

Virtual Interfaces of Layer 3 Core Switches



Overview

Simply, SVI is the concept of inter-vlan routing through which we communicate different VLANs within the layer 3 switch. The term virtual interface in SVI is an interface on a Layer 3 switch that acts. Switch Virtual Interfaces (SVIs) are a cornerstone of modern enterprise networking, enabling efficient inter-VLAN routing on multilayer switches. It makes forwarding decisions based on both MAC addresses (Layer 2) and IP addresses (Layer 3), using dedicated ASIC. Layer 3 interfaces forward packets to another device using static or dynamic routing protocols. In other words, Inter VLAN Routing, Routing between VLANs can be. A switch virtual interface (SVI) or routed VLAN interface (RVI) is a virtual network interface that represents a logical layer-3 interface on a multilayer network switch. VLANs divide broadcast domains in a local area network (LAN) environment.



Article Content

Switch Virtual Interface (SVI): Inter VLAN Routing

A Switch Virtual Interface (SVI) is a logical Layer 3 interface configured on a multilayer switch to enable inter-VLAN routing. It allows devices in different

Routed Interfaces on Layer-3 Switches and Internal VLANs

In the Router Interfaces and Switch Ports blog post, I described why we have switch ports and routed interfaces on layer-3 switches. Another blog post in the same series described the

Fundamentals of Operations on a Layer 3 Switch

*Click on the image to enlarge The Assumption SW-1 is a Layer 3 switch SW-1 has the command SW-1 (config)#ip routing applied on to it Explanation of certain

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How to configure a Cisco Layer 3 Switch-InterVLAN

Moreover, you can configure also a Switch Virtual Interface (SVI) with the “ interface vlan ” command which acts as a virtual layer 3 interface on the Layer3 switch.

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InterVLAN routing using Layer 3 switch

They are commonly used in enterprise LANs, especially in distribution and core layers. Layer 3 switches made the three-tier network design possible by allowing

Cisco Layer 3 Switch InterVLAN Routing Configuration

Cisco Catalyst 6500/6000 Series A Layer 3 Switch can route from one VLAN to another using multiple Switched Virtual Interface (SVI). Layer 3 switches convert

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Hier sollte eine Beschreibung angezeigt werden, diese Seite lässt dies jedoch nicht zu.

Switch Virtual Interface: The Ultimate Networking Hack

The term virtual interface in SVI is an interface on a Layer 3 switch that acts as a gateway for a VLAN. It is a logical interface in a switch that allows VLAN's traffic to be entered or left.

InterVLAN routing using Layer 3 switch

In this lesson, we will learn to configure a multilayer switch (also called Layer 3 switch) to perform inter-VLAN routing, which was previously done using an

Inter-VLAN routing using Layer 3 switches - IT

3) Layer 3 switch using switched virtual interfaces (SVIs): This is the most scalable method of inter-VLAN routing. Layer 3 switches have built-in

Inter-VLAN routing using Layer 3 switches - IT Networking Skills

We learn how to configure SVIs (switch virtual interfaces) on multilayer switches and how this makes it possible to route between subnets and VLANs without having to send traffic to a router.

Configuring Layer 3 Interfaces

Subinterfaces divide the parent interface into two or more virtual interfaces on which you can assign unique Layer 3 parameters such as IP addresses and dynamic routing protocols.

Can anyone please explain L3 SVI configuration, What is SVI and Where

But a layer 2 switch can not forward traffic between vlans. - to forward traffic between vlans the switch needs to operate a layer 3 device (using IP addressing). - An SVI (Switched Virtual

Switch virtual interfaces on two layer 3 switches for high

Switch virtual interfaces on two layer 3 switches for high availability. Hi. I'm trying to get my head around the concepts for high availability and redundancy for an

The 9 Best Enterprise Network Switches for 2026

Generally speaking, enterprise-level switches are rack-mounted. When used as a backbone switch, it can support over 500 information points.

Basic & Advanced Catalyst Layer 3 Switch

A Switch Virtual Interface (SVI) is a VLAN of switch ports represented by one interface to a routing or bridging system. Since there is no physical interface for

Configuring Layer 3 Interfaces

Information About Layer 3 Interfaces Layer 3 interfaces forward packets to another device using static or dynamic routing protocols. You can use Layer 3 interfaces for IP routing and inter-VLAN routing of

Layer 3 Switch Routing Explained – SVIs, Inter-VLAN, OSPF, EIGRP ...

An SVI (Switch Virtual Interface) is a logical Layer 3 interface created on a switch and associated with a specific VLAN. It serves as the default gateway for all hosts in that VLAN and as the routing interface.

Switch Virtual Interface

In the context of a Layer 3 Out configuration, a switch virtual interfaces (SVI), is configured to provide connectivity between the ACI leaf switch and a router. By default, when a single Layer 3 Out is

Question on Virtual wire to Layer 3 Routing

Interface 2 - Virtual wire from SBC to Firewall to ISP. Interface 3 - Layer 3 to Core switch to Firewall - Internal IP used for management. When we cut over our VLANs from the Core Switch to the Firewall,

MS Layer 3 Switching and Routing

Layer 3 routing capabilities are available on most Cisco Meraki switches. This allows the switches to route traffic between VLANs in a campus.

Switch virtual interface

On layer-3 switches it is accomplished by the creation of layer-3 interfaces (SVIs). An SVI is a virtual routed interface that connects a VLAN on the device to the Layer 3 router engine on the same device.

Contact Us

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