chapter **8**

Running Multiple Applications in a Task-Switching Environment

Chapter Overview

NetWare's task-switching files provide the data buffers needed to support IPX and SPX requests made from applications running in a DOS session.

If the only IPX/SPX application you are using is the NetWare DOS Requester, you don't need to load the task-switching files.

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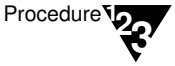
Task Switching in DOS

To use NetWare's task-switching files in DOS, do the following:



1. Copy TBMI2.COM from the ***WSWIN_1*** diskette to any directory.

   You must be able to run TBMI2 from this directory later.

2. From the directory where TBMI2 is located, type

   `TBMI2` <Enter>

3. Start MS-DOS 5.0 DOSSHELL or DR DOS 6.0 TASKMAX normally.

Task-Switching in Windows

NetWare's task-switching files help non-Windows IPX and SPX programs work in a multitasking environment.

You *must* use the task-switching files if

- You will be switching between DOS sessions, *and*
- Your application bypasses the NetWare shell (NETX) and accesses IPX or SPX directly, *and*
- You are running in standard or real mode.

If you are running Windows 3.0, see "Task Switching with Windows 3.0" on page 53. If you are running Windows 3.1, see "Task Switching with Windows 3.1" on page 54.

Do not use the task-switching files if

- You will not be switching between DOS sessions, *or*
- You are running in enhanced mode, *or*
- Your application goes through the NetWare shell (NETX) to access IPX or SPX.

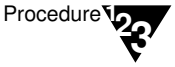
If your application requires task-switching files and you don't use them, the session will fail and your workstation may hang.

If you aren't sure your application needs task-switching support, go ahead and run the task-switching files; they will use only a small amount of memory. After running the application for a period of time, enter the command line parameter /D and look at the number in the "Far Call Usage" field. If this number is zero, your application has not used the task-switching files; you can run it without them.

Task Switching with Windows 3.0

The task-switching files for Windows v3.0 include TBMI2.COM and TASKID.COM.

Load TBMI2 at the command line *before* you begin Windows; load TASKID in Windows after opening a DOS prompt.



1. Expand and copy TBMI2.COM and TASKID.COM from the ***WSWIN_1*** diskette to any directory.

   To expand a file, type

   UNPACK SOURCE:*filename* **DESTINATION:***filename*

   For example, to expand TBMI2.COM, type

   UNPACK A:TBMI2.CO_ C:TBMI2.COM

2. From the directory where TBMI2 is located, type

   TBMI2 <Enter>

3. Start Windows.

4. Start a DOS session.

5. At the new DOS prompt, load TASKID. Type

   TASKID <Enter>

   For each DOS prompt you open, repeat Step 5 before running an application from that prompt.

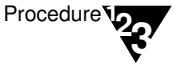
6. When you close a DOS session with the EXIT command, unload TASKID by typing “TASKID /U <Enter>.”

If you don’t unload TASKID before you close the session, your computer may hang. You do not need to unload TBMI2 after you exit Windows unless you want to free memory.

Task Switching with Windows 3.1

The task-switching file for Windows 3.1 is TBMI2.COM.

Load TBMI2 at the command line *before* you begin Windows.



1. Expand and copy TBMI2.COM from the ***WSWIN_1*** diskette to any directory.

   To expand a file, type

   UNPACK SOURCE:*filename* **DESTINATION:***filename*

   For example, to expand TBMI2.COM, type

   UNPACK A:TBMI2.CO_ C:TBMI2.COM

2. From the directory where TBMI2 is located, type

   TBMI2 <Enter>

3. Start Windows.

Using Batch Files with TBMI2

You can include TBMI2 in a batch file to ensure that it is started before entering a task-switching environment and that it is unloaded afterwards.

For example, the batch file could include the following:

```
TBMI2
DOSSHELL (or TASKMAX or WIN)
TBMI2 /U
```

Using Command Line Parameters with TBMI2 or TASKID

You can use any of the following command line parameters with TBMI2 or TASKID.

Table 8-1
TBMI2 or TASKID command line options

Parameter	Syntax	Explanation
Help	/? or /H	Displays help or usage information.
Configuration File	/C*filename*	Specifies an alternate configuration file TBMI2 should use. The filename is NET.CFG by default. Do not put a space between /C and the filename. For example, you would type “TBMI2 /CTBMI2.CFG” at the DOS prompt. For information about configuration file parameters, see “Configuring Your Workstation” on page 5.
Diagnostic Information	/D	Displays diagnostic information.
Version Information	/I	Displays version information.
Unload	/U	Unloads TBMI2 after you exit Windows.

Troubleshooting TBMI2

If you have problems while using TBMI2, you may need to change configuration parameters in the NET.CFG file. For an explanation of the NET.CFG file, see “Configuring Your Workstation” on page 5.

Check configuration parameters by typing TBMI2 /D at the command line.

Check the values associated with

- “Max Buffers Used,” which tells you how many buffers are used, and
- “Configured Data ECBs,” which tells you how many buffers are available.

If the number of buffers used approaches or equals the number of buffers available, increase the number of buffers available using the “ECB Count” and “Data ECB Count” parameters in the configuration file.

Also check the “Unavail Buffer Count.”

If it is more than zero, increase the number of buffers available using the “ECB Count” and “Data ECB Count” parameters in the NET.CFG file.

The COMCHECK and RCONSOLE utilities use too many buffers to be used with TBMI2. To use either of these utilities under Windows, don’t load TBMI2 and don’t switch out of the DOS session running the utility before exiting the utility.