

Read Book Cisco Catalyst 9000 Series Switches At A Glance

Cisco Catalyst 9000 Series Switches At A Glance

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Cisco Catalyst 9000 Serie licensing Cisco Catalyst 9000 Switches - A New Era of Networking with Muhammad A Imam ~~The story behind Cisco's Catalyst 9000 series Cisco Catalyst Switch Comparison 9300, 9300L, 9200, 9200L, 1000 Cisco 9300 (Cisco Catalyst 9000 serie switches) Cisco Catalyst 9000 Series Switches Cisco Catalyst 9000 Series Switches - Engineered For A New Era Of Networking~~ *How to activate a smart license in Cisco catalyst 9000 series switch Cisco Catalyst 9300 Overview NetBeez Integrated Service Level SLA Monitoring for Cisco Catalyst 9000 Series Switches Meet the Cisco Catalyst 9200 on TechWiseTV How to upgrade Cisco catalyst 9000 series switch to Network Advantage from Network Essential license Unboxing and stacking Cisco Catalyst 9300 Why upgrade to Catalyst 9300 Series switches Application Hosting on Cisco Catalyst 9000 Switches on TechWiseTV Cisco Catalyst 9600: The New Campus Core Network on TechWiseTV Application Hosting on Cisco Catalyst 9000 Switches with Jeff McLaughlin*

Cisco Catalyst Switching DNA Licensing Cat 9300, 9400, 9500 UniNets : Cisco Nexus 9000 Series Switches Training Online Unboxing Cisco Catalyst C9606R Cisco Catalyst 9000 Series

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Switches

The Cisco Catalyst 9000 family of switches, access points, and wireless controllers provides the most mission-critical component of the network. Cisco wired and wireless infrastructure is always on, cloud-driven, and highly secure.

~~Cisco Catalyst 9000 Wireless and Switching Family ...~~

Cisco Catalyst 9300 Series switches are our leading fixed enterprise access switching platform. Ideal access switch for business-critical branch and campus environments where scale and an extra degree of security, resiliency and programmability is needed.

~~Cisco Catalyst 9000 At a Glance - Cisco~~

The Cisco Catalyst 9000 family of switches is the next generation of our best-selling Cisco Catalyst line of enterprise LAN switches and operates with the same feature-rich Cisco IOS® XE 16 and field-reprogrammable UADP ASIC technology already widely deployed with the Cisco Catalyst 3850 and 3650 Series.

~~Cisco Catalyst 9000 Switching Family - Cisco~~

The Cisco Catalyst 9000 family of products are the end-to-end foundation of the modern intent-based network: simple to operate and with powerful potential to meet increasing business demands. The new era of networking must be designed for wireless and put you at the forefront of the Wi-Fi 6 standard, along with the wired infrastructure needed to deliver on expectations.

~~Cisco Catalyst 9000 Family Portfolio - Cisco~~

Catalyst 9000 series of switches, Cisco's flagship enterprise switching portfolio delivering Intent Based Networking (IBN) runs a modern, modular and model-driven operating system stack, Cisco IOS® XE.

~~Docker™ Inside Cisco Catalyst 9000 Switches - Cisco Blogs~~

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Cisco Catalyst 9000 Switches Comparison: 9200 vs 9300 vs 9400 vs 9500 Series 9200 See Models List 9200L See Models List 9300 See Models List 9300L See Models List 9400 See Models List 9500 See Models List Designed to replace atalyst 2960X atalyst 2960XR atalyst 2960X atalyst 2960XR atalyst 3850 atalyst 3850 atalyst 4500 atalyst 6500 atalyst 6800

~~Cisco Catalyst 9000 Switches Comparison: 9200 vs 9300 vs ...~~

The Catalyst 9300 Series is the next generation of the industry's most widely deployed stackable switching platform. It is recognized as CRN's 2018 Overall Network Product of the Year. And for security, IoT, and the cloud, these switches form the foundation of Cisco Software-Defined Access, our leading enterprise architecture.

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~~Cisco Catalyst 9300 Series Switches - Cisco~~

Cisco Catalyst 9500 Series Switches High-density advanced services in a compact form factor The Cisco Catalyst 9500 Series is the first 100/40-Gbps switch purpose built for the enterprise campus. It was recently recognized as CRN's 2017 Overall Network Product of the Year.

