

POSITION SUMMARY

Under the general supervision of the Development, Data and Middleware Supervisor, this position provides advanced-level Middleware platform coordination and support for the smooth and efficient delivery of highly complex, multi-platform mainframe and web-based business applications and systems. Middleware platforms are expected to be available 24x7x365 and need to function reliably and securely. Support of the Middleware platform includes providing system administration, consulting, technical support and advanced-level application delivery coordination between the application development teams and the Division of Enterprise Technology at the Department of Administration. Supported technologies and tools include but are not limited to IBM WebSphere Application Server, WebLogic, Hudson, CVS, and other emerging tools.

This position performs work related to all phases of the systems development life cycle for Middleware platform and application development toolchain, which includes analyzing and documenting current business processes, planning, requirements elicitation, design, development, testing, implementation, and maintenance. This position is expected to provide a high degree of support for the delivery of high-quality applications and associated end-products through cost-effective and efficient support of the application development toolchain integrations. This position coordinates and leads technical teams through the process for troubleshooting, recovering, adjusting and modifying or enhancing the application toolchain, middleware, and automation of business processes. This position initiates and effectively communicates with department development and infrastructure staff and other stakeholders; provides training direction for technical staff regarding the technology toolchain; and consults with technical staff to provide expert, specialized guidance for the use, input, and output of technology systems.

This position serves as an agile project lead for operational projects within the Middleware and DevOps team and is expected to partner with technology system and business system experts, the Office of Enterprise Initiatives (OEI), and ETF business analysts to lead, plan, and coordinate efforts related to assigned systems and processes, both automated and manual, throughout the department. It acts as a liaison to provide expertise to technical staff and DET when problems arise with applications and as necessary will develop business user instructions. This position initiates and effectively communicates with department development and infrastructure staff and other stakeholders; provides training for user staff for technology systems operations; and consults with technical staff to provide expert, specialized guidance for the required data storage and use, input, and output of technology systems.

Further, this position should work well both as a member of a development team under the direction of a project manager, or as directed to function as a project lead.

GOALS AND ACTIVITIES

- 45% A. Oversight of ETF middleware platform
- A1. Implement and support the standard middleware tools in cooperation with agency technical staff, technical architects, and other programmers.
 - A2. In cooperation with other technicians, provide installation and configuration support for server hardware and software systems, such as operating systems, management software, and server-based applications.
 - A3. Provide technical and subsystem-specific consultation and recommendations to both user and vendor staff. Interact with technical support, operations and vendor staff to ensure coordination of changes with project team efforts.

- A4. Participate in management and peer group reviews to ensure system quality and the development of tactical and strategic roadmaps.
- A5. Facilitate the analysis of performance data related to new technology systems and the development of techniques to optimize the use of computer resources.
- A6. Ensure effective operation of critical systems by timely – often immediate response to system malfunctions and problems; respond to business users' problems, requests, and plans, documenting the problem and resolution within the ETF Incident and Request systems.
- A7. Perform analysis and troubleshooting of incidents, documenting resolution and root cause within the ETF incident system.
- A8. Continually improve operations by evaluating processes and automating them where possible.
- A9. Perform prime-shift and non-prime shift on-call support as directed.

25% B. Administration, consultation, innovation and support of agency-wide technology solutions for the application development toolchain

- B1. Research, evaluate, and select new technology services and solutions as part of supporting and managing the application tool chain which supports enterprise applications development activities.
- B2. Implement, manage, and support the enterprise application development tool chain in cooperation with agency technical staff, technical architects, and other programmers. Examples of these tools includes: code repository, build tools, problem tracking, web server, code deployment, server management, analytics, etc.
- B3. Develop project and technical architecture review documentation that will flow through the governance process, recommending technology solutions and services, and configuration standards and best practices.
- B4. Perform complex research and analysis of technical architecture issues that impact the deployment of new or existing infrastructure or application architectures including the review and verification of technical feasibility and security as well as the performance impact of new and innovative technologies.
- B5. Monitor ETF, DET, and other state agency technology choices and trends in IT hardware and software and consult with appropriate ETF staff on the impacts of those decisions.
- B6. Continually improve application development tool chain operations by evaluating processes, security and the tools to identify efficiencies to be gained and automating them where possible.
- B7. Respond promptly to system malfunctions and issues with the toolchain; documenting the problem and resolution within the ETF Incident and Request systems.
- B8. Develop actionable key performance indicators (KPI's), including setting goals and objectives, collecting measures, and calculating metrics.

