**Diwakar Dahal**

**Summary:**

* Around 7+ years of Experience in Designing, Implementation and Operations of enterprise data networks as Network Engineer.
* Well experienced in configuring gateway redundancy protocols like HSRP, GLBP, PPP and SNMP.
* Proficient in Cisco IOS for configuration & troubleshooting of routing protocols: MP-BGP, OSPF, LDP, EIGRP, RIP, BGP v4, MPLS.
* Strong knowledge of TACACS+, RADIUS implementation in Access Control Network.
* Implemented traffic filters using Standard and Extended access-lists, Distribute-Lists, and Route Maps.
* Excellent grasp of current and future technologies including TCP/IP, IPv4/v6, RIP, EIGRP, OSPF, BGP, Frame Relay, ACL, VPN, Wireless LAN and configuration of VLANS.
* Expertise in working with Cisco Nexus Switches, ASR 900 and Virtual Port Channel configuration.
* Experience in installing and configuring DNS, DHCP server.
* Experience in configuring Site-to-site and remote access VPN solutions.
* Hands-on experience with TCP/IP, LANs, WANs, and WLANs (WiFi).
* Enterprise Routing experience using protocols RIP v1 & 2, EIGRP, OSPF and BGP
* Worked on network topologies and configurations, TCP/IP, UDP, Frame Relay, Token ring, ATM, bridges, routers, and Switches.
* Experience in Application Deployments & Environment configuration using Chef, Puppet and Ansible.
* Enterprise Switching with VLANs, Trunks, Spanning Tree, Port Spanning etc.
* In depth understanding of IPV4 and implementation of Subnetting.
* Provides technical leadership for problem escalation and resolution.
* Highly motivated with the ability to work independently or as an integral part of a team and Committed to highest levels of profession.
* Planning designing, Installation, configuration and maintenance of 802.11a/b/gWireless Networks and Wireless Access points
* Strong hands on experience in installing, configuring and troubleshooting of Cisco […] 7200, 3800, 3600, 2800, 2600, 2500 and 1800 series Routers, Cisco Catalyst 6500, 4500, 3750, 2950 and 3500XL series switches.
* Experience with devices Palo Alto Network firewalls such as security NAT, Threat prevention & URL filtering.
* Experience with Juniper SRX 240 Firewalls
* Experience in WAN technologies like T1/T3, DS3, STM1 and STM4 circuit types
* Configured Security policies including NAT, PAT, VPN, Route-maps and Access Control Lists.
* Worked on F5 LTM, GTM series like 6400, 6800, 8800 for the corporate applications and their availability.
* Primary responsibility is to design and deploy various network security & High Availability products like Cisco ASA and other security products.

**Technical Skill: -** 

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| --- | --- |
| **Routers** | Cisco 1900, 2600, 2800, 2900, 3600, 3800, 3900, 7200, 7600 |
| **Switches** | Cisco Catalyst 2960, 3560, 3750, 4500, 6500 & Nexus 2K/5K/7K |
| **Routing** | OSPF, EIGRP, BGP, RIP v1/v2, Route Filtering, Redistribution, Summarization& Static Routing |
| **Switching** | VLAN, VTP, STP, PVST+, RPVST+, Inter VLAN routing & Multi-Layer Switch, Ether channels, Transparent Bridging |
| **LAN** | Ethernet (IEEE 802.3), Fast Ethernet, Gigabit Ethernet |
| **WAN** | PPP, HDLC, Channelized links (E1/T1/E3/T3), Fiber Optic Circuits, Frame Relay, MPLS |
| **Protocol** | IP, TCP, UDP, ICMP, NAT, DHCP, SNMP, IPSEC, SSL, HTTP, SSH, DNS, PAT |
| **Load Balancer** | F5 Networks (Big-IP) LTM 6900 and 3900 |
| **Network Security** | Cisco ASA 5540, ACL, IPSEC |
| **Network Management Tools** | Wireshark, Network analyzer, GNS3, Tera term & Putty |
| **Gateway Redundancy** | HSRP, GLBP, VRRP |
| **AAA Architecture** | TACACS+, RADIUS |
| **Operating System** | Windows, Linux |

