What is SANergy, How does it work, What's it good for ?

Dimitri Chernyshov Marketing Manager - SANergy Team Storage Business Unit







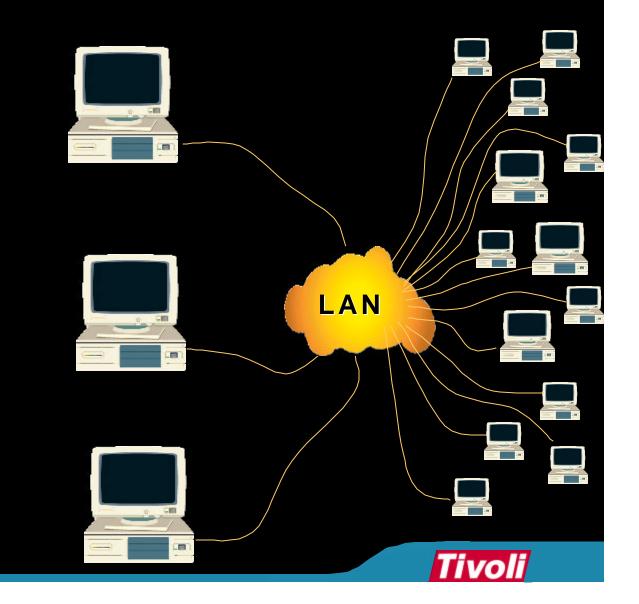
Three Ways to use Storage Area Networks

- 1. Physically Consolidated Storage All your storage in one geographical location
- 2. Partitioned, LUN Masked RAID All computers using one RAID, many File Systems
- 3. Shared File System and (maybe) Shared Files
 All computers using same RAID + File System
 Share same Files between same Apps



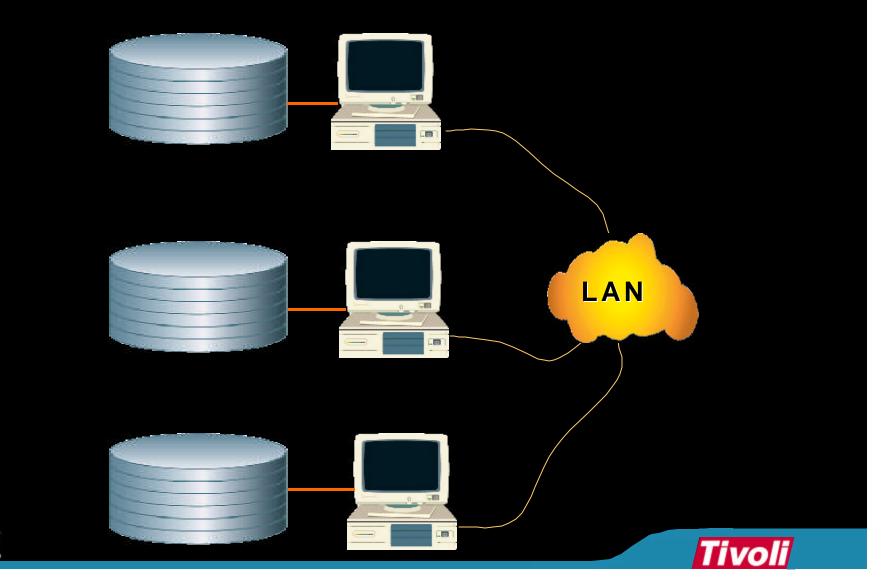


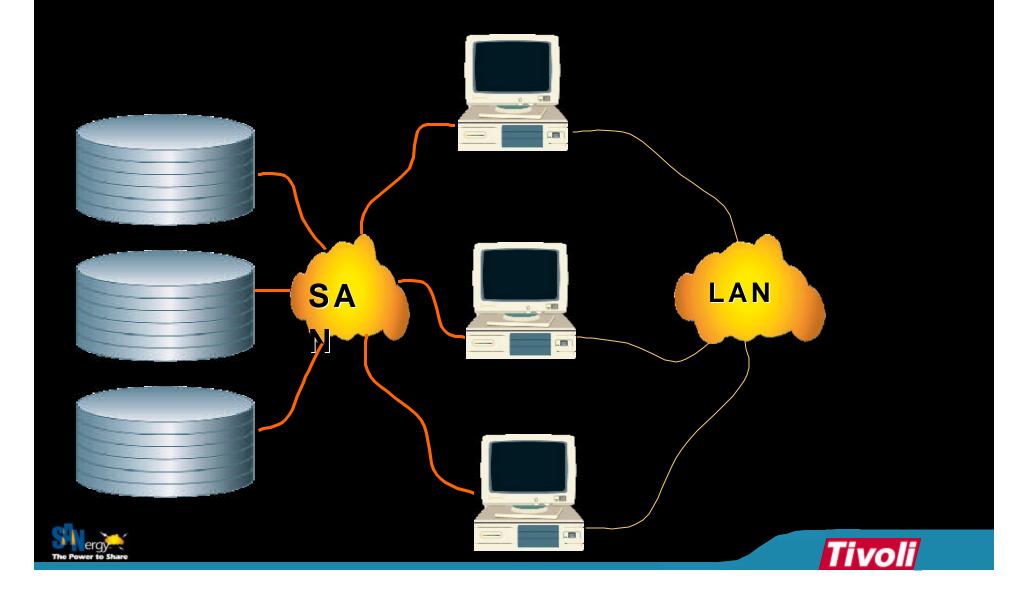
What Business' have now (pre-SAN)

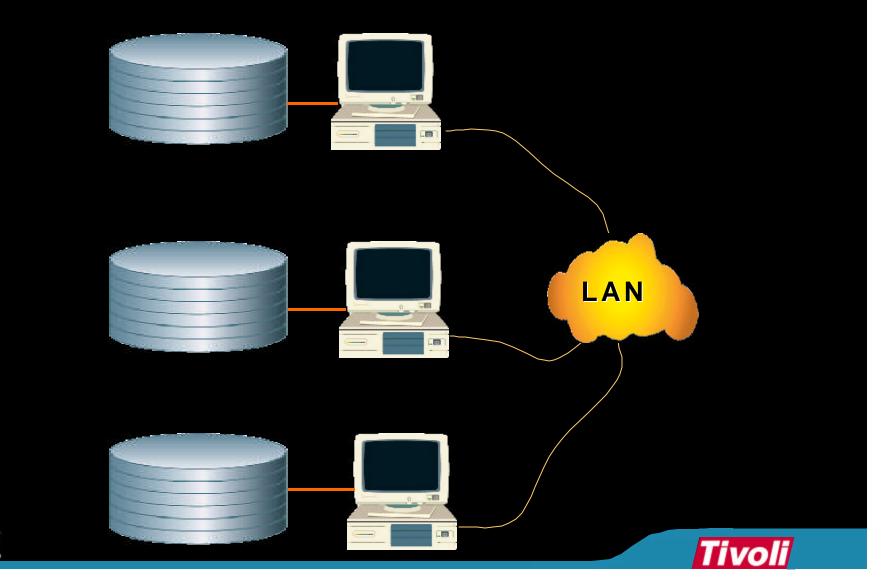


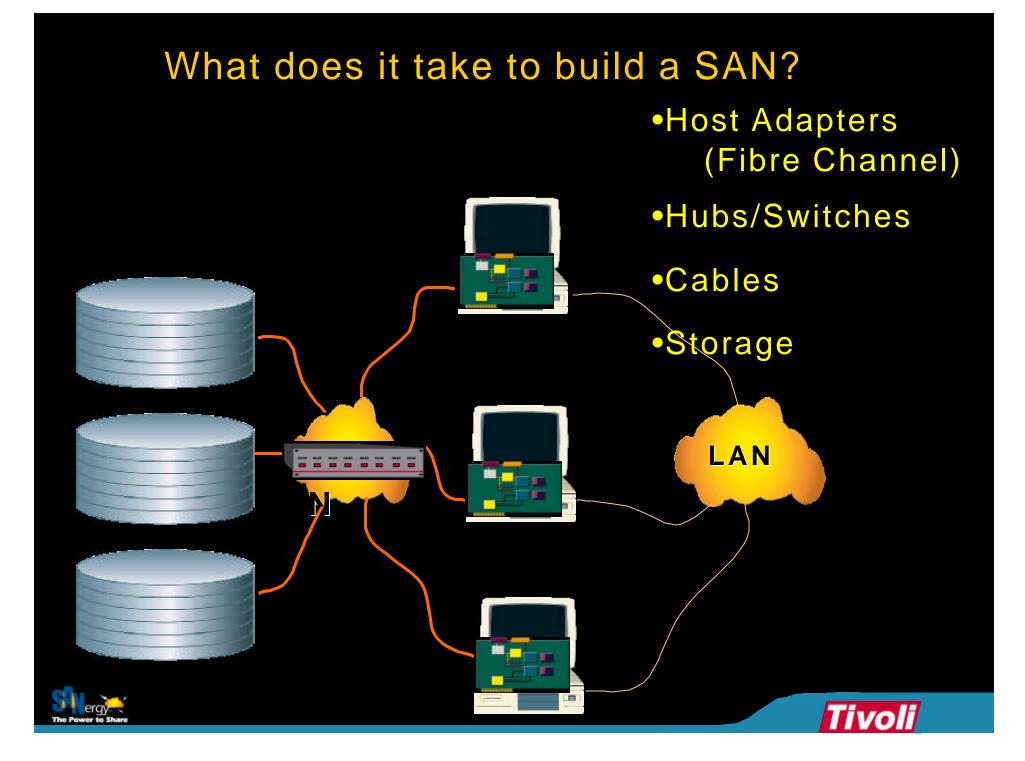


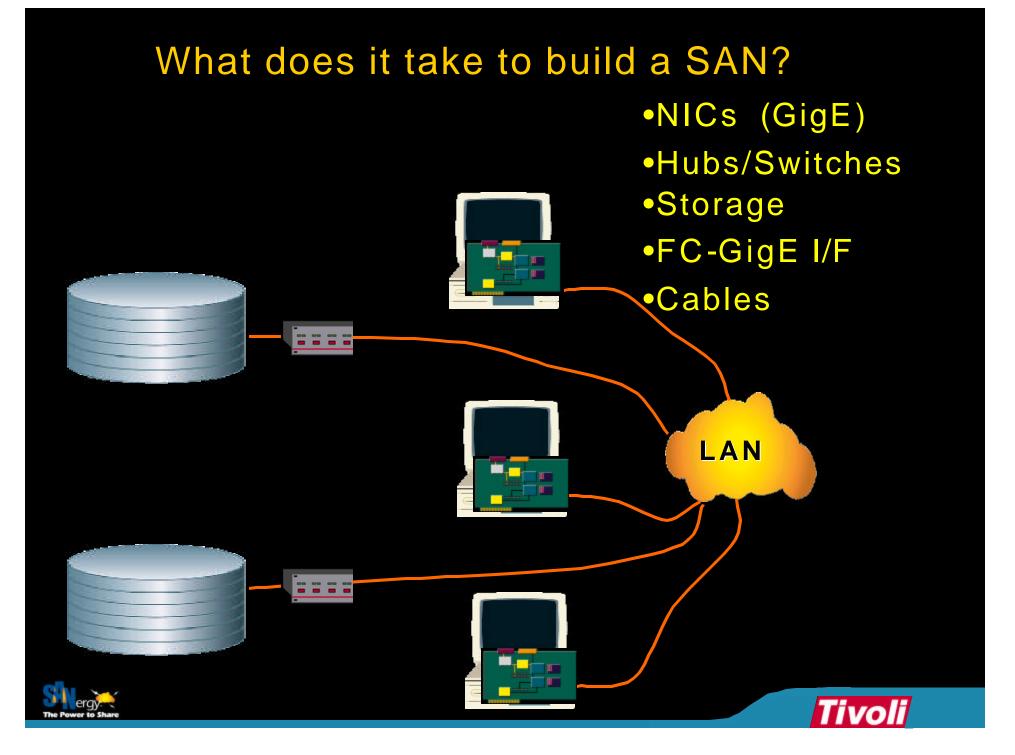
What Business' have now (pre-SAN) Each Computer has it's own Storage Device Heterogeneous 0 **Computer Mix** NT •Low-Bandwidth **Data Sharing** Solaris LAN AIX Tivoli

