

Dual-homed access via switch



Overview

Simply put, dual homing involves connecting a network device, usually a switch or router, to two different upstream devices. This setup enhances redundancy and ensures network availability even if one connection fails. In this guide, we'll deep-dive into the step-by-step process of setting up dual homing in your enterprise network. BGP connections to ISPs use four main topology designs: These are different design topologies where we describe how a customer is connected (using BGP) to one or more ISPs. Single-homed: One. After the MLAG peer group is created between FortiSwitch 1 and FortiSwitch 2, the MLAG trunks are automatically established with the access switches (FortiSwitch 3 and FortiSwitch 4). In an HA active-passive cluster, only one. This document describes the configuration of Ethernet services, including configuring MAC address table, link aggregation, M-LAG, VLAN, QinQ, VLAN mapping, GVRP, STP/RSTP, MSTP, VBST, ERPS (G. 8032), LBDT, and Layer 2 protocol transparent transmission. My design is that I want to use two L3 switches in the distribution whit a L3 between them.



Article Content

May 07, 2026

Single/Dual Homed and Multi-homed Designs

This lesson explains the difference between single homed, dual homed, single multi-homed and dual multi-homed BGP connections to ISP(s).

Oct 03, 2025

Single/Dual Homed and Multi-homed Designs

Ultimately, when dual homing etc, the best choice for redundancy is using BGP. It will allow for redundancy in both directions (for outgoing and

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How to Configure Dual Homing in Enterprise Networks | NSC

In this guide, we'll deep-dive into the step-by-step process of setting up dual homing in your enterprise network. This includes selecting the right hardware, configuring IP routing effectively,

Nov 03, 2025

Dual-Homing Protection in IP-Over-WDM Networks

Dual homing is generally used to increase survivability in the access network. The main objective of dual homing is to provide enhanced survivability, to protect against access-node failures caused by

Jun 09, 2026

Data Center Network Design Best Practices: A Technical Guide for 2026

The super-spine tier: When a single data center row grows beyond what a single-tier spine can handle (typically 64-128 leaf switches per spine plane), add a super-spine tier. This

Feb 10, 2026

Single/Dual Homed and Multi-homed Designs

These are different design topologies where we describe how a customer is connected (using BGP) to one or more ISPs. In this lesson, we'll take a look at

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EVPN Multihoming for Non-Fabric Networks

With industry-standard non-blocking architecture, any downstream networking devices such as, Ethernet Switch, Wireless LAN Controller (WLC), firewalls, servers and hosts can be dual-homed.

Jul 26, 2025

Exploiting Dual Homing in Access Networks to Improve Resiliency in

Dual homing at both the source and destination LEs offers more options for paths between LEs through the core network. Our results show that dual-homed access proves to be advantageous over single

Nov 21, 2025

BGP Single/Dual Homed and Multi-homed Designs

BGP Single/Dual Homed and Multi-homed Designs When talking about ISPS, BGP, and connections, sometimes you will hear terminology like “single homed”, “dual homed”, “single multi-homed” or “dual

Aug 17, 2025

Switch redundancy with MLAG

In this specific example, the FortiLink stack for the LAN networks consists of a two-tier MLAG topology with dual-homed access switches, whereas the WAN FortiLink stack has a one-tier MLAG peer

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Configuring NE Management (Dual Border Nodes, Access Switches

The network has dual border nodes deployed, uses the distributed gateway solution with VXLAN deployed across core and access layers, and uses standalone WACs. The access switches are dual

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Configuring Multi-Homing in a BGP EVPN VXLAN Fabric

In single-active dual-homed device topology, a single host or access device is connected to two VTEPs with two links that pass through a single-active Ethernet segment. The Ethernet

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Exploiting Dual Homing in Access Networks to Improve Resiliency in

In this work, we explore the benefits of dual homing in the access to provide simultaneously, better resilience and load balancing in the core network, considering connections between local exchanges.

Mar 13, 2026

Example for Dual-Homing a Switch to an IP Network Through V-STP ...

On SwitchA and SwitchB, configure an IP address and a MAC address for a VLANIF interface to implement dual-active gateway of access devices. Configure OSPF on SwitchA, SwitchB,

Mar 26, 2026

Single Homed or Dual Homed FEX

Single homed FEX is easier to trouble shoot as the topology is not as complex. A dual homed FEX will support both dual attached hosts and a single

Jan 06, 2026

Configuring Multi-Homing in a BGP EVPN VXLAN Fabric

Multi-homing allows you to connect a host or Layer 2 switch to more than one VTEP in the EVPN VXLAN network. This connection provides redundancy and allows network optimization.

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The Benefits of Dual Homing for Business Continuity | NSC

Dual homing significantly mitigates this risk by allowing your network to instantly switch to a secondary connection when the primary fails. This seamless transition can effectively minimize

Sep 18, 2025

How to Provision a Dual-Homed Switch by using LAN Automation

This video shows you how to provision a dual-homed network switch using the LAN Automation feature in the Cisco DNA Center.

May 02, 2026

What Is Multihoming and What Do You Need to Set It Up?

In dual-homed multihoming, a network is connected to two separate networks, typically through two different ISPs. This configuration offers increased redundancy and fault tolerance, as

Dec 23, 2025

Multihoming

This document is intended to provide step-by-step tutorial to connecting your network to multiple transit providers, a practice called multihoming.

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Dual Homing Devices on two Cisco Catalyst 9500s

9500 series switches support Stackwise Virtual, which will aggregate both switches into one logical unit, similar to VSS on older Catalyst models. You

Oct 10, 2025

dual home servers to access-switches

I am trying to figure out what I can do when I want to dual home a server NIC to two different access-layer switches. My design is that I want to use two L3 switches in the distribution

Dec 03, 2025

Single Homed or Dual Homed FEX

If you have any servers with only one uplink, you want dual homed FEXes for redundancy. Also, it depend on the number of FEXes you are

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Multi-homed vs. single-homed network - How does it

Network engineers often use the terms single-homed and multi-homed network when talking about network upstream topology. In this article we'll

Sep 29, 2025

Network design: Dual ISP, DMZ, and the network edge

It's important to control the inbound and outbound routing using BGP attributes and filtering as you could run into asymmetric routing due to traffic

Dec 20, 2025

dual homing

Best practices include using diverse physical paths, regularly testing failover mechanisms, and monitoring for optimal performance. Dual homing is essential for mission-critical deployments

Aug 15, 2025

Example for Dual-Homing a Switch to an IP Network Through V-VBST ...

Example for Dual-Homing a Switch to an IP Network Through V-VBST Networking Requirements In Figure 2-44, a switch is dual-homed to an IP network through an M-LAG, with the

Feb 25, 2026

Single vs Dual vs Multi-homed Network

This topology offers the most redundancy. Single Multi-Homed Network connection
Dual Multi-Homed Network Connection Why Multi-Homed Network is

Mar 20, 2026

Re: Fortigate HA with Dual Home L3 Switches

I'm trying to configure two FG 201G HA with dual home FS424 switches (mesh connectivity). I added each core switch port to FW1 and FW2 to the fortilink interface.

Contact Us

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