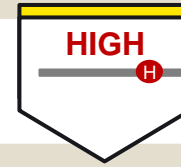


Associate Network Engineer/ Network Engineer



IN 3-5
YEARS



Job holders will be able to use AI to improve network planning, operations and recovery, and the move to software-defined networks will also see these functions being subsumed under SRE.

KEY TRENDS



AI &
Analytics



Evolving IT
Ecosystem

FUTURE TASK-LEVEL VIEW

- AI will support job holders in network capacity planning and optimisation by modelling network behavior and measuring network utilisation more accurately
- As many organisations move towards creating scalable and reliable infrastructure systems, network engineering tasks will fall under the SRE function which uses software-defined networking to increase the network's reliability and performance
- AI will support job holders in monitoring and maintaining network by automatically detecting and notifying network anomalies and faults, analysing root causes and activating fault recoveries, reducing manual tasks and increasing work efficiency

POSSIBLE JOBS TO MOVE INTO

For Associate Network Engineer/ Network 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

- | | | |
|--|--|--|
| <ul style="list-style-type: none">▪ 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. | <ul style="list-style-type: none">▪ 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. | <ul style="list-style-type: none">▪ 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

- | | | |
|---|---|---|
| <ul style="list-style-type: none">▪ Cyber and Data Breach Incident Management▪ Infrastructure Support▪ Network Administration and Maintenance▪ Network Configuration | <ul style="list-style-type: none">▪ Network Administration and Maintenance▪ Network Configuration▪ Service Level Management▪ Test Planning | <ul style="list-style-type: none">▪ Business Needs Analysis▪ Cyber and Data Breach Incident Management▪ Emerging Technology Synthesis |
|---|---|---|



TOP SKILLS GAP

- | | | |
|--|--|--|
| <ul style="list-style-type: none">▪ Application Development▪ Applications Integration▪ Continuous Integration and Continuous Deployment▪ Software Configuration▪ Virtual Collaboration | <ul style="list-style-type: none">▪ Artificial Intelligence Application▪ Network Slicing▪ Radio Frequency Engineering▪ System Integration | <ul style="list-style-type: none">▪ Business Risk Management▪ Cyber Risk Management▪ Security Architecture▪ Security Governance▪ Security Programme Management |
|--|--|--|