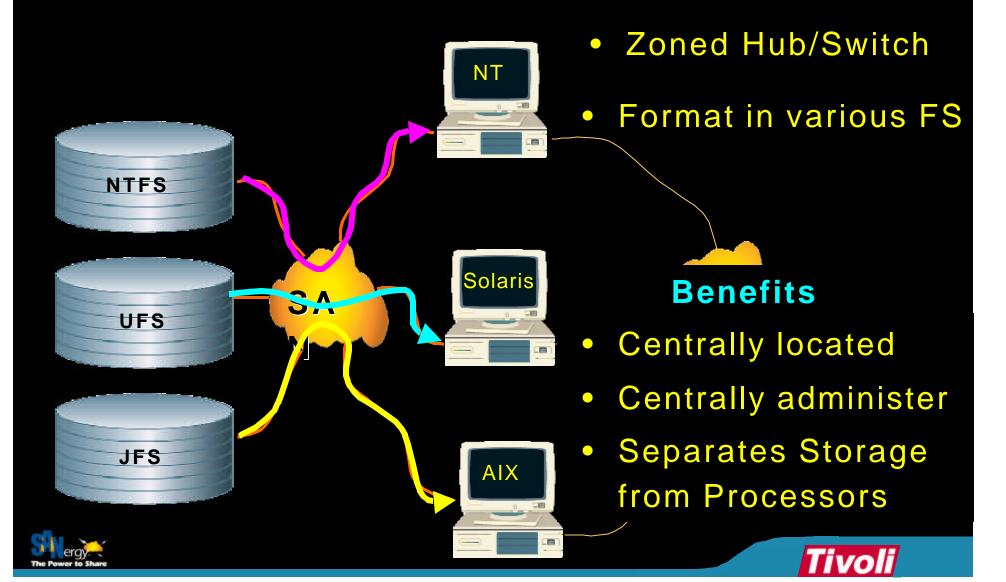




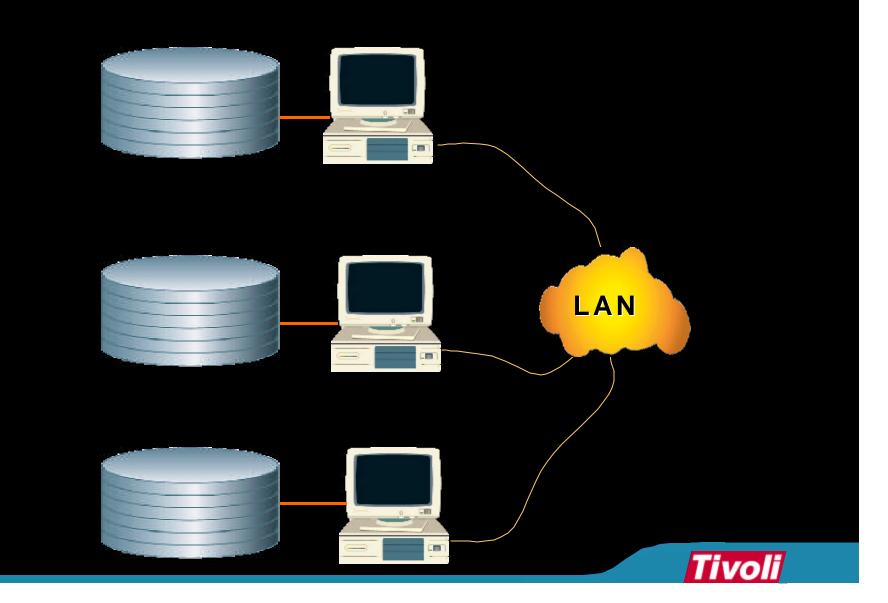






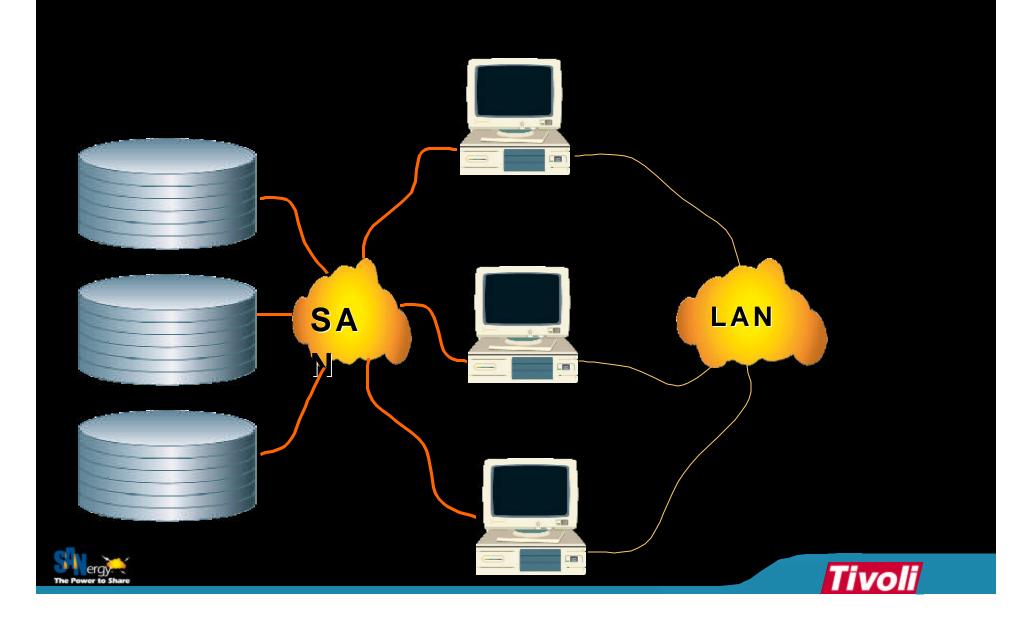


SAN Implementation #2

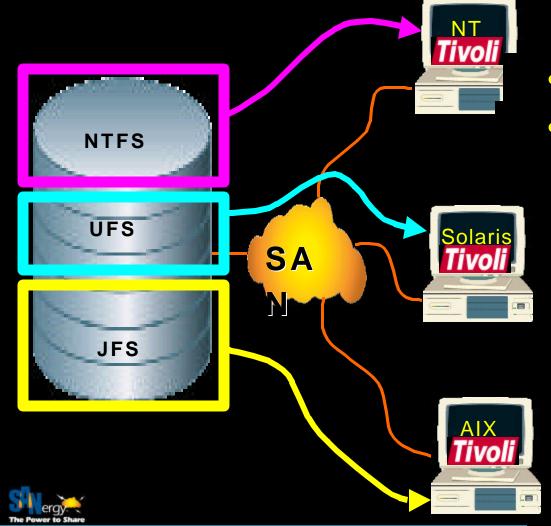




SAN Implementation #2



SAN Implementation #2 "Partitioned, LUN Masked RAID"



- Install LUN-Manager
- Divide storage
- Assign Pieces
- Format in various FS

- Centrally Located + Administered
- Increased Storage Reliability with RAID
- Amortized RAID expense

SAN Implementation #2 "Partitioned, LUN Masked RAID" CONs Allocations not very flexible

Solaris

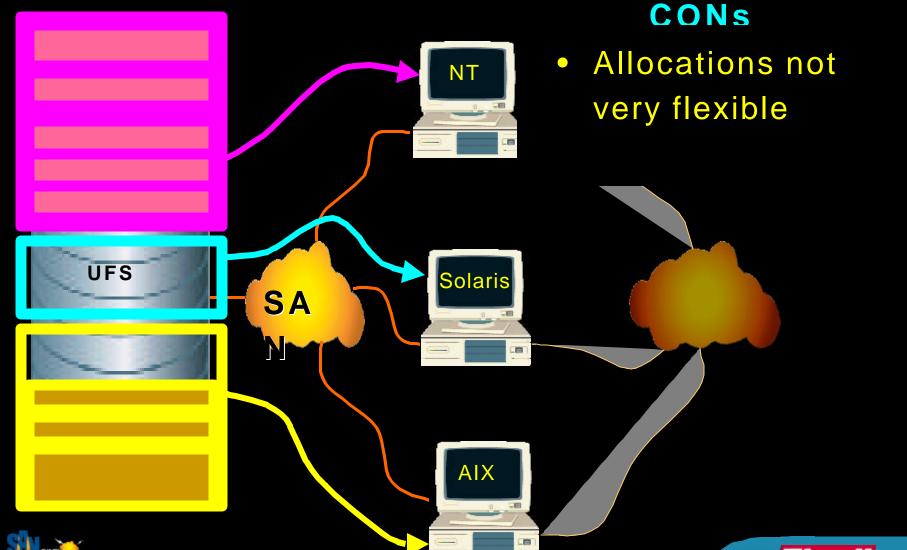
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UFS

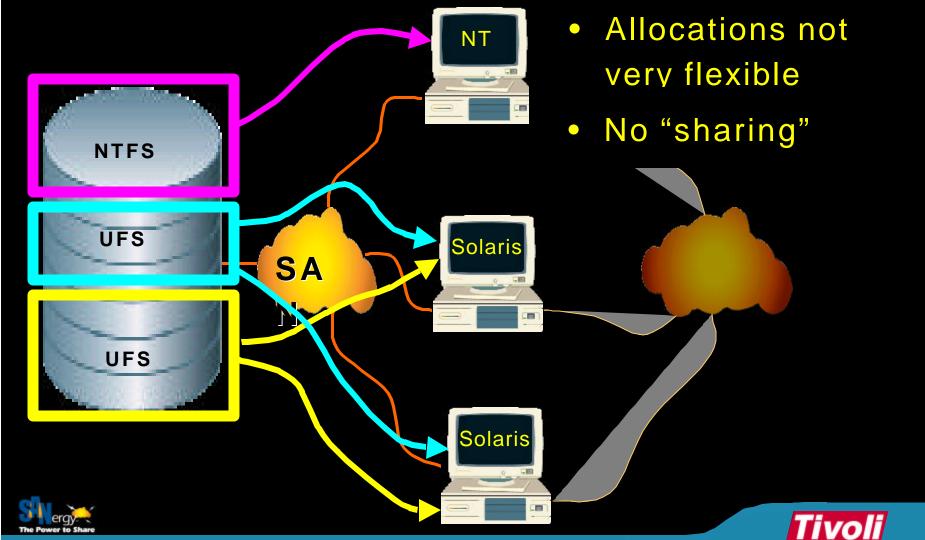
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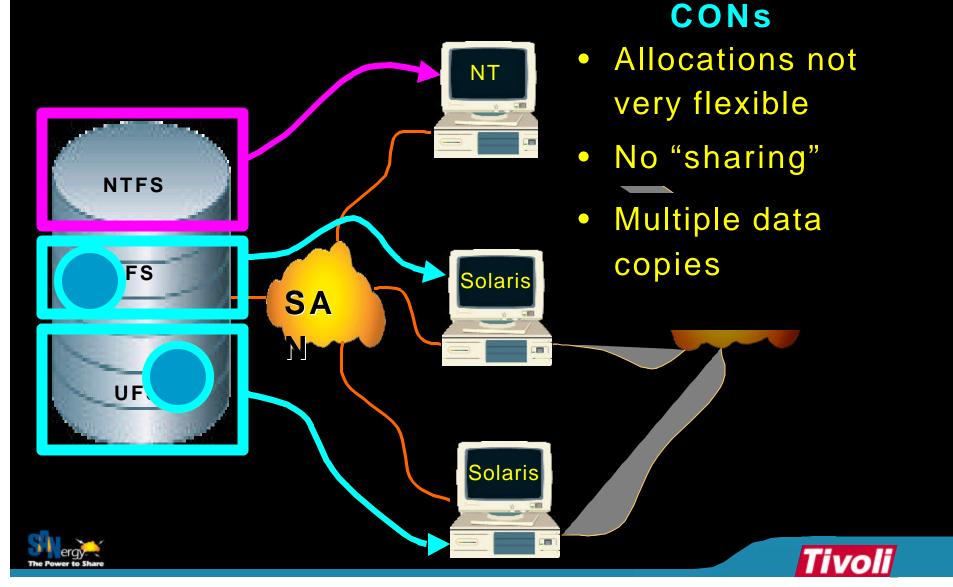




