Thin provisioning in SnapDrive for UNIX

Snapdrive for Unix

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The thin provisioning feature in SnapDrive for UNIX allows the user to have more storage space for the hosts than is actually available on the storage system.

Within SnapDrive for UNIX, you cannot set the fractional reserve value, and there is no integration with Data ONTAP features such as autodelete and autosize. These Data ONTAP features can be safely used with SnapDrive for UNIX; however, there is no awareness within SnapDrive for UNIX, if an autodelete or autosize event occurs.

Related information

NetApp Technical Report 3483: Thin Provisioning in a NetApp SAN or IP SAN Enterprise Environment

Enabling thin provisioning for LUNs

You can use SnapDrive for UNIX to carry out thin provisioning on your storage system. Thin provisioning is also referred as space-reservation.

Steps

1. Set the *space-reservations-enabled* configuration variable value to on.

   You can also enable thin provisioning by using the `-reserve` and `-noreserve` parameters.

   Parameter override the value mentioned in the *-space-reservations-enabled* variable.

   You could use `-reserve` and `-noreserve` with the following commands to enable or disable LUN reservation:

   - `snapdrive storage create`
   - `snapdrive storage resize`
   - `snapdrive snap connect`
   - `snapdrive snap restore`

By default, SnapDrive for UNIX enables space reservation for a fresh or new storage create operations. For snap restore and snap connect operations, it uses the space reservation present in the Snapshot copy if the `-reserve` or `-noreserve` parameters are not specified at the command line, or if the value in the configuration file is uncommented.

Enabling thin provisioning for NFS entities

You can use SnapDrive for UNIX to carry out thin provisioning for NFS entities on your storage system. Thin provisioning is referred as space-reservation.

Steps

1. To enable space reservation for snap connect operations, you can enable space reservation for volumes by using the `-reserve` parameter with the commands involving NFS entities. For NFS entities, SnapDrive for UNIX uses the space reservation available in the Snapshot copy if the `-reserve` or `-noreserve`

parameters are not specified in a command.

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