

Job Description

A Post Details:

Job Title: Principle Infrastructure Specialist	Grade: C001
Department: Technology	Division: A
Reports to: Head of Infrastructure	Contract Type: Permanent
Level of Vetting: Security Check	Numbers in Post: 1
Welsh language required: No	

B Purpose of the Post:

The Principal Infrastructure Specialist plays a significant role in delivering Enterprise-wide Infrastructure solutions, project lead and support within the Infrastructure Services Team. The role supports and delivers the formal requirements associated with working in an Infrastructure team environment. With over 700+ servers, various operating systems, Multiple Sans, Azure, AD, Backup devices and virtualisation provided by VMware. The Infrastructure Architect will design, using best practices robust infrastructure solutions. Resilience of Infrastructure is critical to operational efficiency and underpins the core technology services for BTP. Responsible for supporting the architectural designs/solutions, work and collaborate with the Infrastructure team in delivering the designs to reside in all our datacentres.

Provides technical solutions within current and previously acquired technical specialisms to support teams within the department and the business. This role will contribute towards the development and implementation of Infrastructure solutions and serve as an Architect resource for other departmental and organisational projects. The role supports BTP business objectives and policing strategy through the delivery and development Infrastructure services.

In addition, stakeholder management, collaboration and engagement with cross-functional teams is associated with the role, as is external engagement across wider forces and industry seeking best-practices.

C Dimensions of the Post:

Financial – Direct or Non-Direct

Direct: None

Non-direct: Support the Head of Infrastructure with all directed spend, responsible for the asset management and licence renewal of all server operating system, software licences, Hardware and associated products. Responsible for providing best value advice to support the selection and procurement of core infrastructure products.

Staff Responsibilities – Direct or Non-Direct

Direct: None

Non-direct: Occasional responsibility for the work of 3rd party specialists assigned to particular support contracts or projects.

Any Other Statistical Data

D Principal Accountabilities:

Skills Framework for the Information Age v8

Required level priority: ☒ Normal ☐ High

Strategy and architecture								
Strategy and planning	0	1	2	3	4	5	6	7
Solution architecture					<input checked="" type="checkbox"/>			
Security and privacy	0	1	2	3	4	5	6	7
Information security						<input checked="" type="checkbox"/>		
Delivery and operation								
Technology management	0	1	2	3	4	5	6	7
IT infrastructure						<input checked="" type="checkbox"/>		
Storage management						<input type="checkbox"/>		

Strategy and architecture

Strategy and planning

Solution architecture - 4: Enable

- Contributes to the development of solution architectures in specific business, infrastructure or functional areas.
- Identifies and evaluates alternative architectures and the trade-offs in cost, performance and scalability.
- Determines and documents architecturally significant decisions.
- Produces specifications of cloud-based or on-premises components, tiers and interfaces, for translation into detailed designs using selected services and products.
- Supports projects or change initiatives through the preparation of technical plans and application of design principles.
- Aligns solutions with enterprise and solution architecture standards (including security).

Security and privacy

Information security - 5: Ensure, advise

- Provides advice and guidance on security strategies to manage identified risks and ensure adoption and adherence to standards.
- Contributes to development of information security policy, standards and guidelines.
- Obtains and acts on vulnerability information and conducts security risk assessments, business impact analysis and accreditation on complex information systems.
- Investigates major breaches of security, and recommends appropriate control improvements.
- Develops new architectures that mitigate the risks posed by new technologies and business practices.

Delivery and operation

Technology management

IT infrastructure - 5: Ensure, advise

- Provides technical leadership to optimise the performance of IT infrastructure.

- Investigates and manages the adoption of tools, techniques and processes (including automation) for the management of systems and services.
- Oversees the planning, installation, maintenance and acceptance of new and updated infrastructure components and infrastructure-based services.
- Aligns to service expectations, security requirements and other quality standards.
- Ensures that operational procedures and documentation are fit for purpose and kept up to date.
- Ensures that operational issues are identified, recorded, monitored and resolved.
- Provides appropriate status and other reports to specialists, users and managers.

Storage management - 5: Ensure, advise

- Develops standards and guidelines for implementing data protection and disaster recovery functionality for all business applications and business data.
- Provides expert advice and guidance to implement and improve storage management.
- Manages storage and backup systems to provide agreed service levels.
- Creates, improves and supports storage management services with optimal utilisation of storage resources, ensuring security, availability and integrity of data.

E Decision Making:

Level 5 - By making decisions which impact the success of key components of assigned work including results, deadlines & budgets, this level of decision making will pro-actively support delivery of projects/workstreams that have a significant impact on achieving wider organisational objectives.

F Contact with Others:

Internal

Contact with customers and colleagues at all levels
Works closely with Cyber Security, Networks and Applications teams.

External

Contact with 3rd party suppliers and Home Office equivalents.