~~Cisco Catalyst 9500 Series Switches - Cisco~~

Catalyst 9200 is our entry-level, stackable enterprise network switch series. Built for security, IoT, and the cloud, it's a building block for SD-Access. The Cisco Catalyst 9200 is the most secure, resilient, and programmable switch series in its class.

~~Cisco Catalyst 9200 Series Switches - Cisco~~

The Catalyst 1000 Series switch platform provides a range of options to fulfill almost any small business network's requirements. All models include an easy-to-use web UI for configuration, management, and monitoring. Find and compare switches by using the Cisco Switch Selector. [View all Cisco switches.](#)

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~~Catalyst 1000 Series Switches - Cisco~~

Built using the very programmable UADP 2.0 and running open Cisco IOS-XE, the Catalyst 9000 series of switches delivers for the first time, a unification of ASIC architecture, feature consistency and a single image binary across the different places in the network within the enterprise.

~~Cisco Catalyst 9000 Series of Switches - Software ...~~

The Implementing Cisco Catalyst 9000 Series Switches (ENC9K) v1.0 course introduces you to the architecture, capabilities, and implementation of the Cisco Catalyst 9000 switching platform. This hands-on course covers many features of this Cisco IOS XE platform and describes how to manage devices from a single dashboard called Cisco DNA Center.

~~Implementing Cisco Catalyst 9000 Series Switches (ENC9K) ...~~

Cisco's introduction of the Catalyst 9000 series of Switches and Software Defined Access (SD-Access) is launching of a new era of networking and resetting the bar for investment protection for Enterprise Switching.

~~Cisco Catalyst 9000 Series of Switches - Maximize your ...~~

The Cisco Catalyst 9600 Series is a modular chassis-based core switch family. This series can support interfaces up to 100 Gigabit Ethernet in speed and redundant sSupervisor modules, power supplies and fans. The Cisco Catalyst 9400 Series is a chassis-based access and distribution switch family.

~~Cisco Catalyst - Wikipedia~~

Built using the very programmable UADP 2.0 and running open Cisco IOS-XE, the Catalyst 9000 series of switches delivers for the first time, a unification of ASIC architecture, feature consistency and a single image binary across the different places in the network

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within the enterprise.

~~Cisco Catalyst 9000 Series of Switches ... Cisco Community~~
Cisco's introduction of the Catalyst 9000 series of Switches and Software Defined Access (SD-Access) is launching of a new era of networking and resetting the bar for investment protection for Enterprise Switching.

~~Cisco Catalyst 9000 Series of Switches ... Cisco Community~~
Built using the very programmable UADP 2.0 and running open Cisco IOS-XE, the Catalyst 9000 series of switches delivers for the first time, a unification of ASIC architecture, feature consistency and a single image binary across the different places in the network within the enterprise.

~~Cisco Catalyst 9000 Series Switches - Extending cloud to ...~~
This vulnerability affects Cisco Catalyst 9200 Series Switches if they are running a Cisco IOS XE Software release earlier than releases 16.12.3 and 16.9.5. Products Confirmed Not Vulnerable
Only products listed in the Vulnerable Products section of this advisory are known to be affected by this vulnerability.

~~Cisco Catalyst 9200 Series Switches Jumbo Frame Denial of ...~~
This topic is a chance to clarify your questions about smart licensing on Cisco Catalyst switches, including 9000 (9200, 9300, 9400, 9500, 9500H, and 9600 Series) and 3000 (3650 and 3850 Series) switches. Cisco experts will review and clarify the benefits, basic concepts, considerations, different types of registrations, and general FAQs.

Cisco® Nexus switches and the new NX-OS operating system are rapidly becoming the new de facto standards for data center