20% C. Provision of operational project leadership to ensure the operations and maintenance of the middleware framework and application development tool chain for ETF

- C1. Lead operational technical projects using existing ETF project management agile processes and ensuring the creation of required artifacts of project charters, plans, presentations and closeouts, resourcing estimates, schedules, status updates, coordination of changes and change management, and implementation of projects.

- C2. Work with BITS management and the technical architect to create and maintain a schedule/roadmap of middleware and application development toolchain technology upgrades with consideration for vendor dependencies to help plan for current and upcoming budgets and resource needs.
 - C3. Participate in the development, documentation, and implementation of technical standards, policies, and procedures for application server software and application development tools to ensure the most appropriate, efficient, and effective use of technology.
 - C4. Provide information, direction, and guidance to application developers on development tools, techniques, policies, application development methodology, project management business-area knowledge, and customer relationship management.
 - C5. Control and document changes to custom- and vendor-delivered software, including reviewing proposals for changes, documenting actual changes made and monitoring the life-cycle of these changes through upgrades.
 - C6. Assist with technical project leadership for projects that cross multiple technology platforms.
 - C7. Participation in tactical and strategic planning and establishing application roadmaps.
- 10% D. Participation in training and employee development, performance of special assignments and provision of training and assistance.
- D1. Stay up-to-date on development processes and modern technologies utilizing web resources, online training, books, internal documents, training sessions and workshops.
 - D2. Participate in activities of professional and technical associations to contribute to the development in the IT industry and in various agencies of government.
 - D3. Orient new employees to development standards, procedures, policies, practices with regards to the app dev tool chain and middleware platform.
 - D4. Represent management on task forces and committees to respond to state and agency needs, interacting with staff in other agencies as required.
 - D5. Carry out special assignments that meet the needs of the agency.
 - D6. Prepare special reports or documents as requested.
 - D7. Additional duties as assigned.

Knowledge, Skills, and Abilities

- Advanced skill and knowledge of the administration, configuration and maintenance of web application server software such as IBM WebSphere, JBOSS, Apache Tomcat, etc.
- Advanced skill and knowledge of the administration, configuration and maintenance of http servers such as IBM HTTP Server, IIS, Apache etc.
- Advanced skill and knowledge of analyzing, troubleshooting, and debugging issues related to Application environments, hardware, networking, and system software.
- Advanced skills in identifying and investigating system development/enhancement and performance issues and how to tune application servers, etc.
- Skill and knowledge of Linux Operating System administration, monitoring, backup and recovery.
- Knowledge of Windows Server Operating Systems administration and monitoring.
- Advanced skill and knowledge of Windows and Linux server system security concepts and IT security best practices and trends
- Skill using scripting languages such as Windows batch, Unix shell, Python, and Perl.
- Skill troubleshooting application servers on local and wide area networks including support of DNS, firewalls, directories, and SSL Certificates and tools such as Snort and WireShark.
- Knowledge of the administration, configuration and maintenance of tools in the application development tool chain such as CVS, Jenkins, Subversion, Hudson, Git or Ant.
- Knowledge of application systems, including multi-tier technologies and the application development life cycle processes.
- Knowledge of application development frameworks such as Spring, Struts, Hibernate, etc.
- Skill with incident, problem, and change management principals and software such as Ivanti, Cherwell or Jira.
- Knowledge of application test methodologies and procedures.
- Advanced ability to work on a team, create favorable experiences, and share information and expertise.
- Advanced ability to learn and work independently.
- Strong innovation skills with the ability to analyze and evaluate system modifications to ensure that accurate specifications are met.
- Advanced ability and willingness to learn about new technologies including the various resources for researching new and emerging technologies and how to utilize them to automate business systems and processes.
- Skill using project management methodologies, tools, and techniques including project/work plan development and support, preparation of project artifacts such as charter, scope, fiscal, status updates, cost-benefit, and risk analyses.
- Skill leading complex IT projects using iterative or agile methodologies.
- Ability to help in the development of strategic and operational project plans.
- Ability to work and effectively communicate with departmental customers, vendors, business analysts, business users, technical developers, peers, and management.
- Strong leadership skills with effective time management and prioritization skills.
- Ability to create and maintain a schedule/roadmap of ETF technology upgrades to help plan for current and upcoming budgets.