

## PERSONAL INFORMATION Andrea Chiffi

in www.linkedin.com/in/andreachiffi

## DevOps/Platform/Cloud Engineer | IT System Administrator

#### WORK EXPERIENCE

## Oct 2024 - Present Cloud System Administrator

## CMCC Foundation, Euro-Mediterranean Center on Climate Change, Lecce (Italy)

- Manage private/public cloud environments
- Configure and troubleshoot infrastructure components related to cloud
- Collaborate with HSM team to implement and maintain the infrastructure
- Utilize scripting languages (bash) for automation and tooling
- Develop and maintain infrastructure automation scripts using ansible and terraform/opentofu
- Troubleshoot and resolve issues in production and test environments
- Collaborate with scientists, developers and operations team
- Implement security best practices for infrastructure and applications
- Implement best practices for version control of code using Git
- Implement apache, nginx and haproxy configurations
- Setup and maintain monitoring solutions such as Prometheus, Grafana and Loki
- Create and maintain Helm charts and Kustomize for deploying applications on Kubernetes
- Manage and orchestrate containerized applications using Kubernetes
- Create and maintain comprehensive documentation for infrastructure and processes

#### Jan 2019 - Sep 2024

## **DevOps Engineer**

#### Logifuture Italia S.r.l., Lecce (Italy)

- Design, implement, and manage Gitlab CI/CD pipelines for applications
- Implement best practices for version control of code using Git
- Optimize and automate release processes to achieve faster and more reliable deployments
- Implement Docker containers for applications, ensuring scalability and portability
- Manage and orchestrate containerized applications using Kubernetes and Openshift
- Create and maintain Helm charts and Kustomize for deploying applications on Kubernetes
- Implement Apache and PHP configurations into chroot environment
- Install, configure, and maintain Redis instances to support caching and data storage needs
- Set up and maintain monitoring solutions such as Prometheus, Grafana and Graylog
- Configure centralized logging systems like ELK (Elasticsearch, Logstash, Kibana)
- Implement security best practices for infrastructure and applications
- Troubleshoot and resolve performance-related issues in production environments
- Optimize resource allocation based on application and system requirements
- Develop and maintain infrastructure automation scripts using Ansible
- Collaborate with development and operations teams
- Utilize scripting languages (Bash) for automation and tooling
- Collaborate with developers to integrate infrastructure solutions with code
- Create and maintain comprehensive documentation for infrastructure and processes
- Configure and troubleshoot networking components, ensuring optimal connectivity
- Collaborate with network team to implement and maintain network infrastructure
- Establish and document incident response procedures for production issues
- Participate in on-call rotations and respond promptly to critical incidents
- Stay updated on industry trends and share knowledge with the team





## Sep 2017 – Dec 2018 NOC operator / Network & IT System Engineer

### CLIO S.r.I., Lecce (Italy)

- Wireless network designer of Ruckus, Ubiquiti, Mikrotik solutions
- WiFi Area / Hotspot manager, configuration and support technician (also for Aeroporti di Puglia S.p.A. and CDS Hotels)
- IT automation via custom scripts and Ansible for configuration backup, CPE provisioning, system hardening, etc.
- Network simulators/emulators administrator (GNS3, eve-ng) and network and security pro-
- Network equipment monitoring expert (TR-069, SNMP, Mikrotik Dude, Zabbix)
- L2 and L3 network designer
- Configuration technician on routers and switches (Mikrotik, HP, Ubiquiti, Tiesse)
- Radius, AAA, login and authentication services developer
- Designer of city video surveillance systems
- Network troubleshooting

#### Nov 2016 - Dec 2022 IT Consultant

- Design, deployment and management support of corporate IT systems
- Design of business solutions for wired and wireless networking
- Deployment of wifi hotspot / captive portal solution with AAA integration
- Installation, configuration and monitoring of servers in Windows and Linux environments
- Installation, configuration, management and data recovery on enterprise storage systems
- Installation, configuration and management of integrated services (webserver, fileserver, mailserver, Radius, LDAP, DHCP, DNS)
- Troubleshooting of issues related to Linux servers, storage systems and networking
- Technical assistance and consultancy

