

Job Title:	Senior Network Engineer
Reporting to:	Core Infrastructure Services Team Manager
Date:	22 nd April 2021

Brief overview of the role:	<p>This is an exciting opportunity to join a well-established UK based SME working with one of our strategic partner Universities with global campuses. You will be working with leading edge technologies in a dynamic and busy world leading University. The successful applicant will have the opportunity to work on Networks that support global research projects from medicine to engine design and much more.</p> <p>This is a great company to grow with and will offer many prospects for the future.</p>
Duties:	<p>Routine duties include but are not limited to;</p> <ul style="list-style-type: none"> • To make significant contribution to the strategic development and design of the network active infrastructure through carrying out investigations/developments in emerging network technologies and networked services (for example, Wireless networking, IPV6, VoIP, multicasting, video streaming/conferencing, security policy development, intrusion detection/prevention) following IT Services Project Management processes and procedures. • To make significant contribution to the operation of the Network active infrastructure which is in the region of £8m of mission critical Assets. This includes the day-to-day operation of the various components comprising the active infrastructure (including Ethernet switches, routers, firewalls, load balancers, wireless infrastructure, and network management systems) following IT Services Change Control processes and procedures. Of critical importance is the effective monitoring of the network (including performance monitoring, security, and other uses of the network which contravene Conditions of Use) to ensure reliable operation, working closely with our suppliers in fault finding and problem resolution following IT Services Incident Management processes and procedures. • To make significant contribution to the development of new networking services working closely with the transition function and network operations to deploy them to a live state. • To make significant contribution to the development and/or the operation of the DNS, DHCP and IPAM functions for network based computing systems following IT Services Project Management and Change Control processes and procedures. • To take responsibility for the development and/or operation of Network Registration systems following IT Services Project Management and Change Control processes and procedures. • When called upon to do so take the lead or participate in projects to investigate, develop, pilot and transition into operation various network infrastructure and/or network service initiatives following IT Services Project Management and Change Control processes and procedures. • To produce detailed documentation for new and existing services in support of transitioning services into the live environment, to include diagrams, processes and relevant technical information. • To take responsibility for the development and/or operation of

	<p>Identity Management systems following IT Services Project Management and Change Control processes and procedures.</p> <ul style="list-style-type: none"> ♦ To support the operation of the Network passive infrastructure which is in the region of £6M of mission critical Assets. This includes the day-to-day operation of the various cabling systems within buildings following IT Services Project Management, Change Control, and Incident Management processes and procedures. ♦ When called upon to do so, to take the leading role on developments associated with external network providers, JISC and commercial providers. ♦ Represent IT Services both inside and outside the business as required. ♦ Undertake other such duties as may be required from time to time in furtherance of the work of IT Services. <p>****Please refer to Annex A of this Job Description for further identified Objectives and Requirements ****</p>
<p>Essential Skills and Experience:</p>	<ul style="list-style-type: none"> ♦ Formal education to degree level or equivalent. ♦ Experience of Network Design ♦ Good broad knowledge of C&IT, including latest technology industry trends. ♦ At least eight years' relevant experience in C&IT including at least three years in a similar service environment. ♦ Ability to work cooperatively and collectively within a team environment. ♦ Customer relationship management skills. ♦ Communication skills written and oral. ♦ Project management skills. ♦ Knowledge of Higher Education and its environment. ♦ An awareness of developments in IT services.
<p>Desirable Experience:</p>	<ul style="list-style-type: none"> ♦ Cisco UC – Unified Communications ♦ Cisco Networking Technologies ♦ Load Balancing/VPN/Secure Application Access/SSO (F5 Big-IP) ♦ Aruba Networking ♦ Fortinet Firewalls – FortiManager, FortiAnalyser, FortiAuthenticator ♦ Security Logging and analysis i.e. splunk ♦ Infoblox Grids – DNS/DHCP/IPAM functions ♦ Linux/BIND ♦ PKI infrastructure, Certificates ♦ HPE/Aruba Wireless/Wired Networking ♦ Brocade Networks ♦ High level experience in technologies such as: OSPF, BGP, MPLS, VxLan, Spanning Tree, ♦ Aruba Clearpass – AAA security functions and wireless guest management. ♦ Solar Winds, Aruba Airwave – Network Management Systems ♦ Network security including IPS/IDS/Deep Packet Inspection/Forensics/Logging analysis. ♦ Enterprise Network Design ♦ Merging/Integration of disparate networks in a Multivendor environment. ♦ SDN – Software Defined Networking ♦ Cloud Networking including virtualised network functions.

