

В библиотеке НИИТС для научных сотрудников и аспирантов имеются различные книги по современным инфокоммуникациям.

Аспиранты Университета, которым при работе над диссертацией нужна та или иная книга из этой Библиотеки, могут обратиться к заведующему кафедрой Систем коммутации и распределения информации проф. Б. С. Гольдштейну со [страницы online-диалога](#).

Voice Over MPLS: Planning and Designing Networks

Daniel Minoli

MPLS is many things to many people. If you're moving IP voice traffic, it may mean performance gains for you.

Daniel Minoli's 'Voice Over MPLS' gives you the technical and business lowdown on innovative new solutions for packet-based voice. What does it take to build flexible, high-performance networks with enhanced quality of service? Maybe not as much as you think.

Reliable voice services that customers can afford.

With VoMPLS, you can deliver the quality associated with VoIP over ATM links without the cost in either bandwidth or equipment. Based on label-switching standards from the IETF and the work of a number of leading companies, Voice over MPLS lets you packetize voice without the added overhead of IP encapsulation. It also suppresses periods of silence, freeing up bandwidth for other uses.

From one of the most experienced names in telecom technology, 'Voice Over MPLS' shows you how to

- Provide multiple, high-quality services without costly leased lines
- Deliver low-bandwidth voice over ATM, Frame Relay, or IP
- Add phone lines without adding equipment
- Solve scaling issues for small- and medium-sized users
- Obtain consistent call quality without crunching bandwidth
- Discover ways to protect revenues during deployment
- Evaluate the potential role of VoMPLS in big-picture convergence
- Evaluate VoMPLS's impact on public networks

Find the engineering details you need for Label Switched Paths (LSPs), layers, signaling, CoS (Classes of Service), QoS (Quality of Service), VoMPLS in VPNs (Virtual Private Networks), implementation options, deployment, and more.

Объём: 448 стр.

Издательство: McGraw-Hill Professional Publishing; ?????? ??????, 2002

ISBN: 0-07140-615-8



Traffic Engineering with MPLS

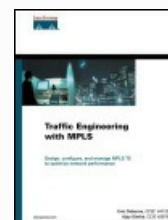
Eric Osborne, Ajay Simha

Design, configure, and manage MPLS TE to optimize network performance

Almost every busy network backbone has some congested links while others remain underutilized. That's because shortest-path routing protocols send traffic down the path that is shortest without considering other network parameters, such as utilization and traffic demands. Using Traffic Engineering (TE), network operators can redistribute packet flows to attain more uniform distribution across all links. Forcing traffic onto specific pathways allows you to get the most out of your existing network capacity while making it easier to deliver consistent service levels to customers at the same time.

Cisco(r) Multiprotocol Label Switching (MPLS) lends efficiency to very large networks, and is the most effective way to implement TE. MPLS TE routes traffic flows across the network by aligning resources required by a given flow with actual backbone capacity and topology. This constraint-based routing approach feeds the network route traffic down one or more pathways, preventing unexpected congestion and enabling recovery from link or node failures.

Traffic Engineering with MPLS provides you with information on how to use MPLS TE and associated features to maximize network bandwidth. This book focuses on real-world applications, from design scenarios to feature configurations to tools that can be used



in managing and troubleshooting MPLS TE. Assuming some familiarity with basic label operations, this guide focuses mainly on the operational aspects of MPLS TE-how the various pieces work and how to configure and troubleshoot them. Additionally, this book addresses design and scalability issues along with extensive deployment tips to help you roll out MPLS TE on your own network.

- Understand the background of TE and MPLS, and brush up on MPLS forwarding basics
- Learn about router information distribution and how to bring up MPLS TE tunnels in a network
- Understand MPLS TE's Constrained Shortest Path First (CSPF) and mechanisms you can use to influence CSPF's path calculation
- Use the Resource Reservation Protocol (RSVP) to implement Label-Switched Path setup
- Use various mechanisms to forward traffic down a tunnel
- Integrate MPLS into the IP quality of service (QoS) spectrum of services
- Utilize Fast Reroute (FRR) to mitigate packet loss associated with link and node failures
- Understand Simple Network Management Protocol (SNMP)-based measurement and accounting services that are available for MPLS
- Evaluate design scenarios for scalable MPLS TE deployments
- Manage MPLS TE networks by examining common configuration mistakes and utilizing tools for troubleshooting MPLS TE problems

Объём: 608 стр.

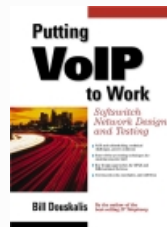
Издательство: Cisco Press; ?????? ??????, 2002

ISBN: 1-58705-031-5

Putting VoIP to Work: Softswitch Network Design and Testing

Bill Douskalis

- VoIP and softswitching: technical challenges, proven solutions
- State-of-the-art testing techniques for ensuring superior QoS
- Key design approaches for MPLS and differentiated services
- Covers protocols, topologies, and call flows
- By the author of the best-selling IP Telephony



Thin-depth, up-to-the-minute technical guide to developing and deploying IP-based telephony.

