Norstar ICS Remote Tools
Quick-start Guide
NRU version 10

How to get help

USA and Canada

Authorized Distributors - ITAS Technical Support

Telephone:
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If you already have a PIN Code, you can enter Express Routing Code (ERC) 196#.
If you do not yet have a PIN Code, or for general questions and first line support, you can enter
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Website:
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Using Norstar ICSRT Tools version 10

This document provides a quick-reference to the screens found in the Norstar ICSRT Tools, NRU version 10. It describes how to provide remote management for customer information and customer databases for backup and restore facilities for Norstar MICS and CICS systems running version 2.0 or later software.

> → **Note: Compatibility**
>
> If you have systems of earlier vintage than 2.0, ensure that you retain the Norstar Manager application on your system.
>
> Data created through the Norstar Manager cannot be used by the ICSRT application. You need to re-enter all customer information through the ICSRT application.

About the ICSRT tool

The ICSRT tool replaces some functionality of the Norstar Manager. ICSRT allows you to use Remote tools to configure and view configuration information in Norstar systems. It also provides backup/restore tools. You can also use this application in a network setting where more than one person has access to databases located on a central file server.

To use this tool, each system you want to manage needs to be connected to a RAD (remote access device). In the case of the CICS, an internal remote access device (I-RAD) that is activated with a software key. The RAD comes with complete installation documentation. I-RAD configuration information is located in the *Compact ICS Installer Guide*.

The computer you want to use for remote management connects to each RAD in one of three ways:

- directly, through a serial cable plugged into the RAD
- remotely through a dial-up connection, through a modem located in or attached to the remote computer
- through a call-in line, where you call the Norstar system you want to manage, and the attendant or auto attendant connects your computer to the Norstar system.

For details, refer to the *RAD Installation Guide* and the *Norstar ICS Remote Tools User Guide.*

About the CustomerInfo database

The Norstar system information is stored on your computer as a database file called CustomerInfo. This file consists of records containing customer details and connection properties for one or more Norstar systems. The database file is contained in a folder that also contains other information specific to the customers, such as Workbook files and backup files.

You can create multiple databases. Each database can store information about multiple systems. At any time you can view all information present in a single CustomerInfo database.

You can copy databases and customer records within databases, but you cannot move customer records from one database to another existing database.

Collecting system information before you start

The first step in adding Norstar system information to the CustomerInfo database is to collect the following information:

Required system information

Customer information

When you are adding a new Norstar system to the CustomerInfo database, this general information should be entered in the database before you enter any Norstar programming information.		
System Identification (ID) In set programming: at Software keys, press **Show**	This is a unique eight-digit number that identifies a Norstar system. No two systems can have the same System Identification number. When a company has several Norstar systems stored in the database, this number allows you to distinguish between systems.	
Customer Name	This is the name of the company or business that owns the Norstar system.	
KSU location	This is where the Norstar system is located on site, such as the telephone room. The Norstar location is not always the same as the customer address. You should know where the Norstar system is located in case a problem occurs on site.	
Address	This is the business address of the customer. The address can be a maximum of five lines.	

Required system information		
Contact	This is the name of person at the customer site who coordinates Norstar programming and troubleshooting.	
Phone number	This is the phone number of the contact person. Remember to include an area code if the phone number is outside your local calling exchange.	
Install date	This is the date that the Norstar system was installed, or will be installed, at the customer site. This date should contain eight digits in the format YYYY : MM : DD	

Connection Properties

RAD phone number	This is the number, which will be answered by RAD at the Norstar location if you are calling into the RAD over a phone line.	
RAD password	This is the number ICSRT uses to identify itself as a valid user to the RAD. This password must be from eight to 10 digits. A new RAD does not have a password, therefore, when you install a new RAD, you must use set programming at the Norstar site to program an eight-to-10-digit password before you can use the ICSRT to connect to the RAD.	
COM Port	This is the communication port on the personal computer that ICSRT uses to communicate with the KSU. You can select COM1 to COM9, depending on your computer configuration. COM1 is the default.	
Connect type	ICSRT uses one of four ways to connect to a KSU: • Direct • Remote (default) • Operator Assisted • Auto-Attendant. The connection type used depends on where the Norstar system is located relative to the managing computer, and the type of assistance required at the Norstar to connect to the RAD. Remote is the default. **Note:** Operator-assisted connections do not support scheduled backup and restore operations.	

Required system information		
Baud rate	This is the communication rate used by ICSRT to communicate with the Norstar system in an on-line session, a backup, or a restore. The default is 19200. If you are using a direct connection, the local baud rate at the RAD must match the baud rate chosen for the direct connection in ICSRT. If you are using a remote type of connection, 1200, 2400, 4800, 9600 or 19200 baud can be used. If you choose a baud rate for a remote connection that is higher than the rate supported by the RAD, your modem will auto-baud down to the modem speed of the RAD. **Note:** The restore operation requires a baud rate greater than 1200.	
Dial mode	The dial mode used by ICSRT can be either pulse or tone, depending on the CO line type used by ICSRT. The default is tone.	
Modem init string	Some modems require special codes to be sent to them before they are ready to communicate. Use this field to enter any special codes that ICSRT must send to your computer modem before it is ready to communicate with the RAD. The default value is EQ0X4V1&D2&C1S7=85. If your modem cannot connect to a RAD, you may have to change this string. Refer to your modem manual for information on what codes must be included in the Modem init string. **Note:** For all remote connections, you require a Hayes compatible modem capable of operating at 1200, 2400, 4800, 9600, or 19,200 baud. The modem should also have a separate line port and phone port.	

Other inputs

Notes	This is a scratch area. Type any information you want to add about the Norstar system.	
Select Workbook	When you want to select the workbook to be copied. This choice list consists of all excel sheets that are present in workbook folder under the directory where ICSRT is installed. The default value is **None**. **Note:** When you press the **OK** button, OlpWorksheets\System ID directory will be created under the folder where the CustomerInfo database that is currently in use exists. The selected workbook will be copied to that directory.	

Defining systems in a CustomerInfo database

The Customer Info screen is the first screen you see after you open the ICSRT application. This is the screen that defines the CustomerInfo database file. The list items are sorted by System ID.

Figure 1   Customer Info Screen

This screen lists all of the Norstar systems present in a CustomerInfo database (defined by **Current Path**).

The **Customer Name**, **KSU Location**, **System ID** and Date and Time of **Last Backup** for each record displays. Before you can perform any function on a particular Norstar system, you must select that system.