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distribution/aggregation layer networking. NX-OS builds on Cisco IOS to provide advanced features that will be increasingly crucial to efficient data center operations. NX-OS and Cisco Nexus Switching is the definitive guide to utilizing these powerful new capabilities in enterprise environments. In this book, three Cisco consultants cover every facet of deploying, configuring, operating, and troubleshooting NX-OS in the data center. They review the key NX-OS enhancements for high availability, virtualization, In-Service Software Upgrades (ISSU), and security. In this book, you will discover support and configuration best practices for working with Layer 2 and Layer 3 protocols and networks, implementing multicasting, maximizing serviceability, providing consistent network and storage services, and much more. The authors present multiple command-line interface (CLI) commands, screen captures, realistic configurations, and troubleshooting tips—all based on their extensive experience working with customers who have successfully deployed Nexus switches in their data centers. Learn how Cisco NX-OS builds on and differs from IOS Work with NX-OS user modes, management interfaces, and system files Configure Layer 2 networking: VLANs/private VLANs, STP, virtual port channels, and unidirectional link detection Configure Layer 3 EIGRP, OSPF, BGP, and First Hop Redundancy Protocols (FHRPs) Set up IP multicasting with PIM, IGMP, and MSDP Secure NX-OS with SSH, Cisco TrustSec, ACLs, port security, DHCP snooping, Dynamic ARP inspection, IP Source Guard, keychains, Traffic Storm Control, and more Build high availability networks using process modularity and restart, stateful switchover, nonstop forwarding, and in-service software upgrades Utilize NX-OS embedded serviceability, including Switched Port Analyzer (SPAN), Smart Call Home, Configuration Checkpoint/Rollback, and NetFlow Use the NX-OS Unified Fabric to simplify infrastructure and provide ubiquitous network and storage services Run NX-OS on Nexus 1000V server-based software switches This book is part of the Networking Technology Series from Cisco

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Press®, which offers networking professionals valuable information for constructing efficient networks, understanding new technologies, and building successful careers.

Improve operations and agility in any data center, campus, LAN, or WAN Today, the best way to stay in control of your network is to address devices programmatically and automate network interactions. In this book, Cisco experts Ryan Tischer and Jason Gooley show you how to do just that. You'll learn how to use programmability and automation to solve business problems, reduce costs, promote agility and innovation, handle accelerating complexity, and add value in any data center, campus, LAN, or WAN. The authors show you how to create production solutions that run on or interact with Nexus NX-OS-based switches, Cisco ACI, Campus, and WAN technologies. You'll learn how to use advanced Cisco tools together with industry-standard languages and platforms, including Python, JSON, and Linux. The authors demonstrate how to support dynamic application environments, tighten links between apps and infrastructure, and make DevOps work better. This book will be an indispensable resource for network and cloud designers, architects, DevOps engineers, security specialists, and every professional who wants to build or operate high-efficiency networks. Drive more value through programmability and automation, freeing resources for high-value innovation Move beyond error-prone, box-by-box network management Bridge management gaps arising from current operational models Write NX-OS software to run on, access, or extend your Nexus switch Master Cisco's powerful on-box automation and operation tools Manage complex WANs with NetConf/Yang, ConfD, and Cisco SDN Controller Interact with and enhance Cisco Application Centric Infrastructure (ACI) Build self-service catalogs to accelerate application delivery Find resources for deepening your expertise in network automation

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Port-based authentication is a "network access control" concept in which a particular device is evaluated before being permitted to communicate with other devices located on the network. 802.1X Port-Based Authentication examines how this concept can be applied and the effects of its application to the majority of computer networks in existence today. 802.1X is a standard that extends the Extensible Authentication Protocol (EAP) over a Local Area Network (LAN) through a process called Extensible Authentication Protocol Over LANs (EAPOL). The text presents an introductory overview of port-based authentication including a description of 802.1X port-based authentication, a history of the standard and the technical documents published, and details of the connections among the three network components. It focuses on the technical aspect of 802.1X and the related protocols and components involved in implementing it in a network. The book provides an in-depth discussion of technology, design, and implementation with a specific focus on Cisco devices. Including examples derived from the 802.1X implementation, it also addresses troubleshooting issues in a Cisco environment. Each chapter contains a subject overview. Incorporating theoretical and practical approaches, 802.1X Port-Based Authentication seeks to define this complex concept in accessible terms. It explores various applications to today's computer networks using this particular network protocol.

Thoroughly revised and expanded, this second edition adds sections on MPLS, Security, IPv6, and IP Mobility and presents solutions to the most common configuration problems.