## Jan 2014 – Jan 2016 Senior IT System Administrator

## Distretto Tecnologico High Tech – DHiTech S.c.a.r.l., Lecce (Italy)

- Design, deployment and management support of Dhitech IT systems
- Management of IT platforms developed for Dhitech projects
- Management and maintenance work on the Company data center
- Installation, configuration and monitoring of servers in Windows, Linux and VMware environ-
- Installation, configuration and management of storage systems
- Installation, configuration and management of the company fileserver and mailserver
- Troubleshooting of issues related to Linux servers, storage systems and networking
- Technical assistance and consultancy

### May 2013 – Dec 2013 IT System Administrator

Apphia S.r.I., Lecce (Italy)

IT system support on Unix environment (HP-UX) and management of physical and virtual development server infrastructure of partner company AvioAero (www.avioaero.com)

### Mar 2013 – Apr 2013 IT System Administrator

Naica Società Cooperativa, Lecce (Italy)

IT system support on Unix environment (HP-UX) and management of physical and virtual development server infrastructure of partner company AvioAero (www.avioaero.com)





## Jun 2012 – Mar 2013 IT System Administrator

Centro Cultura Innovativa d'Impresa – University of Salento, Lecce (Italy)

- Administration of physical and virtual servers (VMware)
- Network management
- Configuration of storage and backup devices
- Clustering and high reliability systems
- AAA framework, Directory services
- System hardening and monitoring activities

## Nov 2011 – May 2012 IT System Administrator

Centro Cultura Innovativa d'Impresa – University of Salento, Lecce (Italy)

- Administration of physical and virtual servers (VMware)
- Network management
- Configuration of storage and backup devices
- Clustering and high reliability systems
- AAA framework, Directory services
- System hardening and monitoring activities

### Nov 2010 – Sep 2011 IT System Administrator

Centro Cultura Innovativa d'Impresa – University of Salento, Lecce (Italy)

Technical-operative support to research activities: configuration and management of hardware and software infrastructures enabling collaboration on new products development in geographically distributed laboratories (IT & Network Staff).

## Apr 2009 – Jul 2009 High Performance Computing (HPC) System Administrator

SPACI Consortium – Southern Partnership for Advanced Computational Infrastructure, Napoli (Italy)

Specialized technician: management and configuration of high performance computing systems (HPC cluster) based on UNIX / LINUX operating systems.

## Nov 2008 IT System&Network Administrator

ALCA Società Cooperativa, Lecce (Italy)

Specialized technician in the "Research and development" area: documentation and testing of the OpenVPN software (Virtual Private Network) on embedded platforms based on OpenWRT.

## Mar 2006 Specialized technician

Scuola IAD (Istruzione A Distanza), Università degli Studi di Roma "Tor Vergata", Roma (Italy)

Management and configuration of workstations in a LAN environment for automated execution of exams related to the Masters organized by the School.

#### Sep 2005 - Oct 2005 Teacher

Istituto Tecnico Industriale Statale "Enrico Medi", Galatone, LE (Italy)

Teacher of the course "GNU/Linux and Multimedia" in the PON project "ICT in the Linux environment".

## May 2005 – Jul 2005 Software developer

CLIO S.p.A., Lecce (Italy)

Development of an AppleScript software to support the production and post-production phases of video recordings: start/end timings, recording and automatic cutting of movies.

