Sunfm Replication

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OVERVIEW

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

Replication Types

- Disk backup
  - Duplicate to removable storage media
  - Performed at timed intervals
  - Require shadow volumes or access to files
  - Stored offsite

Replication Types

- File replication
  - File level replication to another server
  - Performed in a batch or real time mode
  - Open files can be problematic

Replication Types

- 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

File Manager Replication

- Integrated into file manager product
- Integrated with administrative services
- Replicates files in real time
- Replicates files modified by external sources

File Manager Replication

- 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

Directory Replication

- Base directories can be unique to each replicator
- Child directories can be replicated
- File create, modify, and delete actions replicated
- Directory create replicated

Directory Replication

- 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

Backup Replicators

- No rollover on failure detection
- Network address can be configured
- Dynamic network address allowed
- Termination from primary replicator can be performed

Security

- Private message protocol
- Messages encrypted and compressed
- Built in network address filtering

Security

- Access occurs through file manager logon network address
- Comprehensive startup scan of files

Performance

- 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

Performance

- High performance internal file locks
- Fast MD5 file comparison routines

Reliability

- 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

Reliability

- Optional third network node verification before rollover
- File error recovery list
- State preservation between file manager executions

Reliability

- 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!!