europass

Tiziano Minuzzo

WORK EXPERIENCE

Database administrator

Police [01/11/2022 – Current]

City: Luxembourg | **Country:** Luxembourg | **Website:** https://police.public.lu/fr.html | **Business or sector:** Public administration and defence; compulsory social security

Installation, administration, maintenance, migration of Oracle19 CDB/PDB databases, Postgres databases.
Manage incidents and requests within dba scope.
Contributing to IT projects as DBA .
Tuning and performance for Oracle and Postgres database.
Technical and functional analysis
Support to stakeholders in IT project
Managing external consultant.

Assistant dealing with ICT relations

European Parliament [30/09/2016 – 31/10/2022]

City: Luxembourg | **Country:** Luxembourg

Incident Request and Problem manager (ITIL certificate) for DG PERS
PKI operator
General Directorate for Personal Local System Administrator backup.
Under Local System Administrator responsibility, Team Leader of six external consultants (Local Support User team Luxembourg).
Stock IT asset hardware and software inventory responsible.
AD user, group, service mailbox, application manager.
ICT Project manager.
Business analyst.
Project, Wiki, guideline documentation.
Cloud software selection process manager

ICT consultant

National Research Council - Institute of Marine Science [30/11/2003 – 30/11/2006]

City: Venice | **Country:** Italy

Network upgrade,
WiFi implementation
Service Desk planning and implementation

ICT system administrator

National Research Council - Institute of Marine Science [28/02/2006 – 29/09/2016]

City: Venice | **Country:** Italy

ICT project manager.
Design and implement network in the new building of CNR with all network services: DHCP, DNS, Firewall, WiFi, VPN etc.
VMWare infrastructure for application servers.
Set up a Linux Cluster on IBM infrastructure for daily production weather forecast simulations.
Participation in several scientific projects related to IT.
Implementation of standards in scientific data.
Database administrator: SQL : postgres, mysql. Non sql: mongoDB.
Planning, managing, digitalisation and archiving of scientific data and scientific archives stored in the old premises.
Design build, deploy, maintain and support the Archive of Adriatic Studies (ASA).
Standard Support 1st, 2nd level for researchers and staff members.
Install, configure and manage the new client PCs, mainly Windows, for staff and Linux Desktop for researchers with all the basic software plus specific software related to peculiar scientific devices or applications (as databases for scientific data: Thredds, or Matlab, Octave, ArcGIS..).

EDUCATION AND TRAINING

Bachelor in Applied Information Technology

University of Luxembourg [30/09/2019 – 07/07/2021]

Address: 2 Av. de l'Universite,, 4365 Esch-sur-Alzette (Luxembourg) | **Website:** www.uni.lu

Master in Philosophy

Ca' Foscari University of Venice [08/12/1998 – 24/06/2002]

Address: Dorsoduro, 3246, 30123 Venice (Italy) | **Website:** www.unive.it

ITIL Foundation Certificate in IT Service Management

EXIN [05/03/2017 – 07/03/2017]

Address: Arthur van Schendelstraat 650, 3511 MJ Utrecht (Netherlands) | **Website:** https://www.exin.com/

Teacher of "Linux for bioinformatics", part of "The Omics Analysis Sydney Tutorial (TOAST)

Joint Academic Microbiology Seminars (JAMS) [22/02/2015 – 23/02/2015]

City: Sydney | **Country:** Australia | **Website:** https://jams.org.au/index.php/jams-sydney/

Partecipation in UNIDATA TDS worskshop

Unidata [21/10/2012 – 24/10/2012]

Address: UCAR Foothills , 3300 Mitchell Lane Colorado (United States) | **Website:** https://www.unidata.ucar.edu/

Partecipation in Project Management Foundation

European Parliament

Address: Plateau du Kirchberg B.P. 1601 , L-2929 Luxembourg (Luxembourg)

Ensure Access & Identity in Google Cloud

Google

Website: https://www.cloudskillsboost.google/public_profiles/a82f9d23-b4dd-4c79-9e14-1f55129c49ed/badges/2456345

Automate Data Capture at Scale with Document AI

Google

Website: https://www.cloudskillsboost.google/public_profiles/a82f9d23-b4dd-4c79-9e14-1f55129c49ed/badges/2457574

