



Tivoli Storage Management Solutions
Tivoli Storage Manager Directions

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"Integrated Storage Management for a Connected World"

Agenda

- **The move to Tivoli**
- **New, Re-branded Products**
- **V3.7 Product Enhancements**
- **Product Directions**
(removed for web publication)

Why is Tivoli Good for "ADSM"

- ★ Tivoli views "ADSM" as key to providing a total End-to-End Solution
- ★ Tivoli Storage Management BU
 - Strategy, Marketing, & Development
- ★ Significant increase in development funding
- ★ Acceleration of product enhancements
- ★ Leveraging of other Tivoli products to enhance & extend our solution, without starting from scratch
- ★ Very customer driven

New, Re-branded Tivoli Storage Products

Tivoli ADSM for "platform"

Network enabler
Extended device support
Open Systems support
Client Connections
Enterprise Administration
Server-to-Server

Disaster Recovery Manager

HSM

Tivoli Storage Manager

Tivoli Storage Manager, S/390 Edition

Includes Enterprise Administration and Server-to-Server functions

Network Enabler
Extended Device
Client Connections
Open Systems Support

Tivoli Disaster Recovery Manager

Tivoli Disaster Recovery Manager, S/390 Edition

Includes DRM feature & vaulting of DB & SP backups to another server

Does not include the Disk Image Dump

Tivoli Space Manager

Tivoli Space Manager, S/390 Edition

Includes HSM feature/clients

Tivoli Decision Support for Storage Management Analysis

(GA 12/99)

Tivoli ADSMConnect Agent for

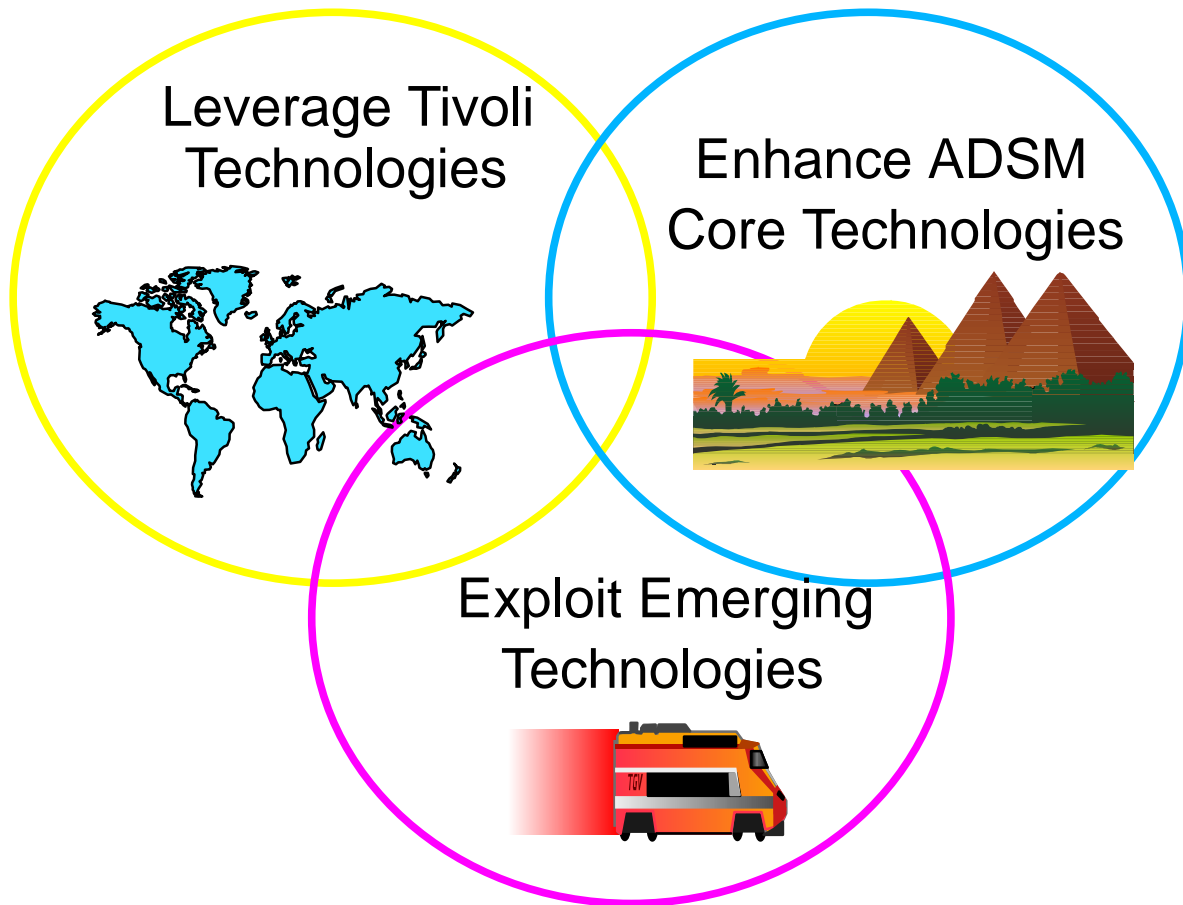
Oracle
Lotus Notes
MS SQL Server
MS Exchange

