cloud STACK | COLLABORATION CONFERENCE

Snapshot Copy
Using Primary Storage

speaker:
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#CSCollab2024

Snapshot Copy Using Primary Storage

StorPool Storage
Nikolay Tenev

StorPool Primary Storage Platform for CloudStack/KVM

Parallel multi-node shared-nothing architecture	Software-only, hardware agnostic	Always-on non-disruptive everything	Linearly scalable
Block first, some file	Made for large scale & Modern IT	Ultimate performance and efficiency	Integration with CloudStack & active in the community

Snapshot Copy Using Primary Storage

CloudStack 4.19 += 'Snapshot Copy'

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- More flexible DR setups
- Remote backups with configurable retention policies
- Migration from staging to production
- Many others…

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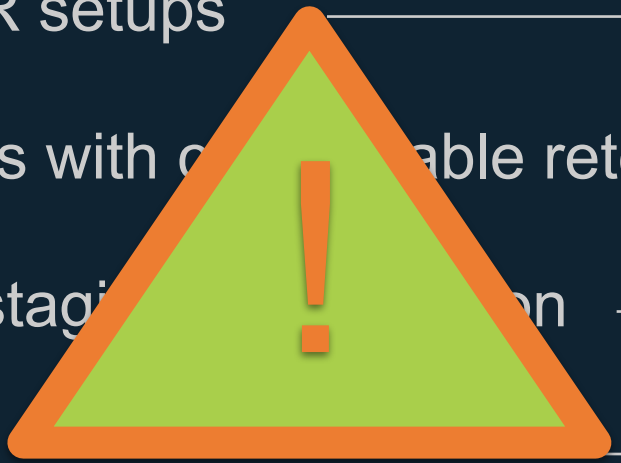

CloudStack 4.19 += 'Snapshot Copy'

- NFS layer-over-layer-over-layer architecture !
- workloads handled by system VM(s) !
- additional virtual drive conversion !

What If Your Primary Storage Can:

- Create snapshots
- Create incremental snapshots
- Send these snapshots to a remote location
- Create volumes without conversion

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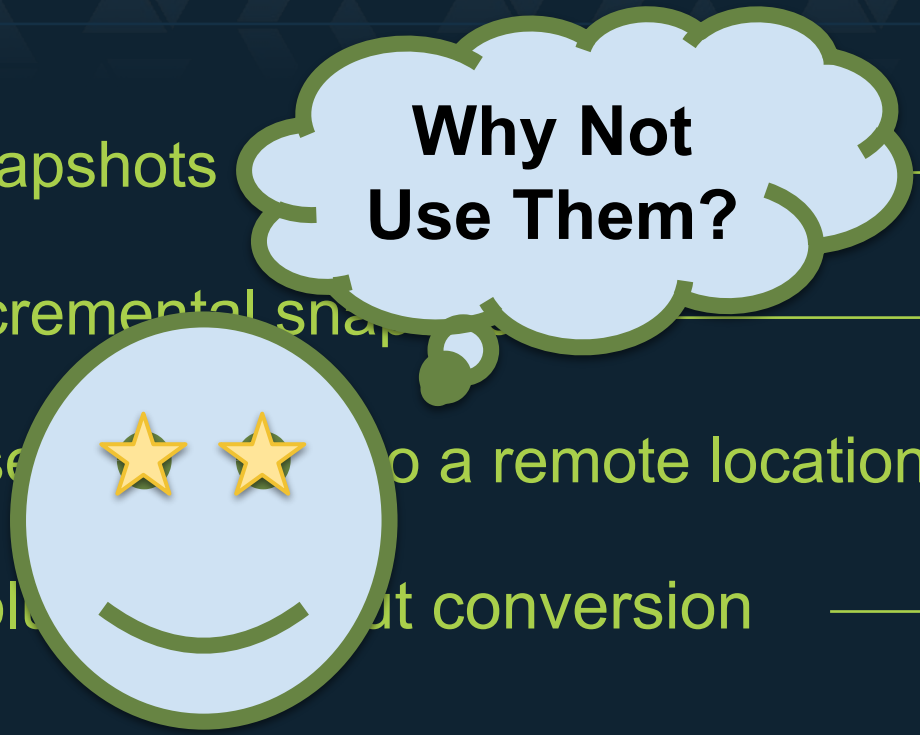

