

# CCNP Switch Master StudyGuide



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## 1.0 Layer 2 Technologies

### 1.1 Configure and verify switch administration

- **THREE PRIMARY SWITCHING METHODS**
  - **PROCESS-BASED SWITCHING**
    - Tasks are switched using CPU
    - This process is called *IP Input*
  - **FAST SWITCHING**
    - First packet would hit CPU
    - Fast Switching Cache would be populated
  - **CISCO EXPRESS FORWARDING**
    - Prepopulated L2 and L3 caches
    - CPU is rarely bothered
    - Tracks the ARP and Routing tables
- **CEF A.K.A. "CISCO EXPRESS FORWARDING"**
  - Known as *switching* within routers and switches
  - Enabled by default on Multilayer Switches
  - Composed two components: **FIB** and **Adjacency Table**
- **FIB A.K.A. "FORWARDING INFORMATION BASE"**
  - Copy of IP Routing Table and tracks information for automatic updates
  - Does not contain everything from the IP Routing Table

# How To Master Ccnp Switch

**Hucaby**



## How To Master Ccnp Switch:

**How to Master Ccnp Switch** René Molenaar,2013-08-28 ow to master CCNP SWITCH shows you step by step everything you need to know to master the CCNP SWITCH exam You will discover new topics like layer 3 switching and virtual gateway protocols but also learn more about familiar switching protocols like spanning tree and VLANs trunking Plus you will receive an overview of switching labs that you should practice from GNS3vault com [How to Master CCNP ROUTE](#) René Molenaar,2013-08-28 How to master CCNP ROUTE shows you step by step everything you need to know to master the CCNP ROUTE exam You will discover new topics like BGP routing manipulation redistribution and learn more about familiar routing protocols like OSPF and EIGRP Plus you will receive an overview of routing labs that you should practice from GNS3vault com **How to Master Ccnp Tshoot** René Molenaar,2013-08-28 How to master CCNP TSHOOT shows you step by step everything that could possibly go wrong with protocols like OSPF EIGRP NAT BGP and everything else you learned in CCNA and CCNP ROUTE SWITCH so far More importantly you will learn how to troubleshoot them so that you will master the CCNP TSHOOT exam Plus you ll receive an overview of troubleshooting labs that you should practice from GNS3vault com **CCNP SWITCH 642-813 Official Certification Guide** David Hucaby,2010-02-09 This is the eBook version of the print title Note that the eBook does not provide access to the practice test software that accompanies the print book Trust the best selling Official Cert Guide series from Cisco Press to help you learn prepare and practice for exam success They are built with the objective of providing assessment review and practice to help ensure you are fully prepared for your certification exam Master the CCNP SWITCH 642 813 exam with this official study guide Assess your knowledge with chapter opening quizzes Review key concepts with Exam Preparation Tasks CCNP SWITCH 642 813 Official Certification Guide is a best of breed Cisco exam study guide that focuses specifically on the objectives for the CCNP SWITCH exam Network architect and best selling author Dave Hucaby shares preparation hints and test taking tips helping you identify areas of weakness and improve both your conceptual knowledge and hands on skills Material is presented in a concise manner focusing on increasing your understanding and retention of exam topics CCNP SWITCH 642 813 Official Certification Guide presents you with an organized test preparation routine through the use of proven series elements and techniques Do I Know This Already quizzes open each chapter and allow you to decide how much time you need to spend on each section The complete exam topic list makes referencing easy Chapter ending Exam Preparation Tasks sections help drill you on key concepts and commands you must know thoroughly Well regarded for its level of detail assessment features and challenging review questions and exercises this official study guide helps you master the concepts and techniques that will enable you to succeed on the exam the first time CCNP SWITCH 642 813 Official Certification Guide is part of a recommended learning path from Cisco that includes simulation and hands on training from authorized Cisco Learning Partners and self study products from Cisco Press To find out more about instructor led training e learning and hands on

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*CCNP Switching* Sean Odom, Doug Hammond, 2000 With this book readers get a comprehensive tutorial on the curriculum objectives for exam 640 504 plus all the study materials necessary for passing The guide offers real world examples interactive activities and multiple hands on projects that reinforce key concepts An exclusive test engine allows users to customize a study plan

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*CCNP Practical Studies* Justin Menga, 2003 Gain necessary hands on experience implementing CCNP Switching concepts with this practical lab guide Prepare for the CCNP Switching exam through hands on application of concepts These lab configurations are complete with explanations of equipment setup and execution      **Implementing Cisco IP Switched Networks (SWITCH) Foundation Learning Guide** Richard Froom, Erum Frahim, 2015-04-20 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 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

**CCNP Switching Exam Cram** Richard A. Deal, 2000 Prepares the reader to pass the new CCNP Switching exam 640 504 Covers strategies and technologies for medium size to large networks that use Ethernet FDDI and ATM LAN emulation Contains all of the necessary overviews concepts and Cisco terminology to help potential test takers get up to speed as quickly as possible This skill based exam is designed to test the candidate on real world job tasks which will increase employer demand for qualified CCNPs

CCNP Routing and Switching Portable Command Guide Scott D. Empson, Patrick Gargano, Hans Roth, 2014-12-10 CCNP Routing and Switching Portable Command Guide All ROUTE 300 101 and SWITCH 300 115 Commands in One Compact Portable Resource Preparing for the CCNP ROUTE or CCNP SWITCH exam Working as a network professional Here are all the CCNP level commands you ll need in one handy resource The CCNP Routing and Switching Portable Command Guide is filled with valuable easy to access information and it s portable enough to use whether you re in the server room or the equipment closet This guide helps you memorize commands and concepts as you prepare to pass the CCNP ROUTE 300 101 or CCNP SWITCH 300 115 exams It summarizes all CCNP certification level Cisco IOS Software commands keywords command arguments and associated prompts offering tips and examples for applying them in

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**Cisco CCNP SWITCH Simplified** Paul Browning, Farai Tafa, 2010 The Cisco CCNP SWITCH exam is one of three exams you must pass on your path towards becoming a CCNP The CCNP SWITCH exam will not only test you knowledge of Cisco specific and industry standard practices but also your hands on skills Cisco CCNP SWITCH Simplified has been written by two Cisco experts Farai Tafa and Paul Browning It has been tested by students just like you and proven to give you the knowledge and skills you need to get you through the tough CCNP SWITCH 642 813 About the Book Cisco CCNP SWITCH Simplified features over 750 pages of theory and hands on labs to ensure you grasp all the key concepts you need to understand for the exams and to carry out the role of a Cisco SWITCH engineer Theory lessons include Campus LANs VLANs and VTP Advanced Spanning Tree Etherchannels and Link Aggregation Protocols Securing the LAN Catalyst Multilayer Switching Extending the LAN for Wireless QoS and Advanced Catalyst Services Hands on labs include VLANs and VTP v1 and v2 Advanced Spanning Tree Etherchannel Configuration HSRP CEF Switching Securing LAN Ports Configuring the Switch for Wireless and many more Our Books Work Every one of our Cisco study guides is designed to get you the maximum results for the shortest amount of time They are not some quick fix by any means but we strip away all the useless jargon we don t show off what we know unlike some authors Every example is applied to live networks and you learn how it works in the real world Once you grasp the concepts you will be ready to pass your exams Amazon com

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**CCNP Support Exam Cram** Matthew Luallen, 2000 Covering all the technologies in exam 640 501 this book provides all the overviews concepts and terminology needed to help candidates get up to speed on the new Cisco certification as quickly as possible Features include a complete practice exam with answer explanations sections on test taking tips and shortcuts and a tear out Cram sheet for last minute memory refreshment

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