JOB DESCRIPTION & PERSON SPECIFICATION

1. Job title: IT Support Engineer **(HPC)**   **Centre:** Business Services (IT)   **Grade:** D **Location: NIAB HQ**

Reports to (Job title)**:** Support Manager   **Line Manages** (Job titles)**:** None

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2. Main purpose of role:

The post holder will be responsible for the configuration and maintenance of the high-performance computing platform at NIAB and the monitoring and maintenance of the infrastructure of the Windows-based systems.

The post holder will engage with bioinformaticians, biostatisticians and other HPC users at the Cambridge and Kent sites to support the configuration, installation and deployment of hardware and scientific software.

Initially, the role will focus in the installation and configuration of the recently acquired HPC platform but will also be key in the design and support of the core infrastructure.

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3.   Financial authority/responsibility (e.g. delegated budget, authorisation level, approx. value of contracts etc.**):**

The post holder will manage associated maintenance, network and licence contracts in partnership with their line manager. They will also be required to negotiate prices and authorise and place orders for equipment under the line manager's delegated budget.

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4.   Key relationships (external and internal)**:**

The post holder will be required to communicate on regular basis with all staff across the organisation. The post holder will also establish communication and a network with other similar roles across research institutes in the region (e.g. Sanger Institute, EBI, Earlham Institute).

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5. Tasks/responsibilities (in order of priority)	Approx % of time
Day-to-day management and resolution of HPC user hardware and software issues.	40%
Development and deployment for software and system upgrades for the HPC platform.	20%
Monitoring and maintenance of the Windows system.	10%
Systems and data traffic monitoring and problem resolution regarding the performance of the HPC platform.	10%
Development and implementation of a strategy to automate HPC job submissions.	15%
Identification and presentation of new strategic opportunities regarding the effective management of the HPC platform in partnership with Senior Management.	5%

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6. Working conditions :
- The post holder will work within the Support team of the IT Systems group.
- The post holder will be based at NIAB HQ with a requirement to visit the EMR site on regular basis (as demands emerge).
- The post holder should expect to occasionally work an evening period (for system maintenance) and/or at weekend periods (for system upgrades) as the need arises. Out-of-hours and weekend working is normally arranged in advance with time in lieu, but occasionally, the need will arise at short notice.

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7.   PERSON SPECIFICATION

Education/Qualifications:

Essential:	Desirable:
• Professional computing qualification or degree in computing science or equivalent experience. • Proven track record in a role as an HPC support engineer for a large organisation. • System administrator certifications.	• ITIL certifications.

Experience:

Essential:	Desirable:
• Unix/Linux systems administration. • Windows systems experience. • Experience in working with HPC systems for the life-science sector (3 years or more) • VMWare or other virtual environment management. • Backup implementation and management. • Knowledge of LAN and WAN networking concepts and administration. • Cisco router and firewall administration.	• Router configuration.

Specialist Training:

Essential:	Desirable:
• Remote software administration. • Bash, Python or Perl scripting. • DBMS administration (e.g. MySQL, Oracle) expert.	• Configuration of batch systems.

Personal Qualities (skills, behaviours and competencies)

Essential:	Desirable:
• Good communications skills. • Excellent organisational skills.	

• Prepared to travel.	3

Date of description: 18 July 2016	**Compiled by:** M. Caccamo and J. Dyson