CCIE Routing and Switching Reading List - RFCs

A listing of RFC's that should be reviewed for the CCIE Lab. This list was based from the list over at Internetwork Expert, with some additional RFC's added (mostly recent ones). Links will go to another page on this wiki with any CCIE-relevant notes that have been added regarding that particular RFC. For full reading, check out the main IETF page for RFCs at: http://www.ietf.org/rfc.html **Ethernet** RFC 826 - Ethernet ARP] RFC 903 - Reverse ARP] RFC 894 - Standard for the Transmission of IP Datagrams Over Ethernet Networks] RFC 2516 - A Method for Transmitting PPP Over Ethernet (PPPoE)] RFC 3748 - Extensible Authentication Protocol (EAP)] RFC 3931 - Layer 2 Tunnel Protocol V3 L2TPv3] RFC 4719 - Transmission of Ethernet Frames over L2 Tunneling Protocol v3] RFC 4951 - Fail-Over Extensions For L2 Tunneling Protocol] RFC 4459 - MTU and Fragmentation Issues with In-Network Tunneling] **Frame Relay** RFC 1586 - Guidelines for Running OSPF Over Frame Relay Networks] RFC 1973 - PPP in Frame Relay] RFC 2427 - Multiprotocol Interconnect over Frame Relay] RFC 2390 - Inverse Address Resolution Protocol] RFC 3133 - Terminology for Frame Relay Benchmarking] RFC 1973 - PPP in Frame Relay] **General IP Routing** RFC 768 - UDP] RFC 792 - ICMP] RFC 793 - TCP] RFC 950 - Internet Standard Subnetting Procedure] RFC 1180 - A TCP/IP Tutorial] RFC 1518 - Architecture for IP Address Allocation with CIDR] RFC 1878 - Variable Length Subnet Table for IPv4] RFC 2923 - TCP Problems with Path MTU Discovery] RFC 3168 - Explicit Congestion Notification (ECN) to IP] **RIP** RFC 1058 - Routing Information Protocol] RFC 1582 - Extensions to RIP to Support Demand Circuits] RFC 1721 - RIP Version 2 Protocol Analysis] RFC 1722 - RIP Version 2 Protocol Applicability Statement] RFC 1723 - RIP Version 2 Carrying Additional Information] RFC 1724 - RIP Version 2 MIB Extension* RFC 1923 - RIPv1 Applicability Statement for Historic Status] RFC 2082 - RIP-2 MD5 Authentication] RFC 2091 - Triggered Extensions to RIP to Support Demand Circuits] RFC 2453 - RIP Version 2] RFC 4822 - RIPv2 Cryptographic Authentication] **OSPF** RFC 1245 - OSPF Protocol Analysis] RFC 1246 - Experience with the OSPF Protcol] RFC 1247 - OSPF version 2] RFC 1253 - OSPF Version 2 Management Information Base] RFC 1370 - Applicability Statement for OSPF] RFC 1403 - BGP OSPF Interaction] RFC 1583 - OSPF version 2] RFC 1584 - Multicast Extensions to OSPF] RFC 1585 - MOSPF - Analysis and Experience] RFC 1586 - Guidelines for Running OSPF Over Frame Relay Networks] RFC 1587 - The OSPF NSSA Option] RFC 1745 - BGP4/IDRP for IP -- OSPF Interaction] RFC 1765 - OSPF Database Overflow] RFC 1793 - Extending OSPF to Support Demand Circuits] RFC 1850 - OSPF Version 2 Management Information Base] RFC 2178 - OSPF version 2] RFC 2328 - OSPF version 2] RFC 2329 - OSPF Standardization Report] RFC 2370 - The OSPF Opaque LSA Option] RFC 3883 - Deactivating Inactive Neighbors Over OSPF Demand Circuits] RFC 4136 - OSPF Refresh and Flooding Reduction in Stable Topologies] RFC 4167 - OSPF Graceful Restart Implementation Report] RFC 4552 - Authentication/Confidentiality for OSPFv3] RFC 4811 - OSPF Out-Of-Band Link State Database] RFC 4812 - OSPF Restart Signaling] RFC 4813 - OSPF Link-Local Signaling] **BGP** RFC 1163 - Border Gateway Protocol (BGP)] RFC 1267 - Border Gateway Protocol 3 (BGP-3)] RFC 1397 - Default Route Advertisement In BGP2 and BGP3] RFC 1403 - BGP OSPF Interaction] RFC 1657 - Definitions of Managed Objects for BGP-4] RFC 1745 - BGP4/IDRP for IP---OSPF Interaction] RFC 1771 - A Border Gateway Protocol 4 (BGP-4)] RFC 1772 - Application of the Border Gateway Protocol in the Internet] RFC 1773 - Experience with the BGP-4 protocol] RFC 1774 - BGP-4 Protocol Analysis] RFC 1863 - A BGP/IDRP Route Server alternative to a full mesh routing] RFC 1965 - Autonomous System Confederations for BGP] RFC 1966 - BGP Route Reflection An alternative to full mesh IBGP] RFC 1997 - BGP Communities Attribute] RFC 2283 - Multiprotocol Extensions for BGP-4 (MBGP)] RFC 2385 - Protection of BGP Sessions via the TCP MD5 Signature Option] RFC 2439 - BGP Route Flap Damping] RFC 3765 - NOPEER Community for BGP Route Scope Control] RFC 3882 - Configuring BGP to Block DOS Attacks] RFC 4264 - BGP Wedgies] RFC 4271 - A Border Gateway Protocol] RFC 4274 - BGP Security Vulnerability Analysis] RFC 4273 - Definitions of Managed Objects for BGP4] RFC 4274 - BGP4 Protocol Analysis] RFC 4360 - BGP Extended Communities Attribute] RFC 4456 - BGP Route Reflectors] RFC 4724 - Graceful Restart Mechanism for BGP4] **Multicast Routing** RFC 1112 - Host Extensions for IP Multicast] RFC 1584 - Multicast Extensions to OSPF] RFC 1585 - MOSPF - Analysis and Experience] RFC 1889 - RTP(A transport for real time protocols)] RFC 2189 - Core Based Trees (CBT version 2) Multicast Routing] RFC 2201 - Core Based Trees (CBT) Multicast Routing Architecture] RFC 2205 - Resource ReSerVation Protocol (RSVP)Functional Specification version 1] RFC 2209 - Resource ReSerVation Protocol (RSVP) Message Processing Rules version 1] RFC 2236 - IGMPv2] RFC 2283 - Multiprotocol Extension for BGP] RFC 2327 - SDP (Session Description Protocol)] RFC 2362 - PIM Sparse Mode] RFC 2365 - Administratively scoped Multicast] RFC 3754 - IP Multicast in Differentiated Services (DS) Networks] RFC 3913 - Border Gateway Multicast Protocol (BGMP)] RFC 3973 - Protocol Independent Multicast - Dense Mode (PIM-DM)] RFC 4045 - Extension to Support Carrying Multicast Traffic in L2 Tunneling Protocol] RFC 4286 - Multicast Router Discovery] RFC 4541 - Considerations for IGMP and MLD Snooping Switches] RFC 4601 - PIM Sparse Mode Protocol Spec] RFC 4604 - Using IGMPv3 and MLDv2 for Source-Specific Multicast] RFC 4605 - IGMP/MLD Based

Multicast Forwarding] [RFC 4607 - Source-Specific Mulicast for IP] [RFC 4609 - PIM Sparse Mode Security Issues and Enhancements] [RFC 4624 - Multicast Source Discovery Protocol (MSDP)] **IPv6** [RFC 1881 - IPv6 Address Allocation Management] [RFC 1887 - An Architecture for IPv6 Unicast Address Allocation] [RFC 1924 - A Compact Representation of IPv6 Addresses] [RFC 1981 - Path MTU Discovery for IP version 6] [RFC 2373 - IP Version 6 Addressing Architecture] [RFC 2375 - IPv6 Multicast Address Assignments] [RFC 2460 - Internet Protocol, Version 6 (IPv6) Specification] [RFC 2463 - ICMPv6 for IPv6 Specs] [RFC 2464 - Transmission of IPv6 Packets over Ethernet Networks] [RFC 2474 - Definition of the Differentiated Services Field (DS Field) in the IPv4 and IPv6 Headers] [RFC 2492 - IPv6 over ATM Networks] [RFC 2545 - BGP-4 Multiprotocol Extensions for IPv6 Inter-Domain Routing] [RFC 2590 - Transmission of IPv6 Packets over Frame Relay Networks] [RFC 3769 - Requirements for IPv6 Prefix Delegation] [RFC 3775 - Mobility Support in IPv6] [RFC 3810 - Multicast Listener Discovery V2 for IPv6] [RFC 3898 - Network Information Services (NIS) Configuration Options for DHCP for IPv6] [RFC 3919 - RMON Protocol Identifiers for IPv6 + MPLS] [RFC 3956 - Embedding the RP Address in an IPv6 Multicast Address] [RFC 3964 - Security Considerations for 6 to 4] [RFC 4007 - IPv6 Scoped Address Architecture] [RFC 4037 - IPv6 Enterprise Network Scenarios] [RFC 4075 - SNTP Configuration Option for DHCPv6] [RFC 4177 - Architectural Approaches to Multi-Homing for IPv6] [RFC 4193 - Unique Local IPv6 Unicast Addresses] [RFC 4213 - Basic Transition Mechs for IPv6 Hosts and Routes] [RFC 4380 - Tunneling IPv6 Over UDP Through NAT] [RFC 4443 - ICMP