Role Profile

Role Title	Senior Engineer Infrastructure Operations (Specialist)
Business group and team	GDT Operations (Hosting Services)
Job Purpose Overview	The Senior Engineer Infrastructure Operations gets involved in solving more complex technical problems and incidents that Engineers are unable to resolve. They manage, coordinate and prioritize tasks to resolve technical incidents as quickly as possible including providing resolutions when there is no available precedent for a problem.

They work closely with Infrastructure colleagues, Architects, Project Managers, Developers and, Incident managers to fix technical problems. They will identify and escalate repeatable issues to the Lead Infrastructure Engineer, the Incident or Problem Manager, Chief Architect and software developers, or all and facilitate development of issue resolution.

Demonstrate our FCOS values of Professional, Innovative, Collaborative, Trusted and Unique to our internal and external customers. Mentoring and coaching of Associate Engineers. |
Organisational position	Role within Hosting team:
Date Updated	17 February 2020
Updated By	KT/DH

Current / Applied Grade	TPB5	Job evaluation date	January 2020	Confirmed grade	January 2020

JOB RESPONSIBILITIES

- **Incident management** - Coordinates the response to incident reports, ensuring relevant prioritisation and detail to allow effective investigation. Identifies the correct procedures or channels for resolution and monitors resolution activity and progress updates to customers. Understands key change management tools and processes. Identifies and registers incidents, gathering the required information and allocating to the appropriate channel.
- **Problem management** - Understands and identifies problems, analysing and helping to identify the appropriate solution. Is able to classify and prioritise problems, document their causes and implement remedies. Initiates and monitors actions to investigate patterns and trends to resolve problems, including consulting specialists, and researching solutions where required. Determines the appropriate remedy, Creating new work methods to provide continuous performance improvement and assists with implementation of it as well as preventative measures.
- **Change management** - Able to manage changes to service, configuration items, organisational change, supplier change and associated documentation. Able to request changes due to incidents or problems to provide effective control and reduction of risk to the security performance and availability. Ensures compliance of the business services impacted by the change. Understands policy, principles and approach. Applies understanding and knowledge in project or programme activities. Develops experience in the use of key change management tools and processes. Able to analyse and assess impact, develops and documents change requests. Implements changes based on requests for change.
- **Technical specialism** – Must proactively ensure technical skills and qualifications are maintained and up to date with technological developments. Able to use management system software and tools. Has knowledge of logical schemata to investigate problems, collect performance statistics and create reports. Able to carry out routine configuration, installation and reconfiguration of database and related products. Optimises performance and forecasts resource needs. Specialist engineers must demonstrate good working knowledge of a range of operating systems in addition to in depth knowledge of their area of specialism as detailed below.
- **Service reporting** - Takes management information and consolidates agreed key performance indicators into product or service measures that underpin service management of a specific product or service. Produces the relevant reports in a standard format in an agreed timeframe. Works with key stakeholders to discuss any prioritise changes in the reporting processes. Able to add a commentary that provides an interpretation for the data set.
- **On-call –** Must join FCOS on-call rota.

KNOWLEDGE & KEY SKILLS

Essential:
- Ability to manage mentor junior staff members, reporting to the Lead Engineer, Service Owners and VIPs when necessary
- Excellent written and verbal communication skills with the ability to communicate clearly at all user levels (internal and external customers)
- Ability to write KBA's, high and low level technical documentation
- Provide authoritative technical advice and successfully influence the teams that they liaise with on the best technical solutions and process improvements.
- Ability to take initiative, identify and respond to business service requirements; managing workload effectively to ensure tight deadlines are met

- Demonstrates the ability to organise and prioritise work to achieve tight deadlines
- Deliver training to high level customer representatives and users
- Previous experience of working in a high pressured, fast paced team
- Experience in working within a secure environment
- Experience of technologies in an enterprise environment and virtual environments

Specialist Infrastructure Engineer
- **Linux Specialist**: Extensive Linux / Ubuntu experience, SAN/backup storage knowledge, OS installation and maintenance for Linux platforms, Apache/NGINX Server installation, AWS, Shell scripting, TCP/IP Network knowledge,

This role should demonstrate knowledge and skills at SFIA level 5.

