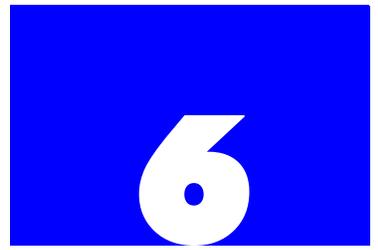


Software Configuration



6.1 Introduction

All aspects of the Plexus system can be configured using the Plexus Administrator Windows application.

About Software Configuration

A Plexus system can be configured using the Plexus Administrator two ways; using the Plexus Administrator with the Plexus Configuration Wizard or using the Plexus Administrator without using the Plexus Configuration Wizard.



Note

It is recommended that you create your configuration using the Plexus Configuration Wizard. The Plexus Configuration Wizard provides a valuable time savings. The configuration created allows the core functions relating to the trunks, extensions, voice-mail, and auto-attendants to be set up quick and easily to provide a base level of operation.

6.2 Software configuration - with Plexus Configuration Wizard

Several steps that must be completed in order to configure a Plexus system using the Plexus Administrator with the Plexus Configuration Wizard. The Wizard will create all the users and trunks and place them according to the physical layout of the system. You will be able to modify settings after the Plexus Configuration Wizard has created the configuration.

- 1 “Determine the structure of the system” - section 6.4.
- 2 “Physically insert peripheral cards into the cabinet” - section 6.5.
- 3 Follow the steps in Chapter 5, "Plexus Configuration Wizard". (The Wizard will create a working configuration. If modifications are necessary, continue to step 4.)
- 4 Launch Plexus Administrator if it is not already open (see “Launch Plexus Administrator” - section 6.6).
- 5 Open the created configuration (see “Using an existing configuration file” - section 6.8).
- 6 Go to “Configure Auto-Attendant Interface (AAI) card” - section 6.10. Follow all subsequent steps and sections to modify the configuration.

6.3 Software configuration - without Plexus Configuration Wizard

The outline that follows discusses the steps that must be completed in order to configure a Plexus system using the Plexus Administrator without using the Plexus Configuration Wizard. Several procedures and the various system entities (i.e. Users, User Groups, Trunks, Trunk Groups, Extension Ports, and Trunk Ports) are addressed. While all steps must be completed in order to successfully configure a system, the user does not need to complete each step according to the sequence shown below. The Plexus Administrator is fully modular and allows the user to address each parameter in any order. However there are certain dependencies e.g., create a user before configuring the user's coverage. This Software Configuration section is organized according to the following sequence. This sequence is followed in order through the rest of this chapter.

- 1 "Determine the structure of the system" - section 6.4
- 2 "Physically insert peripheral cards into the cabinet" - section 6.5.
- 3 "Launch Plexus Administrator" - section 6.6.
- 4 "Start a new configuration" - section 6.7.
- 5 "Complete the peripheral card layout" - section 6.9.
- 6 "Configure Auto-Attendant Interface (AAI) card" - section 6.10.
- 7 "Configure Integrated Voice Processor (IVP) card" - section 6.11.
- 8 "Create users" - section 6.12 and "Create user groups" - section 6.13.
- 9 "Assign users to user groups" - section 6.14.
- 10 "Create trunks" - section 6.15 and "Create trunk groups" - section 6.16.
- 11 "Assign trunks to trunk groups" - section 6.17.
- 12 "Configure AEI extension ports" - section 6.18 and "Configure DEI extension ports" - section 6.19.
- 13 "Configure ATI trunk ports" - section 6.20.
- 14 "Configure system parameters" - section 6.21.
- 15 "Configure users" - section 6.22 and "Configure user groups" - section 6.23.

- 16** “Configure trunks” - section 6.24 and “Configure trunk groups” - section 6.25.
- 17** “Saving a configuration” - section 6.26.
- 18** “Establishing a link” - section 6.27.
- 19** “Uploading the configuration file” - section 6.28.
- 20** “Updating the system clock” - section 6.29.
- 21** “Updating Plexus key telephone programming” - section 6.30.

6.4 Determine the structure of the system

- **Determine the flexible numbering plan that the phone system will follow.** The numbering plan should be designed for optimum organization, clarity, and growth.
 - User IDs can consist of 2-5 digits as defined in the width parameter (Dial Plan tab).
 - The range is based upon the From and To parameters (Dial Plan tab). For example, if the Range is (From) 1 to (To) 4 with a Width of 3. IDs could be from 100 through 499. Likewise, if the Range is (From) 1 to (To) 4 with a Width of 4. IDs could be from 1000 through 4999.
 - The numbering plan will need to include: User; User Group, Trunk; Trunk Group; Auto Attendant; and Voice IDs.

**Note**

The Integrated Voice Processor (auto attendant and voice mailboxes) will only support IDs of 1-4 digits with the highest ID being 8999. If the auto attendant or voice mailbox features will be used, The user IDs must fall into this range.

- **Determine the Access Digits for the system.**
 - What number will the user dial to access an outside line (i.e., trunk)?
 - What number will the user dial to reach the system operator?
- **Determine the number of groups on the system and their names.**
 - What employees or stations will belong to what group?
 - User Groups = departments, organizational groups, teams, sections.
- **Determine how many trunks will be available on the system.**
 - Trunks = outside phone lines.
- **Determine how the trunks should be grouped.**
 - Trunk Groups = groups of outside phone lines.
- **Determine if the organization will have an Auto-Attendant.**
- **Determine if the organization will have Plexus Integrated Voice Mail.**
- **Determine how calls will be routed to users and user groups.**
- **Determine how calls should be managed during the day, night, and weekends.**
- **Determine coverage (backup) for each user or user Group.**

- Determine the features and privileges for each user (e.g., Hold Time-outs, Override capabilities, Call Intrusion capabilities, Toll Restrictions etc.).
- Determine how calls will be distributed to members of each user group.

6.5 Physically insert peripheral cards into the cabinet

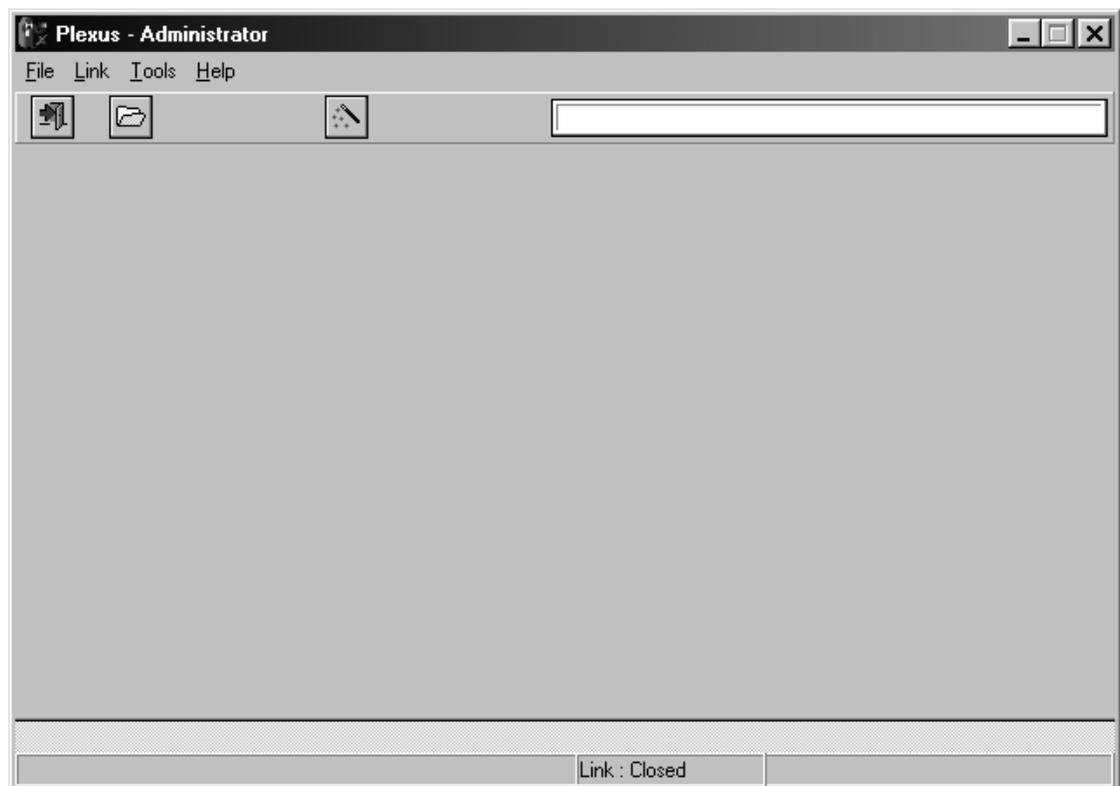
Refer to “Inserting Peripheral Cards” - section 4.3.

6.6 Launch Plexus Administrator

Launch the Plexus Administrator as follows:

- 1 Click on  **Start** .
- 2 Select **Programs**.
- 3 Select **Plexus**.
- 4 Click on **Plexus Administrator**.

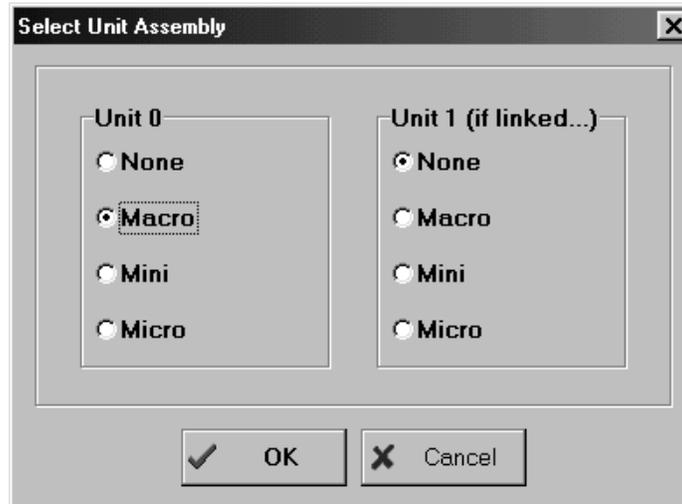
After launching Plexus Administrator, the following window displayed:



6.7 Start a new configuration

To start a new configuration:

- 1 From the **File** menu on the initial window, select **New**.
- 2 Select the type of System being configured (i.e., Macro or Micro).
- 3 If only one cabinet is in use, leave Unit 1 set to **None**.



6.8 Using an existing configuration file

If you are modifying a configuration using an existing configuration file:

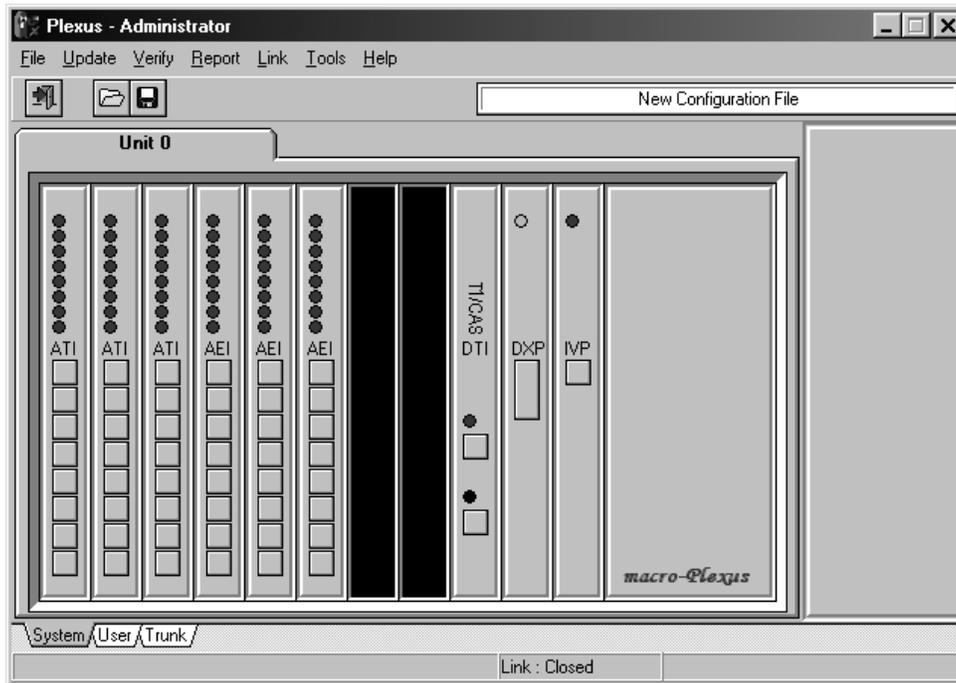
- 1 From the **File** menu on the initial window, select **Open**.
- 2 Select the desired configuration file.

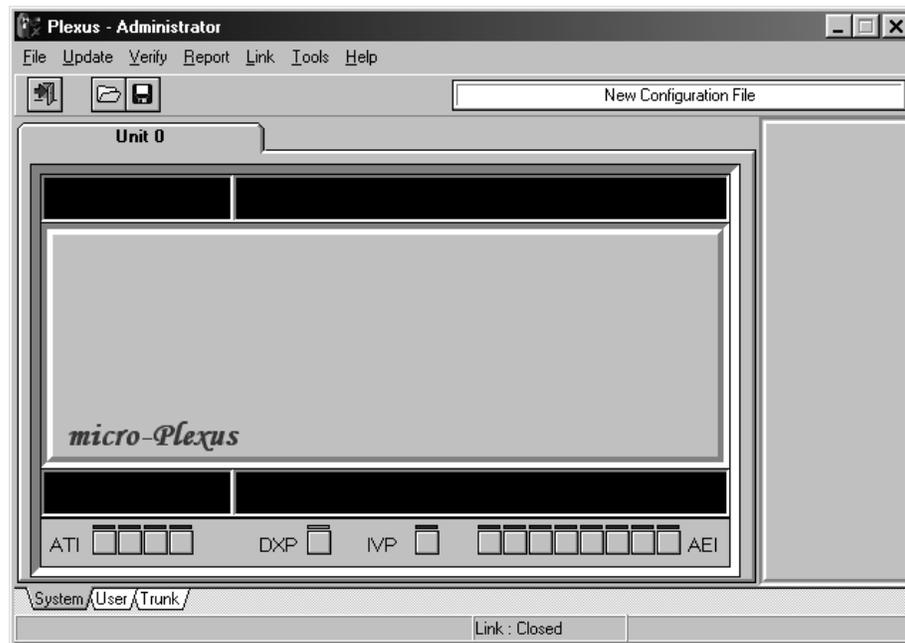
Plexus configuration files have an extension of **.zdb**. E.g., the Plexus Configuration Wizard will create a configuration file named **wiz-cfg.zdb**

6.9 Complete the peripheral card layout

6.9.1 Peripheral card layout

- 1 Click on the System tab to display the peripheral card layout.





- 2 With an image of the applicable cabinet (i.e. Macro Plexus or Micro Plexus) displayed, right-click on the various slots and select the card (ATI, AEI, etc.) that have been physically inserted.

An image of the selected card will appear in the slot.

- 3 Fill the slots on the Macro Plexus system from left to right as follows:

ATI-Analog Trunk Interface cards

AAI-Auto-Attendant Interface card (optional)

AEI-Analog Extension Interface cards

DEI-Digital Extension Interface cards

ILI-Inter-Unit Link Interface card (optional)-slot labeled 8

DXP-Digital Switch Processor-slot labeled "9"

IVP-Integrated Voice Processor card (optional)-slot labeled 10

For digital line Interface cards (T1, E1, ISDN) or Direct Inward Dial (DID) Trunk Interface cards, refer to the Interface card's individual chapter.

- 4 For The Micro Plexus system, right-clicking in an empty slot will show the cards that are allowed for that slot. Other card choices will be grayed out.

**Note**

The Digital Switch Processor (DXP) card may only be placed in the slot in which it appears. The Inter-Unit Link Interface (ILI) card may only be placed in the rear slot of the Micro Plexus system and the slot labeled **8** on the Macro Plexus system.

Refer to the Installation section for details on inserting peripheral cards.

6.9.2 Alternative method to layout peripheral cards:

- 1 Physically insert peripheral cards.
- 2 Start Plexus Administrator.
- 3 From the **File** menu, select **New**.
- 4 Select the type of cabinet that is being configured, **Micro** or **Macro**.
- 5 From the **Link** menu, select **Open**.
- 6 From the **Verify** menu, select **Read**.

Upon completing the read, the following message will appear on the screen:

Verify: Read Operation Complete...

- 7 Click **OK**.
- 8 From the **Verify** menu, select **Synchronize**.

**Note**

The Digital Switch Processor (DXP) card may only be placed in the slot in which it appears. The Inter-Unit Link Interface (ILI) card may only be placed in the rear slot of the Micro Plexus system and the slot labeled **8** on the Macro Plexus system.



6.10 Configure Auto-Attendant Interface (AAI) card

Refer to chapter 15, "Automated Attendant Interface".

6.11 Configure Integrated Voice Processor (IVP) card

Refer to chapter 9, "Integrated Voice Processor".

6.12 Create users

6.12.1 Create users

- 1 Click on the **User** tab to display the User and User Group.
- 2 Click on the **Create** button in the User Window and enter a User ID sequence within the dial plan.
- 3 Create additional users by clicking on the **Create** button or by pressing **ENTER** on the keyboard.

6.12.2 About users

A user is an employee, employee alias, or device that will utilize the system for the purpose of placing or receiving calls.

- Jane Doe (employee)
- Salesperson X (employee alias)
- Device (**Dss** Console, modem, credit card scanner, fax machine)

Users can utilize several IDs by logging in or signing in to the system, depending on the functions they are to perform. Therefore there does **not** need to be a one-one relationship between user IDs and extension ports.

6.12.3 About the User ID sequence

The User ID sequence is the start number of the range of logical IDs to be assigned to system users. Users are assigned user IDs based on the established user ID sequence. The user ID sequence may be any number based on the Dial-Number Range (refer to System Parameters: Dial Plan). Default settings call for a range from 1 to 4 with a width of 3. Using these settings, the user ID sequence may be any number between 100 and 499.



Example

If the User ID sequence entered is 100, the first user created is assigned a user ID of 100. Each additional user created is assigned an ID based on the established sequence. Five users on a system with a user ID sequence of 100, would be 100, 101, 102, 103, and 104.



Tip

To insert or start a new sequence with a new starting number, click on the **Create** button while holding down **SHIFT** on the keyboard. Newly added sequences are automatically ordered.

See “Configure users” - section 6.22 for more details.

6.13 Create user groups

6.13.1 Create user groups

- 1 Click on the **User** tab to display the User and User Group dialog windows.
- 2 Click on the **Create** button in the User Group Window and enter a User Group ID sequence within the dial plan.
- 3 Create additional groups by clicking on the **Create** button or by pressing **ENTER** on the keyboard.

6.13.2 About user groups

- User Groups are groups of users (individuals or functions) who share certain system call routing features. User groups are typically used to establish certain departmental areas (e.g., Sales, Technical Support, etc.) for the purpose of receiving calls.

6.13.3 About the user group ID sequence

The user group ID sequence is the start number of the range of logical IDs to be assigned to user groups. The user group ID sequence may be any number based on the Dial-Number Range (refer to System Parameters: Dial Plan). Default settings call for a range from 1 to 4 with a width of 3. Using these settings, the user group ID sequence may be any number between 100 and 499.

If the user group ID sequence entered is 300, the first user group created is assigned a user group ID of 300. Each additional user group created is assigned an ID based on the established sequence. Five user groups on a system with a user group ID starting sequence of 300, would be 301, 302, 303 and 304.



Tip

To insert or start a new sequence with a new starting number, click on the **Create** button while holding down **SHIFT** on the keyboard. Newly added sequences are automatically ordered.

See “Configure user groups” - section 6.23 for more details.

6.14 Assign users to user groups

6.14.1 Assign users to user groups

Each user may be a member of any number of user groups.

