = Up to 4 ASCII characters
05 Node ID 4 Overlap Code 4	<b>FB05</b> , n, <b>Spkr</b> , n1, <b>Hold, Hold</b>	n = Up to 6 ASCII characters n1 = Up to 4 ASCII characters

Program 657	Button Sequence	Value(s)
Network COS	n, <b>Hold</b>	n = 1~32
01 Local COS	<b>FB01</b> , n, <b>Hold</b>	n = 1~32
02 Off-hook Call Announce	<b>FB02</b> , n, <b>Hold</b>	n = 1. Enable 2. Disable
03 System Speed Dial	<b>FB03</b> , n, <b>Hold</b>	
04 COS Override	<b>FB04</b> , n, <b>Hold</b>	
05 TGAC Override	<b>FB05</b> , n, <b>Hold, Hold</b>	

Program 658/659/660	Button Sequence	Value(s)
Type	n, <b>Hold</b>	n = 1. Outbound 2. Inbound
Network DRL/FRL/QPL	<b>FB01</b> , n, <b>Hold</b>	n = 1~16
Local DRL/FRL/QPL	<b>FB02</b> , n, <b>Hold, Hold</b>	n = 1~16



## 800 Series Programs

Program 801	Button Sequence	Value(s)
00 LAN Port Number	n, <b>Hold</b>	n = 1~9
01 Protocol	<b>FB01</b> , n, <b>Hold</b>	n = 1. TCP 2. UDP
02 PC Operation Type	<b>FB02</b> , n, <b>Hold</b>	n = 1. Server 2. Client
03 Data Flow	<b>FB03</b> , n, <b>Hold</b>	n = 1. Synchronization 2. Asynchronization
04 Server Port Number	<b>FB04</b> , n, <b>Hold</b>	n = 0~65535
05 Client IP Address	<b>FB05</b> , n, <b>Hold</b>	n = 0~255
06 Client Port Number	<b>FB06</b> , n, <b>Hold</b>	n = 0~65535
07 Read Retry Number	<b>FB07</b> , n, <b>Hold</b>	n = 0~10
08 Write Retry Number	<b>FB08</b> , n, <b>Hold</b> , <b>Hold</b>	n = 0~10

Program 803	Button Sequence	Value(s)
00 Logical Device Number	n, <b>Hold</b> see <a href="#">Table 4-5 on Page 4-35</a>	n = 100 = SMDR 300 or 301 = SMDI 200~208 = CTI LAN Devices of PCs
01 Device Connection	<b>FB01</b> , n, <b>Hold</b>	n = 1. None 2. LAN 3. RS-232
02 Device Port Number	<b>FB02</b> , n, <b>Hold</b>	n = 1~4 (for RS-232) 1~9 (for LAN)

Program 804	Button Sequence	Value(s)
00 BSIS Port	n, <b>Hold</b>	n = 1~4
01 Port Speed	<b>FB01</b> , n, <b>Hold</b>	n = 1. 300 2. 1200 3. 2400 4. 4800 5. 9600 6. 19200 7. 38400 8. 57600
02 Port Parity	<b>FB02</b> , n, <b>Hold</b>	n = 1. None 2. Even 3. Odd
03 Data Bits	<b>FB03</b> , n, <b>Hold</b>	n = 1. 7 Bits 2. 8 Bits
04 Flow Control	<b>FB04</b> , n, <b>Hold</b>	n = 1. None 2. Flow
05 Wait Timer	<b>FB05</b> , n, <b>Hold</b> , <b>Hold</b>	n = 0~255

**Note** See next section for “900 Series Programs” on page A-56.

# Maintenance Procedures

This section provides Strata CTX maintenance procedures and program commands (900 series) that can be activated from the programming telephone. For SmartMedia, refer to [“908 SmartMedia” on page 9-5](#).

## Data Backup

1. Format the SmartMedia using [“Format/Unmount SmartMedia” on page A-63](#) (Program 908).
2. Insert the formatted SmartMedia into Strata CTX.
3. Backup data using [“Data Backup” on page A-65](#) (Program 910). LED Indicators should show the following:
  - ✦ **FB01~FB03** solid red light.
  - ✦ **FB04** intermittent green.
4. Press **FB01** and choose Backup by pressing **1** on the telephone button pad.
5. Press **Hold**. Backup starts. The LED indicator for **FB04** consistently blinks green during backup.

**Note** Do not press **Hold** while backup is being performed.

Backup for programmed data starts.

6. When Backup is complete press **#** twice.

## Backup Progress Indicator

You can monitor backup progress by pressing the **FB02** or **FB03** buttons as follows. See [“Data Backup” on page A-65](#) for more details.

If the value displayed in the LCD is increasing each time **FB03** is pressed, the backup is proceeding successfully.

When the value displayed in the LCD for **FB03** and **FB02** are the same, the backup process is complete.

In addition the LED indicator for **FB04** returns to an intermittent green to indicate backup completion.

## Backup Completion Indicator

You can verify completion of the backup by doing one of the following:

- ◆ Press **FB04**. If the LCD displays **\*1:ALL\_OK** the backup was successful.
- ◆ When the value displayed in the LCD for **FB03** and **FB02** are the same, the backup process is complete.
- ◆ The LED indicator for **FB04** returns to an intermittent green to indicate backup completion.

Use the SmartMedia Read/Write to read SmartMedia data. Verify completion of the back up by viewing the **default.dat** file in the **Progdata** folder. If **default.dat**'s file size is greater than zero, the backup was completed successfully.

## Restoring Programmed Data

To restore data from a backup performed onto SmartMedia, follow the directions below:

1. Insert the SmartMedia card that has the system's default.dat file (under the PROGDATA folder) into the Strata CTX SmartMedia slot.
2. Run [“System Initialise” on page A-56](#) (Program 900).

Restoring data takes anywhere from 10 minutes to one hour for completion, depending on the size of the database (default.dat file). When the programming telephone LCD becomes active, enter the programming mode and attempt to enter your password. Restore is complete if the system accepts the password and enables you to enter programming mode.

## Local Update

### Strata CTX100 Update

The Update process is used to change the Strata CTX software version and restore programmed data. The new software is first loaded on the SmartMedia card of the Strata CTX processor. It is then transferred to the Strata CTX processor recall RAM. The Strata CTX programmed data is then restored.

---

**CAUTION!** This operation will take the system out of service.

---

1. Prepare a SmartMedia card that contains a backup of the Strata CTX programmed data.
  - ✦ Backup the customer database onto the SmartMedia card using the Backup Data procedure. This operation writes the **default.dat** file under the PROGDATA directory to the SmartMedia card (see preceding Data Backup procedure).
  - ✦ Pull out the SmartMedia card and label it **“Strata CTX backup data.”**
2. Prepare another SmartMedia card that contains the new Strata CTX software file used to update the system software.
  - ✦ Obtain the Strata CTX operating software file (nhs.prg) from Toshiba.
  - ✦ On SmartMedia card, permit write operation (remove silver write protect seal).
  - ✦ If using a Strata CTX formatted SmartMedia card, install SmartMedia card into a PC SmartMedia reader/writer, make sure the PROGDATA folder is empty.

**Note** If the PROGDATA folder contains the default.dat file, move it to a safe place. The **default.dat** is the Strata CTX Programmed data.

- ✦ Insert the SmartMedia card into Strata CTX processor SmartMedia socket and activate the Forced Format command using Program 908; then Unmount SmartMedia using Program 908.
- ✦ Install SmartMedia card into a PC SmartMedia reader/writer and copy the new Strata CTX software file named “nhs.prg” into SmartMedia card PROGRAM folder.
- ✦ Create the SmartMedia Card Volume label **CTXMXX**, where XX is the Strata CTX new software version. Do not use PRGUPDATE as the volume label.
- ✦ Pull out the SmartMedia card and physically label it **“CTXMXX.”**

3. Start Update procedure.

- ✦ Insert the SmartMedia card labeled **CTXMXX** into the Strata CTX processor SmartMedia socket.
- ✦ From the programming telephone enter Program 911, and press **Hold**. Press **FB01** and dial **1** (UPDATE) and then press **Hold**. See “Program Update” on page A-67.
- ✦ FB07-LED indicates the status of the update process.
  - After a few seconds it will be flashing green. This indicates that update is in progress.
  - Flashing Red indicates an Error. Check the Error Code Table on the next page.
- ✦ You can check update data block status using FB02 (Total) and FB03 (Copied) at any time.
- ✦ After a few minutes the Strata CTX will begin to upload the software from the SmartMedia card to the processor recall RAM causing the following:
  - The Strata CTX stops normal processing and all telephone LCDs go blank.
  - The processor Heartbeat LED is on steady red.
  - The processor SmartMedia LED turns on periodically.
  - The above will last about five to 10 minutes.
- ✦ When the update is complete the system begins to operate normally with default data.
- ✦ Use Program 901, “Display Version” on page A-57 to check that the new software version displays.
- ✦ Pull out the SmartMedia card labeled **CTXMXX** (which includes PROGRAM/nhs.prg file).

4. Restart and Restore Backup data.

- ✦ Insert the SmartMedia labeled *Strata CTX backup data* which you previously made at the start of this procedure. This includes PROGDATA/default.dat file.
- ✦ From the programming telephone enter Program 900. Press **FB01** and dial **1** (ALL DATA CLEAR) and then press **Hold** (twice). The Strata CTX will restart on the new software and restore the backed up program data.
- ✦ Confirm that the software is updated and the backup data is restored before pulling out the SmartMedia card.
  - SmartMedia LED should be off.
  - Try to login to the Programming Mode from digital telephone. (If update/Restore is finished, you can login).
- ✦ After confirming that Update and Restore are complete, pull out the SmartMedia labeled *Strata CTX backup data*.
- ✦ From the programming telephone check the Strata CTX version number using Program 901.

**Note** Error codes may display by pressing both FB02 or FB03.

The table below shows the error codes that may appear during the update/backup process.

Error Codes	Error descriptions
9000	SmartMedia does not exist
9001	SmartMedia is abnormal
9002	Invalid volume label
9003	Cannot use Write Protected Media
9004	Not enough disk space
9005	Program file does not exist
9006	UPD License not permitted
9007	File error
9008	EEPROM error

## Strata CTX670 Update

The Update process is used to change the Strata CTX software version and restore programmed data. The new software is first copied from the SmartMedia card to the standby side of the Strata CTX processor recall RAM. Then the new software on the Standby recall RAM is switched to the active mode and the original software is switched to the Standby mode for a trial run. After swapping the software version making the new software “Active”, the Strata CTX restores the programmed data. If the system functions properly the trial operation can be set to normal operation; if there are problems you can switch the original software back to Active.

---

**CAUTION!** This operation will take the system out of service

---

1. Prepare a SmartMedia card that contains a backup of the Strata CTX programmed data.
  - ✦ Backup the customer database onto the SmartMedia card using the [“Data Backup” on page A-50](#). This operation writes the `default.dat` file under the PROGDATA directory on the SmartMedia card.
  - ✦ Pull out the SmartMedia card and label it **“Strata CTX backup data.”**
2. Prepare another SmartMedia card that contains the new Strata CTX software file used to update the system software.
  - ✦ Obtain the Strata CTX operating software file (nhs.prg) from Toshiba.
  - ✦ On the SmartMedia card, permit write operation by removing the silver write protect seal.
  - ✦ Insert the SmartMedia card into Strata CTX processor SmartMedia socket and activate the Forced Format command using Program 908; then Unmount SmartMedia using Program 908.
  - ✦ Install SmartMedia card into a PC SmartMedia reader/writer and copy the new Strata CTX software file named “nhs.prg” into SmartMedia card PROGRAM folder.
  - ✦ Create the SmartMedia Card Volume label **PRGUPDATE**. See [“Create the SmartMedia Card Volume Label” on page A-55](#)
  - ✦ Pull out the SmartMedia card and physically label it PRGUPDATE

3. Begin Update procedure.

- ✦ Insert the SmartMedia card labeled PRGUPDATE into the Strata CTX processor SmartMedia socket. The SmartMedia LED on the processor starts to blink.
- ✦ From the programming telephone enter Program 911, press **Hold**. Press **FB01** and dial **1** (UPDATE) and then press **Hold**. The SmartMedia LED begins to flash rapidly.
- ✦ FB07-LED indicates the status update process.
  - Flashing green indicates that the update process is in progress.
  - Solid green indicates this part of update completed successfully (5 to 10 minutes).
  - Flashing Red indicates an error.

**Note** Within one or two minutes the SmartMedia LED stops the rapid flashing and starts to blink; you can now check the update progress using FB02 and FB03 to view data block status.

4. Change the standby side status of Flash Memory to trial:

- ✦ After FB07 is on solid green, press **Hold**, while in Program 911. Press **FB05** and dial **2** (TRIAL) and then press **Hold**.
- ✦ Pull out the SmartMedia card labeled **PRGUPDATE** (which includes PROGRAM/nhs.prg file).

5. Clear Reboot the system to switch the new software version from standby to active and restore backup data:

- ✦ Insert the SmartMedia CARD labeled **Strata CTX backup data** into processor/SmartMedia socket -The SmartMedia LED on the processor begins to blink.

**Note** The **Strata CTX backup data** SmartMedia card is the card you previously made that includes the Strata CTX programmed data in the default.dat file under the PROGDATA folder. If this is not done before starting Clear Reboot, all programmed data will be lost.

---

**CAUTION! If CLRREBOOT is activated without the Backup data SmartMedia card installed, the active and standby software is swapped and the system default program data is restored.  
THIS OPERATION WILL TAKE THE SYSTEM OUT OF SERVICE.**

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- ✦ From the programming telephone enter Program 911 and press **Hold**; Press **FB01** and dial **3** (CLRREBOOT) and then press **Hold**.

**Note** The Strata CTX processor Heartbeat LED stops flashing and all telephones become inactive. After a few minutes the Strata CTX initialises and starts up with new version of software as active and the original software as standby, and then restores the backed up program data from the SmartMedia card default.dat file (the processor SmartMedia LED flashes while it restores the program data to the processor RAM). After CLRREBOOT is complete the new version of software will be active and it will be in the Trial mode.

---

**CAUTION!** If the system power is turned off/on while the Active side of flash memory is in the Trial mode, the original software will switch back to Active and the new software will switch back to Standby. This is to provide an automatic method of switching back to the original software version if the new version is causing problems.

---

6. Confirm that the software is updated and the backup data is restored before pulling out the SmartMedia card.
  - ✦ The processor SmartMedia LED should be off.
  - ✦ Login to the Programming Mode from digital telephone. If you cannot log in, it means the data restore process is not completed.
  - ✦ From the programming telephone make sure that the Strata CTX version number of the new software is on the active side.
    - ✦ Program 901 FB01 shows the version number of new Software on active side.
    - ✦ Program 901 FB02 shows the version number of original Software on standby side.
  - ✦ Perform test to verify that the system is working properly on the new software and make sure the database has been restored properly.
  - ✦ After you confirm that update and restore is complete, pull out the SmartMedia labeled **Strata CTX backup data**.
7. Set the active side program to Normal as follows:
  - ✦ From the programming telephone enter Program 911 and press **Hold**; Press **FB04** and dial **1** (NORMAL) and then press **Hold**. The new software is on the active side running in the Normal mode.

---

**CAUTION!** If Strata CTX power is turned off/on before the Active side is switched to Normal, the Strata CTX will automatically perform a CLRREBOOT as described in [Step 5 on A-54](#).

---

**Note** The active side switches from “Trial” to “Normal” automatically after 24 hours if it is not done manually using Program 911.

If a problem occurs with the new software, switch back to the original software by repeating the above steps starting with Step 5.

### Create the SmartMedia Card Volume Label

1. Insert the SmartMedia card in the SmartMedia read-writer in your PC (not in CTX).
2. Select and right mouse click the appropriate SmartMedia drive, for example, drive E or G in some computers.
3. Click Priorities.
4. Under General tab, in the *Label* field enter label name (in this case PRGUPDATE).

## Trace Function

To analyse Strata CTX problems efficiently, Toshiba needs to get the event trace data and ISDN trace data. These data sets enable analysis of the problems Strata CTX may experience. It is helpful for troubleshooting problems that are difficult to duplicate.

Please contact Toshiba Technical Support to coordinate the running of the trace procedures. Technical Support will walk you through the required steps.

## 900 Series Programs

### System Initialise

This program enables you to reset hardware and initialises, or restores programmed data.

**Program Number:** 900

**Prerequisite Program:** None

**Reference:** None

**Access Sequence:** Login to programming mode from your telephone button pad:  
**Hold \*\*\*#1\*2\*3\*.**

At the **PASSWORD=** prompt, Enter your password and press **Hold**.

At the **PROG=** prompt enter **900** and press **Hold**.

FB Name	FB	Summary	Value	LCD Prompt
Initialise Level	01	Press <b>1</b> or <b>2</b> to select the initialise level.  Level 1 – Erases programmed data and enters default data or backed up data if a SmartMedia Card is installed (see Note).  Level 2 – Simulates System Power Off/Power On operation to reset hardware.	1. <b>Initialise Level 1</b> 2. Initialise Level 2	1:Restart with Clear Data 2:Restart

#### ► To access programming parameters

1. Press **FB01** to choose Initialise Level 1 or 2.
2. Press **Hold** twice to initialise.

**Important!** *Choosing Initialise Level 1 without installing a SmartMedia Card deletes all programmed data and returns your Strata CTX to factory default settings. All previously programmed data is lost.*

### Restoring Data from SmartMedia

When initialising with Level 1 you can restore custom data that was previously programmed and stored on a SmartMedia card. To do so, follow the steps below.

1. Install a SmartMedia card that contains the **Prpdata** directory with the **default.dat** file. The **default.dat** file contains your custom settings and can be created by running Data Backup. See “Data Backup” on page A-65.
2. After installing the SmartMedia card, run System Initialisation using Initialise Level 1.



Restoring data from the SmartMedia card may take an hour or more. To verify completion of the restore process access, the Programming Mode from a telephone and enter your password. If the system enables you to continue, the data restore process is complete.

**Note** During the restore process, the telephone LCD may display date and time data. This does not necessarily indicate completion of the restore process.

## Display Version

This program enables you to view current software versions for the Strata CTX system and installed options.

- ◆ Active – As the name implies, this is the current active software operating the Strata CTX system.
- ◆ Standby – This is a software version released prior to the active version. It acts as a backup in the event problems are experienced by the Active version.