G Essential Criteria:

Qualifications and Training:

- Accredited to ITIL Foundation Level or higher
- Educated to degree level in a specific IT or engineering discipline or equivalent experience

Experience:

- Work with the Infrastructure team to define best practices and processes to support the entire infrastructure lifecycle.
- Plan such as automate lifecycle activities – self service, orchestration and provisioning, configuration management.
- Provides business architecture solutioning representation in support of IT architecture activities.
- Lead and define application analysis for infrastructure design, capacity planning, monitoring and operational requirements.
- Provide project leadership and ownership over all aspects of service delivery with Infrastructure Services.

- Closely partner with development partners to assess feasibility, complexity and scope of new capabilities and solutions.
- Collaborates with the architecture and infrastructure delivery teams to ensure consistent solution design and integration.
- Define technology roadmaps and infrastructure direction.
- Ensure that all capabilities delivered align with original business objectives, service levels, IT strategies and design intent.
- Prepares technical quality of infrastructure delivery enter/exit gates for design, integration testing, deployment and operations.
- Drive continuous improvement including design, service strategy, and standardization of process and methodologies.
- Design and implement new technologies with Infrastructure team.
- Create and maintain appropriate policies and documentation

Business and Technical Skills:

BTP Skills Framework

Business

Communication - Strategic: In-depth knowledge and influencing direction

- Adapts to varied cultural styles and non-verbal cues by applying interpersonal awareness, identifying others' differences, concerns and motivations.
- Builds compelling 'cases for action' that consider trade-offs in interests of participating parties.
- Encourages others to share information and ideas openly to improve understanding of critical challenges and issues.
- Communicates the organisational culture, values and practices in a way which brings people on side.
- Builds mutually beneficial influence strategies that incorporate "win-win" options for participants.
- Adopts innovative and creative styles, using references, stories, as appropriate to make a significant impact on the target audience.
- Champions diverse coaching practices and provides insights to improve others' communication and presentation techniques.

Influencing Others - Expert: Extensive experience and diverse application

- Evaluates and focuses on business opportunities likely to be of considerable strategic or long-term value.
- Adapts communication messages, methods and influence strategies to the person or audience.
- Adapts influencing tactics to the motives and style of others (logical appeal, emotional appeal, etc.).
- Utilises positive or negative influence strategies appropriately to garner support for key initiatives.
- Expands reach of influence by motivating others to focus on shared goals and a common purpose.
- Uses knowledge of personalities and team dynamics to effectively solve problems and facilitate decision making.

Problem Solving - Strategic: In-depth knowledge and influencing direction

- Ensures the organisation is able to react to issues as they arise and take steps to prevent them

from reoccurring by developing and following systematic problem solving strategies.

- Minimises recurrence of problems by ensuring problem resolution programs are monitored after their implementation.
- Directs others in the process of testing alternative problem solving scenarios and impact assessment.
- Recognises outstanding results in problem-solving by individuals and teams.
- Promotes a disciplined, continuous and organisation-wide approach to problem solving.

Technical Specialisms

Cloud Platform

Microsoft Azure - Expert: Extensive experience and diverse application

- Assesses and evaluates on-premise infrastructure, determines what needs to be migrated to Azure and plans the integration with existing on-premise systems, such as Active Directory.
- Plans and coordinates migration of data and applications to the cloud and leads Azure environment setup for hosting.
- Provides support for complex or unusual problems, working with Microsoft when necessary.
- Implements migrations, manages the changes to processes and practices and manages the impact on business operations.
- Assesses risks and consequences of platform failure and develops recovery plans.

Virtualisation and Storage Solutions

VMware - Strategic: In-depth knowledge and influencing direction

- Serves as a subject matter expert on VMware and drives development of best practices.
- Researches and assesses potential opportunities for the evolution of VMware.
- Plans and leads virtual machine installations, upgrades and integrations.
- Monitors trends in other virtualised environments in the marketplace and assesses VMware quality, vendor support and compliance against other competing solutions.
- Leads on organisational planning and strategy for VMware.

Windows Platform

Microsoft Windows Server - Strategic: In-depth knowledge and influencing direction

- Defines best practices, advanced configuration for the organisational base build of Microsoft Windows Server.
- Monitors for major updates, assesses and communicates change impact.
- Serves as a subject matter expert on all aspects of the Microsoft Windows Server operating system.
- Implements required security features across the organisation.
- Plans future system enhancements, migration strategies and licence requirements.

Knowledge:

- LDAP/AD
- Azure
- Windows Operating Systems
- Linux Operating Systems
- Creating/customising PowerShell Scripts
- Experience with troubleshooting (Event Viewer, Log Files, Command Prompt)

OFFICIAL

- Backup and Restore (VMWare, Backup Exec, Networker etc.) basics
- Knowledge of ITIL change process

Desirable Criteria:

- VMWare
- Linux,
- PowerShell
- SCCM
- SCOM/Azure Monitoring
- HP Server Solutions
- Dell Storage Solutions
- Dell Backup Solutions
- Capacity Management Techniques
- Basic networking

H Additional Information:

For Panel to complete only:

Line Manager Approval: James Morley

Panel Approval: BTP Reward Team

Date: 2024-01-17

Email the Job Evaluation submission form together with supporting documentation (organisational charts, job descriptions) to People & Culture Policy & Reward inbox.

PolicyandReward@btp.police.uk

You will be advised of a panel date following receipt of the submission.