The definitive deep-dive guide to hardware and software troubleshooting on Cisco Nexus switches The Cisco Nexus platform and NX-OS switch operating system combine to deliver unprecedented speed, capacity, resilience, and flexibility in today's data center networks. Troubleshooting Cisco Nexus Switches and NX-OS is your single reference for quickly identifying and solving

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problems with these business-critical technologies. Three expert authors draw on deep experience with large Cisco customers, emphasizing the most common issues in real-world deployments, including problems that have caused major data center outages. Their authoritative, hands-on guidance addresses both features and architecture, helping you troubleshoot both control plane forwarding and data plane/data path problems and use NX-OS APIs to automate and simplify troubleshooting. Throughout, you'll find real-world configurations, intuitive illustrations, and practical insights into key platform-specific behaviors. This is an indispensable technical resource for all Cisco network consultants, system/support engineers, network operations professionals, and CCNP/CCIE certification candidates working in the data center domain.

- Understand the NX-OS operating system and its powerful troubleshooting tools
- Solve problems with cards, hardware drops, fabrics, and CoPP policies
- Troubleshoot network packet switching and forwarding
- Properly design, implement, and troubleshoot issues related to Virtual Port Channels (VPC and VPC+)
- Optimize routing through filtering or path manipulation
- Optimize IP/IPv6 services and FHRP protocols (including HSRP, VRRP, and Anycast HSRP)
- Troubleshoot EIGRP, OSPF, and IS-IS neighbor relationships and routing paths
- Identify and resolve issues with Nexus route maps
- Locate problems with BGP neighbor adjacencies and enhance path selection
- Troubleshoot high availability components (BFD, SSO, ISSU, and GIR)
- Understand multicast protocols and troubleshooting techniques
- Identify and solve problems with OTV
- Use NX-OS APIs to automate troubleshooting and administrative tasks

The complete guide to transforming enterprise networks with Cisco DNA As networks become more complex and dynamic, organizations need better ways to manage and secure them. With the Cisco Digital Network Architecture, network operators can run entire network fabrics as a single, programmable system by defining

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rules that span their devices and move with their users. Using Cisco intent-based networking, you spend less time programming devices, managing configurations, and troubleshooting problems so you have more time for driving value from your network, your applications, and most of all, your users. This guide systematically introduces Cisco DNA, highlighting its business value propositions, design philosophy, tenets, blueprints, components, and solutions. Combining insider information with content previously scattered through multiple technical documents, it provides a single source for evaluation, planning, implementation, and operation. The authors bring together authoritative insights for multiple business and technical audiences. Senior executives will learn how DNA can help them drive digital transformation for competitive advantage. Technical decision-makers will discover powerful emerging solutions for their specific needs. Architects will find essential recommendations, interdependencies, and caveats for planning deployments. Finally, network operators will learn how to use DNA Center's modern interface to streamline, automate, and improve virtually any network management task.

- Accelerate the digital transformation of your business by adopting an intent-based network architecture that is open, extensible, and programmable
- Integrate virtualization, automation, analytics, and cloud services to streamline operations and create new business opportunities
- Dive deep into hardware, software, and protocol innovations that lay the programmable infrastructure foundation for DNA
- Virtualize advanced network functions for fast, easy, and flexible deployments
- Translate business intent into device configurations and simplify, scale, and automate network operations using controllers
- Use analytics to tune performance, plan capacity, prevent threats, and simplify troubleshooting
- Learn how Software-Defined Access improves network flexibility, security, mobility, visibility, and performance
- Use DNA Assurance to track the health of clients, network devices, and applications to reveal hundreds of actionable insights
- See how DNA Application Policy supports granular

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application recognition and end-to-end treatment, for even encrypted applications · Identify malware, ransomware, and other threats in encrypted traffic

Best-practice QoS designs for protecting voice, video, and critical data while mitigating network denial-of-service attacks Understand the service-level requirements of voice, video, and data applications Examine strategic QoS best practices, including Scavenger-class QoS tactics for DoS/worm mitigation Learn about QoS tools and the various interdependencies and caveats of these tools that can impact design considerations Learn how to protect voice, video, and data traffic using various QoS mechanisms Evaluate design recommendations for protecting voice, video, and multiple classes of data while mitigating DoS/worm attacks for the following network infrastructure architectures: campus LAN, private WAN, MPLS VPN, and IPSec VPN Quality of Service (QoS) has already proven itself as the enabling technology for the convergence of voice, video, and data networks. As business needs evolve, so do the demands for QoS. The need to protect critical applications via QoS mechanisms in business networks has escalated over the past few years, primarily due to the increased frequency and sophistication of denial-of-service (DoS) and worm attacks. End-to-End QoS Network Design is a detailed handbook for planning and deploying QoS solutions to address current business needs. This book goes beyond discussing available QoS technologies and considers detailed design examples that illustrate where, when, and how to deploy various QoS features to provide validated and tested solutions for voice, video, and critical data over the LAN, WAN, and VPN. The book starts with a brief background of network infrastructure evolution and the subsequent need for QoS. It then goes on to cover the various QoS features and tools currently available and comments on their evolution and direction. The QoS requirements of voice, interactive and streaming video, and multiple classes of data applications are presented, along with an overview