**Program Number:** 901

**Prerequisite Program:** None

**Reference:** None

**Access Sequence:** Login to programming mode from your telephone button pad:

**Hold \*\*\*#1\*2\*3\*.**

At the **PASSWORD=** prompt, Enter your password and press **Hold**.

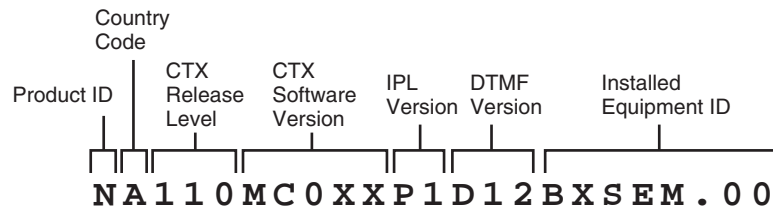
At the **PROG=** prompt enter **901** and press **Hold**.

FB Name	FB	Summary	Value	LCD Prompt
Version Number Active	<b>01</b>	Display Active side software version and installed options.  As the name implies, this is the current active software operating the Strata CTX system.	6~31 digits	Installed Version
Version Number Standby (Strata CTX 670 only).	<b>02</b>	Display Standby side software version and installed options.  This is a software version released prior to the active version. It acts as a backup in the event problems are experienced by the Active version.		Installed Version

1. Press **FB01** to view current Strata CTX software version. Press the **Scroll** or **Page** key to move the display left or right.
2. Press **FB02** to view backup Strata CTX software version.
3. Press **Hold**, then **# # Hold** to return to the **PROG=** prompt.
4. Enter another program number to continue programming or press **# # Hold** again to exit programming mode.

## Reading the Version Code

The figure below is an example of the Strata CTX software version code.



5796

' M ' is fixed character  
 ' C ' is R1.1  
 ' 0 ' is last digit in release level  
 Therefore ' C O ' is "R1.10"

**Figure A-3 Version Code**

- ◆ **Product ID** – This is the first character in the version code string. “N” designates Strata CTX670 and “S” Strata CTX100.
- ◆ **Country Code** – “A” identifies the country (Current CTX: Fixed “A”).
- ◆ **CTX Release Level** – This string of numbers identifies the Strata CTX Release level.
- ◆ **CTX Software Version** – This string of characters identifies the current software version. For the example above, the software is called “MC0XX.”
- ◆ **DTMF Version** – This three character string identifies the existence of DTMF and ABR circuits and the version. The “D” designation indicates that DTMF is being applied to the Strata CTX while “09” indicates the DTMF version number.
- ◆ **Installed Equipment ID** – There are five characters, each referencing a unique equipment identification value assigned to hardware installed in your Strata CTX system. If the particular hardware is not installed a “-” is displayed. The following are the equipment identifier designations.
  - ✦ B – BBMS is installed.
  - ✦ X – BEXS is installed.
  - ✦ S – BSIS is installed.
  - ✦ E – The Ethernet is installed.
  - ✦ M – The Modem is installed.

## Set Time and Date

This program enables you to change the system clock in Strata CTX.

**Program Number:** 902

**Prerequisite Program:** None

**Reference:** None

**Access Sequence:** Login to programming mode from your telephone button pad:  
**Hold ###1\*2\*3\*.**

At the **PASSWORD=** prompt, Enter your password and press **Hold**.

At the **PROG=** prompt enter **902** and press **Hold**.

FB Name	FB	Summary	Value	LCD Prompt
Date	<b>01</b>	Enter current system date in this field.	yymmdd format yy = current year mm = current month dd = current day	DATE=
Time	<b>02</b>	Enter the current time in this field.	hhmmss format hh = current hour mm = current minute ss = current second	TIME=

1. Press **FB01** to enter current Strata CTX Date. See table above for format.
2. Press **Hold** to program.
3. Press **FB02** to enter current Strata CTX time. See table above for format.
4. Press **Hold** to program.
5. Press **Hold** to submit, then **# # Hold** to return to the **PROG=** prompt.
6. Enter another program number to continue programming or press **# # Hold** again to exit programming mode.

## Event Trace Control

This program enables you to trace message events occurring in Strata CTX.

**Program Number:** 903

**Prerequisite Program:** None

**Reference:** *Install SmartMedia card*

**Access Sequence:** *Login to programming mode from your telephone button pad:*  
**Hold \*\*\*#1\*2\*3\*.**

*At the **PASSWORD=** prompt, Enter your password and press **Hold**.*

*At the **PROG=** prompt enter **903** and press **Hold**.*

FB Name	FB	Summary	Value	LCD Prompt
Trace State	<b>01</b>	Enter <b>1</b> or <b>2</b> to Start or Stop Message Trace. Stopping the trace outputs data to the SmartMedia card. Wait for the <b>PROG=</b> prompt on the LCD before proceeding. Before removing the SmartMedia card run Program 908. See <a href="#">"Format/Unmount SmartMedia" on page A-63</a> .	1:Start 2:Stop	1:START 2:STOP
Trace Size	<b>02</b>	Set the trace data size. Toshiba recommends leaving this parameter at the default setting which provides approximately 15 minutes of trace data.	1~256 (in bytes) 1 unit = 16 bytes. default = 2	SIZE=
Trace Category	<b>03</b>	Trace data type to be stored.	1:Call Processing 2:Maint and Admin 3:Both of the above	1.CP 2.M&A 3.CP+M&A

1. Press **FB01** to enable Start or Stop trace. Use the number key pad to make your selection.
2. Press **Hold**.

### Notes

- ◆ Start indicates the trace was previously started and is currently running.
  - ◆ Stop indicates the trace is not running and all trace buffer data was transferred to SmartMedia.
3. Press **FB02** to enter trace file size. To change the setting, use the number Dial Pad.
  4. Press **Hold**.
  5. Press **FB03** to set trace category. To view setting options, press the **Scroll** or **Page** button.
  6. Press **Hold** twice to execute. Wait for the **PROG=** prompt to display before proceeding.
  7. Enter another program number to continue programming or press **# # Hold** again to exit programming mode.

**Note** When Strata CTX 670 stops logging data, it automatically sends data to the SmartMedia card. A new trace file is stored on SmartMedia under the **Evnttrace** directory. Run the Unmount command (Program 908) before removing the SmartMedia card to ensure complete data transfer.

## ISDN Trace Location

This program enables set up of ISDN protocol event trace collection conditions.

**Program Number:** 904

**Prerequisite Program:** None

**Reference:** None

**Access Sequence:** Login to programming mode from your telephone button pad:  
**Hold ###1\*2\*3\*.**

At the **PASSWORD=** prompt, Enter your password and press **Hold**.

At the **PROG=** prompt enter **904** and press **Hold**.

At the **EQUIP=** prompt enter the Shelf, Slot and Port numbers.

### Notes

- Shelf, Slot and Circuit number is entered in "XXYYZZ" format where Shelf is a two digit value from 01~07 corresponding to the Strata CTX Cabinet number, Slot is a two digit value from 01~10 corresponding to the Strata CTX Cabinet's PCB slot number and Circuit is a two digit value from 01~04 corresponding to the Strata CTX PCB Slot's circuit number.
- Always use circuit 01 for RPTU.

FB Name	FB	Summary	Value	
LLCI	01	Level of collecting LLCI values.	1:None (no information) 2:Brief (important information) 3:Detailled (all information)	1:NON 2:BRIEF 3:DETAILED
Layer 3	02	Level of collecting Layer 3 messages.		
Layer 2 and 3	03	Level of collecting Layer 2 and Layer 3 messages.		
State Transitions	04	Level of collecting State Transitions.		
Errors	05	Level of collecting errors.		
Layer 2 States	06	Level of collecting Layer 2 States.		

- Press **FB01** to run a LLCI Trace. Press the **Scroll** or **Page** button to view Non, Brief, or Detailed options. Enter 1~3 to determine Trace Level.
- Press **FB02** and set CCL3 Trace Level. Press the **Scroll** or **Page** button to view Non, Brief, or Detailed options. Enter 1~3 to determine Trace Level.
- Press **FB03** and set L2L3 Trace Level. Press the **Scroll** or **Page** button to view Non, Brief, or Detailed options. Enter 1~3 to determine Trace Level.
- Press **FB04** and set STATE Trace Level. Press the **Scroll** or **Page** button to view Non, Brief, or Detailed options. Enter 1~3 to determine Trace Level.
- Press **FB05** and set ERRORS Trace Level. Press the **Scroll** or **Page** button to view Non, Brief, or Detailed options. Enter 1~3 to determine Trace Level.
- Press **FB06** and set L2 Trace Level. Press the **Scroll** or **Page** button to view Non, Brief, or Detailed options. Enter 1~3 to determine Trace Level.
- Press **Hold** to execute.
- Press **## Hold** to return to the **PROG=** prompt.
- Enter another program number to continue programming or press **## Hold** again to exit programming mode.

## All ISDN Trunk Trace

Program start/stop of packaged detailed collection of event trace functions. This program is only available in the telephone button programming mode.

**Program Number:** 905

**Prerequisite Program:** [“Format/Unmount SmartMedia” on page A-63](#), [“ISDN Trace Location” on page A-61](#), [“ISDN Trace Location” on page A-61](#) and [“Event Trace Control” on page A-60](#)

**Reference:** Install SmartMedia card

**Access Sequence:** Login to programming mode from your telephone button pad:  
**Hold ###\*1\*2\*3\*.**

At the **PASSWORD=** prompt, Enter your password and press **Hold**.

At the **PROG=** prompt enter **905** and press **Hold**.

FB Name	FB	Summary	Value	LCD Prompt
Trace All ISDN Trunks	01	Output All ISDN Trunk Events to SmartMedia.	1:On 2:Off	1:ON 2:OFF

1. Press **FB01**.
2. Select **1**, or **2** to turn on or off.
3. Press **Hold** twice to execute.
4. Press **# # Hold** to return to the **PROG=** prompt.
5. Enter another program number to continue programming or press **# # Hold** again to exit programming mode.

## Event Trace Side Change

This program enables you to manage your ISDN protocol trace. This program is only available in the telephone button programming mode.

**Program Number:** 906

**Prerequisite Program:** [“Format/Unmount SmartMedia” on page A-63](#)

**Reference:** Install SmartMedia card

**Access Sequence:** Login to programming mode from your telephone button pad:  
**Hold ###\*1\*2\*3\*.**

At the **PASSWORD=** prompt, Enter your password and press **Hold**.

At the **PROG=** prompt enter **906** and press **Hold**.

FB Name	FB	Summary	Value	LCD Prompt
Side Change	01	Enter desired parameter number.	1:Message 2:ISDN 3:Message+ISDN	1:MESSAGE 2:ISDN 3:MESSAGE+ISDN

1. Press **FB01**.
2. Select **1**, **2**, or **3** to select parameter.
3. Press **Hold** to execute.
4. Press **# # Hold** to return to the **PROG=** prompt.

5. Enter another program number to continue programming or press **# # Hold** again to exit programming mode.

**Note** When Strata CTX 670 stops logging data, it automatically sends data to the SmartMedia card. Run the Unmount command (Program 908) before removing the SmartMedia card to ensure complete data transfer.

## System Admin Log

Use this command to Start/Stop the System Admin Log.

**Program Number:** 907

**Prerequisite Program:** None

**Reference:** Install SmartMedia card

**Access Sequence:** Login to programming mode from your telephone button pad:  
**Hold ###1\*2\*3\*.**

At the **PASSWORD=** prompt, Enter your password and press **Hold**.

At the **PROG=** prompt enter **907** and press **Hold**.

FB Name	FB	Summary	Value	LCD Prompt
Admin Log On/Off	01	Enter <b>1</b> or <b>2</b> to Start or Stop Admin Log.	1:Start 2:Stop	1:START 2:STOP

1. Press **FB01**. To run System Admin Log press **1 Hold** (twice). You are sent to the **PROG=** prompt.
2. To Stop the log, press **FB01** and press **2** on the dial pad.
3. Press **Hold** twice and wait for the **PROG=** prompt to appear before proceeding.

**Note** When Strata CTX 670 stops logging data, it automatically sends data to the SmartMedia card. Run the Unmount command (Program 908) before removing the SmartMedia card to ensure complete data transfer.

## Format/Unmount SmartMedia

This program enables Administrators to format a SmartMedia card from Strata CTX WinAdmin or the telephone button pad.

**Note** Strata CTX WinAdmin cannot view SmartMedia files directly. Additional hardware is required to view the contents of the SmartMedia card.

**Program Number:** 908

**Prerequisite Program:** None

**Reference:** None

**Access Sequence:** Login to programming mode from your telephone button pad:  
**Hold ###1\*2\*3\*.**

At the **PASSWORD=** prompt, Enter your password and press **Hold**.

At the **PROG=** prompt enter **908** and press **Hold**

FB Name	FB	Summary	Value	LCD Prompt
Control	<b>01</b>	<p>Choose SmartMedia card formatting method:</p> <p><b>Normal</b> – creates any Strata CTX SmartMedia directory that does not exist already. Existing directories are not overwritten by this procedure.</p> <p><b>Forced</b> – erases any existing directories and files. All existing data is overwritten. See “Strata CTX SmartMedia Directories” for more information.</p> <p><b>Unmount</b> – writes data into SmartMedia Card. Always run unmount before removing the SmartMedia card to prevent damage to the card.</p> <p><b>Transfer</b> – writes data from static RAM to SmartMedia Card.</p>	<p>1:Normal</p> <p>2:Forced</p> <p>3:Unmount</p> <p>4:Transfer</p>	<p>1:NORMAL</p> <p>2:FORCED</p> <p>3:UNMOUNT</p> <p>4:TRANSFER</p>

1. Press **FB01** to enter parameter. Enter **1~4** as your command choice. Press the **Scroll** or **Page** button to make your selection.
2. Press **Hold** to confirm and **Hold** again to execute.
3. Wait for the **PROG=** prompt to appear before proceeding.
4. Enter another program number to continue programming or press **# # Hold** again to exit programming mode.

#### Strata CTX SmartMedia Directories

Running the Normal and Forced options of this program creates five directories on the SmartMedia card as follows:

- ◆ **Admlog** – The Admlog folder saves
- ◆ **Errlog** – System error logs are saved into this folder.
- ◆ **Evnttree** – Strata CTX WinAdmin Event Trace files are saved into this folder.
- ◆ **Progdata** – Your Strata CTX programmed settings are all saved in this folder.
- ◆ **Program** – The operating software and default data of the Strata CTX is saved in this folder.

When a backup is performed, Strata CTX saves programmed data to the **Progdata** folder.



## MAC Address (System Serial Number)

This program enables you to display your Strata CTX 670 System Serial Number.

**Program Number:** 909

**Prerequisite Program:** None

**Reference:** None

**Access Sequence:** Login to programming mode from your telephone button pad:  
**Hold \*\*\*#1\*2\*3\*.**

At the **PASSWORD=** prompt, Enter your password and press **Hold**.

At the **PROG=** prompt enter **909** and press **Hold**.

FB Name	FB	Summary	Value	LCD Prompt
MAC Address	01	Display System Serial Number.	12 digits	MAC Address

1. Press **FB01** to view parameter. The MAC Address is view only and cannot be changed.
2. Press **Hold** (twice) to exit to the **PROG=** prompt.
3. Enter another program number to continue programming or press **# # Hold** again to exit programming mode.

## Data Backup

This program enables you to Back up system data to a SmartMedia card.

**Program Number:** 910

**Prerequisite Program:** ["Format/Unmount SmartMedia" on page A-63](#)

**Reference:** None

**Access Sequence:** Login to programming mode from your telephone button pad:  
**Hold \*\*\*#1\*2\*3\*.**

At the **PASSWORD=** prompt, Enter your password and press **Hold**.

At the **PROG=** prompt enter **910** and press **Hold**.

FB Name	FB	Summary	Value	
Backup Function	01	Start and Stop system backup.  <b>Note</b> Restore function is not operational and should never be executed. Use "System Initialise" (Program 900) Level 1 to restore system backup.	1:Backup 2:Restore (Do not use. See Note on left). 3:Cancel	1:BACKUP 2:RESTORE 3:CANCEL
Numbers	02	The number of data blocks. This number varies depending on the amount of programming the system contains.	Variable	ALL NO=
Current Number	03	This number increments as the backup progresses. When the backup is complete this number should match the total number of data blocks displayed in Numbers ( <b>FB02</b> ).	Variable	CUR NO=

FB Name	FB	Summary	Value	
Backup State	<b>04</b>	<b>All_Ok</b> – Backup completed with no errors. <b>Partial_Ok</b> – Backup has completed with errors. <b>NG</b> – Backup has failed. <b>Cancel</b> – Cancel Backup. <b>Importing</b> – Program data is being restored. <b>Exporting</b> – Program data is being sent out.	1:normal end all 2:normal end part 3:abnormal end 4:cancel 5:importing 6:exporting	

**Note** Before running this program, make sure the SmartMedia card is properly formatted. See [“Format/Unmount SmartMedia” on page A-63](#) for more details.

1. Press **FB01** to enter your Backup choice. Press the **Scroll** or **Page** button to view your selection options.
2. Press **1**. **FB01** and **FB04** should blink green.
3. Press **Hold** to execute. Press **Hold** again to Cancel. This program stops running if you exit programming mode from your telephone.

➤ **To view Backup progress**

1. While the program is running (**FB01** and **FB04** blink green), press **FB02** to view the total number of files to be transferred.
2. Press **FB03** to view the current file number that is being transferred.
3. The Backup is complete when **FB04** blinks intermittently.
4. To verify success, push **FB04**. Your telephone LCD should indicate \***1.ALL\_OK**.
5. Press **# # Hold** to exit.

**Note** Do not press the **Hold** button. Pressing the **Hold** button restarts the Backup procedure.

To Restore data from the SmartMedia card to Strata CTX, see [“System Initialise” on page A-56](#).

## Program Update

**Important!** *Do not use this Command during Beta testing until Toshiba notifies you otherwise.*

This program enables you to update the Strata CTX programs.