Build and Deploy Machine Learning Solutions on Vertex AI

Google

Website: https://www.cloudskillsboost.google/public_profiles/a82f9d23-b4dd-4c79-9e14-1f55129c49ed/badges/2469486

Secure Workloads in Google Kubernetes Engine

Google

Website: https://www.cloudskillsboost.google/public_profiles/a82f9d23-b4dd-4c79-9e14-1f55129c49ed/badges/2501942

Build and Secure Networks in Google Cloud

Google

Website: https://www.cloudskillsboost.google/public_profiles/a82f9d23-b4dd-4c79-9e14-1f55129c49ed/badges/2500218

Learning Codeless Machine Learning with KNIME

LinkedIn Learning [10/03/2023 – 12/03/2023]

Address: 1000 W Maude Ave, CA 94085 Sunnyvale (United States) | **Field(s) of study:** Machine Learning, Knime, Artificial Intelligence (AI)

Advance Your Data Engineering Skills

LinkedIn Learning [05/04/2023 – 08/04/2023]

Address: 1000 W Maude Ave, CA 94085 Sunnyvale (United States) | **Field(s) of study:** Big Data, Data Engineering

Advance Your Skills in Deep Learning and Neural Networks

LinkedIn Learning [10/04/2023 – 13/04/2023]

Address: 1000 W Maude Ave, CA 94085 Sunnyvale (United States) | **Field(s) of study:** Neural Networks, Machine Learning, Natural Language Processing (NLP), Deep Learning, Artificial Intelligence (AI)

Advance Your Skills in AI and Machine Learning

LinkedIn Learning [13/04/2023 – 13/04/2023]

Address: 1000 W Maude Ave, CA 94085 Sunnyvale (United States) | **Field(s) of study:** Machine Learning, Natural Language Processing (NLP), Text Classification, Deep Learning, Artificial Intelligence (AI)

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s):

French

LISTENING C1 **READING** C1 **WRITING** B2

SPOKEN PRODUCTION B2 **SPOKEN INTERACTION** B2

English

LISTENING B2 **READING** C1 **WRITING** B2

SPOKEN PRODUCTION B2 **SPOKEN INTERACTION** B2

German

LISTENING A1 **READING** A2 **WRITING** A1

SPOKEN PRODUCTION A1 **SPOKEN INTERACTION** A1

Luxembourgish

LISTENING A1 **READING** A1 **WRITING** A1

SPOKEN PRODUCTION A1 **SPOKEN INTERACTION** A1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

IT TECHNICAL KNOWLEDGE.

Designing Planning implementing and integrating hardware, software, systems and applications.

In CNR-ISMAR in Venice I was in charge to design implement and configure the datacenter for the new premises. Before the move, the Institute had some physical Linux servers ensuring basic network services as well as small business application and share drives, but mainly both staff (administrative) and researchers used their own computers to manage data. With the move to the new premises and the necessity to set up a Computing center for a project aimed to build in production weather forecasts, I was put in charge to design and implement the datacenter and also to virtualise the infrastructure. The datacenter was composed of a Cluster computing on HS22 Blade Center

IBM with a DS 3400 IBM NAS of 40 TB, a tape library for archives and backup and a VMware infrastructure in High availability with a HITACH NAS US110 for network and application services. The datacenter structure was adapted looking at ECMWF (UK) with which we had several collaborations and was built to centralize the storage data also for other Italian CNR institutes. That allowed also centralising access level (security), applications to access the data and protocols to share data.

Knowledge of project management methodologies.

Besides having attended the PM1: Project Management Foundation course organised by the European Parliament I am part nowadays of few projects for Software Selection for Cloud based applications and packaged software. In the past I was involved in many research projects: the biggest was the flag project “ritmare” the leading national marine research project for the period 2012-2016.
I was project manager for moving and upgrading the CNR-ISMAR Datacenter on the new premises in Venice and in EP I was in charge of moving all IT assets (servers, client, meeting rooms, printing facilities) following the move of Directorate for Personnel of EP.

I am the project manager responsible for planning, implementing, following up major upgrades for endusers and servers operating system.

Knowledge of programming languages.

Unix/Linux bash scripting, PowerShell, Python, TensorFlow: experienced and intermediate skill level.
Java: intermediate / advanced skill level.

Android OS : intermediate.

REST api, web services, JSON, PHP, Javascript: experienced and basic/intermediate skill level.

