

Yohan Nugera



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PROFILE

- ❖ **2+ years of hands on experience** in Network Design, Implementation and Support.
- ❖ Configuring and testing of new customer solutions (**Routing and Switching, Security and Wireless**). Additionally, travel to customer sites to implement these solutions.
- ❖ Familiar with **Cisco Systems, Fortinet, Radware, Dell, Juniper and A10** networking equipments.
- ❖ Produce detailed network design documents based on customer requirements.
- ❖ Use programming to ease network deployment and troubleshooting (REST APIs, Conversion scripts in Python, Perl)
- ❖ Solving incidents driven customer facing issues regarding aforementioned technologies and products. Participates in On Call rotation for customer emergencies.
- ❖ Working experience with very demanding local and foreign clients in the Maldives.
- ❖ Ability to positively adapt to continuous changes in the organization.
- ❖ Very good ability/experience to work with under pressure and strictly timed deadline.

SUMMARY OF SKILLS

Networking Technologies	<p><u>Layer 3 Technologies</u> SD-WAN, Dynamic Routing (BGP, EIGRP, OSPF, RIP), Static Routing, Policy-Based Routing, VRF, HSRP, VRRP</p> <p><u>Layer 2 Technologies</u> VLANs (Data and Voice operations, dot1q), Spanning-Tree (STP, PVST+, RPVST+, MST), VTP, Etherchannels (PAgP, LACP), VSS, Stackwise, HDLC, PPP, PAP/CHAP Authentication</p> <p><u>VPN Technologies</u> MPLS (L2/L3), GRE, IPSec, SSL VPNs, DMVPN, ADVPN (Fortigate)</p> <p><u>Network Services</u> DHCP, DNS, NATs (Static, Dynamic, Policy-Based), PAT, QoS (DSCP tagging, shaping, policing), NTP, SNMP, IP SLA</p>
Network Products	<p><u>Network Security</u> Perimeter/Internal Firewalls (FortiGate v5.4 to v6.2, ASA, FTDs, FMC, SFR, Juniper SRX), Email-Security Solutions (Cisco ESA and FortiMail), Web-Security Solutions (Cisco WSA), Endpoint Security Solutions (FortiClient, Anyconnect Cisco AMP for endpoints), Cisco AMP (for ESA, WSA, Firepower), Identity Services Engine (or ISE), Web Application Firewalls (FortiWeb), FortiAuthenticator (for two-factor Authentication), Load Balancers (A10 EX series, Radware Linkproof NG), SIEM (FortiSIEM)</p>

	<u>L2/L3 Network Devices</u> Switches (Cisco 2960 Series, 3850 Series, Dell N3000 Series), Routers (Cisco), Datacenter switches (Nexus 9K, FEX), Multi-layer Switches (Catalyst 9K, Catalyst 4500 Series)
Programming	<u>Programming Languages</u> – Python, C++, Java, Matlab, Perl <u>Tools</u> - Python IDE/Pycharm, Eclipse IDE, Codeblocks
Electronics	<u>Devices</u> – Altera FPGA Boards (Cyclone IV), Microcontrollers (Arduino, PIC), NodeMCU <u>Tools</u> – FPGA Designing (Altera Quartus Prime), PCB Designing (Orcad, Proteus), Microcontroller Programming (MikroC), CAD Designing (AutoCAD, SolidWorks) <u>Languages</u> – Verilog HDL, Arduino, MikroC
Current Research Interests	Python for Network Programmability, Cisco ACI, Ansible for Network Automation, Cisco DNA

PROFESSIONAL QUALIFICATION

- ❖ Professional Qualification in **Fortinet Network Security Architect (NSE 7) Certified – 2019 Aug.**
- ❖ Professional Qualification in **Fortinet Network Security Professional (NSE 4) Certified – 2019 Aug.**
- ❖ Professional Qualification in **Cisco Certified Network Associate (CCNA) Certified – 2019 Sep.**
- ❖ Certified Lead Implementer (Information Security Management Systems conforming to ISO27001:2013)

PROFESSIONAL EXPERIENCE

Systems Engineer – Post Sales
Millennium I.T. E.S.P. (Pvt.) Ltd. | Sri Lanka <https://www.millenniumitesp.com>
(Feb 2018 - Present)

- ❖ Involved to plan, configure and implement new customer solutions. Additionally, produce detailed network documentation for new deployments
- ❖ Provide technical expertise in maintenance and troubleshoot for Enterprise, BFSI and Telecommunication businesses
- ❖ Directly involved in Configuration and troubleshooting of Cisco routers (ISRs, ASRs, 800 Series), Cisco ASA firewalls (with firepower), Fortigate firewalls, Cisco Firepower Threat Defense (FTD, FMC), Cisco ESA (C100 Series), Cisco WSA (S100, S300 Series), A10 Load-balancers (EX series), Cisco WLC (2500 Series), Cisco Aironet Accesspoints (1800 Series).

