

FrameSaver 9620 R1-to-R2 Upgrade Installation Instructions

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Before You Begin

Make sure you have:

- PC running Windows 95.
- Terminal Emulation program that can emulate a VT100 terminal.
- One of the following cables to connect your PC's serial port to the access unit's COM port:
 - DB9-to-RJ45 (Model No. 3100-F2-550)
 - DB25-to-RJ45 (Model No. 3100-F2-540)
- FTP (File Transfer Protocol) software to allow downloading of the software upgrade.
- IP (Internet Protocol) software to allow PC and access unit connectivity.

NOTES:

If upgrading your access unit with an ISDN BRI DBM, upgrade your NAM software to R2 first, then install the DBM.

The default IP connectivity software provided by Windows 95 does not provide IP connectivity to a directly-connected IP-capable device. Upgrading a 9620/9621 Frame Relay Access Unit requires a direct connection to a PC.

Included in this upgrade package is a generic NULL modem device driver file used for IP connectivity for PPP connections under Windows 95. The installation instructions for this device driver begin on page 7.

Package Checklist

Provided with this upgrade:

- Diskette containing the Caribload download program and the R2 upgrade files.
- *FrameSaver 9620 Technical Reference* (Document No. 9621-A3-GH30) provided on diskettes, with Adobe Acrobat Reader diskettes.
- *FrameSaver 9620 User's Guide* (Document No. 9621-A2-GB20), with a *Quick Reference*.

Upgrading a Release 1 Access Unit

An earlier release of the FrameSaver access unit can be upgraded to provide the increased functionality of Release 2 program code, which supports an ISDN BRI DBM for backup and automatic DLCI configuration and cross-connection.

Upgrading an earlier release involves:

- Installing and starting the Caribload program.
- Starting the upgrade download using the Caribload program.
- Switching to FTP to complete the upgrade download.
- Verifying that the upgrade was successful.

The Caribload-to-FTP switch is necessary because the earlier release of the access unit accepts code downloads using the Caribload program. With the advent of FTP as the common utility for IP connectivity, the current release accepts code downloads using FTP. Different control and data files are created using each method.

NOTE:

Before starting, record the access unit's configuration options. This information is needed to reconfigure the unit once it has been upgraded.

Suggestion:

It is recommended that you load the Technical Reference and print the configuration worksheets provided in *Appendix B*, and review the factory-set (default) options ahead of time.

Reviewing and completing the configuration worksheets before you start reconfiguring the unit will speed setup time.

Installing and Starting the Caribload Program

► Procedure

1. Create a directory called CARIB.

Example:

Type **mkdir c:\CARIB**.

2. Type **cd CARIB** to change to the c:\CARIB directory.
3. Type **<drive>:UPGD9620**, where *<drive>* is the drive that contains the UPGD9620.EXE file to be downloaded. This command extracts the necessary files to the CARIB directory.

If any of these files have been loaded before, allow the program to overwrite the old files.

Refer to *Installing a NULL Modem* on page 7 if you desire to install a NULL modem driver.

Starting the Upgrade Download Using the Caribload Program

► Procedure

1. Connect a DB9- or DB25-to-RJ45 cable from the access unit's COM port to the PC's serial port.
2. Bring up the VT100 Terminal Emulation Program with the following settings:
 - Speed or data rate set to the data rate currently configured for the access unit being upgraded (usually 9600 bps) so it is compatible with the communication port's data rate.
 - Character Length set to 8 bits.
 - Parity set to None.
 - Stop Bits set to 1.

NOTE:

If the access unit's communications port is configured for a LAN adapter connection or a PPP connection to a router, reset Port Use to Terminal using the following menu-selection sequence:

Main Menu → Configuration → User Interface → Communication Port → Port Use → Terminal

3. Go to the Control menu to start the download:
Main Menu → Control → Start Download
4. Change the access unit's Bit Rate (Kbps) for optimal download speed, if needed (115.2 kbps is the best speed when using Windows 95).

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5. Select Start and press Enter to start downloading.
After a moment, the access unit resets itself for download mode, and the OK LED starts flashing.
At this point, the Terminal Emulation Program no longer communicates with the access unit and the session needs to be terminated.
 6. Open a DOS window.
 7. Type **cd c:\CARIB** to change to the c:\CARIB directory where the CARIBLD.EXE file is located.
 8. Type **CARIBLD**.
 9. Configure the PC's communication port and data rate to match the access unit's download settings (see Steps 2 and 4).
Reminder: Use Arrow keys to select settings, Enter to toggle selections, and Esc to go to the previous menu.
 10. Select:
 - DTE Download, then
 - Begin DTE Download, then
 - Highest-numbered software revision available (e.g., R02.00.02).*Reminder:* Use Arrow keys to highlight selections, and the Enter key to make selections and to start the download.
 11. Type **y** to confirm that you want to start the download.
Each record address appears as Caribload downloads the first data bank to the access unit's memory. Caribload states that it has entered the **Bank Switch Phase**, then resets the access unit to allow the switch to FTP. The OK LED starts flashing and the ALM LED is on.
At this point, Caribload no longer communicates with the access unit and the session needs to be terminated.
 12. Exit the Caribload program by terminating the DOS window.

Switching to FTP to Complete the Upgrade Download

After the first data bank downloads, the access unit:

- Resets itself to allow the switch to FTP.
- Initializes the Port Rate (Kbps) to 19.2.
- Sets the communication port's IP Address to 001.001.001.001.
- Sets the communication port's Subnet Mask to 255.255.255.000.

No user IDs or passwords are assigned.

For the download to complete via FTP, IP connectivity between the PC and the access unit being downloaded must be established.