Manually connecting to a system

Access the Connection Properties screen so you can connect to the Norstar:

1   Select first row on the Customer Info screen.

2   You can either select a tool under the **Run Tool** menu or select an icon from the Tool Bar.
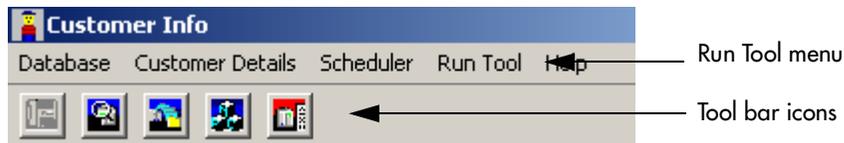
The Connection Properties screen appears (Figure 2).

Figure 2   Connection Properties Screen
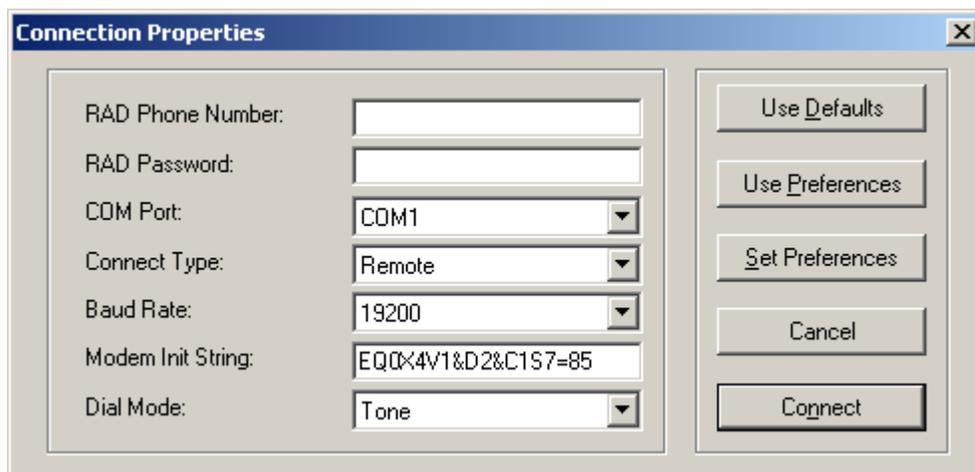
3   Fill out the fields that apply to the type of connection your computer has to the Norstar system.

4   Click on **Connect**.

> → **Note:** Selecting **Workbook** under the **Run Tool** menu will open a default Windows Open dialog that displays all the Excel files present in the ICSRT Workbook folder. **C:\Program Files\Nortel Networks\ICSRT\Workbook** is the default path. This may have been changed when ICSRT was installed.

5   When you complete the required activity, ensure that you exit the connection to the Norstar system:

a   On your desktop, click on the Norstar ICS Programming Tools screen, which sits behind the Customer Info window.

b   On the top menu, click on **Tool**, and select **Terminate Connection**.

Running ICSRT Tools for a specific customer

You can run ICSRT tools from the Customer Info screen from a specific record.

1 Select the Norstar Customer Info record to which you want to link.

2 Choose any tool under the **Run Tool** menu, except **Workbook**.
The Connection Properties screen displays with all fields filled with values that you entered when you created the customer record.

Figure 3   Connection Properties screen
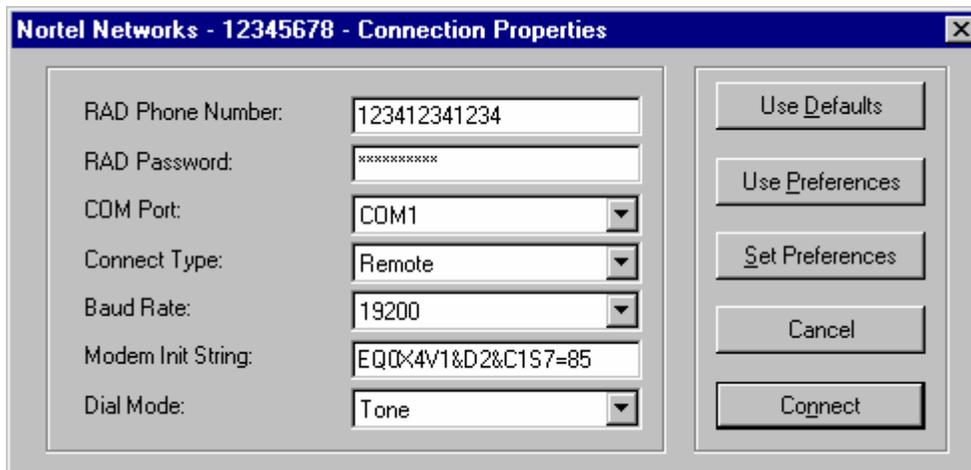
3 If you want to change any connection properties that are different than the one entered on the Customer Information screen, select the field and enter a new value.

4 Click on **Connect** to connect to a particular ICSRT tool.

→   **Note:** If you choose **Workbook** under **Run Tool**, then a For your information dialog displays, reminding you to save multiple copies of the worksheets (Figure 4). This dialog is shown only if **Do not show this dialog in future** remains unchecked. When you click on **OK** on this dialog, a default Windows Open dialog appears, showing all the Excel workbook files that are associated with that particular Norstar System record. If you select the workbook file, then click on **Open**, the Excel workbook opens.

Figure 4   For your information screen
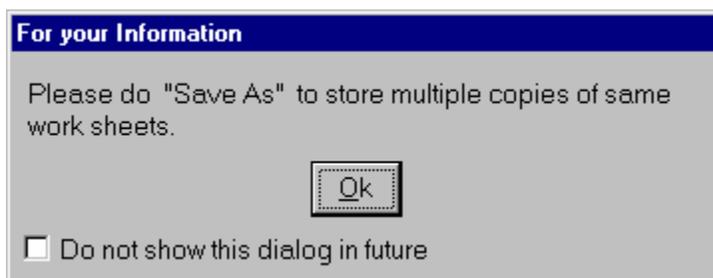
Figure 5   Windows Open screen
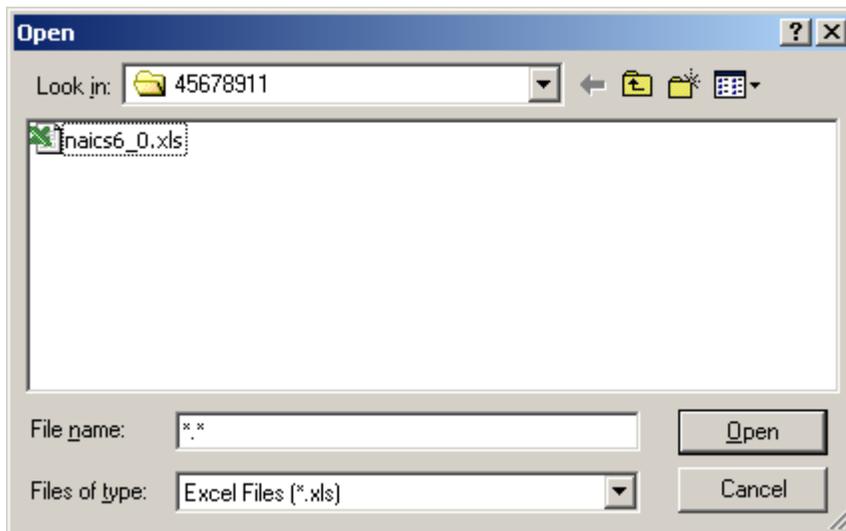
5   When you complete the required activity, ensure that you exit the connection to the Norstar system:

