

BOOKMARK FACT SHEET

What to do if Bookmark Slows down

August 2021

The Bookmark system is designed to operate as fast as it can, given limitations imposed by the computer and network.

Several factors affect speed:

- Broken database
- Computer performance
- Network bottlenecks

Broken Database

With use, the database file can become cluttered with unused data segments and even broken internal indexes. If indexes break, a "brute force" method of searching is used...far, far slower than using the indexes.

Borrowing and returning books can become very slow along with other things such as just opening a module. Even Commit or Malformed Database errors can result.

Databases can be de-cluttered and broken indexes fixed.

The best solution is to re-build the database then re-create the indexes. Instructions on how to do this can be found in the "Malformed Database Error" fact sheet.

Computer Performance

The computer itself can influence speed, although it is not as great a factor as might be expected.

Memory:

The more memory (RAM) the faster the computer can work. The ideal amount of memory depends on the version of Windows. For any 32-bit system, the maximum is 3 Gb. This is ideal. Bookmark may work in 2Gb but may not with any less.

64-bit systems benefit from even more memory. 4Gb is the minimum for 64-bit. 8Gb is faster but more memory beyond 8 may not make much difference in speed.

Bookmark itself only uses less than 1Gb of memory at most and often far less. The Windows operating system, however, uses as much as it can.

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Having many programs open at the same time can slow the system.

CPU Speed:

The central processing unit of the computer can affect speed. The faster the better. Modern desktop PCs are usually over 3Ghz. Some laptops are below 2 but make up using cores.

CPU Cores:

The CPU itself may consist of "cores". Each additional core can make a profound difference. The more cores the faster the computer can "compute". The number of CPU cores has the biggest influence on speed.

Modern desktop units often have 4, 6 or 8 cores. 6 to 10 year old computers may have 2 cores or even one. Even lower-priced modern laptops may only have 2 cores.

The more cores the better.

A 1.60Ghz laptop with 8 cores and 8Gb of memory can be almost as fast as a 3.40Ghz desktop with 4 cores and 4Gb memory.

Storage Devices (drives):

Solid state drives are considerably faster than regular hard drives.

Network Bottlenecks

Bookmark sees the network as a "drive". A great deal of data is exchanged across the network so the connection speed can have a big impact on performance.

The network to which the computer workstation is attached has a set of speeds for various components.

The network connection in the workstation itself has a speed. Older computers (5 yrs or more) may be limited.

Wi-fi connections are always slower than cable. Wi-fi speed varies a great deal, too. Some Wi-fi devices are faster than others. Cable is always much faster than Wi-fi. Where possible, connect to the network via Ethernet cable.

The speed of a network server or Bookmark host is not a big factor in speed !

Cables are plugged into "switches". These have a speed. Older switches are slower.

The traffic on the network can have an impact. If many computers are being used at the same time can bog down the entire network.

The network itself has an overall speed. The term "bandwidth" is often used. Bandwidth=speed. Less bandwidth is less speed.