**Program Number:** 911

**Prerequisite Program:** *Format SmartMedia Card*

**Reference:** *None*

**Access Sequence:** *Login to programming mode from your telephone button pad:  
**Hold \*\*\*1\*2\*3\*.***

*At the **PASSWORD=** prompt, Enter your password and press **Hold**.*

*At the **PROG=** prompt enter **911** and press **Hold**.*

FB Name	FB	Summary	Value	LCD Prompt
Update Function	<b>01</b>	Enter 1 or 2 to identify the type of Update intended. Select 3 to cancel a running update.	1:Update 2:Reboot 3:Cancel	1:Update 2:Reboot 3:Cancel
Total Blocks	<b>02</b>	View total blocks to be updated (total blocks will vary depending on software versions).	0~65536 (Strata CTX 670) 0~128 (Strata CTX 100) default = 0	n/a
Copied Blocks	<b>03</b>	View number of blocks copied.	0~65536 (Strata CTX 670) 0~128 (Strata CTX 100) default = 0	n/a
Active Side Status	<b>04</b>	Backup Type Display	1:Normal 2:Trial 3:Fault 4:Don't Care 5:Error	1:Normal 2:Trial 3:Fault 4:Don't Care 5:Error
Stand by Side Status	<b>05</b>	Stand by Backup Type	1:Normal 2:Trial 3:Fault 4:Don't Care 5:Error	1:Normal 2:Trial 3:Fault 4:Don't Care 5:Error
Active Side Number	<b>06</b>	Active Side Number.	0 or 1 default = 0	ACT SIDE=
Status	<b>07</b>	View Backup Status.	1:Idle 2:Running 3:Success 4:Error	1:Idle 2:Running 3:Success 4:Error

**Note** Before running this program, make sure the SmartMedia card is properly formatted. See [“Format/Unmount SmartMedia” on page A-63](#) for more details.

1. Press **FB01** to enter your Backup choice. Press the **Scroll** or **Page** button to view your selection options.
2. Press **1**. **FB01** and **FB04** should blink green.
3. Press **Hold** to execute. Press **Hold** again to Cancel. This program stops running if you exit programming mode from your telephone.

## Make Busy Control

When an error occurs in hardware resources used for a station or a line fails, this feature makes them busy. The station or line PCB can be disabled temporarily to perform maintenance or parts replacements as well. This program is only available in the telephone button programming mode.

**Program Number:** 912

**Prerequisite Program:** *Format SmartMedia Card*

**Reference:** *None*

**Access Sequence:** *Login to programming mode from your telephone button pad:*  
**Hold \*##\*1\*2\*3\*.**

*At the **PASSWORD=** prompt, Enter your password and press **Hold**.*

*At the **PROG=** prompt enter **912** and press **Hold**.*

*At the **CABINET=** prompt enter the Shelf number.*

**Note** The Shelf number is entered in “XX” format where Shelf is a two digit value from 01~07 corresponding to the Strata CTX Cabinet number. See ““Program Button LEDs”” below for a description of the LED display.

FB Name	FB	Summary	Value	
Equipment	00	Enter Cabinet Number	01~07 (value=xx)	
Slot #1	01	Enter <b>1</b> or <b>2</b>	1: Set make busy 2: Clear make busy	
Slot #2	02			
Slot #3	03			
Slot #4	04			
Slot #5	05			
Slot #6	06			
Slot #7	07			
Slot #8	08			
Slot #9	09			
Slot #10	10			

1. Press **FB01~FB10** to enter your Make Busy selection for the appropriate Slot in the Cabinet entered in Access Sequence above.

**Note** The slot to which your programming phone is connected can not be set to Make Busy.

2. Press **Hold** to execute.
3. Press **Hold** again to return to **CABINET=** prompt.
4. Press **# # Hold** to return to the **PROG=** prompt.
5. Enter another program number to continue programming or press **# # Hold** again to exit programming mode.

## Program Button LEDs

The LED blink pattern indicates the following:

- ◆ Red continuous blinking – PCB experienced a Make Busy status error.
- ◆ Red continuous illumination – PCB Make Busy Status mode is on.
- ◆ Green continuous blinking – PCB Make Busy Status mode is stand by.
- ◆ Green intermittent blinking – PCB Make Busy Status mode is idle.

## Regional Selection

Set Operating region for your Strata CTX. This assignment sets built-in core LSI hardware parameters that are not changeable with jumpers or switches. These parameters must be set unique for each country and affect system operation.

**Program Number:** 915

**Prerequisite Program:** None

**Reference:** None

**Access Sequence:** Login to programming mode from your telephone button pad:  
**Hold \*\*\*#1\*2\*3\*.**

At the **PASSWORD=** prompt, Enter your password and press **Hold**.

At the **PROG=** prompt enter **915** and press **Hold**.

FB Name	FB	Summary	Value	LCD Prompt
01 Region	<b>01</b>	Set region number. 0~2 are valid entries for North American Operations.	0~31 USA = 0 Canada = 1 Mexico = 2 Taiwan = 3 HongKong = 4 Thailand = 5 Japan = 6 Singapore = 7 Malaysia = 8 Indonesia = 9 Sri Lanka = 10 India = 11 UK = 13	REGION=
04 Set Current Region	<b>04</b>	<b>FB04, n, Hold</b>	0~31 Default = 0 UK = 13	

1. Press **FB01**. Enter **0~2**. Press **Hold**.
2. Press **Hold** (twice).
3. Enter another program number to continue programming or press **# # Hold** again to exit programming mode.

## IP Configuration

This program enables you to set up Network Communication Protocols.

**Program Number:** 916

**Prerequisite Program:** None

**Reference:** None

**Access Sequence:** Login to programming mode from your telephone button pad:  
**Hold \*###1\*2\*3\*.**

At the **PASSWORD=** prompt, Enter your password and press **Hold**.

At the **PROG=** prompt enter **916** and press **Hold**.

FB Name	FB	Summary	Value
IP Address	<b>01</b>	Enter IP Address 1. 192 = First IP Address Octet 168 = Second IP Address Octet 254 = Third IP Address Octet 253 = Fourth IP Address Octet	0~255 default = 192.168.254.253
Subnet Mask	<b>02</b>	Enter Subnet Mask Address 1.	0~255 default = 255.255.255.0
Default Gateway	<b>03</b>	Enter Default Gateway 1.	0~255 default = 0.0.0.0

### Notes

- The LCD only displays three of the twelve IP address digits at a time. Press the **Spkr** button to view the remaining digits.
  - The IP Address is the static IP address of the Strata CTX processor NIC/Ethernet connection only. The PPP IP address for the Strata CTX processor modem is always 192.168.255.254 and cannot be changed.
1. Press **FB01** to view the current TCP/IP Address 1 (press **FB02** to view the current Subnet Mask Address 1, or press **FB03** to view Default Gateway Address 1).  
Press **Hold**.
  2. Enter first IP Address Octet. To keep current setting go to [Step 3](#).
  3. Press **Spkr** button and enter second IP Address Octet. To keep current setting go to [Step 4](#).
  4. Press **Spkr** button and enter third IP Address Octet. To keep current setting go to [Step 5](#).
  5. Press **Spkr** button and enter fourth IP Address Octet. To keep current setting go to [Step 6](#).
  6. Press **Hold**.
  7. Press **FB02** to configure the remaining parameters.
  8. Press **Hold**.
  9. After all parameters are entered press **Hold** to submit the new settings.
  10. You are automatically returned to the **PROG=** prompt.

Enter another program number to continue programming or press **# # Hold** again to exit programming mode.

The following Error Code Tables are needed when programming Strata CTX670 using the button programming method. The Error Codes are displayed on the DKT's LCD.

**Note** The following error codes only appear when using the telephone button programming method. These tables are being provided for reference only. CTX WinAdmin will feature error codes in future release.

## Common Error Code Table

Program	Code	Error descriptions
Common	1	Invalid Program number.
	2	Invalid value.
	3	Invalid parameter designation <ul style="list-style-type: none"> <li>Input parameter range error.</li> <li>Required sub-parameter data was not entered.</li> </ul>
	4	Invalid FB button pressed.
	5	The time allotted to enter a modification in the desired field has been exceeded.
	6	Invalid parameter entry <ul style="list-style-type: none"> <li>Incorrect characters entered</li> <li>Input method is wrong</li> </ul>
	7	Some settings carried out using the range function may not have been programmed correctly.
	16	Identification error
	17	Required parameter is not entered.
	18	Required reef which is necessary to register newly does not exist.

## System Programming Error Codes

Program	Code	FB	Sub-parameter	Error descriptions
100	33	FB00		The entered Cabinet/Slot value is out of range.
	33	FB01		The entered PCB Type is out of range.
	49	FB01		Deleting a Card (000) – Programmed station and/or trunk data must be deleted before a card can be deleted.
	49	FB01		Changing Card Type Code – Card Type cannot be changed. Delete the existing Card Type before entering a new Card Type.
	49	FB01		The designated BIOU is already in use.
	49	FB01		The PCB cannot be assigned to the designated equipment position.
	50	FB01		One of the required parameters (PCM Highway, BDKU Type or TEI Assignment) has not been assigned.
	50	FB02		The PCM highway value entered is not applicable for the desired PCB assignment. PCB parameters are required for PDKU or BDKU, RDTU (not available in the uK & Europe), RDSU, RPTU.
	50	FB03		The Channel Type value entered is not applicable for the desired PCB assignment. PCB parameters are required for PDKU or BDKU, RDTU (not available in the uK & Europe), RDSU, RPTU.
	50	FB04		The TEI Type value entered is not applicable for the desired PCB assignment. PCB parameters are required for PDKU or BDKU, RDTU (not available in the uK & Europe), RDSU, RPTU.



Program	Code	FB	Sub-parameter	Error descriptions
102	33	FB01		The entered Feature Code is out of range.
	49	FB02		An invalid OLG number was entered in OLG Number field when assigning a Flexible Numbering Feature code of 551.
	51	FB00		Flexible Numbering Plan values cannot be repeated. The value entered cannot be registered (e.g., If 1234 is registered, 123 cannot be registered).
	52	FB00		The value entered conflicts with an existing extension and cannot be registered.
103	-	-		See <a href="#">“Common Error Code Table” on page B-2.</a>
104	-	-		See <a href="#">“Common Error Code Table” on page B-2.</a>
105	33	FB21-FB22		The entered Clock value is out of range.
	49	FB12 FB18		The BIOU general relay number value conflicts with existing parameter assignments.
	49	FB21-FB22		The entered circuit number is not the clock source port.
106	-	-		See <a href="#">“Common Error Code Table” on page B-2.</a>
107	33	FB00-FB01		The entered Pad device number is invalid.
	96	FB01-FB02		The number of Pad groups exceed the system capacity.
108	33	FB00		The entered Device Type is out of range.
	33	FB01		The PAD group entered is out of the range.
	80	FB00		The Device number entered does not exist in the system.
109	33	FB08-FB16		The entered equipment is out of range.
	50	FB08-FB16		The entered equipment is registered as MOH already.
	80	FB01-FB07		A BIOU circuit with other data such as door phone, etc. is assigned in MOH/BGM 1~7.
	80	FB08-FB16		A circuit with a non-STU circuit is designated in MOH/BGM 8~16.
110	16	-		Identification error: A super user password cannot be checked if you are logged in with a general user level password.
111	-	-		See <a href="#">“Common Error Code Table” on page B-2.</a>
112	33	FB00		The entered date is out of range.
	98	-		Allowable number of Working Day Type has been exceeded.
113	33	FB01-FB09		The entered time value is out of range.
114	-	-		See <a href="#">“Common Error Code Table” on page B-2.</a>
115	-	-		See <a href="#">“Common Error Code Table” on page B-2.</a>
116	33	FB01		The Program Number entered is invalid.
117	32	FB00		An invalid character exists in the entered value.

## Station Programming Error Codes

Program	Code	Occurred FB	Sub-parameter	Error descriptions
200	33	FB01		The entered Shelf/Slot/Circuit value is out of range.
	49	FB01		The selected PDN(s) conflicts with an existing PDN(s) assignments for the selected circuit.
	49	FB02		Station Type cannot be changed.
	49	FB15 FB22		The desired DN does not exist.
	51	FB00		The entered value conflicts with an existing number scheme.
	52	FB00		The entered value conflicts with an existing ISDN assignment etc.
	54	FB00		The quantity of lines, ISDN channels and PDNs entered exceeds the number of ports licensed with this processor.
	80	FB00		The DN does not exist.
	80	FB01		A PCB without 'DKT/SLT setting allowed' is designated for a PCB connecting the selected ISDN extensions.
	96	FB00		The allowed number of extensions has been exceeded.
	98	FB35		The quantity of station speed dial bins entered exceeds the system's capacity.
201	51	FB01		The entered number is not the extension number.
	52	FB01		The entered number is not the extension number.
	80	FB01		The entered value is not a valid extension.

Program	Code	Occurred FB	Sub-parameter	Error descriptions
202	33	FB01		The equipment number entered is out of the range.
	49	FB01		PCB assignment is not set for the ISDN card connecting selected extensions.
	49	FB01		The entered equipment is using as other ISDN extension.
	49	FB02		An ISDN trunk channel group conflict has been detected.
	49	FB02		Although the P-P connection was selected, an additional DN is registered.
	49	FB26-FB32		The desired value conflicts with existing ISDN extensions.
	51	-		The Prime DN entered conflicts with a value of an existing numbering scheme.
	51	FB00, FB26-FB32		The desired value conflicts with existing number schemes.
	52	FB00		A DN used for DKT extensions is designated.
	52	FB26-FB32		The additional ISDN extension number cannot be registered. The number is already in use by a DKT extensions, etc.
	54	FB00		The quantity of lines, ISDN channels and PDNs entered exceeds the number of ports licensed with this processor.
	80	FB00		The DN entered is invalid.
	80	FB01		A PCB without ISDN extension settings allowed' is designated for the PCB connecting the ISDN extension(s) selected.
	96	FB02		The number of channel group exceeds the system capacity when ISDN station is registered.
	96	FB00		The quantity of lines, ISDN channels and PDNs entered exceeds the number of ports licensed with this processor.
	98	FB35		The quantity of station speed dial bins entered exceeds the system's capacity.
203	49	FB01		The new DN value conflicts with an existing value DN, PhDN, etc.
	51	-		The Prime DN entered conflicts with a value of an existing numbering scheme.
	51	FB01		The new DN value conflicts with an existing numbering scheme value.
	52	FB00		The new DN value conflicts with existing group extensions.
	80	FB00		The new DN value does not exist.
204	49	FB01		The number of attendant consoles exceed the number specified in the system.
	52	FB00		DKT is not assigned to DN (ISDN, etc.).
	80	FB00		The DN entered is an extension number that does not exist.
	98	FB04		Allowable Feature Button number is exceeded.
	98	FB17		Allowable Call History Memory size is exceeded.

Program	Code	Occurred FB	Sub-parameter	Error descriptions
205	33	FB01	100 110 120 130 140	Sub-parameters must be assigned.
	33		120	The line number entered is out of range for the system's capacity.
	48	-		Required parameter for each Feature Code is not entered.
	49	FB01	110	Two or more PhDNs with the same value are registered to one extension.
	49	FB01	700 790 800 810 820 830	Only Feature Code(s) allowed for Attendant Console is registered.
	49	FB01	610	Two or more DSSs with the same value are registered to one extension.
	49	FB01	120 130 560 610	While assigning sub-parameters to a DN: A DN was selected that does not exist in the system.
	51	FB01		The Prime DN entered conflicts with a value of an existing numbering scheme.
	51		110	The Prime DN entered conflicts with a value of an existing numbering scheme.
	51	FB01	120 130	When assigning an Owner DN to an Exchange Line or GCO, the related Exchange or GCO buttons are not assigned to the respective FB(s) of the owner's extension.
	52			The Prime DN entered conflicts with a value of an existing numbering scheme.
	52	FB01	110	The Secondary/PhDN entered is already used in ISDN extension(s), etc.
	52	FB01	120 130	The Exchange or GCO Owner DN entered does not exist.
	80	FB00		The PrimeDN does not exist in the system.
	82	-		The sub-parameter values assigned to the FB are invalid.
	82		120	The line number entered does not exist.
	96	-	110 130 140	The maximum allowable value for GCO, POOL, or PhDN has been exceeded.
	98	FB01 FB04		The quantity of Flexible keys programmed exceeds the system's capacity.

Program	Code	Occurred FB	Sub-parameter	Error descriptions
206	49	FB01 FB04		An invalid DN was selected. The entered PDN is not related to this PhDN.
	51	-		Phantom DN entered is invalid (the entered value is used as a part of an existing extension number or numbering plan).
	51	FB00 FB01 FB14		An invalid DN was selected (the entered value is used as a part of an existing extension number or numbering plan).
	52	-		The Phantom DN entered conflicts with an existing DKT extension.
	52	FB00 FB04		The entered DN conflicts with an existing DKT extension, or numbering plan, etc.
	80	FB00		A PhDn that does not exist in the system has been selected.
208	51	FB00		An invalid DN was selected (the entered value is used as a part of an existing extension number or numbering plan).
	52	FB00		The entered DN conflicts with an existing numbering plan.
	80	FB00		The DN entered is an extension number that does not exist in the system.
209	49	FB01		If Hunt Method field is set to Distribute, the incoming destination Pilot Number must be assigned.
	50	FB02		If Hunt Method is set to Distribute, Pilot Number must be assigned.
	51	FB02		The entered value conflicts with an existing number or numbering plan.
	52	FB02		The entered value conflicts with an existing DKT extension.
	80	FB00		The designated Hunt Group number does not exist in the system.
	96	FB00		The assigned Hunt Group number, exceeds the system capacity.
210	51	FB00		The entered DN does not exist in the system (The entered value is used in an extension number or numbering plan).
	52	FB00		The entered value is used in the numbering plan.
	80	FB00		The entered PrimeDN does not exist in the system.
	96	-		The Pickup group number entered is out of the range for the system's capacity.

Program	Code	Occurred FB	Sub-parameter	Error descriptions
213	33	FB01	100 110 120 130 140	The sub-parameters for Feature Code (Key Number) must be assigned.
	33	-	120	The line number entered is out of range for the system's capacity.
	48	-		Essential sub-parameter values must be entered.
	49	FB01	110	Two or more PhDNs with the same value are registered to one extension.
	49	FB01	700 790 800 810 820 830	The feature code(s) allowed to attendant console only is registered.
	49	FB01	610	Two or more DSSs with the same value are registered to one extension.
	49	FB01	120 130 560 610	The entered DN does not exist in the system.
	51	-		The Prime DN entered conflicts with a value of an existing numbering scheme.
	51	FB01	110	The secondary/PhDN entered cannot be registered. The number conflicts with an existing number scheme.
	51	FB01	120 130	When setting an owner extension to the additional information of Exchange , GCO, the said Exchange, GCO keys are not assigned to the Feature buttons of the owner extension.
	52	-		The Prime DN entered conflicts with an existing DKT extension.
	52	FB01	110	The secondary/PhDN entered cannot be registered. The number conflicts with an existing ISDN extension(s), etc.
	52	FB01	120 130	The Exchange or GCO Owner DN entered does not exist.
	80	FB00		The specified PrimeDN does not exist in the system.
	82	-		The additional information assigned to the Feature Button is invalid.
	82	-	120	The line number entered does not exist.
	96	-	110 130 140	The allowable number of GCO, POOL or PhDn has been exceeded.
	98	-		The quantity of Flexible keys programmed exceeds the system's capacity.

