

# Sunfm Replication

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- Replication Types
- □ File Manager Replication
- Directory Replication
- Secondary Replicators
- Backup Replicators
- Security
- Performance
- Reliability



- Disk backup
  - Duplicate to removable storage media

Performed at timed intervals

- Require shadow volumes or access to files
- **□** Stored offsite



- □ File replication
  - □ File level replication to another server

Performed in a batch or real time mode

Open files can be problematic



#### Database Replication

- Snapshot replication sends entire table to subscribers
- □ Transaction replication sends transactions to subscribers
- Merge replication sends and receives transactions
- Merge replication requires conflict resolution



□ Integrated into file manager product

Integrated with administrative services

Replicates files in real time

Replicates files modified by external sources



- Uses a byte level replication scheme
- Based on directory replication
- Can replicate across both Windows and UNIX platforms
- Can replicate to three secondary or backup replicators



Base directories can be unique to each replicator

Child directories can be replicated

File create, modify, and delete actions replicated

Directory create replicated



 Directory delete translated into rename action on secondary replicators

 Directories can be scanned on a timed basis for external modifications



### Secondary Replicators

Network address must be configured

Provide file manager rollover on failure detection

 Rollover conditions turns replicator into an active file manager



#### Secondary Replicators

□ Rollover occurs in specific order

 Optional e-mail message sent when rollover occurs

☐ File manager clients can now have alternate network address for re-connect



### Secondary Replicators

Termination from primary replicator can be performed

Forced rollover from primary replicator can be performed

Automatic rollover transfer back to primary on shutdown



No rollover on failure detection

Network address can be configured

Dynamic network address allowed

Termination from primary replicator can be performed



□ Private message protocol

Messages encrypted and compressed

Built in network address filtering



 Access occurs through file manager logon network address

Comprehensive startup scan of files



 Configuration can be modified without file manager shutdown

Minimal performance impact with transaction round table

Single file open in exclusive mode across all child tasks



High performance internal file locks

Fast MD5 file comparison routines



- Primary file manager will not be active until first secondary attaches
- Replicators can be started in any order
- Replicator state information is logged to the active log file

All errors are logged to the active log file



 Optional third network node verification before rollover

□ File error recovery list

State preservation between file manager executions



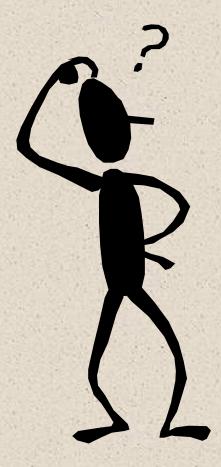
Startup search for active primary replicator

□ Ability to force instant startup of primary file manager

New quit shutdown mode that terminates child tasks when not in locking



# **QUESTIONS?**





## That's All!!

