

# Linux System Administrator, IT support at GEM (Global Earthquake Model) Foundation

The Global Earthquake Model (GEM) is a global collaborative effort that brings together state-of-the-art science, national, regional, and international organisations and individuals to develop open tools, datasets, and best practice for calculating and communicating earthquake hazard and risk worldwide. The GEM Secretariat assembles and maintains global and regional data, and develops and provides the capability to compute, analyse, and communicate seismic hazard, risk, and socio-economic impact calculations globally. The Secretariat comprises inter-disciplinary teams of engineers and scientists that work collaboratively with a wide range of external stakeholders across public and private sectors.

We are looking for a full time Linux System Administrator with at least 3 years 'all-round' experience in managing Linux servers on bare metal. The successful candidate will have experience in complex Linux/FLOSS environments, in network configuration and troubleshooting and knows how to support a development team and the Foundation staff.

The day-to-day responsibilities include:

- Maintain GEM IT infrastructure and IT services (servers, network, web services)
- Management of IT assets and hardware procurement (desktop, workstations)
- Support the development team in application design and deployment (DevOps)
- Support the GEM staff in day-to-day use of IT equipment and tools
- Support the management team in planning IT costs related to projects and running costs

The candidate will report directly to the Director of Technology and Development.

The ideal candidate will have the following technical skills:

- Linux system administration (Ubuntu, CentOS)
- Network configuration and troubleshooting (DELL EMC PowerConnect, Mikrotik)
- VLANs configuration
- 802.3ad link aggregation
- iptables and firewalls in general
- Bare metal server maintenance and configuration (DELL EMC, HPE)
- Blade and blade enclosures management
- Experience with iDrac and firmware management
- Storage (QNAP, RAID, NFS, LVM)
- Virtualization / Containers (KVM, LXC/LXD, Docker)
- Basic experience with Windows and macOS
- Comfortable with Bash and GIT
- Knowledge of Nginx, VPN (OpenVPN), DNS and backup systems (borg, rsync)
- Basic Python programming skills

The ideal candidate will also:

- be a Team player
- be comfortable with troubleshooting, problem solving and collaboration with multiple teams and third parties
- Have good knowledge of Italian and English, both spoken and written (Level B1 or greater)

Experience in any of the following areas is advantageous but not essential:

- HPC clusters (ZMQ, Celery, Slurm)
- Cloud environments (Azure, AWS, Google)

- RDBMS, ideally PostgreSQL
- GitLab and GitLab CI, Travis CI, Jenkins
- Monitoring tools (SNMP, LibreNMS, Netdata)
- User identity and policy management software (FreeIPA, LDAP)
- Google G Suite administration
- Packaging software (Nsis, Deb, RPM, Makeself)
- QGIS (both client and servers) and mapping software

GEM is an equal-opportunity employer and welcomes applications from all suitably-qualified candidates, irrespective of gender, disability, marital or parental status, racial, ethnic or social origin, colour, religion, belief, or sexual orientation.

English is the main spoken language at GEM. The candidate will be based at the GEM offices in Pavia, Italy, with the possibility of working remotely (indicatively one day per week).

We look forward to hearing from you. Please apply to [jobs\\_it@globalquakemodel.org](mailto:jobs_it@globalquakemodel.org) with a cover letter explaining why you would be a good fit for the position, CV, and timeline of availability. The selection procedure will start immediately and continue until we fill the position.