CloudStack 4.21 += Push Request (PR) #9478

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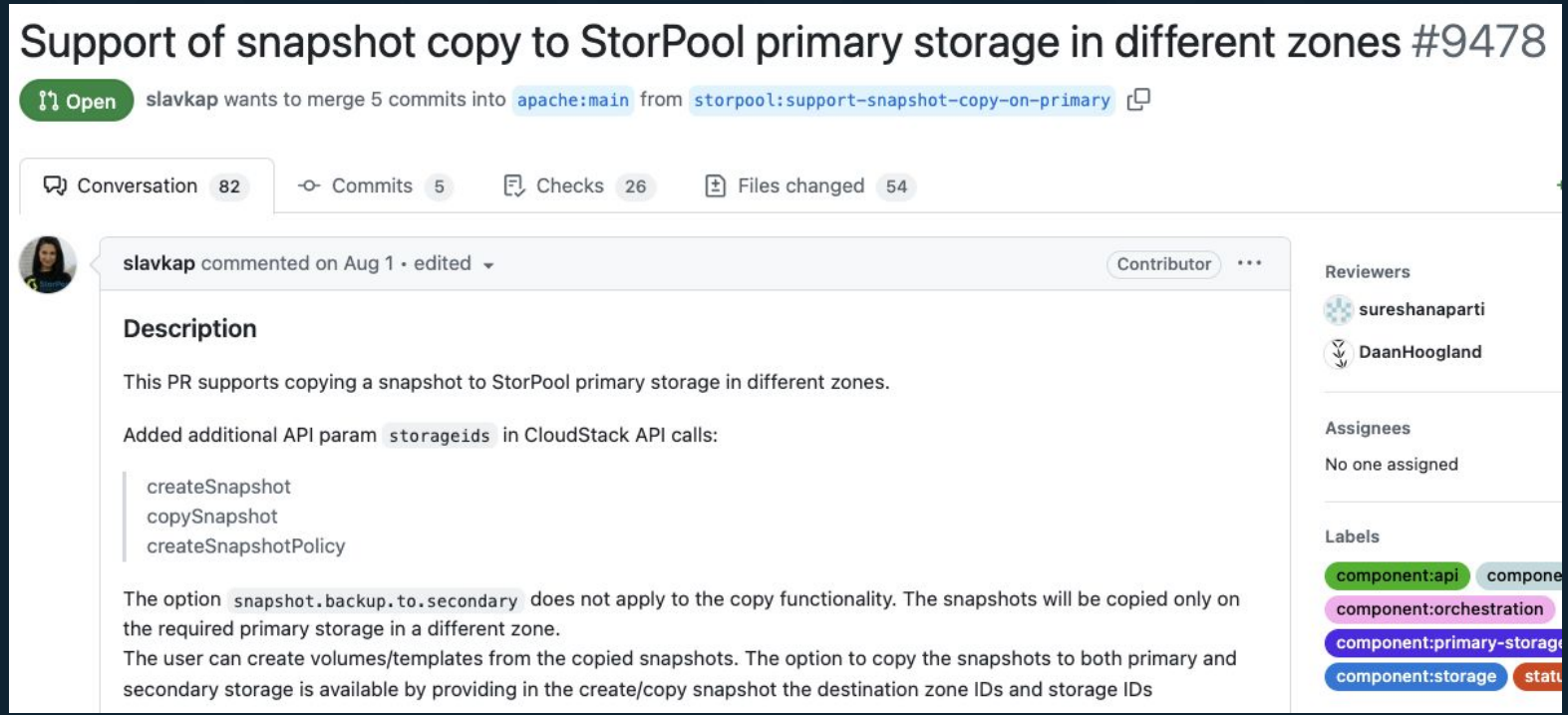

Support of snapshot copy to StorPool primary storage in different zones #9478

Open slavkap wants to merge 5 commits into apache:main from storpool:support-snapshot-copy-on-primary

Conversation 82 Commits 5 Checks 26 Files changed 54

slavkap commented on Aug 1 • edited Contributor

Description

This PR supports copying a snapshot to StorPool primary storage in different zones.

Added additional API param `storageids` in CloudStack API calls:

> createSnapshot
> copySnapshot
> createSnapshotPolicy

The option `snapshot.backup.to.secondary` does not apply to the copy functionality. The snapshots will be copied only on the required primary storage in a different zone.
The user can create volumes/templates from the copied snapshots. The option to copy the snapshots to both primary and secondary storage is available by providing in the create/copy snapshot the destination zone IDs and storage IDs

Reviewers
sureshanaparti
DaanHoogland

Assignees
No one assigned

Labels
component:api
component:orchestration
component:primary-storage
component:storage

CloudStack 4.21 += Push Request (PR) #9478

For other storage plugins that want to adopt this functionality:

- The Primary storage driver should have the capability `CAN_COPY_SNAPSHOT_BETWEEN_ZONES`
- the respective plugin needs to implement the `copySnapshot` method in their SnapshotStrategy and that the driver can handle the COPY operation

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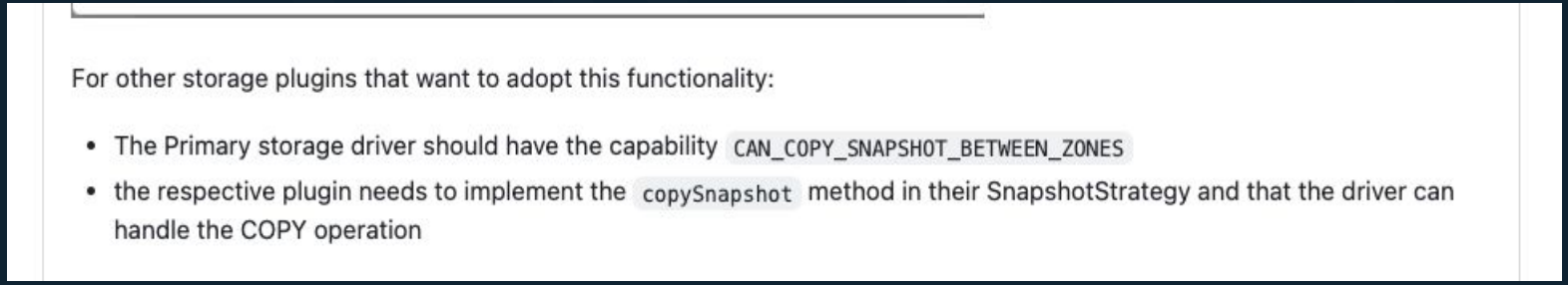

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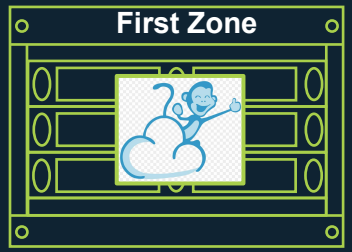
CAN_COPY_SNAPSHOT_BETWEEN_ZONES

implement `copySnapshot` in `SnapshotStrategy`

the driver can handle the COPY operation

CloudStack 4.19
vs
CloudStack 4.21 (+PR #9478)

