Associate Infrastructure Engineer/Infrastructure Engineer



Cloud Computing

KEY TRENDS



loud Evolving IT omputing Ecosystem

IN 3-5 YEARS

With the move to cloud platforms, there will be a decreasing need for stand-alone Infrastructure Engineering roles for organizations that do not have on-premise infrastructure. Job holders might also need to take on SRE functions that can better automate and optimise infrastructure performance

FUTURE TASK-LEVEL VIEW

- For organisations that leverage cloud services for infrastructure solutions, job tasks of designing and deploying IT infrastructure will be outsourced to cloud service providers, thus potentially reducing demand for stand-alone infrastructure engineers
- As many organisations move towards creating scalable and reliable infrastructure systems, infrastructure engineering tasks will be integrated/expanded with Site Reliability Engineer (SRE) functions. SRE allows for more efficient and robust infrastructure performance and reliability by automating repetitive tasks, providing continuous monitoring and analyses of IT environments, and managing on-call and emergency support etc.

POSSIBLE JOBS TO MOVE INTO

For Associate Infrastructure Engineer/ Infrastructure Engineer

- SysOps Engineer (Moderate)
- Automation and Orchestration Engineer (Moderate)
- Security Engineer (Challenging)



Possible job roles to move into for:

(Associate) Infrastructure Engineer / (Associate) Network Engineer



POSSIBLE MOBILITY OPPORTUNITIES

SysOps Engineer



Automation and Orchestration Engineer



Security Engineer





RATIONALE

- Infrastructure Engineers can leverage their skills in operating and troubleshooting infrastructure systems and platforms.
- Network Engineer scan leverage their skills in network operation and optimization.
- Infrastructure and Network Engineers would need to upskill in platform-based scripting skills to embark on this transition.
- Infrastructure Engineers can leverage their skills in operating and troubleshooting infrastructure systems and platforms.
- Network Engineers can leverage their skills in network operation and optimization.
- Infrastructure and Network Engineers would need to upskill in configuring, scaling and deploying infrastructure components and algorithms, and automating network operations.
- Infrastructure Engineer can leverage their skills in infrastructure security.
- Network Engineer can leverage their skills in network security management.
- This mobility opportunity is more difficult as it requires specific training in the security domain. Moreover, it requires a mindset change, e.g. think of security in terms of design, which is not a mindset required by their current job tasks.



TOP SKILLS MATCH

- Cyber and Data Breach Incident Management
- Infrastructure Support
- Network Administration and Maintenance
- Network Configuration

- Network Administration and Maintenance
- Network Configuration
- Service Level Management
- Test Planning

- Business Needs Analysis
- Cyber and Data Breach Incident Management
- Emerging Technology Synthesis



TOP SKILLS GAP

- Application Development
- Applications Integration
- Continuous Integration and Continuous Deployment
- Software Configuration
- Virtual Collaboration

- Artificial Intelligence Application
- Network Slicing
- Radio Frequency Engineering
- System Integration

- Business Risk Management
- Cyber Risk Management
- Security Architecture
- Security Governance
- Security Programme Management