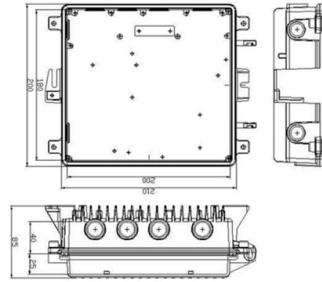


How many switches are needed for the aggregation layer



Overview

An aggregation layer usually comprises a few blocks of two switches in MCLAG. An aggregation switch is a network device that consolidates traffic from multiple access switches, wireless access points, or other edge devices and forwards it to core switches or routers. By design, it therefore provides resiliency because it will always be deployed in pairs of switches and comes with a recommendation to deploy only dual hot swappable power supplies and redundant fans in each switch to. This design employs a pair of redundant Cisco Nexus 7010 switches on the aggregation and core layers. Virtual device contexts (VDCs) of the Nexus 7000 switches are utilized in the design to create a pair of aggregation VDC switches and a pair of core VDC switches from two Nexus 7010 switches. Each aggregation switch is physically connected to all edge switches and participates in. Switch aggregation, also known as link aggregation or trunking, is a method used in computer networking to combine (aggregate) multiple network connections in parallel.



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After EAPS and L2 connectivity is configured, additional L3 routing configuration can be added. Using redundant aggregation switches helps protect against a single point of failure at the switch level,

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Virtual device contexts (VDCs) of the Nexus 7000 switches are utilized in the design to create a pair of aggregation VDC switches and a pair of

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Additionally, the access switch includes user management features like address authentication, user authentication, and user information collection in addition to offering sufficient

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Datacenter Core and Aggregation Design

This design employs a pair of redundant Cisco Nexus 7010 switches on the aggregation and core layers. Virtual device contexts (VDCs) of the Nexus

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Aggregation Layer

A ToR switch usually connects 20–40 servers placed in a rack with 1Gbps link, and for redundancy each ToR is connected with two aggregation switches which in turn connect with the core layers through

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The following figure shows an aggregation-layer building block. Multiple blocks of pairs of aggregation switches extend the design of this key layer if there are more than 24 floors or buildings in the

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Core layer: Core switches forward traffic entering and leaving a DC at a high speed and provide connectivity for multiple aggregation switches. Figure 3.1 shows a

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As the number of these devices grows, the need for a central point to aggregate and manage this traffic becomes critical. That's where aggregation switches step in.

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Aggregation Switch

An aggregation switch refers to a type of switch used to connect multiple ToR switches to a core switch/router in a cloud data center network. It enables high-bandwidth aggregation ports to be

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Understanding Switch Aggregation: A Comprehensive

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