Program	Code	Occurred FB	Sub-parameter	Error descriptions
214	33	FB01-FB08		The equipment number entered is out of the range.
	49	-		The designated circuit is already in use.
	50	-		Multiple DSSs cannot be assigned to the same Shelf/Slot/Circuit.
	51	-		The entered DN does not exist in the system (the entered value conflicts with an existing extension number or numbering plan).
	52	-		The entered value conflicts with an existing numbering plan.
	80	FB00		The designated PrimeDN does not exist in the system.
	80	FB01-FB08		The designated PCB and extension combination is not allowed.
	96	FB01-FB08		The number of DSS consoles entered exceeds the system's capacity.
	98	-		The number of DSS buttons entered exceeds the system's capacity. This error can occur with PB1~PB8

Program	Code	Occurred FB	Sub-parameter	Error descriptions
215	33	FB01	100 110 120 130 140	The sub-parameters for Key Number field must be assigned.
	33	-	120	The line number entered is out of range for the system's capacity.
	48	-		Essential sub-parameter values must be entered.
	49	FB01	110	Two or more PhDNs with the same value are registered to one extension.
	49	FB01	700 790 800 810 820 830	The feature code(s) allowed to attendant console only is registered.
	49	FB01	610	Two or more DSSs with the same value are registered to one extension.
	49	FB01	120 130 560 610	The entered DN does not exist in the system.
	51			The Prime DN entered conflicts with a value of an existing numbering scheme.
	51	FB01	110	The secondary/phantom DN entered cannot be registered. The number conflicts with an existing number scheme.
	51	FB01	120 130	When setting an owner extension to the additional information of Exchange, GCO, the said Exchange, GCO keys are not assigned to the Feature buttons of the owner extension.
	52	-		The Prime DN entered conflicts with an existing DKT extension.
	52	FB01	110	The secondary/PhDN entered cannot be registered. The number conflicts with an existing ISDN extension(s), etc.
	52	FB01	120 130	The Exchange or GCO Owner DN entered does not exist.
	80	FB00		The specified PrimeDN does not exist in the system.
	82	-		The additional information assigned to the Feature Button is invalid.
	82	-	120	The line number entered does not exist.
	96	-		The allowable number of GCO, POOL or PhDn has been exceeded.
	98	-		The number of Flexible buttons programmed exceeds the system's capacity.
216	51	FB00		The entered DN does not exist in the system (the entered value conflicts with an existing extension number or numbering plan).
	52	FB00		The entered DN conflicts with an existing ISDN extension(s), etc.
	80	FB00		The designated PrimeDN does not exist in the system.



Program	Code	Occurred FB	Sub-parameter	Error descriptions
217	51	FB00		The entered DN does not exist in the system (the entered value conflicts with an existing extension number or numbering plan).
	52	FB00		The entered DN is not designated as an ISDN extension in Program 202.
	80	FB00		The designated DN does not exist in the system.
218	49	FB02		The DN entered is already assigned to another Hunt Group. A DN can only be in one Hunt Group.
	51	FB02		The entered DN does not exist in the system (the entered value conflicts with an existing extension number or numbering plan).
	52	FB00		The entered DN conflicts with an existing numbering plan.
	80	FB00		The entered Hunt Group number does not exist in the system.
	80	FB02		The entered DN does not exist in the system.
	82	FB00		The number of Hunt Group assignments has exceeded the system capacity.
	96	FB01		The allowable number of Hunt Group member assignments has been exceeded.
	98	FB01		More than 560 DNs are designated for members of one hunting group.
<b>Note</b> In the cell of Occurred FB in Program 205, 213 and 215, Code shows the inputted Feature Code.				

# Trunk Programming Error Codes

Program	Code	Occurred FB	Sub-parameter	Error descriptions
300	33	FB01		The equipment number entered is out of the range.
	49	FB01		When modifying previously assigned equipment: <ul style="list-style-type: none"> <li>The designated PCB Type does not allow Exchange trunk assignments.</li> <li>The designated circuit does not allow Exchange trunk assignments.</li> </ul>
	49	FB02		The ISDN ILG number is designated for Analogue Trunks or the entered ILG number does not exist in the system.
	49	FB03		The ISDN OLG number is designated for Analogue Trunks or the entered OLG number does not exist in the system.
	49	FB02 FB03		A conflict exists between the ILG number and the OLG number trunk type.
	54	FB00		The quantity of lines, ISDN channels and PDNs entered exceeds the number of ports licensed with this processor.
	80	FB00		A Trunk number that does not exist in the system has been selected.
	80	FB02		The entered ILG number does not exist in the system.
	80	FB03		The entered OLG number does not exist in the system.
	96	FB00		Allowable number of Trunks has been exceeded.
	96	FB00		The line number entered exceeds the system's capacity.
301	6	FB01		A Trunk number that does not exist in the system has been selected.
302	33	FB01		The equipment number entered is out of the range.
	48	FB07		Dch position is not set to 16. When setting the time slot pattern for a 2048 kbps interface, this value must be set to 16.
	49	FB03		The type of ILG or OLG entered is not an ISDN.
	49	FB04		The ILG or OLG entered does not exist in the system.
	50	FB24		The T-Wait Timer can only be enabled if the Protocol is set to National ISDN.
	52	FB00		The entered Channel Group conflicts with an existing ISDN extension(s), etc.
	54	FB00		The quantity of lines, ISDN channels and PDNs entered exceeds the number of ports licensed with this processor.
	80	FB00		The entered Channel Group number does not exist in the system.
	80	FB01		An ISDN trunk cannot be assigned to the designated Shelf/Slot/Circuit.
	80	FB03		The designated ILG does not exist in the system.
	80	FB04		The designated OLG does not exist in the system.
	96	FB00		The number of allowable Channel Groups has been exceeded when a new ISDN trunk assignment is made.

Program	Code	Occurred FB	Sub-parameter	Error descriptions
303	52	FB01		The entered Channel Group number conflicts with an existing ISDN extension(s).
	80	FB01		The entered Channel Group number does not exist.
304	49	FB01 FB02		The Group Type and Trunk Type are assigned based on the ILG settings found in ILG field of Program 300 and in ILG field of Program 302.
	49	FB06		The entered Pool Key Number cannot be assigned. It belongs to another ILG number.
	49	FB05		The entered GCO Key Number cannot be assigned. It belongs to another ILG number.
	80	FB00		The entered ILG does not exist in the system.
	96	FB05 FB06		The allowable number of GCO or POOL Key Number has been exceeded.
	96	FB00		The number of ILGs exceed the system capacity.
305	49	FB01		The entered ILG number cannot be deleted. Trunk relationships assigned in Programs 300 and 302 must be deleted first.
	80	FB01		The entered ILG does not exist in the system.
306	49	FB01 FB02		The Group Type and Trunk Type are assigned based on the OLG settings found in ILG field of Program 300 and in ILG field of Program 302.
	49	FB06 FB07		The entered Pool Key Number cannot be assigned. It belongs to another OLG number.
	49	FB04		The entered GCO Key Number cannot be assigned. It belongs to another ILG number.
	80	FB00		The entered OLG does not exist in the system.
	96	FB00		The allowable number of OLG Group Number has been exceeded.
	96	FB04 FB06 FB07		The allowable number of GCO or POOL Key Number has been exceeded.
307	49	FB01		The entered OLG number cannot be deleted. Trunk relationships assigned in Programs 300 and 302 must be deleted first.
	80	FB01		The entered OLG does not exist in the system.
308	33	FB00		The entered equipment value is invalid.
	80	FB00		The designated trunk equipment does not exist in the system.

Program	Code	Occurred FB	Sub-parameter	Error descriptions
309	48	FB05 ~ FB10		No incoming destination number is entered for the parameter required.
	49	FB00		The entered DDI conflicts with an existing wild card PCB. The allowable number of DDI assignments including a wild card PCB is exceeded.
	49	FB03		The selected GCO conflicts with an existing ILG number.
	49	FB04		The selected Pool Line Group conflicts with an existing ILG number.
	51	FB00		The entered ILG number does not exist in the system.
	51	FB01		The length of entered DDI value exceeds the allowable contract digit number.
	80	FB03		The entered GCO key group does not exist in the system.
	82	FB01		The selected ILG number does not exist in the system. The number of ILGs exceed the system capacity.
	96	FB03 FB04		The number of allowable GCO or POOL key group assignments has been exceeded.
	98	FB01		The allowable number of DDI assignments has been exceeded.
310	33	FB00		The entered equipment value is invalid.
	48	FB01 ~ FB03		No incoming destination number is assigned for the required parameter.
	80	FB00		The entered circuit is not set to support the designated trunk.
311	49	FB01		Although DISA security is set to Necessary, no DISA code has been assigned.
312	49	FB01		The entered DDI number is not assigned to an ILG.
	49			The DDI Number entered is invalid.
	80			DDI Number entered does not exist in the system.
	82	FB00		The entered ILG number does not exist in the system.
313	33	FB01		The entered equipment value is invalid.
	33	FB00		The entered equipment value is invalid.
	49	FB02 FB03		When Signalling Method field is set to CLASS: <ul style="list-style-type: none"> <li>The Signalling Contents field value must be assigned</li> <li>The CLID Equipment Number Position circuit for the CIU must be entered.</li> </ul>
	80	FB00		The entered trunk number does not exist in the system.
315		FB01 FB02 FB04 FB05		"NONE" entered in any field is invalid.
	33	FB03		The entered equipment value is invalid.
	49	FB00		The PCB installed in the designated Shelf/Slot must be a RDTU (not available in the uK & Europe).

Program	Code	Occurred FB	Sub-parameter	Error descriptions
316	33	FB01		RPTU Equipment Number entered is invalid.
	49	FB04		If the Span Interface speed is set to a value not equal to 1.5M, the Dch position is modified.
	52	FB00		The entered channel group number conflicts with an existing ISDN extension(s).
	54	FB01		The equipment number entered is out of range.
	80	FB00		The entered channel group number does not exist in the system.
	80	FB01		The entered circuit must be an assigned ISDN.
317	33	FB00		The entered equipment value is invalid.
	49	FB03 FB04		The entered ILG/OLG values do not have ISDN assignments.
	50	FB18		The T-Wait Timer can only be enabled if the Protocol is set to National ISDN.
	52	FB00		The entered channel group number conflicts with an existing ISDN extension(s).
	54	FB00		The quantity of lines, ISDN channels and PDNs entered exceeds the number of ports licensed with this processor.
	80	FB00		The entered channel group number does not exist in the system.
	80	FB01		The entered circuit must be an assigned ISDN.
	80	FB03		The entered ILG number does not exist in the system.
	80	FB04		The entered OLG number does not exist in the system.
	96	FB00		The allowable channel group assignments exceed the system capacity.
318	48	FB05 ~ FB10		No incoming destination number is assigned for the required parameter.
	49	FB03		The selected GCO conflicts with an existing ILG number.
	49	FB04		The selected Pool Line Group conflicts with an existing ILG number.
	80	FB03		The entered GCO key group does not exist in the system.
	82	FB00		The selected ILG number does not exist in the system.
	82	FB01		The selected ILG number does not exist in the system. The number of ILGs exceed the system capacity.
	96	FB03 FB04		The number of allowable GCO or POOL key group assignments has been exceeded.
319	48	FB01-FB03		The destination number is not assigned.
320	33	FB00		The entered equipment value is invalid.
	54	FB01-FB03		The quantity of lines, ISDN channels and PDNs entered exceeds the number of ports licensed with this processor.
	80	FB00		The circuit for the designated PCB must be an assigned ISDN primary trunk.
321	80	FB00		The entered OLG number does not exist in the system.

Program	Code	Occurred FB	Sub-parameter	Error descriptions
322	33	-		The Group Exchange Line or Pool Line Group Destination is out of range (1~128).
	80	FB00		The entered OLG number does not exist in the system.
	80	FB01 FB02		The designated extension number does not exist in the system.
	80	FB01 FB02		The entered GCO value does not exist in the system.
	80	FB01 FB02		The entered POOL value does not exist in the system.
	96	FB03		The allowable system DDI assignments has been exceeded.

Program	Code	Occurred FB	Sub-parameter	Error descriptions
323	18	FB02		Select the Type of Service for CBC.
	33	FB06		The Incoming Line Group entered is invalid.
	33	FB07		The Outgoing Line Group entered is invalid.
	49	FB02-FB05		The same value is designated to the Type of Service, Facility Code, Service Parameters, and Network ID fields that correspond to the same channel group and different line service index.
	49	FB02		The entered values in Channel Group and Index fields are not valid CBC assignments. Select NODATA in Type of Service field to delete CBC setting.
	49	FB02 FB06		When an INWATS ILG is assigned in ILG field an Out WATS Type of Service cannot be assigned.
	49	FB02 FB06		If OUTWATS service is selected for Type of Service, an OLG value must be assigned.
	49	FB02 FB06		The selected ILG conflicts with an existing ILG number.
	49	FB02 FB07		When an Out WATS OLG is assigned in OLG field an INWATS Type of Service cannot be assigned.
	49	FB02 FB07		Make a selection in OLG field.
	49	FB02 FB07		The selected OLG conflicts with an existing ILG number.
	49	FB08-FB13		The assigned minimum Bch value (Minimum Calls Zones 1~3) exceeds the related (Maximum Calls Zones 1~3) maximum Bch value.
	49	FB08 FB10 FB12		The assigned minimum Bch value (Minimum Calls Zones 1~3) exceeds the related (Maximum Calls Zones 1~3) maximum Bch value.
	49	FB08-FB13		The B channel entered is invalid.
	49	FB07		The OLG entered does not exist in system.
	49	FB06 FB07		The entered ILG/OLG values are not assigned ISDNs.
	50	FB02-FB07		Make a Service Type selection for field 02.
	52	FB00		The entered channel number conflicts with an existing ISDN extension(s), etc.
	80	FB00		The entered channel group number does not exist in the system.
	82	-		The Channel Group entered does not exist in the system.
324	82	FB01		The allowable number of assigned channel groups has been exceeded.
	96	-		The number of allowable CBCs has been exceeded.
	33	FB01-FB03		The time entered is invalid.
	52	FB00		The entered channel number conflicts with an existing ISDN extension(s), etc.
	80	FB00		The entered channel group number does not exist in the system.

## Attendant Position Programming Error Codes

Program	Code	Occurred FB	Sub-parameter	Error descriptions
400	50	FB02		If the Called Number Index is not assigned, Call Destination must be set to insert.
404	33	FB00		The Attendant group number entered is out of the range.
	80	FB00		The entered Attendant group number does not exist in the system.
	80	FB07-FB16		The designated ILG does not exist in the system.



## Service Programming Error Codes

Program	Code	Occurred FB	Sub-parameter	Error descriptions
500	32	FB04 FB05		A character that is not permitted is included in the Destination number.
	50	FB05		A value must be assigned to Destination 1 if an assignment was made in Destination 2.
	82	FB00		The entered System Call Forward number does not exist in the system.
501	32	FB01		A character that is not permitted is included in the entered Speed Dial number.
	33	FB00		The entered Speed Dial number is out of range.
502	51	FB00		The entered DN does not exist in the system (the entered value conflicts with an existing extension number or numbering plan).
	52	FB00		The entered number conflicts with an existing numbering plan.
	80	FB00		The entered extension does not exist. The entered Attendant Console does not exist.
	96	-		The Page group number entered exceeds the system's capacity.
	98	FB01 ~ FB18		The number of allowable Device number per paging group has been exceeded.
503	49	FB19		The entered External Generic Relay number conflicts with an existing device, such as a door lock, etc.
	96	-		The Page group number entered exceeds the system's capacity.
	98	FB01 ~ FB18		Device Number per paging group is exceeded.
504	-	-		No error occurs for this Program except for common errors.
506	53	FB00		Account Code cannot be verified.
	80	FB00		Account code confirmation digit does not coincide. (It is larger than the value that was registered by Program 570.)
	98	FB00		The Account code number exceeds the system's capacity.

Program	Code	Occurred FB	Sub-parameter	Error descriptions
507	33	FB01		The DDCB Equipment number entered is invalid.
	33	FB06 ~ FB08		The destination number value is out of range (when destination type is Paging Group).
	33	FB06 ~ FB08		The allowable number of Paging Groups have been exceeded.
	33	FB04		The entered Ring Duration is invalid.
	49	FB01		Door Phone number entered conflicts with an existing Door Phone number.
	49	FB01		The equipment assigned in DDCB Equipment Number is already in use.
	49	FB01		The entered value conflicts with an existing DKT extension.
	52	FB01		The entered Circuit conflicts with an existing door lock.
	80	FB00		The entered Door Phone number does not exist in the system.
	80	FB01		The PCB Type designated for this circuit must be a DKU.
	82	FB00		The entered Door Phone number does not exist in the system.
	96	FB00		The allowable number of Door Phones has been exceeded.
508	33	FB03		The entered equipment value is invalid.
	49	FB02		The designated BIOU PCB circuit is used by another device (Night Bell, etc.), or two or more door locks are designated for the same BIOU PCB.
	49	FB03		The PCB Type designated for this DDCB circuit must be a PDKU or BDKU.
	49	FB03		The DDCB Equipment number entered conflicts with an existing door lock.
	52	FB03		Other devices (DKT extensions, door phones, etc.) are designated for the specified DDCB circuit.
	96	FB00		The allowable number of Door Locks has been exceeded.
509	-	-		No error occurs for this command except for common errors.
510	49	FB01		The specified COS Override Code digit is invalid.
512	-	-		No error occurs for this Program except for common errors.
513	80	FB00		ILG number enter does not exist.
514	80	FB00		The entered OLG number does not exist.
515	-	-		No error occurs for this Program except for common errors.
516	32	FB02		A character that is not permitted is used in the Speed Dial number.
	50	FB01		The allowable number of Speed Dial Bins has been exceeded.
	51	FB00		The entered DN does not exist in the system (the entered value conflicts with an existing extension number or numbering plan).
	52	FB00		The entered value conflicts with an existing numbering plan.
	80	FB00		The entered PrimeDN does not exist.
	98	FB00		The allowable Short-dial number has been exceeded.

