Łukasz Bernard **Polański**

NETWORK ADMINISTRATOR/ENGINEER · SOLUTIONS ARCHITECT - INFRASTRUCTURE

born on 30th March 1979 in Poland
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cookisz

"Improvement begins with I."

Summary

During my previous employment I have developed over 10-year experience in managing several hundred node networks both local and geographically distributed. I have been dealing with networking infrastructure optimization in order to meet the growing needs of modern datacenter in terms of both services availability and traffic monitoring. I have been enforcing the company's security policy by deploying and managing Next Generation Firewall systems.

I've been working along with datacenter operators and DevOps, being in touch with the cutting-edge technological hardware and software based solutions. A similar approach that drives DevOps community spurs me on to look for solutions that guarantee security, scalability and elasticity in a datacenter networking workload.

In the near future I would like to focus my attention on network provisioning and process automation as well as studying implementations of Software Defined Networking (SDN) for flexible and programmatic network configuration.

Skills

Networking devices	Juniper, Nortel, Cisco, D-Link, HP, Huawei, NVIDIA/Mellanox (Cumulus Linux)
Firewall and security	Stonesoft/McAfee (now Forcepoint), Dell SonicWall, Palo Alto, opnSense, Websense, Darktrace
Networking protocols:	IPv6, OSPF, BGP, EVPN, VRRP, 802.1X, EAP, RADIUS, VLAN, VXLAN, NetFlow/sFlow
Telephony	Innovaphone PBX, UC, AudioCodes BG, Asterisk, h.323, SIP, ENUM
Virtualisation, Cloud, Container	KVM, oVirt, VMware vSphere, OpenStack, Docker/podman, kubernetes
Programming and automation	Python, Shell Scripting, Ansible, GIT
Linux server administration	RedHat/CentOS, Debian/Ubuntu
Storage	VMware vSAN, CEPH, Fibre Channel, iSCSI, FreeNAS, ZFS
Natural Languages	Polish *(mother tongue)*, Italian *(full professional proficiency)*, English *(professional proficiency)*
Driving license	International driving license: category A, B

Work Experience

NWU - IT Department (North-West University) *Potchefstroom, South Africa*
JUNIOR SOLUTIONS ARCHITECT *Sep. 2018 - Present*

- Supporting university Enterprise Architect's tasks
- Supervision and guidance of small teams of Network and Systems from Operations and Infrastructure division
- Network automation, configuration management and systems orchestration and deployment using DevOps approach
- Planning supervision and maintenance of the core network backbone and global peering.
- Data Center Virtualizzation
- Study and evaluation of service contenerizzation techniques
- Data pipeline building blocks towards unified infrastructure as a code

Potchefstroom, South Africa
SOLUTIONS ARCHITECT CONSULTANT *Dic. 2017 - Aug. 2018*

- Design of EVPN based Data Center fabric, stretched L2 domains and evaluation of VXLAN routing scenarios
- Configuration and testing of IPv6 based routed network services
- Network automation tasks, configuration management and orchestration with Ansible
- Building testing environment for backbone network infrastructure on top of GNS3 and Vagrant
- Testing, troubleshooting and monitoring of BGP L2VPN EVPN fabric deployment in Cumulus Linux/Juniper/Cisco environments
- Troubleshooting VMware vSphere iSCSI attached SAN over VXLAN overlay networks
- Configuration of routed multicast domains on Juniper devices
- Design and implementation of an infrastructure for user edge network devices deployment

CNR - Consiglio Nazionale delle Ricerche (National Research Council of Italy)
Rome, Italy

Network & Security Engineer/Administrator, VoIP Engineer/Administrator
Jul. 2008 - Sep. 2017

- *CNR is the largest public research institution in Italy that refers to MIUR (Ministry of Education, Universities and Research). Within its Networking and Information Systems department I am committed to support both scientific and administrative units, mainly through:*
- Management and deployment of Next Generation Firewall, IPS and VPN
- Deploying 10 Gbps and 40 Gbps core datacenter network and enterprise user network
- Management of wireless and Authentication Authorization and Accounting architecture
- Migration of over 1000 extensions of Ericsson's MD110 to Innovaphone VoIP PBX leading to closing down the former obsolete architecture
- Scaling out Central Office VoIP deployment to other campuses and branch offices. Deploying Unified Communications, Border Gateway, and WebRTC
- Deploying and managing of Data Center virtualisation platform in VMware's vSphere, Red Hat's oVirt and participating in definition of Open Stack deployment
- Administration of mainly Red Hat based operating systems and services
- Configuration and maintenance of network services like DNS, DHCP, LDAP
- Troubleshooting network operational and security issues