Client-Side: Javascript-based Frameworks (JQuery, React.js, Vue.js)

Server-Side: Javascript-based server (Node.js), PHP-Frameworks (Symfony), Python with Django, Go, Java-Framework SpringBoot

Database: MariaDB, PostgreSQL, No-SQL DB like Cassandra, MongoDB, Redis: experienced and basic skill level.

Experience working in an IT Operations team, 2nd or 3rd level support, or an engineering specialist role.

As CNR-ISMAR system administrator I designed and implemented the entire network infrastructure from layer 2-3 as routing to application level as a Linux Cluster for weather forecasts. I kept developing this infrastructure and support users in troubleshooting at the 2nd level.
I implemented new services as requested by research projects where I was involved:

Link: https://www.researchgate.net/profile/Tiziano_Minuzzo

Working knowledge of networking, infrastructure, servers, systems and business applications.

In CNR-ISMAR I was in charge to design, implement, support and develop the new network infrastructure for the new premises. It was a migration from a physical infrastructure to a virtual one (VMware configured in high availability) as well as a brand-new Computing Linux Cluster for daily weather forecasts production for the local government. All network services were reconfigured from scratch, starting by routing and layer 2 connections till network security, authentication and business applications. In my actual job at European Parliament I am officially LSA (Local System Administrator) backup for DG Personnel. In this current role I have the working knowledge of servers, security and management tools and business applications that DG PERS is in charge of.
As LSA backup in the European Parliament I am the system administrator for our Windows Virtual Servers dedicated to DG PERS. In my former job at CNR on an IBM blade center of 12 nodes I set up a Linux Cluster both with Linux Red Hat and Suse SLES as supported operating systems by IBM.

Experience in collaborating with external contractors.

As a system administrator in CNR I was in charge to implement the network infrastructure for the new premises: for this project I had to deal with external companies for requirement selection for hardware, software and for specific

support. In several scientific projects I was in charge of the IT part and that implied to deal with external contractors of scientific hardware in order to integrate their data into the IT infrastructure.
As the LSA backup in the DG PERS I manage four external consultants working as local user support and I deal with software companies in the software selection projects.

Knowledge of ITIL standards – specifically incident management, change management, configuration management best practices.

I am certified ITIL Foundation in IT service management (Axelon certificate number 5943759.20638668)

Planning, installing, configuring and managing hardware and software components, physical and virtual servers, appliances.

In CNR-ISMAR I was in charge to design the new network infrastructure for the new premises. This infrastructure was made by several physical servers and a Virtual Infrastructure (in High Availability based on VMWare plus an IBM San DS 3400 and HITACHI US 110…) The servers were mainly provided with Linux operating systems (Debian, Ubuntu server, Red Hat, Suse SLES) but also a Windows Server was installed in order to manage SAN software and Type Library for data backup and recovery.
I was in charge also to install, configure and manage the new client PCs, mainly Windows, for staff and Linux Desktop for researchers with all the basic software plus specific software related to peculiar scientific devices or applications (as databases for scientific data: Thredds, or Matlab, Octave, ArcGIS..). In my current job at the European Parliament I am in charge of installing new PCs, laptops, network printers, scanners. I deploy the standard configuration on PCs and laptops and servers and install or remove standard software. I am in charge as the LSA backup to do system administrator tasks on our servers (patching, install software; adapt configurations and security management in collaboration with EP Operation Unit).

Implementing and managing enterprise storage and backup systems.

A part of the CNR-ISMAR network infrastructure I was in charge to design and implement was made (composed) by an IBM SAN DS3400 NAS and HITACHI US110 NAS for an amount of 45 TB used to store users' and applications' data plus VMware virtual servers. Some LUN where configured to be shared through SAMBA protocol to the end users or application servers, others were shared with other protocols as iscsi or nfs. Policies for backup and snapshots have been configured for specific purpose related to specific applications. A tape library was used to store backups and data archives for the cluster simulations. The tape library software was installed in a Windows server.

Implementing and operating infrastructure monitoring systems.

In order to monitor the CNR-ISMAR infrastructure I installed, implemented and managed, during the same time, different applications as watchdog, Nagios, Snort, LibreNMS and PRTG Network monitor that was a standard tool for all the CNR Italy network. These applications allowed me to build reports for directors and managers.

Planning, configuring and maintaining VMware environments.