   a   On your desktop, click on the **Norstar ICS Programming Tools** screen, which sits behind the Customer Info screen.
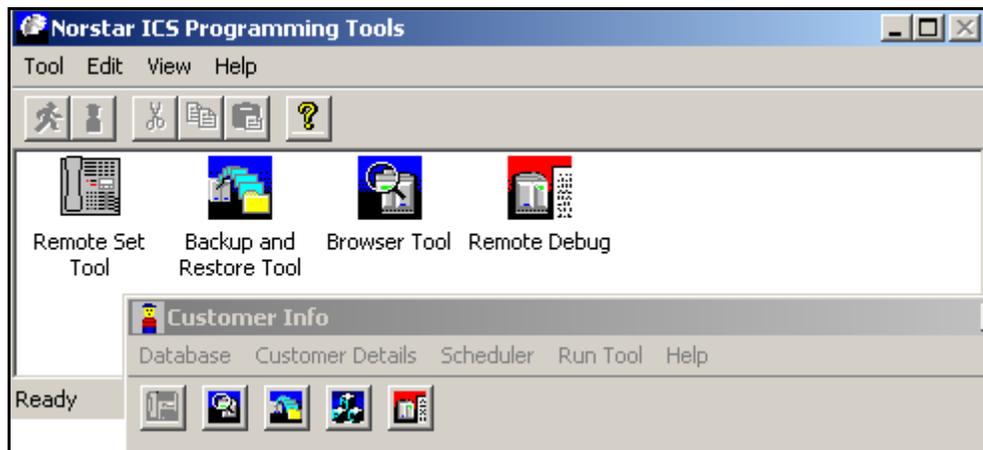
   b   On the top menu, click on **Tool** and select **Terminate Connection**.
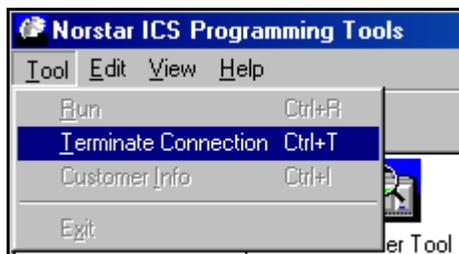
Database operations

This section describes how you use the ICSRT database to manage customer information.

> ➡ **Note:** When the system prompts for a Database Path for either creating or copying a database, you only need to enter the directory path. The database name is automatically taken.

Creating the CustomerInfo database

You can create a new CustomerInfo database in a selected path. When the **Create** menu item is selected, the Create CustomerInfo Database screen displays. On this screen you need to enter a valid destination path. Use either the **Browse** button or type in a destination path.

Figure 6   Creating CustomerInfo database screen
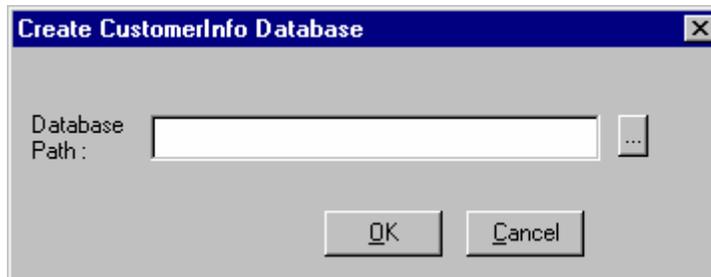
If you type a folder name that does not exist in the directory at the end of the path you specify, you will be prompted to allow the system to create a new folder. The CustomerInfo database will then be added to that folder.

Copying the CustomerInfo database

You can copy the CustomerInfo database that is currently in use to a different location such as a network drive, floppy drive, or a different path on the computer. When the **Copy** menu item is selected, the Copy CustomerInfo Database screen displays. On this screen, enter a valid destination path by selecting Browse button or by typing a destination path.

Figure 7   Copying CustomerInfo database screen
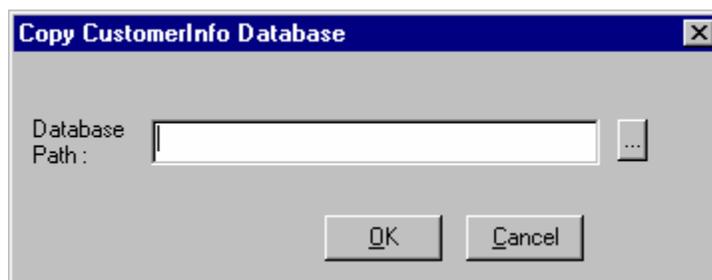
If you type a folder name that does not exist in the directory at the end of the path, the system will request permission to create a new folder. The CustomerInfo database then copies to that folder.

If you do not know the exact path, click on the Browse button (**...**) to get the Browse for Folder screen and navigate to the folder where you want to install the database, then click **OK**.