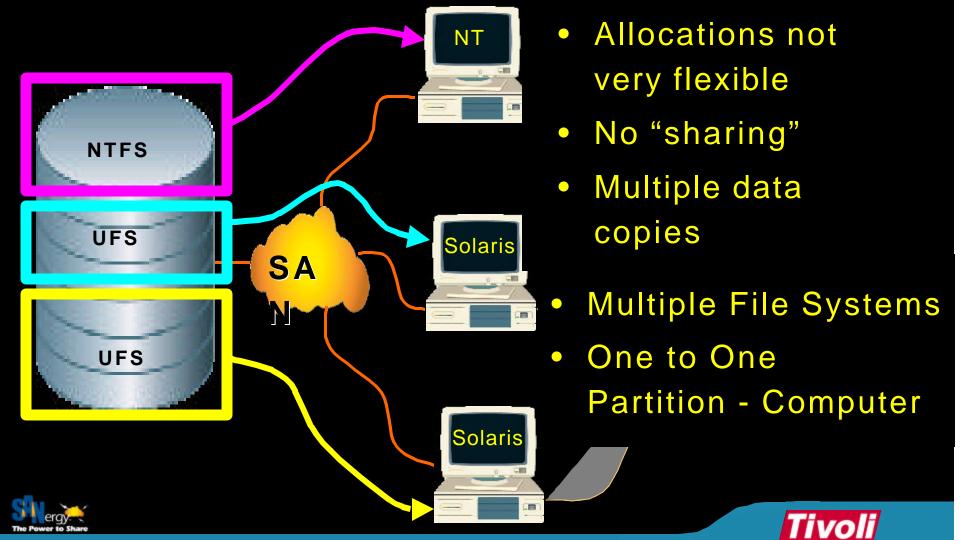
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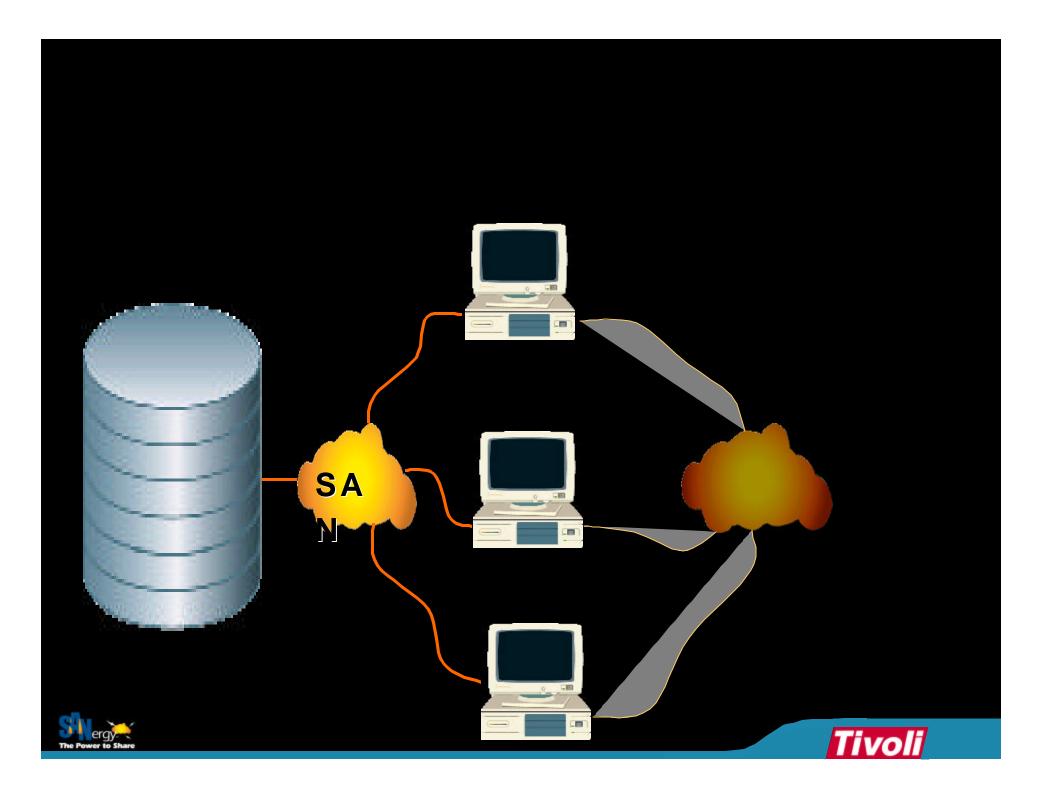


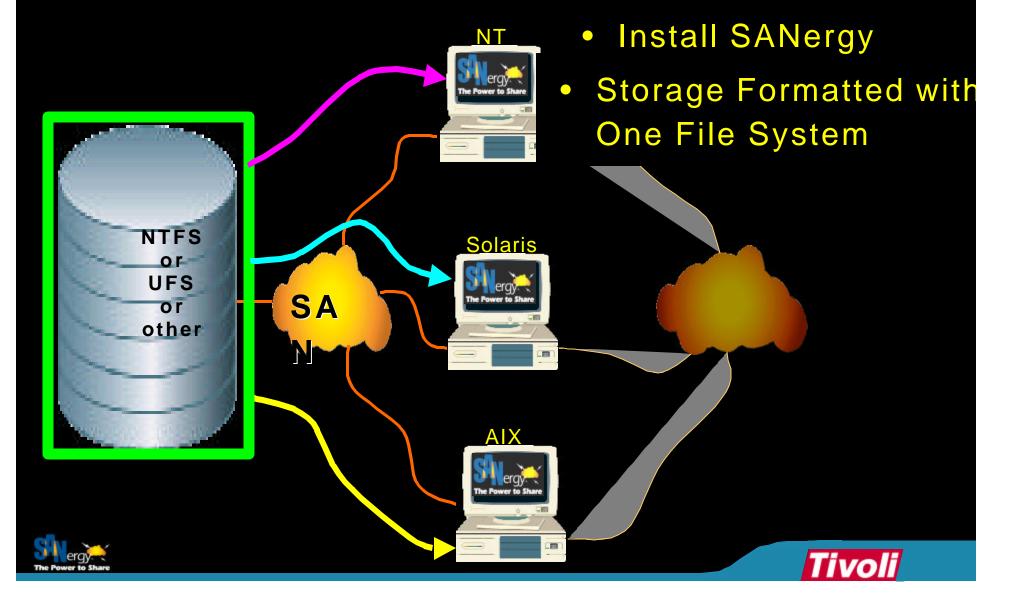
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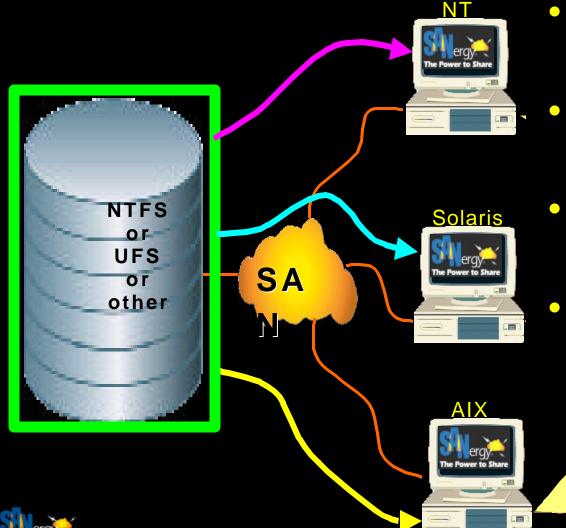


SAN Implementation #2 "Partitioned, LUN Masked RAID" CONs



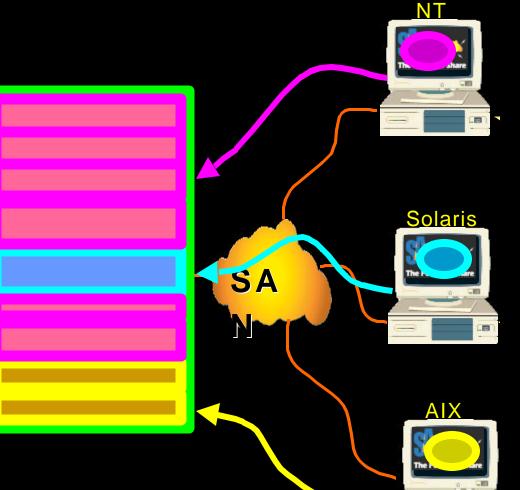






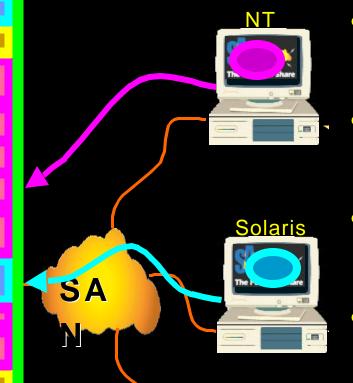
- Centrally Located + Administered
- Increased Reliability with RAID
- Amortized RAID expense
- Only One File
 System to Manage
- Flex Data Growth
 - less rebuilding





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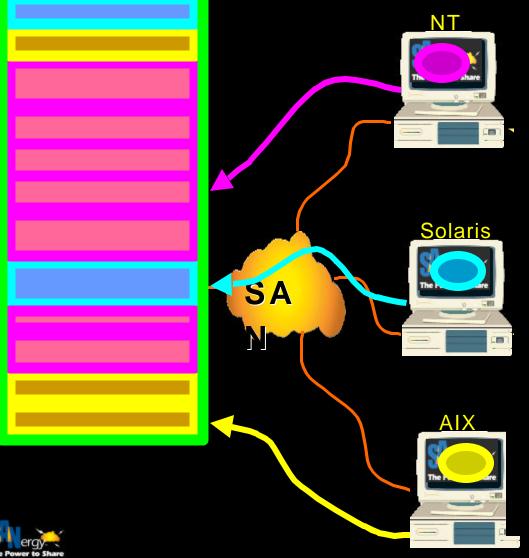




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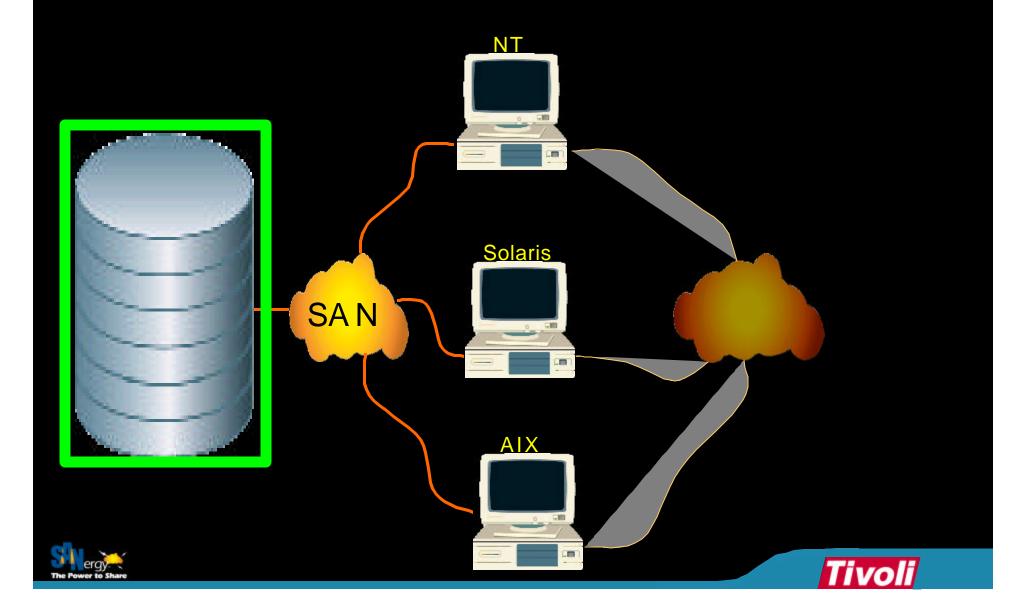


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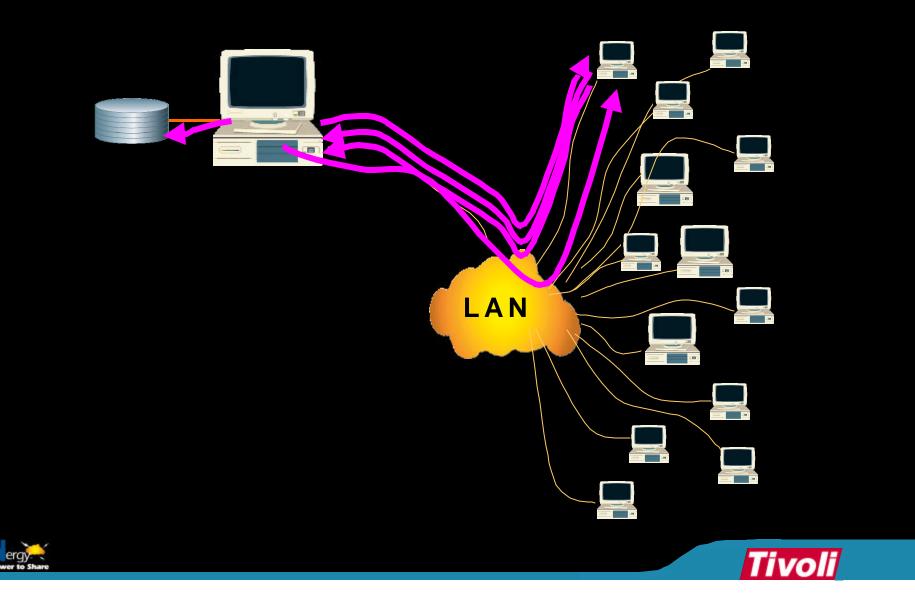
- Centrally Located + Administered
- Increased Reliability
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- Amortized RAID expense
- Only One File
 System to Manage
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- One to Many Partition - Computer