For IPv6] [RFC 4580 - DHCP for IPv6] [RFC 4861 - Neighbor Discovery For IPv6] [RFC 4864 - Local Network Protection for IPv6] **QoS** [RFC 896 - Congestion Control in IP/TCP Internetworks] [RFC 1483 - Multiprotocol Encapsulation over ATM Adaptation Layer 5] [RFC 1577 - Classical IP and ARP over ATM] [RFC 2001 - TCP Slow Start, Congestion Avoidance, Fast Retransmit, and Fast Recovery Algorithms] [RFC 2205 - Resource ReSerVation Protocol (RSVP) -- Version 1 Functional Specification] [RFC 2208 - Resource ReSerVation Protocol (RSVP) Version 1 Applicability Statement Some Guidelines on Deployment] [RFC 2210 - The Use of RSVP with IETF Integrated Services] [RFC 2474 - Definition of the Differentiated Services Field (DS Field) in the IPv4 and IPv6 Headers] [RFC 2475 - An Architecture for Differentiated Services] [RFC 2481 - A Proposal to add Explicit Congestion Notification (ECN) to IP] [RFC 2597 - Assured Forwarding PHB Group] [RFC 2598 - An Expedited Forwarding PHB] [RFC 2697 - A Single Rate Three Color Marker] [RFC 2698 - A Two Rate Three Color Marker] [RFC 4495 - RSVP Extension for the Reduction of a Bandwidth Flow] **IOS Security** [RFC 1948 - Defending Against Sequence Number Attacks] [RFC 2138 - Remote Authentication Dial In User Service (RADIUS)] [RFC 2139 - RADIUS Accounting] [RFC 2267 - Network Ingress Filtering - Defeating Denial of Service Attacks which employ IP Source Address Spoofing] [RFC 2784 - Generic Routing Encapsulation] [RFC 2865 - Remote Authentication Dial In User Service (RADIUS)] [RFC 2866 - RADIUS Accounting] [RFC 2867 - RADIUS Accounting Modifications for Tunnel Protocol Support] [RFC 2868 - RADIUS Attributes for Tunnel Protocol Support] [RFC 2869 - RADIUS Extensions] [RFC 3957 - AAA Registration Key for Mobile IPv4] [RFC 4014 - RADIUS Attributes Suboption for DHCP Relay Agent Information Option] **IOS Management** [RFC 1155 - Structure and Identification of Management Information (SMI) for TCP/IP-based Internets] [RFC 1156 - Management Information Base for Network Management of TCP/IP-based internets - MIB-I] [RFC 1157 - Simple Network Management Protocol(SNMP) Specification] [RFC 1158 - Management Information Base for Network Management of TCP/IP-based internets - MIB-II] [RFC 1271 - Remote Network Monitoring Management Information Base] [RFC 1757 - Remote Network Monitoring Management Information Base] [RFC 2021 - Remote Network Monitoring Management Information Base Version 2] [RFC 3954 - Cisco Systems NetFlow Services Export v9] [RFC 4022 - MIB for TCP] [RFC 4293 - MIB for the Internet Protocol] **IP Features** [RFC 951 - BOOTP] [RFC 1119 - Network Time Protocol (version 2) specification and implementation] [RFC 1129 - Internet Time Synchronization - The Network Time Protocol] [RFC 1256 - ICMP Router Discovery Protocol (IRDP)] [RFC 1305 - Network Time Protocol (Version 3) Specification, Implementation] [RFC 1531 - Dynamic Host Configuration Protocol (DHCP)] [RFC 1534 - Interoperation Between DHCP and BOOTP] [RFC 1631 - The IP Network Address Translator (NAT)] [RFC 2030 - Simple Network Time Protocol (SNTP) Version 4 for IPv4, IPv6 and OSI] [RFC 2131 - DHCP] [RFC 2281 - Cisco Hot Standby Router Protocol (HSRP)] [RFC 2338 - Virtual Router Redundancy Protocol (VRRP)] [RFC 3768 - Virtual Router Redundancy Protocol (VRRP)] [RFC 3846 - Mobile IPv4 Extensions for Carrying Network Address Identifiers] [RFC 3925 - Vendor Identifying Vendor Options for DHCPv4] [RFC 4030 - Authentication Option For DHCP] [RFC 4280 - DHCP Options for Broadcast and Multicast Control Services] [RFC 4330 - Simple Network Time Protocol (SNTP) for IPv4, IPv6 and OSI] [RFC 4332 - Cisco's Mobile IPv4 Host Config Extensions]   Source From: http://www.cciestudywiki.com/wiki/CCIE_Routing_and_Switching_Reading_List_-_RFCs