Figure 8   Browse for Folder to find path to database

![Browse for Folder dialog box showing a directory tree with Desktop, My Documents, My Computer (selected) containing 3½ Floppy (A:), PCSRP21 (C:), Local Disk (D:), Compact Disc (E:), Control Panel, Hummingbird Neighborhood, My Network Places, Recycle Bin, Internet Explorer, documentum, and OK/Cancel buttons.]
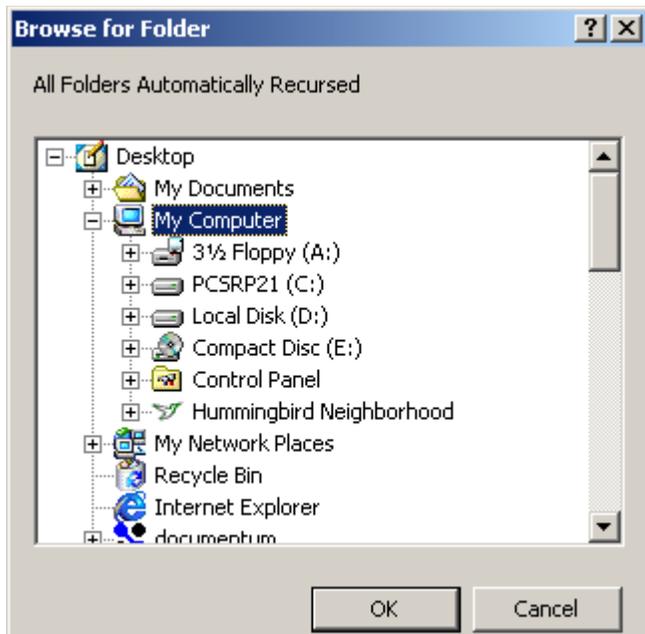
Note: You can use this process to backup the CustomerInfo database whenever required.

⚠ **Warning:** If a database is deleted, all the customer records and all the information attached to those customer records is permanently removed.
It is advisable to maintain frequent backups of your databases in a secure folder.

Changing the customer path

With this setting you can select a different CustomerInfo database. When the **Change Path** option is selected, a default Windows Open dialog box displays. In this dialog, select an existing CustomerInfo database file and click **Open**.

Figure 9   Open windows screen
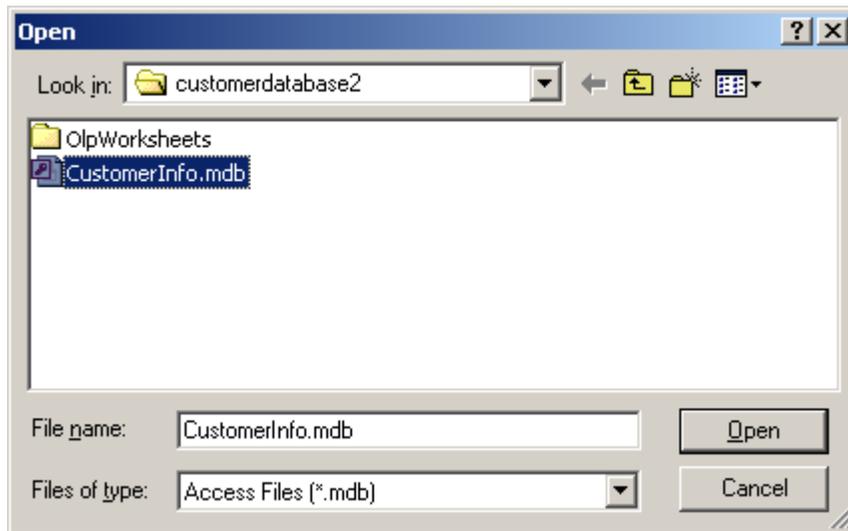
> ⚠ **Warning:** Do not connect to *<installed path>***\ICSRT\Template\CustomerInfo.mdb** for any reason. If this file is accessed, it may become corrupted. In that situation, you need to re-install the ICSRT application.

Refreshing the database

With this setting you can update the list box on the Customer Info screen. This will be helpful when a number of users use the same database at same time.

Deleting a database

To delete a database, ensure that ICSRT and Scheduler are not running, then select the database folder and delete it from your computer.

> ⚠ **Warning:** This will delete all the customer records and any information attached to those records.

If you delete the database for the customer that was last active on the ICSRT screen, when you go back into ICSRT you will receive a message indicating that the CustomerInfo.mdb that was last used does not exist and the system will connect to the default database. (Figure 10).

Figure 10 Cannot find database

When you click on **OK**, the ICSRT Customer Info screen opens within the default database (Figure 11).

Figure 11 Customer Info opens in default database

Removing any other database does not have any impact on working of ICS Remote tools application.

⚠ **Warning:** Do not delete the default database file **Nortel Networks/ICSRT/db/ customerinfo.mdb**. Deleting any of the default folders may cause ICSRT to fail, and you would need to reinstall the application.

Quitting the Customer Info screen

Before you log off, make sure the Customer Info screen is displayed on your monitor. When you click the **Quit** button, the For your Information dialog displays.

➡ | **Note:** This dialog displays only if you have not checked **Do not show this dialog in future** in earlier operation(s). It will provide a prompt suggesting that you copy the database to the required location before exiting so that you will have a backup of the database. (Figure 12).

Figure 12   For your Information screen

After this you will be prompted to confirm that you want to exit before closing the Customer Info dialog (Figure 13).

Figure 13   User prompt screen

Working with customer information

This section describes how you add, delete, edit or copy Norstar system and customer information displayed on the Customer Info screen.

Adding a Norstar system

Before you can perform scheduled backup/restore operation you must add the Norstar system information to the Customer Info database.

1   Make sure your monitor displays the Customer Info screen.

2   Choose the **Customer Details** menu, and select **Add**.
The Add Customer Information screen appears (Figure 14).

Figure 14   Add Customer Information screen

3   Fill out the information about the customer and the Norstar site.

All the information you need for the Add System screen is described in "Collecting system information before you start" on page 6.

To add Norstar system information, select each of the fields listed on the Add Customer Information screen and enter the information required.

For some of these fields, such as Customer Name, you must type in the information.

For other fields, such as Dial Mode, you choose an option from a combo box.

If desired, select the Note field and type any information you want to add about the customer's Norstar system.

→ **Tips: System ID** is a mandatory field for all connections.
Other mandatory fields include:
Direct connection: RAD Password.
Dial-up connection (Remote and Operator-assisted): RAD Password, RAD Phone Number, and Modem Init String
Valid information must be entered into these fields before a Norstar system is added to the database. The other fields may be left blank, if necessary.

4 Choose **OK** to add the system details to CustomerInfo database and to return to the Customer Info screen.

Deleting a Norstar system from the database

When you delete a Norstar system from the Customer Info screen, all information regarding that Norstar system will be removed from the CustomerInfo database.

To delete a Norstar System:

1 Select the Norstar system you want to delete.

2 Choose the **Customer Details** menu and select **Delete**.

You will be prompted to confirm your choice before the system deletes the selected record.

3 Choose **OK** on the prompt dialog box.

The chosen Norstar system is removed from the CustomerInfo database.

Changing Norstar system information

When customer information changes, you can alter the information stored in the CustomerInfo database. You alter this information by accessing the Edit Customer Information screen.

The Edit Customer Information screen is similar to the screen used to add a customer to the CustomerInfo database. The Edit Customer Information screen differs, because you cannot alter the System ID.