- ◆ Deploying IoT networks and security.
- ◆ DataCentre network technologies, high speed low latency switching.

ANNEX A

F5 Objectives and Requirements:

Overview:

The establishment has invested in the F5 load balancing platform as it's primary load-balancing/VPN Service.

Role is envisaged to provide additional resource required to focus on improving the service and extending it's capabilities to meet UoB operational and strategic needs.

It is expected that the candidate will have excellent hands on experience in addition accreditation within F5 – Big IP any qualifications within their Certified Professional Program is highly desirable.

Candidate Qualities:

1. Self-Motivated
2. Committed
3. Effective in leading and implementing required improvements and changes
4. Able to work as part of the existing team
5. Able to communicate effectively to a wide range of stakeholders.

Demonstration of Effectiveness:

The candidate will be expected to provide and demonstrate:

Support and assist on the proposed virtualized F5 instances.

Documentation on the F5 service and architectural/functional diagrams.

Documentation to show a list of suggested improvements going forward and work with Network Operations manager to review and prioritise.

Weekly progress reports on all activities and successes in this area.

Good communication with the Operations Manager to communicate progress and any barriers to progress.

Work closely with the operational/Dev/CIS/Service management teams as well as other stakeholders to ensure the service is fit for operations and meets strategic objectives.

Overall Service

1. Review and Document Existing Service
2. Suggest Improvements and timeline
3. Implement improvements.
4. Work with the CIS team to implement new Virtual units
5. Transition above skills into wider operational support and mentor/train existing staff in the changes/improvements.
6. Ensure that all monitoring of the service is effective and meets the universities needs.

F5 Focus – Skills Profile

F5 BigIP

- Setup/Implementation BigIP Virtual/Physical Appliances
 - Configure
 - Interfaces
 - Routes

- Licensing
- User Management
- IP Addressing
- Certificate Management
- Other Appliance Level Settings
- Upgrades
 - Plan/Carryout upgrades to the BigIP Platform
- Configuration / Automation LTM
 - Configuration of the LTM Module in BigIP
 - Virtual Servers
 - Profiles (SSL, Protocol, Authentication etc..)
 - iRules
 - Pools
 - Nodes
 - Monitors
 - SNAT
 - Etc..
 - Automation of the above tasks (i.e. using Terraform/Ansible etc...)
- Configuration / Automation APM
 - Configuration of the APM module in BigIP
 - Access Profiles / Policies
 - Authentication (LDAP/Radius/Active Directory)
 - Single Sing-On
 - Federation (SAML/oauth)
 - Connectivity Profiles
 - Network Access VPN
 - VDI/RDP configurations
 - ACL / Webtop creation/customisation
 - Automation of the above tasks (i.e. using Terraform/Ansible etc...)

Compliance with Company Policies, Procedures and Rules

A condition of Employment as an Employee shall be, at all times, to comply with all Policies, Procedures and Rules of the Company, which include, but are not limited to: the Prolinx Integrated Management System (IMS) Manual, Prolinx Information Security Management System (ISMS) Manual and includes all Policies, Procedures and Rules specified in the Company's Employee Handbook.

Equal Opportunities

Prolinx does not discriminate on the basis of race, religion, colour, sex, age, disability or sexual orientation. All recruitment decisions are based solely on qualifications, skills, knowledge and experience and relevant business requirements.

The Job Holder will understand the regulatory, fair trading and competition rules relating to their work sufficiently to be able to comply with them, relying on their knowledge or on their ability to recognise that they will need specialist support.

The Job Holder will actively support at all times company policy and best practice in the area of security, with particular emphasis on the protection of sensitive customer information. This includes the Security requirements of our customers