Ny-Ålesund, Svalbard (Norway)

Datacenter Contact and Logistic staff Member
Jan. 2014 - Sep. 2017

- Maintaining networking and telecommunications facilities both remotely and during on-site expeditions
- Supporting Italian research teams in Ny-Ålesund in Svalbard
- Collaboration in "Dirigibile Italia Management and Logistics Programme" scientific project (RIS-ID 10204) http://www.researchinsvalbard.no/project/7399/

Rome, Italy

IT and VoIP Consultant
Mar. 2008 - May 2008

- PIEMME TELECOM S.r.l. consultant for the CNR administration: performing preliminary study, testing of interoperability and its deployment between the Innovaphone VoIP solution and Ericsson MD110 PABX

Rome, Italy

IT external Consultant
Dic. 2005 - dic 2007

- Modernization, management and monitoring of enterprise network infrastructure; system administrator of Linux servers
- Hardware deployment of IBM systemX servers and Fibre Channel SAN

PNRA – Programma Nazionale delle Ricerche in Antartide (Italian National Antarctic Research Program)
Concordia Station, Plateau Dome C, Antarctica

SuperDARN (Super Dual Auroral Radar Network) technical staff member
20 Nov. 2012 – 30 Jan. 2013

- Temporal assignment to the Antarctic Technical Unit of ENEA/PNRA following INAF - IAPS request (Institute of Astrophysics and Space Plane-tology) as Italian teem member with the mission of assembling and putting into operation SuperDARN radar on the Antarctic plateau
- Real-time UNIX (QNX) configuration, setting-up networking and data transmission back to the Antarctic base
- Mounting all the trellis and antennas, mounting and testing power transmitters and phasing matrix

Concordia Station, Antarctica

IT Specialist, Logistic and Radio Room staff member
13 Nov. 2009 – 19 Feb. 2010

- Implementation of new mail server and bash scripting for data transmission on satellite connection, network monitoring system and enhance-ment of the Ethernet infrastructure; deployment of VoIP infrastructure
- Control Room activities: weather observation and radio communication both with scientific and logistic personnel

Orange Open Solutions S.r.l.
www.orangeos.it

ICT System Integrator
Jun. 2007 - 2016

- IBL Banca: migration of Stonesoft distributed firewall system of the bank headquarter and its 34 Italian branch offices; implementation of "Intermapper" SNMP monitoring system
- TELESPAZIO - one of the world's leading players in satelite services: configuration and on-site training of Innovaphone VoIP distributed solution for Lario Area operators
- Phitofarma - Italian Cosmetic Factory: network and VoIP service consultancy
- CNOS FAP - Salesian Father's Professional education centers: "Progetto Conettività" assessment of networking and telecommunication strate-gies towards common policy (2007, 2008)
- PARSIFAL - archeology supervision cooperative in Rome: deployment of a NAS system based on FreeNAS operating system and ZFS filesystem and zvolumes
- Innovaphone VoIP solutions consultancy for different smaller customers

Pontifical Committee for Historical Sciences
Vatican City State, Italy

"PCSS - Pontificio Comitato di Scienze Storiche"

IT technical collaboration
2002 - 2007

- Implementation of an organizational web site
- Configuration and administration of network shared resources

"POLANSKI" Salon Komputerowy - Family IT Business *Lubin, Poland*

IT TECHNICAL STAFF MEMBER *Jan. 1994 - Aug. 1998*

- Assembling, configuration and testing of desktop PCs
- Technical assistance and installation of hardware and software
- First networking deployments to some of the town schools (Windows NT 4.0 and Novell NetWare 4.x)

Professional Training & Courses

COURSES

Google Cloud Platform, Big Data and Machine Learning Fundamentals *Coursera.org*

GOOGLE CLOUD *April. 2020*

- This course highlights use-cases for both components of any data pipeline and dives into the available data lake and warehouse solutions on Google Cloud Platform.