**WORK EXPERIENCE:**

**AT&T Dallas, TX**

**Network Security Engineer Sep 2016 – Current**

**Responsibilities:**

* Implementing Security Solutions using PaloAltoPA-5000/3000, Cisco 5580/5540/5520, Checkpoint firewalls R70, R75, R77.20Gaia and Provider-1/MDM.
* Manage wireless infrastructure (5500 series Wireless LAN Controllers); configure and deploy Access Points (Cisco AIR-CAP3500/3700/3800).
* Monitored Wireless and Local Area Network (WLAN) performance utilization using wireless and wired network monitoring utilities to ensure optimum performance of Information Technology (IT) resources.
* Configuration and administration of firewalls, which includes Checkpoint, Juniper and Cisco ASA firewalls.
* Experience in deployment Automation using multiple tools Chef, Puppet, Jenkins, GIT, TFS, SonarQube, ANT Scripts.
* Created continuous integration system using Ant, Jenkins, Puppet, Continuous Integration forfaster and flawless deployments.
* Configured and maintained rule sets in the firewalls and updated them on the daily basis.
* Monitors the network traffic and maintain the records with the help of SPLUNK.
* Knowledge of Cisco ASA firewall, VPN, GRE over IPSec tunnel configuration and Route-maps.
* Extensive knowledge of and experience configuring and troubleshooting layer 3 routing protocols (EIGRP, OSPF, RIP, BGP)and High Availability on Cisco devices.
* Designed & Integrated cloud networks using VMware NSX.
* Designed AWS Cloud Formation templates to create custom sized VPC, subnets, NAT to ensure successful deployment of Web applications and database templates.
* Develop, create infrastructure for following perimeter solutions Checkpoint and Cisco ASA firewalls, Cisco Firepower IDS/IPS, Bluecoat secure web gateway. Provided collaboration, triage, a managed of existing to migration of new network security solutions.
* Create and validate SMOPS for upgrade, replace, add and remove Cisco VOD equipment.
* Worked with applications transport protocols SSL, IPSEC, DNS, NTP, SSH, LDAP, RADUS, TACACS+ and AAA on ASA Firewalls.
* Work with Load Balancing to build connectivity to production & disaster recovery servers through Citrix Net scaler.
* Configuring High Availability using Cluster XL on Checkpoint as well as VRRP and monitor the Sync status for stateful replication of traffic between active and standby member.
* Innovated with support of Palo Alto for remote and mobile users and for analyzing files for malware in a separate (cloud-based) process that does not impact stream processing.
* Involved in Installing and Configuring a Cisco secure ACS server for AAA authentication.
* Researched, designed and replaced Checkpoint firewall architecture with new next generation Palo Alto PA3000 and PA5000 appliances serving as firewalls and URL and application inspection.
* Handling Modern related issue like that of RAD & Aruba.
* Experience on Code Upgrade for Cisco Routers including 7200, 3900, 2900, 881, 891 and Switches including 6500, 4500, Nexus 9K, Nexus 7k, Nexus 6k, Nexus 5k, Nexus 4k, ASR 9K, ASR 1K.
* Cisco Wireless WiFi implementation/configuration for Aironet 1240 AG Series Access Points, Aironet 1500 Series Mesh Access Points, Cisco IP Transfer Point, 4400 Series Wireless LAN Controllers and Wireless Location Appliance.
* Responsible for the deployment and associated tasks for the implementation of the tanium Endpoint Security and Systems Management product.
* Configuring rules and maintaining Palo Alto Firewalls& Analysis of firewall logs using Panorama.
* Successfully installed Palo Alto PA-3000/PA-5000 firewalls to protect Data Center and provided L3 support for routers/switches/firewalls.
* Configured and maintained IPSEC and SSL VPN's on Palo Alto Firewalls and also implemented Zone-Based Firewall and Security Rules on the Palo Alto Firewall.
* Exposure to wild fire feature of Palo Alto.
* Configuration and Maintenance of Cisco ASA 5580-20, ASA 5540, ASA 5520, ASA 5510 series firewalls.
* Strong knowledge and understanding with IPsec, Remote Access VPN, and Source Fire IPS.
* Troubleshoot and installing of CRS, ISR, GSR, ASR9000 and Nexus devices
* Hands on Experience with Cisco Wireless Controllers 5500's and 2500's and coming to access points, worked on 3700's, 3500's and 1142 access points.
* Responsible for design and implementation/migration from Cisco wireless platform to Aruba wireless platform.
* Worked on Implementation and troubleshooting of 802.11a/b/g/n technology with primary focus on Cisco Unified Wireless Network /Configure Aruba wireless Controller 7210.
* Works with Palo Alto Network firewall, Palo Alto Networks Panorama, MacAfee Sidewinder firewall, Bluecoat proxy and MacAfee Firewall Enterprise Control Center.