CloudStack 4.19



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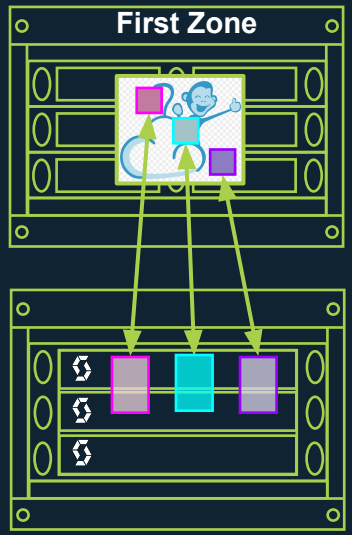

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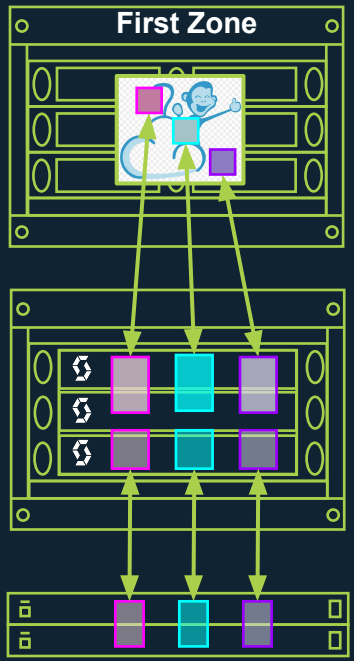

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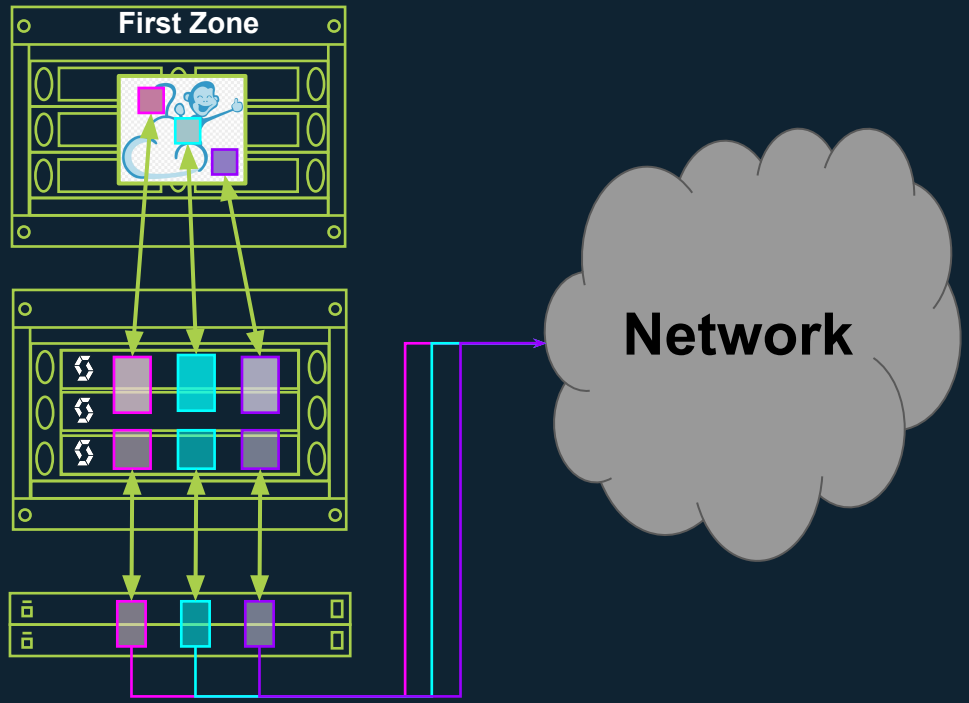

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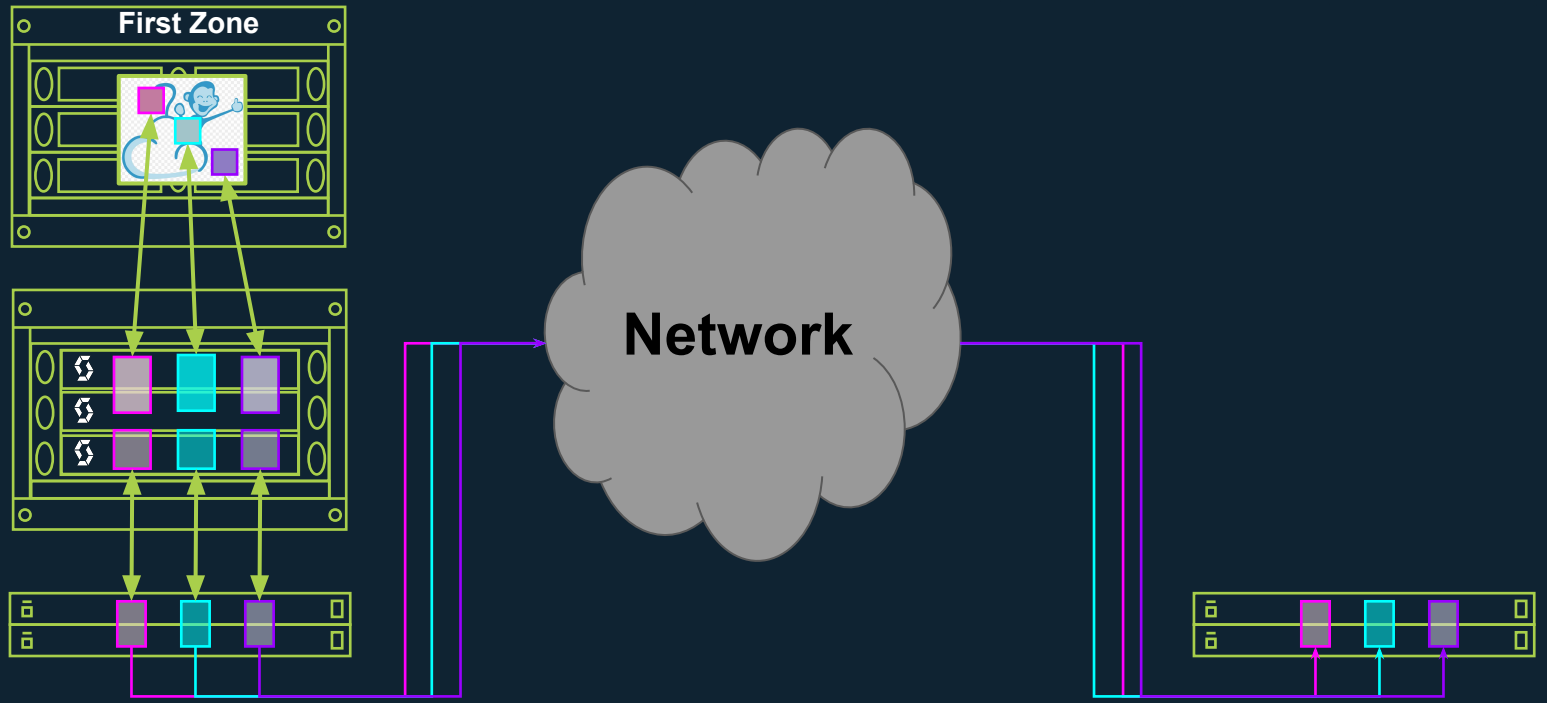

