



Virtualisation & Storage Engineer

UKRI – NERC – BGS

Keyworth, Nottingham

£30,782 to £33,459 per annum (depending on qualifications and experience)

Full-Time – 37 hours a week (a range of flexible working options may be available)

Fixed Term Appointment (until 31 March 2020)

Internal secondment or temporary promotion opportunity for internal BGS staff

About us

The British Geological Survey (BGS) is an applied geoscience research centre that is housed in UK Research and Innovation (UKRI) and affiliated to the Natural Environment Research Council (NERC). It is a world leading geological survey that provides a core science mission to inform government of science related to the subsurface and its interfaces and also undertakes applied research for solutions to earth and environmental processes, both in the UK and globally. It is funded directly by UKRI as well as through research grants and via private sector contracts.

BGS has an annual budget of approximately £60 million and employs 650 people. It has two main sites, a head office in Keyworth near Nottingham and the Lyell Centre, which is a joint collaboration with Heriot Watt University in Edinburgh. BGS works with more than 150 private sector organisations as well as having close links with 40 universities and sponsors approximately 100 PhD students each year.

The BGS has embarked on a £31 million, three year project to set up the UKGEOS energy Observatories project which will provide a group of science research facilities where new subsurface activities such as fracking for shale gas and geothermal energy sources can be tested and monitored under controlled conditions, allowing rigorous, transparent and replicable observations of subsurface processes. More details are available at <https://www.ukgeos.ac.uk>

Central to the project is the ongoing development and support of enterprise storage infrastructure that will provide the data platform for the data sets gathered over the lifetime of the project.

We have an opportunity for a talented and motivated IT Specialist to join the BGS Systems & Network Support (SNS) Team based in our headquarters in Keyworth in Nottingham.

About the role

To develop, maintain, manage and test disk and tape storage infrastructure, the VShare environment as well as associated procedures and controls within the UKGEOS project.

The post holder will report to and liaise closely with the BGS Storage Virtualisation Manager and with the Backup and Archive Administrator.

Responsibilities will include management of the virtualisation infrastructure, involving patching, securing, managing, upgrading firmware and software, and future proofing over 250 virtual servers. These provide mission critical services to both internal staff and external stakeholders including many public facing and high profile websites and services.



The data storage role involves ensuring BGS' vast data holdings (currently around 350TB of live data at the Keyworth site) are secured and accessible at all times. This requires managing the primary, secondary, backup and archive storage as well as developing and enhancing existing SAN (storage area network) infrastructure.

The primary tasks of this role will be to:

- To report to and liaise closely with the BGS Storage and Virtualisation Manager.
- To diagnose and resolve technical issues and to mitigate against recurrence.
- To identify potential problems or weaknesses in the systems and to ensure that measures are developed, tested and carried out to prevent any impact on our users and stakeholders.
- To liaise with the sensor network teams and the core scanning teams to ensure that best technical and security protocols, procedures and policies are developed, documented and followed.
- To ensure that all virtualisation and storage systems are kept secure and reliable with regular updates to drivers, software and firmware.
- To manage the backing up and restoring of virtual servers through tested enterprise-level backup and disaster recovery solutions.
- To manage the storage media and systems, whilst liaising closely with the BGS data archive managers and the IT Security Manager.
- To manage and plan current and future storage and virtualisation requirements. To ensure that the BGS' future data storage and virtualisation needs are met by researching and implementing enterprise level systems that are cost effective.
- To contribute to formal reports as required, internal and external meetings, and to review all relevant events and incidents. To liaise with the Data Management Group on a regular basis to ensure that BGS' data is being stored, backed up and archived in line with the Survey's policies.
- To work closely with the Dev Ops teams to ensure that they are able to develop systems in an environment which gives them the freedom needed for frequent testing, but which still meets the requirements and standards of the BGS IT security policies.
- Rationalisation and automation of procedures and processes through the development of PowerShell scripts to ensure that scheduled tasks and systems monitoring is completed outside of business hours to reduce the impact on users.
- Racking hardware and replacing components in physical servers.

You will also be expected to:

- Visit other BGS offices and field sites as and when required.
- Follow a path of continued professional and personal development through both on the job training and attendance at technical and personal development training courses as required.
- To maintain awareness of developing enterprise level technologies in virtualisation and storage.
- To meet all core expectations, including Health & Safety procedures.



About you

This is an exciting opportunity to focus the next phase of your career on the development of an IT storage infrastructure that will underpin research addressing many of the environmental issues that need to be answered for the development of secure energy solutions. The successful applicant will develop high levels of expertise and knowledge in the areas of data storage across SANs, backup and archive systems, and other related technologies.

You will be highly motivated and technically competent, an excellent communicator who is able to work well across a range of different specialist areas. We are seeking professionals with five or more years' experience, and welcome applications from anyone with a willingness to learn and develop themselves further.

You will have at least an undergraduate degree (and/or equivalent work experience). A background in a numerate science (or similar) would be desirable as would experience in working with enterprise storage systems. As important as your technical skills is your ability to work well in multi-disciplinary teams. It is vital that you understand the importance of delivering what the customer needs and turning concepts and ideas into reality.