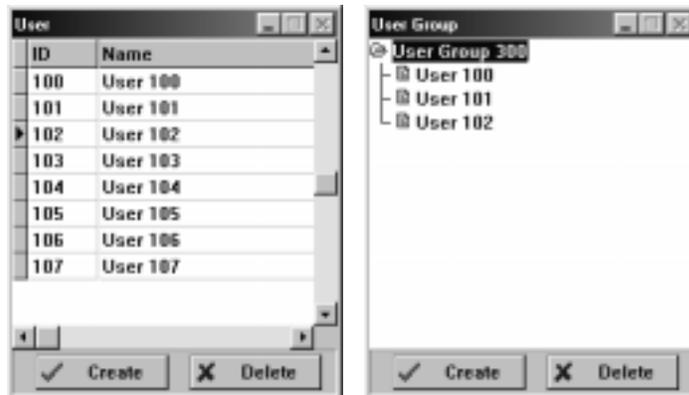
- 1 Ensure that users and user groups have been created.
- 2 Click on the user so that it becomes highlighted.
- 3 Click again on the user and hold down the left mouse button.
- 4 Drag the user over to the desired user group.

The user group name will become highlighted.

- 5 With the desired user group highlighted, release the mouse button.

6.14.2 About assigning users to user groups

The first user assigned to a user group converts the user group icon from a sheet of paper to a folder. Double-clicking on a user group folder icon displays the members of the user group.



Tip

To change the order in which users are listed in the user group, click on the user so that it becomes highlighted and drag it to the desired position in the user group.

CTRL and **SHIFT** may be used to select multiple users. Click on the first user so that it becomes highlighted. Hold down **CTRL** and select additional users in the desired order. Hold down **SHIFT** and use **↑** and **↓** to select a consecutive list of users. A selected group of users may be assigned to a user group in one drag and drop motion.

6.15 Create trunks

6.15.1 Create trunks

- 1 Click on the **Trunk** tab to display the Trunk and Trunk Group dialog window.
- 2 Click on the **Create** button in the trunk window and enter a trunk ID sequence within the dial plan.
- 3 Create additional trunks by clicking on the create button or by pressing **ENTER** on the keyboard.

6.15.2 About trunks

Trunks and trunk groups determine how a user will place external calls and determine how inbound calls are routed. Trunk groups are used for allocation purposes (e.g., to permit users access to groups of outside lines).

6.15.3 About the trunk ID sequence

The Trunk ID sequence is the start number of the range of logical IDs to be assigned to the trunks on the system. Trunks are assigned sequential Trunk IDs based on the established Trunk ID sequence. The trunk ID sequence may be any number based on the Dial-Number Range (refer to System Parameters: Dial Plan). Default settings call for a range from 1 to 4 with a width of 3. Using these settings, the trunk ID sequence may be any number between 100 and 499.



Example

If the Trunk ID sequence entered is 201, the first trunk created is assigned a Trunk ID of 201. Each additional trunk created is assigned an ID based on the established sequence. Five trunks on a system with a Trunk ID sequence of 201, would be 201, 202, 203, 204 and 205.



Tip

To insert or start a new sequence with a new starting number, click on the **Create** button while holding down **SHIFT** on the keyboard. Newly added sequences are automatically ordered.

See “Configure trunks” - section 6.24 for more details.

6.16 Create trunk groups

6.16.1 Create trunk groups

- 1 Click on the **Create** button in the trunk group Window and enter a trunk group ID sequence within the dial plan.
- 2 Create additional trunk groups by clicking on the **Create** button or by pressing **ENTER** on the keyboard.

6.16.2 About trunk groups

Trunks and trunk groups determine how a user will place external calls and determine how inbound calls are routed. Trunk groups are used for allocation purposes (e.g., to permit users access to groups of outside lines). Trunk groups will be assigned sequential trunk group IDs based on the established trunk group ID sequence.

6.16.3 About the trunk group ID sequence

The trunk group ID sequence is the start number of the range of logical IDs to be assigned to the trunk groups on the system. Trunk groups are assigned sequential trunk group IDs based on the established trunk group ID sequence. This sequence may be any number based on the Dial-Number Range (refer to System Parameters: Dial Plan). Default settings call for a range from 1 to 4 with a width of 3. Using these settings, the trunk group ID sequence may be any number between 100 and 499.

Example



If the trunk group ID sequence entered is 400, the first trunk group created is assigned a Trunk Group ID of 401. Each additional trunk group created is assigned an ID based on the established sequence. Five trunk groups on a system with a trunk group ID sequence of 401, would be 401, 402, 403, 404 and 405.



Tip

To insert or start a new sequence with a new starting number, click on the **Create** button while holding down **SHIFT** on the keyboard. Newly added sequences are automatically ordered.

See “Configure trunk groups” - section 6.25 for more details

6.17 Assign trunks to trunk groups

6.17.1 Assign trunks to trunk groups

To assign a trunk to a trunk group, proceed as follows. Each trunk may be a member of more than one trunk groups.

- 1 Ensure that both the trunk and trunk Group have been created.
- 2 Click on the trunk so that it becomes highlighted.
- 3 Click again on the trunk and hold down the left mouse button.
- 4 Drag the trunk over to the desired trunk group.

The trunk group name will become highlighted.

- 5 With the desired trunk group highlighted, release the mouse button.

6.17.2 About assigning trunks to trunk groups

The first trunk assigned to a trunk group converts the trunk group icon from a sheet of paper to a folder. Double-clicking on a trunk group folder icon displays the trunks in the trunk group.



Tip

Trunks should be listed in trunk groups in an order opposite to the hunt (rollover) order established by the phone company. Such an arrangement facilitates the use of the least busy trunks for outgoing calls. The order in which trunks are listed in the trunk group is changed by clicking on the trunk so that it becomes highlighted and dragging it to the desired position in the trunk group.

CTRL and **SHIFT** may be used to select multiple trunks. Click on the first trunk so that it becomes highlighted. Hold down **CTRL** and select additional trunks in the desired order. Hold down **SHIFT** and use **↑** and **↓** to select a consecutive list of trunks. A selected group of trunks may be assigned to a trunk group in one drag and drop motion.

6.18 Configure AEI extension ports

6.18.1 Configure extension ports

- 1 Click on the System tab.

An image of the system cabinet and the available peripheral cards will display.

- 2 Click on each of the buttons on the Analog Extension Interface (AEI) card to configure the extension ports.
- 3 Make appropriate entries and selections to each of the tabs.

Each LED image will appear red until the associated extension port has been assigned. Once assigned the LED image will appear green.



Tip

To alleviate the repetitive tasks associated with configuring multiple extension ports, right-click on a setting or field and select **Replicate**. Replicate automatically assigns a setting to all extension ports.

To alleviate the repetitive tasks associated with assigning Users to extension ports, right-click in the Port Assignment field on the General tab and select

Auto Assign. Auto Assign automatically assigns Users to extension ports in a sequential fashion.

6.18.2 Extension port: General

Table 6 - 1 Extension port: General

Unit ID	
Logical identifier for the unit (i.e., system cabinet) being configured.	Automatically Assigned
Note: Unless there is more than one system (i.e., a linked environment), this ID will be 0.	
Slot ID	
Logical identifier for the slot in which the Analog Extension Interface (AEI) card is inserted.	Automatically Assigned
Port ID	
Logical identifier for the extension port being configured.	Automatically Assigned
Port Enabled	
Enables the extension port.	Enabled*/Disable
Port Assignment	
The assigned user. Extension ports can be assigned to non-transient users to serve as their home station. Tip: Right mouse-click to utilize the Auto Assign feature.	None* User ID
Location	
Informal description or notes about the station location. E.g., Conference Room.	Alphanumeric

* = default setting

6.18.3 Extension port: Device

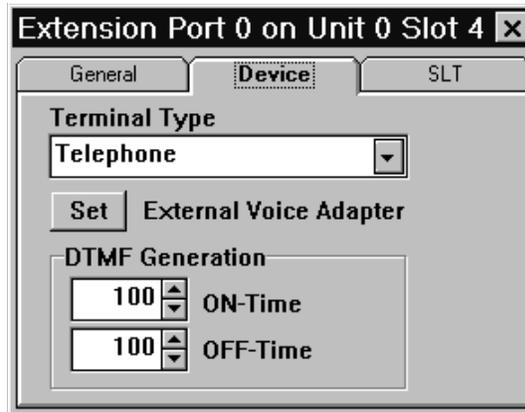


Table 6 - 2 Extension port: Device

Terminal Type		
The type of device connected to the extension port.	Telephone*	
Note: if a modem, fax machine, credit card scanner or other device is to be connected, select Telephone.	Door-Phone	
	External Voice-Adapter	
Set External Voice Adapter		
If an external voice-adapter is selected above, click on this button to configure the adapter.		
Note: External voice-adapter refers to a third-party voice mail system.		
DTMF Generation		
The ON/OFF time for DTMF digits sent to the external voice adapter.	0-255 ms	100 ms*

* = default settings

6.18.3.1 Set external voice adapter

- 1 Click on the image of the extension port.
- 2 Click on the **Device** tab.
- 3 Click on the **Set** button to display the Voice Adapter dialog window.
- 4 Configure the external voice adapter by making appropriate entries and selections on each of the voice adapter tabs.

6.18.4 Extension port: Voice Adapter, Access

The Access tab addresses DTMF digits sent to the external voice adapter when system entities attempt to access the extension port either as direct internal calls or redirected calls.

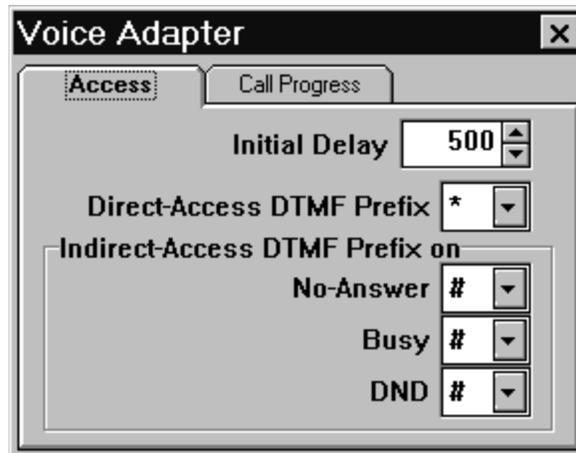


Table 6 - 3 Extension port: Voice Adapter, Access

Initial Delay	
The duration of the initial delay when sending DTMF to the external voice adapter.	50-9000 ms 500*
Direct – Access DTMF Prefix	
The DTMF digit sent to the external voice adapter when a user or trunk directly accesses the extension port.	0-9, A-D, * (default), X, #
Indirect – Access DTMF Prefix On	
The DTMF digit sent to the external voice adapter when a user or trunk indirectly accesses the extension port (through a user's coverage).	0-9, A-D, *, X, #*

* = default settings

6.18.5 Extension port: Voice Adapter, Call Progress

The Call Progress tab enables the sending of DTMF digits to the external voice adapter to represent call progress tones detected when the associated extension port attempts to access other system entities (e.g., users, trunks).



Table 6 - 4 Extension port: Voice Adapter, Call Progress

Feedback DTMF Digit on		
The DTMF digit which represents the associated call progress tone.	Disconnect	D*
	Ringing	X*
	No-Answer	X*
Note: X = send extension number	Answer	X*
	Busy	X*
	DND	X*
	Error	X*

* = default setting

6.18.6 Extension port: SLT

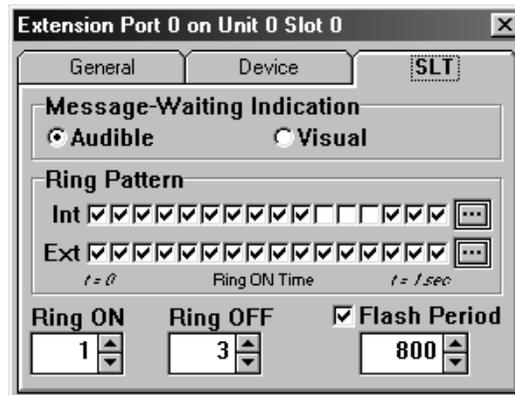


Table 6 - 5 Extension port: SLT

Message-Waiting Indication	
The method of message waiting indication utilized on the (SLT) Single Line Telephone. Note: To utilize the visual method, the SLT must have a message waiting lamp compatible with the Plexus signaling format.	Audible* Visual
Ring Pattern Internal	
The ring pattern for the ring On position for internal calls. Note: Plexus Key Telephone users have the option of changing ring pattern directly from their phones. Choose Int. Ring Type .	60% on, 20% off, 20% on* or Continuous ON
Ring Pattern External	
The ring pattern for external calls. Note: Users of Key Telephones have the option of changing ring pattern directly from their phones. Choose Ext. Ring Type .	60% on, 20% off, 20% on or Continuous ON
Ring ON	
Period during which the ring tone will be on.	1-2 seconds 1 second *

Table 6 - 5 Extension port: SLT (continued)

Flash Period		
Allows SLTs to do an internal flash	enabled*/ disabled	
Flash Period		
The duration of an internal flash signal. Note: Applies to SLTs	50-10000 ms	800 ms *

* = default setting

6.19 Configure DEI extension ports

6.19.1 Configure DEI extension ports

- 1 Click on the System tab.

An image of the system cabinet and the available peripheral cards will display.

- 2 Click on each of the buttons on the Digital Extension Interface (DEI) card to configure the extension ports.
- 3 Make appropriate entries and selections to each of the tabs.

Each LED image will appear red until the associated extension port has been assigned. Once assigned the LED image will appear green.



Tip

To alleviate the repetitive tasks associated with configuring multiple extension ports, right-click on a setting or field and select **Replicate**. Replicate automatically assigns a setting to all extension ports.

To alleviate the repetitive tasks associated with assigning Users to extension ports, right-click in the Port Assignment field on the General tab and select **Auto Assign**. Auto Assign automatically assigns Users to extension ports in a sequential fashion.

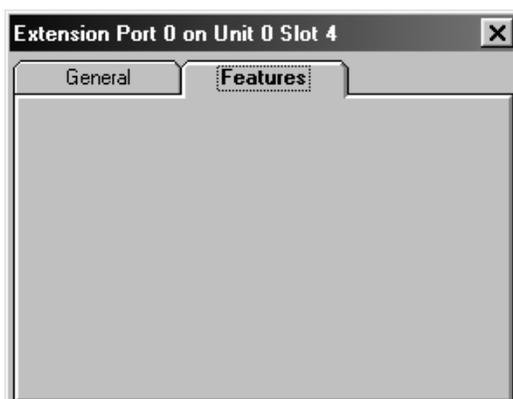
6.19.2 Extension port: General

Table 6 - 6 Extension port: General

Unit ID	
Logical identifier for the unit (i.e., system cabinet) being configured. Note: Unless there is more than one system (i.e., a linked environment), this ID will be 0.	Automatically Assigned
Slot ID	
Logical identifier for the slot in which the Digital Extension Interface (DEI) card is inserted.	Automatically Assigned
Port ID	
Logical identifier for the extension port being configured.	Automatically Assigned
Port Enabled	
Enables the extension port.	Enabled*/Disable
Port Assignment	
The assigned user. Extension ports can be assigned to non-transient users to serve as their home station. Tip: Right mouse-click to utilize the Auto Assign feature.	None* User ID
Location	
Informal description or notes about the station location. E.g., Conference Room.	Alphanumeric

* = default setting

6.19.3 Extension port: Features (for future release)



6.20 Configure ATI trunk ports

6.20.1 Configure ATI trunk ports

- 1 Click on the **System** tab.

An image of the system cabinet and the available peripheral cards will be displayed.

- 2 Click on each of the buttons on the Analog Trunk Interface (ATI) card to configure the trunk ports.
- 3 Make appropriate entries and selections on each of the tabs.



Tip

To alleviate the repetitive tasks associated with configuring multiple trunk ports, right-click on a setting or field and select **Replicate**. Replicate automatically assigns a setting to all trunk ports.

To alleviate the repetitive tasks associated with assigning trunks to trunk ports, right-click in the Port Assignment field on the General tab and select **Auto Assign**. Auto Assign automatically assigns trunks to trunk ports in a sequential fashion.



Note

Each LED image will appear red until the associated trunk port has been assigned. Once assigned the LED image will appear green.

6.20.2 Trunk ports: General

The screenshot shows a configuration window titled "Trunk Port 0 on Unit 0 Slot 1". It has three tabs: "General", "Features", and "Dialing". The "General" tab is selected. Inside, there are three input fields: "Unit ID" with the value "0", "Slot ID" with the value "1", and "Port ID" with the value "0". Below these is a "Port Assignment" dropdown menu currently set to "None". To the right of the dropdown is a checked checkbox labeled "Port Enabled". At the bottom is a large empty text box labeled "Location".

Table 6 - 7 Trunk ports: General

Unit ID	
Logical identifier for the unit (i.e., system cabinet) being configured. Note: Unless there is more than one system (i.e., a linked environment), this ID will be 0.	Automatically Assigned
Slot ID	
Logical identifier for the slot in which the Analog Trunk Interface (ATI) card is inserted.	Automatically Assigned
Port ID	
Logical identifier for the trunk port being configured.	Automatically Assigned
Port Enabled	
Enables the trunk port.	Enable */Disable
Port Assignment	
The assigned trunk. Tip: Right mouse-click to utilize the Auto Assign feature.	None * Trunk ID
Location	
Informal description or notes about the location of the trunk wiring. e.g., Phone closet	Alphanumeric

* = default settings

6.20.3 Trunk ports: Features

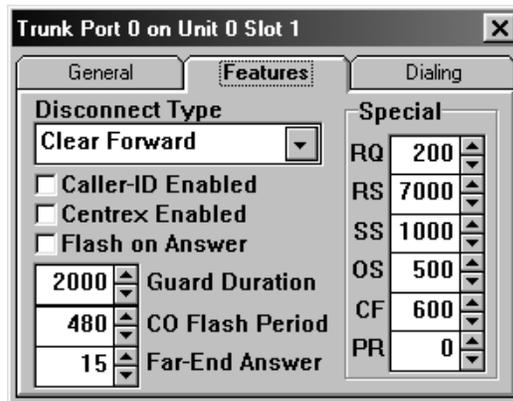


Table 6 - 8 Trunk ports: Features

Disconnect Type	
<p>The type of disconnect supervision utilized by the local telephone company.</p> <p>Note: Check with the local telephone company to determine which type of disconnect supervision is used on the lines. All trunk ports should be set to the same type of disconnect supervision. In the U.S., the primary disconnect is Clear Forward.</p>	<p>None Clear Forward* Polarity Reversal Disconnect Tone</p>
Caller-ID Enabled	
<p>When enabled, the system will detect the Caller ID signal for each incoming call on the trunk.</p> <p>Note: Caller ID can only be enabled on Caller ID equipped Analog Trunk Interface (ATI) cards. Caller ID service must be activated on the line in order for a Caller ID signal to be present.</p>	<p>Enable/Disable*</p>
Centrex Enabled	
<p>Identifies if the trunk has Centrex capabilities with the phone company. When enabled, the system will allow the sending of a 'flash' signal for externally forwarded or transferred calls.</p>	<p>Enable/Disable *</p>

Table 6 - 8 Trunk ports: Features (continued)

Flash on Answer		
Used to 'flash' the CO on seizing an inbound call. This is used to signal the CO to reject certain types of calls (e.g., collect calls).	Enable/ disable*	
Guard Duration		
The period of time that a trunk is unavailable following the completion of a call.	100-2000 ms	2000 ms *
CO Flash Period		
The duration of the 'flash' signal as sent to the central office. Note: Check with the local telephone company to determine the proper duration of the 'flash' signal.	50-10000 ms	480 ms *
Far-End Answer		
When the system starts timing external calls for SMDR output information if the system has not already received indication that the call has been answered by the remote party.	0-255 seconds	15 seconds*
RQ (Ring Qualifier)		
The duration necessary for voltage on the line to be considered a ring tone by the system. Voltage of a shorter duration is considered line noise.	10-1000 ms	200 ms *
RS (Ring Silence)		
The duration of the of the interval between ring tones used by the system to determine that a call was terminated.	500-15000 ms	7000 ms *
SS (Seize Settling)		
The amount of time the system must wait once a trunk port has been opened (e.g., seizing a trunk) to reach the nominal operating condition. During this period, disconnect signals are ignored, and digit buffering is in effect.	100-2000 ms	1000 ms *
OS (Central Office Setup)		

Table 6 - 8 Trunk ports: Features (continued)

The amount of additional time following Seize Settling (SS) that the system must wait to allow the Central Office to reach the nominal operating condition. During this period, disconnect signals are ignored and digit buffering is in effect. Upon expiration of the OS time-out, the buffer is emptied and digits are sent to the Central Office.	0-8000 ms	500 ms *
CF (Clear Forward)		
The duration of a break in signal from the central office that represents a terminated call.	0-2000 ms	600 ms *
PR (Polarity Reversal)		
Disqualification period used in detecting polarity reversals on the line. The PR period begins as soon as a polarity reversal is detected. If a second reversal is detected within the period, the initial PR is ignored or disqualified.	0-3000 ms	0 ms *

* = default settings

6.20.4 Trunk port: Dialing

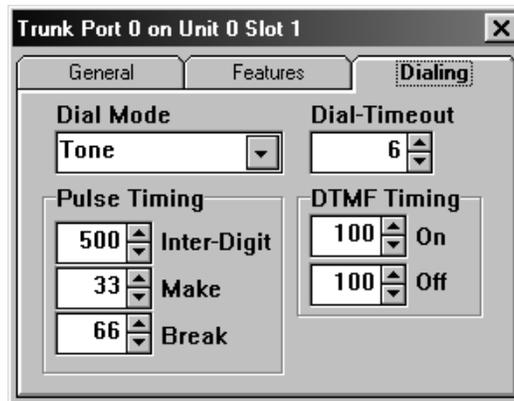


Table 6 - 9 Trunk port: Dialing

Dial Mode		
The type of dialing utilized by the trunk port. Note: Check with the local telephone company to determine the dial mode(s) supported on the line. If the line supports both Tone and Pulse, the port should be set to Tone.		Tone * Pulse
Dial-Timeout		
The period of time that must elapse before the system assumes that the dialing sequence is complete. Note: Buffering and pulse-to-tone or tone-to-pulse conversion terminates according to the network dial timeout.	0-255 seconds	6 seconds *
Pulse Timing		
Timing parameters associated with components of a pulse string.		
Inter-Digit	50-1000	500
Make	10-255	33
Break	10-255 ms	66 ms *
DTMF Timing		
Timing parameters associated with the various components of a DTMF tone.		
On	50-255	100
Off	50-255 ms	100 ms *

* = default settings

6.21 Configure system parameters

6.21.1 Configure system parameters

- 1 Click on the System tab.

