

Telecommunications Network Engineer Job Description

Duties and Responsibilities:

- Ensures smooth transmission of data by configuring networks that fulfill the objective of the organization
- Champions the upgrade of new and existing telecom equipment, hardware, and software
- Performs assessment aimed at resolving technical issues with respect to computer, server, network, and voice in a timely manner
- Maintains data, voice, and video network hardware and systems
- Conducts research aimed at isolating, analyzing and resolving error
- Evaluates and updates older networks as required in accordance with specified plans
- Provides escalated Tier-2 and Tier-3 technical support on voice, data, or video networks
- Responds to technical questions; recommends and Implements approved course of action
- Get network applications installed on network servers or voice equipment
- Prepares data or voice network drawings and diagrams to document and assist in communicating current operational status of networks
- Performs data or voice network configurations and configuration changes of various voice or data equipment to enhance performance
- Designs, implements, and provides support for the company's voice network technologies, including PBX, Call Center/ UCCX, voice over IP technology, QOS, Unity/voicemail, long distance and local carrier selection and international standards and procedures
- Installs version control and backups for all voice networking equipment
- Monitors systems for required capacity planning and performance adjustments as necessary and acts upon findings
- Monitors the company's landscape for potential network or server vulnerabilities

- Ensures the company operates at a supported level of code for all voice equipment, including Cisco, Avaya, and call center
- Documents recovery for semiannual testing of network disaster recovery of the telecom environment at offsite facility
- Sets up new international locations and integrates them into core system
- Sets up backup and recovery of all network and phone equipment
- Proactively monitors network performance, phone line reliability and connectivity to all remote sites for daily operations
- Proactively inspects all hardware and ensures that all identified hardware issues are addressed immediately
- Develops phone and network administration standards
- Responsible for documenting and distributing operational standards
- Accountable for all voice and data wiring and cabling for the entire network, including remote sites, communications closets, and data center
- Resolves operational issues with 3rd party vendor sales and support staff and maintains relationship with them
- Responsible for the management of DID and 800 number, including ownership and usage
- Responsible for purchasing, bill payment, tracking, and reporting for voice and data network providers.

Telecommunications Network Engineer Requirements – Skills, Knowledge, and Abilities

- Education: A telecommunications network engineer requires a Bachelor's degree in Engineering or a 4 year college degree in a related field. Alternatively, he/she should have an Associate's degree in Engineering Technology from an accredited college and 4 years of relevant work experience is acceptable in lieu of a Bachelor's Degree. Also, 2 years of additional network engineering experience may be substituted for Associate's degree
- Certifications: Telecommunications network engineers are required to have a certification, which depends on the need of the recruiting

organization. It may be required that the engineer possesses an IAT level II baseline certification as defined by DoD 8570.01-M; CCNA, or equivalent, certification may be required; and Network component level certification in Cisco may be preferred

- Knowledge: They should possess solid knowledge of Cisco Business Edition 7k Phone System, and Cisco IOS used in global networking
- Knowledge of Capital management experience, budgeting, and accounting may be required
- Knowledge of fiber optic technology and network equipment and additional systems expertise, including FIM, Microsoft Excel/Access is required. It is regarded as a plus if telecoms network engineers possess experience in performing installation and configuration of all levels of network devices, such as firewalls, switches, routers, cabling, Cisco, Brocade, and Juniper devices
- Customer focus skills: Engineers must possess well-developed customer focused skills while operating in a manner that makes it easy to do business. Committed to helping and supporting company End Users connectivity issues
- Communication: They should be able to effectively communicate technical information and concepts to team members, outside partners and managers in a clear and concise manner
- Team building/relationship building: They should be able to function well in a team, as well as establish rapport, credibility, and trust with colleagues and clients
- Planning and prioritization: it is important that they can develop workable plans and timetables to complete projects and appropriately pre-prioritize activities in line with changing needs
- Analytical/decision making: Network engineers require this skill to identify critical elements and utilize information from cause/effect relationships in situations to evaluate, draw inferences, and make decisions
- Technical problem solving: They should have adept understanding of the features and functionality of relevant technologies and be able to work with obstacles in the technical product field, usually with no documentation

- Complex thinking ability: The ability to identify interrelationships between the parts of the technical situation and determines how to use technology to solve business requirements is essential for a telecoms network engineer.