This is a complete, in-depth technical guide to the challenges associated with building and deploying Voice over IP (VoIP) networks using softswitch technologies and today's best solutions. Bill Douskalis, author of the best-selling IP Telephony, reviews the entire current state of the art in protocols for signaling, media transport, and network engineering and presents expert guidance on designing telephony solutions that meet the needs of both carriers and customers. Coverage includes:

- New scenarios for design of VoIP networks based on Class 4 and Class 5 softswitch network technology
- Designing for performance and interoperability: challenges, examples, and comparisons of potential solutions
- Protocols of the new converged networks and design requirements for seamless integration of softswitch applications with the PSTN
- Call flows for SIP, H.323, MGCP, and Megaco
- Testing tips to ensure consistently high QoS in voiceband applications
- MPLS and IP differentiated services in VoIP networks: key roles and integration issues

Nobody has more experience implementing VoIP in large-scale networks than Bill Douskalis and no book offers more insight for real-world VoIP design, construction, and deployment.

Объём: 352 стр.

Издательство: Prentice Hall Ptr; ?????? ??????, 2001

ISBN: 0-13040-959-6

The MPLS Primer: An Introduction to Multiprotocol Label Switching

Sean Harnedy

The complete guide to MPLS for the working network professional.

- MPLS for the working network professional
- Traffic engineering, VPNs, QoS, and path-restoral applications
- Design, implementation, operations, and administration
- Core technologies, protocols, signaling, and label distribution
- Compares today's leading MPLS implementations



MPLS simplifies and improves IP packet exchange, giving network operators unprecedented flexibility in managing traffic and

controlling network performance. Now there's a complete MPLS primer for working network professionals: *The MPLS Primer*.

Leading consultant Sean Harnedy introduces every aspect of MPLS technology: concepts, standards, evolution, real-world design and implementation, day-to-day operations, and more. From never-before-published deployment tips to hands-on comparisons of the leading MPLS implementations, *The MPLS Primer* gives you the information you need to deliver on the promise of MPLS starting today.

- 11 compelling advantages of MPLS technology
- Key MPLS applications: traffic engineering, VPNs, QoS, and path restoral
- How MPLS integrates with TCP/IP and existing internetwork infrastructures
- MPLS core technologies and protocols: control plane, data forwarding plane, FEC, LSR, and LSP
- Signaling and label distribution, in depth
- Leading MPLS offerings from equipment vendors, stack providers, service providers, and others
- The future of MPLS: new enhancements that will increase its value and extend its role
- MPLS documentation and resources: how to find out more

Whether you're a network architect, administrator, manager, or consultant, *The MPLS Primer* is your hands-on jumpstart for planning, deploying, and succeeding with MPLS!

Объём: 512 стр.

Издательство: Prentice Hall PTR; ?????? ??????, 2001

ISBN: 0-13032-980-0

<- [1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17] [18] ->

Страница 15 из 18

Всего книг в базе данных: 69

[Наверх](#) | [Назад](#) | [На главную](#) | [Карта сайта](#)

[Темы и направления исследований](#) | [Публикации](#) | [Образование](#) | [О портале](#)

1997 – 2019 © Научно-исследовательский институт Телекоммуникационных систем.

Ретроспективный сайт научно-образовательной школы проф. Б. С. Гольдштейна

Последнее обновление страницы: 25.02.14

Daniel Minoli - Voice Over MPLS: Planning and Designing Networks2002 | ISBN: 0071406158 | English | 448 pages | PDF | 4 MBMPLS (MultiProtocol Label Switching) is a controversial new protocol that vastly simplifies Internet traffic and effectively removes obstacles to Voice Over IP applications. Here is the first book to thoroughly explain and evaluate MPLS specifically for the voice markets. Explains a potentially disruptive technology for telephony Shows providers how to protect their revenues during deployment Details key engineering problems such as classes of service, traffic engineering, overlays, and more. <<< Visit My Blog For More Ebooks>>>. download.

MPLS. Multi-Protocol Label Switching. In a MPLS network, each data frame is assigned a label. Packet-forwarding (switching) decisions are made solely on the contents of this label no need to examine the packet itself. Speed benefit, since no IP routing table lookup is performed. MPLS and label switching. Implications. In MPLS networks, when using trace-routes, remember the ICMP behavior. As long as there is a break on the MPLS path, the packet will not make it past the 1st hop, but that doesn't mean that the 2nd hop is dead. Implications 2. MPLS and its deployment require topology and network considerations and planning. More material: If you liked this presentation look at Tiktube.com