Disaster Recovery

A powerful data-mirroring solution using Long Distance Stacking

Your network core can be distributed across two locations using long distance fiber links, to support data-mirroring disaster recovery solutions.

Virtual Chassis Stacking over Long Distance (VCStack-LD) is available on the SwitchBlade x8100 and various x-series switches. We have a solution to meet the needs of any size business, allowing your virtual chassis to be distributed across the campus or the city.

VCStack-LD: performance and resiliency in a distributed network core

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NETWORK SMARTER

Allied Telesis VCStack technology

Maximum bandwidth

With VCStack, Allied Telesis provides a truly resilient network. Using true active/active technology, in normal operation all bandwidth and all routing power in the network are fully available for use all the time. If a link or device fails, some of the bandwidth or forwarding power will be reduced, but the network will still be fully operational and all remaining resources will continue to be fully utilized.

Resilient

Link aggregation between a core VCStack and edge switches ensures that there is no single point of failure in the network. With link aggregation across ports on different virtual chassis members, there is no perceptible disruption in the case of a link failure, and the full bandwidth of the network is available. Link aggregation can also be used to connect network resources, such as servers, across the virtual chassis members. This provides device and path resiliency.

Simple virtual chassis

Using VCStack at the core of your network allows multiple switches to appear as a single virtual chassis. This virtual chassis acts as a single switch, simplifying management. New devices can be added to the stack prior to being physically connected with provisioning. Moreover, remote login allows flexible device management.

Reliable

Virtualization of the network core ensures access to information when you need it, and VCStack fast failover delivers minimal network downtime, so critical resources remain online. When a software upgrade requires a restart of your VCStack, the rolling reboot function keeps online resources available by never having the complete virtual chassis down at any one time.

Scalable

VCStack is well proven on several Allied Telesis Layer 3+ switch series, and now VCStack Plus brings the ability to stack SwitchBlade x8100 Series chassis together for complete resiliency – perfect for the larger enterprise.
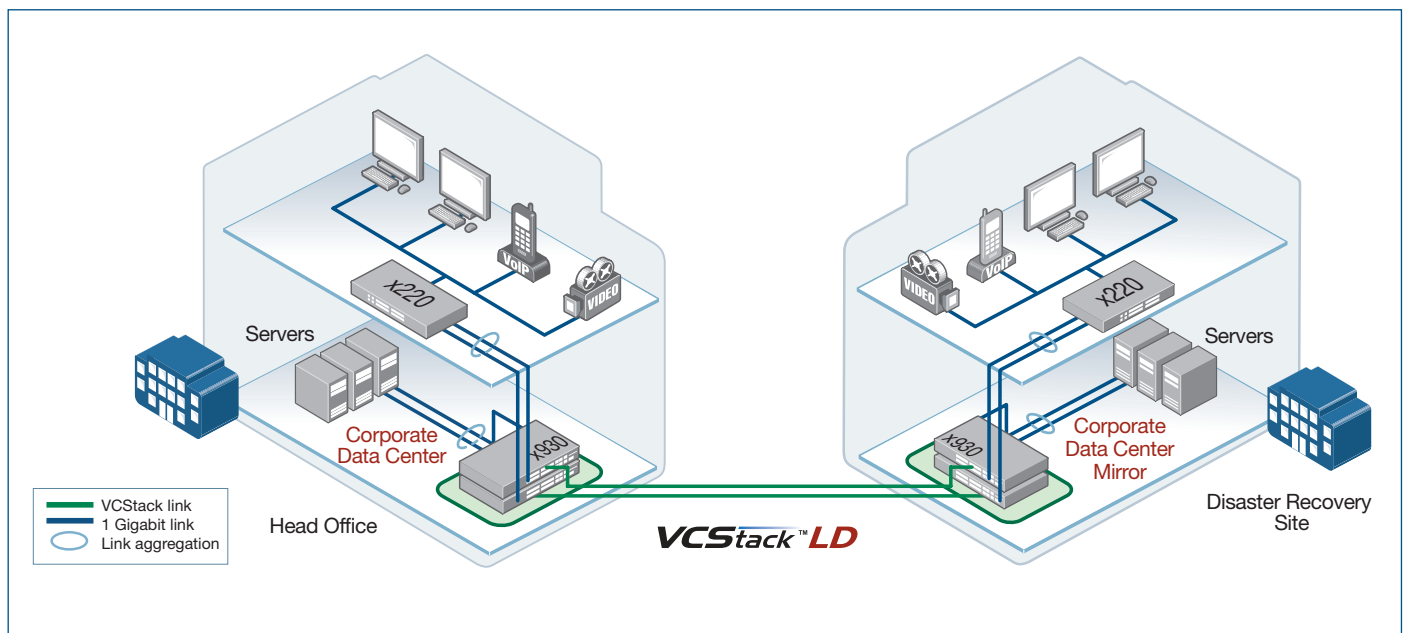
VCStack-LD

Long distance stacking enables the VCStack solution to provide a distributed network core. The increased distance enabled by fiber connectivity means that members of the virtual chassis do not have to be collocated, but can be kilometers apart.

All of the benefits and powerful features of VCStack remain exactly the same—Allied Telesis long distance stacking provides a genuine distributed virtual network core.

This is also ideal for a data-mirroring solution, as shown in the diagram, where the server farm is duplicated across the 2 physical sites for disaster recovery purposes. As VCStack members can be located tens of kilometers apart, a secure data management solution can be implemented simply and efficiently. By having two stack members in each location, the benefits of using link aggregation between the core and edge switches remain. The complete distributed virtual chassis provides a solution with no single point of failure, and a single management entity.

This is not merely clustering, nor is it just an implementation of router redundancy. It is a true virtual chassis Layer 3 switch distributed over locations that can be kilometers apart. IPv4 and IPv6 are routed at wire speed through a single routing table that is synchronized over all the switches, with almost no traffic loss in the case of unit or link failure.

The powerful VCStack solution offers uninterrupted network access to critical resources. Whether your virtual chassis is located in the same equipment rack, or distributed across the campus or city, VCStack provides resiliency, scalability and ease of management.

For more information on Allied Telesis VCStack and Long Distance Stacking visit **alliedtelesis.com**/alliedwareplus

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