

# How to achieve redundancy in access switches



## Overview

Various redundancy solutions are available for networking two switches, including the Spanning Tree Protocol (STP), which is less effective, and better options such as the Virtual Port Channel (VPC), or stacking. Cisco brings together AI, automation, and security into one unified architecture—built to simplify operations, scale intelligently, and protect every connection. Cisco AI Assistant combines the latest generative AI technology with our expertise to responsibly guide and inform the decisions you make. In this tech paper, you will learn about the key protocols for building a redundant network and discover—based on five examples—how to design highly available three-tier or two-tier networks using LANCOM products. This paper is part of the series “switching solutions“. Multiple strategies can be applied to prevent the redundant connections from forwarding layer 2 frames in. What I'd like to know is: if I buy two Layer 3 switches such as the SG550X, what is the best way to configure redundancy to the servers they're connected to?

The best option I found was to stack the switches and configure LAG groups that the servers can connect to with teamed NICs, one cable to. The Cisco implementation of TCP header compression is an adaptation of a program developed by the University of California, Berkeley (UCB) as part of UCB's public domain version of the UNIX operating system. Network redundancy provides multiple paths for traffic so that network communications remain functional even during a failure. A network failure can occur due to a faulty device/link or a network attack (e., DDoS, man-in-the-middle attacks, ARP spoofing, etc.

## Article Content

### Redundancy and Resiliency in Cisco Networks

This article explores the core concepts of redundancy and resiliency in Cisco networks, their significance, and how Cisco technologies enable businesses to build robust, always-on ...

### The Complete Solutions Guide to a Redundant Switched ...

We provide the reasons for implementing a redundant network, the benefits, the side effects, and the solution for avoiding Layer 2 loops.

### LAN Switching with Redundant Links | NetworkAcademy.IO

In the real world, every network topology uses redundant devices and links because availability is paramount for computer networks. Let's look at how switches behave when there are redundant links.

### What is the correct way to configure redundant access switches ...

The best option I found was to stack the switches and configure LAG groups that the servers can connect to with teamed NICs, one cable to each switch in the stack.

### Redundancy concepts for hierarchical switch networks

In this tech paper, you will learn about the key protocols for building a redundant network and discover—based on five examples—how to design highly available three-tier or two-tier networks ...

### Switch Redundancy and Management

This page contains information about Switch Redundancy and Management technology.

### Redundancy Protocol Configuration Guide, Cisco Catalyst IE3x00 ...

The switch supports Multiple HSRP (MHSRP), an extension of HSRP that allows load sharing between two or more HSRP groups. You can configure MHSRP to achieve load-balancing and to use two or ...

### Redundancy and Link Aggregation in Industrial Networks — ...

Network Redundancy and Link Aggregation are essential features of managed industrial switches eliminates this single point of failure by providing alternate communication paths that ...

### Routing & Switching Design | Validated Solution Guide

Stacking allows multiple access switches to be connected to each other and behave like a single switch. Stacking combines multiple physical devices into one virtual switch, increasing port ...

## Best Practices for Hierarchical Layers

Links to the core must be able to support the bandwidth used by the aggregate access layer switches. Redundant links from the access switches to the distribution layer and from the ...

## How To Design A Network For High Availability And ...

Best practices include implementing strong access controls, using firewalls and intrusion detection systems, keeping software up to date, and ...

## Contact Us

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