Tivoli Data Protection for

Oracle , Lotus Notes, MS SQL Server, MS Exchange
Informix (new product)
Lotus Domino , Lotus Domino, S/390 Edition (new product)

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Tivoli Storage Manager V3.7



★ Performance

- Exploiting SANs
- Rapid Recovery
- Instant Archive
- Logical Volume backup
- Multi-Session client

★ Management/Ease of Use

- Self-tuning
- Wizards
- Out-of-Band DB backups
- TDP for... event management
- TDS Guide
- Service Desk integration
- Software Installation Services

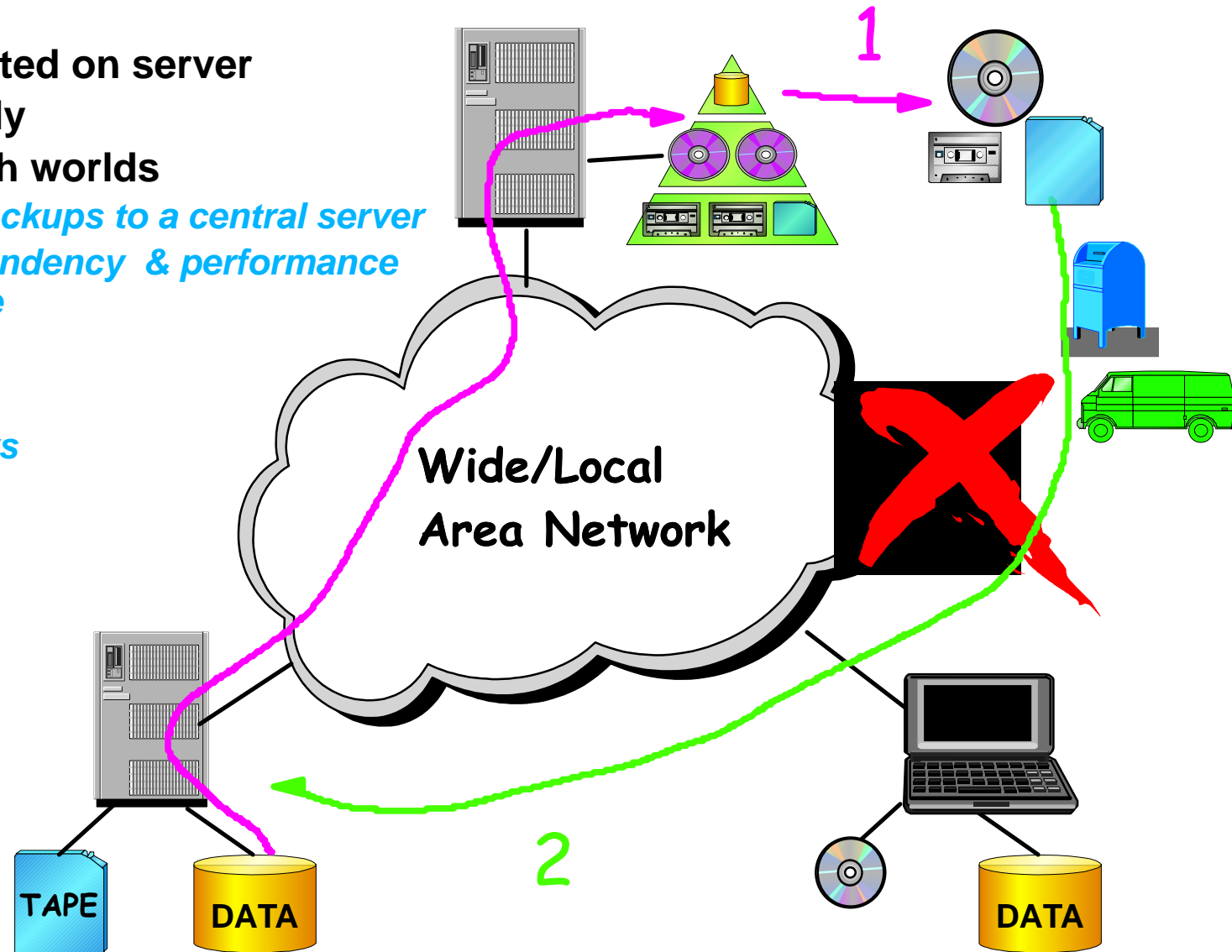
★ End-to-End

- Lotus Domino support
- Win2000 support

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Network-Free Rapid Recovery

- ★ **Portable Backup Set created on server**
- ★ **Client restores data locally**
- ★ **Gives you the best of both worlds**
 - *Leverage progressive backups to a central server*
 - *Eliminates network dependency & performance constraints during restore*
- ★ **Great for:**
 - *Mobile users*
 - *Large, critical file servers*