Modernizing Data Lakas and Data Warehouses with GCP *Coursera.org*

GOOGLE CLOUD *May. 2020*

- This course highlights use-cases for both components of any data pipeline and dives into the available data lake and warehouse solutions on Google Cloud Platform.

vSphere: Install, Configure, Manage [V6.7] *Johannesburg, South Africa*

VMWARE EDUCATION SERVICES *Dic. 2018*

- Configuration and administration of vSphere infrastructure and its components for the foundation of a software-defined data center

vSphere: Install, Configure, Manage [V6.0] *Rome, Italy*

VMWARE EDUCATION SERVICES *Dic. 2015*

- Configuration and administration of vSphere infrastructure and its components for the foundation of a software-defined data center

CL210: Red Hat OpenStack Administration II *Rome, Italy*

RED HAT, INC. *Dic. 2015*

- Implementation, configuration, use and maintenance of a cloud computing environment using Red Hat Enterprise Linux OpenStack platform
- Leveraging the cloud computing characteristics: self-service, global network access, multitenancy, elasticity, telemetry

Juniper Advanced Switching *K-Labs, Rome, Italy*

JUNIPER NETWORKS EDUCATION SERVICES *Mar. 2014*

- Advanced Switching, JunOS CLI, MSTP, VSTP, authentication and access control for Layer 2 networks, IP telephony features, class of service (CoS), monitoring and troubleshooting tools and features supported on the EX Series Ethernet Switches

Asterisk Advanced *Rome, Italy*

ALLNET ITALIA – CERTIFIED DIGIUM PARTNER *Jun. 2012*

- The Asterisk Advanced training course is designed to prepare Linux/Unix consultants, interconnect vendors, enterprise IT personnel, and ITSP/telco systems administrators to configure, manage and troubleshoot Asterisk-based VoIP systems

PHP Base Programming *Rome, Italy*

PCSNET ROMA *Apr. 2009*

- Introductory course to PHP programming

Innovaphone convergent Engineer Advanced *Hannover, Germany*

INNOVAPHONE *Feb. 2009*

- Advanced configuration and troubleshooting of Innovaphone VoIP architecture

Stonesoft Solutions to Network Security: Firewall/VPN, IPS, SSL VPN *Rome, Italy*

STONESOFT CORPORATION *Nov. 2008*

- Stonesoft - McAfee/Intel Security - Forcepoint

Voice over IP & Telephony over IP: technology and solutions *Rome, Italy*

CNR - UIEC *Oct. 2008*

- architecture of SIP protocol

Development of advanced web services applications

"Progettazione e sviluppo di applicazioni e servizi distribuiti orientati al Web a elevato contenuto tecnologico" *www.iasi.cnr.it*

CNR, IASI - INSTITUTE FOR SYSTEMS ANALYSIS AND COMPUTER SCIENCE. *Oct. 2005 - Apr. 2006*

- HTML, XML, Software Engineering, UML, Java, J2EE, Web services

Voice over IP - Configuration. Innovaphone - Basic Q-305
Rome, Italy

CONTROLWARE GMBH · *Oct. 2005*

- VoIP systems architecture, IP infrastructure issues, VoIP protocols, Configuration and management of Innovaphone gateway and PBX

Configuration, Management & Security of Open Source Platform Solutions
"Configurazione, Gestione e Sicurezza di Piattaforme Open Source (Linux/Unix)"

www.iasi.cnr.it

CNR, IASI - INSTITUTE FOR SYSTEMS ANALYSIS AND COMPUTER SCIENCE. · *Feb. 2005 - Nov. 2005*

- programming fundamentals; computer networks; system hardware and software architecture; Open Source paradigm; system, service and network administration in Linux/Unix; Linux related security