An image of the system cabinet and the available peripheral cards will be displayed.

- 2 Click on the button on the Digital Switch Processor (DXP) card.
- 3 Make appropriate entries and selections on each of the tabs.

6.21.2 Posting changes to system parameters

The following five buttons appear at the bottom of some system parameters tabs to prevent configuration errors from being posted to the system. The **Insert Record** button must be clicked on prior to adding any recording and the **Insert or Delete Record** button must be clicked on prior to making any changes.

Table 6 - 10 System Parameters: buttons

Edit record	
	Enables a record to be edited.
Post edit	
	Posts the changes made to the record.
Cancel edit	
	Cancels the changes made to the record.
Insert record	
	Inserts a new blank record in a list.
Delete record	
	Deletes a record from a list.

6.21.3 System parameters: General, Passwords



Table 6 - 11 System parameters: General, Passwords

Admin Password		
Password to Access system programming	Numeric, up to 12 digits	123456*
DISA Password		
Password to access Direct Inward System Access and Remote Station Service.	Numeric, up to 12 digits	123456*

* = default settings

6.21.4 System parameters: General, CTi Settings



Table 6 - 12 System parameters: General, CTi Settings

IP Address		
System IP Address for CTi Interface	Numeric, 1-3 digits per field	0, 0, 0, 0*
Subnet Mask		
Subnet Mask for CTi Interface	Numeric, 1-3 digits per field	255, 255, 255, 0*
Option Key		
Unique software key for CTi Interface	Alpha- Numeric	None*
Monitors		
Number of system resources that can be monitored with current CTi software	Numeric	

* = default settings



Note

See chapter 16, "CTi Interface" for information on programming CTi Settings

6.21.5 System Parameters: General, Miscellaneous

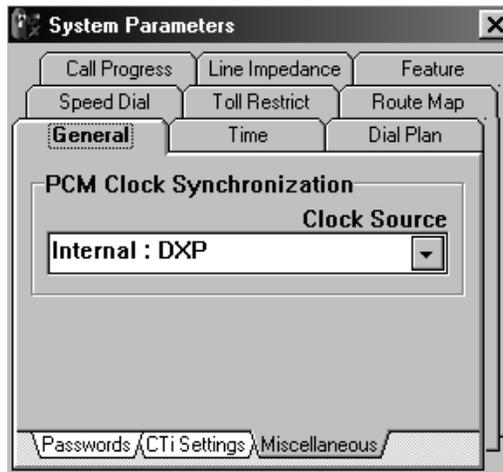


Table 6 - 13 System Parameters: General, Miscellaneous

Clock Source	
Clock synchronization for digital trunk cards	varies with types of digital trunk cards in the system



Note

See digital trunk card chapters for information on programming this parameter.

6.21.6 System parameters: Time, Mode

To designate call routing for each trunk based upon system time, see “Trunk: Routing: Voice” - section 6.24.2 and “Trunk: Routing: Fax” - section 6.24.3.

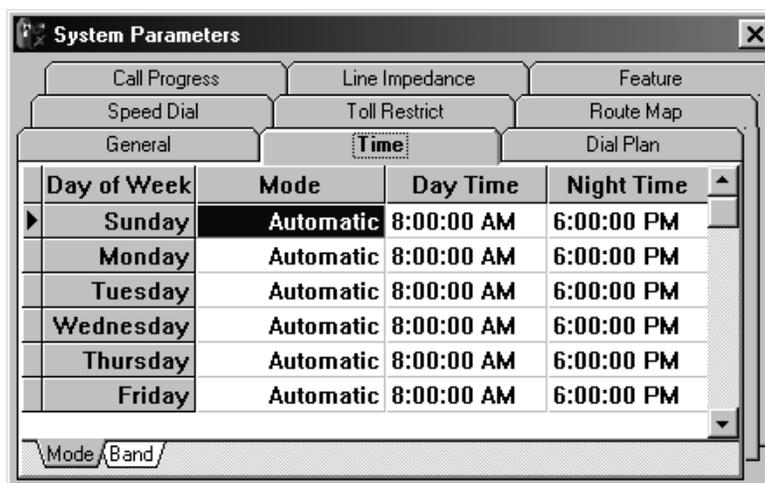


Table 6 - 14 System parameters: Time, Mode

Mode	
Sets whether the time automatically switches modes or if the system will stay in day mode or night mode for the entire day.	Automatic*, Day, Night
Day Time	
Time that the system switches to day mode if Automatic switching is enabled for that day.	Time; Hour, Minute, AM/PM 8:00 AM*
Night Time	
Time that the system switches to night mode if Automatic switching is enabled for that day.	Time; Hour, Minute, AM/PM 6:00 PM*

* = default settings

6.21.7 System Parameters: Time, Band

Time, Band is user to designate outbound calls based upon least cost routing, see chapter 14, "Least Cost Routing".

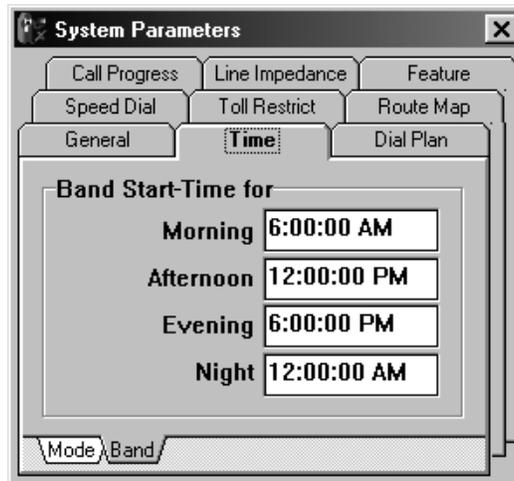


Table 6 - 15 System Parameters: Time, Band

Morning		
Time that Least Cost Routing starts following the Morning table to route calls.	Time; Hour, Minute, Seconds, AM/PM	6:00:00 AM*
Afternoon		
Time that Least Cost Routing starts following the Afternoon table to route calls.	Time; Hour, Minute, Seconds, AM/PM	12:00:00 PM*
Evening		
Time that Least Cost Routing starts following the Evening table to route calls.	Time; Hour, Minute, Seconds, AM/PM	6:00:00 PM*
Night		
Time that Least Cost Routing starts following the Night table to route calls.	Time; Hour, Minute, Seconds, AM/PM	12:00:00 AM*

* = default settings

6.21.8 System parameters: Dial Plan

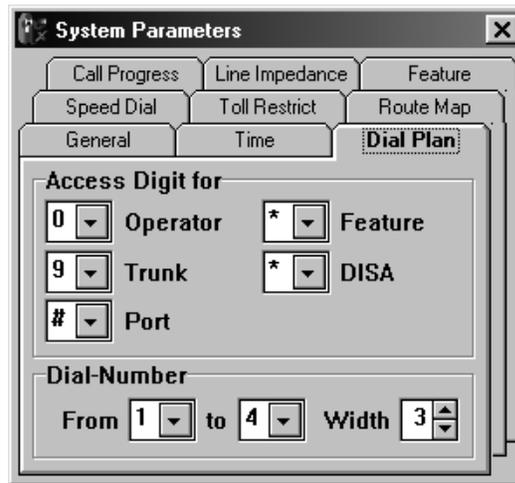


Table 6 - 16 System parameters: Dial Plan

Access Digit for		
Establishes the single digit dialed to...		
Reach the Operator	0-9, *, #	0 *
Access a outside line (Trunk)	0-9, *, #	9 *
Precede a Feature code	0-9, *, #	* (default)
Access a Port	0-9, *, #	# d
Utilize DISA	0-9, *, #	* (default)
Note: A unique digit must be assigned to each of the five access options, with the exception of Utilize DISA.		
Dial-Number Range		
The flexible numbering plan parameters used for assigning logical IDs to system resources such as User IDs, User Group IDs, Trunk IDs, Trunk Group IDs, Voice IDs, and Auto-Attendant IDs.		
Range From	0-9	1 *
Range To	0-9	4 *
Width	1-5	3 *
Note: The dial plan is uniform. For example, if there is a Range From 1, and a Range to 3, with a width of 4, the possible dial ranges are from 1000 to 3999. Values such as 100 or 10 are not valid.		

* = default settings

6.21.9 System parameters: Speed Dial

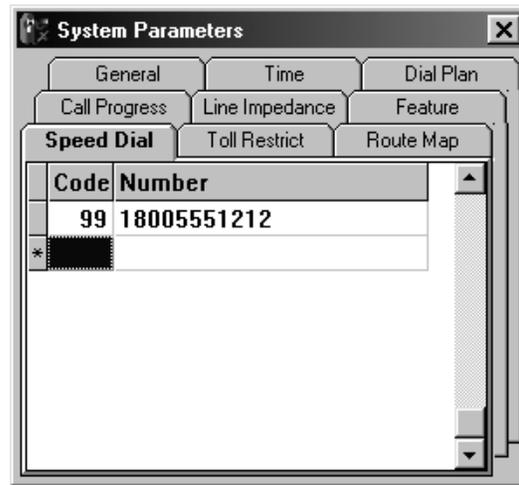


Table 6 - 17 System parameters: Speed Dial

Code	
Digits used to execute each system speed dial number.	0-99
<p>Note: Single digits (1-9) are actually mapped with a preceding zero. For example, when utilizing code 1, the user dials 01.</p> <p>Note: Plexus Key Telephone users may program additional personal speed dial numbers using the speed dial memory on the key telephone [Refer to “User: Features, Settings” - section 6.22.3].</p>	
Number	
The telephone number that will be dialed when the speed dial code is entered.	Phone #
<p>Note: The Plexus system has the capacity to store approximately 100 20-digit speed dial numbers. If the speed dial numbers are generally more than 20 digits, fewer numbers may be stored. Commas (i.e., pauses) count as digits.</p>	

6.21.10 System parameters: Toll Restrict, Deny Dialing

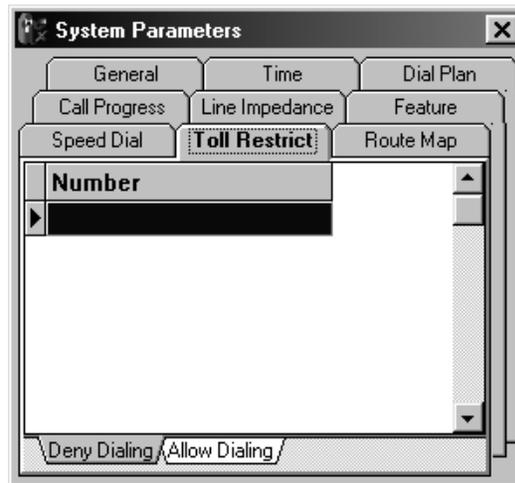


Table 6 - 18 System parameters: Toll Restrict, Deny Dialing

Number
<p>List of generally denied phone numbers and prefixes applicable to unassigned extensions and system out dialing. Phone # / Phone # prefix</p> <p>E.g., 1-900 would terminate calls with this prefix unless the specific number dialed is allowed in the system allow dialing table.</p> <p>Note: System-dialed calls as in the case of Remote Call Forwarding, and Remote Telephone Notification, and Pager Notification are subject to the system deny and allow dialing tables</p>

6.21.11 System parameters: Toll Restrict, Allow Dialing

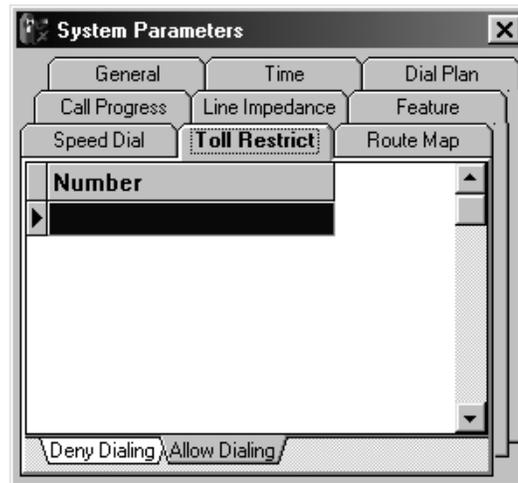
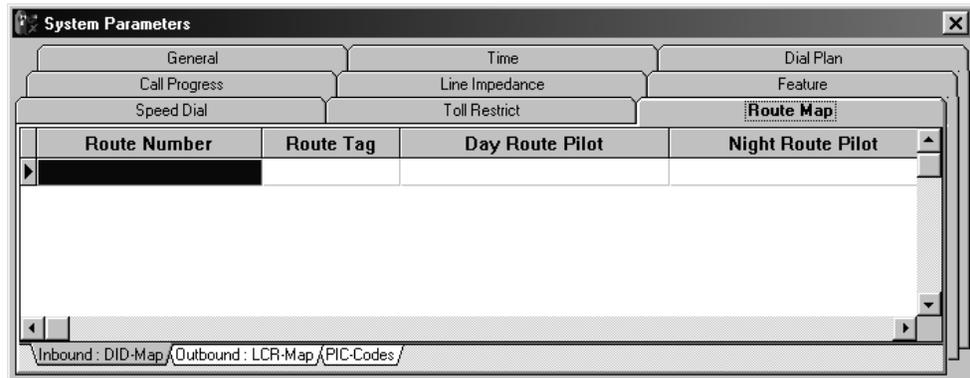


Table 6 - 19 System parameters: Toll Restrict, Allow Dialing

Number
<p>List of specifically allowed phone numbers applicable to unassigned extensions and system out dialing. These numbers will override the Deny Dialing table.</p> <p style="text-align: right;">Phone # / Phone # prefix</p>

6.21.12 System Parameters: Route Map, Inbound: DID-Map



The Inbound: DID-Map is used to route calls for Caller ID / ANI Routing, Mapped DID / DNIS Routing, and DID Routing. See chapter 13, "Direct Inward Dialing".

Table 6 - 20 System Parameters: Route Map, Inbound: DID-Map

Route Number	
The Caller ID number, DID number, DNIS number, or ANI number sent by the incoming call.	numeric, 1-20 digits
Route Tag	
Identifying name or information for this route number	alphanumeric, 0- 10 digits
Day Route Pilot	
System resource that the call will be routed to during the day mode.	None * User ID User Group ID AutoAttendant ID Voice ID
Night Route Pilot	
System resource that the call will be routed to during the day mode.	None * User ID User Group ID AutoAttendant ID Voice ID

* = default settings

6.21.13 System Parameters: Route Map, Outbound: LCR-Map



Note

Least Cost Routing is covered in detail in chapter 14, "Least Cost Routing". Refer to this chapter before configuring these settings.

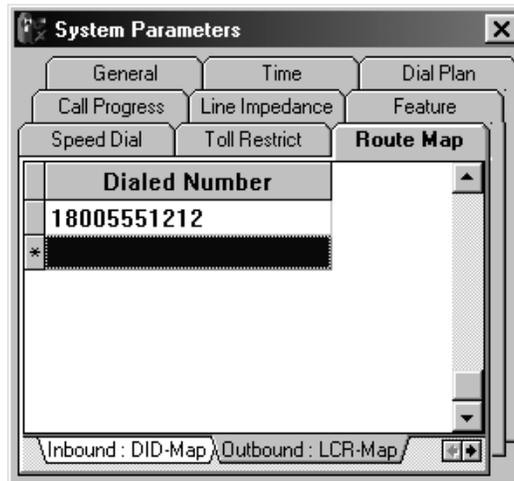


Table 6 - 21 System Parameters: Route Map, Outbound: LCR-Map

Dialed Number	
Number or prefix of the number dialed by a user with Least Cost Routing enabled.	Numeric, None*

* = default setting

Double clicking in a completed Dialed Number field brings up the LCR-Map Definition window.

The screenshot shows a window titled "LCR Definition for #18005551212". It contains a table with two columns: "Trunk Pilot-ID" and "PIC-Code". The rows are labeled "Morning", "Afternoon", "Evening", and "Night". Each row has a dropdown menu for "Trunk Pilot-ID" and a dropdown menu for "PIC-Code". All dropdown menus are currently set to "None". At the bottom of the window, there is a row of tabs for the days of the week: Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, and Sunday.

	Trunk Pilot-ID	PIC-Code
Morning	None	
Afternoon	None	
Evening	None	
Night	None	

Monday / Tuesday / Wednesday / Thursday / Friday / Saturday / Sunday

Table 6 - 22 System Parameters: Route Map, Outbound: LCR-Map: LCR Definitions

Trunk Pilot-ID	
Trunk or trunk group that will be accessed for this time band when the user dials the defined number.	None* Trunk ID Trunk Group ID
PIC-Code	
PIC Code that will be dialed with the number dialed by the user when the trunk is accessed.	Numeric, None*

* = default settings

6.21.14 System Parameters: Route Map, PIC-Codes



Note

Least Cost Routing is covered in detail in chapter 14, "Least Cost Routing". Refer to this chapter before configuring these settings.