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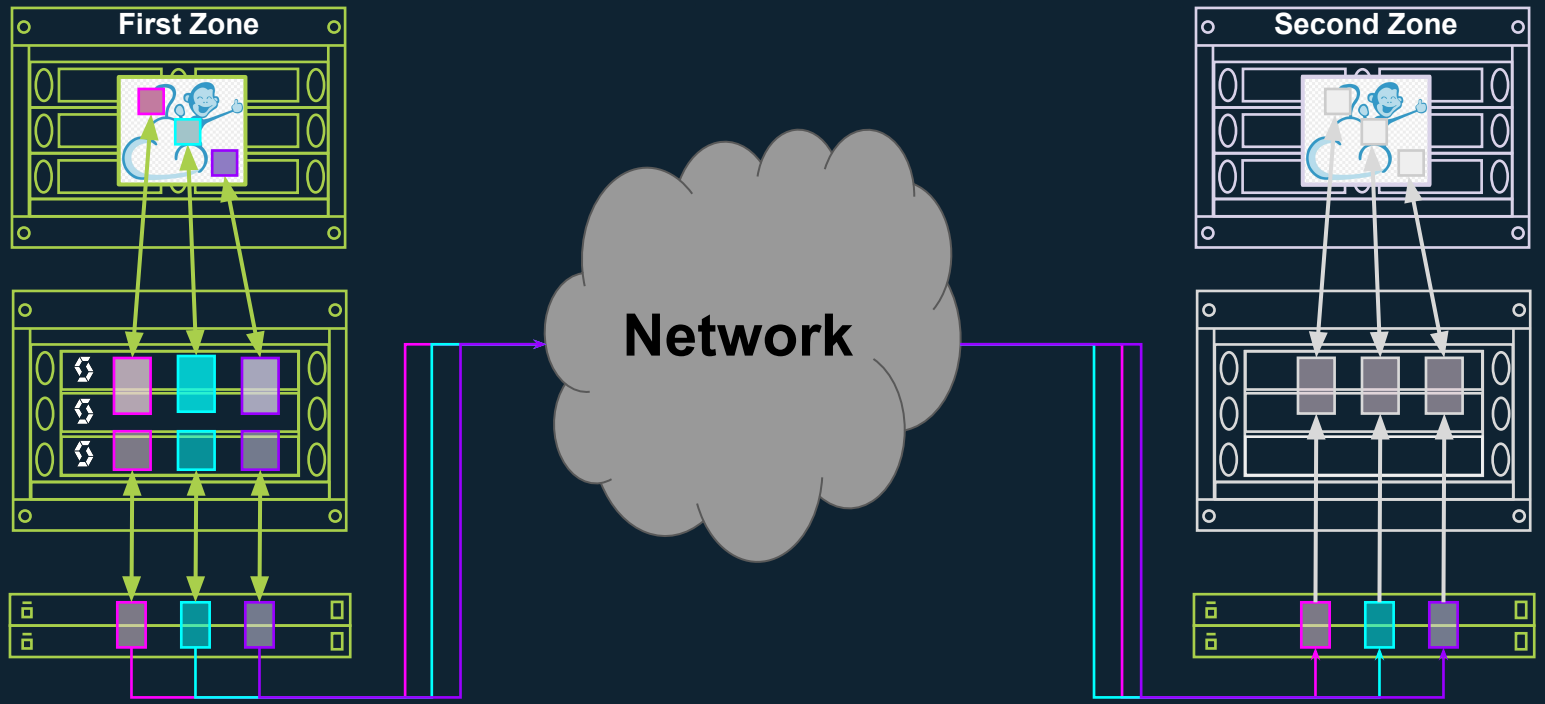

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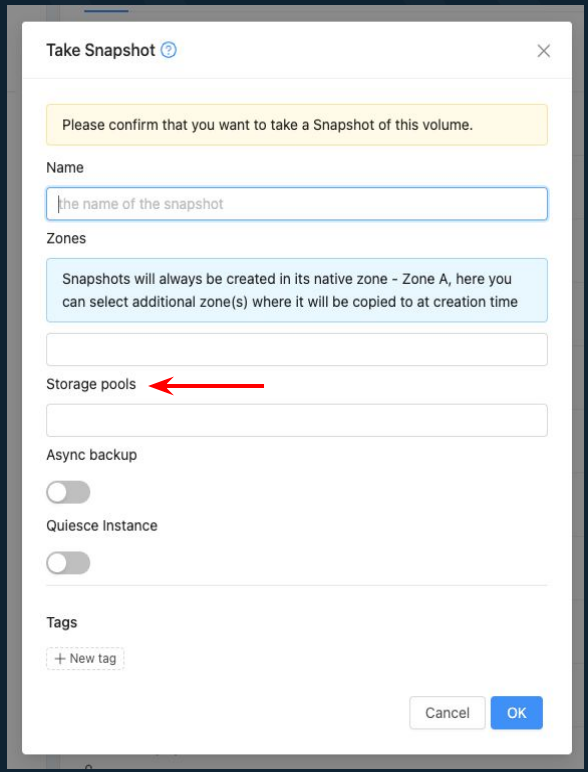