► Procedure

To establish IP connectivity between the PC and the access unit being downloaded:

1. Open a DOS window, and start your IP software.
(Specific steps for doing this vary with the software.)
2. Type **dir \CARIB*.FTP** to get a file listing so you can determine the latest software revision level used in Steps 9 through 11 (format Rxyyzz).
Example:
For files R020002.FTP and R020000.FTP, R020002 is the most current (highest-numbered) software revision level.
3. Configure your IP software to be compatible with the access unit's new settings:
 - Speed or data rate set to 19.2 Kbps to match the communication port's data rate.
 - Character Length set to 8 bits.
 - Parity set to None.
 - Stop Bits set to 1.
4. Type **ftp 1.1.1.1** (or similar command used in your IP software) to establish an FTP login session.
5. Press Enter to continue with the FTP login process. No user ID or password is required.
6. Type **cd system** to change to the system directory.
7. Type **bin** to enter binary mode.
8. Type **hash** to start status display mode; the Caribload program keeps you apprised of its status (following the # character).
This step is not repeated unless the upgrade was interrupted and the FTP session ended.
9. Type **put c:\CARIB*<software revision>.FTP nam1_ctl.ocd*** to start the download.*

Example:

put c:\CARIB\R020002.FTP nam1_ctl.ocd

After the download completes, the access unit resets and IP connectivity is terminated.

NOTE:

It may be necessary to close all IP and FTP applications to proceed with the procedure. (This varies with your particular IP/FTP software package.)

* Latest *<software revision>* was determined in Step 2.

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10. Repeat Steps 1 through 7, then substitute **put c:\CARIB*<software revision>*A.OCD nam2_low.oed** in Step 9.* The access unit resets and the OK LED flashes continually.
For example, **put c:\CARIB\R020002A.OCD nam2_low.oed**.
 11. Repeat Steps 1 through 7, then substitute **put c:\CARIB*<software revision>*B.OCD nam3_hi.oed** in Step 9.* The access unit resets and the OK LED stays on.
For example, **put c:\CARIB\R020002B.OCD nam3_hi.oed**.
 12. Close all FTP/IP applications.

Verifying that the Upgrade was Successful

1. Bring up the VT100 Terminal Emulation Program with the following settings:
 - Speed or data rate set to 19200 bps so it is compatible with the communication port's data rate.
 - Character Length set to 8 bits.
 - Parity set to None.
 - Stop Bits set to 1.
2. Re-establish connectivity with the access unit to start a session.
If unable to start a session, repeat the download procedure making sure you typed the **put** commands exactly as specified. If you still cannot start a session, call your service representative for assistance.
If able to start a session, your FrameSaver access unit has been upgraded successfully.
3. Go to the Identity screen:
Main Menu → Status → Identity

The following field should be updated under the NAM Identity:
 - Software Revision should be 02.00.02 or greater.*
4. Reconfigure the upgraded FrameSaver 9620, referencing the configuration options recorded prior to the upgrade.

* Latest *<software revision>* was determined in Step 2 on page 4.

Installing a NULL Modem

This NULL modem is designed to use a PPP link to a Paradyne 9620/9621 FrameSaver Access Unit for the purpose of loading new firmware. This is a very simple, easy-to-install method for connectivity via PPP with Windows 95. However, if you already use a connectivity package that works to your satisfaction, you do not need to install this device driver.

As with the other upgrade procedure, the access unit's COM port must be directly connected to the PC serial port using one of the following cables, depending on the PC connector type:

- DB9-to-8-Position Modular RJ45 (Feature number 3100-F2-550)
- DB25-to-8-Position Modular RJ45 (Feature number 3100-F2-540)

The NULL Modem will only run on a Windows 95 platform.

If you have previously installed the NULL Modem on your PC, then you need only to connect to the access unit to download new firmware. See *962x Access Unit FTP Procedure* on page 9.

Configuring the NULL Modem

► Procedure

1. Unpack the self-extracting file (run file from manager or DOS prompt). Ensure that you know the directory name where the output files exist.
2. Select Setting/Control Panel from the Start menu.
3. Select Modems from the Control Panel.

Adding the Paradyne Generic NULL Modem

► Procedure

1. From the Modems Properties dialog box, choose Add.
2. Select Install New Modem, then click Other.

NOTE:

This screen will only appear if you have a PCMCIA modem card.

3. Select Don't detect my modem; I will select it from a list, then click Next.
4. Select Have Disk in the Install New Modem dialog box.
5. Type the directory name where the mdmpdn.inf file (one of the extracted files) is located. Highlight the mdmpdn.inf file and click OK.
6. When the Install From Disk dialog box appears, click OK.

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7. The Install New Modem dialog box should appear after loading the mdmpdn.inf file. Click Paradyne Corporation-Generic NULL Modem, then click Next.
 8. Select an available COM port, then click Next.
 9. The Install Modem dialog box now states that your modem has been set up successfully. Click Finish.
 10. The Modems Properties dialog box should now include the Generic Null Modem. Close the Modems Properties and Control Panel dialog boxes.

Making a New Modem Connection

► Procedure

1. Select Dial-Up Networking from the My Computer window.
2. Choose Make New Connection.
3. Enter the new connection name (9620 Null Modem is suggested) and select Paradyne Corporation-Generic Null Modem.
4. Select Configure and set the maximum speed to 19.2 Kbps.
5. Select the Connection tab and set the Connection preferences to 8, none and 1. Make sure that none of the Call preferences boxes are checked. Then, click OK.
6. Click Next.
7. Click Next again, then enter phone number (use a dummy phone number).
8. Click Finish.



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