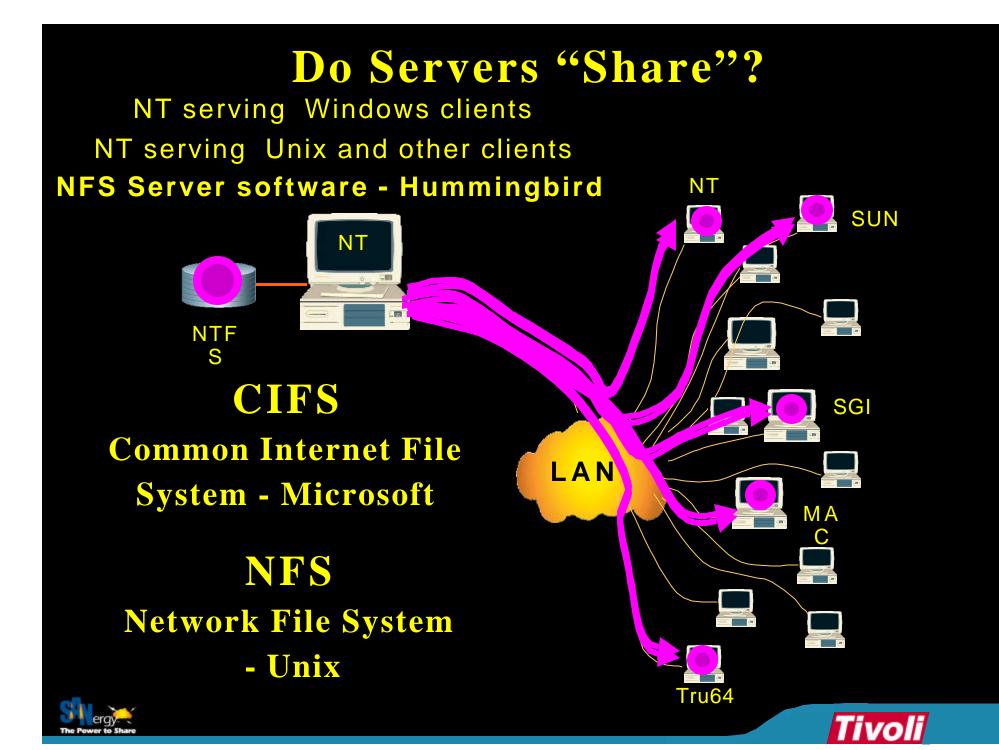
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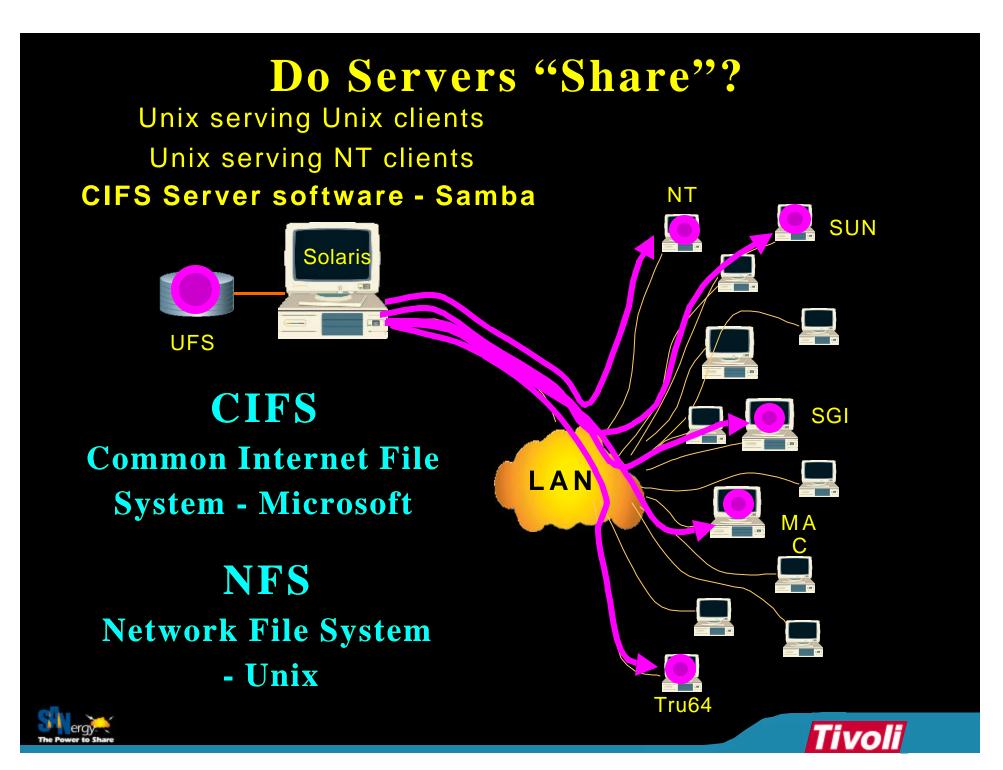
Can the SAN "Share Files"?



How do LANs and Servers work?