Before you change Norstar system information, make sure the Customer Info screen appears on your monitor.

To change Norstar system information:

1   Select the Norstar system to edit.

2   Choose the **Customer Details** and select **Edit Customer Information**.
The Edit Customer Information screen appears (Figure 15).

Figure 15   Edit Customer Information screen

3   Make the changes you require.

4   Choose **OK** to save the changes in the CustomerInfo database and to return to the Customer Info screen.

Viewing Norstar customer information

The View item is used when you only want to view customer information, without needing to change anything.

The View Customer Information screen is similar to the screen used to add a customer to the CustomerInfo database. However, in this screen you will not be allowed to alter any of the fields.

You can view the customer information either by double clicking on a particular record or by choosing **Customer Details**, and then **View**.

Figure 16   View Customer Information screen

Choose **OK** to return to the Customer Info screen.

Copying Norstar system details

This setting allows you to copy customer information from an existing Norstar System to a new customer information record. In this way, you can copy the changes between two records. The Copy Customer Information screen is similar to the screen used to add a customer to the CustomerInfo database. The Copy Customer Information screen differs because you have to enter a unique System ID. All other fields can be same.

To copy Norstar system information:

1   On the Customer Info screen, select the Norstar system you want to copy.

2   Choose the **Customer Details** menu and then select **Copy**.

The Copy System Details screen appears (Figure 17).

3   In the **System ID** field, enter the system ID where you want to copy the data.

4   Choose **OK** to copy the system details to the CustomerInfo database and to return to the Customer Info screen.

Figure 17   Copy Customer Information screen

Backing up and restoring system information

It is important that you backup the system data for the Norstar systems you are managing on a regular basis to prevent long delays for reprogramming in the event of a system failure. The ICS Remote Tool (ICSRT) allows you to schedule a backup for times of low system activity, by entering specific date and time information

The **Run Tool** menu **Backup Restore** tool allows you to do an immediate backup or restore.

Backing up data with ICSRT

You can either use the Add/Submit Job screen, located under the **Scheduler** menu heading ("Backing up and restoring system information" on page 23) or you can use or the **Backup Restore** tool, located under the **Run Tool** menu heading to perform backups on your Norstar customers.

When you use ICSRT to perform a scheduled backup, a copy of the Norstar system programming copies to the current *<database path>***\backup** folder in a file called *<System ID>*.**new** on the computer where ICSRT is located. This copy can be used to restore the programming to the Norstar system through a scheduled restore in the event of complete programming loss. The file name changes to *<System ID>*.**old** when the next backup occurs. Only two versions of backed-up files are stored.

If you use the **Backup Restore** tool, the files are saved in *<ICSRT installed path>***\backup** in a file called **FNVRAM.new**, unless you specify another path.

🛑 **Caution:** We recommend that you create a separate folder under your CustomerInfo database/backup folder for manual backups. Refer to Figure 18. When you perform a manual backup, you can then navigate to this folder instead of storing the file in the default folder, where it might accidentally get overwritten.
This also allows you to have both types of backup files stored close to each other.

Figure 18 Customer database backup folders
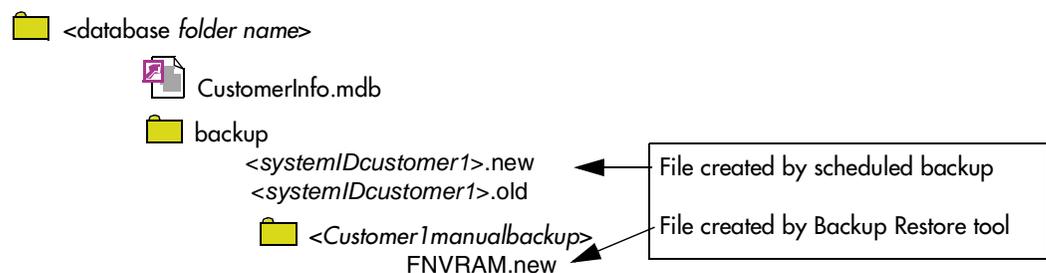
➡️ **Tips:** If the computer you are using is in the same building as the Norstar system, we strongly recommend that you copy backup files to CD and store it offsite.

You use the Backup feature when you:

- add a customer with an existing Norstar system to the CustomerInfo database
- offer to backup customer programming as a service
- want to update the system database with the current programming data

> **Tips:** If the computer you are using is in the same building as the Norstar system, we strongly recommend that you copy backup files to CD and store it offsite.

When you perform a backup, the Norstar system being backed up may slow down, but it remains operational. We suggest that you perform these operations during non-business hours, and warn the customer that the Norstar system will be slow. The amount of time it takes for a backup depends on the size and configuration of the Norstar system, and the baud rate the ICSRT computer uses.

You can schedule a backup to run every day, every 7 days, every 15 days, or every 30 days. The job then runs at the time you have chosen for whatever time period you chose. For instance, if you chose every 7 days, the backup for that system would occur at the same day every 7 days.

To determine if any backup or restore operations have been scheduled, have run, or are running, view the Job Queue screen. This screen allows you to remove scheduled jobs and to view the current status of a scheduled job. Refer to "Understanding Jobs in Queue" on page 29.

Restoring data with ICSRT

When you use ICSRT to perform a scheduled restore, you indicate the path to the backup file on your computer. When the restore occurs, the information from the indicated file is uploaded to the Norstar system, replacing the existing programming.

> **Caution:** If you use both scheduled and manual backups for a system, ensure that you picked the latest backup file to restore, unless you have a specific reason for wanting to restore an older version.

If you use the **Backup Restore** tool to perform a manual restore, ensure that the backup file indicated in the restore Path field is named **FNVRAM.new**.

You use the Restore feature when the Norstar system has lost all its programming. When you perform a restore, the Norstar system is put in maintenance mode for the duration of the restore process.

> **Tips:** The enhancements incorporated in ICSRT tools can be used on systems running CICS/MICS version 2.0 or newer software.

When you perform a restore, the Norstar system is non-operational and in maintenance mode. Call processing is suspended during the restore process. Therefore, we suggest that you perform these operations during non-business hours, and warn the customer that the Norstar system will be

non-operational. The amount of time it takes for a restore to complete depends on the size and configuration of the Norstar system, and the baud rate the ICSRT computer uses.

Starting the Scheduler

Scheduler automatically starts once you log onto the Windows system. The application runs in the background. A Scheduler icon appears in the system tray as long as it is running.

If you close the scheduler at any time, you can manually restart it by selecting **Start**, **Programs**, **Nortel networks**, **Norstar Remote Tools**, **Norstar ICS tool**.

