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** Aravind ARAVIND**

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**Summary:**

* Cisco Certified Network Engineer with **8 years of professional experience** in Network engineering, performing Network analysis, design, Implementing, capacity planning with focus on performance tuning and support of large Networks.
* Experience in Cisco Routing, Switching and Security with strong Cisco hardware/software experiences with high end **Routers**: **Cisco 3400, 3750, 4550, 4948, 7600 Series; Catalyst Switches: 4500, 6500; Juniper: Ex 4200, Ex 4500, Mx480**& **Mx960; Nexus 7000, 5000, 2000 Series; InfobloxTrinzic 1400; Arista 7050, 7500; Ciena 3930, 3916; ADVA GE114, XG210; IX Network version 6.30 and 7.50**
* Experience in set up, configuration and management of **Cisco PIX, ASA 5510and Juniper SA 4500, 6500.**
* Experience in Layer 3 Routing protocol configurations: **RIP, EIGRP, OSPF, BGP,** & **MPLS.**
* Experience in Layer 2 Routing protocol configurations: **ATM/FRAME RELAY, IP** services such as **Cos**, **QoS**
* Experience in configuring **VLANs**, **STP, RSTP, VTP**, **PVST** and **802.1x authentication** in access layer switches.
* Experience in configure **ACL, Firewall, VPN technologies: IPsec, SSL, IKE, AAA (TACACS+ & RADIUS)**
* Experience in network management tools including Tail-F ConfD, Cisco NCS.Tested NED for various vendors
* Experience with different Network Management Tools and Sniffers like **Wireshark, and Cisco works** to support 24 x 7 Network Operation Center.
* Worked extensively in Designing, Implementing & Managing **LAN, WLAN** & **WAN** solutions for different client setups. In-depth knowledge and experience in **WAN technologies** including **T1, T3, ISDN, HDLC, Point to Point, ATM** & **Frame Relay.**
* Experience in Physical **cabling, IP addressing & subnetting** with **VLSM**
* Implemented **DNS (A, PTR, NS, CNAME, and Delegation), DHCPand IPAM**rules on **InfoBlox Grid manager.** Implemented **public DNS** records on **Bind Server.**
* Knowledge in Load Balancing using **F5 Network Load Balancers**.
* Ability to Install, Manage & Troubleshoot Large Networks & Systems Administration on **Windows & Linux platforms** in Development, Staging, Lab & Production Environments.
* Strong Experience in using various tools for management, analyzing, and troubleshooting, monitoring & process automation in **Lab** &**Production** environment.
* Highly valuable Project Management and Operations Planning skills.
* Experience in developing Python script for Network automation

**PROFESSIONALCERTIFICATIONS:**

* Cisco Certified Network Professional (**CCNP**)
* Cisco Certified Network Associate **(CCNA**)
* Juniper Network Certified Associate (**JNCIA**)
* Python for Everybody Certified by Coursera from University of Michigan

**EDUCATION:**

* Bachelor of Technology in Electronics and Communications from JNTU, India.**3.7/4.0**

**TECHNICAL SKILLS:**

Networking Concepts:OSI Model, TCP/IP, UDP, IPV4, IPv6, Subnetting, VLSM

Routing Protocols: RIP, IGRP, EIGRP, OSPF, BGP, Static Routing, HSRP, VRRP & GLBP

Infrastructure services: DNS, ICMP, SNMP, ARP, IPAM, DHCP, FTP, TFTP

Switch Technologies: VLANs, VTP, STP, DTP, MLPPP, MPLS, ISL and dot1q

Scripting: Python, XML

LAN Protocols: IEEE 802.1q, VTP, STP, RSTP

WAN Technologies:Frame Relay, PPP, HDLC

**Security:** VPN (IPSEC, SSL, IKE)**,** NAT/ PAT, ACL, AAA (TACACS+, RADIUS)

Firewall: Cisco PIX, ASA, Juniper Secure Access VPN Appliance

Load Balancer: F5 Networks (BIG-IP), Cisco ACE

Platform: Cisco IOS (11.x, 12.x), CAT-OS, Cisco NX-OS, Windows XP/Vista/7/8

Other Technologies: VISIO, VMware, MatLab, GNS3, Microsoft Word, Excel, Oracle virtual box

