

CLASS TITLE: Cloud Infrastructure Engineer

BASIC FUNCTION:

Under the direction of an assigned supervisor, provide technical leadership, coordination, planning, deployment, monitoring, securing and optimization for the Districts Cloud infrastructure.

REPRESENTATIVE DUTIES:

Responsible for executing the architecture of cloud network services. This includes the design and development of strategy for implementation and ongoing optimization of a cloud environment. *E*

Develop Cloud network reference architectures (i.e., AWS VPCs, subnets, VPN, etc...). *E*

Develop and oversee Network Operations, Event Management, Incident Management, Problem Management, Configuration Management and Change Management Processes for all Network Cloud Services. *E*

Assist with, contribute to and enhance security controls, monitoring, policies and procedures for cloud services. *E*

Define and report Key Performance Indicators to monitor process health; define and report network related service metrics. *E*

Monitor network performance. *E*

Manage scheduled infrastructure outages. *E*

Manage network connectivity as described in application network topology in cloud and hybrid environments. *E*

Provision, monitor and manage connectivity and VPN services. *E*

Develop and manage network routing tables. *E*

Leverage continuous delivery tools and techniques. *E*

Automate, innovate and standardize networking hardware, software and support practices to continually improve the effectiveness of IT Network Operations. *E*

Research, implement and utilize appropriate network management tools for network monitoring, troubleshooting, traffic prioritization, and usage and uptime reporting. *E*

Assists with development, documenting and implementing appropriate networking infrastructure standards, policies, and support procedures. *E*

Assist with efforts to ensure effective cable plant build out, maintenance and documentation for all District sites. *E*

Implement IT security measures and solutions as provided by District IT Security group. *E*

Implement and maintain backup and disaster recovery plans for areas of responsibility. *E*

Maintain vendor contacts, partnerships and relationships related to the implementation and support of District's networking infrastructure. *E*

Develop and maintain Help Desk Knowledge Base articles for respective areas of responsibility. *E*

Develop and maintain documentation's Cloud infrastructure *E*

Identify, recommend and implement changes to support processes that need improvement. *E*

Receive, prioritize and respond to Help Desk service tickets for LAN/WAN related issues. *E*

Manage hardware and software support contracts required to effectively support District's Cloud infrastructure. *E*

Backup other network team members on as needed basis. *E*

Keep current with the latest developments in Cloud technologies. *E*

Review budget recommendations, cost estimates and justifications for Cloud networking infrastructure. *E*

Develop and maintain budget to support District's Cloud and related infrastructure. *E*

Perform related duties as assigned

KNOWLEDGE AND ABILITIES:

KNOWLEDGE OF:

- Cloud (i.e. AWS, Azure, GCP, etc..) platform expertise
- Cloud network connectivity and services (i.e. VPN, AWS VPC, AWS Direct Connect, DNS, CDN, Load balancers, routing, etc...)
- Cloud monitoring (i.e. AWS Cloud trail, AWS Cloud watch)
- Cloud Scripting (coding) techniques and languages (i.e. Cloud Formation)
- Cloud Security constructs (i.e. Security Groups, NACLs)
- IT Infrastructure expertise
- Leadership and communication skills
- Problem solving skills

KNOWLEDGE OF (Continued):

- Network operations
- Ethernet, TCP/IP, IPV4, IPV6
- Performance monitoring, capacity planning and methodologies
- Packet capture and analysis
- Operating systems such as Microsoft Windows XP, Windows 7, and Windows 2003/2008 server
- IP addressing and subnetting practices
- Remote Access technologies (i.e. Citrix)
- Cloud/Network management industry best practices
- Cloud/Network troubleshooting and problem resolution
- Principles of effective project management.
- Budget management principles
- Effective customer service skills and practices

ABILITY TO:

- Plan, organize, coordinate and implement LAN related projects
- Manage a wide array of networking infrastructure
- Effectively interact and negotiate with vendors
- Effectively prioritize and execute projects
- Effectively participate in working groups or committees
- Prepare and follow work plans and time lines for projects and proposed systems
- Learn new skills and adapt to changes in technology
- Continuously update personal knowledge of industry-leading LAN technology
- Communicate effectively both orally and in writing
- Establish and maintain cooperative and effective working relationships with others

EDUCATION AND EXPERIENCE

Any combination equivalent to: Associate degree in Computer Science or related field and 5 years of increasingly responsible network or Cloud infrastructure support experience including 2 years in a team lead role.

OR

A Bachelor's degree in a related field of study and 3 years of work experience such as described in the representative duties section of the specification.

Preferred: At least 3 years' experience with Cloud infrastructure management and IT Security

WORKING CONDITIONS:

ENVIRONMENT:

Office environment.

Driving a vehicle to conduct work

PHYSICAL DEMANDS:

Incorporated within one or more of the previously mentioned essential functions of this job description are essential physical requirements. The chart below indicates the percentage of time spent on each of the following essential physical requirements.

- | | |
|----------------------------------|---|
| 1. Seldom = Less than 25 percent | 3. Often = 51-75 percent |
| 2. Occasional = 25-50 percent | 4. Very Frequent = 76 percent and above |

- 4 a. Ability to work at a desk, conference table or in meetings of various configurations.
- 2 b. Ability to stand for extended periods of time.
- 4 c. Ability to sit for extended periods of time.
- 4 d. Ability to see for purposes of reading printed matter.
- 2 e. Ability to hear and understand speech at normal levels.
- 4 f. Ability to communicate so others will be able to clearly understand a normal conversation.
- 2 g. Ability to bend and twist.
- 2 h. Ability to lift 25 lbs.
- 2 i. Ability to carry 25 lbs.
- 4 j. Ability to operate office equipment, computer or related peripherals.
- 3 k. Ability to reach in all directions.

This job description is intended to describe the general nature and level of work being performed. It is not intended to be construed as an exhaustive list of all responsibilities, duties and skills required of individuals so classified.