> **Note:** If you change the time and/or date on your computer, ensure that you exit the Scheduler and restart it, to allow it to synchronize timing, so that the jobs on queue execute correctly.
>
> Daylight Savings Time: If your computer automatically updates when a time change occurs, you still must exit Scheduler and restart it. If a job is running when the time changes, the job completes. At that point you must exit Scheduler and restart it before any more jobs will run.

If you need to turn off your computer, ensure that no scheduled jobs are running. Any jobs scheduled to run during the time the computer is off will need to be removed manually from the Jobs on Queue screen. Refer to "Removing a job" on page 30.

Exiting Scheduler

You can close Scheduler by right clicking on Scheduler system tray icon and selecting the **Exit** option.

> **Tips:** It is recommended not to close the scheduler application as jobs scheduled for that particular duration will not be scheduled for execution.

Scheduling backups or restores

Usually you schedule a backup for a later date and time when you are offering a backup service. For example, you can schedule a backup of system data every day, every seven days, every 15 days, or every 30 days.

When you have several Norstar systems to backup, you should schedule the backups to run overnight. This method prevents any degradation of service on the system that is being backed up.

> **Caution:** After a restore process is successfully completed, you must wait at least 10 minutes before attempting to make another on-line connection to the Norstar system to which you just restored data.

1   Before you begin, make sure the Customer Info screen appears on your monitor and Scheduler is running in System tray.

2   On the Customer Info screen, select the Norstar system you want to back up or restore.

3   Choose the **Scheduler** menu and then select **Add/Submit Job**.
    The Add/Submit Job screen appears. (Figure 19)

Figure 19 Add/Submit Job screen

4 Select the **Date** field and enter the date the backup or restore will occur. Enter the date in the format **YYYY : MM : DD**. The default value is the current date on your computer.

5 Select the **Time** field and enter the time the backup or restore should start. Enter the time in the format **HH : MM** (24-hour format). The default value will be the current system (your computer) time.

   Important: The time you enter into this field is the time the job will start according to your ICSRT computer. If there is a time difference between your site and the Norstar system site, check the Time difference field to ensure you do not accidentally schedule the job to start during the customer's work hours.

6 Choose the drop list arrow beside the **Job type** field, and choose one of the following options:

   - Backup - System Programming
   - Backup - AA Greetings
   - Backup - All
   - Restore - System Programming
   - Restore - AA Greetings
   - Restore - All

   The **PC Source File** field will be enabled only when you select any of the restore operation. This allows you to browse and select a proper file in a directory, which contain NVRAM backup file that needs to be restored. By default this edit box will be blank.

7 Choose the drop list arrow beside the **Repeat** field and then choose the interval between repeated backups. If you do not want this job repeated, choose **Never**.

8 If you want to use a RAD telephone number, RAD Password, Baud Rate, Connection Type, Dial Mode, COM Port and Modem init string that is different than the one entered on the Customer Information screen, select the suitable field and change to new value.

9 Select the **Notes** field and type any notes for this backup or restore.

10 Choose **Submit.**

The job will be scheduled to run at the time that you selected. You can check this by going to Jobs in Queue screen where **Status** will display **Ready to Run**.

> ⚠ **Warning:** Do not shut down your computer while a backup or restore job is running. When you restart your computer, ensure that Scheduler is started. Refer to "Starting the Scheduler" on page 25.

Backup notes:

- The Backup AA greeting and the Restore AA greetings are valid only for CICS systems. If you select **Backup - All** option for MICS system, only the system programming is backed up. For CICS systems, both System programming and AA Greeting will be backed up. If you select **Restore - All** option for MICS system, only system programming will be restored. For CICS systems, both System programming and AA Greeting will be restored.

- The scheduled time for backup/restore operation can be set for maximum of 30 days. The scheduled backup operation can be set to repeat after a defined period, while restore operations will be performed only once at the pre-defined time.

- Operator-assisted connections do not support the scheduled backup and restore feature.

- If you change the time and/or date on your computer, ensure that you exit the Scheduler and restart it, to allow it to synchronize timing, so that the jobs on queue execute correctly. Refer to "Starting the Scheduler" on page 25.

- When a scheduled activity completes, the system automatically disconnects from the Norstar System and is ready to perform the next scheduled event.

Troubleshooting Scheduler

When scheduler crashes or if you face any problem while performing scheduled backup/restore operations you need to send the jobqueue database and scheduler log files to your system support.

1 Exit the scheduler application if it is still running. If you are not sure if it is still running, press **Ctrl** + **Alt** + **Del** to view the Task Manager. **Scheduler.exe** should not appear on the Task Manager.

2 Navigate to the ICSRT folder. The db folder contains the **JobQueue.mdb** file which contains all the information about the jobs to provide information about the situation.

3 In the Scheduler folder, look for the log file (**Sched_<*dateandtime*>.log**) that was created nearest to the time when the problem occurred. Send this file to your field support team.

Understanding Jobs in Queue

The Jobs in Queue screen lists all Norstar systems scheduled for a backup or restore. Each backup or restore in the list is called a job. (Figure 20)

When you double click on the **Scheduler** icon, or when you select the **Job Queue** menu item under the **Scheduler** menu on the Customer Info screen, the Jobs in Queue screen appears.

Choosing **Done** on this screen will close this dialog.