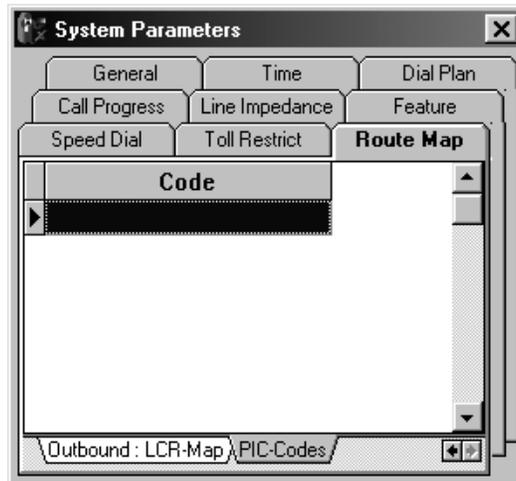


Table 6 - 23 System Parameters: Route Map, PIC-Codes

Code
Available PIC Codes that will be dialed with the number dialed by the user when the trunk is accessed with Least Cost Routing. Numeric, None*

* = default settings

6.21.15 System parameters: Call Progress, Filter

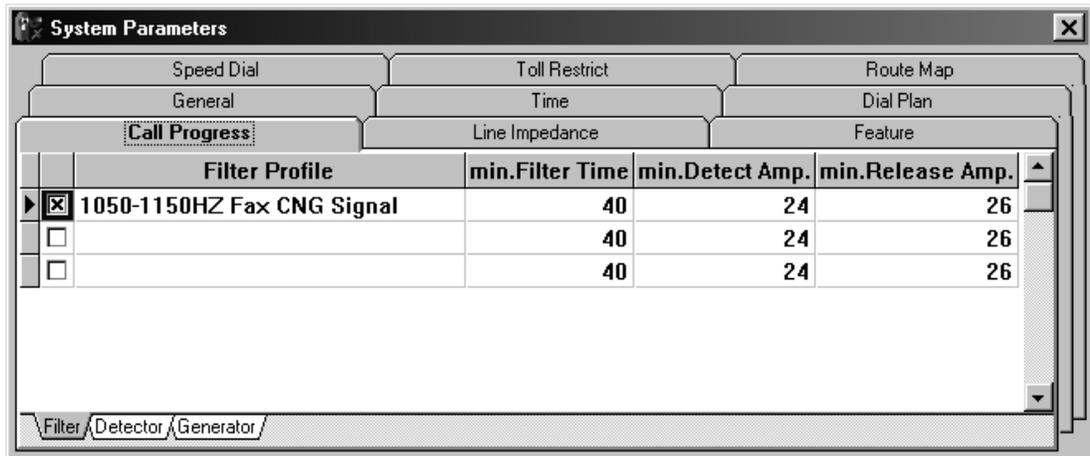


Table 6 - 24 System parameters: Call Progress, Filter

Check Box		
Makes the corresponding filter available or unavailable.	Available *	Unavailable
Filter Profile		
Description or name of the frequency range filter profile. Note: Filters are used to detect such external tones as busy, dial, ring back, disconnect and CNG.		
min. Filter Time		
Period during which the system will attempt to detect the frequency range defined in the filter.	0-500	200 ms *
min. Detect Amp		
Minimum amplitude level required for the system to detect the defined frequency range.	0-40	24dB *
min. Release Amp.		
Minimum amplitude level at which the system will terminate detection of the defined frequency range. Note: It may be necessary to scroll right to see all of the parameters.	0-40	26dB *

* = default settings

6.21.16 System parameters: Call Progress, Detector

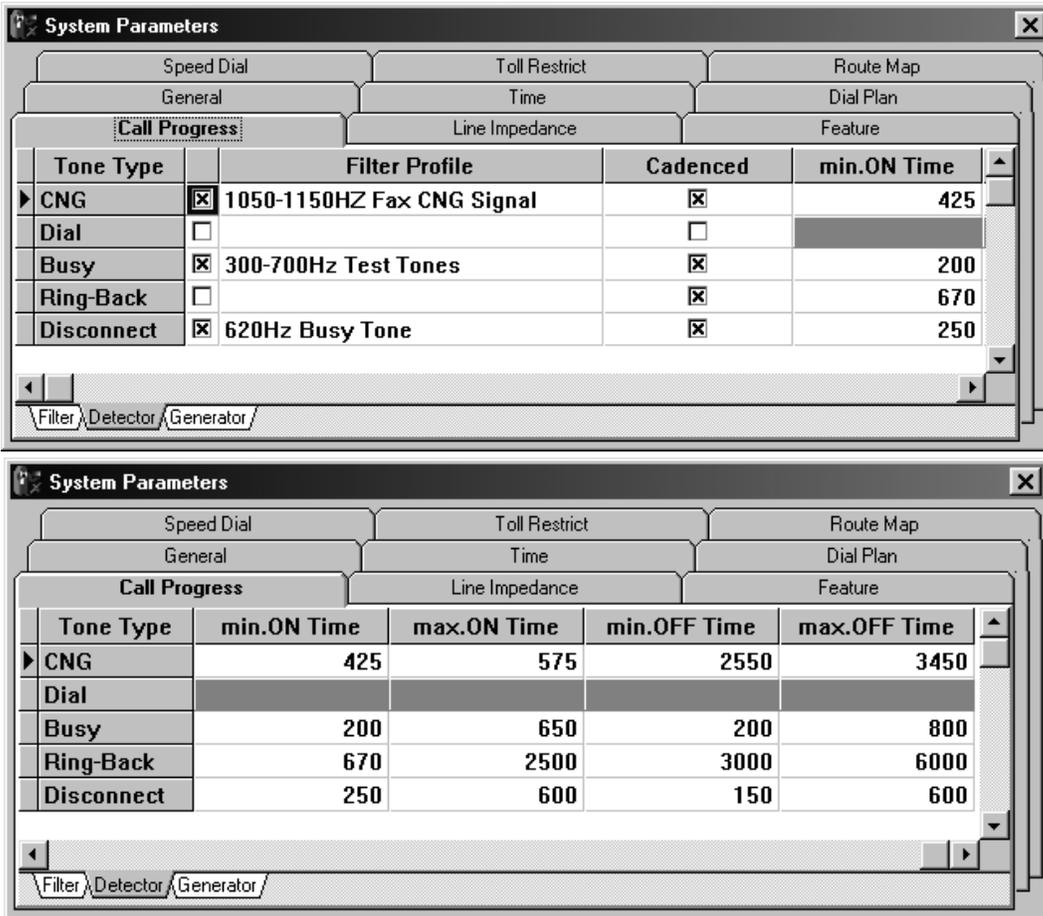


Table 6 - 25 System parameters: Call Progress, Detector

Tone Type
Type of tone detected with the applicable filter.
Check Box
Activates or deactivates the filter profile for the applicable tone. Active/Inactive
Filter Profile
Description or name of the frequency range filter profile.

Table 6 - 25 System parameters: Call Progress, Detector

Cadenced	
Enables the system to detect either a cadenced or continuous tone.	Enable/Disable
Note: If cadenced is enabled the following five parameters must be addressed in defining the minimum number of cycles and the ON and OFF positions of the cadence.	
min. ON Time	
Minimum range for the ON position of a cadenced tone. See Chart B: min ON Time System Defaults and Ranges for details.	
max ON Time	
Maximum range for the ON position of a cadenced tone. See Chart C: max ON Time System Defaults and Ranges for details.	
min. OFF Time.	
Minimum range for the OFF position of a cadenced tone. See Chart D: min OFF Time System Defaults and Ranges for details.	
max OFF Time	
Maximum range for the OFF position of a cadenced tone. See Chart E: max OFF Time System Defaults and Ranges for details. Note: It may be necessary to scroll right to see all of the parameters.	

6.21.16.1 Chart A: System defaults and ranges (in milliseconds)

Table 6 - 26 System parameters: Call Progress, Detector

min ON Times	CNG	
	425 *	0-20000 (increments of 10)
	Dial	
	0 *	0-20000 (increments of 10)
	Busy	
	200 *	0-20000 (increments of 10)
	Ring Back	
	670 *	0-20000 (increments of 10)
	Disconnect	
	200 *	0-20000 (increments of 10)

* = default settings

6.21.16.2 Chart B: System defaults and ranges (in milliseconds)

Table 6 - 27 System parameters: Call Progress, Detector

min ON Time	CNG	
	575 *	0-20000 (increments of 10)
	Dial	
	0 *	0-20000 (increments of 10)
	Busy	
	650 *	0-20000 (increments of 10)
	Ring Back	
	2500 *	0-20000 (increments of 10)
	Disconnect	
	650 *	0-20000 (increments of 10)

* = default settings

6.21.16.3 Chart C: System defaults and ranges (in milliseconds)

Table 6 - 28 System parameters: Call Progress, Detector

Min OFF Time	CNG	
	2550 *	0-20000 (increments of 10)
	Dial	
	0 *	0-20000 (increments of 10)
	Busy	
	200 *	0-20000 (increments of 10)
	Ring Back	
	3000 *	0-20000 (increments of 10)
	Disconnect	
	200 *	0-20000 (increments of 10)

* = default settings

6.21.16.4 Chart D: System defaults and ranges (in milliseconds)

Table 6 - 29 System parameters: Call Progress, Detector

max OFF Time	CNG	
	3450 *	0-20000 (increments of 10)
	Dial	
	0 *	0-20000 (increments of 10)
	Busy	
	800 *	0-20000 (increments of 10)
	Ring Back	
	6000 *	0-20000 (increments of 10)
	Disconnect	
	800 *	0-20000 (increments of 10)

* = default settings

6.21.17 System parameters: Call Progress, Generator, Ringback

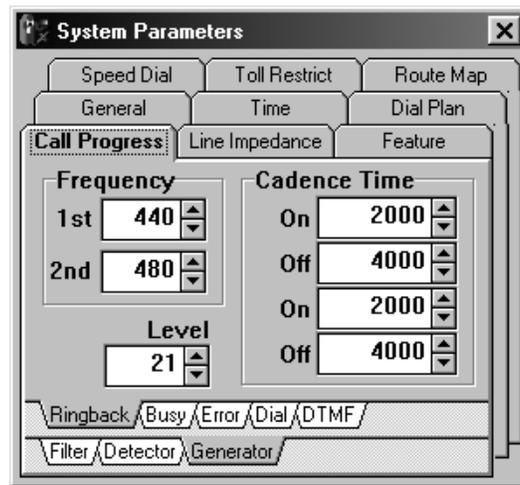


Table 6 - 30 System parameters: Call Progress, Generator, Ringback

Ringback Frequency		
Frequency settings for the internal ringback tones.	0-4000 Hz	1st 440 Hz * 2nd 480 Hz *
Ringback Cadenced Time		
Period for the ON and OFF positions of a cadenced ringback tone. Note: Control is given for two cycles to allow for two different ON or OFF periods.	0-4095 ms	On 2000 ms * Off 4000 ms *
Ringback Level		
Amplitude level for internal ringback tones.	0-70 dB	21 dB *

* = default settings

6.21.18 System parameters: Call Progress, Generator, Busy

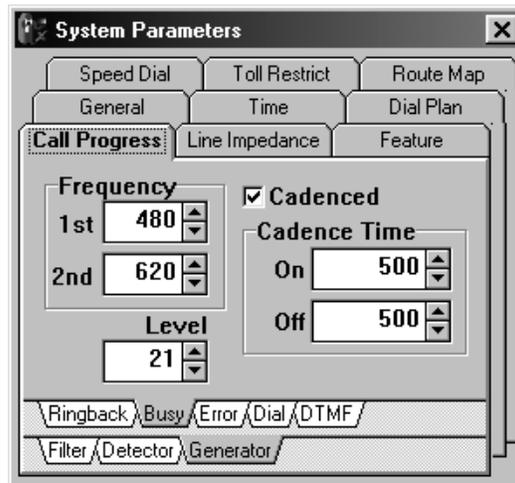


Table 6 - 31 System parameters: Call Progress, Generator, Busy

Busy Frequency		
Frequency settings for internal busy tone.	0-4000 Hz	1 st 480 Hz * 2 nd 620 Hz *
Busy Cadenced		
Enables/disables a cadenced busy tone.	Enable/Disable *	
Busy Cadence Time		
Period for the ON and OFF positions of a cadenced busy tone.	0-4095 ms	On 500 ms * Off 500 ms *
Busy Level		
Amplitude level for internal busy tones.	0-70 dB	21 dB *

* = default settings

6.21.19 System parameters: Call Progress, Generator, Error

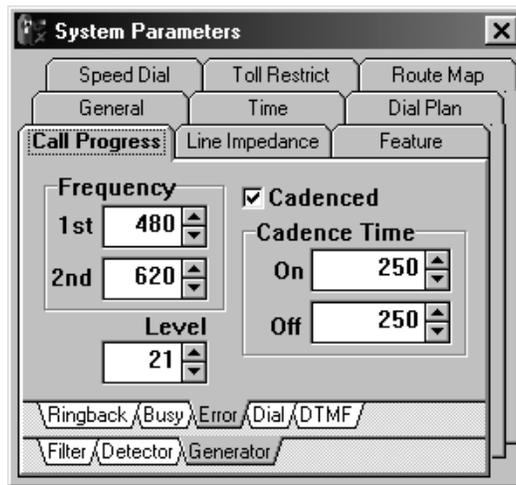


Table 6 - 32 System parameters: Call Progress, Generator, Error

Error Frequency		
Frequency setting for internal error tone.	0-4000 Hz	1 st 480 Hz * 2 nd 620 Hz *
Error Cadenced		
Enables/disables a cadenced error.	Enable ^d /Disable	
Error Cadence Time		
Period for the ON and OFF positions of a cadenced error tone.	0-4095 ms	On 250 ms * Off 250 ms *
Error Level		
Amplitude level internal error tone.	0-70 dB	21dB *

* = default settings

6.21.20 System parameters: Call Progress, Generator, Dial

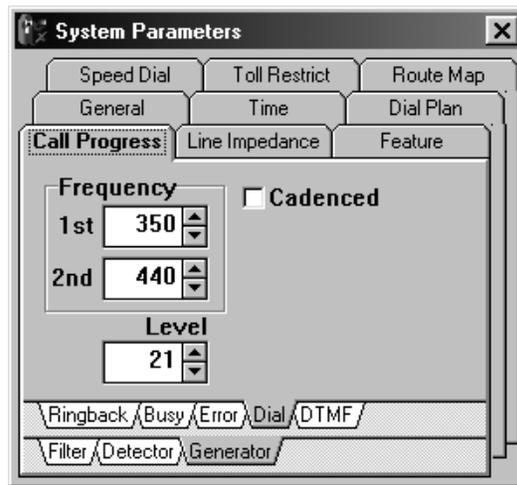


Table 6 - 33 System parameters: Call Progress, Generator, Dial

Dial Frequency		
Frequency settings for internal dial tone.	0-4000 Hz	1st 350 Hz * 2nd 440 Hz *
Dial Cadenced		
Enables/disables a cadenced dial tone.	Enable/Disable *	
Dial Cadence Time		
Period for the ON and OFF positions of a cadenced dial tone.	0-4095 ms	On 0 ms * Off 0 ms *
Dial Level		
Amplitude level for internal dial tone.	0-70 (-dB)	21 (-dB) *

* = default settings

6.21.21 System parameters: Call Progress, Generator, DTMF

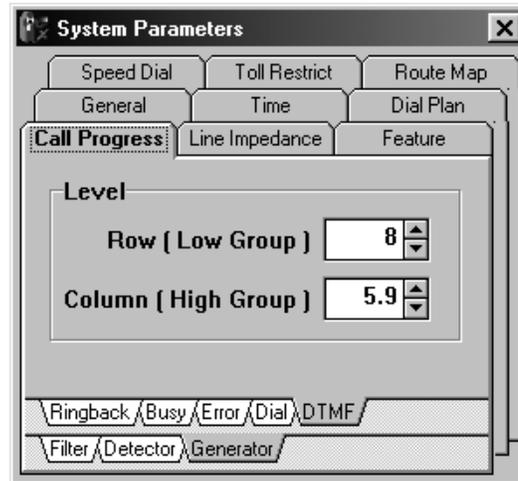


Table 6 - 34 System parameters: Call Progress, Generator, DTMF

DTMF Level		
Amplitude levels for the low and high frequencies associated with the DTMF digits 0-9, *, and #.	0-70 dB	Row (Low Group) 8 * Column (High Group) 5.9 *

* = default settings

6.21.21.1 DTMF digits and their respective frequencies

The following table illustrates the frequency associated with each DTMF digit. The column/high contains 4 frequencies (1209, 1336, 1477 and 1633). The row/low contains 4 frequencies (697, 770, 852, 941).

Table 6 - 35

	1209 Hz	1336 Hz	1477Hz	1633 Hz
697 Hz	1	2	3	A
770 Hz	4	5	6	B
852 Hz	7	8	9	C
941 Hz	*	0	#	D

6.21.22 System parameters: Line Impedance

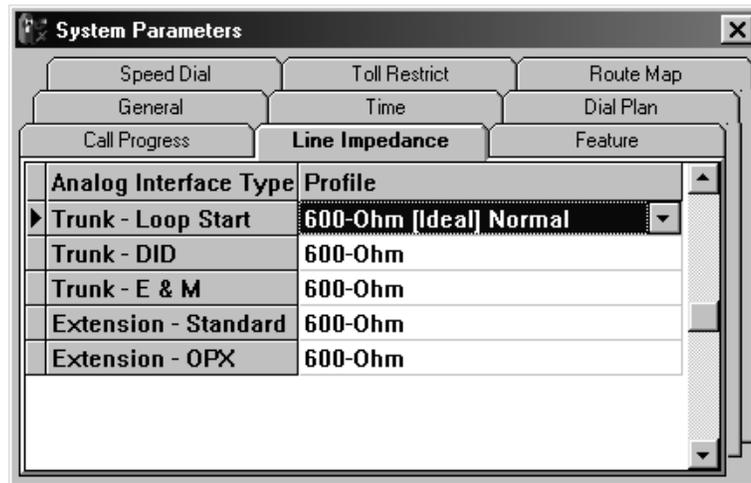


Table 6 - 36 System parameters: Line Impedance

Analog Interface Type	
Type of Analog Interface (e.g., Loop Start).	
Profile	
Impedance profile for the analog interface.	600-Ohm *
<p>Note: Line impedance profiles can only be configured through software configuration. Should the line impedance profile provided not meet the needs at a particular installation, e-mail a request for additional profiles at bbstechns@bbstelecom.com or contact a support representative.</p>	

* = default settings

6.21.23 System parameters: Feature, Assignment

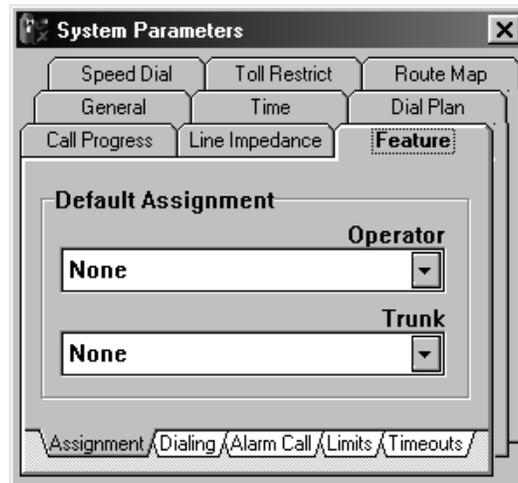


Table 6 - 37 System parameters: Feature, Assignment

Default Assignment-Operator	
<p><i>Connect to</i> for system-dialed calls placed to the operator or calls made by unassigned extensions.</p> <p>Note: System-dialed calls are calls made by the Integrated Voice Processor as in the case where a caller presses 0 to reach the system operator while in a user's voice mailbox.</p>	None * User ID User Group ID AutoAttendant ID Voice ID
Default Assignment-Trunk	
<p>Trunk or Trunk Group utilized for system-dialed calls or unassigned extension calls.</p>	None * Trunk ID Trunk Group ID