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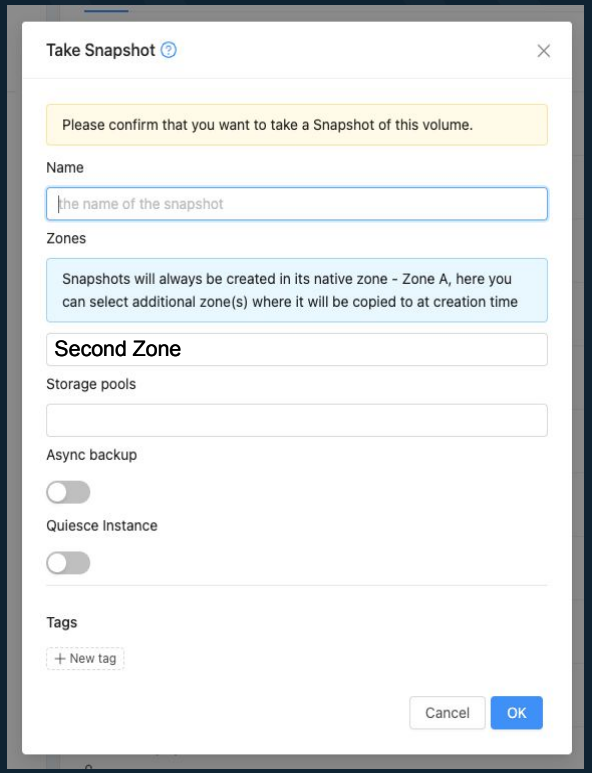

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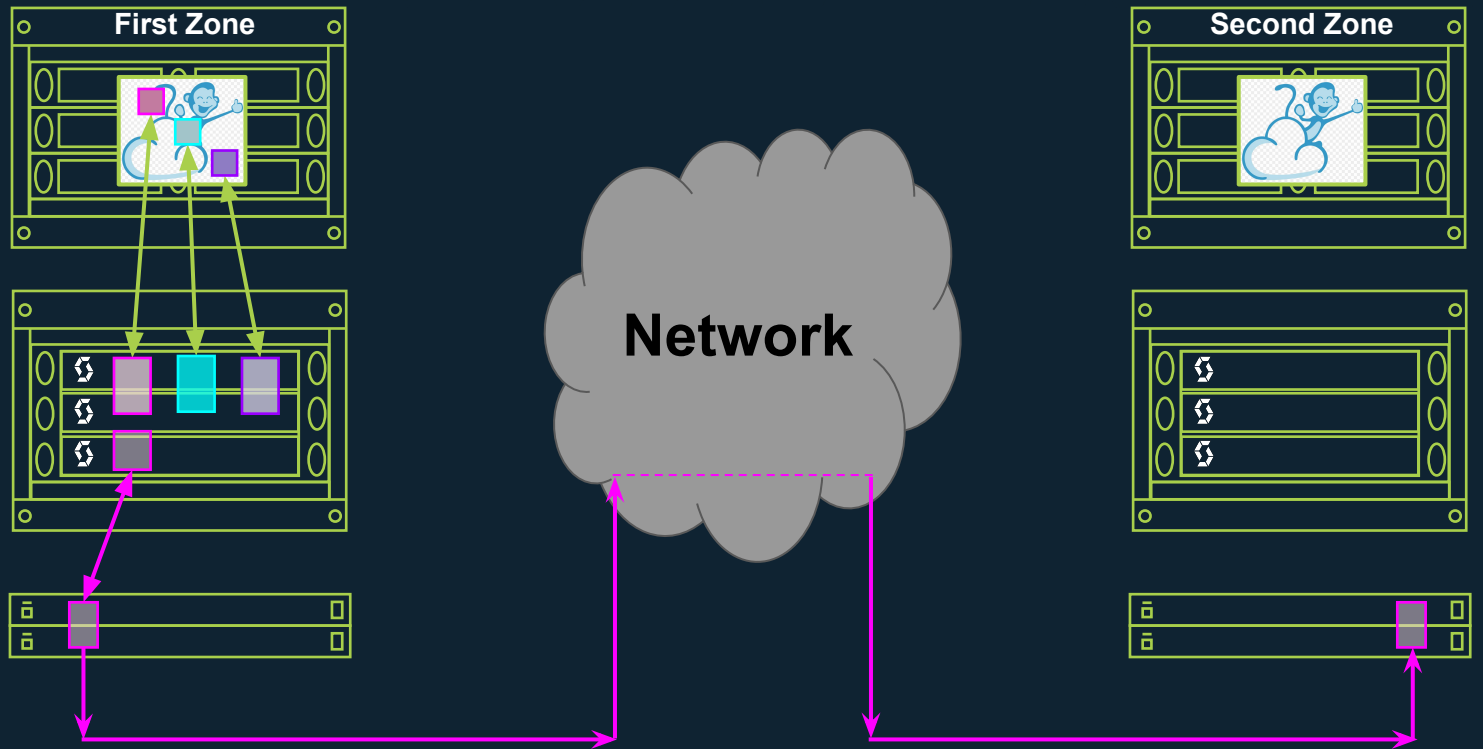

