■ NetApp

Aggregate configuration

FlexPod

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Aggregate configuration

NetApp RAID DP

NetApp recommends NetApp RAID DP technology as the RAID type for all aggregates in a NetApp FAS or AFF system, including regular NetApp Flash Pool aggregates. MEDITECH documentation might specify the use of RAID 10, but MEDITECH has approved the use of RAID DP.

RAID group size and number of RAID groups

The default RAID group size is 16. This size might or might not be optimal for the aggregates for the MEDITECH hosts at your specific site. For the number of disks that NetApp recommends that you use in a RAID group, see NetApp TR-3838: Storage Subsystem Configuration Guide.

The RAID group size is important for storage expansion because NetApp recommends that you add disks to an aggregate with one or more groups of disks equal to the RAID group size. The number of RAID groups depends on the number of data disks and the RAID group size. To determine the number of data disks that you need, use the NetApp System Performance Modeler (SPM) sizing tool. After you determine the number of data disks, adjust the RAID group size to minimize the number of parity disks to within the recommended range for RAID group size per disk type.

For details on how to use the SPM sizing tool for MEDITECH environments, see NetApp TR-4190: NetApp Sizing Guidelines for MEDITECH Environments.

Storage expansion considerations

When you expand aggregates with more disks, add the disks in groups that are equal to the aggregate RAID group size. Following this approach helps provide performance consistency throughout the aggregate.

For example, to add storage to an aggregate that was created with a RAID group size of 20, the number of disks that NetApp recommends adding is one or more 20-disk groups. So, you should add 20, 40, 60, and so on, disks.

After you expand aggregates, you can improve performance by running reallocation tasks on the affected volumes or aggregate to spread existing data stripes over the new disks. This action is helpful particularly if the existing aggregate was nearly full.



You should plan reallocation of schedules during nonproduction hours because it is a high-CPU and disk-intensive task.

For more information about using reallocation after an aggregate expansion, see NetApp TR-3929: Reallocate Best Practices Guide.

Aggregate-level Snapshot copies

Set the aggregate-level NetApp Snapshot copy reserve to zero and disable the default aggregate Snapshot schedule. Delete any preexisting aggregate-level Snapshot copies if possible.

Next: Storage Virtual Machine Configuration.

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