* = default settings

6.21.24 System parameters: Feature, Dialing

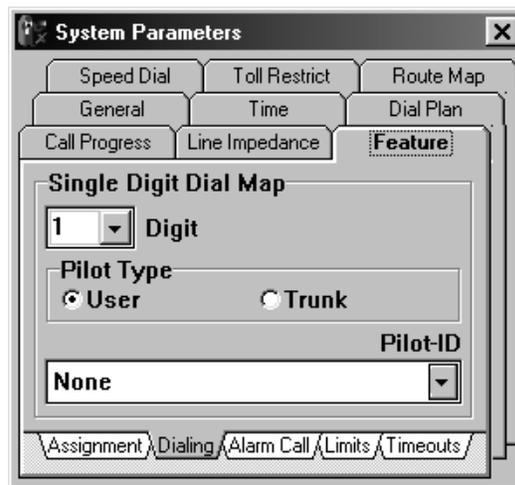


Table 6 - 38 System parameters: Feature, Dialing

Single Digit Dial Map: Digit	
Single digit access for users, user groups, trunks, trunk groups, auto attendant IDs, or voice IDs. E.g., If 3 is mapped to User 102, pressing the single digit 3 would connect to User 102.	0-9, #, *
Single Digit Dial Map: Pilot Type	
The type of entity to which the digit is mapped.	User /Trunk
Pilot-ID	
The ID to which the digit is mapped. Note: Plexus systems process a single digit at a time. If 3 is mapped to a user, pressing it will immediately connect you to the user. Therefore, it is not possible to connect to a user group or other entity with an ID of 300. Review the defined flexible numbering plan and access digits before mapping single digits.	None * User ID User Group ID Trunk ID Trunk Group ID AutoAttendant ID Voice ID

* = default settings

6.21.25 System parameters: Feature, Alarm Call

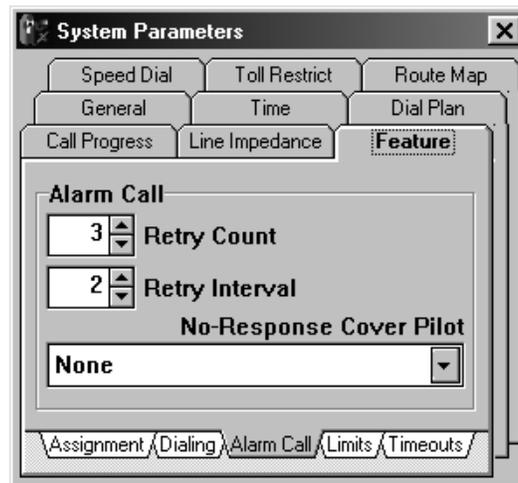


Table 6 - 39 System parameters: Feature, Alarm Call

Alarm Call: Retry Count		
The number of attempts the system will make to reach a user for either an appointment reminder or an alarm clock call.	0-255	3 *
Alarm Call: Retry Interval		
The period of time between retries.	0-255 minutes	2 minutes *
Alarm Call: No-Response Cover Pilot		
<i>Connect to</i> when no response is received for an alarm clock call. Note: The No-Response Cover Pilot does not apply to appointment reminders. Refer to chapter 18, "Hotel / Motel Package".	None *	User ID User Group ID AutoAttendant ID Voice ID

* = default settings

6.21.26 System parameters: Feature, Limits

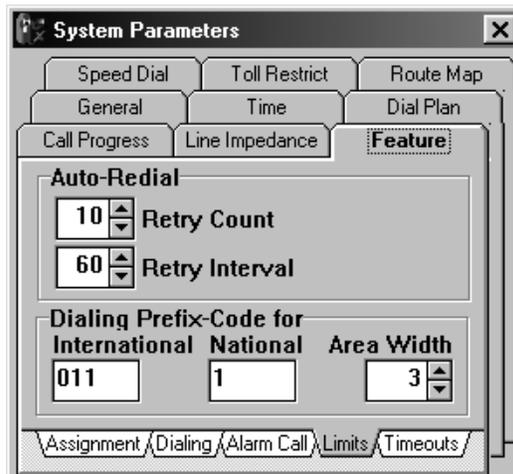


Table 6 - 40 System parameters: Feature, Limits

Auto Redial: Retry Count		
The number of attempts the system will make in completing an automatic redial.	0-255	10 Attempts
Auto-Redial: Retry Interval		
The period of time between retries.	0-255	60 seconds *
Dialing Prefix-Code: International		
The prefix the system will dial for an international call when a user utilizes Caller ID Redial (see "Caller ID Redial" - section 8.57).	numeric, 0-4 digits	011*
Dialing Prefix-Code: National		
The prefix the system will dial for a national call when a user utilizes Caller ID Redial (see "Caller ID Redial" - section 8.57).	numeric, 0-4 digits	1*
Dialing Prefix-Code: Area Width		
The number of digits in the system's local area code (see "Caller ID Redial" - section 8.57).	0-10	3*

* = default settings

6.21.27 System parameters: Feature, Timeouts

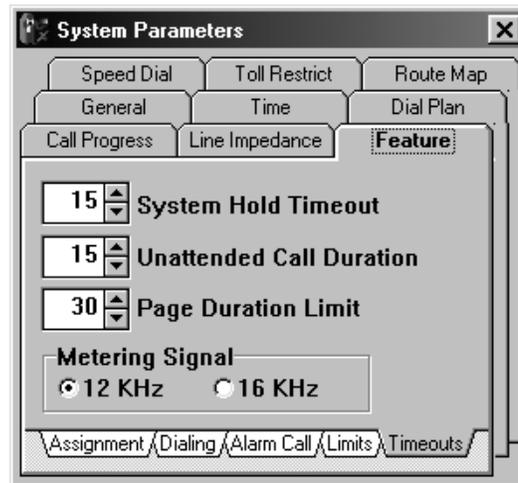


Table 6 - 41 System parameters: Feature, Timeouts

System Hold Timeout		
The period of time that a call will remain on System Hold before recalling the responsible user.	0-255 minutes	15 minutes*
Unattended Call-Duration		
The period of time that an unattended trunk call can go unsupervised before the call is automatically terminated. Note: Unattended calls include unsupervised conferences, externally forwarded or diverted calls, and doorphone calls to an external number.	0-255 minutes	15 minutes*
Page Duration Limit		
The maximum duration of a page. The page is automatically terminated upon exceeding the duration limit.	0-255 seconds	30 seconds*
Metering Signal		
Frequency of the central office metering signal. Note: Metering is available only on trunk cards with metering capabilities and in areas with metering service available from local phone service provider.	12KHz* or 16KHz	

* = default settings

6.22 Configure users

6.22.1 Configure Users

- 1 Ensure that all users have been created.
- 2 Click on the User tab to display the Users and User Group dialog window.
- 3 Double-click on each User in the User window.
- 4 Make appropriate entries and selections on each of the tabs.

Each user has a default system profile that can be modified to limit or expand the user's class of service.

**Tip**

To alleviate the repetitive tasks associated with configuring multiple users, right-click on a setting or field and select **Replicate ALL** or **Replicate Selected** [Replicate Selected is only available if users have been selected]. The Replicate options automatically assign a setting to all or selected users.

6.22.2 User: General

Table 6 - 42 User: General

ID	
Logical identifier for the user. Note: The ID is automatically assigned based on the User ID Sequence entered when the first user was created Note: To assign the user ID to a port, see “Extension port: General” - section 6.18.2.	Numeric Up to 4 digits
Name	
Informal identifier for the user. E.g., Heather.	Alphanumeric Up to 20 characters
Description	
Informal description or notes about the user. E.g., Receptionist	Alphanumeric

An extension port assigned to a user serves as the user’s home station. It is not necessary to assign a user to a port. Users with no port assignment are referred to as *transient* users. Additional User IDs may also be given to a user to serve as a user alias for purposes of receiving different types of calls at a single station.

6.22.3 User: Features, Settings

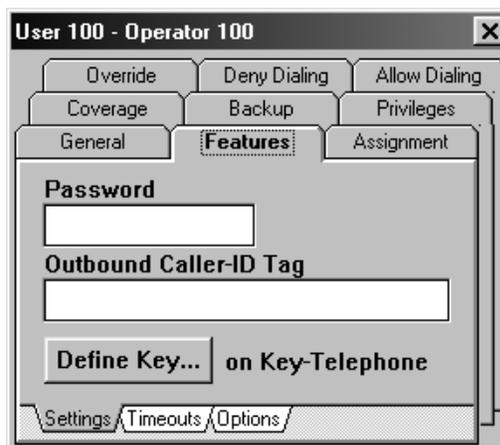


Table 6 - 43 User: Features, Settings

Password	
Optional log-in password. See "Password Security" - section 8.107.	Numeric, Up to 12 digits
Define Key... on Key-Telephone	
Press the Define Key button to define the programmable keys on the user's Plexus Key Telephone (if available).	

6.22.3.1 User: Features, Settings, Define Key

Unlike user privileges, programmable keys are assigned to a key telephone and not the user. The definitions are actually stored in memory that resides on the key telephone. A user's log-in privileges always override the physical key telephone's dialing or feature programming.



Notes

Only Plexus Key Telephones with firmware v1.01 or greater may be programmed through Plexus Administrator. The firmware version appears when the telephone is initializing.

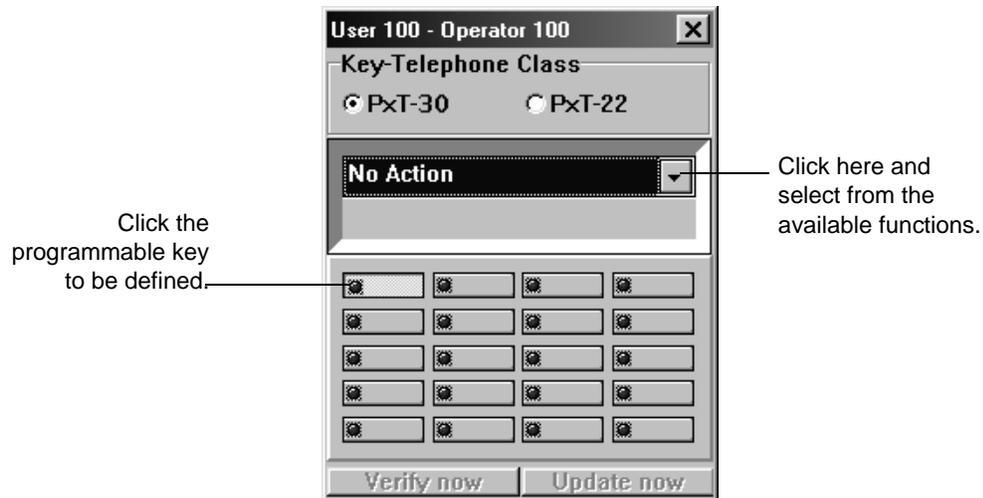
To initialize a key telephone, dial **F99**. If the screen displays S/W 1_00 it cannot be programmed using Plexus Administrator, but must be programmed at the key telephone.

To define the programmable keys on a Plexus Key Telephone, proceed as follows:

- 1 Click on the User tab.
- 2 Click on the Feature tab.
- 3 Click on the Define Key button.

Templates will appear for the various models of Plexus Key Telephones.

- 4 Click on the tab that corresponds to the available model. The following dialog box will appear:



- 5 Click on the programmable key to be defined.

The selected key will become highlighted.

- 6 Click on the options arrow, and select from the listed functions, as seen in the table below.
- 7 Programmable key definitions can be replicated to other key telephones on the system. To replicate a key definition to all other key phones on the system, press the options arrow, right click the mouse, and then choose **Replicate All**.
- 8 To replicate selected users: use the **CTRL** key to select users from the list of users. Then, press the options arrow and choose **Replicate Selected**.

**Note**

To see the programming already on a user's Key Telephone, Press **Verify now** after linking with the system. This feature works with version 2.0 Key Telephones and above only.

After programming the keys, you will need to send the parameters to the key telephones. See "Updating key telephones" - section 6.22.3.3.

6.22.3.2 Available functions for the Plexus Key Telephone

Table 6 - 44 User: Features, Settings

No Action*
Instructs the system to not overwrite key telephone programming during an update.
Undefined
Not programmed.
Map/Monitor Users
Monitors the status of a system user. E.g., When the monitored user goes off hook, the mapped key will illuminate.
Map/Monitor Trunks
Monitors the status of a trunk. E.g., When the monitored trunk is in use, the mapped key will illuminate.
Function
Activates a function [See "Feature Reference" on page 1 for a full description of the function codes]. Call Record is function 1, and Live Call Screening is function 2.
Feature
Activates a feature [See "Overview of Features" on page 1 for features codes].
Speed-Dial
Dials a frequently used telephone number. Commas provide a 2 second pause.
Default
Several buttons on version 2.0 Key Telephones have additional features that can be programmed. See User's Guide - Programming Keyphone for options.

* = default settings

6.22.3.3 Updating key telephones

To update the key telephone version 1.01, proceed as follows:

- 1 After linking with the system, click on the **Update** menu at the top of the Administrator program.
- 2 Click on **Key-Phone**. This will update all version 1.01 and above Key Telephones physically attached to the system.

To update the key telephone version 2.0 and above, proceed as follows:

- 1 After linking with the system, click on the **Update now** button on the screen. This will only update the phone at that user's station.

or

- 1 After linking with the system, click on the **Update** menu at the top of the Administrator program.
- 2 Click on **Key-Phone**. This will update all version 1.01 and above Key Telephones physically attached to the system.

6.22.4 User: Features, Timeouts

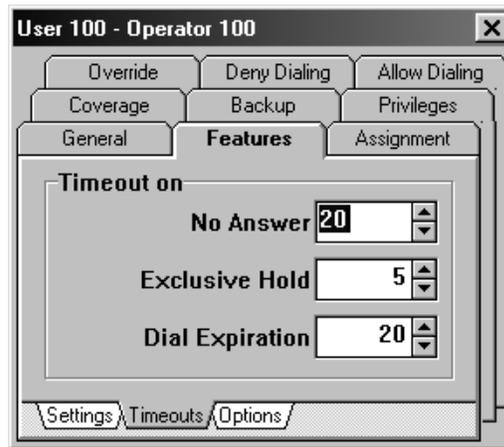


Table 6 - 45

Timeout on No Answer		
The period of time before an unanswered call routes to the user's backup or coverage. Note: See "Call Backup - User / User Group" - section 8.27 and "Call Coverage" - section 8.32.	0-255 seconds	20 seconds*
Timeout on Exclusive Hold		
The period of time that a call will remain on Exclusive Hold before recalling the responsible user. Note: See "Call Hold: Exclusive" - section 8.37 for further recall interactions.	0-255 minutes	5 minutes*
Timeout on Dial Expiration		
The amount of time that an off-hook station receives internal dial tone before receiving error tone.	0-255 seconds	20 seconds*

* = default settings

6.22.5 User: Features, Options

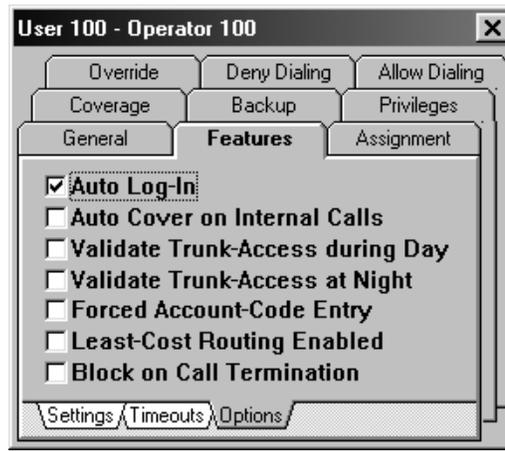


Table 6 - 46 User: Features, Options

Auto Log-In	
Enables the user to be automatically logged-in each time the system boots.	Enable*/Disable
Auto Cover on Internal Calls	
Enables an automated version of the call cover feature for the user. Note: A user with Auto Cover enabled will automatically route to the applicable coverage entity when calling an unavailable user.	Enable/Disable*
Validate Trunk Access during Day	
The Plexus system will only allow the user to place an external call after the user verifies the user's trunk access privileges while the system is in the day mode. See "Authorize User" - section 8.12.	Enable/Disable*
Validate Trunk Access at Night	
The Plexus system will only allow the user to place an external call after the user verifies the user's trunk access privileges while the system is in the night mode. See "Authorize User" - section 8.12.	Enable/Disable*
Forced Account Code	

Table 6 - 46 User: Features, Options (continued)

The Plexus system will only allow the user to place an external call after the user enters an account code for the call. See "Account Codes: Forced" - section 8.4.	Enable/Disable*
Least Cost Routing Enabled	
The Plexus system will route external calls based on information entered in the Least Cost Routing table. See chapter 14, "Least Cost Routing."	Enable/Disable*
Block on Call Termination	
Prevents an internal dial tone from being sent to a phone after disconnecting from a phone call. See "Block On Call Termination" - section 8.19.	Enable/Disable*

* = default settings

6.22.6 User: Assignment, Group-Access



Table 6 - 47 User: Assignment, Group-Access

Pilot-ID for Pickup	
Pickup Group or Pickup User that the user picks up when using F07 or F08 . See "Call Pickup: Intra-Group" - section 8.44.	None * User ID User Group ID AutoAttendant ID Voice ID
Pilot-ID for Operator	
Connect to for calls to the operator. E.g., when the user presses 0 .	None * User ID User Group ID AutoAttendant ID Voice ID
Pilot-ID for Trunk	
Trunk or trunk group utilized by the user for external outbound calls. This parameter also determines which trunks will be used for automated off-site dialing (e.g., External Forward and Remote Call Notification) for the user.	None * Trunk ID Trunk Group ID

* = default settings

6.22.7 User: Assignment, Message-Access

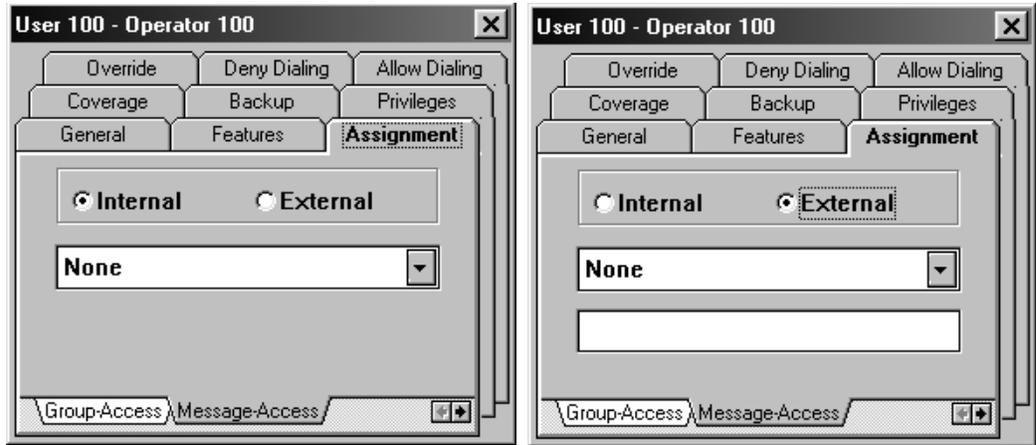


Table 6 - 48 User: Assignment, Message-Access

Message-Access: Internal	
System entity that the user accesses when checking messages. Note: On systems with an Integrated Voice Processor, this is set to a Voice ID. In the absence of an Integrated Voice Processor, this can be set for a receptionist, operator, or front desk where messages are taken manually.	None* User ID User Group ID Voice ID
Message-Access: External	
Trunk / Trunk Group that the user accesses when checking messages. Note: On systems with an Integrated Voice Processor, this is set to an Internal Voice ID. In the absence of an Integrated Voice Processor, this can be set for an answering service, etc.	None* Trunk ID Trunk Group ID
Message-Access: External - Dial Number	
Externally dialed telephone number that the system dials for the user to check messages.	Numeric, 0-9 up to 20 digits