CERTIFICATIONS ACHIEVED

Oct. 2020	**JNCDA,** Juniper Networks Certified Associate - Juniper Networks Certified Design	*Juniper Networks*
Aug. 2020	**JNCIA-SEC,** Juniper Networks Certified Associate - Security	*Juniper Networks*
Aug. 2020	**JNCIA-Junos,** Juniper Networks Certified Associate - Junos	*Juniper Networks*
Jul. 2020	**JNCIA-DevOps,** Juniper Networks Certified Associate - Automation and DevOps	*Juniper Networks*
Feb. 2020	**JNCIA-Cloud,** Juniper Networks Certified Associate - Cloud	*Juniper Networks*
Jan. 2020	**VCP,** VMware Certified Professional - Data Center Virtualizzation	*VMware*
Oct. 2019	**TOGAF,** TOGAF 9 Certified (understanding and practice of core principals of Enterprise Architecture)	*The Open Group™*
Sep. 2015	**EX210, Cert.: 150-160-588,** Red Hat Certified System Administrator in Red Hat OpenStack	*Red Hat, Inc.*
Feb. 2009	**ICE Advanced,** Innovaphone Certified Engeener	*Innovaphone AG*
Jan. 2009	**SGFWA 4.3,** Stonegate Firewall Architect	*Stonesoft Corp.*
Jan. 2009	**SGIPSA 4.3,** Stonegate IPS Architect	*Stonesoft Corp.*
Jan. 2009	**SGSMCA 4.3,** Stonegate Administrator	*Stonesoft Corp.*

CERTIFICATES OF COMPLETION

Dic. 2015	**284140,** vSphere: Install, Configure, Manage [V6.0]	*VMWare Inc.*
Mar. 2014	**IJOS,** Introduction to the Junos Operating System	*Juniper Networks*
Mar. 2014	**JEX,** Junos Enterprise Switching	*Juniper Networks*
Mar. 2014	**AJEX,** Advanced Junos Enterprise Switching	*Juniper Networks*
Jun. 2012	**dCAP,** Asterisk Advanced Training	*Digium®*
Jun. 2009	**TNIAM II,** Trapeze Networks TNIAM Recertification Test	*Trapeze Networks*
Sep. 2007	**TNIAM I,** Trapeze Networks Installation Configuration & Maintenance	*Trapeze Networks*
Oct. 2005	**Q-305,** Innovaphone - Basic. Voice over IP - configuration	*Innovaphone AG*

Education

UNISAL (Università Pontificia Salesiana)
Rome, Italy

M.SC IN COMMUNICATION SCIENCE · *Sep. 1998 - Aug. 2004*

- Old and New Media Studies. Radio theory and techniques, majored in "media per le comunità"
- 6 week Internship in "Radio Studio Sette" in Trento (Italy)
- Graduated with maximum of votes, thesis title "Open Source, State of the Art."

Other Experience of relevance

LECTURING

Aug. 2017	**CNR,** "Configuration and runnig of Firewall systems: Forcepoint/Stonesoft" (10 hours)	*Rome, Italy*
Apr. 2007	**Grid Consulting S.r.l.,** "Networking II – percorso specialisti IT" (advanced level) course on-site ENAIP (24 hours)	*Rome, Italy*
Jun. 2006	**Grid Consulting S.r.l.,** introductory course in "Networking" for "SIEL Euroimpianti" employees (66 hours)	*Santa Palomba, Italy*

PARTECIPATION IN WORKSHOP & TUTORIAL

Jun. 2018	**OpenStack Foundation,** "OpenStack Days Poland"	*Kraków, Poland*
Sep. 2014	**Consortium GARR,** "Enable web applications with SAML Single Sign-on"	*Rome, Italy*
Jan. 2013	**Alessandro Schillaci,** Astronomy course	*Antarctica*
Nov. 2010	**Consortium GARR,** GARR - CERT Security Tutorial	*Rome, Italy*
Nov. 2010	**IGF Italia,** Internet Governance Forum Italia 2010	*Rome, Italy*
Nov. 2005	**Consortium GARR,** 6° Workshop GARR: "Dalla Rete all'Utente: quando l'utente diventa nodo attivo della Rete."	*Rome, Italy*

Professional body membership

Jul. 2017   **IITPSA,** Institut of Information Tecnology Professionals South Africa   *N° P070932*

Publications

"Migrazione alla tecnologia VoIP del sistema telefonico dell'Amministrazione Centrale"   *Project Document published internally at CNR*

CO-AUTHOR   *Nov. 2008*

• Migration of the telephone infrastructure for the CNR Central Administration to the VoIP tecnology

Hobbies

• Sport: running, cycling, volleyball, snowboard, squash
• Diving: International PADI Open Water Diver, PADI Nitrox, PADI Adventure Deep Dive
• Hiking, climbing, via ferrata
• Photography
• DIY