

# Network Engineer: Principal Network Engineer

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Designs and plans network communications systems. Provides specifications and detailed schematics for network architecture. Provides specific detailed information for hardware and software selection, implementation techniques and tools for the most efficient solution to meet business needs, including present and future capacity requirements. Conducts testing of network design. Maintains technical expertise in all areas of network and computer hardware and software interconnection and interfacing, such as routers, multiplexers, firewalls, hubs, bridges, gateways, etc. Evaluates and reports on new communications technologies to enhance capabilities of the network.

## **Discretion/Latitude**

Works under consultative direction toward predetermined long-range goals and objectives. Determines and pursues courses of action necessary to obtain desired results. Completed work is reviewed for desired results from a relatively long-term perspective.

## **Knowledge, Skills, & Abilities**

Applies advanced technical principles, theories and concepts. Contributes to the development of new principles and concepts. Identifies, analyzes and develops new business opportunities. Answers unusually complex technical questions regarding products and services, and takes part in putting together proposals, configurations and product offerings.

## **Problem Solving**

Works on unusually complex technical problems and provides solutions that are highly innovative and ingenious.

## **Impact**

Develops technological ideas and guides their development into a final product. Erroneous decisions or recommendations would typically result in failure to achieve critical project objectives. Leads the planning and implementation of large projects/programs. Contributes to department goals and planning efforts.

## **Liason**

Serves as organization spokesperson on projects and/or programs. Acts as advisor to management and customers on advanced technical research studies and applications.

## **Minimum Education and Experience**

12+ years with a BS in designated Engineering or a related field.. Employees usually have an advanced degree in their field of specialization.