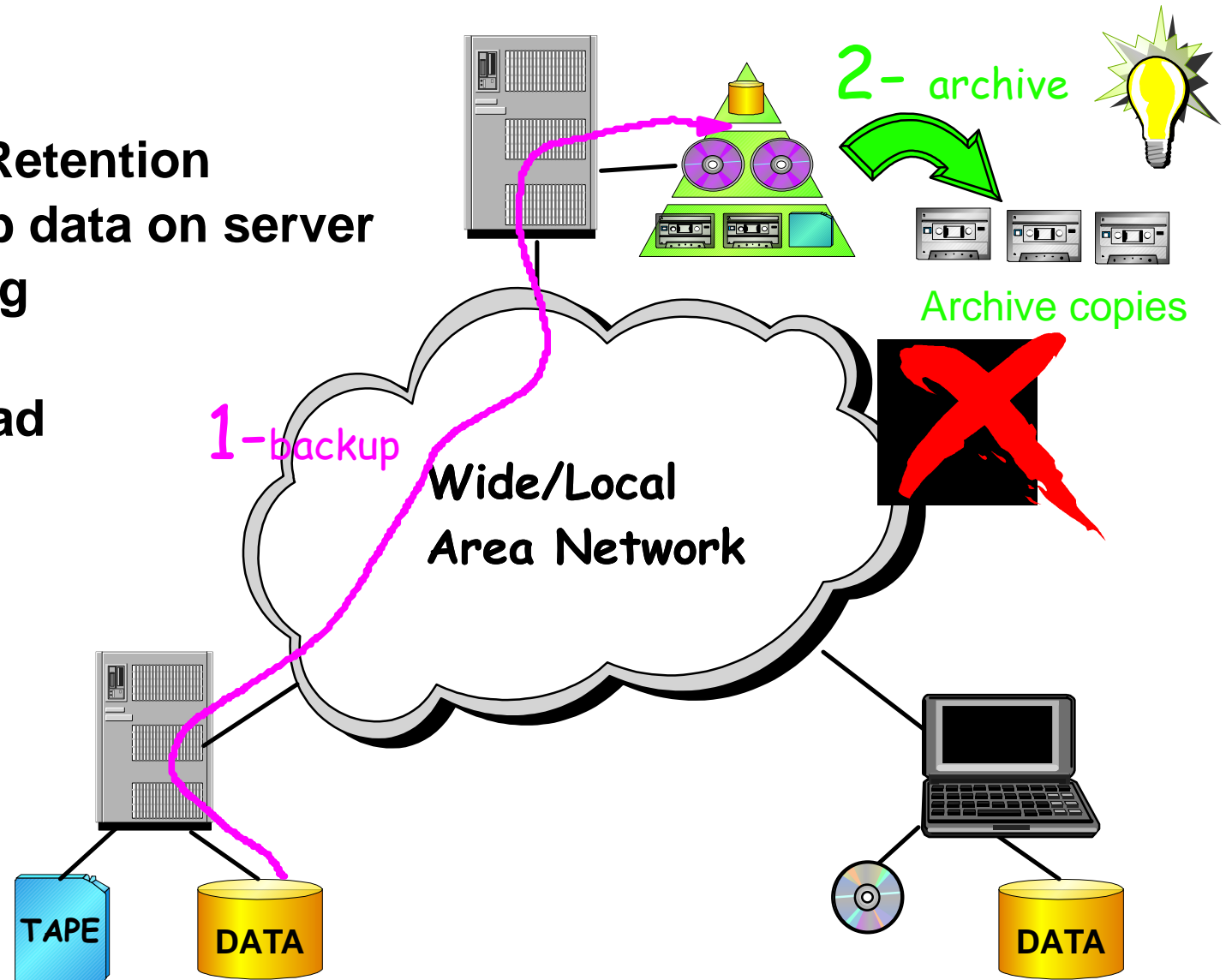


Centralized Backup, Network-Free
Restores

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Instant Archive

