



Job Description:

Job vacancy:	Senior Cloud Infrastructure Engineer
Reporting to:	Head of Engineering Computing Services
Location:	Bristol & Bath Science Park
Annual Salary:	Subject to applicant experience
Package:	27 days annual leave 4 x salary life assurance Group Personal Pension Scheme Group Private Medical Insurance Health Care Cash Plan



About the role:

CFMS' Engineering Computing Services (ECS) team provides infrastructure and technical systems to internal stakeholders and external clients, making use of leading-edge scientific computing services including:

- State-of-the-Art HPC cluster (architected and built in-house)
- State-of-the-Art GPUs and AI accelerator servers
- Openstack and Proxmox private cloud systems
- Ceph-based petabytes of distributed storage
- High performance ethernet networking
- General purpose business computing

The Centre for Modelling & Simulation (CFMS) has an exciting opportunity for a Senior Cloud Infrastructure Engineer looking for a new challenge, latest hardware, and the latest automation and data centre technologies.

The Senior Cloud Infrastructure Engineer role will support and develop the technical running of the company's data centre, on-premises cloud, and HPC systems in alignment with its business objectives. The role will support the Head of ECS in the maintenance and continued operation of the company's existing systems, and developing strategies for running mostly Linux based applications on internal systems, external systems and public cloud, by leveraging automation to maximise optimal use of resources.

The Senior Cloud Infrastructure Engineer will be exposed to a wide variety of exciting and leading-edge technologies and systems, with many opportunities to influence technological strategy as well as learn new skills.

About CFMS:

CFMS is an independent digital engineering specialist organisation, providing HPC, AI, design & analysis services, consultancy and IT infrastructure to help organisations create better solutions to pioneer new product development.

CFMS provides a managed environment which combines an on-premises High Performance Computing (HPC) cluster and private cloud facilities with expertise in modelling and simulation (M&S) to offer a research-supportive environment that enables organisations to increase competitive advantage. We seek an enthusiastic and self-motivated individual to join our team.

Key Responsibilities:

The Senior Cloud Infrastructure Engineer will take a key role on day-to-day running of CFMS systems, including:



- Build, administer and maintain data centre servers and supporting equipment for multiple systems with special focus on the **Ceph**-based distributed storage, and **Openstack** and **Proxmox** on-premises cloud environments
- Provide network and infrastructure support for software development team
- Support the development of junior staff by sharing knowledge and expertise

The Senior Cloud Infrastructure Engineer will operate under the guidance of all policies and procedures, and promote an environment of continuous improvement.

Experience:

- A degree **or equivalent work experience** in IT domain
- Credible Linux system administration experience.
- Experience and knowledge of **Ceph** *or equivalent distributed storage platforms (e.g. IBM Storage Scale, Lustre, etc)*
- Experience and knowledge of **Openstack and/or Proxmox** *or equivalent cloud computing platforms (e.g. Apache CloudStack, VMware vCloud)*
- Automation knowledge and demonstrable experience
- Minimum of 3 years administration of enterprise Linux distributions such as Ubuntu or RedHat

Skills, Knowledge and Competencies:

Essential:

- Technical expertise in **Ceph** *or equivalent distributed storage platforms*
- Technical expertise in **Openstack and/or Proxmox** *or equivalent cloud computing platforms*
- Demonstrable knowledge of server class IT infrastructure
- Minimum of three years administration of enterprise Linux distributions such as Ubuntu or RedHat
- Demonstrable administration management and installation of Linux based systems and technologies
- Knowledge of source control, automation software and deployment tools
 - Git
 - Terraform
 - Ansible
- Comfortable/awareness of with Linux OS installation server technologies (e.g. Cobbler)



- Knowledge of Linux security strategies
 - Comfortable with Linux patching regimes
 - Appropriately deploying and maintaining Linux systems in a secure manner

Desirable or Willing to Learn:

- DevOps methodologies (including CI/CD)
- Virtualisation technologies (Proxmox and Openshift/Kubernetes)
- Containerisation technologies (e.g Docker/Podman)
- Knowledge of programming languages (eg Python, javascript)
- Automation/Orchestration of private/public cloud (Packer/Terraform)
- Ansible AWX/Tower/Automation Platform
- Knowledge of datacentre IP/Ethernet networking

Key Relationships:

The Senior Cloud Infrastructure Engineer will work closely with the Head of ECS and the ECS team, but also with the wider CFMS technical team, and directly with client-end users.

Candidate Profile:

The successful candidate will be a confident and motivated individual that is passionate about all things IT with a particular focus on Linux, **Ceph** (or equivalent) and **Openstack/Proxmox** (or equivalent), preferably (but not essential) with HPC and Automation experience, keen to investigate and research new technologies and be able to take a project from an abstract concept through to completion in a team environment.

How to Apply:

Email your CV and covering letter to careers@cfms.org.uk. If you would like further information on the role please contact us on the email above or call 0117 906 1100.

Applicants must be UK nationals and will be required to undergo security clearance.

Direct applications only - no agencies.



Don't meet every single requirement? CFMS is committed to building a team with a variety of backgrounds, skills and views. The more inclusive we are, the better our work will be. We know that having varied perspectives helps generate better ideas to solve the complex problems of a changing and increasingly diverse world. We encourage candidates to apply if they are excited about this role and meet some of the criteria.