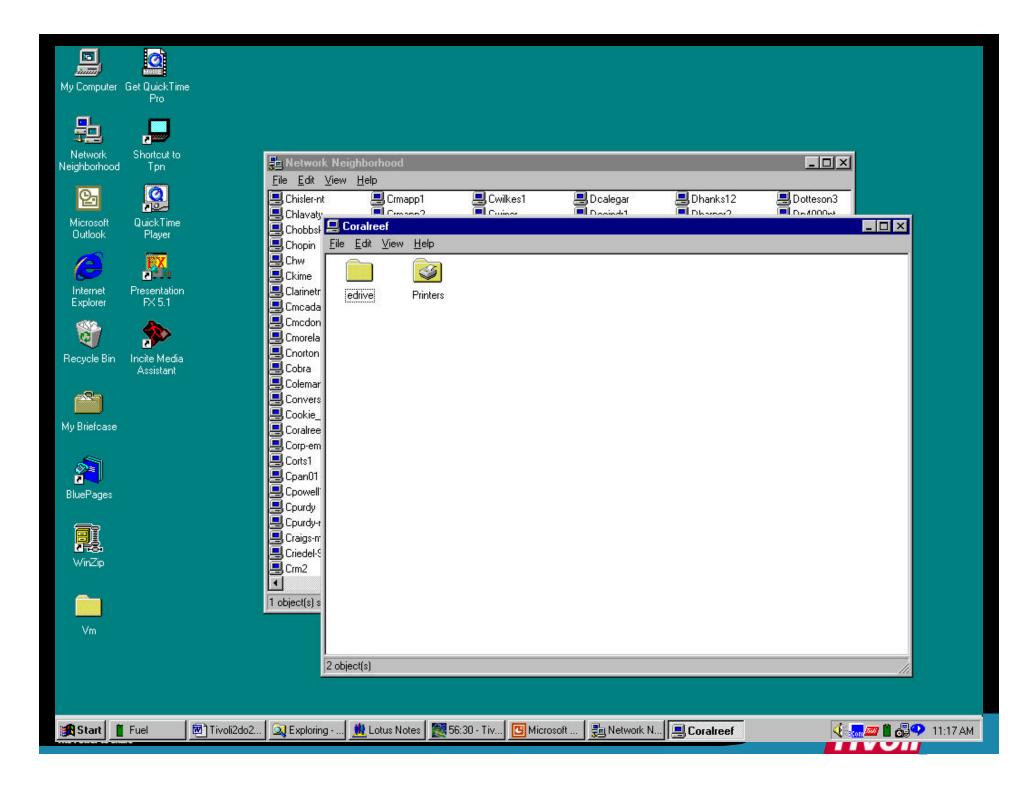


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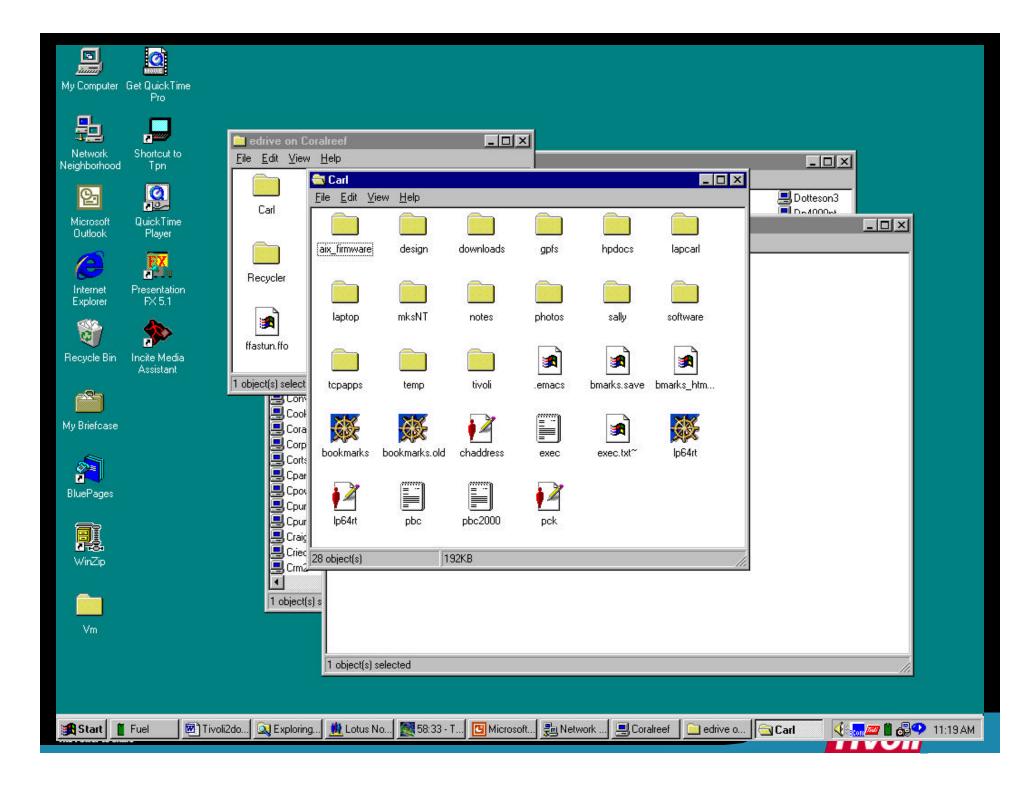
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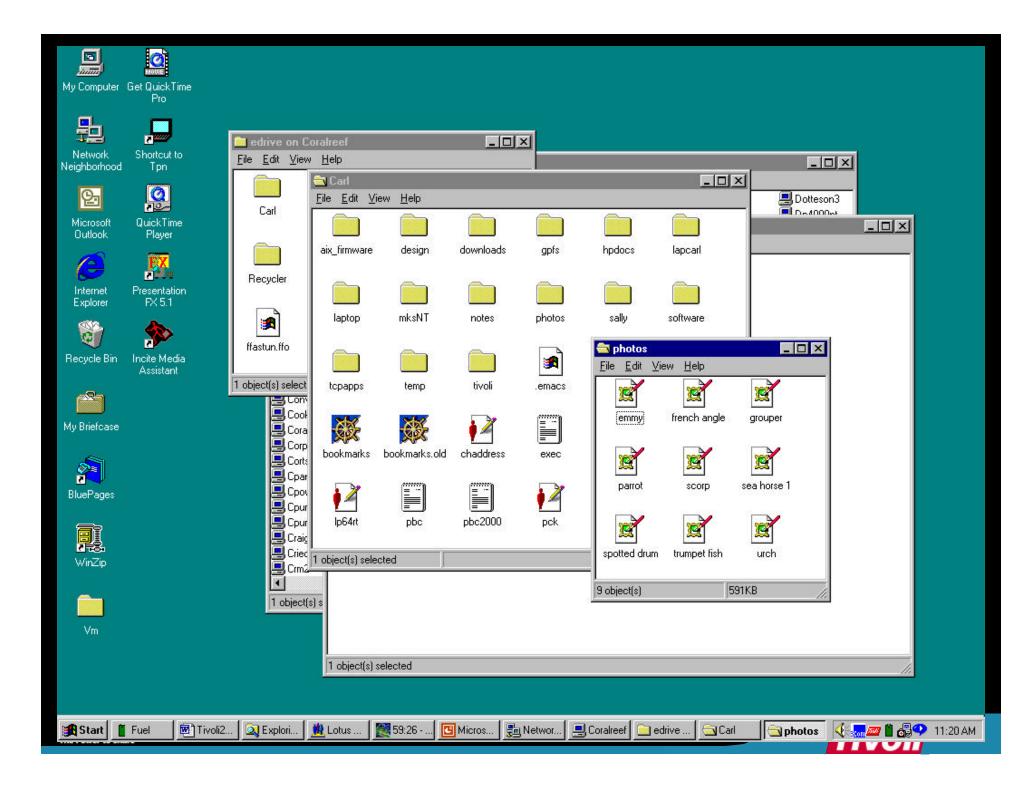
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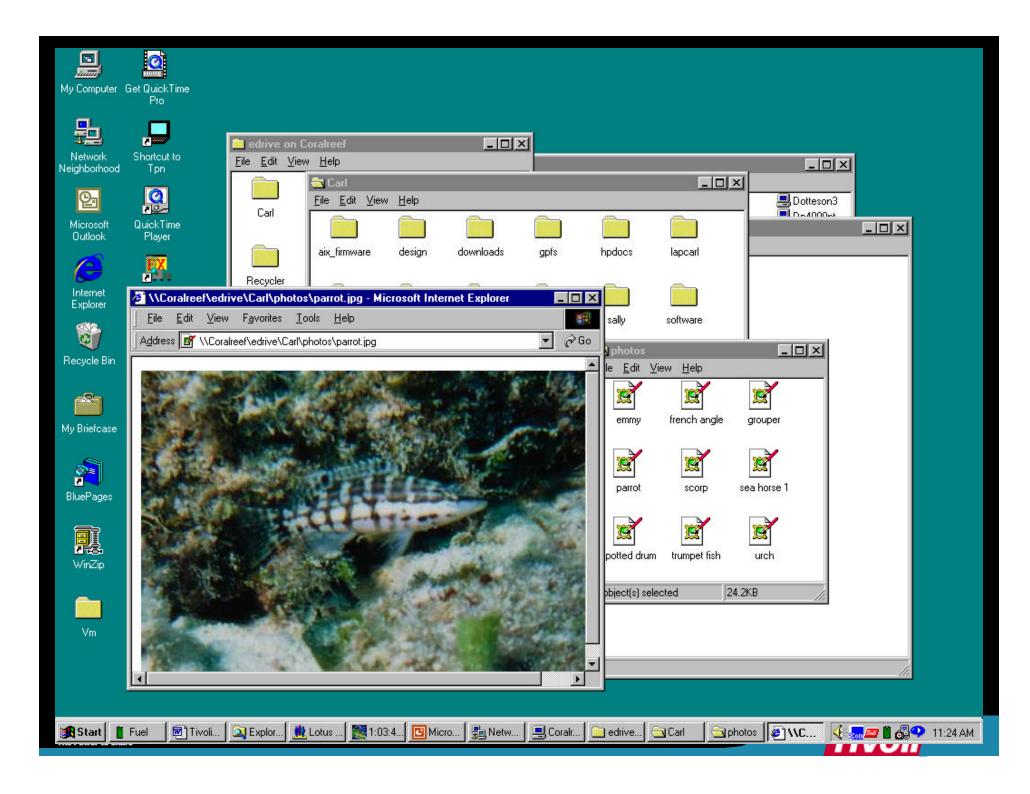
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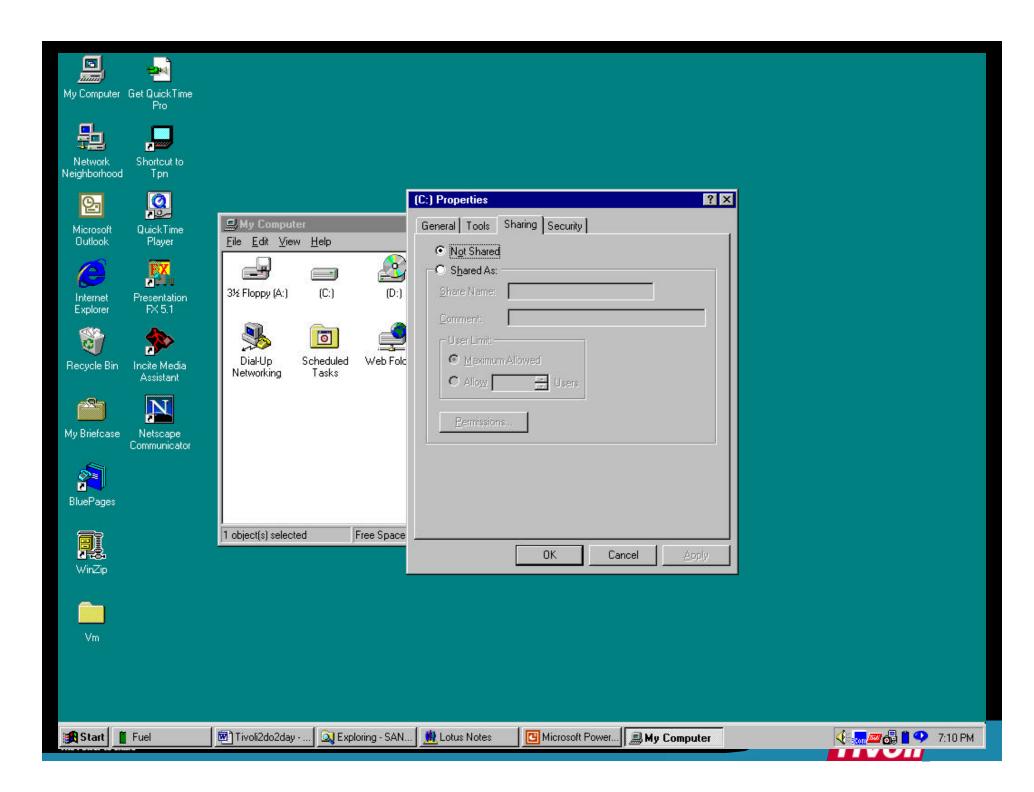
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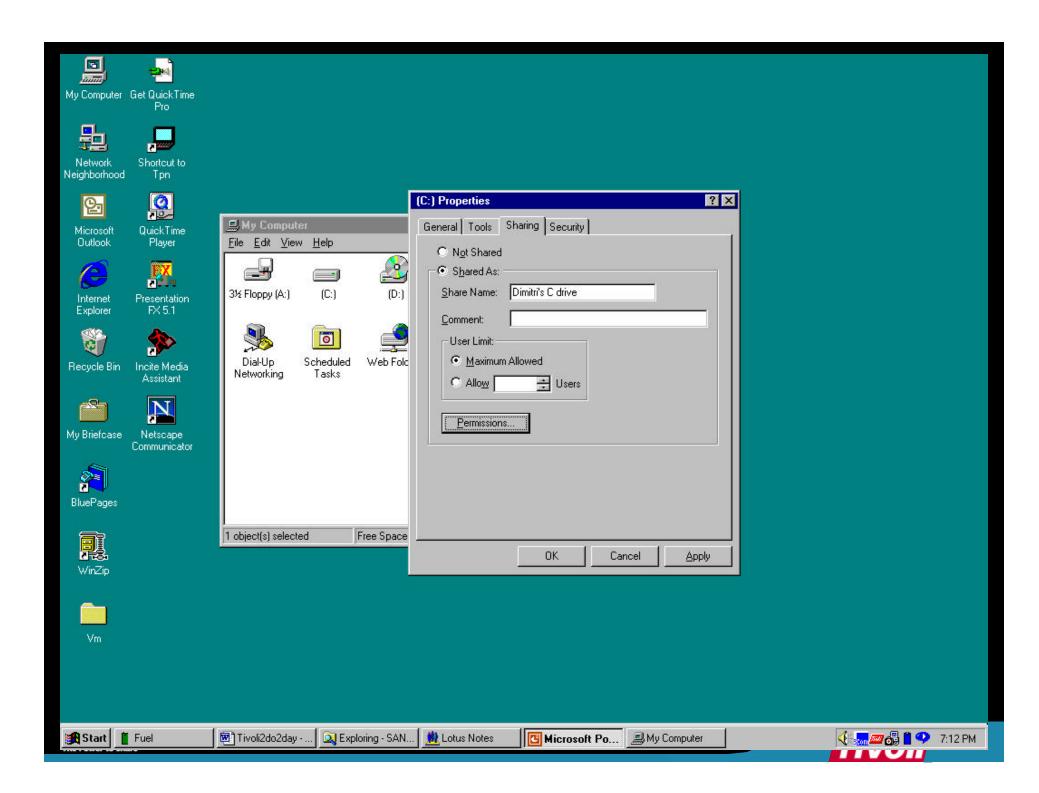
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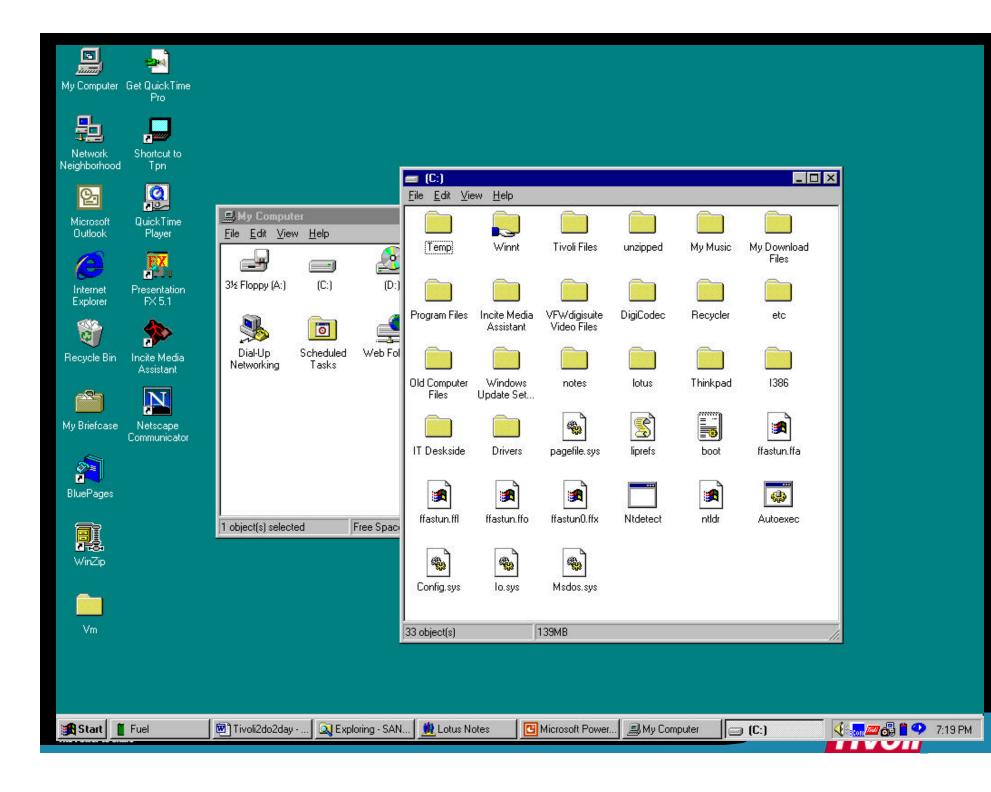
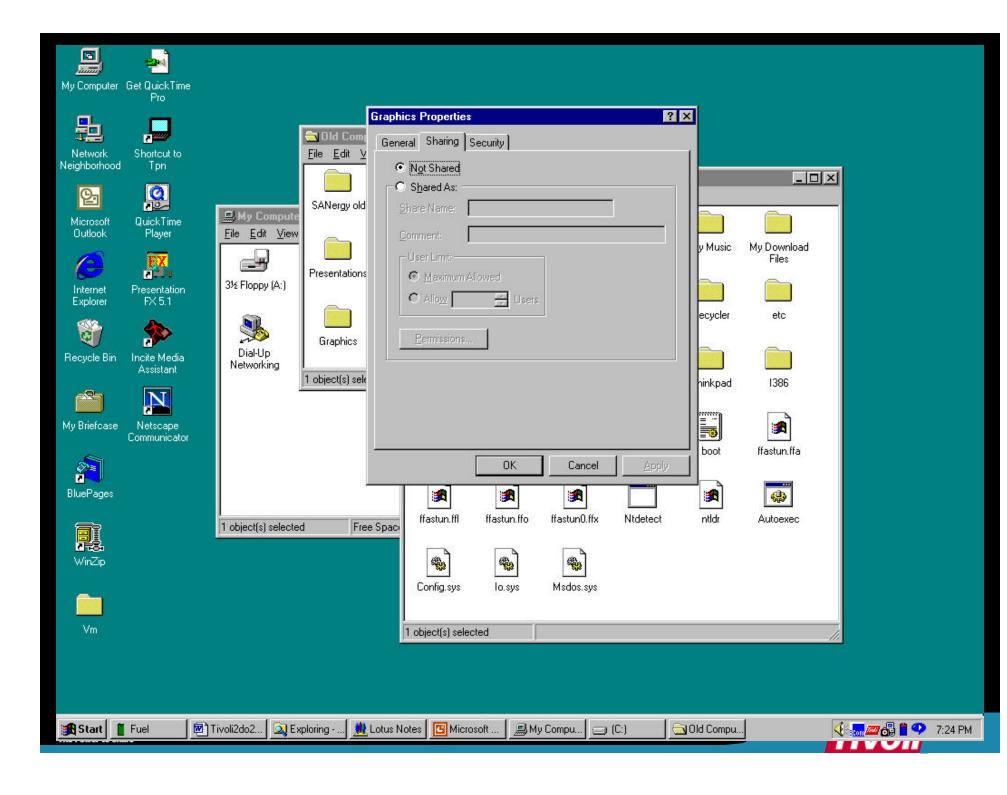


