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SAN Basics Leave a comment

Oversubscription and Density Best Practices

What is Over Subscription:

The Term related to the Storage Area Networking and Other Networks. To Give an example, two water tanks are connected with 10" pipe to transfer water between each other when each received water from external connections. When the Incoming water in the tank from external sources is more than the capacity of the interconnected pipe to transfer between each tank and also more than the capacity of the pipe that water entering the pipe. then we call it as over subscription.

Technical Note on **Network Over subscription**:

Network OverSubscription refers to the a point of bandwidth consolidation where the ingress bandwidth is greater than the egress bandwidth. For Example:

From Edge to Core the Standard Over subscription is 7:1 or greater.

In single Switch or Director the Network Over-subscription is greater than 7:1 and usually it is 10:1 or higher.

Technical Note on **Switch Over subscription**:

This is basically the ingress bandwidth of all the Ports on the switch is more than the total bandwidth the switch can support. The switches have the ability to manage the bandwidth across all ports.

Fan Out Ratio:

Best Example is to quote the number Government office to number of people. The Government office are not one to one and they are one to many.

Fabric fan out ration is number of host HBA connected to storage port. The standard is 10:1 and is defined by the Storage vendors.

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