* Configured and installed Cisco routers 2500, 2600, 3601 and 4000 series. 2950 Switches & Link sys wireless access points.
* Configuring and install hardware and software required to conduct network penetration testing.
* Configure Syslog server in the network for capturing and logs from firewalls.
* Provided tier 3 support for Check Point and Cisco ASA Firewalls to support customers, Backup and restore of Checkpoint and Cisco ASA Firewall policies.
* Monitoring Traffic and Connections in Checkpoint and ASA Firewall.
* Manage project task to migrate from Cisco ASA firewalls to Check Point firewalls.
* Configuring and troubleshooting site-to-site IPSEC VPN tunnels using Cisco ASA 5540 for third-party connectivity.
* Configuring Fire POWER on Cisco ASA including IPS (NGIPS), Application visibility and Control as well as Advanced malware protection.
* Configure Fire POWER using cli as well as Fire SIGHT Management Center.
* Installed and configured a variety of Cisco devices like Cisco Routers (1841, 1900, 2600, 2800, 3800, ASRs and more), Cisco switches (3560, 3750, 4507 catalyst, 6500 catalyst Switch and more) and Nexus 7000 series, Nexus 5000 series, Nexus 2K Fabric Extenders and F5 appliances.
* Installed, configured and upgraded Cisco Adaptive Security Appliance (ASA) with Firepower Services.
* Applied knowledge of Ethernet switch and router configuration to configuration/design MPLS connections.
* Installed for Edge and internal security; Cisco 4240 IDS/IPS on wired/wireless networks.
* Implemented AAA Architecture and 802.1x Wireless User Authentication using Active Directory Server with Kerberos.
* Understanding of Layer2/3 VPN's, MPLS, Metro Ethernet and LAN switching.
* Creating object, groups, updating access-lists on Check Point Firewall, apply static, hide NAT using smart dashboard.
* Installs, maintains and optimizes Dell/EMC Claiiron hardware, software and Local Area Network McData, Brocade and Cisco and configurations at customer sites.
* Installed and configured high availability Big IP F5 LTM and GTM load balancers like 6600, 6800 to provide uninterrupted service to customer applications and monitoring the availability.
* Identified opportunities for implementation of network best practices, particularly F5 load balancer implementations.
* Configuring F5 Load Balancers: Adding virtual IPs, nodes, pools and health monitoring.
* F5 BigIP iRule programming and troubleshooting.
* Worked on F5 solutions/support for migration work of applications and websites from Cisco CSS Load Balancers to the F5 BigIP Load Balancers.
* Configure and Monitor Cisco Source fire IPS for alerts.
* Working with different teams to gather info for the new request and troubleshoot for any connectivity issues by capturing traffic using TCPDUMP and smart view tracker.
* Worked on VPN configuration, routing, NAT, access-list, security contexts and failover in ASA firewalls.
* Provide support to help desk for complex/major network problems. Build the rules for the application access across the IPSEC VPN tunnel
* Implemented configuration back-ups using Win SCP, cyberfusion to automate the back-up systems with the help of public and private keys.
* Deployment and Management of Bluecoat proxies in forward proxy scenario as well as for security in reverse proxy scenario.
* Worked on Blue Coat Proxy SG to safeguard web applications in extremely untrusted environments such as guest Wi-Fi zones.
* Performing URL filtering and content filtering by adding URL’s in Bluecoat Proxy SG’s.
* Working on the network team to re-route BGP routes during maintenance and FW upgrades.
* Running vulnerability scan reports using Nessus tool.
* Use of Citrix Net scalar for the application delivery control.
* Configure B2B VPN with various business partners and 3rd parties and troubleshoot VPN Phase 1 and Phase 2 connectivity issues including crypto map, encryption domain, psk etc.
* Provided administration and support on Bluecoat Proxy for content filtering and internet access to primary, remote site offices and VPN client users
* Follow information security policies, methods, standards, NIST standards and practices to organize information systems, IT reference material and interpret regulations.
* Monitor Intrusion Detection Systems (IDS) console for active alerts and determine priority of response.
* Configuration and Installation of Cisco Nexus 9K, 7K, 5K, 6K, ASR 1000 series.
* Actively use SIEM technology for searching and monitoring real-time events for network security and compliance.
* Review daily log data gathered from various resources such as sensors, alert logs, firewall logs, content filtering logs.
* Monitor Intrusion Prevention System (IPS).

