Updating 8239 Operational Code

This section contains the following information:

- Obtaining 8239 operational code
- Loading 8239 operational code using XMODEM or TFTP
- Updating 8239 V1.0 to a later version with three or more Model 1s in the stack
- Updating 8239 V1.1 to a later version when continuous hub resets are occurring

Obtaining New 8239 Operational Code

The 8239 operational code is contained in a binary file. The files used for the 8239 Model 1 and the 8239 Model 2 are unique files. The Model 1 and Model 2 filenames have a format of m1r***x***v***y***.opr and m2r***x***v***y***.opr, respectively, where ***x*** is the release number and ***y*** is the version number.

The Model 1 operational code file, which contains both the Model 1 and Model 2 operational code, is loaded on a Model 1; all of the Model 1s and Model 2s in the stack will be updated with the code. The Model 2 operational code file, which contains only the Model 2 operational code, is loaded on a Model 2; all of the Model 2s in the stack will be updated with the code. All 8239s in the same stack should run the same code level.

The most recent 8239 operational code can be obtained by either of these methods.

- Retrieving it from our website at *http://www.networking.ibm.com/support*.
- If the 8239 is under warranty, contact your reseller or call IBM. In the United States, call IBM at **1-800-772-2227**; in Canada, call IBM at **1-800-IBM-SERV (1-800-426-7378)**.

  For warranty upgrade or post-warranty maintenance service, call IBM at **1-800-IBM-SERV (1-800-426-7378)**.

If you have a Model 1 in the stack, obtain the Model 1 operational code file; this file contains both the Model 1 and Model 2 operational code. If you have only Model 2s in the stack, obtain the Model 2 operational code file.

Loading New 8239 Operational Code

The Model 1 will update all Model 1s and Model 2s in the stack. The Model 1 operational code file is loaded on the Model 1 using either XMODEM or TFTP. After the code is loaded, the appropriate code is automatically copied to all of the other 8239 Model 1s and Model 2s in the stack. To start executing the new code, all of the 8239s in the stack must be reset.

The Model 2 will update only Model 2s in the stack. Load the Model 2 operational code file on the Model 2 using XMODEM. After the code is loaded, the code is automatically copied to all of the other 8239 Model 2s in the stack. To start executing the new code, all of the 8239 Model 2s in the stack must be reset.

Updating Using XMODEM

To load new code onto your Model 1 or Model 2 using XMODEM:

1. Put the file containing the new code on the workstation that connects to the 8239 EIA-232 port.
2. If necessary, UNZIP the file to recover the m1r***x***v***y***.opr and/or m2r***x***v***y***.opr files.

3. Log onto the 8239 using your terminal emulation software.
4. If your terminal baud rate has not been changed from the default value of 9600 bits per second, you may want to configure both the 8239 and the terminal emulation software for a higher baud rate so that the file transfer goes faster.
5. Issue the LOAD OPERATIONAL_CODE XMODEM command.
6. When the message *Ready to RECEIVE File in binary mode* appears, indicate to your terminal emulation software that the file transfer should start. Specify:
   - XMODEM or 1K-XMODEM for the protocol. 1K-XMODEM causes the file transfer to occur faster.
   - The filename of the file to be transferred.
7. After the file transfer is completed, the 8239 will automatically update the code on the appropriate hubs in the stack. Once the message *Code load complete* appears, the hubs can be reset at any time to execute the new code; for example, you can issue the RESET_HUB ALL command.

Updating Using TFTP

Code can be updated using TFTP on Model 1s only. The code transfer can be triggered through a terminal interface command or SNMP. Only the instructions for updating code using the terminal interface are described here.

1. Put the file containing the new code on your TFTP server. Make sure that the permission code for the file allows read-access for "others". For example, on AIX or UNIX systems, specify *chmod o+r FILE*, where *FILE* is the name of the file to be transferred.
2. If necessary, UNZIP the file to recover the m1r***x***v***y***.opr file.
3. Log onto the 8239 using either your terminal emulation software or Telnet.
4. Issue the LOAD OPERATIONAL_CODE TFTP command, specifying the TFTP server's IP address and the filename of the file to be transferred.
5. After the file transfer is done, the 8239 will automatically update the code on all other hubs in the stack. Once the message *Code load complete* appears, the hubs can be reset at any time to execute new code; for example, you can issue the RESET_HUB ALL command.

Updating 8239 V1.0 with Three or More Model 1s in the Stack

When there are three or more 8239 Model 1s in a stack running V1.0 operational code and a code update is performed, the Model 1 initiating the update may reset. This problem does not exist in V1.1, or later, operational code. To update the Model 1 from V1.0 to a later version, follow these steps:

1. Load the V1.1 or later code onto one of the Model 1s running V1.0.
2. If the Model 1 resets, issue the REPLICATE OPERATIONAL_CODE command on the Model 1 after it becomes operational; the rest of the Model 1s will then be updated with the new code.

Updating 8239 Model 1 V1.1 When Continuous Hub Resets are Occurring

When an 8239 Model 1 has been configured with an invalid combination of IP information and Version 1.1 operational code is loaded, the hub may be placed into a state where it performs continuous resets. This makes it impossible to load new code by the methods described above. This problem exists only when Version 1.1 operational code is installed. There is a procedure to perform this code update. To obtain the information needed to update a Model 1 hub, that is in this state, from V1.1 to a later code version, please call IBM Technical Support.