Program	Code	Occurred FB	Sub-parameter	Error descriptions
520	-	-		No error occurs for this Program except for common errors.
521	51	FB00		The Route Plan Number must be complete to be registered to the Route Plan Table.
	98	-		The allowable number of participants in the Route Plan Table has been exceeded.
522	51	FB00		The Exception Route Plan Number must be complete to be registered to the Route Plan Table.
	98	-		The allowable number of participants in the Route Plan Table has been exceeded.
523	-	-		No error occurs for this Program except for common errors.
524	-	-		No error occurs for this Program except for common errors.
525	49	FB01 FB02		Both the OLG Number and the Digit Modification Index must be entered.
	50	FB01		Digit Modification Index value cannot be 0.
526	-	-		No error occurs for this Program except for common errors.
527	33	FB00		The entered date is out of range.
	98	FB00		The public holiday number entered exceeds the system's capacity.
528	-	-		No error occurs for this Program except for common errors.
529	33	FB03		The entered time is out of range.
530	32	FB00		A character(s) that is not permitted is included in the specified code.
	51	FB00		DR LCR Table codes cannot be repeated. The value entered cannot be registered (e.g., If 1234 is registered, 123 cannot be registered).
	80	FB00		The code is not registered in the screening table.
531	32	FB01		A character(s) that is not permitted is included in the specified code.
	51	FB01		LCR OLG Access codes cannot be repeated. The value entered cannot be registered (e.g., If 1234 is registered, 123 cannot be registered).
	82	FB01		The allowable number of LCR OLG Access codes has been exceeded.
	98	FB01		The allowable number of DR sharing tables has been exceeded.
532	-	-		No error occurs for this Program except for common errors.
533	32	FB01		A character(s) that is not permitted is included in the specified code.
	51	FB01		Dial Strings cannot be repeated. The value entered cannot be registered (e.g., If 1234 is registered, 123 cannot be registered).
	98	FB01		The allowable number of DRLs has been exceeded.

Program	Code	Occurred FB	Sub-parameter	Error descriptions
534	32	FB01		A character(s) that is not permitted is included in the specified code.
	51	FB01		To add a DRL to the DR Exception Table, the DRL number must be complete.
	98	FB01		The allowable number of participants in the DR Exception Table has been exceeded.
540	48	FB01		An incoming destination number must be entered when After Shift Type field is set to Dialling Digits.
	51	FB00		The entered value conflicts with an existing number scheme.
	52	FB00		The entered DN conflicts with an existing DKT, ISDN extension, etc.
	80	FB00		The entered DN does not exist.
541	20	FB01		A character(s) that is not permitted is included in the specified code.
	52			The entered DN conflicts with an existing DKT, ISDN extension, etc.
	80			The entered DN does not exist.
550	49	FB01 ~ FB08		Two or more OLG numbers with the same value exist in the same group.
	80	FB01 ~ FB08		The entered OLG number does not exist.
570	49	FB01		Registered Digit Length cannot be less than the Verified Digit Length.
	50	FB02		Registered Digit Length cannot be less than the Verified Digit Length.
571	49	FB01 ~ FB04		The same account code cannot be repeated.
	50	FB01 ~ FB04		The same account code cannot be repeated.
573	80	FB01		The entered Door Phone does not exist.
576	80	FB01		The entered Paging Group does not exist.
577	33	FB00		The entered circuit type is out of range.
	33	FB00		The Ckt Type number entered, Exchange Line, GCO or POOL is invalid.
	51	FB00		The entered circuit number is invalid.
	52	FB00		The entered circuit number is invalid.
	80	FB00		The Device installed in the Circuit does not exist in the system.
	80	FB01		The entered station number does not exist.
579	-	-		No error occurs for this Program except for common errors.
580	52	-		The entered DN is not a VM extension.
	80	-		No error occurs for this command except for common errors.

## Networking Programming Error Codes

Program	Code	Occurred FB		Error descriptions
650	80	-		An OLG number has not been assigned in system.
651	98	-		The allowable number of Node ID assignments has been exceeded.
653	-	-		No error occurs for this Program except for common errors.
654	-	-		No error occurs for this Program except for common errors.
655	-	-		No error occurs for this Program except for common errors.
656	49	FB01 ~ FB04		The entered Overlap Code already exists.
657	-	-		No error occurs for this Program except for common errors.
658	-	-		No error occurs for this Program except for common errors.
659	-	-		No error occurs for this Program except for common errors.
660	-	-		No error occurs for this Program except for common errors.

## Equipment Programming Error Codes

Program	Code	Occurred FB		Error descriptions
801	49	FB02		Server Port Number must be entered when PC Operation Type is set to Server, or Client Port Number must be entered when PC Operation Type is set to Client.
	49	FB03		If a CTI value (200~208) is assigned to the Logical Device in Program 803, then Data Flow must be set to Asynchronization.
	49	FB09		When PC Operation Type is set to Client, the Client Port Number cannot be deleted.
	49	FB04		When PC Operation Type is set to Server, the Server Port Number cannot be deleted.
	80	FB00		The values assigned in Program 803 conflict with related I/O Logical and Physical Device assignments.
803	49	-		The selected port conflicts with existing devices, such as CTI, etc.
	50	-		The Physical Device assignment conflicts with existing serial number assignments.
804	80	-		The values assigned in Program 803 conflict with related I/O Logical and Physical Device assignments.



# Notes to Users

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## Step 1: Safety Approval

Toshiba Information System (U.K.) Ltd declare that the Strata CTX complies with the EEC's LVD directive, (Directive No. 73/23/EEC). The product has been assessed and found to comply with EN60950:2000.

The notes listed below form part of the products compliance with the aforementioned European Norm.

### IMPORTANT SAFETY NOTES

- 1-1. Both systems must have an earth connection and must be hardwired to a main distribution point. The main cabinet must be earthed.
- 1-2. Table C1 below identifies and classifies the ports available on the system:

**Table C-1**

Type of Circuit (EN60950 Classification)	Port Location	Port Description
SELV	Power Supply BPSU672F APSU112F	For connection of external 24 volt batteries.
SELV	Processor Boards: ACTU1F, BECU1F, BBCU1F	For connection of external Music-on-Hold source and Ethernet LAN connection
SELV	AETS1A	Ethernet I/F for CTX100 only
SELV	PDKU2A/BDKU/ BDKS/ADKU	For connection of Toshiba proprietary terminals.
SELV	BSIS1A	For connection of Voice Mail and Call Logging Equipment. RS232 ports.
TNV3	RSTU1F	For connection of approved 2 wire devices.
TNV3	RSTU3F/ASTU1F	For connection of approved 2 wire devices.
TNV3	PCOU2F/ PCOUS2F RCOU/RCOS/ RCOUS	For connection to PTO provided Loop Calling Unguarded Clear exchange lines.
TNV1	RBSU2A	2 Cct ISDN2, (TBR3), Basic Rate I/F. For connection to euro- ISDN services.
TNV1	RBSU1A	2 Cct ISDN2, (TBR3), Basic Rate I/F. For connection to euro- ISDN services.
TNV1	RBSS1A & RBSS2A	2 Cct ISDN2, Basic Rate I/F. For connection to euro-ISDN services.
TNV1	RPTU1F/RPTU2F	1ccts ISDN30, (TBR4), primary rate I/F. For connection to euro-ISDN services.

**Table C-1 (Continued)**

Type of Circuit (EN60950 Classification)	Port Location	Port Description
TNV2	PACU2F/PACU3F	4Cct AC15 Private Circuit I/F, (TBR17). For connection to PTO Private Circuit services.
TNV2	PEMU2F/REMU	4Cct AC15 Private Circuit I/F, (TBR17). For connection to PTO Private Circuit services.
SELV	BIOU1A	Contains various ports for connection of audio paging amplifiers, dry relay contacts to control external equipment.
SELV	BVPU1A	Voice Over IP interface cards. House Ethernet/RS232 ports.
SELV	Stratagy DK	Intergrated Voice Mail unit. House R232 ports.
SELV	RRCU1A	Optical interface board for connecting remote cabinets.
SELV	BPCI1A	USB port for connection of PC for CTI.
SELV	DKT2500/ DKT3000/DKT3500	Headset ports on any of the range of key telephones.

Any peripheral apparatus connected to the above ports must have the same EN60950 classification. ie.

- SELV ports must only be connected to SELV type ports.
  - TNV ports must only be connected to TNV type ports.
- 1-3. The Strata CTX670 system must be hardwired into a switched fused spur, (which should comply with the requirements of a disconnecting device as specified in the standard EN60950), the switch on the fused spur outlet shall be considered the AC power disconnection device. This spur must be installed in accordance with 16th edition of the IEE wiring regulations, aka BS7671:1992. Or the latest edition of this standard.
- The Strata CTX100 system must be hardwired into a switched fused spur, (which should comply with the requirements of a disconnecting device as specified in the standard EN60950), the switch on the fused spur outlet shall be considered the AC power disconnection device. This spur must be installed in accordance with 16th edition of the IEE wiring regulations, aka BS7671:1992. Or the latest edition of this standard

1-4. Environmental Installation details.

The Strata CT is designed to work within the following environmental conditions:

- Operating temperature 0oC to 40oC
- Humidity 20% to 80%



## Step 2: EU Compliance

Toshiba Information Systems (U.K.) Ltd declare that the Strata CTX100 & CTX670 complies with the EEC's EMC directive, Directive No. 89/366/EEC as amended by directive 92/31/EEC. The product has been assessed and found to comply with the following generic standards:

- ✦ **EN55022:1998-9, EN/IEC61000-3-2/1995, EN/IEC61000-3-3/1995 (Emissions)**
- ✦ **EN52024:1998, EN61000-4-2/1995+A1:1998, EN61000-4-3/1997+A1:1998, EN61000-4-4/1995+A1:2001, EN61000-4-5/1995+A1:2001, EN61000-4-6/1995+A1:2001, (Immunity)**

The notes listed below form part of the products' compliance with the aforementioned European Norm.

To ensure EU compliance the system must installed in accordance with the instructions in the "Installation and Maintenance" manual. In order to maintain compliance any shielded cables supplied and/or ferrite suppression cores must be used.

### Equipment details Strata CTX100

Base Cabinet Dimensions:	Expansion Cabinet Dimensions:
Height - 370mm	Height - 370mm
Width - 303mm	Width - 230mm
Depth - 259mm	Depth - 259mm
Weight - 8.8kg (fully equipped)	Weight - 6.9kg (fully equipped)

### Equipment details Strata CTX670

Base Cabinet Dimensions:	Expansion Cabinet Dimensions:
Height - 296mm	Height - 254mm
Width - 672mm	Width - 672mm
Depth - 270mm	Depth - 270mm
Weight - 14.1kg (fully equipped)	Weight - 13.2kg (fully equipped)

**Warning!** *This is a Class A product. In a domestic environment this Product may cause radio interference in which case the User may be required to take adequate measures*

## Step 3: Type Approval

Toshiba Information Systems (UK), Ltd, (TIU), hereby declares that the Strata CTX product complies with the requirements of the EC Directive 1999/5/EC, (aka Radio & Telecommunications Terminal Equipment directive). A manufacture's Declaration under this Directive allows connection to the relevant Public Network Services and the right to place the Product on the market.

The Strata CT is classified as "Call Routing Apparatus" it is intended to be connected to the various Public Telecommunications Network Services for the purpose of generating and terminating "calls". Table C2 below lists the intended purposes of all the system interfaces.

**Table C-2**

Interface Type	Network Service
PCOU2F/RCOU	Analogue Loop Calling Unguarded Lines. PD7002
RPTU1F/RPTU2F	Euro ISDN30 service. Approved to TBR 4 & TBR12.
RBSU1A & RBSU2A	Euro ISDN2 service. Approved to TBR 3.
PACU2F/PACU3F	Analogue 4 wire Private Circuits, uses AC15 signalling. Approved to TBR 17.
PEMU2F/REMU	Analogue 4 wire Private Circuits, uses DC5 signalling. Approved to TBR 17.

The system must be installed in accordance with BS6701 parts 1 and 2, the latest issue shall apply.

Toshiba Information Systems claim approval to OFTEL general variation NS/V/1235/P/100020.

The information contained in this paragraph supports Toshiba's claim:

The following features require the interconnection of 2 or more exchange lines.

- ✦ **Multi-party conferencing**
- ✦ **Call Forward External\***
- ✦ **Translation of Un-used Extension numbers\***
- ✦ **DISA\***

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**\*Warning!** *These features can allow an Incoming callers access to an outgoing exchange line. There is an engineering programming parameter which can disable these features. In addition the DISA feature can be "password" protected. USERS SHOULD BE AWARE THAT THESE FEATURES CAN BE USED FOR FRAUDULENT PURPOSES. Please consult your supplier to ensure any necessary security measures are enabled.*

## Step 4: Network Planning Information

### 4-1. Strata CTX Tone Plan.

Table C3 below lists the characteristics of the tones and signals used in Strata CTX.

**Table C-3**

Tones/ Signal to:	Frequency	Cadence	Meaning
Exchange Line	Music On Hold 1209Hz	N/A 0.12 ON 2s Off	Call on Hold Internal Hold Tone
DKT	1. 500/640Hz 2. 1240/1560Hz 3. 840/1060Hz 4. 860/1060Hz (T1) & 1240/1560Hz (T2) 5. 2000Hz mod by 10Hz 5. 500Hz 6. 1300Hz 7. 1000/800Hz 8. 1000/800Hz 9. 660/500 10. 2000Hz 11. 2000Hz 10Hz Intrpt 12. 860/1180Hz (T1) & 1300/1780Hz (T2)	1s On 3s Off <b>OR</b> 1sOn 1s Off 1s On 3s Off <b>OR</b> 1sOn 1s Off 1s On 3s Off <b>OR</b> 1sOn 1s Off T1-0.5s ON T2-0.5s On 3s Off <b>OR</b> T1-0.5s ON T2-0.5s On 3s Off  1s On 3s Off 1s On 1 S Off 0.6s On 1000Hz/0.6s On 800Hz 0.6s On 1000Hz/0.6s 800Hz 0.7s On 660Hz/0.7s On 500Hz 1s On 3s Off 1s On 1 S Off T1-0.5s ON T2-0.5s On Repeat	I/C PSTN call Opt.1 & 2. I/C PSTN call Opt.3 & 4. I/C PSTN call Opt.5 & 6. I/C PSTN call Opt.7. I/C PSTN call Opt.8. I/C PSTN to Busy DKT I/C Int call Opt 1 I/C Int call Opt 2 Call from D/phone A Call from D/phone B Call from D/phone B Busy/DND Override Recall Indication Emergency Ring down Call
2 Wire extns	1. 20Hz 2. 20Hz 3. DTMF A 4. DTMF D 5. DTMF B 6. MWI Signal 7. 20Hz 8. 1209Hz 9. 1209Hz	0.4s On 0.2s Off 0.4s On 3s Off 1s On 3s Off 80 or 160mS 80 or 160mS 80 or 160mS 0.9 ON/0.1s Off 1s On 1 S Off 2 bursts 0.16s On twice then 3s Off 2 bursts 0.5s On twice then 3s Off	Ringing Signal Internal Ringing Signal Internal Voice Mail Answer Voice Mail Disconnect Voice Mail Recall Message Waiting Signal Recall Ringing Signal External Call waiting Internal Call waiting

**Table C-3 (Continued)**

Tones/ Signal to:	Frequency	Cadence	Meaning
Internal general	1. 350/440Hz	Continuous	Dial Tone
	2. 400(T1), 350/440Hz(T2)	4 bursts of 0.125s T2-3s On	DND Stutter Dial Tone
	3. 350/440Hz	5 bursts of 0.1s 3s On	MW Stutter Dial Tone
	4. 400/450Hz	0.4s On, 0.2s Off 0.4s On 2s Off	Ringing Back Tone
	5. 400Hz	0.375s On/0.375s Off Repeated	Normal Extension Busy
	6. 400Hz	0.375s On/0.375s Off Repeated	Busy-Extension in DND
	7. 400Hz	0.375s On/0.375s Off Repeated	NU/Reorder Tone
	8. 440Hz	1s On	Executive override
	9. 350/440Hz	3 bursts of 0.1s	Entry Tone
	10. 1209Hz(T1), 500Hz(T2)	T1-3 bursts of 0.25s, T2 0.25s three times	Operation rejected. In call
	11. 350/440Hz	3 bursts of 0.125s	Operation accepted In call
	12. 2000Hz	2 bursts of 0.125s	Progmg Operation accepted
	13. 2000Hz	0.75s On	Prmgmg Operation rejected
	14. 350/440Hz	1s On 2s Off Repeated	CFD stutter dial tone

4-2. System Port to Port losses.

Table C4 below lists the various “typical” transmission gains/losses when inter-connecting the various port types.

**Table C-4**

System Port Type	RCOU3R/ PCOU2F		RBSU2A		RPTU1F/ RPTU2F		PEMU2F/ REMU		PACU2F/ PACU3F		RSTU3F ASTU	
	to	fm	to	fm	to	fm	to	fm	to	fm	to	fm
PCOU2F/RCOU	3.7	3.7	1.8	1.9	1.8	1.9	3.1	3.2	-0.7	-1.5		
RPTU1F/2F	1.9	1.8	0	0	0	0						
RBSU2A	1.9	1.8	0	0	0	0						
PEMU2F/REMU	3.1	3.2	1.3	1.3	1.3	1.3	2.6	2.6	-2.0	-2.0		
PACU2F/PACU3F	-0.7	-1.5	-3.4	-2.5	-3.4	-2.5	-2.0	-2.0	-6.0	-6.0		
RSTU3F/ASTU	-0.5	-1.0	-2.4	-2.8	-2.4	-2.8	-1.1	-1.5	-5.9	-6.2	-5.2	-5.2

-Values indicate a transmission loss.

4-3. Loudness Rating.

The table below lists the measured loudness rating of the Toshiba proprietary terminals.

SLR and RLR @ 0km PSTN. (All values are +/-dB)

**Table C-5**

System Port Type	PDKU2A/BDKU/BDKS ITS-A	
	SLR	RLR
PCOU2F/RCOU3F	1dB	-5dB to -16dB
RPTU1F/RPTU2F/RBSU1A	6dB	2dB to -10dB
PEMU2F/REMU	4dB	-2dB to -14dB
PACU2F/PACU3F	8dB	0dB to -9dB

# Typical Programming Scenarios Guide For **TOSHIBA** Strata CTX

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Compiled by Ian Ellul

Date: 12<sup>th</sup> July 2002

Version: CTX02

# A

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  - 2) Call Pick-up
  - 3) DISA
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# 1 Call History

Please follow the instructions to first enable Call History (the ability to view the history, using CLI, of calls that have been answered and abandoned) and then how to return the call.