**Environment:** Cisco 2600, 2800, 3600, 3800, and 7200 series routers, Cisco 2950, 3550, 3560, 6509 Catalyst Switches, ASA 5510 firewall, Juniper SRX240, Juniper EX4200, ESW Switch, PIX 525, PIX 515E, U.S. Robust modem, ShopperTrak TS600 modem, Chef, Puppet, Fujitsu POS, Orbit5 Camera, Cisco Nexus7K/5K/2K.

**Nepal Telecom, KTM Nepal Sep 2014 – May 2016**

**Network Security Engineer**

**Responsibilities:**

* Installation and Configuration of Cisco Catalyst switches 6500, 3750 & 3550 series and configured routing protocol OSPF, EIGRP, BGP with Access Control lists implemented as per Network Design Involved in the redistribution into OSPF on the core
* Deploying and distinguishing of VLANs on core ASR 9k, Nexus 7k, Mk and its downstream devices.
* Worked in Wireless technologies: 802.11 a/b/g/n.
* Experience on HSRP for load balancing.
* Involved in the removal of EIGRP from all devices and making OSPF the primary routing protocol.
* Involved in the modification and removal (wherever necessary) of BGP from the MPLS routers.
* Tuned BGP internal and external peers with manipulation of attributes such as metric, origin and local Preference.
* Cisco Identity Services Engine (ISE) for Wireless and Wired 802.1X / Device Administration / Posture Checking / Guest Wireless Portals / BYOD
* Expertise in configuring and troubleshooting of Palo Alto, FortiGate, Juniper Netscreen& SRX Firewalls and their implementation.
* Troubleshooting switching/routing on Core Switches & Routers. VLANs, Authentication - AAA & TACACS's, Encryption, ACL, VPN Tunnels, Jump Servers connectivity to ATT DataCenters. Proficient in Linux CLI.
* Basic understanding of Puppet, attended basic training on Puppet and started learning concepts, building small modules. Analyzed modules from Puppet Forge and created simple modules to automate tasks like installation of apache, managing NTP and controlling few services and packages.
* Manage Linux infrastructure using Ansible, Puppet, & Chef.
* Strong hands on and exposure to Checkpoint & Palo Alto on a regular basis
* Develop and implement strategies to support the current and future needs of the company.
* Configured Cisco Routers 2600 series using RIP, OSPF, and EIGRP.
* Configured Cisco Switches 2900 and firewall (checkpoint)
* Responsible for SNMP Monitoring and Performance Tuning software.
* Hands on Experience working with security issue like applying ACL's, configuring NAT and VPN
* Configured BGP for CE to PE route advertisement inside the lab environment
* Spearheaded meetings & discussions with team members regarding network optimization and regarding BGP issues
* Responsible for maintaining and ensuring the proper functioning of all network devices (i.e. Juniper routers/switches, Cisco Routers/Switches, Juniper Netscreen firewalls, Cisco ASA firewalls, and load balancers (LTM)).
* Configured and provided support for juniper Netscreen firewalls.
* Configured and provided support for cisco ASA firewall and FWSM modules.
* Responsible for turning up BGP peering and customer sessions, as well as debugging BGP routing problems.
* Designing and Implementation of (LAN) VLANs, VTP, Spanning Tree (STP), Trunking (dot1q and ISL) and Ether channel.
* Key contributions include troubleshooting of complex LAN/WAN infrastructure that include routing protocols EIGRP, OSPF & BGP
* Configuring, Installing and troubleshooting on Check Point Devices.
* Good knowledge on Intrusion Detection and Intrusion Prevention System.
* Experience with Synchronous Optical Networking (SONET) over optical fiber.
* Involved in Configuring and implementing of Composite Network models consists of Cisco7600, 7200, 3800 series and ASR 9k, GSR 12K routers and Cisco 2950, 3500, 5000, 6500 Series switches.
* Configured networks using routing protocols such as RIP, OSPF, BGP and manipulated routing updates using route-map, distribute list and administrative distance for on-demand Infrastructure.
* Implemented Hot Standby Router Protocol (HSRP) by tuning parameters like pre-emption.
* Responsible for day to day management of Cisco Devices, Traffic management and monitoring.
* Managing health check of Network devices this is involves upgrading IOS on every quarter after checking the vulnerability of IOS and reviewing the configuration
* Experience in HSRP standby troubleshooting & Experience in configuring & upgrading of Cisco IOS
* Configured policy based routing for BGP for complex network systems.