Figure 20   Jobs in Queue screen
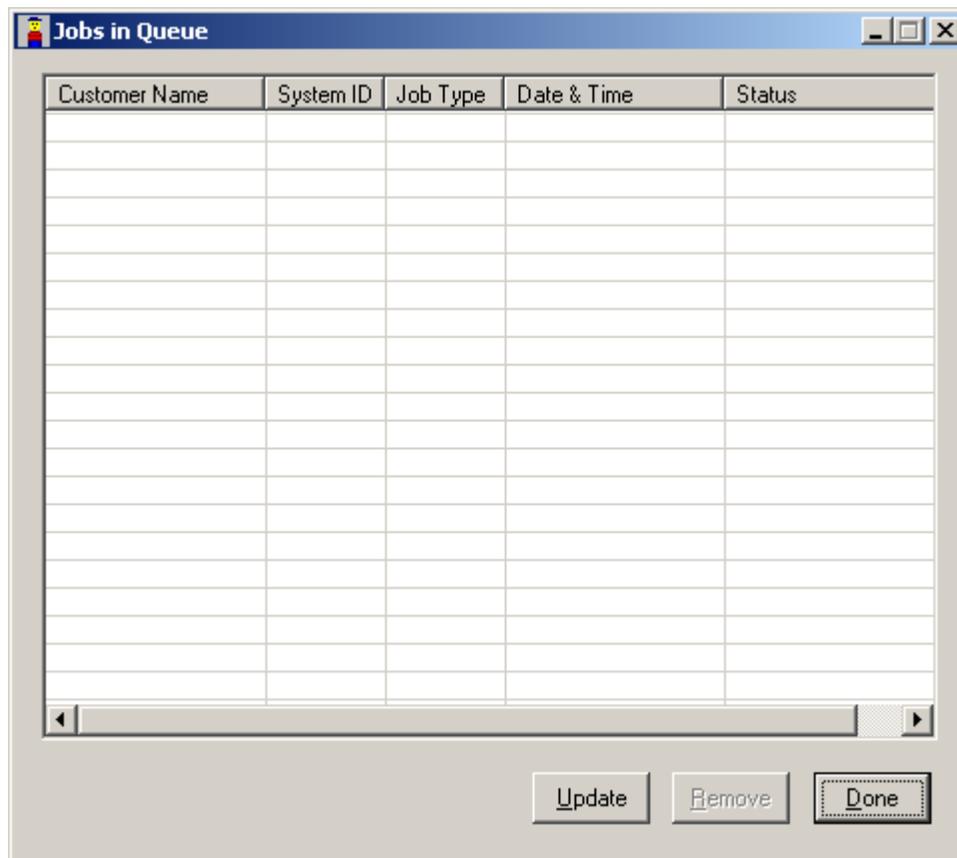
Each job on the Job Queue is listed with its Customer name, System ID, Job Type, Date and Time and when the job is scheduled to occur, and its status.

The possible status for each job in a job queue is listed below:

• **Ready to Run:** The job has been scheduled and is waiting to be run.
• **Running:** The job is currently being run.
• **Completed:** The Job has been completed successfully.
• **Error:** An error occurred during the job execution. Corresponding error message will be updated.

- **Suspended:** Job is scheduled for execution and user terminates scheduler application. The status of jobs that are to be scheduled are updated as **Suspended** in the **Status** field of the Jobs in Queue dialog
- **Re-Scheduled:** A suspended job which has a Repeat attribute set will be scheduled for next time and the current job status will be set to this.

Completed jobs are not deleted from the Jobs in Queue. The jobs are left on the screen so you can view the status of the completed jobs.

The maximum number of jobs that can be on the JobQueue database is 4096. To prevent the Job Queue from becoming too full, you should delete completed jobs after you have confirmed that they have run successfully.

To remove the completed jobs, use the remove procedure described later in this section.

Jobs that are scheduled to repeat automatically are treated like a series of separate jobs. Each time the job is scheduled to repeat, another job is added to the JobQueue database. This allows you to check if the previous job has completed successfully and see when this job will be run again.

Removing a job

The Jobs in Queue screen allows you to remove pending or completed jobs from the JobQueue database.

To remove a job from the Job Queue:

1   Select the job you want to remove.

2   Choose the **Remove** button. You will be prompted to confirm the removal.

3   Click **OK** on the confirmation dialog and the selected job disappears from the JobQueue database.

Removing repeated jobs

To remove repeated jobs, you need to remove the latest instance of job that is scheduled with **Repeat** attribute.

Updating the jobs on Jobs in Queue

With this setting, you can update the list box in Jobs in Queue screen. This will update the status column if there is any change or error has occurred. This will also be helpful when different users use the same database at the same time.

Viewing a submitted job

When you double click on any job in Jobs in Queue dialog, the View Job Info screen appears. All the fields in View Job Info dialog will be filled with values read from JobQueue database. All the dialog elements in View Job Info dialog will be in disabled state.

Figure 21   View Job Info screen

Immediate backup or restore

If you want to do an immediate restore or backup of the system programming, you can use the **Backup Restore** tool found under the **Run Tool** heading.

Caution: We recommend that you create a separate folder in your CustomerInfo database/backup folder for manual backups. Refer to Figure 22. When you perform a manual backup, you can then navigate to this folder instead of storing the file in the default folder, where it might accidentally get overwritten.
This also allows you to have both types of backup files stored close to each other.

Figure 22 Finding the correct backup file
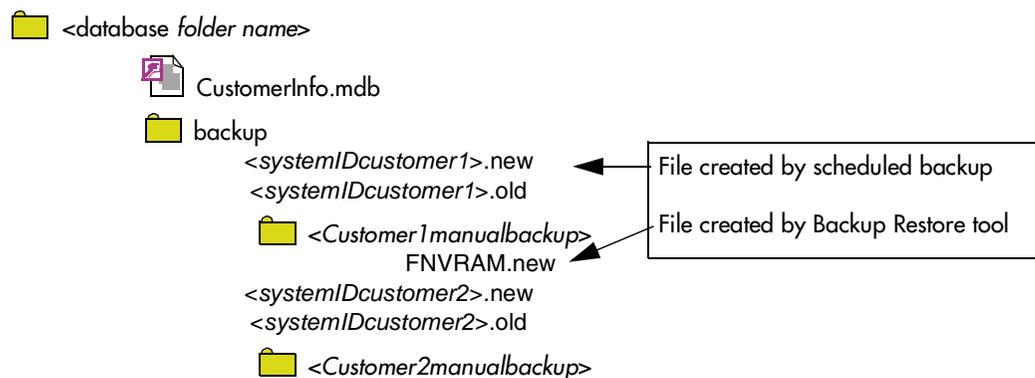
Tips: If the computer you are using is in the same building as the Norstar system, we strongly recommend that you copy backup files to CD and store it offsite.

1 Open ICSRT.

2 If you are not in the correct database, find the database where the correct customer is located.

3 Select the customer you want to connect to.

4 Click on **Run Tool**, and select **Backup Restore**.
The connect screen appears, with the connect information for that system.