* = default settings

6.22.8 User: Assignment, Off-Hook Preference, User

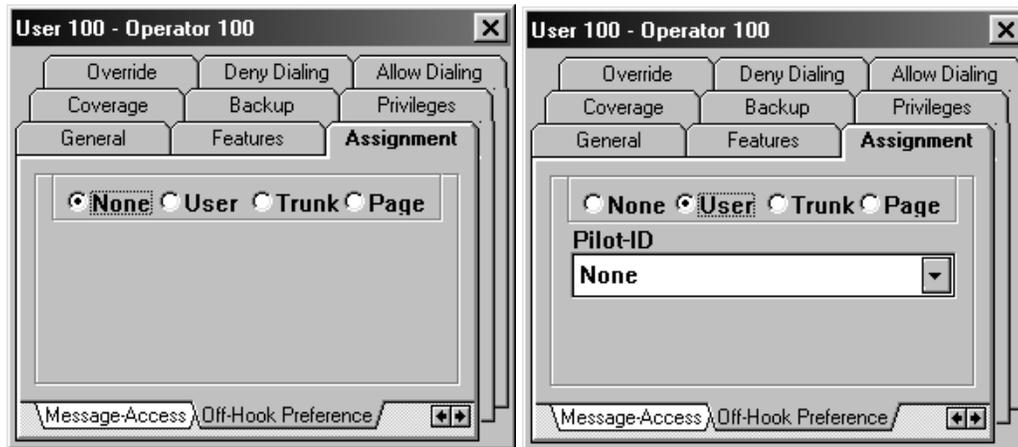


Table 6 - 49 User: Assignment, Off-Hook Preference, User

Pilot-ID	
Internal connect to initiated by going off-hook. E.g., A hotel lobby phone which automatically calls the hotel switch operator when someone picks up the handset.	None * User ID User Group ID AutoAttendant ID Voice ID

* = default settings

6.22.9 User: Assignment, Off-Hook Preference, Trunk

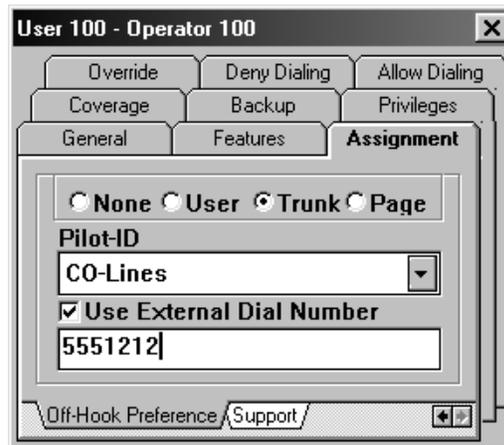


Table 6 - 50 User: Assignment, Off-Hook Preference, Trunk

Pilot-ID	
Trunk or trunk group the user is automatically connected to by going off-hook. e.g., An elevator phone which automatically accesses an outside line when someone picks up the handset, so that emergency numbers can be dialed.	None * Trunk ID Trunk Group ID
Use External Dial Number	
Telephone number associated with the trunk off-hook preference Note: When enabled, the telephone number is automatically dialed after the user is connected to the trunk or trunk group designated in the trunk off-hook preference Pilot-ID above. E.g., An elevator phone could be set to dial 911 when someone lifts the handset.	Enable/Disable + Phone #

* = default settings

6.22.10 User: Assignment, Off-Hook Preference, Page

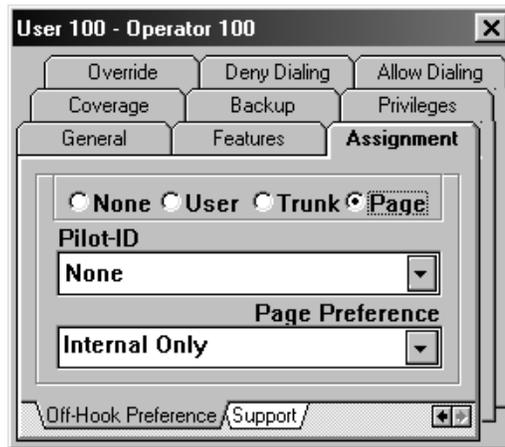


Table 6 - 51 User: Assignment, Off-Hook Preference, Page

Pilot-ID	
Paging service connect to initiated by going off-hook. e.g., going off-hook performs an internal page to the selected user group	None * User Group ID
Note: The Pilot-ID applies only to internal pages. To page all users, do not select a Pilot-ID and choose internal for the page preference parameter below.	
Note: Page refers to the Page features.	
Page Preference	
The type of paging service to be utilized.	Internal * External Answer

* = default settings

6.22.11 User: Assignment, Support

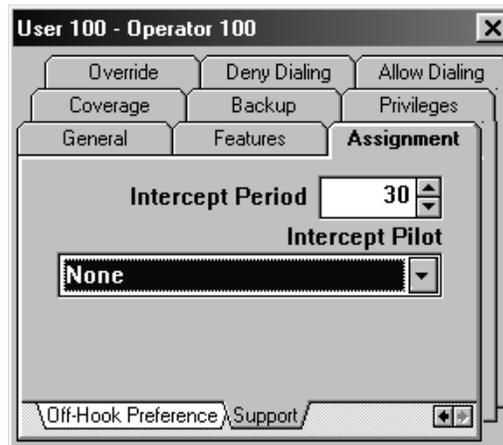


Table 6 - 52 User: Assignment, Support

Intercept Period		
The period of time between connections to the intercept pilot while a caller is waiting in a user's exclusive hold queue. Note: See "Intercept Service" - section 8.84.	0-255 seconds	30 seconds*
Intercept Pilot		
Intercept connect to for calls in queue for the user.	None * User ID User Group ID Auto Attendant ID Voice ID	

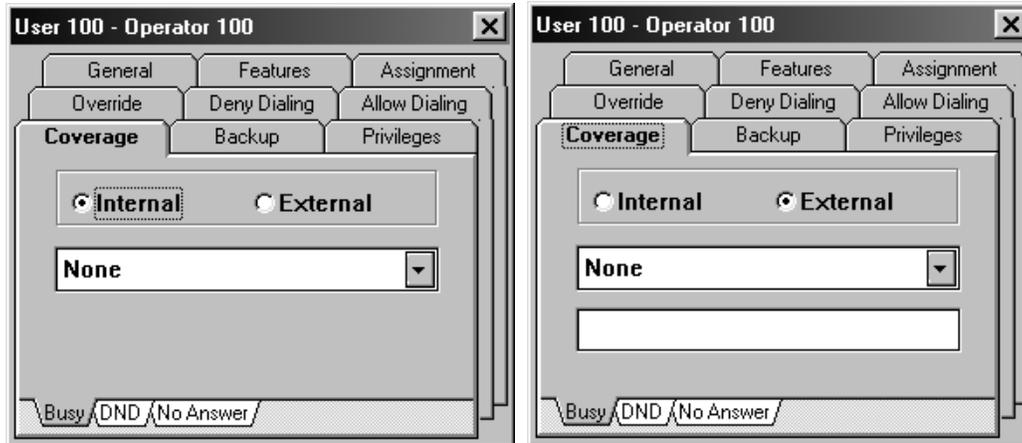
* = default settings

6.22.12 User: Coverage, Busy



Note

Coverage entities (i.e., Pilot-IDs) should be chosen carefully as calls routed to an unavailable entity are dropped.



Coverage Pilot IDs will only be used if the user’s Backup Pilot IDs are unavailable or not defined.



Note

In Coverage, if a Voice ID is set for the Pilot ID, the call will route to the user’s voice mailbox. For the call to route to the Auto Attendant, the user’s Backup must be set to the Voice ID.

Table 6 - 53 User: Coverage, Busy

Pilot-ID on Busy: Internal	
Where the call will be transferred to when the user is busy.	None * User ID User Group ID AutoAttendant ID Voice ID (see above note)
Pilot-ID on Busy: External	
Trunk or trunk group the call will be transferred to when the user is busy. An external number must be defined or the call will be terminated. (This is used to route the calls to an external entity; e.g., answering service.)	None * Trunk ID Trunk Group ID

Table 6 - 53 User: Coverage, Busy

External Dial Number	
Externally dialed number for External Coverage.	none*, 0-9

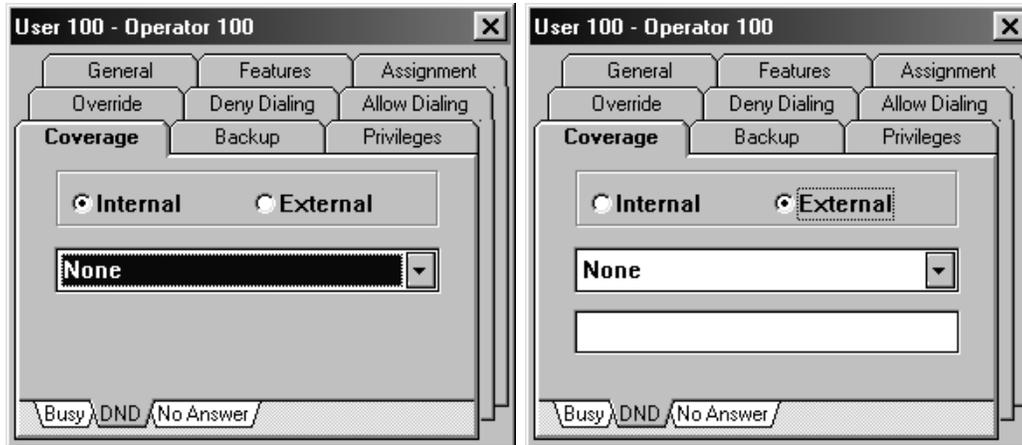
* = default settings

6.22.13 User: Coverage, DND



Note

Coverage entities (i.e., Pilot-IDs) should be chosen carefully as calls routed to an unavailable entity are dropped.



Coverage Pilot IDs will only be used if the user's Backup Pilot IDs are unavailable or not defined.



Note

In Coverage, if a Voice ID is set for the Pilot ID, the call will route to the user's voice mailbox. For the call to route to the Auto Attendant, the user's Backup must be set to the Voice ID.

Table 6 - 54 User: Coverage, DND

Pilot-ID on Busy: Internal	
Where the call will be transferred to when the user is in DND.	None * User ID User Group ID AutoAttendant ID Voice ID (see above note)
Pilot-ID on Busy: External	
Trunk or trunk group the call will be transferred to when the user is in DND. An external number must be defined or the call will be terminated. (This is used to route the calls to an external entity; e.g., answering service.)	None * Trunk ID Trunk Group ID

Table 6 - 54 User: Coverage, DND

External Dial Number	
Externally dialed number for External Coverage.	none*, 0-9

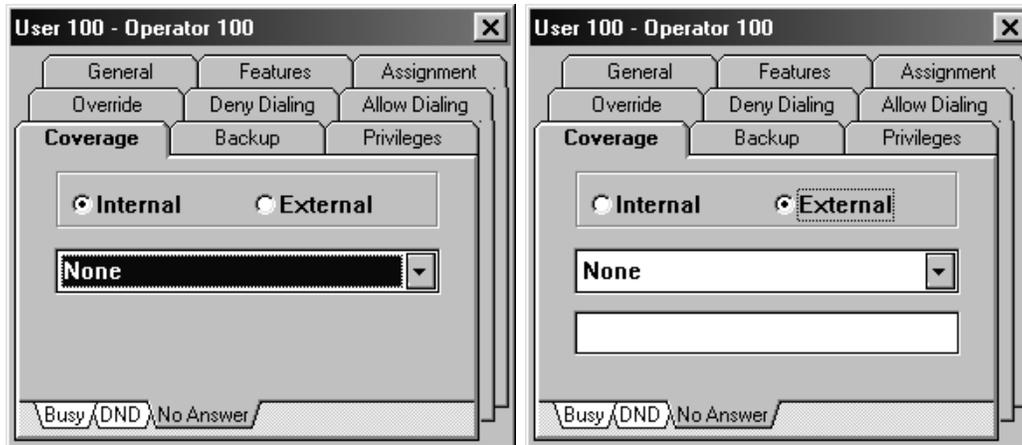
* = default settings

6.22.14 User: Coverage, No Answer



Note

Coverage entities (i.e., Pilot-IDs) should be chosen carefully as calls routed to an unavailable entity are dropped.



Coverage Pilot IDs will only be used if the user's Backup Pilot IDs are unavailable or not defined.



Note

In Coverage, if a Voice ID is set for the Pilot ID, the call will route to the user's voice mailbox. For the call to route to the Auto Attendant, the user's Backup must be set to the Voice ID.

Table 6 - 55 User: Coverage, No Answer

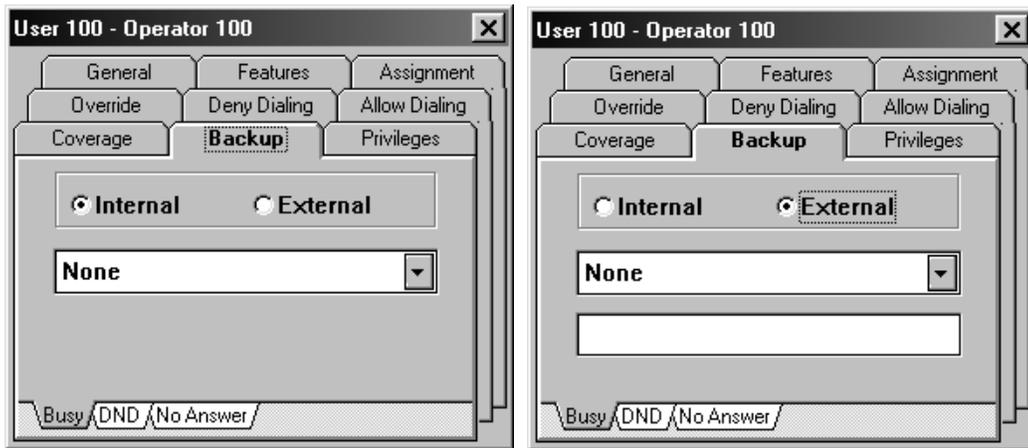
Pilot-ID on Busy: Internal	
Where the call will be transferred to when the user does not answer.	None * User ID User Group ID AutoAttendant ID Voice ID (see above note)
Pilot-ID on Busy: External	
Trunk or trunk group the call will be transferred to when there is no answer. An external number must be defined or the call will be terminated. (This is used to route the calls to an external entity; e.g., answering service.)	None * Trunk ID Trunk Group ID

Table 6 - 55 User: Coverage, No Answer

External Dial Number	
Externally dialed number for External Coverage.	none*, 0-9

* = default settings

6.22.15 User: Backup, Busy



If a Backup entity is unavailable (Busy, DND, No Answer) or is not defined, the call will follow the user's coverage.



Note

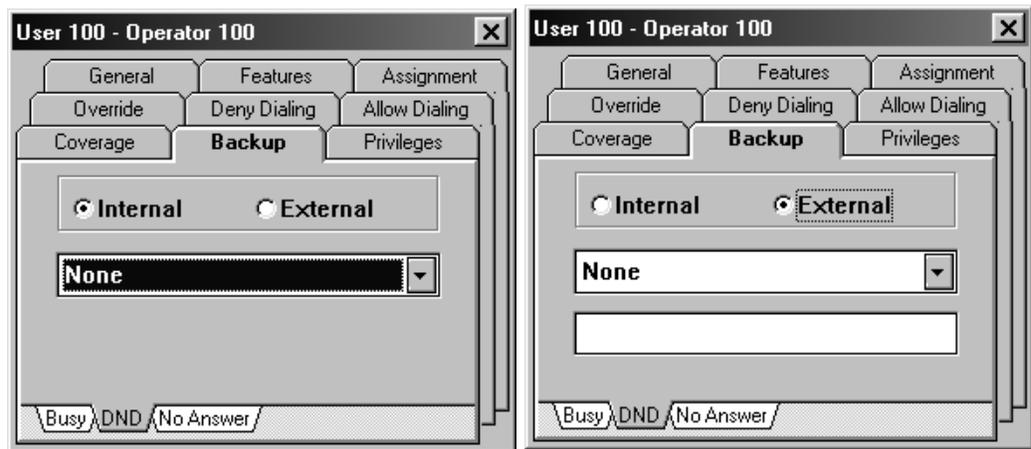
In Backup, if a Voice ID is set for the Pilot ID, the call will route to the Auto Attendant. For the call to route to the user's voice mailbox, the user's Coverage must be set to the Voice ID.

Table 6 - 56 User: Backup, Busy

Pilot-ID on Busy: Internal	
Where the call will be transferred to when the user is busy.	None * User ID User Group ID AutoAttendant ID Voice ID (see above note)
Pilot-ID on Busy: External	
Trunk or trunk group the call will be transferred to when the user is busy. (This is used to route the calls to an external entity; e.g., answering service.)	None * Trunk ID Trunk Group ID
External Dial Number	
Externally dialed number for External Backup.	none*, 0-9

* = default settings

6.22.16 User: Backup, DND



If a Backup entity is unavailable (Busy, DND, No Answer) or is not defined, the call will follow the user's coverage.

**Note**

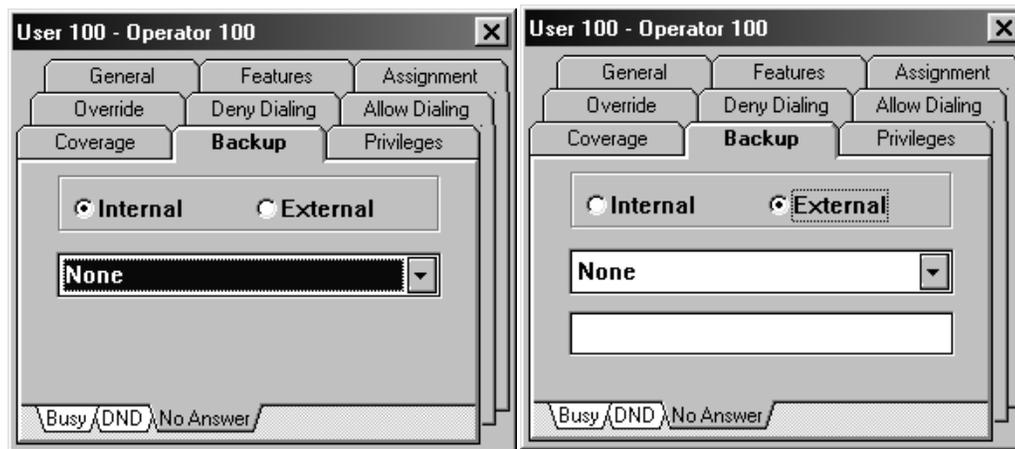
In Backup, if a Voice ID is set for the Pilot ID, the call will route to the Auto Attendant. For the call to route to the user's voice mailbox, the user's Coverage must be set to the Voice ID.

Table 6 - 57

Pilot-ID on Busy: Internal	
Where the call will be transferred to when the user is in DND.	None * User ID User Group ID AutoAttendant ID Voice ID (see above note)
Pilot-ID on Busy: External	
Trunk or trunk group the call will be transferred to when the user is in DND. (This is used to route the calls to an external entity; e.g., answering service.)	None * Trunk ID Trunk Group ID
External Dial Number	
Externally dialed number for External Backup.	none*, 0-9

* = default settings

6.22.17 User: Backup, No Answer



If a Backup entity is unavailable (Busy, DND, No Answer) or is not defined, the call will follow the user's coverage.



Note

In Backup, if a Voice ID is set for the Pilot ID, the call will route to the Auto Attendant. For the call to route to the user's voice mailbox, the user's Coverage must be set to the Voice ID.