## STEP 1 - Using WinAdmin follow the instructions below to enable a DKT to view their Call History

From WinAdmin, click - **System / System Data**

### **Pgm 105** SYSTEM PARAMETERS

FB23 – Select Not Add – **Click Submit**

From WinAdmin, click - **Station / Assignment / DKT (DKT is a tab at the top)**

### **Pgm 204** DKT DATA

Enter the extension number in the PRIME DN field (Top left)

FB17 – Select the number of calls to be stored in the Call History memory –  
Click Submit

### **Pgm 205** STATION FEATURE KEY

Click Key (Key is a tab at the top) if still in previous menu – i.e. Pgm 204  
Type the extension number in the PRIME DN field (Top left) if not already displayed  
Click and highlight a spare key (should turn Red)  
Click on Call Control option tab (top right)  
Choose CLID option underneath option tabs – **Click Submit**

## STEP 2 - Viewing stored records on the LCD

Press the **CLID** key (Previously programmed in pgm 205)  
Press the **PAGE** key to see if the call was abandoned or answered  
Press the **VOL** Up/Down key to view all calls

## STEP 3 – Returning calls

Use the above procedure to view the call you want to return  
Once you have the call in the LCD press either:

Direct Line Key + CLID Key  
DN Key + 9 + CLID Key

## 2 Call Pick-up

### STEP 1 - Adding extensions to a call pick up group

We will add extensions 200, 202 and 203 to pick up group 1

From WinAdmin, click - **Station / Assignment / Data Tab**

**Pgm 210** GROUP CALL PICKUP

Click **List** and choose station 200

Click on **box 01** (Ensure that there is a tick in the box)

Click Submit

Repeat for stations 202 and 203

### STEP 2 - Allowing Call Pick Up in Station Class of Service

From WinAdmin, click - **System / Class of Service**

**Pgm 103** CLASS OF SERVICE (COS)

Choose the COS by clicking in the COS Number box.

Enable the call pick up features within FB 12 ~ 19

Click Submit

### STEP 3 – Allowing an Extension the ability to use Call Pick Up

We will allow extensions 200, 202 and 203 to use call pick up

From WinAdmin, click - **Station / Assignment**

**Pgm 200** STATION DATA

Click **List** and choose station 200

FB 04 – Choose the Class of Service enabling call pick up features from Step 2

FB 13 – choose Permitted

Click submit

Repeat for stations 202 and 203

### STEP 4 – Assigning a Pickup Group key

We will give extensions 200, 202 and 203 a group pick up key

From WinAdmin, click - **Station / Assignment/KEY tab**



**Pgm 205** STATION FEATURE KEY

Click **List** and choose extension 200  
Select the key you wish to use (key should turn red)  
Click on the **Call Pickup** button (right hand side of screen)  
Choose **Pickup-Group** from the list  
Click Submit

Repeat for extensions 202 and 203

Testing the Pickup Group key

Make a call to one of the members of the group i.e. dial 200 from 202 and then press the **Pickup Group** key at extension 203.

## 3 DISA

### STEP 1 – Enable the trunk to be used for DISA

From WinAdmin, click - **Trunk / Timer/DIT**

#### **Pgm 310** DIRECT INWARD TERMINATION

Click on **List** and choose the DISA line's equipment number

FB 01~03 – Choose DISA (Depending on Day/Day 2/Night modes)

Click Submit

### STEP 2 – Set the Timer before the system answers the DISA line and DISA Security Code

From WinAdmin, click - **Trunk / Service**

#### **Pgm 311** DISA SECURITY CODE

FB 01 – Select **Enable**

FB 02 – Enter the security code (up to 15 digits)

FB 03 – Enter the amount of time (0 ~ 30 seconds) that it takes the CTX to answer the DISA line and return dial tone.

# 4 Distinctive Ringing

Strata CTX provides distinctive ringing for internal and external calls. There are two types of ring tones for internal calls, whereas with external calls we get 8 tones.

## STEP 1 - Internal ringing

Access **User Programming** by entering **#9876** and press **HOLD**  
Press the **DN** key (usually labelled **Intercom**)

## STEP 2 - Allowing an extension to invoke an all call emergency page

From WinAdmin, click - **Station / Assignment**

### Pgm 200 STATION DATA

Click on **List** and choose the extension you would like to be able to invoke an all call emergency page.

FB 04 – Choose a Class of Service (COS) number 1~32

Click submit

From WinAdmin, click - **System / Class of Service**

### Pgm 103 CLASS OF SERVICE

Choose the Class of Service number previously chosen above in Pgm 200 FB 04.

FB 23 – Tick this option (Invoke Emergency Page)

**Note Ensure all other FBs are selected correctly for this class of service!**

Click submit

## STEP 3 - Testing the emergency all call page group

Make a normal page announcement.

Now, Dial **#37** from the extension that is allowed to invoke an emergency all call page set up in Step 2.

# 5 Emergency All Call Page

By default there are NO extensions in the emergency all call paging group.

An emergency page will override any other page currently active. Please follow the procedures below to add extensions to the emergency paging group.

## STEP 1 - Adding extensions to accept an all call emergency page

We will add extensions 200 and 201 to the emergency paging group

From WinAdmin, click - **Station / Assignment**

### Pgm 502 TERMINAL PAGING GROUP ASSIGNMENT

Click the **Page Group** tab (top right)

Enter 200 in the Prime DN field – press **ENTER**

Click to place a tick (☒) in the **All Emergency Page Group** – click submit

Enter 201 in the Prime DN field – press **ENTER**

Click to place a tick (☒) in the **All Emergency Page Group** – click submit

## STEP 2 - Allowing an extension to invoke an all call emergency page

From WinAdmin, click - **Station / Assignment**

### Pgm 200 STATION DATA

Click on **List** and choose the extension you would like to be able to invoke an all call emergency page.

FB 04 – Choose a Class of Service (COS) number 1~32

Click submit

From WinAdmin, click - **System / Class of Service**

### Pgm 103 CLASS OF SERVICE

Choose the Class of Service number previously chosen above in Pgm 200 FB 04.

FB 23 – Tick this option (Invoke Emergency Page)

**Note Ensure all other FBs are selected correctly for this class of service!**

Click submit

## STEP 3 - Testing the emergency all call page group

Make a normal page announcement.

Now, Dial **#37** from the extension that is allowed to invoke an emergency all call page set up in Step 2.

# 6 Emergency Page to a Group

It is good to note that an emergency page to a group will override the current page currently active at that group.

## STEP 1 - Allowing an extension to invoke an emergency page

From WinAdmin, click - **Station / Assignment**

### **Pgm 200** STATION DATA

Click on List and choose the extension you would like to be able to invoke an all call emergency page.

FB 04 – Choose a Class of service number 1~32  
Click submit

From WinAdmin, click - **System / Class of Service**

### **Pgm 103** CLASS OF SERVICE

Choose the Class of Service number previously chosen above in Pgm 200 FB 04.

FB 23 – Tick this option (Invoke Emerg Page)  
Click submit

**Note Ensure all other FBs are selected correctly for this class of service!**

## STEP 2 - Testing the emergency page to a group

Assuming that page group 1 has already been programmed;

- i) Dial **#3101** to page group 1
- ii) Dial **#38** followed by **01** (for page group 1) to invoke an emergency page to that group

# 7 ISDN BRI NT (S-bus) Configuration

Please follow the steps below to assign Basic Rate Trunks for DDI working.

## STEP 1 - Hardware

Ensure that the switches on the RBSU/RBSS are set to NT, and that the 100  $\Omega$  terminating resistor is correctly installed.

## STEP 2 – Install the RBSU pcb in the cabinet. (Power must be off)

Once the RBSU interface board is installed and the Strata CTX powered back up, follow the following WinAdmin programming:

From WinAdmin, click – **System / Card Assignment**

### Pgm 100 CABINET SLOT PCB ASSIGNMENT

Select Cabinet and Slot numbers

In **PCB Type** choose: RBSU – 2 BRI S/T interface circuits – fixed

Click Submit

From WinAdmin, click – **Station / ISDN / BRI**

### Pgm 202 ISDN BRI STATION

Click **Create**

Type the DN number associated to the SBus circuit – Click **OK**

FB01 – Enter the equipment number of the RBSU/RBSS circuit

FB02 – Enter the ISDN Channel group number (make sure it does not conflict with previously assigned channel groups for ISDN trunks in Pgm 317 and 302)

FB04 – Select Point to Multipoint

FB16 – Select Any Channel

FB26–32 – Add more DNs if required

All other FKs leave in default – **Click Submit**

# 8 ISDN BRI TE Configuration

Please follow the steps below to assign Basic Rate Trunks for DDI working.

## STEP 1 – Hardware

Ensure that the switches on the RBSU are set to TE. (Make sure that the 100 ohm terminating resistor is correctly installed.)

## STEP 2 – Install the RBSU pcb in the cabinet. (Power must be off)

Once the RBSU interface board is installed and the Strata CTX powered back up, follow the following WinAdmin programming:

From WinAdmin, click – **System / Card Assignment**

### Pgm 100 CABINET SLOT PCB ASSIGNMENT

Select Cabinet and Slot numbers

In **PCB Type** choose: RBSU – 2 BRI S/T interface circuits – fixed

Click Submit

From WinAdmin, click – **Trunk / ILG**

### Pgm 304 INCOMING LINE GROUP ASSIGNMENT

Click on **Create** – Enter an ILG number you wish to use.

**Note** You can click on List to find out how many ILGs have been created

FB01 – Select ISDN

FB02 – Select CO

FB03 – Select DID

FB04 ~ 10 – Leave in default

FB11 – Enter the number of DDI digits that will be received

FB12 ~ 27 – Leave in default

From WinAdmin, click – **Trunk / OLG**

### Pgm 306 OUTGOING LINE GROUPS

Click on **Create** – Enter an OLG number you wish to use.

**Note** You can click on **List** to find out how many OLGs have been created

FB01 – Select ISDN  
FB02 ~ 18 – leave in default

### STEP 3 – Direct Inward Dialling

From WinAdmin, click – **Trunk / DID**

#### Pgm 309 DDI

Click on ILG Number down arrow box and choose the ILG number created in Step 2

Click **Create** – Enter the DDI digits expected to be received (E.g. 5000). Ensure that the number of digits entered match Pgm 304 FB11. **Click OK**

FB02 – Select Quiet Tone for no MOH (If there is a MOH source then enter the correct value of 1~15)

FB03 ~ 04 – Leave in default

FB05 – Audio Day1 Dst Type - Select - Dialling Digits

Audio Day1 Dst DN – Enter the DN of where the call should ring

FB06 – Audio Day2 Dst Type - Select - Dialling Digits

Audio Day2 Dst DN – Enter the DN of where the call should ring

FB07 – Audio Night Dst Type - Select - Dialling Digits

Audio Night Dst DN – Enter the DN of where the call should ring

FB08 ~ 11 – Leave in default

FB12 – Enter a DDI Alpha Tag (Not essential) – **Click Submit**

From WinAdmin, click – **Trunk / ISDN / BRI**

#### Pgm 317 ISDN BRI Trunk

Click on **Create** – Enter a Channel Group number you wish to use.

**Note You can click on List to find out how many Channel Groups have been created**

FB01 – Enter the circuit number of the 1<sup>st</sup> circuit on the card (E.g. 010401 would be the 1<sup>st</sup> circuit of the RBSU card in slot 4 of cabinet 1)

FB02 – Select ETSI

FB03 – Select the ILG number created in Step 2

FB04 – Select the OLG number created in Step 3

FB06 ~ 11 – Leave in default

FB12 – Select Any Channel

FB13 – Leave in default

FB14 – Select None

FB15 ~ 21 – Leave in default



# 9 Multiple Calling Groups

This chapter will describe the programming involved in setting up what are usually termed as Ringing Groups, where PDNs assigned within such a group will ring at the same time.

With Strata CTX we go one step further. You are now not only able to assign a number of PDNs in such a group, but you can also assign a Pilot Number to this group for internal and external call termination. You can now also assign which member in the group receives VM messages for the whole group. These VM messages will flash that member's **Msg LED**. Members of such a group do not necessarily have to ring simultaneously, but you can also have a number of members ringing on the IMMEDIATE setting, and another number set to ring on DELAY 1 or 2.

A Multiple Call Group allows PDN, SDN, PhDN and other MCGs to be members. Hunt Group Pilot DNs cannot be a member in a MCG.

For MCG programming, three programs are used:

Pgm 517: Creates a MCG and assigns its attributes

Pgm 518: Assigns members in a MCG and assigns their attributes within the MCG

Pgm 519: Deletes a MCG

Unfortunately, presently we are experiencing some problems with MCG programming through WinAdmin which are being dealt with. In the meantime, please program MCGs through button programming.

## STEP 1 – Creating a Multiple Calling Group

Pgm 517 - Multiple Calling Group Assignment Programming

**FB00** MCG Index (possible values 1-64)

**FB01** MCG Pilot DN (max 5 numerical characters)

**FB02** MCG Delay1 Timer (possible values in seconds 1 – 180, Default = 12)

**FB03** MCG Delay2 Timer (possible values in seconds 1 – 180, Default = 24)

**FB04** MCG System CF Index (possible values 0 – 32, Default = 0)

**FB05** MCG VM ID (max 16 characters)

**FB06** MCG Msg Centre Port (max 5 characters)

**FB07** MCG COS Day1 (possible values 1 – 32, Default = COS 1)

**FB07** MCG COS Day2 (possible values 1 – 32, Default = COS 1)

**FB07** MCG COS Night (possible values 1 – 32, Default = COS 1)

**Note** To toggle between Day1, Day2 and Night under FB07 use the Spkr button on the DKT.

## STEP 2 – Assign members to the Multiple Calling Group

518 - Multiple Calling Members Assignment

**FB00** MCG Index (possible values 1-64)

**FB01** MCG Destination List Index (possible values 1 – 25)

**FB02** MCG Destination Type

Possible values: 1. NO DATA  
2. DIALLING DIGITS

**FB02** MCG Destination Number (max 32 characters)

**Note** To toggle between Destination Type and Destination Number under **FB02** use the Spkr button on the DKT.

**FB03** MCG Destination Call Type

1. IMMEDIATE
2. DELAY1
3. DELAY2

**Optional – Delete the Multiple Calling Group**

**FK01** MCG Index Delete (possible values 1-64)

# 10 Non-Toshiba Door Phones & Locks

Strata CTX provides for door phones and unlock relays for these. However it might be the case where a non-Toshiba door phone is employed. In such a scenario, Strata CTX still requires a DHCB unit assigned to an equipment number. These are in turn assigned to a BIUO and a relay on that same interface PCB. How do we do this, then?

## STEP 1- Door Phone Assignment

From WinAdmin, click – **Services/External Device/Door Phones**

### Pgm 507 DOOR PHONE ASSIGNMENT

Click on **Create** and enter 1. This is only an index number and you could put anything. It is however a good idea to keep these in sequence.

FB 01 – As in this scenario we do not have a physical DDCCB installed, you need to assign a “dummy” equipment number. Do not forget to de-assign the PDN in Station Assignments.

FB 05 – Assign a name, if required, say, DOOR PHONE?  
FB06 – Define the Destination type and number

If you require to ring the Door Phone on all the extensions in the system, create a MCG and program all the extensions as members of the MCG. Do not forget to program Day 2 and Night if required.

Click submit

## STEP 2 – Door Lock Assignment

From WinAdmin, click – **Services/External Device/Door Phones**

### Pgm 508 STATION DATA

FB 00 – Assign the number you assigned in FB 00 above.  
FB 01 – Define the type of interface, say BIOU.  
FB 02 – Assign the relay number of the BIOU to which you have connected the door lock.  
FB 03 – Assign the same equipment number you assigned above in FB 01.

# 11 Least Cost Routing (LCR) for Indirect Trunk Access - Part 1

It is assumed that the local lines are connected to BT and the indirect carrier is Telia (Need to add 1656 to the front of the number)

In this example the following STD codes will be routed via BT  
0500, 0800, 0845, 0870, 192, 100

All other numbers will be routed via Telia.

Please programme the CTX by following the step by step procedure below:

## STEP 1 - Pgm 520 / 521

From WinAdmin, click - **Services / LCR/DR / Assignment**

**Pgm 520** LCR LOCAL ROUTE PLAN ASSIGNMENT  
FB01 - Leave empty  
FB02 - Select 1 (Local Route Plan) - **Click Submit**

This is a fail safe route plan that the CTX will use if a number is dialled that is not registered in programme 521.

**Pgm 521** LCR ROUTE PLAN DIGIT ANALYSIS ASSIGNMENT

Enter the codes for BT using FB00 and choose route plan 2 using FB01

I.E. enter the following:  
FB00 - 0500 = FB01 - 2 **Click Submit**  
FB00 - 0800 = FB01 - 2 **Click Submit**  
FB00 - 0845 = FB01 - 2 **Click Submit**  
FB00 - 0870 = FB01 - 2 **Click Submit**  
FB00 - 192 = FB01 - 2 **Click Submit**  
FB00 - 100 = FB01 - 2 **Click Submit**

NB All other numbers will follow Route Plan 1 (Programmed in Pgm 520 under FB02)

We therefore now have 2 Route Plans  
Route Plan 1 = Telia  
Route Plan 2 = BT

## STEP 2 - Pgm 523 / 528

We now need to tell CTX how the schedules will work, we will assume that this company will route calls in the same way regardless of the day of the week or time of day.

