

Network Architect Network Architect Network Architect - U.S. Electrical Services Inc Hartford, CT

Network professional passionate about network automation and NetDevOps. Looking for an opportunity to develop and use my skills to solve business problems with amazing technology at a forward thinking company.

Work Experience Network Architect U.S. Electrical Services Inc January 2017 to Present Deployed Netbox as an IP address, equipment and circuit source of truth for infrastructure team. Wrote multiple scripts to interact with Cisco IOS, Cisco ASA, and Cisco Wireless controllers. Additionally wrote scripts to enable CSV imports and other data structures to programmatically model the operational network for network automation and other purposes.

Developed a Python program that automatically configured DIA services for 25 sites. Junior personnel were able to input site specific details that generated and merged configs to devices during cutover phase. Routing validation functions ensured that cutover was successful. API calls were utilized to update Netbox.

Developed Raspberry PI platform to serve as a test point for branch offices for tools such as iperf3 or tcpdump. It also served as a Prometheus blackbox exporter to test SaaS and datacenter services from branch point of view. It has the ability to sit inline for link loss and latency insertion for testing purposes.

Architected and administers a production AWS Transit VPC utilizing two Palo Alto's for routing and security services. The transit VPC serves as the aggregation point for all VPC to VPC and VPC to Datacenter traffic for the enterprise. All public services are inspected through the Firewall and routed to the DMZ. Palo Altos peer with AWS Virtual Private Gateways and datacenter Cisco ASRs and utilize BGP.

Developed and architected the network security posture for the enterprise. This involved utilizing Zscaler as our web filtering service for branch offices, fully reengineering our data center Fortinet Firewall policies and procedures, administrating Cisco ASA's, SSL VPN redesign and Palo Alto Firewalls for cloud security.

Completely redesigned datacenter edge for redundancy over two separate Internet circuits, with minimal downtime. This redesign allowed for agile connections to cloud providers. Critical datacenter workloads were provided to branch offices through multiple paths and transport mechanisms decreasing downtime.

Adopted the use of terraform to quickly provision testing and training environments for the infrastructure team. As example, Terraform was used in the creation

of individual test VPCS that provisioned test web servers, and SD-Wan devices to allow each member to modify their own deployments. Built an immutable infrastructure pipeline utilizing Ansible, Terraform and Packer to develop and deploy supporting network services in AWS. This allowed for testing, upgrading and deployment of services from test to production with limited risk to ensure high service availability. Architected and Engineered a 100+ site DMVPN deployment across three separate transports, (MPLS, broadband, 4G) to two datacenter for higher availability. DMVPN deployments utilized EIGRP as IGP. Offloaded local internet traffic to Zscaler for URL inspection and utilized SLA's for HSRP priority in cases where dual routers were needed. Configured EEM's for SNMP Trap notification upon SLA failures. Currently leading SD-Wan Vendor selection and architecture design for the company to remove MPLS costs, increase agility from the edge and bolster security through business driven overlay networks. Senior Network Engineer Office of Naval Intelligence February 2013 to January 2017 Engineered, managed, designed and implemented network architectures for multiple networks spanning across six regional network-operating centers worldwide for Naval and other DoD entities. Engineered solution for module deployment of access sites utilizing common underlay transport enabling standardization of new deployments to decrease time to operate and increase cost savings to customer Designed and configured multicast routing infrastructure to provide live video dissemination throughout a common infrastructure with minimal delay while maintaining security posture of the network. Continually sought to troubleshoot complex issues in the infrastructure utilizing Wireshark capture analysis, iPerf and other tools to find root causes of issues like; misconfigured video conferencing units, path MTU problems, MSS misconfigurations, client side duplex negotiation issues and Window Server complications, like group policy configurations limiting TCP session bandwidth which was improved 200% Spearheaded global networking monitor solution and design involving six regional NOCS. This included the research and selection of software, hardware and ancillary components along with aggregating data to the central office to provide management information to improve capacity planning and response time Led two multimillion-dollar regional node installations for major network hubs serving network services to over 35 separate customer

locations with an aggregate user count of approximately 5000 Network Operations Center Manager United States Navy October 2010 to February 2013 Managed a Network Operations Center with 30 personnel to monitor, troubleshoot, provision and engineer WAN services for Naval entities on the East coast. The facility served classified communication services for multiple entities at multiple levels of classification. Developed comprehensive curriculum for enlisted Sailors to develop technical skills in the field of IT, Security and Networking leading to four CCNA, two CCNA Security, and ten Security + certified personnel. Selected to analyze contract proposals for major multimillion-dollar contract providing IT services. Chosen as the lead technical interviewer for five technical director positions at five major network- operating centers to identify strong candidates to operate the organization in remote locations. Managed Wide Area Network circuit program for over 200 circuits to include scheduling of new, change and discontinues actions, along with maintaining circuit records and briefing management on status Led team on over 30 network installation projects from conception to closeout phases to include requirements documentation, design, configuration and installation and monitoring Network Administrator United States Navy November 2006 to October 2010 Responsible for the patching, configuring and administration of ship board networks spanning three classification enclaves for ship board officers and crew on multiple ships. Ensured successful mission accompaniment over three deployments to the Middle East and multiple exercises in the United States. Awarded multiple achievement medals for execution of shipboard network administration tasks and assistance to other crews on the waterfront with technical challenges. Education Masters of Science in Computer Information Technology Central Connecticut State University September 2017 to May 2019 Bachelor of Arts in Political Science Eastern Connecticut State University September 2002 to 2006 Military Service Branch: United States Navy Rank: E6

Name: Rodney Barnes

Email: christinehart@example.com

Phone: (291)712-2623