5 Click on **Connect**.
After your computer connects to the Norstar System, the following screen appears.

Figure 23   Default Backup and Restore screen
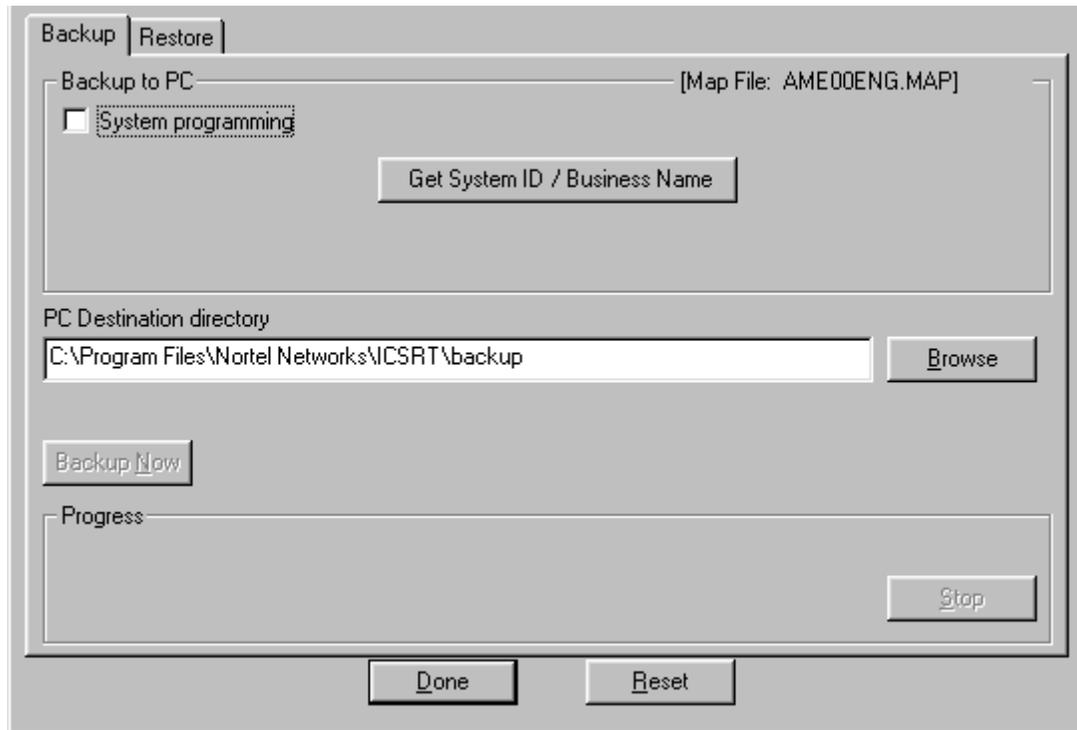
6   If you want to perform a restore, click on the **Restore** tab. (Figure 24)

Figure 24   Default Backup and Restore screen, Restore tab
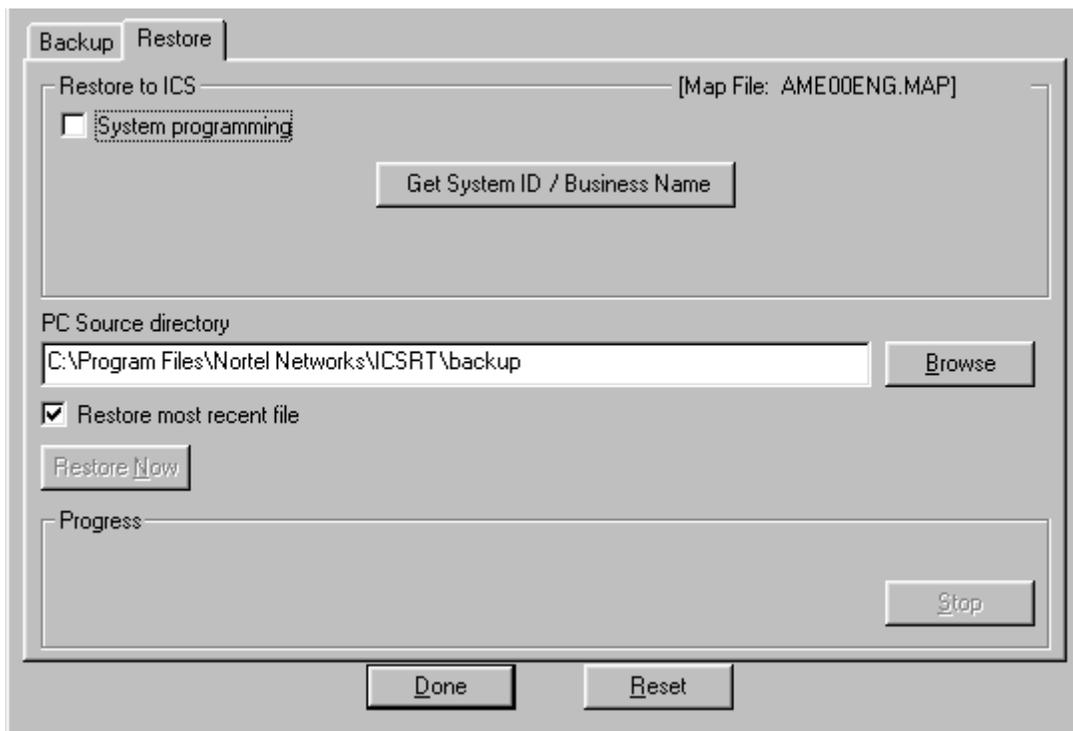
7   Click on the **Get System ID / Business Name** button to ensure that you are backing up from or restoring to the correct system.

8   Click on the **System programming** check box to make it active. Note that the Backup Now button becomes active.

9   Click on **Browse** and navigate to the manual backup folder you created in the customer database/backup folder. Refer to Figure 22.

10   If you are performing a restore operation (Figure 24), ensure that the **Restore most recent file** is selected, unless you want to restore the archive backup.

11   Start the Backup or restore:

- To perform an immediate backup, click on **Backup Now**.
  The backup begins immediately. The **Progress** field indicates how the backup is progressing. If you encounter errors or need to stop the backup, click on **Stop**.

- To perform an immediate restore operation, click on **Restore Now**.
  The restore begins immediately. The **Progress** field indicates how the restore is progressing. If you encounter errors or need to stop the restore process, click on **Stop**.

12   When the operation is complete, click on **Done**.
If you need to restart the backup or restore while it is running, click on the **Reset** button.
The backup is stored as **FNVRAM.new**.
If there was a previous backup file, it is renamed as **FNVRAM.old**.

13   When you complete the required activity, ensure that you exit the connection to the Norstar system:

a   On your desktop, click on the **Norstar ICS Programming Tools** screen, which sits behind the Customer Info screen.

b   On the top menu, click on **Tool** and select **Terminate Connection**.

Connecting to Nortel Networks

This URL (www.nortelnetworks.com) will connect you to the main web site of Nortel Networks using the default browser installed on your computer.

Acronyms used in this document

CICS	Compact Integrated Communication System
CO	Central Office
COM	Communication
ICSRT	Integrated Communication Systems Remote Tools
ID	Identification
MICS	Modular Integrated Communication System
NRU	Norstar Remote Utilities
OLP	Off Line Programming
RAD	Remote Administration Device