

RE: Storage server

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- *From:* Ryan Hanisco <RyanHanisco@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx>
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Patrick,

If you are going to be using this for virtualized servers, you are probably pretty firmly in the SAN neighborhood. You'll find that there are a ton of options for scalability and that the current SAN software will give you vastly superior performance. Specifically on transfer rates.

With a server, you are constricted by the speed and design of your network. This means if you don't have very good switches, the correct QoS, and low contention, the best you'll get on the transfer rate is 10G (if you've spend that kind of money) or 1G with a pretty normal switch. Even if you team the NICsm you're looking at 1G inbound — slap a snffer in there, ARP only advertizes one NIC in the Team, menaing that inbound traffic can only find one NIC; remember that switches doesn't care about IP address, the forward by MAC address, thus use their ARP tables for lookup.

With a SAN, you have fiber connections into dedicated data switches that, these days, connect at 4G. With multipathing, you even have more redundancy and throughput options (though you usually get a spanning tree blocking state if you don't configure STP QoS.)

Last week I priced out a small 5TB (Native – before RAID) SAN from EMC with the chassis, drives, licenses, installation, data switches, and support for just over \$68k. The prices have really come down and there are cheaper options, but I wouldn't suggest straying from EMC unless you are going to something truly large.

DO look into that as an option if this is somehting to drive production or anything mission critical — especially SQL.

Hope this helps.

—

Ryan Hanisco
MCSE, MCTS: SQL 2005, Project+
Chicago, IL

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RE: Storage server

"Patrick Tang" wrote:

Hi Ryan,

Thanks for your reply. The full story is we are planning to virtualize our existing servers, and therefore we decided to centralize the data. Basically, we've looked at few different options, and they are pretty much the same idea. I personally not prefer SAN box because of the Flexibility and Scalability, unless if we can spend big money.

Whereas if we use a storage server, we can easiliy upgrade the system performance. The only drawback is we are not too sure which microsoft product can turn a server into a SAN function storage server.

Would you know anything about that?

Patrick

"Ryan Hanisco" wrote:

Patrick,

I am usually the first to look at MS technologies to solve problems, but there are some circumstances where there are much better options. Usually int he storage market, you'll see better performance, scalability, and resilliance from a SAN. There are circumstances where MS storage server presents different options, but these are closing fast.

Looking at the EMC product line is usually a safe bet and they have some good options as you look at adding a NAS for archival and SAN to SAN synchronization.

What functionality are you looking for that you expect Storage Server to provide?

—

Ryan Hanisco
MCSE, MCTS: SQL 2005, Project+
Chicago, IL

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"Patrick Tang" wrote:

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I need some experts opinion about purchasing a storage server. we recently decided to centralize all data (about 600GB, including user/SQL/exchange store). After lots of read and asking question, the answer is SAN.

My question is it is better to have a storage server rather than a closed box (e.g. EMC SAN storage), I personally think a server is more flexible and scalable. Whereas the EMC box might be easier to setup.

If i do want to run a server, what software (OS/application) is recommended?
obviously, i need the storage device appear as a local device on the application server (just like SAN device).

I hope this make sense to everyone.