



## Changing Server Bandwidth Parameter Settings

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This appendix describes how to change the default server bandwidth parameter settings. If you accept the server settings shown in [Table B-1](#), you do not need to make any changes. However, you can change these settings by editing the Windows 2000 registry.

Base your decision of whether or not to change the default bandwidth parameters on the peak number of users that you expect to be using the BBSM server at the same time. However, keep in mind that BBSM continues to operate correctly even if the maximum number of users is exceeded occasionally and performance is degraded.



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**Note**

You can only make these changes locally and not from a remote server.

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**Caution**

Incorrect registry settings can render your BBSM server unusable. Alter only the parameters listed in [Table B-1](#). Always backup the registry before making any changes.

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**Table B-1 BBSM Bandwidth Management Configurable Parameters**

Parameter	Description
BWTQueueSize	Amount of data per link to queue before discarding. The default should be adequate for TCP clients. For UDP clients (streaming audio or video), you must select a transmission rate below the bandwidth limit to avoid losing packets because of queue overflow. The default number of bytes is <i>151,400</i> .
PacketPoolSize	The number of packet descriptors. The default is <i>50</i> .
LookaheadPoolSize	The number of look-ahead buffer descriptors, which the packet descriptor indicates. Set the PacketPoolSize and LookaheadPoolSize parameters to a higher number than the anticipated maximum number of packets queued for bandwidth management. The default is <i>50</i> . <ul style="list-style-type: none"> <li>For TCP clients, this number is the TCP window divided by the packet size. For example, a typical Windows TCP client uses a window of 8192 bytes, and an Ethernet interface has a maximum packet size of 1514 bytes. Divide the window size (8192 bytes) by the packet size (1514 bytes) to allocate 6 packets per TCP client.</li> <li>For UDP clients, this number is the BWTQueueSize parameter value divided by the packet size. Calculate both and select the larger of the two values. For example, assume that the BWTQueueSize value is 15140 KB. Because the Ethernet packet size is 1514 bytes, divide 15140 by 1514 bytes to establish 10 packets per client. Because 10 is greater than 6, 10 packets per client would be used.</li> </ul>

Follow this procedure to change the registry settings.

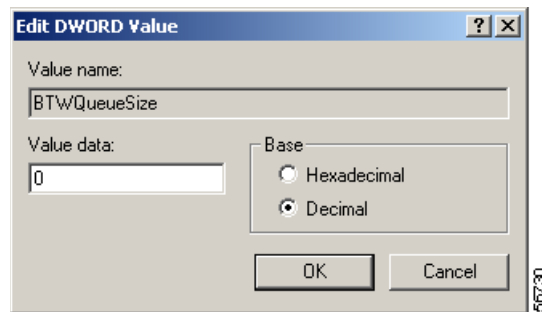
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- Step 1** Choose **Start > Run**. The Run window appears.
  - Step 2** Enter **regedit** and click **OK**. The Registry Editor window appears.
  - Step 3** Double-click **HKEY\_LOCAL\_MACHINE**.
  - Step 4** Navigate to **System > CurrentControlSet > Services > ATNAT > Parameters**.
  - Step 5** Right-click anywhere in the right pane of the Registry Editor window.
  - Step 6** To back up the file before making any changes, choose **Registry > Export Registry File** and follow the instructions.
  - Step 7** From the New drop-down menu, select **DWORD Value**.
  - Step 8** Rename the entry to the parameter name you want to change. For applicable parameter names, see [Table B-1 on page B-2](#).
  - Step 9** Double-click the new parameter name. (See [Figure B-1](#). Note that BWTQueueSize is shown here only as an example.)

**Figure B-1 New Parameter Name**

Name	Type	Data
ab (Default)	REG_SZ	(value not set)
ab ClientPage	REG_SZ	/ekgnkm/
ab ComputerName	REG_SZ	10.10.2.1
ab ConnectPage	REG_SZ	/ekgnkm/preconnect.asp
DebugLevel	REG_DWORD	0x00000000 (0)
DebugMask	REG_DWORD	0x00000000 (0)
DNSProxy	REG_DWORD	0x0a0a0201 (168428033)
EnableTransparentProxy	REG_DWORD	0x00000000 (0)
LocalMappedAddressEnd	REG_DWORD	0x0a0a02fe (168428286)
LocalMappedAddressStart	REG_DWORD	0x0a0a02ab (168428203)
PipServer	REG_DWORD	0x0a0a0102 (168427778)
SMTPServer	REG_DWORD	0x00000000 (0)
WebServer	REG_DWORD	0x0a0a0201 (168428033)
WebServerPort	REG_DWORD	0x00000050 (80)
BTWQueueSize	REG_DWORD	0x00000000 (0)

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The **Edit DWORD Value** dialog box appears. (See [Figure B-2](#).)

**Figure B-2 Edit DWORD Value Dialog Box**

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- Step 10** Click **Decimal**.
- Step 11** In the Value data field, enter the new value in the appropriate units for that parameter name and then click **OK**. See [Table B-1 on page B-2](#) for a list of parameters.
- Step 12** To add another parameter, repeat Steps 5 through 11 for each new parameter.
- Step 13** To change other parameters, repeat Steps 9 through 11 for each parameter.
- Step 14** Close the Registry Editor window.
- Step 15** Reboot the server for the new changes to take effect.