- Systems Installation/Decommissioning
- Customer Service Support
- IT Infrastructure

Knowledge required of the Digital Data and Technology Profession Framework (DDaT Skills Levels) for the Senior Engineer Infrastructure Operations role:

https://www.gov.uk/government/publications/senior-engineer-infrastructure-operations-skills-they-need/senior-engineer-infrastructure-operations-skills-they-need

Skill	Skill level
Change management	Working
Incident management	Working
Ownership and initiative	Working
Problem management	Working
Service focus	Working
Technical specialism	Working
Testing	Working
Understanding of service management framework	Awareness
User focus	Working

Essential (Professional Qualifications and Accreditation):

- A Levels / AS Level / NVQ Level 3 / Access to Higher Education Diploma / Advanced Apprenticeships. Preferably in a Computer Science, Computer Systems, Networking / Digital Data Communication or Science, Technology, Engineering or Mathematics (STEM) subjects or relevant job experience.
- Agile Methodologies Foundation, BCS Agile Foundation Certificate or equivalent accreditation or relevant job experience.
- ITIL Foundation V3 Certification or relevant job experience.
- Technical Qualifications, Accreditation or relevant job experience (**Linux**):
  - Linux Qualifications
  - LPIC-1
  - LPIC-2
  - LPIC-3

- Strong understanding with traditional windows servers and cloud services utilising virtualization technologies
- Good working knowledge of certificate based authentication and security
- Knowledge of Hosting, Virtualization, Red hat
- Experience in working alongside many aspects of the ITIL3 environment such as production, problem & change management, and quality assurance.
- The ability to create and support Operational Process documentation, for use across the business
- Strong numerical and analytical skills
- SDN ACI deployment experience

Desirable: Digital Data and Technology Profession Framework (DDaT Skills Levels):

https://www.gov.uk/government/publications/senior-engineer-infrastructure-operations-skills-they-need/senior-engineer-infrastructure-operations-skills-they-need

Skill	Skill level
Asset and configuration management	Working
Availability and capacity management	Working
Broad technical understanding	Working
Coding and scripting	Awareness
Continual service improvement	Working

Desirable (Professional Qualifications and Accreditation):

- ITIL Foundation V4 Certification
- Cisco ACI certification
- Microsoft Certified System Engineer (MCSE)
- Linux certification
- NetApp certification

CIVIL SERVICE BEHAVIOURS

- Managing a Quality Service
- Making Effective Decisions
- Working Together

CRITICAL SUCCESS FACTORS

Success measured and evidenced by delivery against stated goals and objectives covering at a minimum:

- Prioritises tasks and understands business needs. Measures the impact of their work. Ensures that services are available for users (99999 approach). Proactively manages problems which underpin service availability by employing programme, project and risk management methodologies appropriately.
- Works in a no-blame culture and feels empowered to make judgement calls. Makes the right decisions at the right time based on the information and evidence available. Takes measured risks and learns from mistakes. Visualises, articulates and solves complex problems and concepts. Applies logical thinking and information from analysis using comprehensive tools and techniques to make and validate decisions.
- Ensures that technical terminology is business-oriented. Translates technical terminology and asks the right questions to find solutions.

- Is a good team player and works effectively across IT operations. Is able to manage challenging relationships with internal and external teams and suppliers. Demonstrates the FCO Services values and someone the engineers aspire to.

Budget Responsibility? N	If YES, how much: £ N/A per annum.	If NO can they authorise payments? N
Reports to: **(Role Title and Grade)**	Lead Engineer Infrastructure Operations or Service Owner	
Direct Reports: **(Number and grades of staff)**	None	