We will 1st set up how Telia calls will be scheduled:

### **Pgm 523** LCR ROUTE PLAN SCHEDULE ASSIGNMENTS

FB00 - Route Plan - Select 1 (Telia)  
 FB01 - Type of Day - Select Weekday  
 FB02 - LCR Time of Day - Select Time Zone 1  
 FB03 - Station LCR Group - Select 1 (The station LCR group must match what is programmed in Pgm 200 FB07 - the default is 1)  
 FB04 - Route Choice Table - Select 1 (Telia Route Choice)

### **Pgm 528** LCR DAY TYPE ASSIGNMENTS

FB01~07 - select Weekday - **Click Submit**

We must now repeat for Time Zone 2

### **Pgm 523** LCR ROUTE PLAN SCHEDULE ASSIGNMENTS

FB00 - Route Plan - Select 1 (Telia)  
 FB01 - Type of Day - Select Weekday  
 FB02 - LCR Time of Day - Select Time Zone 2  
 FB03 - Station LCR Group - Select 1 (The station LCR group must match what is programmed in Pgm 200 FB07 - the default is 1)  
 FB04 - Route Choice Table - Select 1 (Telia Route Choice)

### **Pgm 528** LCR DAY TYPE ASSIGNMENTS

FB01~07 - select Weekday - **Click Submit**

We must repeat again for Night

### **Pgm 523** LCR ROUTE PLAN SCHEDULE ASSIGNMENTS

FB00 - Route Plan - Select 1 (Telia)  
 FB01 - Type of Day - Select Weekday  
 FB02 - LCR Time of Day - Select Night  
 FB03 - Station LCR Group - Select 1 (The station LCR group must match what is programmed in Pgm 200 FB07 - the default is 1)  
 FB04 - Route Choice Table - Select 1 (Telia Route Choice)

### **Pgm 528** LCR DAY TYPE ASSIGNMENTS

FB01~07 - select Weekday - **Click Submit**

We will now set up how BT calls will be scheduled

**Pgm 523** LCR ROUTE PLAN SCHEDULE ASSIGNMENTS

FB00 - Route Plan - Select 2 (BT)  
FB01 - Type of Day - Select Weekday  
FB02 - LCR Time of Day - Select Time Zone 1  
FB03 - Station LCR Group - Select 1 (The station LCR group must match what is programmed in Pgm 200 FB07 - the default is 1)  
FB04 - Route Choice Table - Select 2 (BT Route Choice)

**Pgm 528** LCR DAY TYPE ASSIGNMENTS

FB01~07 - select Weekday - **Click Submit**

We must now repeat for Time Zone 2

**Pgm 523** LCR ROUTE PLAN SCHEDULE ASSIGNMENTS

FB00 - Route Plan - Select 2 (BT)  
FB01 - Type of Day - Select Weekday  
FB02 - LCR Time of Day - Select Time Zone 2  
FB03 - Station LCR Group - Select 1 (The station LCR group must match what is programmed in Pgm 200 FB07 - the default is 1)  
FB04 - Route Choice Table - Select 2 (BT Route Choice)

**Pgm 528** LCR DAY TYPE ASSIGNMENTS

FB01~07 - select Weekday - **Click Submit**

We must repeat again for Night

**Pgm 523** LCR ROUTE PLAN SCHEDULE ASSIGNMENTS

FB00 - Route Plan - Select 2 (BT)  
FB01 - Type of Day - Select Weekday  
FB02 - LCR Time of Day - Select Night  
FB03 - Station LCR Group - Select 1 (The station LCR group must match what is programmed in Pgm 200 FB07 - the default is 1)  
FB04 - Route Choice Table - Select 2 (BT Route Choice)

**Pgm 528** LCR DAY TYPE ASSIGNMENTS

FB01~07 - select Weekday - **Click Submit**

**STEP 3 - Pgm 527 / 529**

From WinAdmin, click - **Services / LCR/DR / Public Holidays and LCR Time Zones**

**Pgm 527** LCR HOLIDAY TABLE – DO NOT ALTER, LEAVE EMPTY

We need to now set up the time zones in relation to Program 523-FB02.

We will 1st set up the time zones for Telia.

**Pgm 529** LCR ROUTE PLAN TIME ZONE ASSIGNMENT

FB00 - Route Plan - Select 1 (Telia)  
FB01 - LCR Day Type - Select Weekday  
FB02 - LCR Time Zone - Select Zone 1  
FB03 - Start Time - select 0000 - Click Submit

We need to repeat for Zone 2.

**Pgm 529** LCR ROUTE PLAN TIME ZONE ASSIGNMENT

FB00 - Route Plan - Select 1 (Telia)  
FB01 - LCR Day Type - Select Weekday  
FB02 - LCR Time Zone - Select Zone 2  
FB03 - Start Time - select 0001 - **Click Submit**

We need to repeat for Night.

**Pgm 529** LCR ROUTE PLAN TIME ZONE ASSIGNMENT

FB00 - Route Plan - Select 1 (Telia)  
FB01 - LCR Day Type - Select Weekday  
FB02 - LCR Time Zone - Select Night  
FB03 - Start Time - select 0002 - **Click Submit**

We will now set up the time zones for BT

**Pgm 529** LCR ROUTE PLAN TIME ZONE ASSIGNMENT

FB00 - Route Plan - Select 2 (BT)  
FB01 - LCR Day Type - Select Weekday  
FB02 - LCR Time Zone - Select Zone 1  
FB03 - Start Time - select 0000 - **Click Submit**

We now need to set up Zone 2

**Pgm 529** LCR ROUTE PLAN TIME ZONE ASSIGNMENT

FB00 - Route Plan - Select 2 (BT)  
FB01 - LCR Day Type - Select Weekday  
FB02 - LCR Time Zone - Select Zone 2  
FB03 - Start Time - select 0001 - **Click Submit**

We now need to set up Night

**Pgm 529** LCR ROUTE PLAN TIME ZONE ASSIGNMENT

FB00 - Route Plan - Select 2 (BT)  
FB01 - LCR Day Type - Select Weekday  
FB02 - LCR Time Zone - Select Night  
FB03 - Start Time - select 0002 - **Click Submit**

#### STEP 4 - Pgm 524 / 525 / 526

From WinAdmin, click - **Services / LCR/DR / Route Define**

We will 1st set up how Telia calls will be routed

##### **Pgm 524** ROUTE TABLE TO ROUTE DEFINITION ASSIGNMENT

FB00 - Choose Route Choice Table 1 (Telia - Defined in Pgm 523 FB04)

FB01 - Route Definition 1 - Select 1 **Click Submit**

##### **Pgm 525** LCR ROUTE DEFINITION ASSIGNMENTS

FB00 - Choose Route Definition 1 (Must match Pgm 524 FB01)

FB01 - OLG Number - select 1 (The OLG must already be programmed in Pgm 306)

FB02 - Digit Modification Index - select 1. **Click Submit**

##### **Pgm 526** MODIFIED DIGITS TABLE ASSIGNMENTS

FB00 - Digit Modification Index - select 1 (Must match Pgm 525 FB02)

FB01 - Delete Digits - Leave at 0 (zero)

FB02 - Add leading digits - enter 1656

FB03 - Add trailing digits - leave empty - **Click Submit**

We will now set up how BT calls will be routed

##### **Pgm 524** ROUTE TABLE TO ROUTE DEFINITION ASSIGNMENT

FB00 - Choose Route Choice Table 2 (BT- Defined in Pgm 523 FB04)

FB01 - Route Definition 1 - Select 2 **Click Submit**

##### **Pgm 525** LCR ROUTE DEFINITION ASSIGNMENTS

FB00 - Choose Route Definition 2 (Must match Pgm 524 FB01)

FB01 - OLG Number - select 1 (The OLG must already be programmed in Pgm 306)

FB02 - Digit Modification Index - select 2. **Click Submit**

##### **Pgm 526** MODIFIED DIGITS TABLE ASSIGNMENTS

FB00 - Digit Modification Index - select 2 (Must match Pgm 525 FB02)

FB01 - Delete Digits - Leave at 0 (zero)

FB02 - Add leading digits - leave empty

FB03 - Add trailing digits - leave empty - **Click Submit**



# 12 Least Cost Routing (LCR) for Indirect Trunk Access - Part 2

In this chapter we will look at an alternative LCR set up. It will be assumed that the customer has two ISDN circuits. One is with Telia and the other is a BT one. To access Telia we need to add 1656 to the front of the number.

The customer wants to make all the outgoing calls via Telia. If the Telia circuit goes down, then the customer wants to automatically access the BT circuit. Normally, the BT circuit is only used for incoming calls.

In this example the following STD codes will be routed via Telia  
0500, 0800, 0845, 0870, 192, 100

## STEP 1 - Pgm 520 / 521

From WinAdmin, click - **Services / LCR/DR / Assignment**

**Pgm 520** LCR LOCAL ROUTE PLAN ASSIGNMENT  
FB01 - Leave empty  
FB02 - Select 1 (Local Route Plan) - **Click Submit**

This is a fail safe route plan that the CTX will use if a number is dialled that is not registered in programme 521.

**Pgm 521** LCR ROUTE PLAN DIGIT ANALYSIS ASSIGNMENT

Enter the codes using FB00 and choose route plan 1 using FB01

I.E. enter the following:

FB00 - 0500 = FB01 - 2 **Click Submit**  
FB00 - 0800 = FB01 - 2 **Click Submit**  
FB00 - 0845 = FB01 - 2 **Click Submit**  
FB00 - 0870 = FB01 - 2 **Click Submit**  
FB00 - 192 = FB01 - 2 **Click Submit**  
FB00 - 100 = FB01 - 2 **Click Submit**

We therefore now have 1 Route Plan to which we will assign two Route Definitions, one for Telia and the other for BT.

Route Definition 1 = Telia  
Route Definition 2 = BT

## STEP 2 - Pgm 523 / 528

We now need to tell CTX how the schedules will work, we will assume that this company will route calls in the same way regardless of the day of the week or time of day.

### **Pgm 523** LCR ROUTE PLAN SCHEDULE ASSIGNMENTS

FB00 - Route Plan - Select 1  
FB01 - Type of Day - Select Weekday  
FB02 - LCR Time of Day - Select Time Zone 1  
FB03 - Station LCR Group - Select 1 (The station LCR group must match what is programmed in Pgm 200 FB07 - the default is 1)  
FB04 - Route Choice Table - Select 1

We must now repeat the above for Time Zone 2 and 3 (Night)

### **Pgm 528** LCR DAY TYPE ASSIGNMENTS

FB01~07 - select Weekday - **Click Submit**

## STEP 3 - Pgm 527 / 529

From WinAdmin, click - **Services / LCR/DR / Public Holidays and LCR Time Zones**

### **Pgm 527** LCR HOLIDAY TABLE – DO NOT ALTER, LEAVE EMPTY

We need to now set up the time zones in relation to Program 523-FB02.

We will 1st set up the time zone.

### **Pgm 529** LCR ROUTE PLAN TIME ZONE ASSIGNMENT

FB00 - Route Plan - Select 1  
FB01 - LCR Day Type - Select Weekday  
FB02 - LCR Time Zone - Select Zone 1  
FB03 - Start Time - select 0000 - **Click Submit**

We need to repeat for Zone 2.

### **Pgm 529** LCR ROUTE PLAN TIME ZONE ASSIGNMENT

FB00 - Route Plan - Select 1 (Telia)  
FB01 - LCR Day Type - Select Weekday  
FB02 - LCR Time Zone - Select Zone 2  
FB03 - Start Time - select 0001 - **Click Submit**

We need to repeat for Night.

**Pgm 529** LCR ROUTE PLAN TIME ZONE ASSIGNMENT

FB00 - Route Plan - Select 1  
FB01 - LCR Day Type - Select Weekday  
FB02 - LCR Time Zone - Select Night  
FB03 - Start Time - select 0002 - **Click Submit**

**STEP 4 - Pgm 524 / 525 / 526**

From WinAdmin, click - **Services / LCR/DR / Route Define**

Now set up how calls will be routed.

**Pgm 524** ROUTE TABLE TO ROUTE DEFINITION ASSIGNMENT

FB00 - Choose Route Choice Table 1 (Defined in Pgm 523 FB04)  
FB01 - Route Definition 1 (for Telia) - Select 1 **Click Submit**  
FB02 - Route Definition 2 (For BT) - Select 2 **Click Submit**

**Pgm 525** LCR ROUTE DEFINITION ASSIGNMENTS

FB00 - Choose Route Definition 1 (Must match Pgm 524 FB01)  
FB01 - OLG Number - select 1 (The OLG must already be programmed in Pgm 306)  
FB02 - Digit Modification Index - select 1. **Click Submit**

FB00 - Choose Route Definition 2 (Must match Pgm 524 FB01)  
FB01 - OLG Number - select 2 (For BT - The OLG must already be programmed in Pgm 306)  
FB02 - Digit Modification Index - select 2. **Click Submit**

**Pgm 526** MODIFIED DIGITS TABLE ASSIGNMENTS

FB00 - Digit Modification Index - select 1 (Must match Pgm 525 FB02)  
FB01 - Delete Digits - Leave at 0 (zero)  
FB02 - Add leading digits - enter 1656  
FB03 - Add trailing digits - leave empty - **Click Submit**

FB00 - Digit Modification Index - select 2 (Must match Pgm 525 FB02)  
FB01 - Delete Digits - Leave at 0 (zero)  
FB02 - Add leading digits – leave empty  
FB03 - Add trailing digits - leave empty - **Click Submit**  
CTX

# 13 Page Groups

This chapter will demonstrate how to create an extension Paging Group. We will add extensions 200 and 201 to paging group 1.

Please follow the procedure below:

## STEP 1 – Assigning the extensions to a page group

From WinAdmin, click - **Station / Assignment**

**Pgm 502**    **TERMINAL PAGING GROUP ASSIGNMENT**

Click the Page Group tab (top right)  
Enter 200 in Prime DN field – press **ENTER**  
Click on PG1 box (Make sure the box is ticked) – **click submit**  
Enter 201 in Prime DN field – press **ENTER**  
Click on PG1 box (Make sure the box is ticked) – **click submit**

## STEP 2 - Testing the page group

From a handset dial **#3101**

You can use this procedure to create an All Call Page group

## STEP 3 - Assigning extensions to the All Call Page group

We will add extensions 200 and 201 to the all call page group.  
From WinAdmin, click - **Station / Assignment**

**Pgm 502**    **TERMINAL PAGING GROUP ASSIGNMENT**

Click the Page Group tab (top right)  
Enter 200 in Prime DN field – press **ENTER**  
Click on PG1 box (Make sure the box is ticked) – **click submit**  
Enter 201 in Prime DN field – press **ENTER**  
Click on PG1 box (Make sure the box is ticked) – **click submit**

## STEP 4 - Testing the all call page group

From a handset press the **PGE All** key (You need to have set this up in Pgm 205 previously!)

# 14 Phantom Directory Numbers (PhDN)

Please follow the steps below to assign PhDNs. Step 1 will assign the PhDN appearance to a specific key, whereas Step 2 assigns the owner of the PhDN and overflow attributes.

## STEP 1 – Pgm 200: STATION DATA

From WinAdmin click - **Station / Assignment**

Click to select on KEY tab at the top

- ◆ Click **LIST** (A DN list will appear on the top left hand of the screen) and choose the DN that should belong to the PhDN group
- ◆ Select the feature button that the PhDN should appear (I.E. button 1 ~ 20). The key should now be coloured RED.
- ◆ Click on the **Directory No** button (top right hand of the screen)
- ◆ Select Secondary/Phantom DN (bottom right hand of the screen). A Dialog Box will appear, enter the DN number that you want to use for the PhDN (E.g. 500) and choose the Ringing Assignment and Tone Pitch required. Click **OK**, then **Submit**

Now add the other members of the PhDN. Will all members of the group have the same key appearance and ringing assignments? If yes go to 1.7, if no go to 2.0

- ◆ Click **Copy**. A Dialog Box will appear, enter the DN numbers you want to belong to the PhDN group. You can enter multiple DNs by using a comma (E.g. 201,203,210).
- ◆ Click on the PhDN key (already assigned above in steps 1.3~1.6). The key should now be coloured RED. Click **OK** in the Dialog Box that was opened in step 1.8

To assign members of the PhDN group that have different Key and Ringing assignments repeat steps 1.1 ~ 1.6

## STEP 2 – Pgm 206: PHANTOM DN

From WinAdmin click - **Station / Phantom DN**

Phantom DN – Enter the PhDN number used in step 1.6 above in step 1

FB01 – Owned PDN – Enter the DN number of the owner of the PhDN

**Note The owner of the PhDN has special privileges, e.g. set a call forward for the group to receive a voice first call for the group**

FB02 – Tone/Voice First – Select Tone First

FB04 – Display DN – Enter the DN you wish to appear on the LCD of the calling extension (Usually the same as the PhDN number entered above)

FB05 – System Call Forward – Enter a System Call Forward number (It must have been previously programmed in System / System Call Forward – Pgm 500)

# 15 Pop on Speed Dial

## **PROGRAM 501 SYSTEM SPEED DIAL**

### **Programming**

FK00 Speed Dial Bin = (Any Value between 000-799)

FK01 Number = (e.g. 01932 755380)

FK02 Name = (This is the LCD name that appears, max 8 characters, e.g. TOSHIBA)

### **Example:**

FK00 Speed Dial Bin = 000

FK01 Number = 07866 714346

FK02 Name = JAS

### **Click on Submit**

## **PROGRAM 516 STATION SPEED DIAL**

### **Programming**

Click on List

Select a DN from the available list

FK01 Speed Dial Bin = (Any Value between 00-99)

FK02 Number = ( e.g. 01932 755380)

FK03 Name = (This is the LCD name that appears, max 8 characters, e.g. TOSHIBA)

### **Programming**

Click on List

Select DN 2000

FK01 Speed Dial Bin = 00

FK02 Number = 01932 755380

FK03 Name = PRI LINE

### **Click on Submit**

### **Programming**

Click on List

Select DN 2000

FK01 Speed Dial Bin = 01

FK02 Number = 01932 785592

FK03 Name = BRI LINE

### **Click on Submit**

## **Programming**

Click on List

Select DN 2000

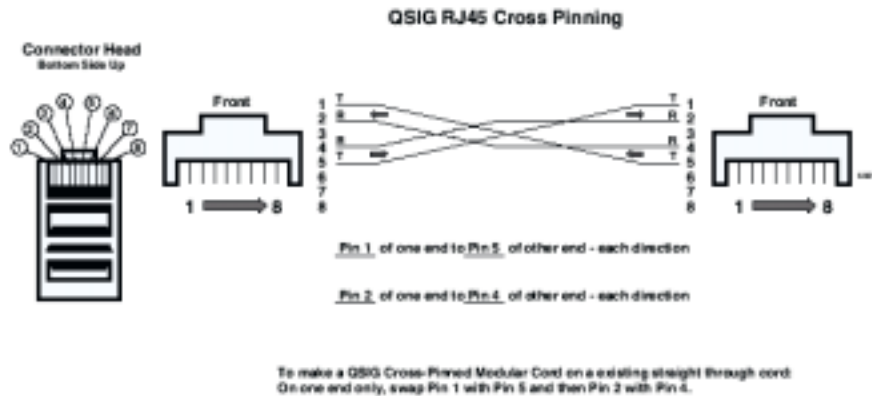
FK01 Speed Dial Bin = 02

FK02 Number = 07785335829

FK03 Name = IAN

**Click on Submit**

# 16 Q-Sig Made Simple



This chapter describes how to set up two systems, one with node ID 10 (Master) and the other with node ID 11 (Slave). We will look at 2 scenarios; each scenario will be programmed via WinAdmin. It is assumed that there are 2 systems each with an RPTU2F connected back to back. You therefore must use a cross over cable.