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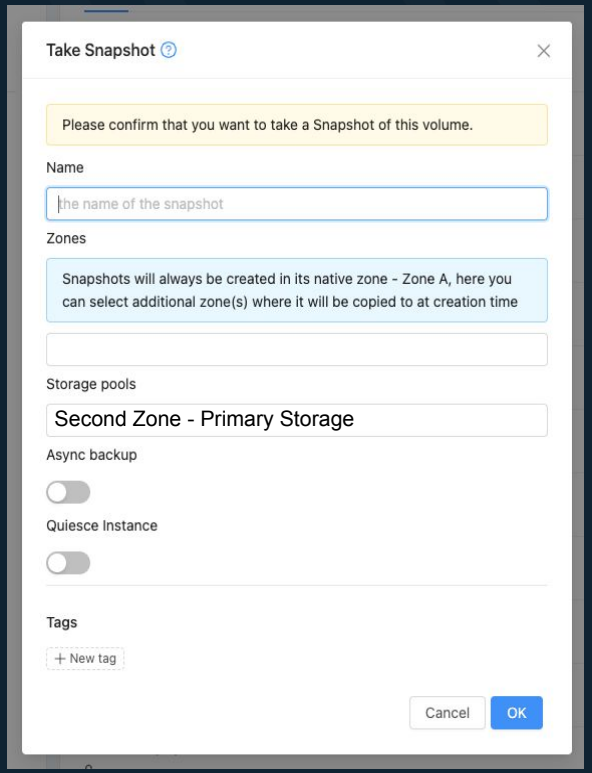

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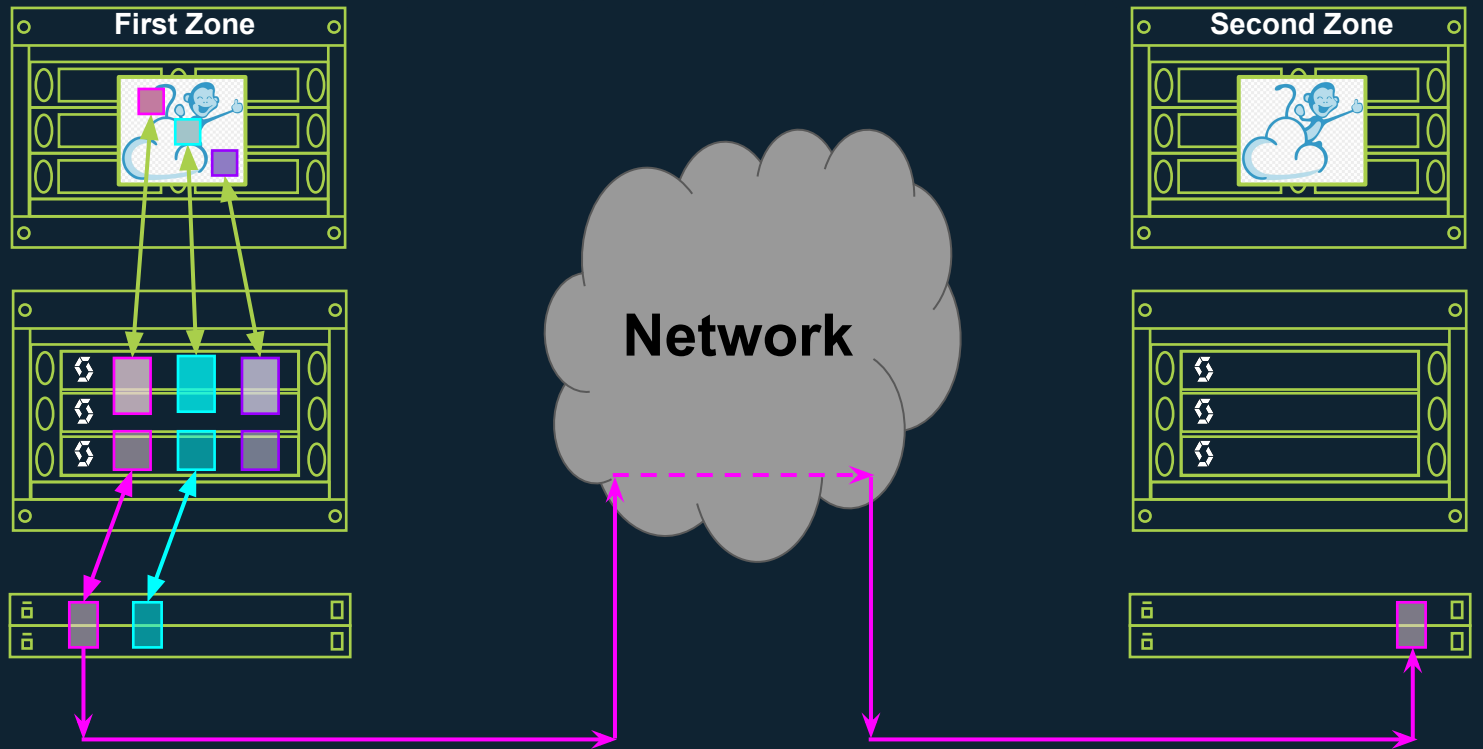