Table 6 - 58 User: Backup, No Answer

Pilot-ID on Busy: Internal	
Where the call will be transferred to when the user does not answer.	None * User ID User Group ID AutoAttendant ID Voice ID (see above note)
Pilot-ID on Busy: External	
Trunk or trunk group the call will be transferred to when the user does not answer. (This is used to route the calls to an external entity; e.g., answering service.)	None * Trunk ID Trunk Group ID
External Dial Number	
Externally dialed number for External Backup.	none*, 0-9

* = default settings

6.22.18 User: Privileges

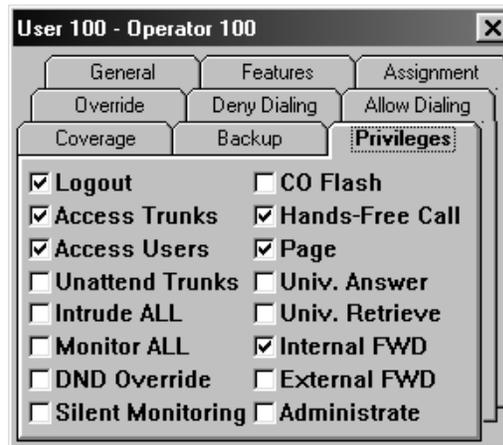


Table 6 - 59 User: Privileges

Logout	
Permits the user to log out. Note: Without the logout privilege, the user is tied to a particular station as on a conventional telephone system.	Enable */ Disable
Access Trunks	
Permits the user to access outside lines.	Enable */ Disable
Access Users	
Permits the user to access other users (i.e., make internal calls).	Enable */ Disable
Unattend Trunks	
Permits the user to transfer one external call to another external call ("trunk-to-trunk transfer") and create an unsupervised conference. Note: All unattended calls are subject to the Unattended Call-Duration timeout. See "System parameters: Feature, Timeouts" - section 6.21.27.	Enable / Disable *

Table 6 - 59 User: Privileges (continued)

Intrude ALL	
Permits the user to intrude on ALL busy users and trunks. All parties on the call will hear a stutter tone to indicate that someone has intruded on the call. Plexus Key Telephone users (display model) will see “conferenced” on their LCD. Note: Intrude privileges may be limited by listing specific users [See “User: Override, Intrude” - section 6.22.20] rather than granting the privilege universally.	Enable / Disable *
Monitor ALL	
Permits the user to monitor ALL busy users and trunks. All parties on the call will hear a stutter tone to indicate that someone has intruded on the call. Plexus Key Telephone users (display model) will see “conferenced” on their LCD. Note: Monitor privileges may be limited by listing specific users [See “User: Override, Monitor” - section 6.22.21] rather than granting the privilege universally.	Enable / Disable *
DND Override	
Permits the user to override the Do Not Disturb (DND) mode of ALL users. Note: DND override privileges may be limited by listing specific users [See “User: Override, DND Override” on page 95] rather than granting the privilege universally.	Enable / Disable *
Silent Monitoring	
Permits a user to silently monitor ALL busy users and trunks or selected users and trunks as defined by the User: Override, Monitor list. Note: Silent Monitoring provides no indication to the busy user or the other party that the call is being monitored.	Enable / Disable *
CO Flash	
Permits the user to send a ‘Flash’ to the CO to utilize Centrex features.	Enable / Disable *
Hands-Free Call	
Permits the user to place hands-free calls to other users.	Enable * / Disable

Table 6 - 59 User: Privileges (continued)

Page	
Permits the user to issue internal and external pages. Note: Page refers to the Paging Service feature.	Enable */ Disable
Univ Answer	
Permits the user to answer any ringing user, user group, or trunk on the system [See “Universal Answer” - section 8.134].	Enable/ Disable *
Univ Retrieve	
Enables a user to retrieve an internal or external call from another user’s exclusive hold queue or from a user group’s busy hold queue. Note: Universal Retrieve is not available with Key Telephone firmware version 1.01 or previous versions.	Enable / Disable *
Internal FWD	
Permits the user to forward his/her calls to another user on the system. [See “Call Follow-Me” - section 8.34 and “Call Forwarding” - section 8.35]	Enable */ Disable
External FWD	
Permits the user to forward his/her calls to an off-site telephone [See “Call Forwarding” - section 8.35].	Enable/Disable *
Administrate	
Permits the user to activate System Administrator privileges [See “System Administrator Privileges (SAP)” - section 8.126].	Enable/Disable *

* = default settings

6.22.19 User: Override, DND Override

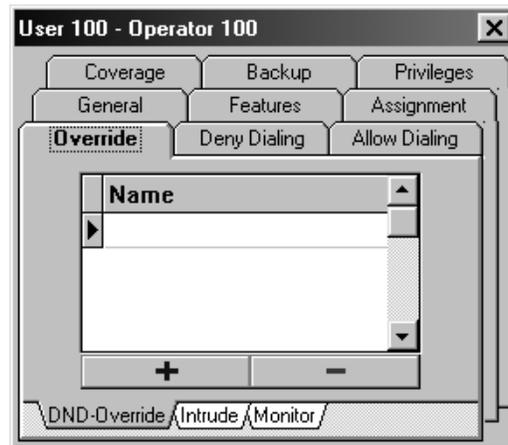


Table 6 - 60 User: Override, DND Override

Name
Allows the user to override the Do Not Disturb (DND) mode of the listed User Name users.

6.22.20 User: Override, Intrude

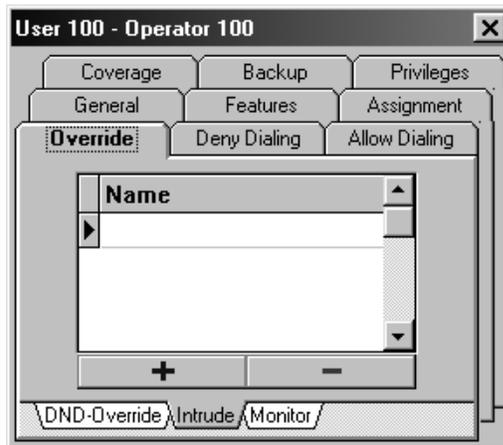


Table 6 - 61 User: Override, Intrude

Name	
Allows the user to intrude on the listed users.	User Name

6.22.21 User: Override, Monitor

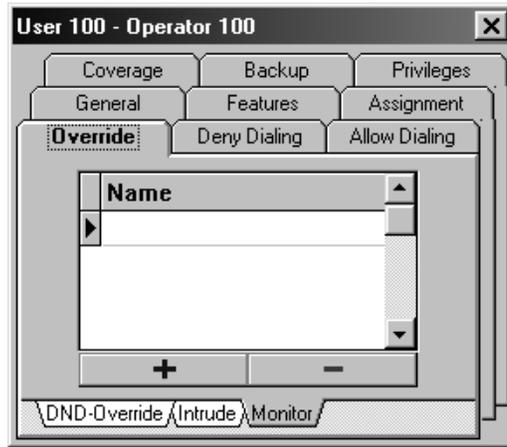


Table 6 - 62 User: Override, Monitor

Name	
Allows the user to monitor the listed users.	User Name

6.22.22 User: Deny Dialing

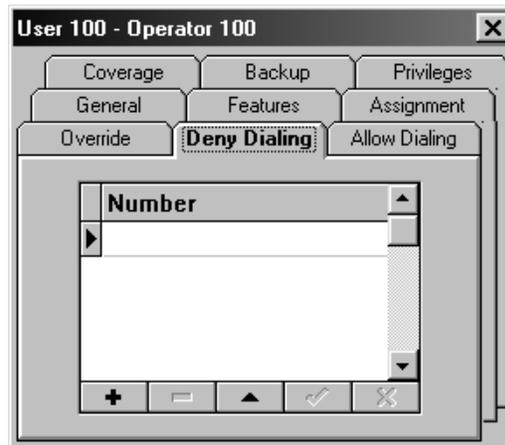


Table 6 - 63 User: Deny Dialing

Number	
List of phone numbers and prefixes that the system will generally not allow the user to dial. Specific exceptions are listed in the user's allow dialing list. E.g., 1900 would terminate all calls, dialed by the user, with this prefix unless the specific telephone number is in the user's allow dialing list.	Phone # / Phone # prefix

6.22.23 User: Allow Dialing

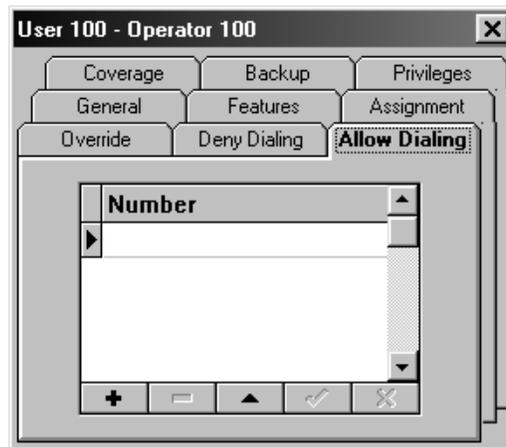


Table 6 - 64 User: Allow Dialing

Number
<p>List of phone numbers that the user is specifically allowed to dial. Phone # / Note: This will override numbers entered in the Deny Dial table. E.g., Phone # prefix '1' can be entered in the Deny Dial table to block all toll calling but '1800' can be entered in the Allow Dial table to allow toll free calling.</p>

6.23 Configure user groups

- 1 Ensure that Users and User Groups have been created.
- 2 Click on the User tab to display the User and User Group dialog window.
- 3 Double-click on each user group in the User Group window.
- 4 Make appropriate entries and selections on each of the tabs.

**Tip**

To alleviate the repetitive tasks associated with configuring multiple user groups, right-click on a setting or field and select **Replicate**. Replicate automatically assigns a setting to all user groups.

6.23.1 User Group: General

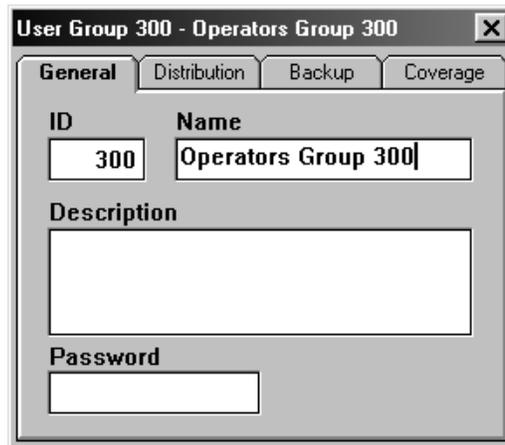
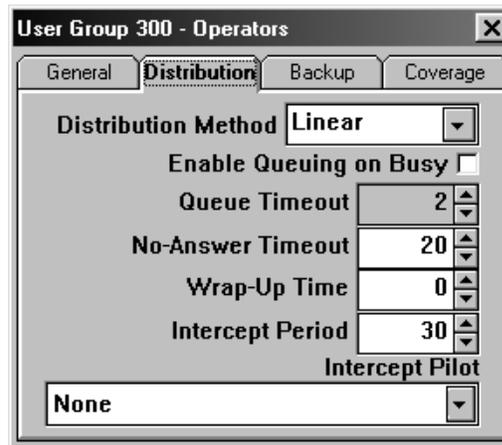


Table 6 - 65 User Group: General

ID	
Logical identifier for the user group. Note: The ID is automatically assigned based on the User Group ID Sequence entered when the first user group was created.	Numeric Up to 4 digits
Name	
Informal identifier for the user group. E.g., Sales, Technical Support	Alphanumeric Up to 20 characters
Description	
Informal description or notes about the user group. E.g., The Sales group consists of all sales personnel.	Alphanumeric
Password	
Password that must be entered by users to Log On to a group [see "Agent Log Off / Agent Log On" - section 8.5.	Numeric

6.23.2 User Group: Distribution



The screenshot shows a configuration window titled "User Group 300 - Operators" with four tabs: General, Distribution (selected), Backup, and Coverage. The Distribution tab contains the following settings:

- Distribution Method: Linear (dropdown menu)
- Enable Queuing on Busy:
- Queue Timeout: 2 (spin box)
- No-Answer Timeout: 20 (spin box)
- Wrap-Up Time: 0 (spin box)
- Intercept Period: 30 (spin box)
- Intercept Pilot: None (dropdown menu)

Table 6 - 66 User Group: Distribution

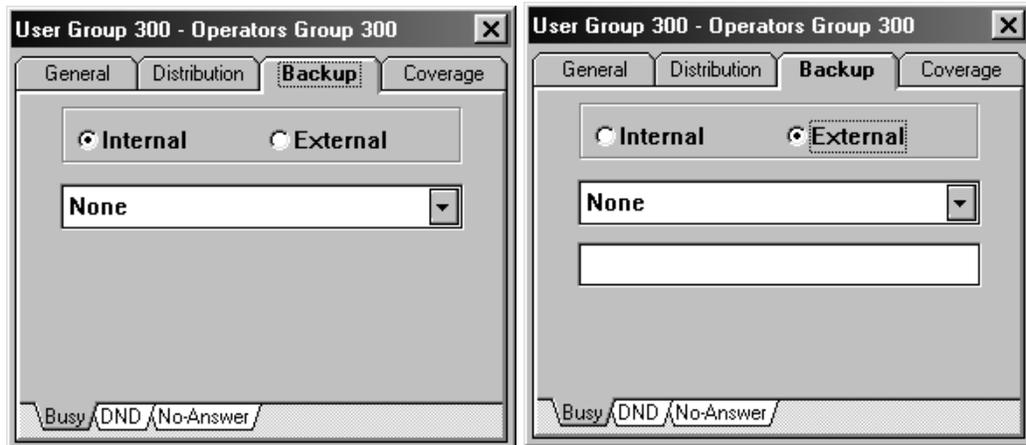
Distribution Method		
Method utilized in hunting for an available user in the user group. Note: See "Call Distribution Management" - section 8.33 for detailed descriptions of distribution methods.	Linear*	Circular
	Least Busy	Multiple
	Manual	Single Shot
Enable Queuing on Busy		
Whether Busy Queuing is enabled for calls to this group. Note: See "Busy Queuing - User Group" - section 8.22.	Enable /	disable*
Queue Timeout		
The period of time that a call may remain in queue waiting for an available user before routing to backup and/or coverage. Note: See "Busy Queuing - User Group" - section 8.22.	0-255 minutes	2 minutes*
No Answer Timeout		
The period of time before an unanswered call rolls over to the next available user. If there is not a next available user, the call will route to the defined backup / coverage.	0-255 seconds	20 seconds*

Table 6 - 66 User Group: Distribution

Wrap Up Time		
The period of time allotted for a user to wrap-up after terminating a call. No additional calls will route to the user until the wrap-up time expires.	0-255 seconds	15 seconds*
Intercept Period		
Refers to the period of time between reassurance messages while a caller is waiting in the busy queue. Note: Enable/Disable *using check-box.	0-255 seconds	30 seconds*
Intercept Pilot ID		
System entity providing the audio prompts for call holding in the queue. Note: To provide a system default message or a prerecorded message, the IVP card must be properly set up. See “ Setting up Hold Queue Intercepts” in the IVP section.	None * User ID User Group ID AutoAttendant ID Voice ID	

* = default settings

6.23.3 User Group: Backup, Busy



For a user group, busy is defined as when all users in the user group are busy or in DND with at least one agent in the busy state. If a Backup entity is unavailable (Busy, DND, No Answer) or is not defined, the call will follow the user group's coverage.



Note

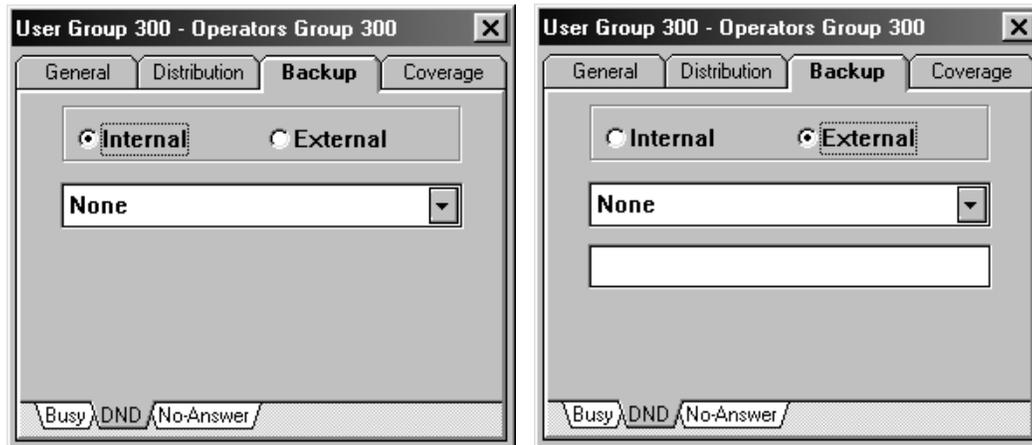
In Backup, if a Voice ID is set for the Pilot ID, the call will route to the Auto Attendant. For the call to route to the user group's voice mailbox, the user group's Coverage must be set to the Voice ID.

Table 6 - 67 User Group: Backup, Busy

Pilot-ID on Busy: Internal	
Where the call will be transferred to when all users in the user group are busy or in DND (at least one agent must be in the busy state).	None * User ID User Group ID AutoAttendant ID Voice ID (see above note)
Pilot-ID on Busy: External	
Trunk or trunk group the call will be transferred to when the user group is busy. (This is used to route the calls to an external entity; e.g., answering service.)	None * Trunk ID Trunk Group ID
External Dial Number	
Externally dialed number for External Backup.	none*, 0-9

* = default settings

6.23.4 User Group: Backup, DND



For a user group, DND is defined as when all users in the user group are in DND. If a Backup entity is unavailable (Busy, DND, No Answer) or is not defined, the call will follow the user group's coverage.



Note

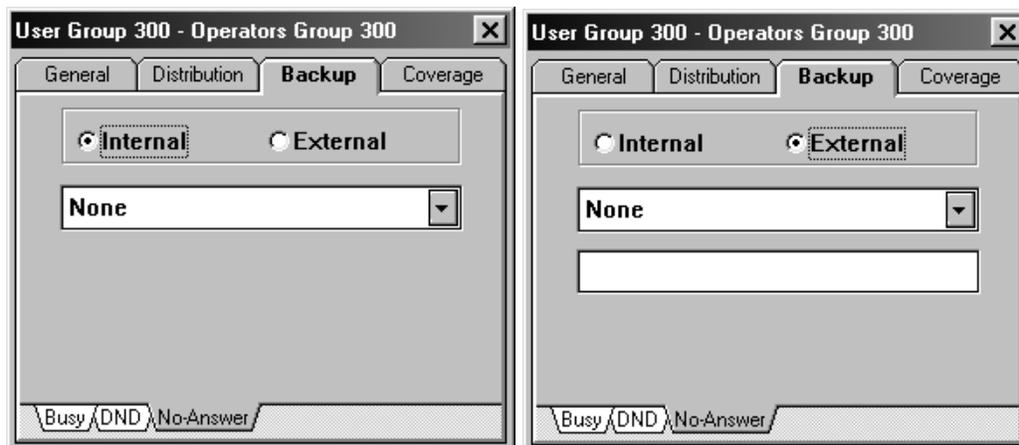
In Backup, if a Voice ID is set for the Pilot ID, the call will route to the Auto Attendant. For the call to route to the user group's voice mailbox, the user group's Coverage must be set to the Voice ID.

Table 6 - 68 User Group: Backup, DND

Pilot-ID on Busy: Internal	
Where the call will be transferred to when all users in the user group are in DND.	None * User ID User Group ID AutoAttendant ID Voice ID (see above note)
Pilot-ID on Busy: External	
Trunk or trunk group the call will be transferred to when the user group is DND. (This is used to route the calls to an external entity; e.g., answering service.)	None * Trunk ID Trunk Group ID
External Dial Number	
Externally dialed number for External Backup.	none*, 0-9

* = default settings

6.23.5 User Group: Backup, No-Answer



For a user group, No Answer is defined as when at least one user is not busy or in DND and the call is not answered after ringing to the available user(s). If a Backup entity is unavailable (Busy, DND, No Answer) or is not defined, the call will follow the user group's coverage.