The core of the network services in CNR was a VMware infrastructure build on IBM HS22 blade system. I was in charge to design the infrastructure, to link it to the routing and switch system in order to connect 2 different locations in Venice in addition to a platform 16 miles offshore in the Adriatic Sea connected via WiFi hyperlink. A high Availability was implemented with hot swap of the servers from one VMware node to another. Backup of the virtual servers was set up to a tape library.

Configuring, operating and troubleshooting front end and back end applications servers - IBM WebSphere, MS SharePoint, Java technologies, Web services, REST or similar.

Before taking a job at the European Parliament, I was working on a project related to cloud applications in order to reduce costs and improve efficiency of our infrastructure. Critical applications had a similar schema: a database with REST over HTTP transmission mainly from scientific devices as data collector, with different brokering system to connect many databases of the same type of data located in different regions and on different networks. This required OGC standards implementation and metadata management. The same was planned for our infrastructure and I was exploring WebSphere application server. In my current job at the European Parliament I manage part of

MS SharePoint infrastructure, mainly for end users and I do support for Java technologies as WebLogic because Streamline (the main HR application developed at EP) is oracle based.

Designing Planning and implementing enterprise data centers.

In CNR-ISMAR in Venice I was in charge to design implement and configure the datacenter for the new premises. Before the move, the Institute had some physical Linux servers ensuring basic network services as well as small business application and share drives, but mainly both staff (administrative) and researchers used their own computers to manage data. With the move to the new premises and the necessity to set up a Computing center for a project aimed to build in production weather forecasts, I was put in charge to design and implement the datacenter and also to virtualise the infrastructure. The datacenter was composed of a Cluster computing on HS22 Blade Center IBM with a DS 3400 IBM NAS of 40 TB, a tape library for archives and backup and a VMware infrastructure in High availability with a HITACH NAS US110 for network and application services. The datacenter structure was adapted looking at ECMWF (UK) with which we had several collaborations and was built to centralise the storage data also for other Italian CNR institutes. That allowed also centralising access level (security), applications to access the data and protocols to share data.

Designing, planning and configuring medium size enterprise networks (LAN WLAN remote connections).

In the context of the move of CNR-ISMAR in Venice I was in charge to design and implement all network and communication services. Connectivity was ensured by GARR (network Italian team in charge for connectivity for all Italian CNR institutes). I was in charge to plan the routing among the different 3 sites in Venice, to choose, install and implement switches and routers, create and configure VLAN for different sites for servers and client, for VoIP phones, for research network and administrative staff. In addition, we had a platform 16 miles offshore in the Adriatic sea collecting scientific data. A Hyperlink 24 Ghz was set up and routing has been configured to secure connections from and to the platform. I was appointed Access Port Manager for GARR for upgrading and troubleshooting IPv6 tests of WAN connections in the context of CNR network.

Maintaining and monitoring enterprise networks, with knowledge of standard monitoring and management tools.

Once the datacenter and the virtual Infrastructure were built, I was in charge of maintaining and monitoring them. I used several free opensource tools such as watchdog, Nagios, Snort, LibreNMS and PRTG Network as well as tools in the management software for the specific hardware (i.e IBM, HP)All logs of the linux servers, pfsense, and other critical services as Cluster Computing were centralised and synchronised between site.

Configuring and troubleshooting network related incidents.

As system administrator and network system administrator I was in charge to LAN network incidents, VLAN performance troubleshooting and the inter-sites network related incidents (routing) between premises in Venice included the offshore Platform. I used osTicket (then in my actual job at the European Parliament I use Jira ticketing system) to encode the incidents. Being APM for GARR I was also involved in troubleshooting WAN incidents. In order to resolve these incidents, I used monitor tools described in 6.1.3 plus router cisco basic tools and command to get basic information about the network status.

Configuring and managing classic and virtual networking and security components, including load balancers, Web Application Firewalls.

In order to implement the network infrastructure with routing, load balancing, VLAN, with different connections at physical layer: from classic RJ45 cat6 network to optical fiber switch for datacenter, to Hyperlink 24 Ghz wireless for offshore platform I had to configure switches and routers of several brands (HP IBM, Ubiquity, Cisco) in order to perform redundancy and load balancing. I also implemented PfSense on multiple sites to manage VPN, firewall routing and access control at network level. I also used Ubiquity network advanced features (as Controller Management). In my actual job at the European Parliament I use McAfee ePolicy Orchestrator and VitalQ IP to manage VLAN, to set security tags for client and servers, to do encryptions and to do reporting on security.

