

DATABASE BY DESIGN, INC.

Growth Happens

Things to consider when moving from a single user to a multi user system.

When is it Time to Move from One User to Multi-User?

Productivity is key to a successful organization. Productive and efficient systems help us handle growth in business, changing competition, and increased service demands from our customers. Once an effective system is developed, everyone in your organization will want to use it. When this occurs, it is time to make your program accessible to other people. Use this checklist to see if it is time to upgrade to a multi-user database system:

- ✓ People are waiting to use the **one** computer that holds your database.
- ✓ Copies of your database are put on other computers so that others may **view** the data.
- ✓ Many people do similar tasks, but only one enters information into the computer.
- ✓ You want to give people access to live data over the web, but you also need direct access for the people in your office.

There is More to Upgrading than Just Increasing Users

Moving from a single-user database to a system that allows several people to access the information requires more than just making additional connections available. Make sure you have an effective plan for expanding your database system. Otherwise, you may spend time and money to increase your database capabilities, but fail to realize its true potential. Plan carefully to avoid these drawbacks when adding users to your database:

- ✗ Each time you increase the number of users, your system slows down.
- ✗ Productivity falls as you add people to your system.
- ✗ Users consistently get “Locked Record” error messages that prevent them from accessing the same information.
- ✗ Expanding a database only designed to support one user can actually cost more money.

Ensuring Success: Don't Skimp on Hardware

The hardware configurations that make up your computers and your network can have a big impact on the effectiveness of your system. Make sure that these components are maximized for optimal performance:

Server (holds the database):

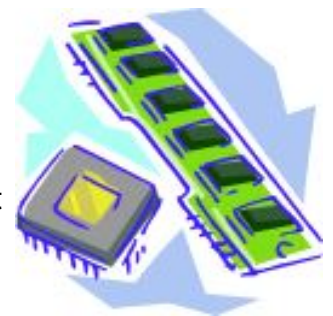
- ✓ Make sure that this computer has plenty of operating memory (RAM).
- ✓ Storage space (the hard drive) is very inexpensive so don't hold back.
- ✓ The speed of the computer (CPU), hard drive, and RAM have a significant impact on the responsiveness of the server.

Client (users who share the database):

- ✓ Make sure that these computers have plenty of operating memory.
- ✓ The speed of the computer (CPU) and RAM have a significant impact on how fast the program responds to user requests.

Network:

- ✓ Check with the person who manages your network to make sure it is optimized to handle your extra users.



Ensuring Success: Make Sure Your Database is Ready for More Users

Adding users to your database system puts new demands on the program. It also creates new situations that didn't exist previously. For instance, what if two people want to review the same information at one time? Databases are made to only let one person change data at a time so that there aren't any conflicts. However, waiting until information is released by another person before you can continue working will remove the benefit of adding users.

Your database programmer can make changes to allow multiple users access to the same data, and still prevent any conflicts. These adjustments will enable you to increase your productivity by adding additional users to your system. Here are some additional areas that your database programmer should check to make sure that your system is ready for multiple users:

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| Where does the programming exist, on the Client computer or the Server? | Some database systems serve information by "filesharing". This is very inefficient and can result in increased network traffic and an overall slowdown in the system. It's best to have a database system that enables the developer to control whether the programming is executed on the Client computers or the Server. This level of control helps the developer optimize the processing of your information. |
| How will passwords be managed? | In many cases, not all of the people who will use the database will need access to all of the data. Some of the information will need to be protected so that unauthorized people can't view or modify it. Accidental changes to data by unauthorized users can cause expensive problems. |
| How will program updates be conducted? | Some database programs make it necessary to manually install every programming update on each computer that accesses the server. This can be very cumbersome, time consuming, and problematic. If a user misses an update and uses an older version of the program, data can be mis-entered or corrupted . It's important to make sure that all users are updated in a timely and efficient manner. |
| How will web access be handled? | Sometimes, the additional users of your database are coming from the Internet. Managing who has access to what information becomes very complicated. Making your database system accessible via the web can increase the complexity of expanding your system. Make sure that the connection between your web server and your database server is secure and the programming is optimized for delivery over the web. |

At Database by Design, we can help you ensure that the expansion and growth of your database systems are a success. Please consider us as your resource for expanding your information management programs.

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(Previous Newsletters)

Next Month's Topic: Going Cyber - What kind of database do you need for your web site?