Note

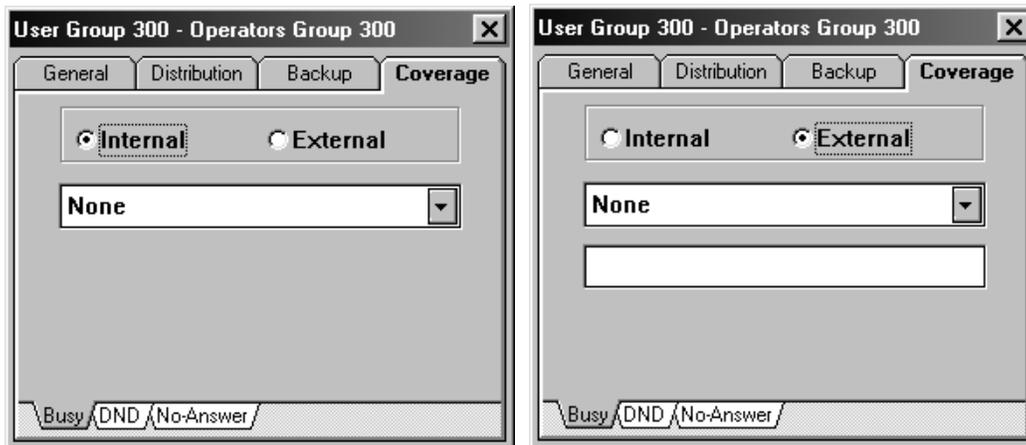
In Backup, if a Voice ID is set for the Pilot ID, the call will route to the Auto Attendant. For the call to route to the user group's voice mailbox, the user group's Coverage must be set to the Voice ID.

Table 6 - 69 User Group: Backup, No-Answer

Pilot-ID on Busy: Internal	
Where the call will be transferred to when there is no answer.	None * User ID User Group ID AutoAttendant ID Voice ID (see above note)
Pilot-ID on Busy: External	
Trunk or trunk group the call will be transferred to when there is no answer. (This is used to route the calls to an external entity; e.g., answering service.)	None * Trunk ID Trunk Group ID
External Dial Number	
Externally dialed number for External Backup.	none*, 0-9

* = default settings

6.23.6 User Group: Coverage, Busy



Note

Coverage entities (i.e., Pilot-IDs) should be chosen carefully as calls routed to an unavailable entity are dropped.

For a user group, busy is defined as when all users in the user group are busy or in DND with at least one agent in the busy state. Coverage Pilot IDs will only be used if the user group's Backup Pilot IDs are unavailable or not defined.



Note

In Coverage, if a Voice ID is set for the Pilot ID, the call will route to the user group's voice mailbox. For the call to route to the Auto Attendant, the user group's Backup must be set to the Voice ID.

Table 6 - 70 User Group: Coverage, Busy

Pilot-ID on Busy: Internal	
Where the call will be transferred to when all users in the user group are busy or in DND (at least one agent must be in the busy state).	None * User ID User Group ID AutoAttendant ID Voice ID (see above note)
Pilot-ID on Busy: External	
Trunk or trunk group the call will be transferred to when the user group is busy. (This is used to route the calls to an external entity; e.g., answering service.)	None * Trunk ID Trunk Group ID
External Dial Number	
Externally dialed number for External Coverage.	none*, 0-9

* = default settings

6.23.7 User Group: Coverage, DND

The image shows two side-by-side screenshots of the 'User Group 300 - Operators Group 300' configuration window, specifically the 'Coverage' tab. Both windows have tabs for 'General', 'Distribution', 'Backup', and 'Coverage'. The left window has the 'Internal' radio button selected and a dropdown menu set to 'None'. The right window has the 'External' radio button selected and a dropdown menu set to 'None'. At the bottom of each window, there are buttons for 'Busy', 'DND', and 'No-Answer'.

**Note**

Coverage entities (i.e., Pilot-IDs) should be chosen carefully as calls routed to an unavailable entity are dropped.

For a user group, DND is defined as when all users in the user group are in DND. Coverage Pilot IDs will only be used if the user group's Backup Pilot IDs are unavailable or not defined.

**Note**

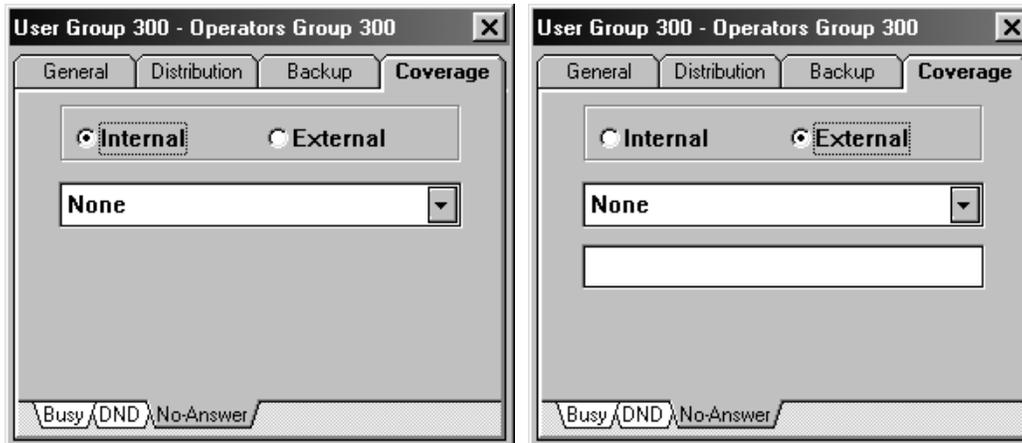
In Coverage, if a Voice ID is set for the Pilot ID, the call will route to the user group's voice mailbox. For the call to route to the Auto Attendant, the user group's Backup must be set to the Voice ID.

Table 6 - 71 User Group: Coverage, DND

Pilot-ID on Busy: Internal	
Where the call will be transferred to when all users in the user group are busy or in DND (at least one agent must be in the busy state).	None * User ID User Group ID AutoAttendant ID Voice ID (see above note)
Pilot-ID on Busy: External	
Trunk or trunk group the call will be transferred to when the user group is busy. (This is used to route the calls to an external entity; e.g., answering service.)	None * Trunk ID Trunk Group ID
External Dial Number	
Externally dialed number for External Coverage.	none*, 0-9

* = default settings

6.23.8 User Group: Coverage, No Answer



Note

Coverage entities (i.e., Pilot-IDs) should be chosen carefully as calls routed to an unavailable entity are dropped.

For a user group, No Answer is defined as when at least one user is not busy or in DND and the call is not answered after ringing to the available user(s). Coverage Pilot IDs will only be used if the user group's Backup Pilot IDs are unavailable or not defined.



Note

In Coverage, if a Voice ID is set for the Pilot ID, the call will route to the user group's voice mailbox. For the call to route to the Auto Attendant, the user group's Backup must be set to the Voice ID.

Table 6 - 72 User Group: Coverage, No Answer

Pilot-ID on Busy: Internal	
Where the call will be transferred to when there is no answer to the user group.	None * User ID User Group ID AutoAttendant ID Voice ID (see above note)
Pilot-ID on Busy: External	
Trunk or trunk group the call will be transferred to when there is no answer to the user group. (This is used to route the calls to an external entity; e.g., answering service.)	None * Trunk ID Trunk Group ID
External Dial Number	
Externally dialed number for External Coverage.	none*, 0-9

* = default settings

6.24 Configure trunks

- 1 Ensure that trunks have been created.
- 2 Click on the trunk tab to display the Trunk and Trunk Group dialog window.
- 3 Double-click on each trunk in the trunk window.
- 4 Make appropriate entries and selections on each of the tabs.

**Tip**

To alleviate the repetitive tasks associated with configuring multiple trunks, right-click on a setting or field and select **Replicate ALL** or **Replicate Selected** [Replicate Selected is only available if trunks have been selected]. The Replicate options automatically assign a setting to all or selected trunks.

6.24.1 Trunk: General

Table 6 - 73 Trunk: General

ID		
Logical identifier for the trunk. Note: The ID is automatically assigned based upon the Trunk ID Sequence entered when the first trunk was created.		Numeric Up to 5 digits
Name		
Informal identifier for the trunk. E.g., (512) 555-9500		Alphanumeric Up to 20 characters
Description		
Informal description or notes about the trunk. E.g., main CO line		Alphanumeric

6.24.2 Trunk: Routing: Voice

**Note**

Each Trunk ID in the Trunk dialog window will be highlighted in red until the routing for the Trunk has been configured.

Table 6 - 74 Trunk: Routing: Voice

Day Calls Routing Method	
Method by which the system will route calls during the Day Mode. Note: The Day Calls: Pilot should still be set if Fixed is not chosen. This will serve as the default routing in case other routing methods do not receive the required inputs from the local service provider (see "Trunk Routing" - section 8.133).	Fixed * DID Mapped-DID / DNIS Caller-ID / ANI
Day Calls: Pilot	
Where the system will route the incoming calls during the day hours [See "System parameters: Time, Mode" - section 6.21.6].	None * User ID User Group ID Auto Attendant ID Voice ID
Night Calls Routing Method	
Method by which the system will route calls during the Night Mode. Note: The Route Call during Day/Night should still be set if Fixed is not chosen. This will serve as the default routing in case other routing methods do not receive the required inputs from the local service provider (see "Trunk Routing" - section 8.133).	None * Trunk ID Trunk Group ID

Table 6 - 74 Trunk: Routing: (continued)Voice

Night Calls: Pilot	
Where the system will route the incoming calls during the night hours [See "System parameters: Time, Mode" - section 6.21.6].	None * User ID User Group ID Auto Attendant ID Voice ID

* = default settings

6.24.3 Trunk: Routing: Fax



Table 6 - 75 Trunk: Routing: Fax

Day Calls Pilot	
Where the system will route the incoming fax calls during the Day Mode [See "System parameters: Time, Mode" - section 6.21.6]. Note: The Plexus system must be properly configured to detect fax tones on incoming calls. See "Fax Detection" - section 8.73 for setup parameters.	None * User ID User Group ID AutoAttendant ID Voice ID
Night Calls Pilot	
Where the system will route the incoming fax calls during the Night Mode [See "System parameters: Time, Mode" - section 6.21.6]. Note: The Plexus system must be properly configured to detect fax tones on incoming calls. See "Fax Detection" - section 8.73 for setup parameters.	None * User ID User Group ID AutoAttendant ID Voice ID

* = default settings

6.24.4 Trunk: Features

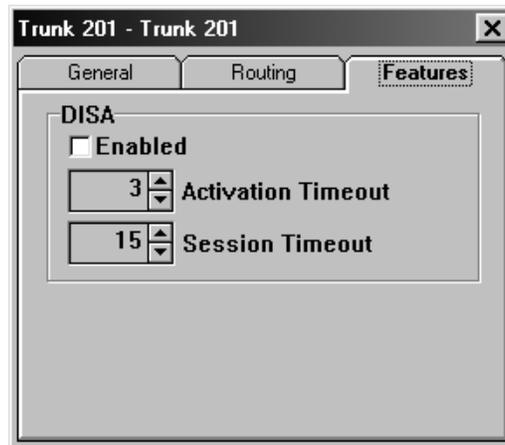


Table 6 - 76 Trunk: Features

DISA Enabled		
Enables DISA and Remote Station Service on the trunk.		Enable/Disable *
DISA Activation Timeout		
The period of time allotted for a caller to enter the DISA access digit. Note: If a DISA password is not entered, the call is routed according to the defined routing [See "Trunk: Routing: Voice" - section 6.24.2].	0-255 seconds	2 seconds*
DISA Session Timeout		
Period of time before a DISA or Remote Station Service session is automatically terminated. Note: The session timeout is provided to limit the duration of potentially fraudulent DISA sessions and/or to control costs.	0-65,535 minutes	15 minutes *

* = default settings

6.25 Configure trunk groups

- 1 Ensure that trunks and trunk groups have been created.
- 2 Click on the trunk tab to display the Trunk and Trunk Group dialog window.
- 3 Double-click on the trunk group in the trunk group window.
- 4 Make appropriate entries on the tabs.

6.25.1 Trunk groups: General

Table 6 - 77 Trunk groups: General

ID	
Logical identifier for the trunk group. Note: The ID is automatically assigned based on the Trunk Group ID sequence entered when the first trunk group was created.	Numeric Up to 5 digits
Name	
Informal identifier for the trunk group. E.g., Telemarketing	Alphanumeric Up to 20 characters
Description	
Informal description or notes about the trunk group. E.g., These trunks are used for outbound telemarketing	Alphanumeric

6.26 Saving a configuration

To save a completed configuration, proceed as follows:

- 1 From the **File** menu, select **Save As**.
- 2 Type the desired name on the **File name** line (up to 8 characters).
- 3 Select the desired directory.
- 4 Click on **OK**.

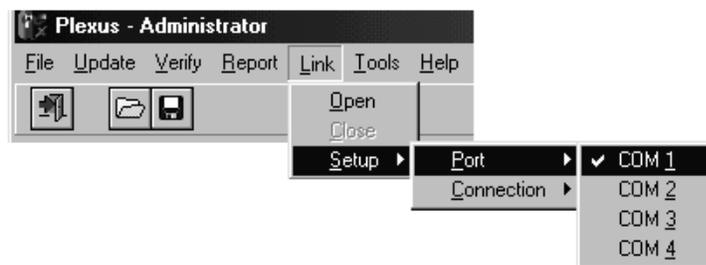
The file will be saved with a **.zdb** extension.

6.27 Establishing a link

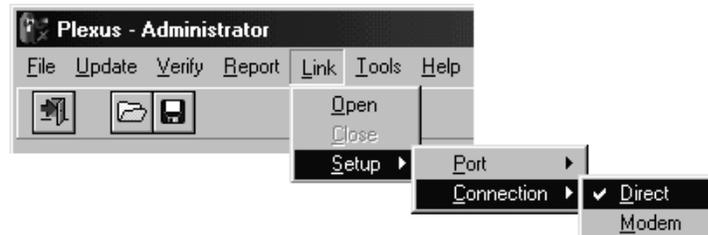
- 1 Connect the serial port on the DXP card (labeled “RS-232”) to an available COM port on a PC using a 9-pin serial cable.
- 2 From the **Link** menu, select **Setup** and **Port** (as shown below). Then, choose the COM port to which the serial cable is connected.

**Note**

The chosen COM port must be an *available* COM port [See “About serial ports and COM ports” - section 6.27.1].



- 3 From the **Link** menu, select **Setup** and **Connection** (as shown below). Then, choose **Direct**.

**Note**

The default Connection setting, Direct (**Connection** and **Direct**), applies to a serial connection. Modem connections apply only when performing Remote System Management.

6.27.1 About serial ports and COM ports

Most computers provide two serial ports for use by serial devices. Serial ports are either 9-pin or 25-pin external ports. Each serial port has an associated COM port. Microsoft Windows supports COM 1, COM 2, COM 3, and COM 4. Generally, the two serial ports are pre-configured as COM 1 and COM 2. Internal devices such as modems may utilize a COM port. Should an internal device utilize COM 1 or COM 2, the associated serial port will be unavailable. Should an internal device utilize COM 3 or COM 4, the serial ports are available as long as the COM port utilized by the internal device has been assigned other than the default IRQ.

**Tip**

Should the computer's only available serial port be a 25-pin port, a 9-25 pin adapter must be used. 9-pin serial cables and 9-25 pin adapters may be purchased at any electronics store.

6.27.2 About IRQs

An interrupt request (IRQ) is a unique number (between 0-15) assigned to each device in a computer. The unique number assigned to a device enables the computer's processor to manage which device is receiving its attention. If devices share an IRQ, a conflict arises as the processor does not know which device to attend to. COM 1 and COM 3 share a default IRQ. COM 2 and COM 4 share a default IRQ. In order to simultaneously use COM 1 and COM 3 or COM 2 and COM 4, one of the COM ports must be assigned a different IRQ (i.e., other than the default)

6.28 Uploading the configuration file

- 1 Save the desired configuration and keep the file open.
- 2 From the **Link** menu, select **Open**.
- 3 The link indicator at the bottom of the screen should indicate **Link: Opened** and the LED image should appear green. A magnifying glass will appear on the toolbar. To verify an active link, press the magnifying glass. This will query the current XOS version of the system. If the window showing the XOS version is displayed, you have a good link.
- 4 From the **Update** menu, select **Full**.

A status indicator at the bottom of the screen will display the progress of the update.

6.29 Updating the system clock

The Plexus system clock may be updated using Plexus Administrator as follows:

- 1 Launch Plexus Administrator.
- 2 Open a configuration file (.zdb).



Note

A configuration file must be open for the **Update** menu to be available. The open configuration file will not be uploaded or used in any way to update the clock.

- 3 From the **Link** menu, select **Open**.

The link indicator at the bottom of the screen should indicate Link: Opened and the LED image should appear green. A magnifying glass will appear on the toolbar. To verify an active link, press the magnifying glass. This will query the current XOS version of the system. If the window showing the XOS version is displayed, you have a good link.

- 4 From the **Update** menu, select **Clock**.

The Plexus system clock will be updated with the clock settings from the PC.

6.30 Updating Plexus key telephone programming

6.30.1 For Version 1.01 Key Telephones

These steps are for use with Key Telephones version 1.01 only.

The 20 programmable keys on a version 1.01 Plexus Key Telephone may be programmed using Plexus Administrator [Refer to “User: Features, Settings” - section 6.22.3]. After completing the key telephone programming (for all of the users on the system), and with the configuration file open:

- 1 From the **Link** menu, select **Open**.

The link indicator at the bottom of the screen should indicate Link: Opened and the LED image should appear green

- 2 From the **Update** menu, select **Key-Phone**.



Note

Updating Key Telephones through the **Update - Key Phone** option will cause each version 1.01 Key Telephone to reset, disconnecting active calls.

6.30.2 For Version 2.0 Key Telephones or later

These steps are for use with Key Telephones version 2.0 and later only.

The programmable keys on a version 2.0 and later Plexus Key Telephone may be programmed using Plexus Administrator [Refer to “User: Features, Settings” - section 6.22.3].

- 1 From the **Link** menu, select **Open**.

The link indicator at the bottom of the screen should indicate **Link: Opened** and the LED image should appear green.

- 2 Open the window **User: Features: Settings: Define Key** for the user’s Key Telephone being programmed.
- 3 Complete the Key Telephone programming for the user.
- 4 Press **Update** button. This will update only this user’s Key Telephone.



Note

The **Update now** button will not be an available option unless the window was opened while having an active link with the system.

A. or to program all Key Telephones

After completing the key telephone programming (for all of the users on the system), and with the configuration file open:

- 1 From the **Link** menu, select **Open**.

The link indicator at the bottom of the screen should indicate Link: Opened and the LED image should appear green

- 2 From the **Update** menu, select **Key-Phone**.

**Note**

Updating Key Telephones through the **Update - Key Phone** option will cause each version 1.01 Key Telephone to reset, disconnecting active calls.

6.31 Updating system XOS

**Note**

When the XOS is upgraded and the system is reset, the configuration will be deleted and will need to be updated before the system will work. This will not affect the voice mailboxes or the Auto Attendant structure.

- 1 Launch Plexus Administrator.
- 2 Open a Plexus configuration file.
- 3 From the **Link** menu, select **Open**.
- 4 Right mouse-click on the DXP card.
- 5 Select **Upgrade XOS**.
- 6 Select the directory and file name where XOS file is located.
- 7 Press **OK**.
- 8 Wait for the message **Plexus XOS Upgrade Successful** signaling that the upgrade is complete.
- 9 You will be prompted whether or not to **Reset the System now**. The XOS upgrade will not be complete until the system is reset.
- 10 Press **Yes** or **No**. If you press **No**, the system can be manually reset later.
- 11 After the system has reset, from the **Update** menu, select **Full** to update the configuration.