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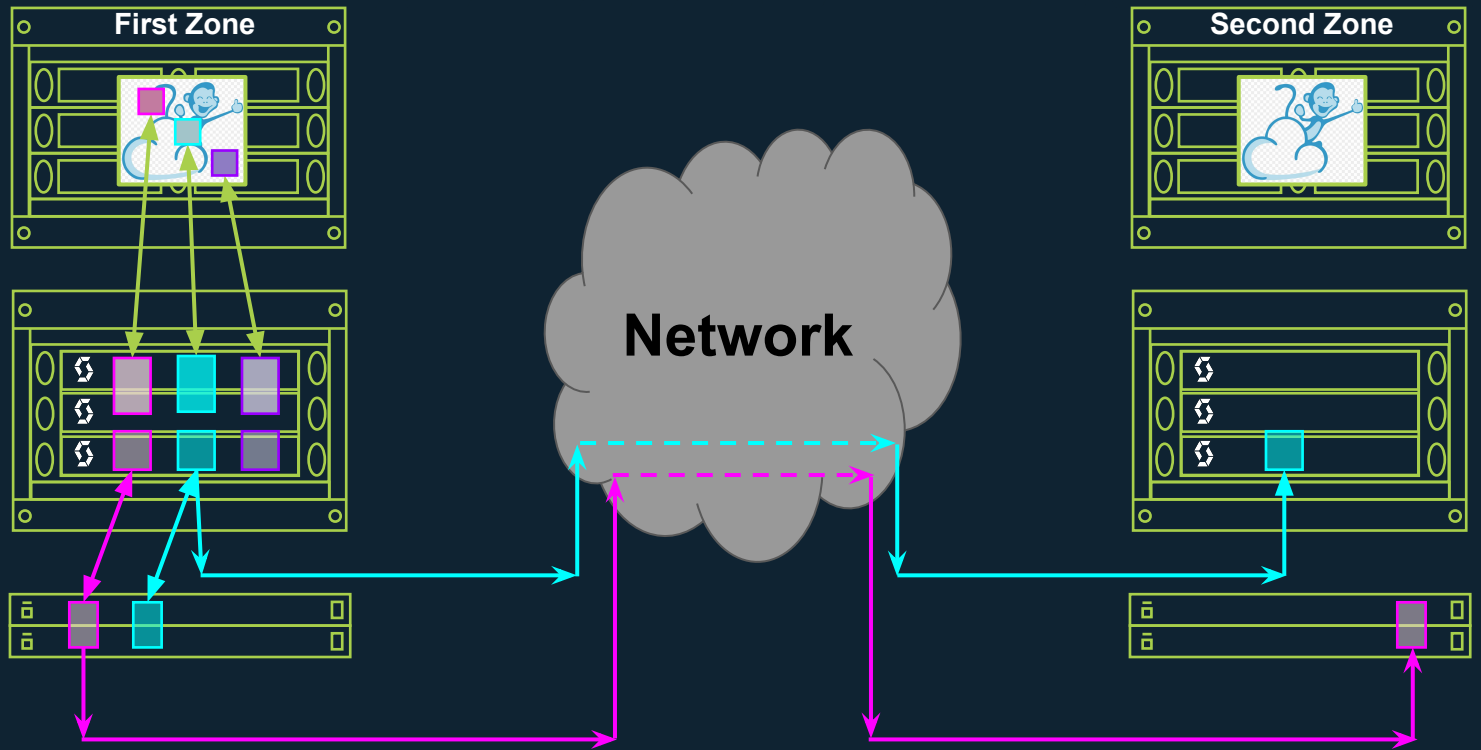

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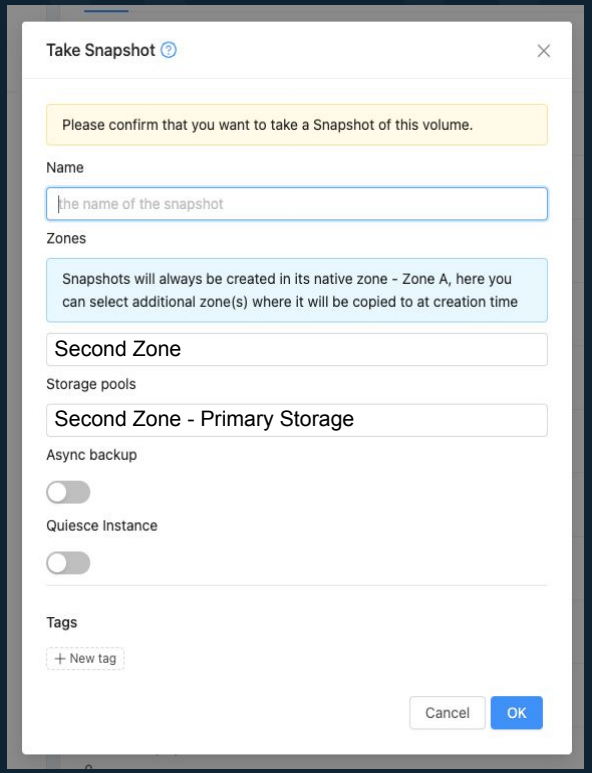