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Conclusion:

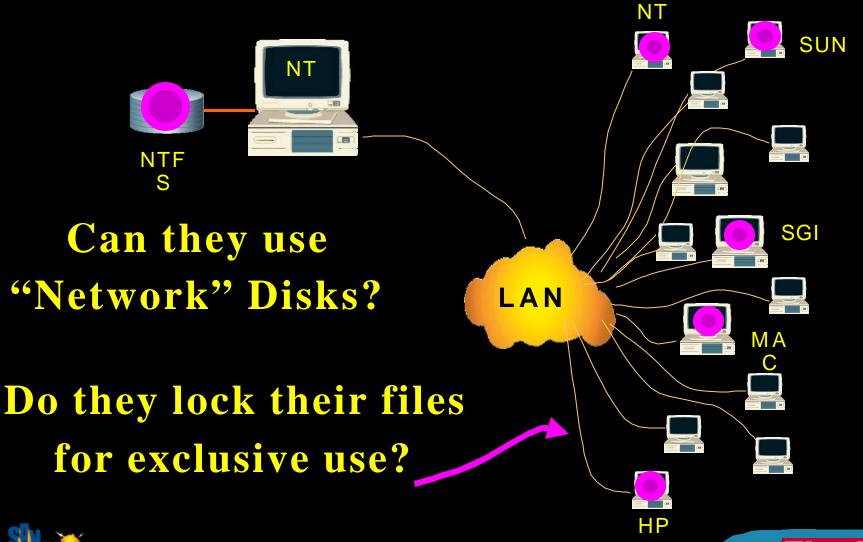
Networks (LANs) Share Files

"Share Files" defined... Multiple computers can use the same files at the same time



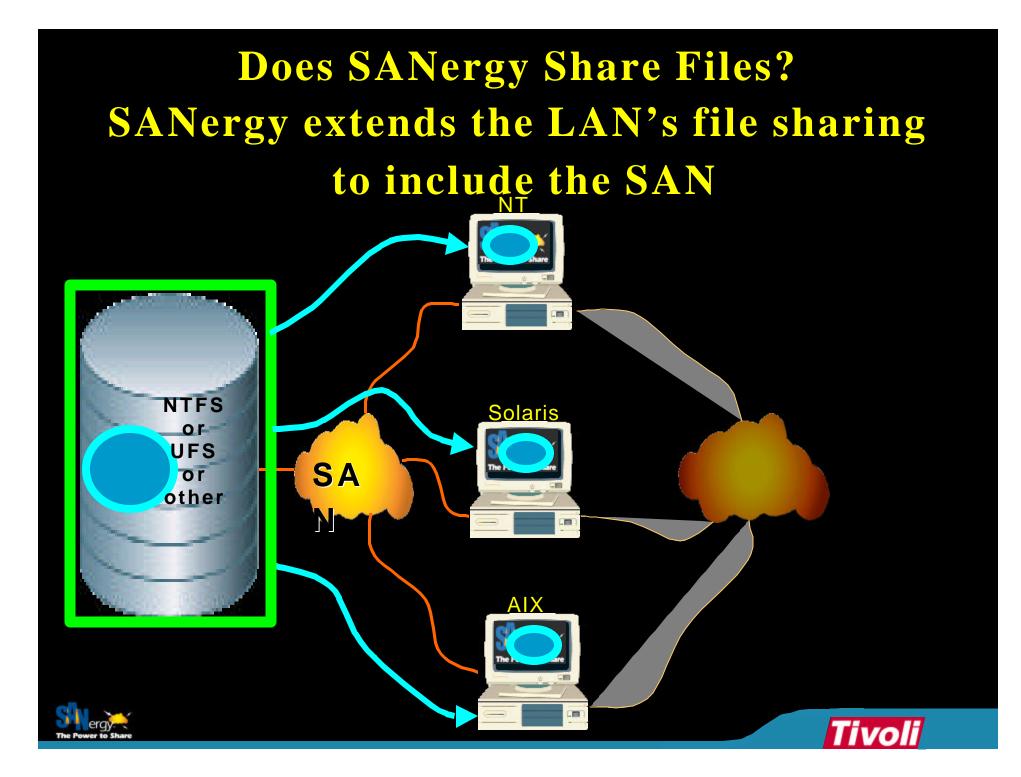


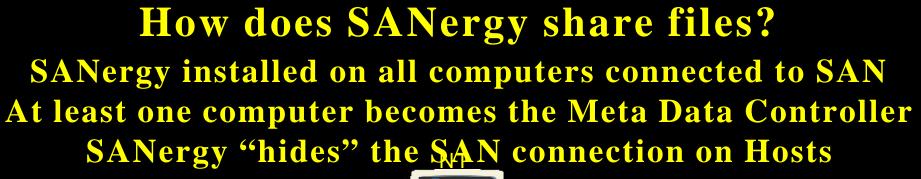
Do Applications "Share Files"?

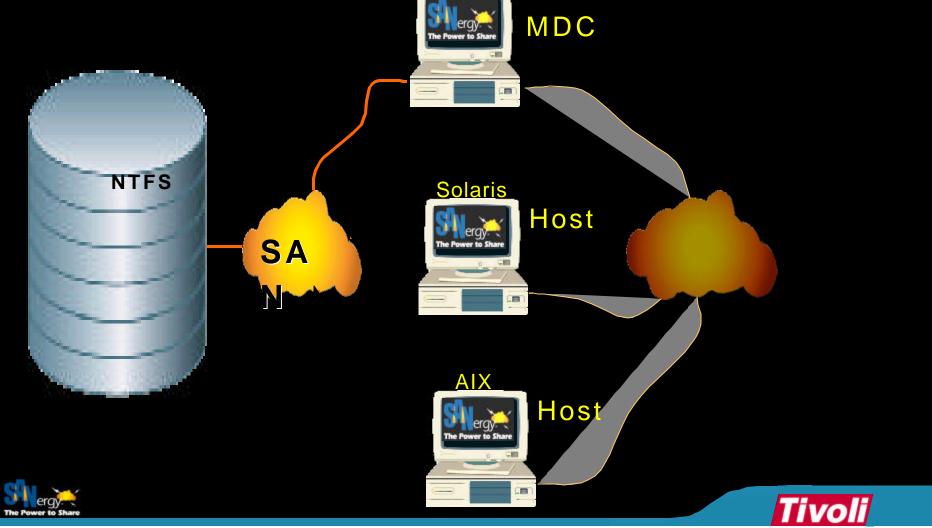


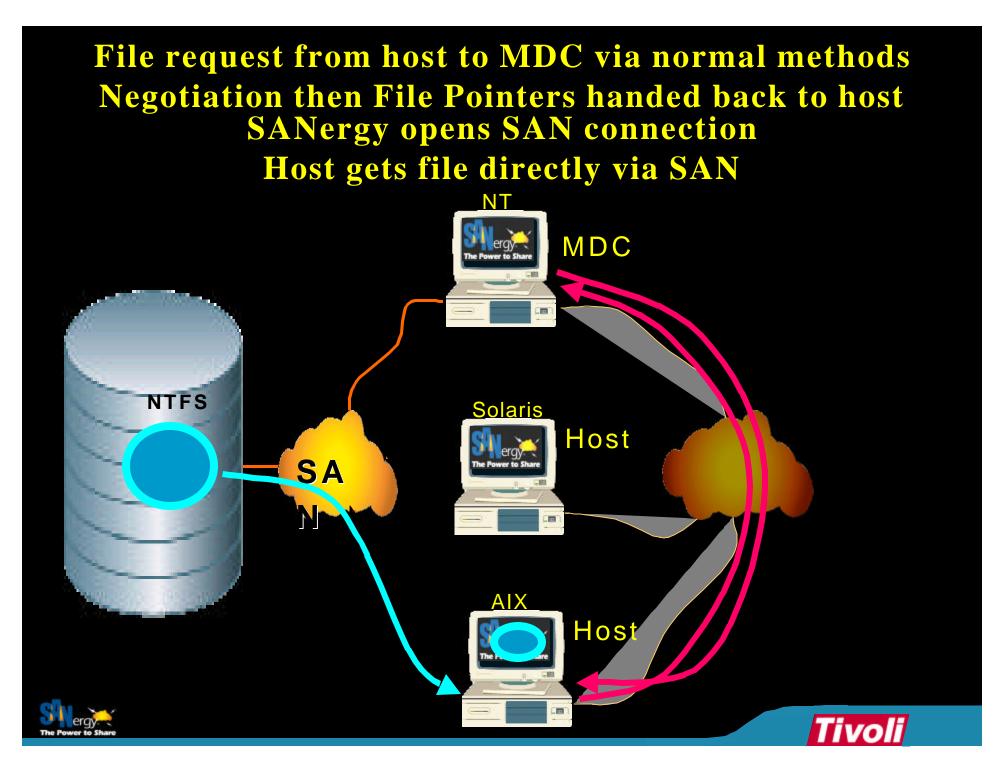






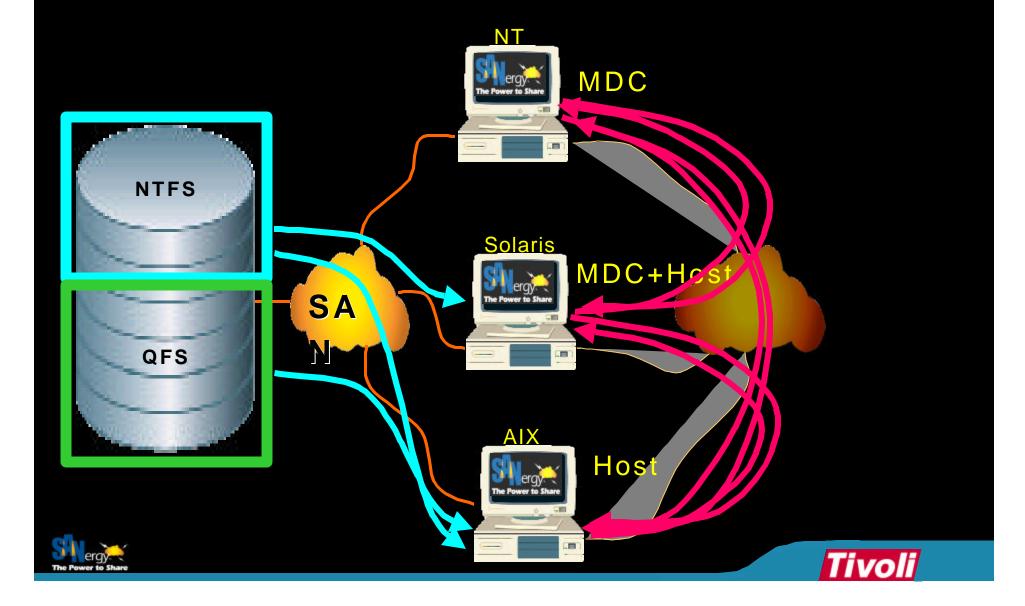






More Typical SAN with SANergy

Multiple MDCs, Multiple Hosts, Multiple File Systems



- greatly simplifies SAN-storage administration
- extends industry-standard networking to utilize the SAN
- broadens increased-data-availability protectio to include any application
- can reduce the total amount of storage required in a SAN

