**Teja Pulicherla**

**Student ID: 21083075**

**Assignment\_3.2**

**CIS614-T302 Storage Systems (2173-1)**

**Instructor: James Krohn**

**1.What is zoning? Discuss a scenario:**

**a. Where WWN zoning is preferred over port zoning.**

**b. Where port zoning is preferred over WWN zoning.**

Zoning is a texture based administration in a storage area network (SAN) that gatherings together hosts and storage hubs that require correspondence. The essential requirement for performing zoning is that the hubs can convey just on the off chance that they are individuals from a similar zone. Hubs can likewise be individuals from different zones, allowing adaptability while utilizing the technique.

WWN zoning utilizes name servers as a part of the changes to either permit or piece access to specific World Wide Names (WWNs) in the texture. A major preferred standpoint of WWN zoning is the capacity to recalled the texture without redoing the zone data. WWN zoning is defenseless to unapproved access, as the zone can be bypassed if an attacker can parody the World Wide Name of an approved HBA.

Port zoning uses physical ports to characterize security zones. A client access to information is determined by what physical port he or she is associated with.

With port zoning, zone data must be redesigned each time a client changes switch ports. Moreover, port zoning does not permit zones to cover. Port zoning is regularly implemented using hard zoning, yet could likewise be implemented using soft zoning.

**2. Discuss the roles of the name server and fabric controller in an FC-switched fabric.**

Switching fabric is the mix of hardware and software that moves information coming into a network hub out by the right port to the following hub in the network. Switching fabric incorporates the exchanging units (individual boxes) in a hub, the coordinated circuits that they contain, and the programming that permits changing ways to be controlled.

Every PS in a domain runs its own name server containing data about N\_Ports, and while getting a casing, a switch won't know which approach to send it if it has clashing data. Just the same as VLANs, a VSAN can be utilized to execute arbitrary limits, in ways that make organization significantly more middle of the road, contrasted with manually moving wiring.

The Signal Computing System Architecture (SCSA), which gives a model structure to PC communication, utilizes the term. In the SCSA system, part of the hardware demonstrate incorporates a Switch Fabric Controller, a segment that monitors and deals with the exchanging ways.

**3. How does flow control work in an FC network?**

Flow control is the administration of information stream between PCs or gadgets or between hubs in a system so that the information can be taken care of at an effective pace. An excessive amount of information landing before a gadget can deal with it causes data overflow, which means the data is either lost or should be re transmitted. In a network, flow control can likewise be connected by rejecting additional devices associations until the stream of traffic has died down.

**4. How do VSANs improve the manageability of an FC SAN?**

Using virtual SAN technology, a vast physical SAN can be apportioned into various littler coherent SANs, which can be overseen and worked freely. On the other hand, virtual SAN innovation can likewise be utilized to consolidate different physical SANs into a solitary universal SAN to enhance use. Virtualization in the SAN fabric can enhance reasonability, look after security, enhance use, streamline investigating and simplicity disturbances during upgrades or changes.

**References:**

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