**Note** It is better to add the RPTU2F cards manually in pgm 100.

If your system has been initialised with the RPTU2F inserted then default programming will have already been assigned to the card E.g. an ILG(Pgm304), OLG(Pgm306) and channel groups(Pgm302) will already have been allocated. Therefore you will either need to use these defaults or remove the default ChGrp first in order to use the suggested ILG/OLG/ChGrp shown below

## Adding RPTU2F Manually via a handset

**Note** If the system was initialised with this card already inserted then this step is not required.

Enter Programming Mode via the handset  
 \* # \* # 1 \* 2 \* 3 \* password Hold  
 100 Hold (Program 100)  
 Enter the cab/slot number (Must be a slot that supports RPTU2F – E.g. 0105)  
 FB01 – enter code of 22  
 Hold, Hold, ## Hold, ## Hold



## Scenario 1 – Extension numbers the same at both sites

### Node ID 10

From WinAdmin click – **Trunk/ILG**

#### **Pgm-304** INCOMING LINE GROUP ASSIGNMENT

Click **Create** and enter 10, now click **OK**  
FB01, Group Type = ISDN  
FB02, Trunk Type = TIE  
FB04, Private Service Type = QSIG  
**Click Submit**

From WinAdmin click – **Trunk/OLG**

#### **Pgm-306** OUTGOING LINE GROUPS

Click **Create** and enter 10, now click **OK**  
FB01, Group Type = ISDN  
FB02, Trunk Type = TIE  
FB03, Private Service Type = QSIG

From WinAdmin click – **Trunk / ISDN / PRI**

#### **Pgm-302** PRI TRUNKS

Click **Create** and enter 10, now click **OK**  
FB02, Protocol = QSIG  
FB03, Incoming Line Group = 10  
FB04, Outgoing Line Group = 10  
FB26, Network Mode = Master  
FB27, Negotiation Priority = Side B  
**Click Submit**

From WinAdmin click – **System / Flexible Access Code**

#### **Pgm-102** FLEXIBLE ACCESS CODES

Click **Create** and enter 11, now click **OK**  
FB01 – choose Network Access Code for Remote Node  
**Click Submit**

From WinAdmin click – **Services / Networking / Node ID**

#### **Pgm-656** NODE ID ASSIGNMENT

FB01 = 10  
**Click Submit**

From WinAdmin click – **Services / Networking / Route Plan Analysis**

**Pgm-651** PRIVATE ROUTING PLAN ANALYSIS TABLE ASSIGNMENT

FB00 = 11  
FB01 = 1  
**Click Submit**

From WinAdmin click – **Services / Networking / Route Choice Definition**

**Pgm- 653** PVT NTWK ROUTE CHOICE TABLE ASSIGNMENT

FB00 = 1  
FB01 = 1  
**Click Submit**

**Pgm-654** PVT NTWK ROUTE DEFINITION TABLE ASSIGNMENT

FB00 = 1  
FB01 = 10  
FB02 = 1  
**Click Submit**

**Pgm-655** PVT NTWK DIGIT MODIFICATION TABLE ASSIGNMENT

FB00 = 1  
FB01 = 0  
**Click Submit**

## Node ID 11

From WinAdmin click – **Trunk/ILG**

**Pgm-304** INCOMING LINE GROUP ASSIGNMENT

Click **Create** and enter **11** (Group Number)  
FB01, Group Type = ISDN  
FB02, Trunk Type = TIE  
FB04, Private Service Type = QSIG

From WinAdmin click – **Trunk/OLG**

**Pgm-306** OUTGOING LINE GROUPS

Click **Create** and enter **11** (Group Number)  
FB01, Group Type = ISDN  
FB02, Trunk Type = TIE  
FB03, Private Service Type = QSIG

From WinAdmin click – **Trunk/ISDN/PRI**

**Pgm-302 PRI TRUNKS**

Click **Create** and enter **11** (Group Number)  
FB02, Protocol = QSIG  
FB03, Incoming Line Group = 11  
FB04, Outgoing Line Group = 11  
FB26, Network Mode = Slave  
FB27, Negotiation Priority = Side A

From WinAdmin click – **System / Flexible Access Code**

**Pgm-102 FLEXIBLE ACCESS CODES**

Click **Create** and enter **10** (Group Number)  
FB01 – choose Network Access Code for Remote Node  
**Click Submit**

From WinAdmin click – **Services / Networking / Node ID**

**Pgm-656 NODE ID ASSIGNMENT**

FB01 = 11  
**Click Submit**

From WinAdmin click – **Services / Networking / Route Plan analysis**

**Pgm-651 PRIVATE ROUTING PLAN ANALYSIS TABLE ASSIGNMENT**

FB00 = 10  
FB01 = 1  
**Click Submit**

From WinAdmin click – **Services / Networking / Route Choice Definition**

**Pgm- 653 PVT NTWK ROUTE CHOICE TABLE ASSIGNMENT**

FB00 = 1  
FB01 = 1  
**Click Submit**

**Pgm-654 PVT NTWK ROUTE DEFINITION TABLE ASSIGNMENT**

FB00 = 1  
FB01 = 11  
FB02 = 1  
**Click Submit**

**Pgm-655 PVT NTWK DIGIT MODIFICATION TABLE ASSIGNMENT**

FB00 = 1  
FB01 = 0  
**Click Submit**

## How to test

From System with Node ID of 10, dial 11 + Extension Number.  
From System with Node ID of 11, dial 10 + Extension Number

## Scenario 2 – Different extension numbers at both sites

It will be assumed that the following extension numbers have been created

Node ID 10: Extension numbers are 200 ~ 299

Node ID 11: Extension numbers are 300 ~ 399

### Node ID 10

From WinAdmin click – **Trunk/ILG**

#### **Pgm-304** INCOMING LINE GROUP ASSIGNMENT

Click **Create** and enter **10** (Group Number)  
FB01, Group Type = ISDN  
FB02, Trunk Type = TIE  
FB04, Private Service Type = QSIG  
**Click Submit**

From WinAdmin click – **Trunk/OLG**

#### **Pgm-306** OUTGOING LINE GROUPS

Click **Create** and enter **10** (Group Number)  
FB01, Group Type = ISDN  
FB02, Trunk Type = TIE  
FB03, Private Service Type = QSIG

From WinAdmin click – **Trunk/ISDN/PRI**

#### **Pgm-302** PRI TRUNKS

Click **Create** and enter **10** (Group Number)  
FB02, Protocol = QSIG  
FB03, Incoming Line Group = 10  
FB04, Outgoing Line Group = 10  
FB26, Network Mode = Master  
FB27, Negotiation Priority = Side B  
**Click Submit**

From WinAdmin click – **System / Flexible Access Code**

**Pgm-102 FLEXIBLE ACCESS CODES**

Click Create and enter 3, now click OK  
FB01 – choose Network Access Code for Remote Node  
**Click Submit**

From WinAdmin click – **Services / Networking / Node ID**

**Pgm-656 NODE ID ASSIGNMENT**

FB01 = 2  
**Click Submit**

From WinAdmin click – **Services / Networking / Route Plan analysis**

**Pgm-651 PRIVATE ROUTING PLAN ANALYSIS TABLE ASSIGNMENT**

FB00 = 3  
FB01 = 1  
**Click Submit**

From WinAdmin click – **Services / Networking / Route Choice Definition**

**Pgm- 653 PVT NTWK ROUTE CHOICE TABLE ASSIGNMENT**

FB00 = 1  
FB01 = 1  
**Click Submit**

**Pgm-654 PVT NTWK ROUTE DEFINITION TABLE ASSIGNMENT**

FB00 = 1  
FB01 = 10  
FB02 = 1  
**Click Submit**

**Pgm-655 PVT NTWK DIGIT MODIFICATION TABLE ASSIGNMENT**

FB00 = 1  
FB01 = 0  
**Click Submit**

## Node ID 11

From WinAdmin click – **Trunk/ILG**

### **Pgm-304** INCOMING LINE GROUP ASSIGNMENT

Click **Create** and enter **11** (Group Number)  
FB01, Group Type = ISDN  
FB02, Trunk Type = TIE  
FB04, Private Service Type = QSIG  
**Click Submit**

From WinAdmin click – **Trunk/OLG**

### **Pgm-306** OUTGOING LINE GROUPS

Click **Create** and enter **11** (Group Number)  
FB01, Group Type = ISDN  
FB02, Trunk Type = TIE  
FB03, Private Service Type = QSIG

From WinAdmin click – **Trunk/ISDN/PRI**

### **Pgm-302** PRI TRUNKS

Click **Create** and enter **11** (Group Number)  
FB02, Protocol = QSIG  
FB03, Incoming Line Group = 11  
FB04, Outgoing Line Group = 11  
FB26, Network Mode = Slave  
FB27, Negotiation Priority = Side A  
**Click Submit**

From WinAdmin click – **System / Flexible Access Code**

### **Pgm-102** FLEXIBLE ACCESS CODES

Click **Create** and enter **2**, now click **OK**  
FB01 – choose Network Access Code for Remote Node  
**Click Submit**

From WinAdmin click – **Services / Networking / Node ID**

### **Pgm-656** NODE ID ASSIGNMENT

FB01 = 3  
**Click Submit**

From WinAdmin click – **Services / Networking / Route Plan analysis**

**Pgm-651** PRIVATE ROUTING PLAN ANALYSIS TABLE ASSIGNMENT

FB00 = 2

FB01 = 1

**Click Submit**

From WinAdmin click – **Services / Networking / Route Choice Definition**

**Pgm- 653** PVT NTWK ROUTE CHOICE TABLE ASSIGNMENT

FB00 = 1

FB01 = 1

**Click Submit**

**Pgm-654** PVT NTWK ROUTE DEFINITION TABLE ASSIGNMENT

FB00 = 1

FB01 = 11

FB02 = 1

**Click Submit**

**Pgm-655** PVT NTWK DIGIT MODIFICATION TABLE ASSIGNMENT

FB00 = 1

FB01 = 0

## **How To Test**

From System with Node ID of 10, dial extension number at remote site (300~399)

From System with Node ID of 11, dial extension number at remote site (200~299)

# 17 Setting Caller Number Identification

Strata CTX offers a new feature which previous Strata systems did not have. It is now possible to send out a different DDI other than the billing number.

For example if when your customer makes a call from their system they send number 01932755380 as their main number, we can now decide to send 01932 755399 instead. This number MUST be an existing DDI number in the range.

## How is this done?

It is fairly simple.

From WinAdmin click – **ISDN / Calling Number**

Select an OLG Number that you assigned to dial out over

**FB01** Default Number = 5399

*(This is the actual DDI number sent in by the network provider. It must also be the new number you want sent out)*

Number Prefix = LEAVE BLANK

Number Verification = Enabled

**FK04** Default Number 2 = 5399

*(This is the actual DDI number sent in by the network provider. It must also be the new number you want sent out)*

Click on **Submit**

## How do I test this?

Dial out to you mobile phone. The Number **01932 755399** will now appear on the LCD as the CLI.



# 18 System Call Forward

## STEP 1 – Assign a system call forward to an extension

From WinAdmin click - **Station / Assignment**

**DKT/SLT**

**Pgm 200** STATION DATA

FB12 – Select the System Call Forward location you wish to use

From WinAdmin click - **Station / ISDN / Station Data**

**ISDN Sbus**

**Pgm 217** SDN STATION DATA

FB03 - Select the System Call Forward location you wish to use

## STEP 2– Assigning the System Call Forward No Answer Timer

From WinAdmin click – **System/System Timer**

**Pgm 104** SYSTEM TIMERS

FB08 – Select the timer value from 1~180 seconds

## STEP 3 – Assign how the System Call Forward will operate

From WinAdmin click – **System/System Call Forward**

**Pgm 500** SYSTEM CALL FORWARD

FB00 – Select the SCF number used in Step 1

FB01 – Choose CO Loop or Grd

**The Number 01932 755381 will now appear on the CLI**

# 19 Updating the Licenses

When a new software level is installed on the Strata CTX, the system will also requires new licensing information. Without this updated data the Strata CTX does not function and no calls are allowed until the new licenses are loaded onto the system.

Once you have logged-on through WinAdmin, the procedure to update the license data is as follows:

- ◆ From the **Operation** menu select **License Control**. As the license number is at least 60 characters long, we highly recommended that you use the Copy (Ctrl + C) and Paste (Ctrl + V) facilities to enter the new license number.
- ◆ Enter/paste the required data in the **License Code** field. Point and click on the **Issue** button.
- ◆ Under LICENSE ACTIVATE press the **Activate** button.
- ◆ When the operation is successfully completed, the **Status** field on top of the screen will display "Active Finished"
- ◆ You are now required to restart the system. From the **Operation** menu select **System Setup**. At the top under program **900 CTX Restart** point and click on the Restart CTX button.

# 20 Upgrading System Software & Making Back-ups

This chapter describes the procedure necessary to load and install new main centre software onto a Strata CTX processor.

Before following the instructions below, please make sure that you do have the latest backup of the Strata CTX system you are working on.

For this procedure you will need 2 Smart Media cards, one for a backup and the other for software. It is best to format these cards using WinAdmin.

## Making a backup

Ensure that a formatted Smart Media card is in the drive on the Strata CTX processor.

From WinAdmin, go to **Operation** and then click on **Data Backup**. Press **Backup**. In the **Completion** field you will notice the different stages of the backup process, while in the **Progress** field, WinAdmin informs you of the progress made.

When *Backup Complete* is displayed in the **Progress** field, the process is finished. You can now unmount the Smart Media card from **System Set-up** under **Operation**.

## Installing the new Strata CTX 670 software

This procedure is only relevant for Strata CTX 670. If you need to install new software on a Strata CTX 100, please follow the instructions below.

Make sure that the Smart Media card onto which the software is stored is labelled as **PRGUP-DATE**. The software file (nhs.prg) is saved into the **PROGRAM** folder on the formatted Smart Media card.

A label is assigned through *My Computer* on your PC. Click to highlight the Smart drive and press the right mouse button. Enter the required name in the field called *Label*. Press **Apply** and then **OK**.

From a handset, access programming mode:

- ◆ To commence the software installation, select program **911**, press **FB 01** and then press **1** in the keypad. Press **HOLD** and then **FB 07**. Observe LED 07 on the handset and confirm against the chart below.

LED STATUS	DESCRIPTION
Flashing Green	Software installation in progress
Solid Green with intermittent flash	Software installation has completed successfully
Flashing Red	<p><b>Error</b></p> <p>Check for the following:</p> <ul style="list-style-type: none"> <li>◆ Faulty Smart Media card,</li> <li>◆ Corrupt software file,</li> <li>◆ Software file saved to different folder than PROGRAM, or,</li> <li>◆ Wrong label assigned to Smart Media card.</li> </ul>

- ◆ When the software is installed onto the processor, your programming should still be in program 911. We now need to change the standby side status of the Flash Memory. Press **FB 05** and then **2** from the dial keypad. This changes the status to **TRIAL**. Press **HOLD**.
- ◆ Pull out the Smart Media labelled PRGUPDATE from the Strata CTX. Make sure that the Smart Media LED on the processor (labelled SM) is OFF.

**Note Failure to extract the Smart Media card at this point will jeopardise the whole upgrade and may even lock the processor!!!**

- ◆ Still in program 911, press **FB 01** and then on **3** on the dial keypad. Press **HOLD**. This will perform a **CLEARBOOT** to confirm the installation.
- ◆ After clear boot check the version of software now assigned to the Active side of memory. You can do this either in System Set-up in WinAdmin or program 901 through handset programming mode. **FB 01** and **FB 02** toggle between the Active and the Standby sides respectively.
- ◆ Before the installation is complete it is important to confirm the Active side. Go to program 911, press **FB 04** and then **1** on the keypad. Press **HOLD** twice. This time **TRIAL** is changed to **NORMAL**.

The software upgrade is now complete.

## Installing the new Strata CTX 100 software

This procedure is only relevant for Strata CTX 100. If you need to install new software on a Strata CTX 670, please follow the instructions above.

Make sure that the Smart Media card onto which the software is stored is labelled as **CTXMxx** (where **xx** is software version, e.g. **06**). The software file (nhs.prg) is saved into the **PROGRAM** folder on the formatted Smart Media card.

A label is assigned through *My Computer* on your PC. Click to highlight the Smart drive and press the right mouse button. Enter the required name in the field called *Label*. Press **Apply** and then **OK**.

From a handset, access programming mode:

- ◆ To commence the software installation, select program **911**, press **FB 01** and then press **1** in the keypad. Press **HOLD** and then **FB 07**. Observe LED 07 on the handset and confirm against the chart below.

LED STATUS	DESCRIPTION
Flashing Green	Software installation in progress
Solid Green with intermittent flash	Software installation has completed successfully
Flashing Red	<p>Error</p> <p>Check for the following:</p> <ul style="list-style-type: none"> <li>◆ Faulty Smart Media card,</li> <li>◆ Corrupt software file,</li> <li>◆ Software file saved to different folder than PROGRAM, or,</li> <li>◆ Wrong label assigned to Smart Media card.</li> </ul>

- ◆ After a few minutes the LCD on the DKT goes blank. Do not worry! As long as the SM LED on the processor is still ON, the upgrade is still in process.

**Note** Wait until the LCD on the DKT is up again. Doing anything like extracting the Smart Media or switching OFF the system will jeopardise the whole upgrade and may even lock the processor!!!

- ◆ When the LCD on the DKT is up again pull out the Smart Media labelled CTXMxx from the Strata CTX. Make sure that the Smart Media LED on the processor (labelled SM) is OFF.

**Note Failure to extract the Smart Media card at this point will jeopardise the whole upgrade and may even lock the processor!!!**

- ◆ Due to memory size on a Strata CTX 100 processor, there is only an Active side. You can check this in System Set-up in WinAdmin or program 901 **FB 01** through handset programming mode.

The software upgrade is now complete.

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