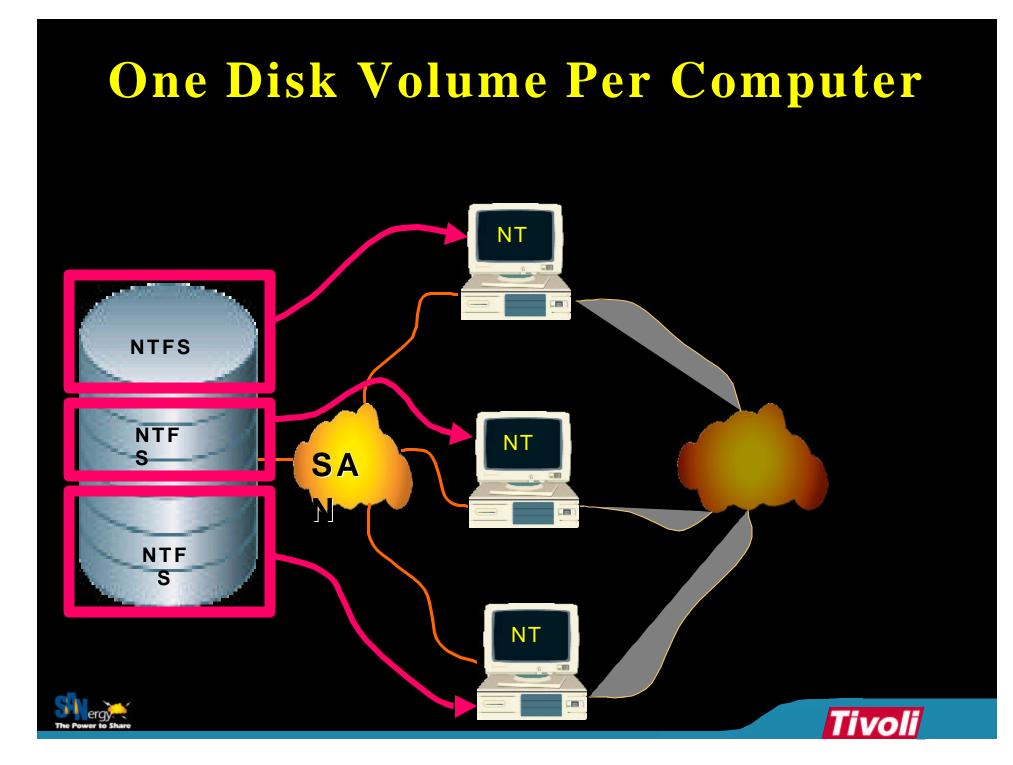




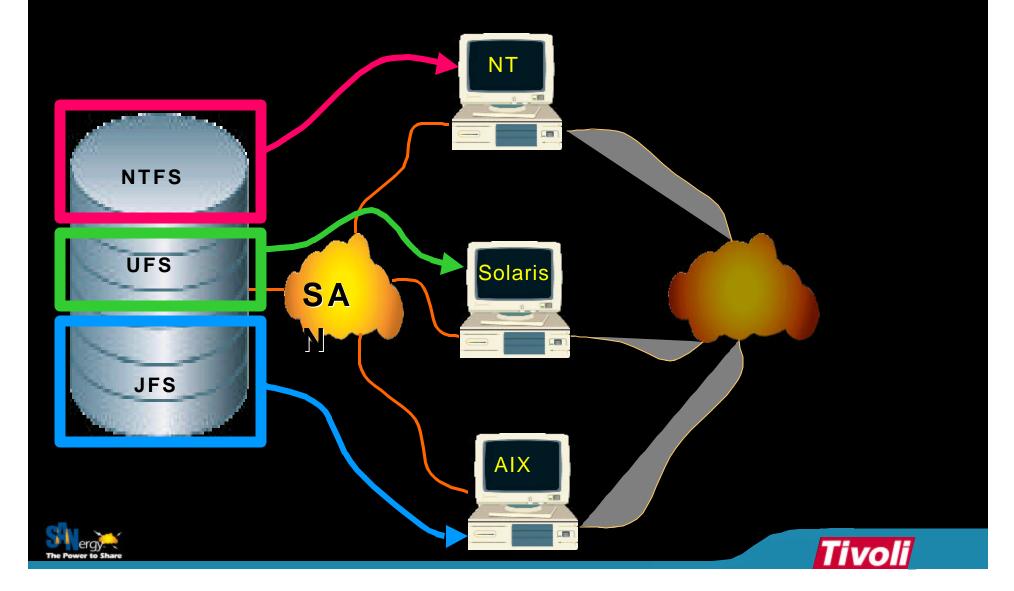
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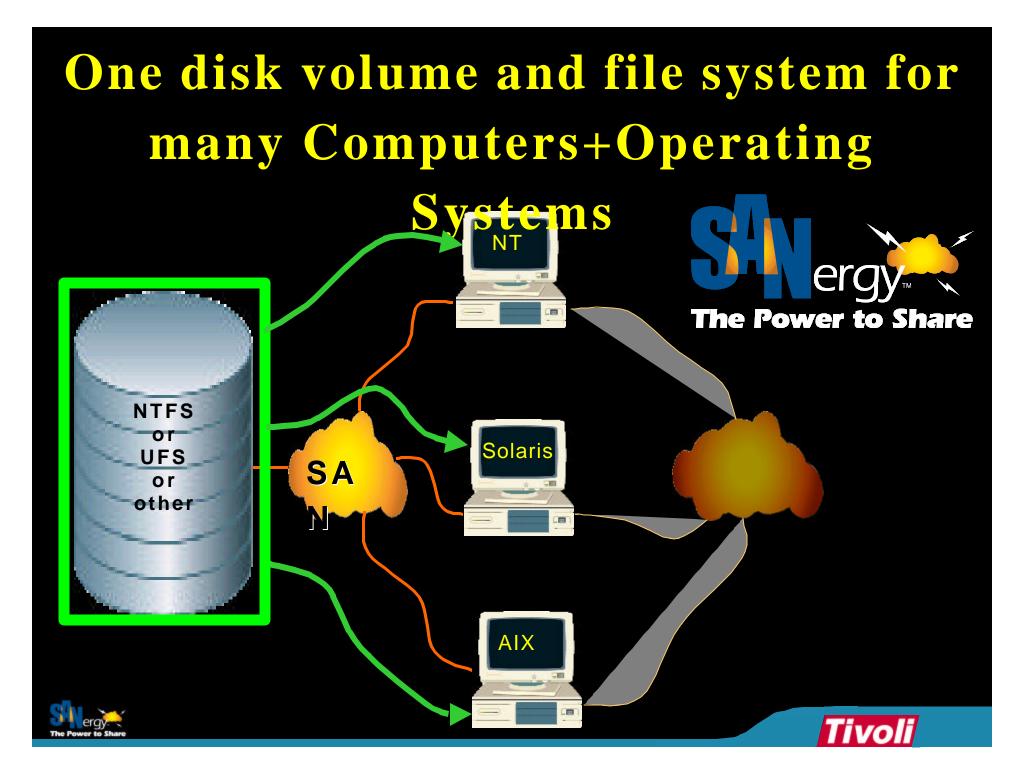