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of the nature and effects of various types of DoS and worm attacks. QoS best-practice design principles are introduced to show how QoS mechanisms can be strategically deployed end-to-end to address application requirements while mitigating network attacks. The next section focuses on how these strategic design principles are applied to campus LAN QoS design. Considerations and detailed design recommendations specific to the access, distribution, and core layers of an enterprise campus network are presented. Private WAN QoS design is discussed in the following section, where WAN-specific considerations and detailed QoS designs are presented for leased-lines, Frame Relay, ATM, ATM-to-FR Service Interworking, and ISDN networks. Branch-specific designs include Cisco® SAFE recommendations for using Network-Based Application Recognition (NBAR) for known-worm identification and policing. The final section covers Layer 3 VPN QoS design-for both MPLS and IPsec VPNs. As businesses are migrating to VPNs to meet their wide-area networking needs at lower costs, considerations specific to these topologies are required to be reflected in their customer-edge QoS designs. MPLS VPN QoS design is examined from both the enterprise and service provider's perspectives. Additionally, IPsec VPN QoS designs cover site-to-site and teleworker contexts. Whether you are looking for an introduction to QoS principles and practices or a QoS planning and deployment guide, this book provides you with the expert advice you need to design and implement comprehensive QoS solutions.

Now fully updated for the new Cisco SWITCH 300-115 exam, *Implementing Cisco IP Switched Networks (SWITCH) Foundation Learning Guide* is your Cisco® authorized learning tool for CCNP® or CCDP® preparation. Part of the Cisco Press Foundation Learning Series, it teaches you how to plan, configure, verify, secure, and maintain complex enterprise switching solutions using Cisco Catalyst® switches and Enterprise Campus Architecture. The

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authors show you how to build scalable multilayer switched networks, create and deploy global intranets, and perform basic troubleshooting in environments using Cisco multilayer switches for client hosts and services. They begin by reviewing basic switching concepts, network design, and campus network architecture. Next, they present in-depth coverage of spanning-tree, inter-VLAN routing, first-hop redundancy, network management, advanced switch features, high availability, and campus network security. Each chapter opens with a list of topics that clearly identify its focus. Each chapter ends with a summary of key concepts for quick study, as well as review questions to assess and reinforce your understanding. Throughout, configuration examples, and sample verification outputs illustrate critical issues in network operation and troubleshooting. This guide is ideal for all certification candidates who want to master all the topics covered on the SWITCH 300-115 exam. Serves as the official textbook for version 7 of the Cisco Networking Academy CCNP SWITCH course Covers basic switching terminology and concepts, and the unique features of Cisco Catalyst switch designs Reviews campus network design, including network structure, roles of Cisco Catalyst switches, and differences between Layer 2 and multilayer switches Introduces VLANs, VTP, Trunking, and port-channeling Explains Spanning Tree Protocol configuration Presents concepts and modern best practices for interVLAN routing Covers first-hop redundancy protocols used by Cisco Catalyst switches Outlines a holistic approach to network management and Cisco Catalyst device security with AAA, NTP, 802.1x, and SNMP Describes how to use advanced features to improve campus network resiliency and availability Shows how to establish switch physical redundancy using Stackwise, VSS, or redundant supervisors Explains advanced security features

End-to-End QoS Network Design Quality of Service for Rich-Media & Cloud Networks Second Edition New best practices,

