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# Increasing Performance

## Overview

Here are some performance items from the BDE Support Page and Internet newsgroups that may help to speed up the Windows® versions of the following PDS programs:

- Facility Scheduler
- Ledger
- Ledger/Payroll
- Church Office Management
- Formation Office Management
- School Office Management

## Increasing Performance – All Users

### Configure Virus Scanners

Properly configure virus checkers running on the file server and all workstations. A virus checker may cause processing delays if it is configured to check for changes to all files. This could include your database files, even though they are not really vehicles for viruses. If possible, configure the virus checker to scan only executable files.

To determine if the virus checker is contributing to performance issues, disable it temporarily and see if database performance increases.

File extensions to exclude from virus scanning:

db	Database	log	Log
net	Network Lock	rtm	Report
lck	Network Lock	udr	Report
px	Index	ini	Configuration
x*	Index	pds	Data Backup
y*	Index	bak	Report Backup
mb	Memo	raf	Report Sample
val	Default Value		

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**Note:** Some virus scanners do not allow you to configure file extensions using the "\*" wildcard. Try using "?" instead. For example: x??. y??

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### Verify Write Behind Caching

Ensure that write behind caching is enabled on each computer.

*Note: The wording for this setting may be slightly different depending on the version of your operating system.*

#### Windows® 95/98/ME

1. Right click My Computer. Go to the Performance tab.
2. Click the File System button.
3. Click the Troubleshooting tab.
4. Verify that the setting for “Disable write behind caching for all drives.” is NOT checked. If this setting is checked, uncheck it. You will need to reboot if you change this setting.

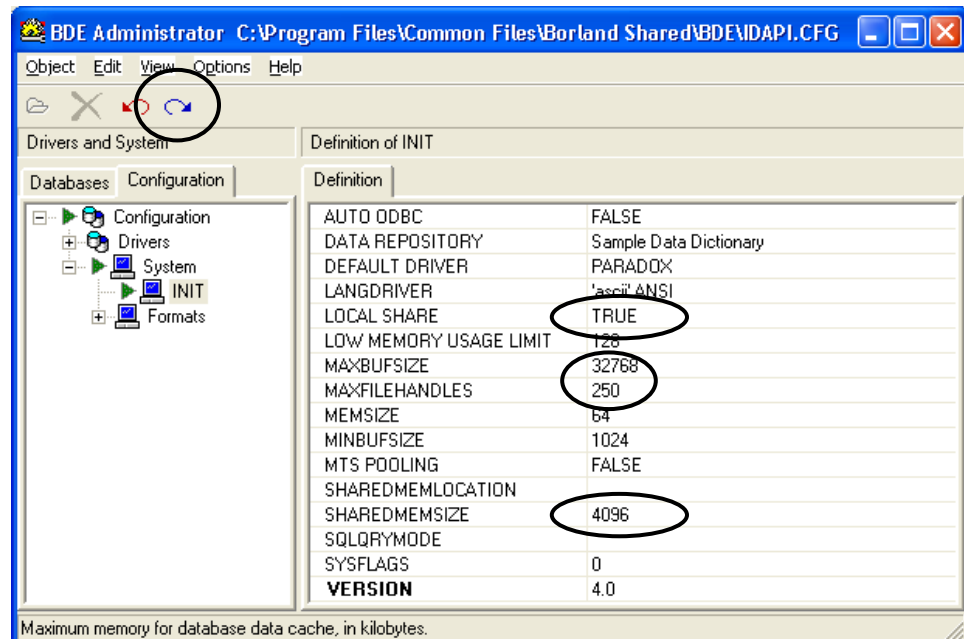
## Windows® 2000/XP/2003

1. Double click My Computer. Right Click on your “C” drive, choose Properties.
2. Click the Hardware tab. Select the drive that hosts the data, click the Properties button.
3. Click the Disk Properties (Windows 2000) or Policies (Windows XP/2003) tab.
4. Verify that the setting for “Write cache enabled / Enable write caching on the disk.” IS checked. If this setting is unchecked, check it. You will need to reboot if you change this setting.

## Verify BDE Configuration

Configure the BDE to use more memory on each computer.

1. Run the C:\Program Files\Common Files\Borland Shared\BDE\BDEAdmin.exe program.
2. On the Configuration Tab go to System\Init.
3. Verify the following settings:
  - LOCAL SHARE is TRUE
  - MAXFILEHANDLES is 250
  - SHAREDMEMSIZE is 4096.
  - MAXBUFSIZE is 32768
4. Click on the Blue arrow on the toolbar to apply the changes. Any BDE Application (like the Office, Ledger or Scheduler) needs to be restarted.



## Increasing Performance – Network Users

### Reboot the Network

Reboot the server, all workstations, and all interconnected network gear, including (but not limited to) routers, gateways, hubs, switches, etc. If performance improves after rebooting, wait until the next slowdown occurs. Selectively reboot individual components to isolate which piece of the network is causing the slowdown.

### Avoid Wireless Networks

While wireless networks may be fine for sharing Internet connections, they are not typically suitable for sharing the heavy load of a database application. Wireless networks also tend to "throttle down" all wireless users to the slowest common speed rather than allow each connection to negotiate its speed based on the available signal strength. One bad connection can bring all wireless connections to a crawl.

### Avoid Mixed Protocols

Look for unnecessary protocols being loaded on both the workstation and server. If TCP/IP is the primary communication protocol in use, don't load NetBeui or IPX if it is not needed.

### Avoid Period in Path

Don't use a period in folder or share names. The server may try to translate the folder name into an IP address. For Example: Do NOT use [\\servername\data/mydata.db\](#)

### Avoid Internet speed-tweaking utilities

We have found that some tools designed to improve Internet data transfer speeds can tamper with TCP/IP registry settings that ultimately impact local network performance negatively. While these settings may improve Internet data transfers, they can in some cases cause your local area network (LAN) to slow down significantly. This is often due to one or more values entered into the registry by these utilities.

### Disable Screen Savers

Do not use resource-intensive screen savers on the file server. Make sure your file server is not running a resource-intensive screen saver such as one of the OpenGL screen savers.

Whenever possible, choose "Blank Screen" as the screen saver on a file server. Using one of the more "active" screen savers can impede the performance of the server if its CPU time is being allocated to drawing images rather than file management.

We've actually seen an NT 4 file server brought to its proverbial knees when serving up files to a small group of LAN clients because a significant portion of its CPU cycles were being dedicated to drawing an OpenGL screen saver. The same Delphi/BDE/Paradox app performed remarkably well when the server's screen saver was finally switched to "Blank Screen"!