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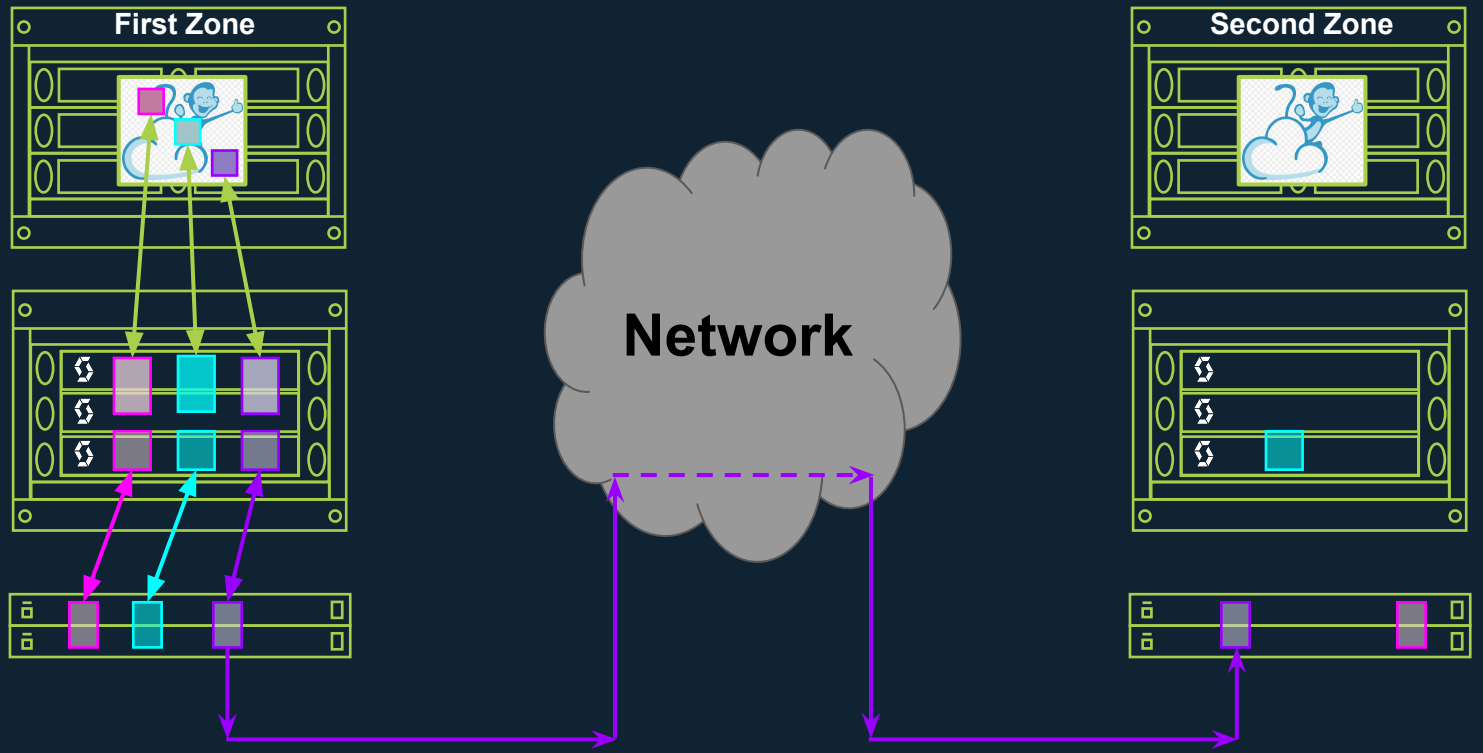

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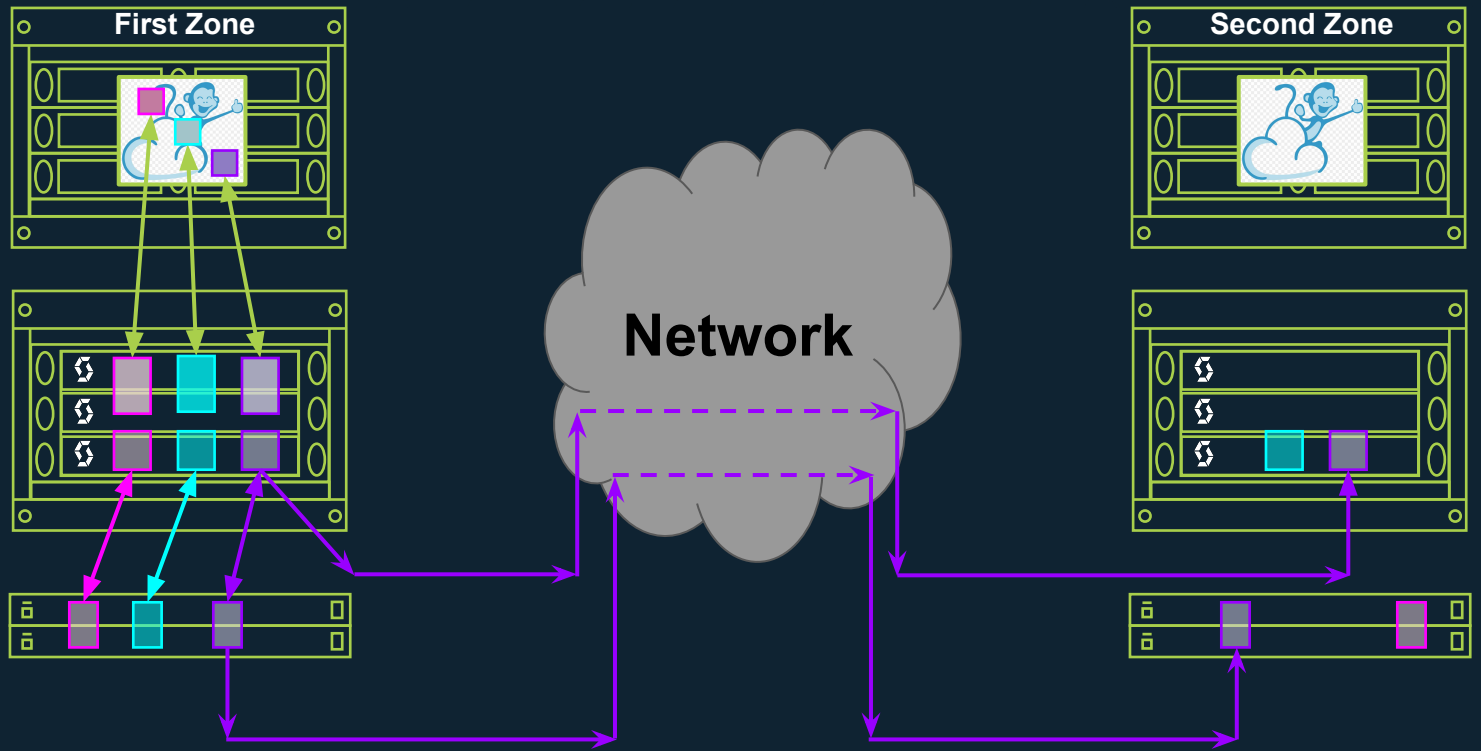

Benefits

- Better scalability
- Lower time for recovery
- More DR scenarios covered

Questions

StorPool.com @StorPool StorPool Storage