Intern – Post Sales
Millennium I.T. E.S.P. (Pvt.) Ltd. | Sri Lanka <https://www.millenniumitesp.com>
(Aug. 2016 – Feb. 2017)

- ❖ Involved in network installation and configuration of Cisco Routers, Switches, Wireless Infrastructures (WLC and Access-Points) and troubleshooting network issues.
- ❖ Involved in designing network diagrams, documenting (UAT, SoW) and Wifi Heat-Map Creation

PROJECT CONTRIBUTION

❖ Toyota Perimeter Head Office and Branch Network Implementation

- Implementation of perimeter firewall cluster
- Configuration conversion (using custom-built scripts) from Cisco ASA to Fortigate
- Firewall policy, Route and NAT optimization
- Security profile creation for IPS, Anti-Virus, Certificate Inspection requirements
- VPN tunnel creation for private clouds and remote-access purposes
- New firewall deployment with SDWAN for selected branches. Traffic optimization using local-breakout internet traffic and Application based load sharing (with existing MPLS and new IPSec tunnels)
- Creation of web-security policies in Cisco WSA proxy servers as per company policies

Terminologies & Tools: Fortigate 200E, 60E, Cisco WSAv S600, Cisco Catalyst 2960-X, HA-failover (FGCP), Python scripts, SDWAN, IPSec, MPLS, FortiClient VPN, Fortigate Advanced security configurations (Anti-Virus Profiles, IPS Profiles, Certificate Inspection), WPAD PAC file hosting for automatic proxy detection, High-level/Physical/Logical Diagrams, UAT/As-Built Documents

❖ South Asia Gateway Terminals Datacenter Network Deployment

- Deploy internal firewall cluster, Data-center and LAN Core switch clusters, Web-Proxy, Perimeter Routers, Loadbalancers and floor switches
- Configuration conversion (using custom-built scripts) from Cisco FWSM to Fortigate for internal firewall cluster
- Firewall policy, Route and NAT optimization
- Security profile creation for IPS, Anti-Virus requirements
- Web-Proxy deployment from scratch and User policy creation as per company policies
- Active-directory integration for user aware authentication
- Load-balance internet traffic with two ISP connections as per customer requirements

Terminologies & Tools: Fortigate 2000E, Cisco Catalyst 9500 Cluster, Cisco Catalyst 9300 Cluster, Cisco Nexus 9K, VPC, Radware Linkproof, Cisco Catalyst 2960 Switches, Cisco WSAv S300 Series Web Proxy, NTLM Authentication, Stackwise Virtual, Etherchannels (LACP)

❖ Institute of Policy Studies Perimeter Firewall Deployment

- Deploy perimeter firewall cluster
- Configuration conversion (using custom-built scripts) from Cisco ASA 5500x to Fortigate
- Firewall policy, Route and NAT optimization
- Security profile creation for IPS, Anti-Virus and Certification inspection requirements
- Design document generation (Physical and Logical Diagrams, UAT)

Terminologies & Tools: Fortigate 500E, Cisco Catalyst 2960, ASA5500X, HA-failover, Etherchannels

❖ Hatton National Bank Email Security Gateway Optimization and Maintenance

- Optimize existing inbound & outbound mail policies to align with company security policies
- Configure anti-spam, gray-mail detection, content filters to ensure only intended inbound and outbound emails are allowed
- Define multiple quarantine zones for different mail filtering requirements
- Maintain black-list/white-list policy and mail filtering attributes according to the organization policies
- Troubleshoot email delivery issues by interpreting mail logs, delivery status and bounced messages

- Perform firmware upgrades

Terminologies & Tools: Cisco ESA C190, Cisco SMAv M300, SMTP, SMTPS, Anti-SPAM, Cisco AMP, Gray-mail detection, message filters, content filters, Quarantine, inbound/outbound mail policy, HAT, HA, Configuration synchronization, Centralized configuration and reporting.

❖ National Savings Bank Web-Proxy Deployment

- Web-proxy configuration conversion
- User Identification profiles, Access policies and Custom URL filters optimization as per company policies.
- Active directory integration for user authentication
- Centralized configuration management
- Design document creation

Terminologies & Tools: Cisco WSA S395, Cisco SMAv M100, Explicit Proxy, NTLM Authentication, HA failover

❖ Other Projects

- Dialog Axiata - Fortimail SPAM Filter solution designing and deployment
- Nations Development Bank – Internal firewall deployment
- MAS Holdings – Head Office SDWAN deployment
- Laugfs Holdings – Network Deployment
- Mobitel – ISE 2.1 Instalation
- Seylan Bank – Island-wide switch deployment

ACADEMIC QUALIFICATIONS

- ❖ B. Sc. Eng. (Hons.) in Electronics and Telecommunication Engineering, University of Moratuwa
 - Cumulative GPA : 3.55
- ❖ G.C.E. Examination, St. Peter's College (Colombo 04)
 - Advanced Level: Combined Maths (A), Physics (A), Chemistry (B)
 - Ordinary Level: 7As and 2Bs

RESEARCH & PUBLICATIONS

- ❖ Yohan Nugera, et al. IEEE IV 2019 - Emergency Vehicle Traversal using DSRC/WAVE based Vehicular Communication.
 - Link: <https://ieeexplore.ieee.org/document/8813981>
- ❖ Y. Nugera, et al. IEEE Signal Processing Cup 2016 – Team Ravan. IEEE Sigport – Exploring Power Signatures for Location Forensics of Media Recordings.
 - Link: <https://sigport.org/documents/ieee-signal-processing-cup-2016-team-ravan>

COMPETITIONS

- ❖ IEEE Signal Processing Cup 2016 – Exploring Power Signatures for Location Forensics of Media Recordings
- ❖ IEEE Xtreme Programming Competition 10.0 (2017) – Island 23, World 267
- ❖ IEEE Xtreme Programming Competition 9.0 (2016) – Island 80, World 507

PERSONAL INFORMATION

Marital status : Single
Gender : Male
Nationality : Sri Lankan

REFEREES

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