**Professional Experience:**

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| **Position:** Sr.Network Engineer  **Client: Comcast, Mount Laurel NJ** | **Duration: Sep 2014 – Present** |

***Responsibilities:***

* Responsible for managing activities, **Upgrading IOS** – Upgrading hardware and installing new devices and Password Recovery, Tuning (Configuration), make standardization for the topology.
* Involved in creating network design templates on various devices **Cisco 7600, 3750, 4948, 3400**, **Nexus 6004, Juniper Ex4200, Ciena 3930, 3916**
* Monitored, managed and resolved all data network circuits. Configured **Static, RIP v1 & v2, IGRP, EIGRP, OSPF and BGP** Routing Protocols on **Cisco 3600, 3750, 4948, 7600 ASR 9000** series Routers.
* Experience in working with **Nexus 7009, 6400, 5596, 5020, 2148, 2248** devices.
* Involved in certification of platform for Ciena 39xx series on OS 6.10 and 6.13
* Performed OS upgrades 7.11 from 7.0 on Nexus 6000 series datacenter switches
* Implemented various **OSPF & BGP** scenarios on networks consisting of **7600** routers.
* Implemented **EPL, EVPL** on **Ceina 3900, ADVA** using **COS & marking policies**
* Worked on Extensively on Cisco Firewalls, Cisco **PIX (506E/515E/525)** &**ASA 5500(5510/5585)** Series
* Configure and utilize a variety of network management tools including Tail-FConfDCisco NCS
* Load and test various network element driver (NED) for vendors Arista, Juniper, Ciena, A10, F5, Ciscoon NCS server which Implemented by Cisco
* Participated in designing leaf spine architecture for data center environment
* configured lab setup for Juniper OAM testing environment
* Involved in Juniper OS 14.2R4 and 14.2R5 certification, OAM testing, Created required IX Network configuration files for OAM test.
* 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.
* Manage Cisco Routers and troubleshoot **layer1, layer2 and layer3** technologies for customer escalations.
* Taking Regular backups & testing the backups by restoring in test lab frequently.
* Substantial lab testing & validation prior to implementation of **Nexus 7K, 5K & 2K**

**Environment:**

**Cisco routers (**7600,3750,4948, 3400) and **Cisco switches (**6500, 3700, 4900,2900),**Nexus** (7K, 6K & 2K),**Routing Protocols** (EIGRP, OSPF, BGP),**Switching protocols** (VTP,STP,GLBP,HSRP), **Cisco PIX** (525, 535), **ASA** (5505, 5510) firewall, **F5 Load Balancers** (6400, 6800, 8800).

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| **Position:** Sr.Network Engineer  **Client: Atos, Hightstown NJ** | **Duration: Jan 2014 – Sep 2014** |

***Responsibilities:***

* Reviewing, analyzing, approving and executing all changes in the network. All Configurations of Cisco Routers and Switches. Participated in a rotating 24x7 support schedule for the Network operation Center.
* 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 Document and followed the change process as per IT policy It also includes the configuration of port channel between core switches and server distribution switches.
* Configured and designed LAN networks with Access layer switches such as Cisco 4510, 4948, 4507 switches.
* Setting up **VLANS** and configuring **ISL trunk** on Fast-Ethernet channel between Switches.
* Experience in HSRP standby troubleshooting & Experience in configuring & upgrading of Cisco IOS.
* Deployed a large-scale HSRP solution to improve the uptime of collocation customers, in the event a core router became unreachable.
* Upgrade Cisco Routers, Switches and Firewall (ASA) **IOS** using **TFTP**
* Handle ticket escalations from the network operations team and in accordance to Service Level Agreement requirements
* Worked on F5 LTM, GTM series 6400, 6800, 8800 for the corporate applications and their availability
* Understand the JUNOS platform and worked with IOS upgrade of Juniper devices
* Configured **Remote Access VPN** on **Juniper SA 6500, 4500,2500**
* Understand the JUNOS platform and worked with IOS upgrade of Juniper devices
* Designed and implemented security policies using **ACL, AAA, PIX, ASA firewall**.
* Implemented **DNS (A, PTR, NS, CNAME, and Delegation), DHCP and IPAM**rules on **InfoBlox Grid manager.** Implemented **public DNS** records on **Bind Server.**
* Experience in working with **Nexus 7010, 5020, 2148, 2248** devices.
* Design and configuring of OSPF, BGP on Juniper Routers and SRX Firewalls.
* Configured routing policy for **BGP**. Switching related tasks included implementing **VLANs** and configuring **ISL trunk** and **802.1Q** on Fast-Ethernet channel between switches
* Configured and troubleshooting of **HSRP, GLBP and VRRP** on Cisco routers.
* Configuring RIP, OSPF and Static routing on Juniper M and MX series Routers
* Troubleshooting on network problems with **Wire shark**, identify problem and fix.
* Experience with configuring Nexus 2000 Fabric Extender (**FEX**) which acts as a remote line card (module) for the Nexus 5000. Experience with configuring **VDC** on Nexus.
* Key contributions include troubleshooting of complex LAN/WAN infrastructure that include routing protocols EIGRP, OSPF & BGP
* Implemented **TCP/IP** and related services like **DHCP/DNS/WINS.**
* Performed the maintenance of **Active Directory** and **replication** scheme, **DNS/DHCP** services and **time** services; wrote step-by-step procedures for implementing upgrades.
* Configured **VLANs** on a switch for inter-VLAN communication. Configured VLAN Trunking Protocol (**VTP**) on Core Switches. Configured various LAN switches such as **CISCO CAT 2900, 3550, 4500, 6509** switches for **STP, VTP Domain, VLAN, Trunking, Fast Ether Channel** configuration**.**
* Documented all the work done by using **Visio, Excel** &**MS word**.