Curriculum vitae Andrea Chiffi



#### **EDUCATION AND TRAINING**

## Mar 2024 – Mar 2027 Certified Kubernetes Administrator (CKA)

The Linux Foundation

- Cluster Architecture, Installation & Configuration
- Workloads & Scheduling
- Services & Networking
- Storage
- Troubleshooting

### Jan 2023 – Jun 2023 English course

Wall Street English

Online exercises and practice (intermediate level)

## Jun 2013 – Jan 2014 Cisco CCNA Discovery 2:

## Working at a Small-to-Medium Business or ISP

Cisco

Istituto Tecnico Industriale Statale "Enrico Fermi", Lecce (Italy)

- Design of wired and wireless network infrastructure
- Installation, configuration, troubleshooting on Cisco network devices
- Basic study concepts of active and passive circuits
- Common server setups (FTP, SSH, HTTP, etc.)
- Implementation of disaster recovery practices

## Jun 2011 - Dec 2011 Cisco CCNA Discovery 1:

## Networking for Home and Small Business

Cisco

Centro Cultura Innovativa d'Impresa – University of Salento, Lecce (Italy)

- Hardware
- Operating Systems
- TCP/IP concepts
- Prevention and management of security threats
- Troubleshooting of network connections

# Jul 2011 Network Security methodologies and application on

## Cisco ASA devices

Cisco

ITHUM s.r.l., Rome (Italy)

- LAN Security
- Wireless Security
- VPN
- Real case studies and advanced simulations

## Mar 2011 – Apr 2011 ICT Infrastructure course

Cisco

Centro Cultura Innovativa d'Impresa – University of Salento, Lecce (Italy)

- Telecommunication Systems components and functions: wired and wireless technologies
- Lab networking with focus on Cisco technologies

## Apr 2009 - Jun 2009 Hardware assembly course

Faculty of Computer Engineering – University of Salento, Lecce (Italy)

### 1997 – 2007 Bachelor's degree in Computer Engineering

(DM 509/1999)

Faculty of Computer Engineering – University of Salento, Lecce (Italy)

- Specialization: Telecomunication networks
- Thesis title: Testbed of Intelligent Transportation Systems: a framework for the software development of a MAC protocol





## 1991 – 1996 Science High School diploma

Liceo Scientifico "A. Vallone", Galatina, LE (Italy)

#### PERSONAL SKILLS

Mother tongue Italian

#### Other languages

English French

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
B2	B2	B1	B1	B2
A2	A2	A1	A1	A1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user Common European Framework of Reference for Languages

Communication skills Always involved in association activities:

- Agesci Associazione guide e Scout cattolici italiani, Gruppo Galatina 1, LE
- SaLUG! Salento GNU/Linux Users Group www.salug.it (founding and ordinary member)
- Diaframma Zero gruppo fotografico, Lecce (founding and ordinary member)
- FotoFucina associazione fotografica, Salice, LE (founding member)
- I gained the ability to work in a team contributing actively to the growth of "SaLUG!" and the realization of "LinuxDay" events and meetings. I'm able to develop software in a team for university exams of computer technology.

#### Organisational / managerial skills

- I gained the ability to organize events in group with other members of SaLUG! all the Linux-Day, Seminars and Courses realized.
- I'm able to adapt to various tasks within my area (Computer Engineering) having realized group software projects for university exams, research studies in the field of wireless networks and having worked as Systems and Network Administrator in the IT&Network Staff at Centro Cultura Innovativa d'Impresa.

### Digital competences

SELF-ASSESSMENT							
Information Processing	Communication	Content creation	Safety	Problem solving			
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user			
Digital competences. Calf accomment and							

<u>Digital competences - Self-assessment grid</u>

#### Working style

- Adaptable, learn fast in new environments, stay focused.
- Team player and self-starter.

#### Computer skills

#### Operative systems (client, server and embedded)

- Good knowledge on: Windows (3.1, 9x, ME, NT, 2000, XP, 2003 server, Vista, Seven, 10, Windows 2008 server), MS-DOS and MacOS X
- Good knowledge on: Cisco IOS, NX-OS
- Expert on: GNU/Linux OSs (Ubuntu, Debian, RHEL, Red Hat, Fedora, CentOS, Scientific Linux, Suse, Gentoo, OpenWRT, Raspbian and many other distros) and Unix-like OSs (Sun/Oracle Solaris, HP-UX, IBM AIX, NetApp Data ONTAP)