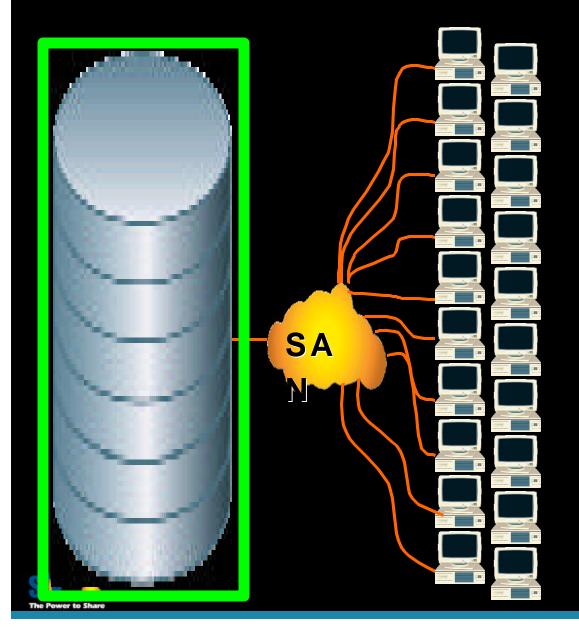




Different File System per Operating System

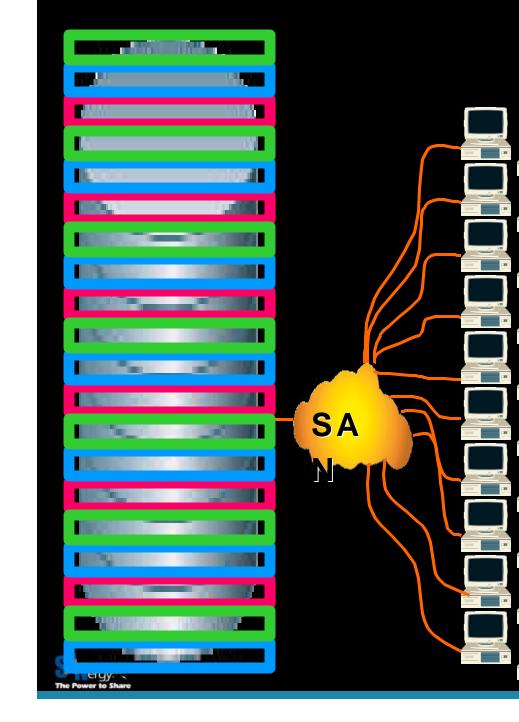






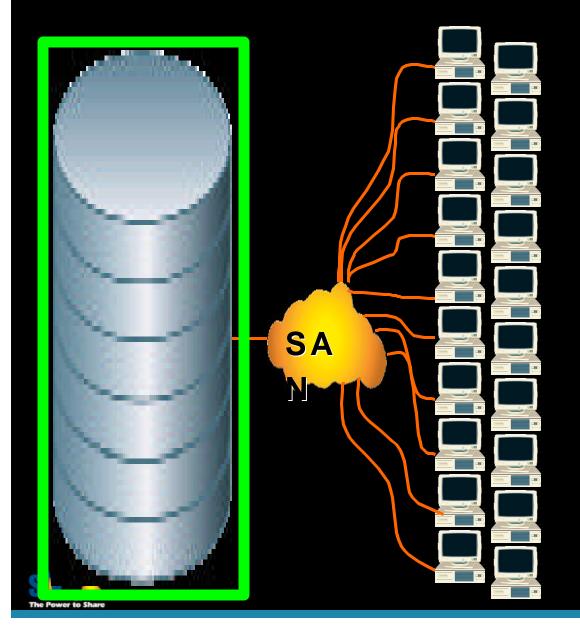






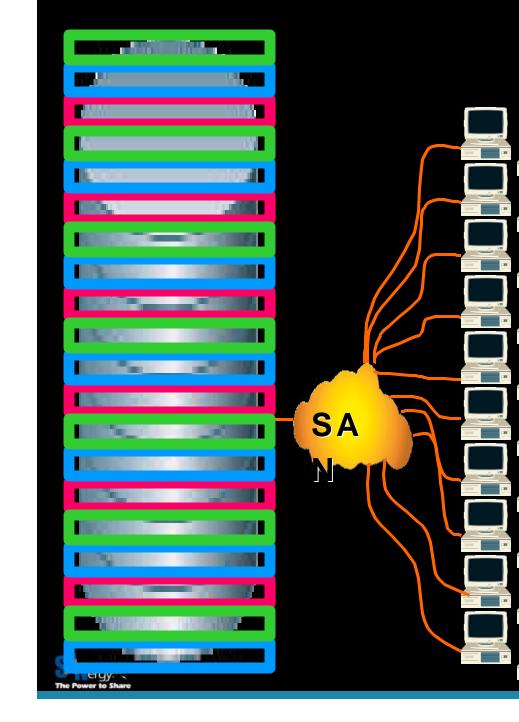
Without Shergy The Power to Share





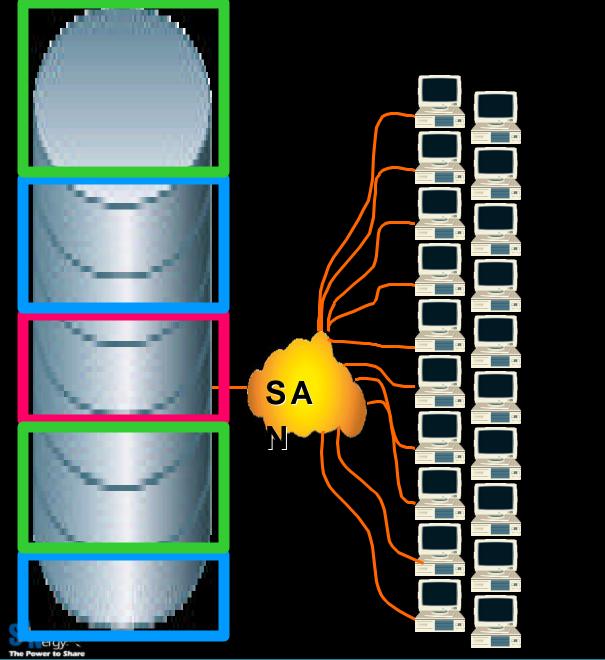






Without Shergy The Power to Share







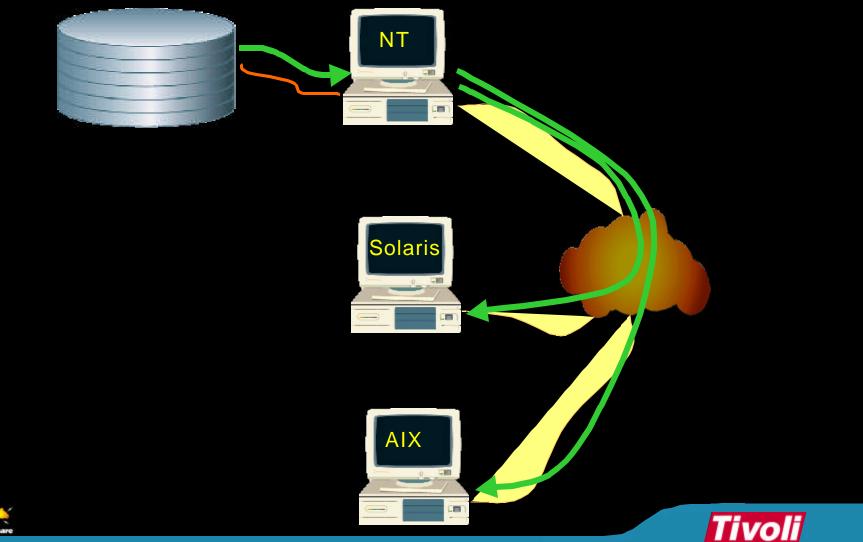


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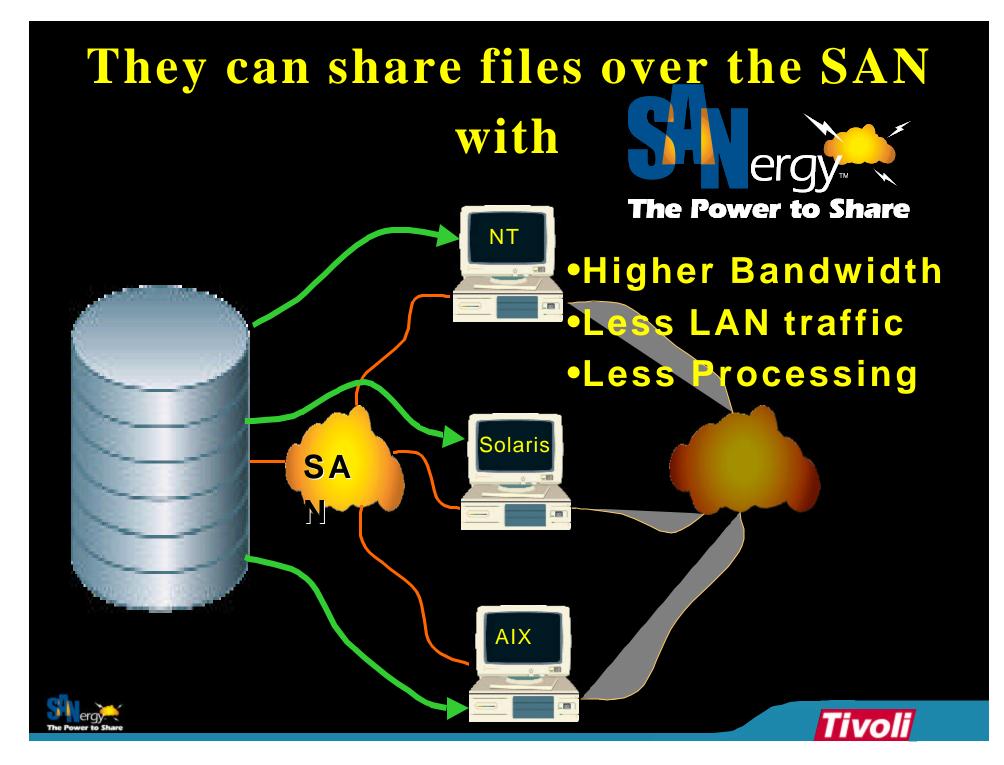




If computers can "share" files over the LAN . . .







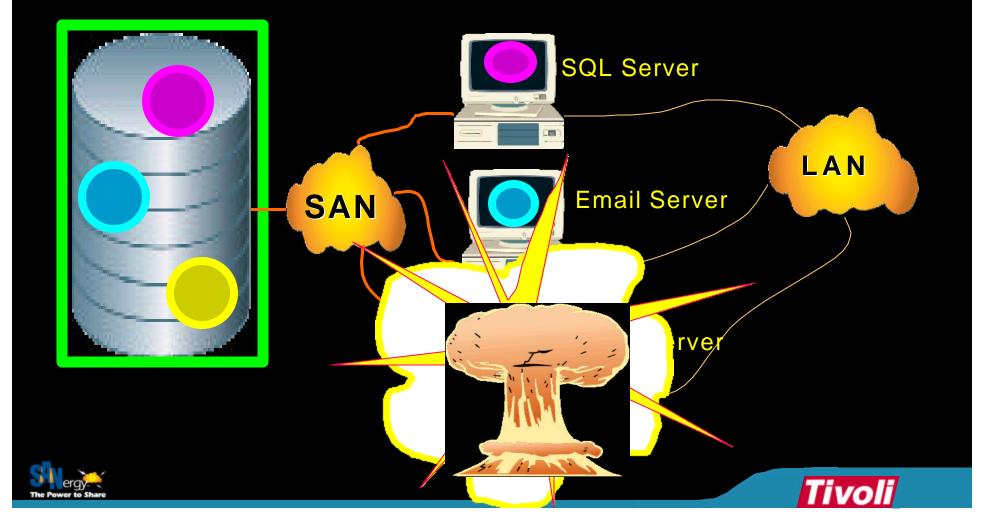
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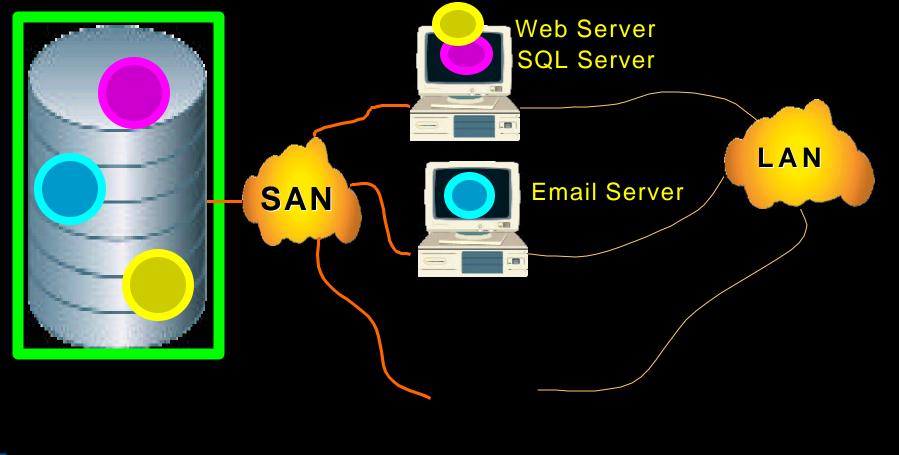
Higher Data Uptime

Oops!



Higher Data Uptime

All computers can see the same filesAny other computer can run any other App



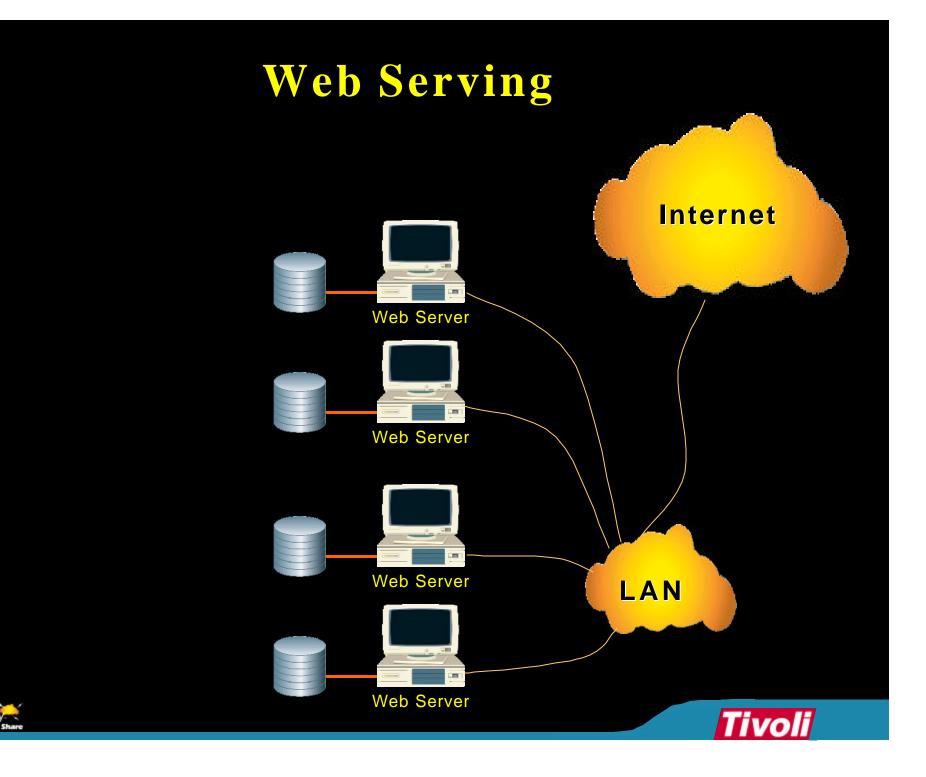


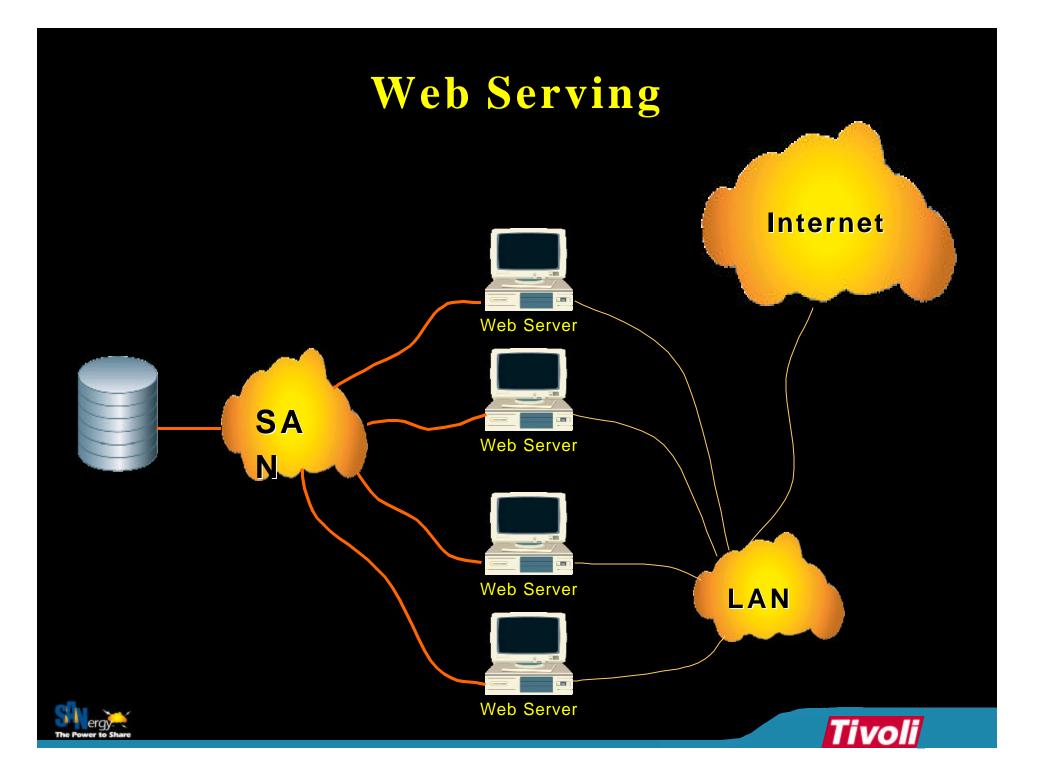


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ergy **The Power to Share**

- Shipping since November 98
- 5,000+ licenses sold IRIX

- Win NT4
- Win 2000
- Solaris
- MacOS
- **AIX**
- Tru64
- Red Hat Linux
- DG/UX







Services Endly The Power to Share





Added Features of SANergy 2.2

- Linux Host + Meta Data Controller (MDC)
- DG/UX Host
- All MDCs now support all hosts
- Improved MacOS support
- Zoom on Linux and Solaris SANs