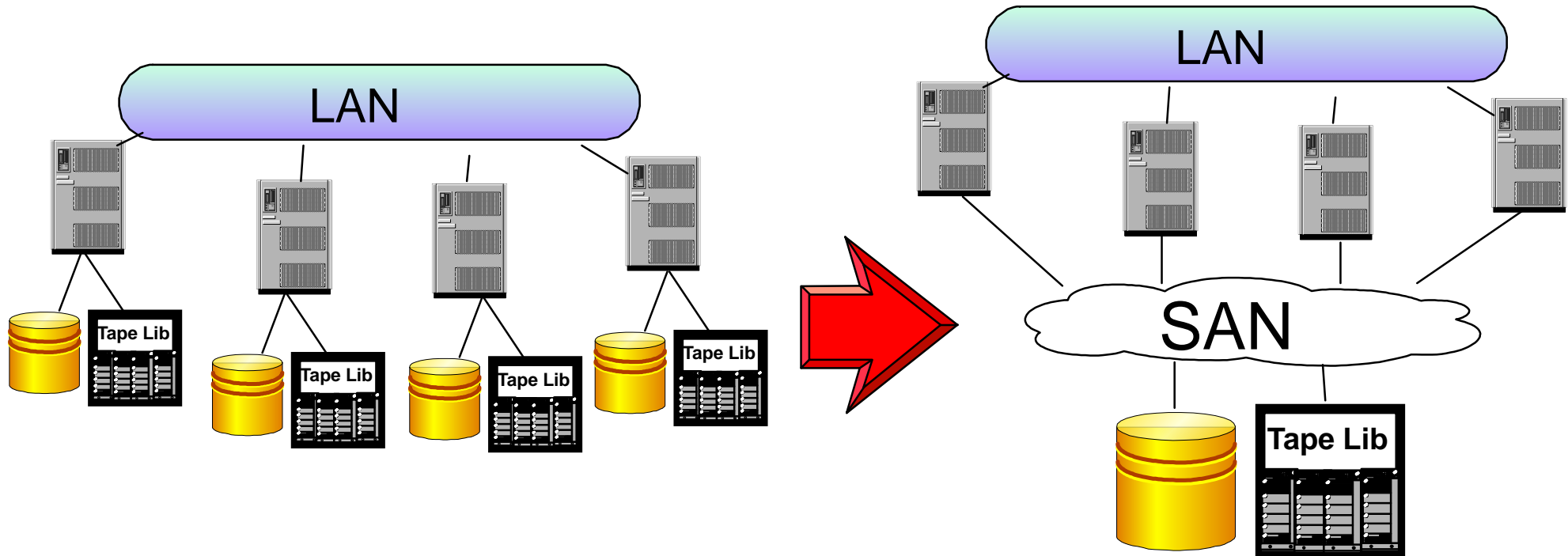
- ★ Intelligent Records Retention
- ★ Created from backup data on server
- ★ Volume level tracking
- ★ Policy managed
- ★ Reduces network load