#### Network technologies

- - Wired networks (IEEE 802.3) with authentication 802.1x and QoS services
  - Wireless networks: IEEE 802.11 a/b/g/n/ac also managed by various brand of WLC (Wireless LAN Controller), physical and virtual
- Basic knowledge of structured wiring

#### Databases / DBMS

- Good knowlegde on design techiques of databases
- Competent on: PostgreSQL, MongoDB, Oracle, SQLServer
- Expert on: MySQL DBMS





#### Server-side computer skills - IT System Administration

I've advanced management skills of Unix-like systems acquired during the working activities in Centro Cultura Innovativa d'Impresa, as well as during self-learning of GNU/Linux for server administration (web and mail) of the SaLUG! and in the management, maintenance and configuration of high-performance multi-user computing systems (clusters) performed at SPACI Consortium and the Centro Cultura Innovativa d'Impresa. I'm able to configure, manage and monitor high performance computing systems - clusters (Cloud and Grid Computing). I can configure, manage and monitor IBM Blade systems both the older (BladeCenter H) and the latest generation (IBM Flex System).

#### **Network Infrastructures**

I've skills related to design, deployment (structured wiring), configuration, management and maintenance of even complex physical network infrastructures: IEEE 802.3 wired networks with QoS support and IEEE 802.11 a/b/g/n/ac wireless networks, also managed by WLC and newer technlogies like 10GigabitEthernet. RFID, WiMAX and HiperLAN sensor networks are being studied.

#### **Storage Systems**

I have advanced skills related to installation, configuration, management and maintenance of storage systems used in business or research areas (SAN, NAS, Disk Array) in addition to iSCSI technologies, 10GigabitEthernet and various vendor devices such as NetApp, IBM, HP. I'm also expert in the architecture and management of local, network and cluster/parallel filesystems: ext3/4, XFS, NFS, Samba/CIFS, Oracle/Sun ZFS, PVFS, IBM GPFS.

#### Virtualization

I am able to design, implement and manage the deployment of virtualization systems both on the client side (desktop) and on the server side, using different technologies: VMware (ESXi, vSphere), RHEV and oVirt, KVM, Qemu, XEN, Citrix XenServer/XenDesktop, VirtualBox. I also have advanced skills in the creation of VDI systems (Virtual Desktop) based on the virtualization framework oVirt.

#### Security

I've advanced skills regarding current information security technologies (IPsec suites, SSL/TLS protocols, use of digital certificates and various encryption algorithms) and the creation of site-to-site and SSL/TLS VPNs (Virtual Private Networks).

#### Monitoring/Audit

I'm able to install, configure and make fine-tuning of centralized monitoring systems of servers logs/events/downtime, network and storage devices via SNMP, syslog, ssh, using applications such as Nagios, Zenoss, Cacti, Ganglia, Zabbix, Monit, Mikrotik Dude.

#### Network Services

I'm able to configure and administer server-side services such as:

- · Apache and Nginx web server, also in reverse-proxy mode with load-balancing support
- · Tomcat application server
- MongoDB, MySQL, Oracle, SQLServer (DBMS)
- MailMan (mailing list manager)
- Postfix (mail server) with antivirus/antispam features
- Samba, NFS (fileserver on GNU/Linux and Solaris)
- OpenLDAP (Directory Services)
- Microsoft Active Directory Services
- FreeRadius (framework AAA, IEEE 802.1x)
- OpenSSH (remote shell server) and various FTP servers

#### Networking

- L2 and L3 switch: Cisco catalyst 2900, 3500 series
- · Router: Cisco 6500 series, Nexus 5500 series and Linux in-kernel advanced routing (on servers and embedded devices): VLAN, Bridging, Security Access Control List (ACL), VRF-lite, VTP domain on IOS and NX-OS platforms
- Firewall: IPTables Linux in-kernel firewall/NAT system and Cisco PIX, ASA
- VPN site-to-site and TLS/SSL (through Cisco ASA devices also with failover support or by using OpenVPN)
- I've skills on assembling, configuring and troubleshooting hardware on client machines and servers of various architectures like x86, x86-64, IA-64, ARM, MIPS.

Date

28/02/2025