



Messaging and Collaboration Servers

IBM® Lotus® Domino® Server

Microsoft® Exchange Server

Messaging and collaboration servers, such as IBM's Lotus Domino server and Microsoft's Exchange Server, are responsible for managing the flow of various forms of interactive communications among users, enhancing the dynamics of those interactions. However, for maximum effectiveness, a highly responsive environment must be maintained. This can be challenging, especially when high numbers of large interactions are occurring among users.

Heavy loads impact efficient collaboration

When the volume of user transactions increases greatly, the time required for a user to view his or her schedule, contacts, and tasks, or to send or receive e-mails, etc., may increase from a fraction of a second to many seconds. Web page renderings may take many times longer than usual to complete. These latencies begin to erode a user's sense of productivity, distracting him or her from the tasks at hand.

The disk I/O bottleneck

A common cause of these conditions is a disk I/O bottleneck. Most user interactions require access to storage devices. As the volume of data being retrieved and stored by the server grows, the storage subsystem begins to constrain the system's overall performance. Although Lotus Domino and Exchange Server feature internal caches, their effectiveness is reduced as the number of users and I/O transactions increase.

Use processor and memory resources to improve performance and productivity

SuperCache 3® alleviates latency problems by removing the disk I/O performance bottleneck. It inserts itself into the disk I/O path at the block level, and caches the most active blocks of data on the logical disks selected. When deferred-writing is enabled, SuperCache 3 significantly improves server performance, and dramatically reduces user request latencies, resulting in a much more satisfying and productive user experience.

For maximum benefit, "hot" data (such as the stores), and the system paging file should be located on a separate logical disk (disk partition or storage volume), which in turn should be cached by SuperCache 3. SuperCache 3 trades CPU utilization and physical memory for disk I/O bandwidth. Generally, the larger the cache, the better the performance. Users of heavily loaded Domino and Exchange servers experience latency reductions of ten times or more with SuperCache 3.