Network-Free Records Retention

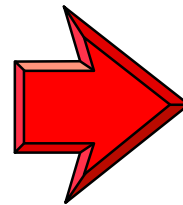
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Storage Management Exploitation of SANs



SANs Enable:

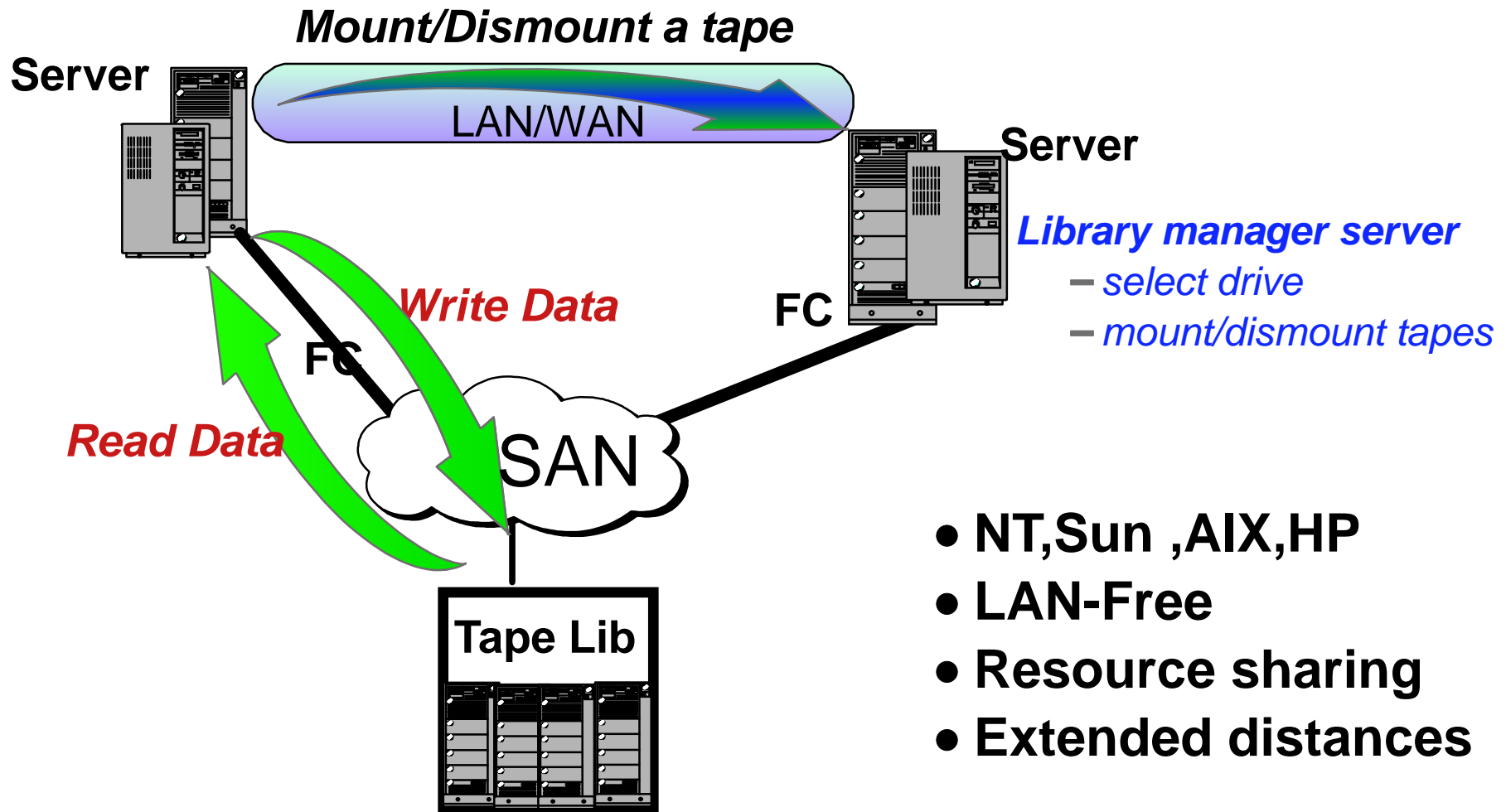
1. Lan-Free Data Transfer & Tape Pooling
2. Lan-Free Client Transfer
3. Server-Free (Outboard) Data Transfer