You must possess excellent communication skills, both oral and written. You will be able to undertake multiple simultaneous tasks effectively, demonstrate a problem solving ability and work in a flexible manner. Technical training will be provided as part of continuous professional development.

Please also refer to the specific essential and desirable skills criteria for this post.

What we offer

A generous benefits package is also offered, including a very competitive pension scheme, 30 days annual leave plus bank holidays, free parking and access to flexi-time.

We also offer the 'Bike to Work' scheme, free parking, health and wellbeing support, social clubs and on-site sports facilities.

Please note that any internal BGS staff applying for this post would, if successful, be appointed to new UKRI Terms and Conditions and pay.

How to Apply

Applicants are required to include a cover letter outlining their suitability for this role. We would stress the importance of this paperwork in our selection process. **A well thought through application addressing the advertised essential and desirable criteria for the post will be considered far more favourably than a generic covering letter and CV.**

Applications are being handled by UK Shared Business Services, to apply please visit our job board at http://www.topcareer.jobs/Vacancy/irc249287_9399.aspx

Applicants who are unable to apply online should contact us by telephone on +44 (0)1793 867000.



Closing date for receipt of applications is 24 May 2019. Interviews will take place either on 28 or 29 May 2019 in Nottingham.

BGS provides a range of flexible working options including flexible working patterns, compressed hours and home working so if you have a need for flexibility, please raise this in the recruitment process when your needs, balanced with the requirements of the role, will be fully considered.

We are committed to promoting equality and diversity across our organisation as well as across all areas of our science community. As such, we aim to have a workforce with employees from all backgrounds with people who are passionate about earth science and who share our commitment to work for the good of the environment and the benefit of society.

We will actively seek to avoid discrimination on the grounds of age, being or becoming a transsexual person, being married or in a civil partnership, being pregnant or on maternity leave, disability, race (including colour, nationality, ethnic or national origin), sex or sexual orientation.

The British Geological Survey is an Investors in People organisation and has achieved Bronze status for Athena SWAN – a scheme that recognises an organisation's commitment and progress in developing a diverse and inclusive workforce.



Specific Skills Criteria		
	<i>Essential</i>	<i>Desirable</i>
QUALIFICATIONS	<ul style="list-style-type: none"> Degree or equivalent in an IT related subject (substantial equivalent work experience may be considered) 	<ul style="list-style-type: none"> Relevant Microsoft, IBM, Hitachi certification
EXPERIENCE	<ul style="list-style-type: none"> Experience and knowledge of managing and developing Storage Area Networks and Fabrics Experience and expert knowledge of Microsoft Active Directory administration in relation to 	



Gateway to the Earth

	<p>management of SAN access control lists</p> <ul style="list-style-type: none"> • Extensive experience of Microsoft Windows Server management (including previous versions) • Willingness to respond reactively to changing requirements and time-critical events • At least 5 years' experience in an appropriate role in demanding and busy IT department • Experience of working as part of a close-knit technical team • Experience of testing, developing and documenting systems • Diagnosing and resolving issues with a holistic understanding of IT systems • Experience of Enterprise level backup systems • Demonstrable experience and skill with Microsoft PowerShell 	
<p>KNOWLEDGE</p>	<ul style="list-style-type: none"> • In-depth technical knowledge of SANs • In-depth technical knowledge of virtualisation systems • An understanding of hierarchical storage systems and the best practises employed to ensure maximum efficiency when delivering large data sets 	<ul style="list-style-type: none"> • Knowledge of Hitachi HUS systems • Knowledge of Dell Equallogic systems • Knowledge of IBM Spectrum Project
<p>SKILLS AND ABILITIES</p>	<ul style="list-style-type: none"> • Ability to write and maintain clear documentation and procedures • Ability to work largely unsupervised • Critical attention to detail in all areas • Excellent diagnostic and problem solving abilities • Excellent communication skills, both written and oral • Excellent time management with the ability to prioritise work and meet tight deadlines • Ability to work within a variety of teams, with the ability to participate fully as a team member • Flexibility to cope with and manage rapidly changing priorities 	<ul style="list-style-type: none"> • Excellent presentation skills directed at all levels of audience (technical and non-technical) • Ability to provide training to colleagues



	<ul style="list-style-type: none"> • Flexible approach including a willingness to occasionally work anti-social hours 	
<p>PERSONAL QUALITIES</p>	<ul style="list-style-type: none"> • Approachable • Ability to fit in with an established team, working in an open-plan environment • Able to express themselves clearly and concisely • Logical and methodical in their approach • Willingness to travel to other BGS offices • Alignment to and appreciation of BGS core values 	
<p>MOTIVATION</p>	<ul style="list-style-type: none"> • Demonstrates an interest in the work of BGS, NERC and UKRI • Displays an enthusiasm for their areas of expertise and skill and a desire to develop this further • Demonstrates curiosity and a drive to resolve technical problems • Willingness to attend residential training courses • Ability to provide support to colleagues in other areas outside of your specialities 	

