



Job Description:

Job vacancy:	Senior DevOps Engineer
Reporting to:	Head of Engineering Computer 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



Overview:

The Centre for Modelling and Simulation (CFMS) is a growing, independent digital engineering research organisation providing technical expertise to help organisations create cutting edge solutions by pioneering new approaches to product development and enabling innovation services.

Working with commercial and research organisations of all sizes, CFMS has a full portfolio of digital innovation capabilities, including design and analysis services, consultancy, and IT infrastructure. CFMS uses digital innovation across the cyber-physical landscape including robotics capability to help develop more effective engineering solutions across industrial sectors critical to the UK economy.

As a commercially focused organisation we reinvest profits from commercial activity into the continued development of our people, facilities, and research capability.

About the role:

CFMS is looking for a highly motivated individual to join the team as a Senior DevOps Engineer who wants to be part of our inclusive and supportive Engineering Computing Services (ECS) team, and who can leverage their experience and expertise of **Terraform, Ansible and RedHat Ansible Automation Platform (AAP/AWX)** to deliver exciting enterprise automation projects to global customers in secure private/public hybrid cloud environments.

The ECS team designs, deploys and supports the infrastructure and technical systems of both internal and external customers, making use of leading-edge scientific computing and AI services including:

- State-of-the-Art HPC cluster
- State-of-the-Art GPUs and AI accelerator servers
- Openstack private cloud systems
- Petabytes of Ceph based distributed storage
- High performance networking equipment
- General purpose back office computing and services

Key Responsibilities:

As Senior DevOps Engineer you will take a key role leveraging automation to support the day-to-day running of the CFMS ECS activities, including:



- Deliver enterprise automation projects for global customers in secure cloud-based environments, including direct interaction with customers
- Develop and maintain automated infrastructure deployment pipelines using **Terraform** and **Ansible**
- Develop and maintain automated deployment systems with **RedHat Ansible Automation Platform (AAP/AWX)** in RedHat Openshift environments
- Support the rest of the ECS team improving and upgrading to the CFMS datacenter operations through increased and/or targeted automation.
- Support the development of junior staff by sharing knowledge and expertise
- 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
- Automation knowledge and demonstrable experience
- HPC and private cloud specific demonstrable experience
- Proficient technical experience and knowledge of:
 - **Terraform**, or equivalent (e.g. *OpenTofu, Terragrunt, Pulumi, etc*)
 - **Ansible**, or equivalent (e.g. *SaltStack, Puppet, and Chef, etc*)
 - Enterprise Linux distributions such as Ubuntu or RedHat
 - **RedHat Ansible Automation Platform (AAP)** or equivalent (e.g. *AWX/Tower, Jenkins, Spacelift, Rundeck, etc*)
- Experience of CI/CD pipelines
- **Desirable but not essential:**
 - Experience and knowledge of **RedHat Openshift** or equivalent (e.g. *K8S, EKS, AKS, GKE, etc*)

Skills, Knowledge and Competencies:

Essential:

- Deploy virtual infrastructure using **Terraform** (or equivalent)
- Deploy and configure enterprise level applications using **Ansible** (or equivalent)
- Configure enterprise Linux distributions to provide the correct operational environment for deployed applications
- Develop CI/CD pipelines to effect complex automated processes
- Knowledge of source control and corresponding tools
 - Git
 - Gitlab (or equivalent)
- Ability and willingness to guide and educate junior staff

Desirable or Willing to Learn any of the following:

- Automation/orchestration of private/public cloud (Packer/Terraform)
- Azure platform cloud engineering



- Knowledge of Linux security strategies
 - Comfortable with Linux patching regimes
 - Appropriately deploying and maintaining Linux systems in a secure manner.
- DevOps methodologies
- Virtualisation technologies (Proxmox/Openstack)
- Containerisation technologies (e.g Docker/Podman)
- Knowledge of programming languages (eg Python, javascript)
- Linux OS installation server technologies
- Knowledge of datacentre IP/Ethernet networking

Key Relationships:

The Senior DevOps Engineer will be a valued member of the ECS team, reporting to the Head of ECS, but will also interact directly with customers on a regular basis.

Security Clearance:

For this role, it is a requirement to have or be eligible for SC (Security Check) Clearance (by being a UK resident for at least 5 years).

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**.

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.