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technical strategies, and proven designs for maximizing QoS in complex networks This authoritative guide to deploying, managing, and optimizing QoS with Cisco technologies has been thoroughly revamped to reflect the newest applications, best practices, hardware, software, and tools for modern networks. This new edition focuses on complex traffic mixes with increased usage of mobile devices, wireless network access, advanced communications, and video. It reflects the growing heterogeneity of video traffic, including passive streaming video, interactive video, and immersive videoconferences. It also addresses shifting bandwidth constraints and congestion points; improved hardware, software, and tools; and emerging QoS applications in network security. The authors first introduce QoS technologies in high-to-mid-level technical detail, including protocols, tools, and relevant standards. They examine new QoS demands and requirements, identify reasons to reevaluate current QoS designs, and present new strategic design recommendations. Next, drawing on extensive experience, they offer deep technical detail on campus wired and wireless QoS design; next-generation wiring closets; QoS design for data centers, Internet edge, WAN edge, and branches; QoS for IPsec VPNs, and more. Tim Szigeti, CCIE No. 9794 is a Senior Technical Leader in the Cisco System Design Unit. He has specialized in QoS for the past 15 years and authored Cisco TelePresence Fundamentals. Robert Barton, CCIE No. 6660 (R&S and Security), CCDE No. 2013::6 is a Senior Systems Engineer in the Cisco Canada Public Sector Operation. A registered Professional Engineer (P. Eng), he has 15 years of IT experience and is primarily focused on wireless and security architectures. Christina Hattingh spent 13 years as Senior Member of Technical Staff in Unified Communications (UC) in Cisco's Services Routing Technology Group (SRTG). There, she spoke at Cisco conferences, trained sales staff and partners, authored books, and advised customers. Kenneth Briley, Jr., CCIE No. 9754, is a Technical Lead in the Cisco Network Operating Systems Technology Group. With

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more than a decade of QoS design/implementation experience, he is currently focused on converging wired and wireless QoS. n Master a proven, step-by-step best-practice approach to successful QoS deployment n Implement Cisco-validated designs related to new and emerging applications n Apply best practices for classification, marking, policing, shaping, markdown, and congestion management/avoidance n Leverage the new Cisco Application Visibility and Control feature-set to perform deep-packet inspection to recognize more than 1000 different applications n Use Medianet architecture elements specific to QoS configuration, monitoring, and control n Optimize QoS in rich-media campus networks using the Cisco Catalyst 3750, Catalyst 4500, and Catalyst 6500 n Design wireless networks to support voice and video using a Cisco centralized or converged access WLAN n Achieve zero packet loss in GE/10GE/40GE/100GE data center networks n Implement QoS virtual access data center designs with the Cisco Nexus 1000V n Optimize QoS at the enterprise customer edge n Achieve extraordinary levels of QoS in service provider edge networks n Utilize new industry standards and QoS technologies, including IETF RFC 4594, IEEE 802.1Q-2005, HQF, and NBAR2 This book is part of the Networking Technology Series from Cisco Press®, which offers networking professionals valuable information for constructing efficient networks, understanding new technologies, and building successful careers.

The complete guide to building and managing next-generation data center network fabrics with VXLAN and BGP EVPN This is the only comprehensive guide and deployment reference for building flexible data center network fabrics with VXLAN and BGP EVPN technologies. Writing for experienced network professionals, three leading Cisco experts address everything from standards and protocols to functions, configurations, and operations. The authors first explain why and how data center fabrics are evolving, and introduce Cisco's fabric journey. Next, they review key switch

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roles, essential data center network fabric terminology, and core concepts such as network attributes, control plane details, and the associated data plane encapsulation. Building on this foundation, they provide a deep dive into fabric semantics, efficient creation and addressing of the underlay, multi-tenancy, control and data plane interaction, forwarding flows, external interconnectivity, and service appliance deployments. You'll find detailed tutorials, descriptions, and packet flows that can easily be adapted to accommodate customized deployments. This guide concludes with a full section on fabric management, introducing multiple opportunities to simplify, automate, and orchestrate data center network fabrics. Learn how changing data center requirements have driven the evolution to overlays, evolved control planes, and VXLAN BGP EVPN spine-leaf fabrics Discover why VXLAN BGP EVPN fabrics are so scalable, resilient, and elastic Implement enhanced unicast and multicast forwarding of tenant traffic over the VXLAN BGP EVPN fabric Build fabric underlays to efficiently transport uni- and multi-destination traffic Connect the fabric externally via Layer 3 (VRF-Lite, LISP, MPLS L3VPN) and Layer 2 (VPC) Choose your most appropriate Multi-POD, multifabric, and Data Center Interconnect (DCI) options Integrate Layer 4-7 services into the fabric, including load balancers and firewalls Manage fabrics with POAP-based day-0 provisioning, incremental day 0.5 configuration, overlay day-1 configuration, or day-2 operations

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