**Environment:** CISCO 7200/3845/3600/2800 routers, Fluke and Sniffer, CISCO 6509/ 3750/ 3550/ 3500/ 2950 switches, Checkpoint firewalls(SPLAT), Net flow, Chef, Ansible, Puppet, TACACS, EIGRP, RIP, OSPF, BGP, VPN, MPLS, CSM, SUP720

**British Telecom, India Chennai, India Mar 2012 – Aug 2014**

**Network Security Engineer**

**Responsibilities:**

* Provided onsite support for new installations as well as upgrades.
* Router configurations at new sites according to company network policy.
* Routing between different networks (Dynamic & Static).
* Experience in designing LAN, WAN, Datacenter and Wireless access services securely as well as installing, configuring and supporting Large/Medium-scale enterprise networks.
* Responsible for design and administration of complex network consists of Cisco7600series routers, Nexus7K, 5K Series switches.
* Implementing IP address Scheme through VLSM.
* Configuring RIP, OSPF areas, EIGRP and implementing traffic filters using access lists
* Built and maintained an enterprise network monitoring system based on SolarWinds alerts system tool to monitor and restore network outages.
* Installed and maintained all routers and switches with various network configurations for VLANs, QoS and advanced routing (OSPF, BGP) and security protocols.
* Designed and configured the commands for QoS and Access Lists for Nexus 7K and 5K.
* Hands on experience working with security issue like ACL'S, configuring NAT and VPN.
* Implemented VTP and Trouncing protocols on catalyst 3560, 3750, and 4500 switches.
* Provided current network documentation and Visio drawings depicting new network topology that incorporated newly installed Cisco switches and associated VLANs spanning through 802.1q trunks.
* Configuring and Monitoring remote sites (Site to Site VPN).
* Configuring and Monitoring VLAN, STP, QoS, NAT and DHCP.
* Configuring BGP and OSPF routing protocol on Core and EDGE router.
* Configuring Vlans, STP, VTP, and HSRP protocol on network switches.
* Configured OSPF on CISCO devices with multiple routing processes and redistributed them. Tested and hands on experience in multi area OSPF topologies.
* Configured VLANs with 802.1q tagging. Configured Trunk groups, ether channels, and Spanning tree for creating Access/distribution and core layer switching architecture.
* Migrated existing devices from Cisco Catalyst 6500 series to Nexus 7k, 5k, 2k in Data Center.
* Assisted in network engineering efforts consistent with the infrastructure of an Internet Service Provider and support of such network services. Helped in designing and implementation of VLAN for the new users.

**Environment:** CISCO routers and switches, Access Control Server, Palo Alto Firewalls, DNS, Nexus switches, TCP/IP, VPN, Bluecoat Proxy servers, IDS/IPS, Firewall, LAN/WAN.