**Environment:**

In Corporate office architecture with highly reliable & secured network including **Router series** (2800, 3600, 7300), **switch series** (3750, 3550, 4500 ,6500), **Cisco ASA**(5505, 5510, 5585) firewall, **Nexus** (7K, 5K & 2K), **Routing Protocols** (EIGRP, OSPF, BGP), **Switching protocols** (VTP, STP,GLBP, HSRP), Site to Site VPN, Remote Access VPN, Cisco VPN, **F5 Load Balancers** (6400, 6800, 8800)

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| **Position:** Network Engineer  **Client: Citigroup, Warren, NJ** | **Duration: Jan 2011– Dec 2013** |

***Responsibilities*:**

* Monitored, managed and resolved all data network circuits. Configured **Static, RIP v1 & v2, IGRP, EIGRP, OSPF and BGP** Routing Protocols on **Cisco1600, 2600, 2800, 3600, 7300** series Routers.
* Designing and Implementation of **(LAN) VLANs**, **VTP**, **Spanning Tree (STP), Trunking (dot1q and ISL)** and **Ether channel** on **Cisco Catalyst Switches 3500, 6500, 7600**.
* Performed Troubleshooting and monitored routing protocols such **RIP, OSPF, EIGRP & BGP**.
* Designed **OSPF Areas** for reliable Access Distribution and for Core IP Routing.
* Implemented traffic filters on Cisco routes using **Standard** &**Extended access-list.**
* Installed and configured **Routers, Bridges, Terminal Servers** and **CSU/DSU’s** to support **WAN** links.
* Worked extensively in Configuring, Monitoring and Troubleshooting Cisco's **ASA 5500/PIX** security appliance, configuring **VLANs/routing/NATing** with the firewalls as per the design.
* Configuring **RIP, OSPF**, **BGP** and Static routing on **Juniper M and MX** series Routers
* Involved in designing L2VPN services and VPN-IPSEC authentication & encryption system
* Configured **Remote Access VPN** on **Juniper SA 6500, 4500,2500**
* Configured **Admin and User Realms, Roles, Resource Profiles, Sign-in Policies** and monitored **User logs** on **Juniper IVE.**
* Performed software upgrade on **Juniper IVE** from **7.3R5 to 8.0R1** to support **Remote access** on windows 8.1 operating system
* Experience in working with **Nexus 7010, 5020, 2148, 2248** devices.
* Negotiate VPN tunnels using IPSec encryption standards and also configured and implemented **site-to-site VPN**, **Remote VPN**.
* Configured **standard** and **extended access-lists** on network
* Experience with MP-BGP and MPLS LDP protocols
* Experience with setting up MPLS Layer 3 VPN cloud and also working with BGP WAN towards customer
* Configured and troubleshooting of **HSRP** on Cisco routers.
* Responsible for turning up **BGP** peering and customer sessions, as well as debugging BGP routing problems.
* **Redistribution of route** (Network Migration) from **RIP to OSPF**.
* Conversions to BGP WAN routing. Which will be to convert WAN routing from OSPF to BGP (OSPF is used for local routing only) which involves new wan links.
* Convert Branch WAN links from TDM circuits to MPLS and to convert encryption from IPSec/GRE to Get VPN
* Responsible for procurement and installation of Hardware, network drives and other IT infrastructure. Documented the design, implementation and troubleshooting procedures with Method of Procedure (MOPS).
* Responsible for service request tickets generated by the helpdesk in all phases such as troubleshooting, maintenance, upgrades, patches and fixes with all around technical support.
* Design, Implement & troubleshooting of Juniper switches, routers and Firewalls.
* Configured, installed, & managed DHCP, DNS, & WINS servers.
* Juniper: **EX-2200, EX-4200, EX-4500, MX-480**, **M Series, SRX210, SRX240**