Knowledge of software development concepts.

Being a support at DG PERS in IT Unit, most of the clients are developers involved in Streamline HR application plus several side projects (documents management systems, paperless etc.) This allows me to learn software development concepts and procedures in order to understand and solve incidents for them. I am also involved in Software Selection Processes for DG PERS.

Maintaining and improving/automating business processes, features and user functionalities.

In my actual job at the European Parliament I have been involved in several projects with the goal of introducing new features sometimes based on user requests and sometimes coming from hierarchy decisions. Implementing these features (that requires to bridge users and IT constraint) is one of the most important duties of my actual job. One of my tasks is to be a floater business analyst. I go for a period of several weeks in a unit or service and perform analysis on the work processes in order to identify weaknesses where IT technologies can help to reduce workload, human errors, increase efficiency, security and speed up the process.

Collaborating with various business stakeholders.

During my career I had to deal with different kind of stakeholders. For scientific projects: researchers, administrative staff, politicians, National and regional institutions, medical staff, IT teams, University staff, project managers etc. I had several national and international (non EU) collaboration (I.e. University of Sydney, University of Nador In Morocco; USGS in Denver, USA, NYU University in Singapore). I worked also with other EU institutions: JRC (Milano), EU commission.

Experience with automation and orchestration of IT environments.

At the European Parliament several tools have been developed in order to automatically deploy applications, standard images for OS both for clients and servers and to collect logs. One of this is EPINCO (European Parliament INstall CONsole) that I actually use for my daily tasks. Other standard tools as SCCM are used to manage Active Directory. In the DG PERS servers some tasks are performed in order to update and synchronise different databases and document management systems. In my previous job at CNR-ISMAR I was working on a project with the goal to explore cloud automation to lower the costs and ensure continuous delivery for scientific data produced by CNR-ISMAR.

PKI operator

As PKI operator at European Parliament I'm familiar with the following technologies: authentication via digital certificates, non-repudiation via digital signature, confidentiality via encryption, integrity via message hashing, access control via public/private keys.

Dataset archiving

In my old job at ISMAR-CNR I got familiar with scientific datasets issues both digitals such as how best comparing data versions, difference between on line and off line datasets, metadata schemas (for example Dublin core), non-repudiation, DOI system, live datasets, quality control, and historical dataset usually in paper, handwritten that I needed to merge, archiving and normalise with the help of IT systems and with the collaboration of archivists, historian of science, local municipalities stakeholders.

MANAGEMENT AND LEADERSHIP SKILLS

Service Desk team leader I've been involved in projects about moving datacenter (at CNR-ISMAR) and IT assets linked to end users (at EP).
In both cases I had to coordinate several stakeholders both externals to the organisations (i.e movers, IT specialists) and internal (services with special needs, safety units, IT managers) in order to meet deadlines and reduce downtime of services. This required planning of resources, coordination with many kind of stakeholders, risk management, metrics to evaluates the results, time scheduling.

As incident and request manager in EP I am in charge to hire external consultant, check timesheets, coordinating and reassign tasks in case of planned and unplanned absences. I delegate incidents and requests to team members based on personal skills, interests and knowledge in order to maximise time, quality results, avoid internal conflicts and give them the possibility to enhance their experience. I also push them to follow courses and training job related. I am their first point of contact in case of technical and specific difficult or sensitive situations: I propose solutions or escalate to the hierarchy if necessary.

PUBLICATIONS

Madricardo, Fantina, et al. "High resolution multibeam and hydrodynamic datasets of tidal channels and inlets of the Venice Lagoon." *Scientific data* 4.1 (2017): 1-14.

Oggioni, Alessandro, et al. "Sensing real-time observatories in marine sites-a proof-of-concept." *International Conference on Sensor Networks*. Vol. 2. SCITEPRESS, 2014.

Birello, Giancarlo, et al. "Step by step installation guide of a digital preservation infrastructure." (2012).

Minicante, Simona Armeli, et al. "Building a Natural and Cultural Heritage Repository for the Storage and Dissemination of Knowledge: The Algarium Veneticum and the Archivio di Studi Adriatici Case Study." *Journal of Library Metadata* 17.2 (2017): 111-125.