- ★ Improve performance
- ★ Improve scalability
- ★ Better utilize resources
- ★ Free up LAN/WAN
- ★ Reduce costs

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LAN-Free Data Transfer & Tape Resource Sharing



Improved Resource Utilization

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Tivoli Storage Manager Performance Enhancements

★ Backup-Archive Client:

Dynamic Multi-Threaded transfer increases throughput 2-3 times

Raw/Logical Volume dump/restore

Backup performance is 6 times faster

Restore performance is 5 times faster

★ OS/390 Server:

Enhanced Database, Rlog, Disk Storage Pool I/O performance

Enhanced throughput on 3590 tape

Reduced CPU utilization for USS client

★ AS/400 Server:

Enhanced Database, Rlog, Disk Storage Pool performance

Integrated File System vs AS/400 library file system

Performance doubles depending on file size

Enhanced tape EOVS support

AS/400 tapes are filled to physical EOVS

Less tapes and tape mounts for backup/restore

★ TDP for Lotus Domino using new V5 APIs

Supports Domino in NT, AIX, OS/390 USS

Backup performance is 15 times faster

Restore performance is 30 times faster

The Tivoli logo is located in the bottom right corner of the slide. It consists of the word "Tivoli" in a white, bold, sans-serif font, set against a red rectangular background.

Tivoli Decision Support for Storage Management Analysis

• Health/Event Analysis (12/99)

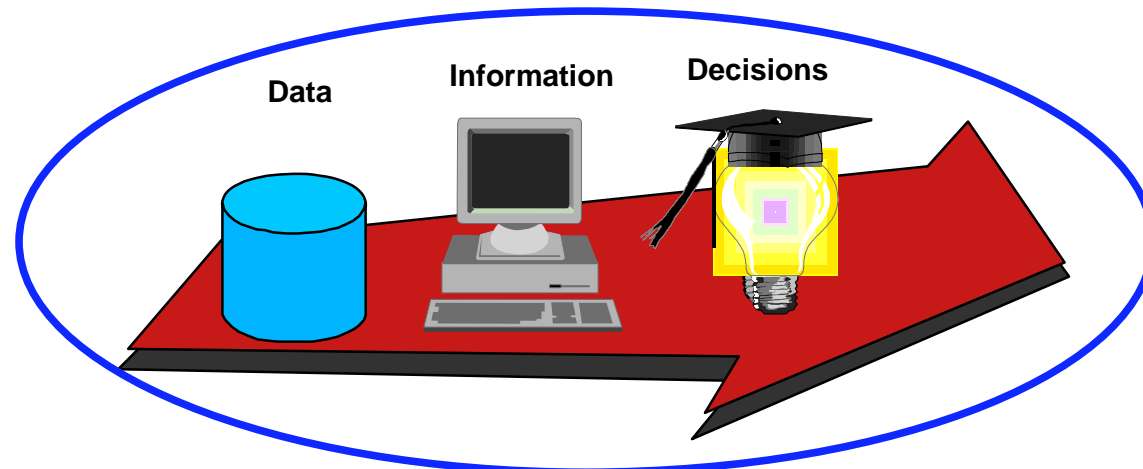
- Daily exception reports on: scheduled operations, messages, offline volumes, last DB backup,...
- Top 10 clients with problems
- Currency of client backups, summary of failures,...
- When do problems tend to occur: error rates by date or time of day

• Performance Analysis (12/99)

- Client stats: fastest clients, slowest clients, throughput rates
- Time spent waiting for media
- Server stats on operations
- File size affect on performance

• Capacity Analysis (4/00)

- Database growth
- Storage Pool growth
- Storage used by client, by domain,...



Summary, snapshots, trending, forecasting, what ifs

Pro-active Management

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