

STATE OF MONTANA

JOB DESCRIPTION

Montana state government is an equal opportunity employer. The State shall, upon request, provide reasonable accommodations to otherwise qualified individuals with disabilities.

Job Title: IT Systems Administrator 3.1 & 3.2

Position Number: 44007, 81004, 82005, 81116, 81025, 25013, 81003

Location: Helena

Department: Transportation

Division and Bureau: Information Service Division/Infrastructure and Applications Bureau

Section and Unit: Infrastructure Section

Job Overview:

These positions are responsible for all activities related to Windows and Linux systems administration including security, support, technical project management, and disaster recovery. Responsible for analysis, testing and evaluation activities as well as recommendations for improvements or changes and/or replacement events. Maintain and administer Windows and Linux computing environments including hardware, systems software, and associated configurations as well as applications software used in support of analysis tasks. Involved in diagnosing more complex hardware and software problems, identifying strategies to improve the infrastructure both on the network and server platforms. Involved in the planning, coordination, and implementation of security measures of the Windows and Linux environment to protect data, software and hardware and all aspects of disaster recovery to ensure environment stability. Responsible for the design, configuration, testing, and implementation of complex computer hardware, software, and network operating system software in a Windows and Linux environment.

Essential Functions (Major Duties or Responsibilities):

Maintain Operating Systems - 50%

Level 3.1

- Performs analysis and design for Windows and Linux upgrades to current technology including consideration of impact of all available options

- Uses knowledge of Windows and Linux operating system utilities; performs complex scoping assignments.
- Performs risk management.
- Leads medium to large projects and critical projects that impact the entire division; focusing on true business requirements gathering; provides time and resource estimates for project completion.
- Plan, coordinate, and implement network and other security measures to protect data, software, and hardware including wireless networks and firewalls.
- Manages system upgrades including test plan preparation. Provides direction to staff as appropriate.
- Designs/architects Windows and Linux network design.
- Performs routine maintenance on all Windows and Linux servers maintaining OS knowledge including unique features of each.
- Estimate change impacts in terms of time, resources and lost benefit.

Level 3.2

- Analyzes products and recommends use of new products and services. Performs research and development for new technologies and tools. Performs analysis and design of proposed upgrades. Provides impact and cost/benefit analysis for options.
- Functions as a member of the strategic direction committee; helps define vision; identifies timelines, goals that would insure the implementation of all approved technology initiatives.
- Evaluate the impact of changes resulting from either legislative action or SITSD.
- Provides technical leadership in at least two areas of networking, security, or storage; complete the more difficult technical tasks in these areas.
- Able to effectively lead large or critical projects which impact the entire Agency. Estimates change impact on resources. Performs or directs business requirements gathering and ensures the proposed solution supports the business need. Develops time and resource estimates for project completion.
- Provide prioritized recommendations regarding technology, based on business need.

Staff Support - 35%

Level 3.1

- Provides guidance, mentoring, support for band 5 and 6 technical staff.
- Present designs and white papers to management.
- Confer with non-MDT analysts on best practices.

- Aids in the determination of ISD network architecture.
- Reviews recommended changes to improve existing systems and network configurations and determines go/no go decision; presents to management

Level 3.2

- Provides mentoring to all within ISD on areas of expertise; shares knowledge gained at technology conferences.
- Identify needed technical training for staff. Provide on-the-job training.
- Represent ISD on cross agency technical committees; interacts with the public and federal government representatives as appropriate.
- Provides Program Management support to projects led by other staff members
- Act as vendor liaison as appropriate handling contract front end activities.

Document Processes and Outputs - 15%

Level 3.1

- Develop and document change management procedures for various technical specialties; documents the processes/procedures.
- Develop and write position papers as directed.
- Presents designs, including prototypes as applicable to IS staff and Management.
- Establish and document Windows and Linux networking, and/or security standards.
- Create and maintain Windows and Linux Disaster Recovery documents identifying emergency measures policies and procedures. Leads disaster recovery planning and testing.
- Prepares and conducts presentations to IS staff and management. Present designs, including prototypes as applicable.
- Use currently accepted methods of business process analysis and system analysis, and makes recommendations for changes within ISD.
- Provides regular updates to upper management on large or critical system activities.
- Maintains a general understanding of the various divisions and their use of IS resources.

Level 3.2

- Provides impact analysis for all technology projects impacting more than one division.
- Establishes technology standards for MDT including documentation standards within the Systems and Operations team; plays a critical role in all related ISD policy and procedure development.

- Fully comprehends MDT business and process as it relates to systems and infrastructure; determines technology prioritization in conjunction with management.
- Identifies all needed documentation for the execution of the section's duties and working through management ensures that it is kept current.
- Owns the physical piece of Windows and Linux Disaster Recovery and all necessary documentation; performs the testing.
- Develops a specific understanding of at least one business division's technology needs.

Supervision

The number of employees supervised is: 0

The position number for each supervised employee is: N/A

Physical and Environmental Demands:

This position functions in a typical office environment.

Knowledge, Skills and Abilities (Behaviors):

Extensive knowledge and experience with the Windows and Linux operating system is required. Proficiency in the mid-tier server environment is the primary expertise being sought (Apache HTTP web server, Apache Tomcat application server; proxy configuration experience is preferred). Familiarity and experience with Samba CIFS file sharing services; basic knowledge of LDAP and Active Directory services; familiarity with virtual machine technologies such as VMware; and server configuration automation technologies such as CFEngine is preferred.

An understanding of virtualization, Oracle database, operating systems and networking knowledge are strongly desired as well as the ability to learn new technologies and adapt them to changing environments.

Minimum Qualifications (Education and Experience):

The required knowledge and skills are typically acquired through a combination of education and experience equivalent to Bachelor's Degree in Computer Science or a closely related field such as Networking.

Level 3.1: This position requires a minimum of 6 years of experience in Windows and Linux systems administration, enterprise application server administration, identity and access management, or a closely related IT systems infrastructure field.

Level 3.2: This position requires a minimum of 8 years of experience in Windows and Linux systems administration, enterprise application server administration, identity and access management, or a closely related IT infrastructure discipline, including demonstrated experience in security configuration, disaster recovery planning, and leadership of large or critical systems projects with agency-wide impact.

Certifications, licensure, or other credentials include: n/a

Alternative qualifications include: Any combination of additional related work experience and education equivalent to the minimum qualifications.

Special Requirements:

- Fingerprint check
- Background check
- 035 Union Code
- Valid driver's license
- Other; Describe
- Safety Responsibilities

The specific statements shown in each section of this description are not intended to be all inclusive. They represent typical elements and criteria considered necessary to perform the job successfully.

Signatures

My signature below indicates the statements in the job description are accurate and complete.

Immediate Supervisor	Title	Date
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Administrative Review	Title	Date
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My signature below indicates that I have read this job description.

Employee	Title	Date
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Human Resources Review

Job Code Title: IT Systems Administrator 2

Job Code Number: C1E012

My signature below indicates that Human Resources has reviewed this job description for completeness and has made the following determinations:

FLSA Exempt

FLSA Non-Exempt

Telework Available

Telework Not Available

Classification Complete

Organizational Chart attached

Human Resources:

Signature

Title

Date