

# Tivoli Storage Manager V6.2

## Simultaneous write during storage pool migration



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Welcome to this IBM Education Assistant module for Tivoli® Storage Manager, version 6.2. In this training module, you learn about simultaneous data copying during backup and storage pool migration.

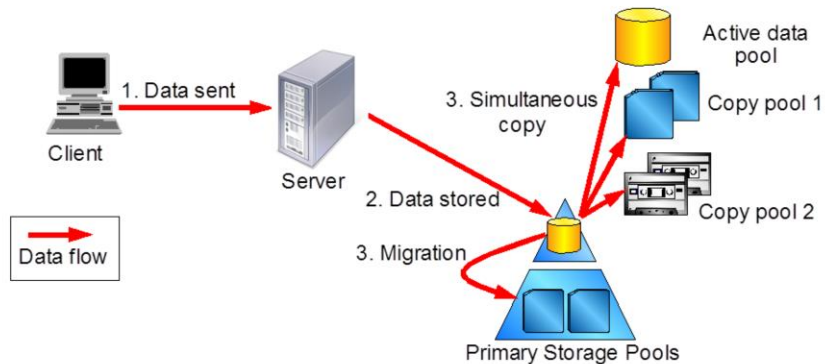
## Simultaneous write during client backup

- Simultaneous storage pool backup during client backup time has been available with Tivoli Storage Manager since version 5.1
- Simultaneous write at backup time can slow backup and increase tape drive usage
- Manual migration and storage pool backup must be performed at separate times, and the amount of time available is small
- These issues also apply to simultaneous write to active data pools

Simultaneous write at backup has been available in the Tivoli Storage Manager client and server since version 5.1. When Tivoli Storage Manager performs a backup to a primary pool, it can simultaneously write backup data to a copy storage pool or to an active data pool.

However, simultaneous write during backup can slow backup times and increase tape drive usage. It is becoming more difficult to complete manual migration and storage pool backup (nonsimultaneous) because you must complete them separately. You must also complete them after backups have completed.

## Simultaneous write during migration data flow



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Simultaneous write during storage pool migration

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In Tivoli Storage Manager version 6.2, data is copied to a copy storage pool or an active data pool simultaneously **as the** data is migrated to a primary pool.

This function provides faster backups because simultaneous data writing occurs after the backup is complete. Faster storage pool backup or active data pool copy backup happens because the copy can be overlapped with migration.

Data flows into the primary storage pool from a backup. When the data is later migrated, it can be simultaneously sent to a copy storage pool on disk or tape. It can also be sent simultaneously to an active data pool on disk or tape.

## Simultaneous write during storage pool migration

- You can specify up to three copy pools or active data pools for simultaneous write during migration
- Copies are incremental — no change from previous versions
- Source primary pool can be random or sequential, disk or tape but must use the native or nonblock format
- Simultaneous write does not support other data movements: Reclamation, Move Data, Move Nodedata, and so on

The primary pool can be random or sequential, a disk or a tape. It must use the native or nonblock format. Simultaneous write does not support functions such as reclamation, move data, or move node data.

You can specify up to three storage pools during migration. The three pools can be any combination of active and copy pools.

## Implementation (1 of 2)

Use the existing COPYSTGPOOLS and ACTIVEDATAPOOLS parameters of the DEFINE STGPOOL and UPDATE STGPOOL commands

STEP 1: Specify a storage pool value on the NEXTPOOL parameter for the migration source pool

STEP 2: In that storage pool, specify the COPYSTGPOOLS or ACTIVEDATAPOOLS parameters for the migration source pool

To implement simultaneous data write, you first select the target pool. You specify this pool on the NEXTPOOL parameter of the migration source storage pool definition. Next, you specify the copy storage pool or active data pool parameters. You can specify up to three pools (copy or active) for simultaneous migration.

## Implementation (2 of 2)

- STEP 3: Specify a value for the AUTOCOPY parameter on the target storage pool
- CLIENT: Perform simultaneous write only on client backup operations  
Includes IMPORT for Copy Storage Pools. This is the default.
- MIGRATION: Perform simultaneous write only on migration operations
- ALL: Perform simultaneous write during both client backup operations, including IMPORT for Copy Pools, and during migration operations
- NONE: Disable simultaneous write altogether

The third step is to specify what type of operations to allow for simultaneous copy. In this step, you use one of the values for the AUTOCOPY parameter on the target storage pool.

The **Client** value triggers a simultaneous copy any time a backup occurs directly to this pool. This is the default setting.

The **Migration** value triggers a simultaneous copy only when migration occurs to this pool.

The **All** value triggers a simultaneous copy whenever either backup or migration occurs.

**None** disables simultaneous copy altogether.

## Summary

In this module, you learned how to simultaneously copy data during data backup and storage pool migration.

In this module, you learned how to simultaneously copy data during data backup and storage pool migration for Tivoli Storage Manager version 6.2.

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