**Environment:**

**Router series** (2800, 3600, 7300) and **switch series** (3750, 3550, 4500,6500), **Juniper SA** (6500, 4500, 2500), **Cisco ASA**(5505, 5510) firewall, **Nexus**(7K, 5K & 2K),**Routing Protocols** (EIGRP, OSPF, BGP), **Switching protocols** (VTP, STP,GLBP,HSRP), Site to Site VPN, Remote Access VPN

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| **Position:** Network Engineer  **Client: Idea Cellular Ltd., India** | **Duration: June 2009–Dec 2010** |

***Responsibilities:***

* Configured and installed Cisco 2500, 3640, 7200, and 7940 Routers.
* Troubleshot network bandwidth performance, mismatched framing and line coding.
* Coordinated with LAN/WAN engineers the development and implements security policy.
* Monitored usage of network resources with Cisco works, and using sidewinder in PIX Firewall.
* Defined policies, NAT and anti-spoofing for internal, external networks as well as Internet gateways.
* Configured remote users to access corporate LAN with VPN connectivity.
* Configured and installed new IP addresses for new users by using IP Addressing and Subnetting Scheme.
* Interfaced with various vendors for company products.
* Configured Frame-Relay, ISDN, ATM, Protocols, & load balancing switches.
* Configured IPX/SPX, HDLC, PPP, TCP/IP, BGP, EIGRP, RIP, & HSRP.
* Configured TCP/IP addressing scheme to assigned IP blocks.
* Designed network architectures and implementation of network Switches.
* Worked on a migration project which involved the removal of all static routes from core devices
* Worked on the redistribution of connected routes on all OSPF devices so that all connected subnets are advertised via OSPF.
* Involved in the redistribution into OSPF on the core ASA firewall.
* Also prepared documentation for various Vlans and Voice subnetworks and worked on Visio for the same.
* Installed and configured DNS and DHCP server.
* Involved in troubleshooting of DHCP and other IP conflict problems.
* Carried out performance monitoring & documentation of relevant network segments to ensure data integrity & environmental safety
* Performed switching technology administration including VLANs, inter-VLAN routing, Trunking, STP, RSTP, port aggregation & link negotiation.
* Configuration of Access List ACL (Std, Ext, Named) to allow users all over the company to access different applications and blocking others.
* Configuring STP for switching loop prevention and VLANs for data and voice along with Configuring port security for users connecting to the switches.
* Involved in L2/L3 Switching Technology Administration including creating and managing VLANs, Port security, Trunking, STP, Inter-Vlan routing, LAN security.
* Working on Cisco 6509 and 4507 series switches for LAN requirements, that includes managing VLANs, Port Security and troubleshooting LAN issues.
* Working on Network design and support, implementation related internal projects for establishing connectivity between the various field offices and data centers.
* Ensure Network, system and data availability and integrity through preventive maintenance and upgrade.
* Supporting EIGRP and BGP based PwC network by resolving level 2 &3 problems of internal teams & external customers of all locations.
* 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.
* Provide front end on-call network support 24x7x365 for all network infrastructures in the co-operation.

**Environment:**

**Cisco routers(**7900,3600,2500), **Cisco switches**(4500,6500),**Cisco ASA Firewall**(5510), **Routing Protocols**(EIGRP, RIP, BGP), **Switching protocols**(VTP,STP)