

POSITION DESCRIPTION

This position description serves as the official classification document of record for this position. Please complete the information as accurately as you can as the position description is used to determine the proper classification of the position.

2. Employee's Name (Last, First, M.I.)	8. Department/Agency TECH, MGMT AND BUDGET - IT
3. Employee Identification Number	9. Bureau (Institution, Board, or Commission) Agency Services
4. Civil Service Position Code Description Info Tech Specialist-4	10. Division DTMB AS Management and Budget
5. Working Title (What the agency calls the position) Solutions Architect	11. Section Management and Budget
6. Name and Position Code Description of Direct Supervisor JOHN, JIBU; STATE ADMINISTRATIVE MANAGER-1	12. Unit
7. Name and Position Code Description of Second Level Supervisor SCHLYER-NIAZI, GIGET M; SENIOR EXEC BUS REL ADMIN	13. Work Location (City and Address)/Hours of Work Deborah A. Stabenow, Lansing, MI / 8:00 A.M. – 5:00 P.M. M-F (may vary) Hybrid

14. General Summary of Function/Purpose of Position

This position is responsible for establishing the overall technical and infrastructure architecture and strategies for DTMB Management and Budget environments. This position works with the Business Relationship Managers and their teams to lead solution development as well as review and approve technology solutions and collaborate with application leads to ensure enterprise solutions and standards are being leveraged. This position sets goals for DTMB Agency Services Management and Budget to standardize technologies across the Division to reduce overall complexity and cost. This position is additionally responsible for advocating the use of emerging technologies such as AI, cloud infrastructure and other applicable tools and will provide expertise in the design, and implementation of complex data structures and systems at an enterprise level. This position provides critical oversight for solutions infrastructure maintenance and improvements for systems that include tier 2 and higher-level application environments that may contain highly sensitive information, having internal and external interfaces with critical systems. This position requires an extremely high degree of technical skill and creativity and must keep current with new and emerging theories, regulations, standards, technologies, and practices related to tools, software, networking, operating systems, and hardware in order to provide guidance for the needs of the division, department, and the state. This position also involves mentoring, coaching, coordination and consultation with fellow Solutions Architects, systems administrators, managers and executives. This position is the first in line representing the division in enterprise architecture sessions, exception reviews, etc. This position will also work with division staff in guiding and ensuring security requirements such as DTMB PSPs, NIST controls, zero-trust, DevSecOps are addressed in all phases of application / process lifecycles. This position will also evaluate and analyze AI requirements which includes inhouse developed and vendor solutions and recommend the proper use of such technologies in compliance with DTMB standards.

Indirect reporting relationship to the Chief Technology Officer through the Enterprise Architecture Division.

15. Please describe the assigned duties, percent of time spent performing each duty, and what is done to complete each duty.

List the duties from most important to least important. The total percentage of all duties performed must equal 100 percent.

Duty 1

General Summary:

Percentage: 60

In a Specialist capacity, develop and manage the enterprise level architecture for all of Customer Services, Agency Services Management and Budget Division, IT systems and projects. Plan, develop and administer architectural design related policies and procedures.

Individual tasks related to the duty:

- Provide technical architecture expertise as it relates to the integration of systems, security, middleware, services, database design, hardware/server, and tools, to IT project business and technical requirement sessions and for system implementation.
- Lead and coordinate with other technical resources in the overall system design, implementation and integration of systems with other existing systems/technologies/data sources on multiple platforms within the agency, across multiple state agencies, DTMB Bureau of Strategic Policy and Enterprise Architecture and with multiple vendors.
- Develop strategic goals required to ensure that the overall architecture is in compliance with the DTMB Strategic Plan.
- Consult with system designers on proper system design and use of enterprise architecture components.
- Compile or design hardware and software architectural models of current and proposed systems across the client enterprise for use internally and in conjunction with third party technology partners. The models are of two types:
 - Enterprise Models that depict the entire client enterprise and its inter-relationships internally and with the state enterprise architecture.
 - Reference Models that depict recommended & approved technologies & designs, which can serve as a template for future projects.
- Perform architecture design reviews across the organization.
- Define, implement and maintain the IT technical architecture design methodology and best practices.
- Lead the alignment effort toward State of Michigan (SOM) Digital Strategies development and implementation.
- Survey external emerging developments, and evangelize new technologies, standards and methodologies that will have a positive impact on the quality of DTMB systems and services.
- Ensure the implementation of security standards in system architectures and designs. Be familiar with, provide research, documentation and input (when applicable) to Enterprise Security standards.
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- Plan, develop and administer architecture design related policies and procedures to promote high quality, accuracy and usable system designs.
- Provide technical leadership, guidance and direction to Application Architects, Database Administrators, Programmer/Analyst(s) supporting system design, database architecture and design and overall architecture functions in client agencies.
- Review and approve firewall rule submissions for the division.
- Reviews system configurations, ports, protocols, data and overall system architecture in accordance with applicable NIST security controls.
- Guide and provide technical assistance to division staff with Threat Modelling, Application and Infrastructure Scans.
- Evaluate the need for TRBs, track and present exceptions before the boards.
- Work with technical teams to understand and evaluate risks on all solutions.
- Participate in Structured Walk Throughs and provide feedback of System Design, Configuration Management, etc.
- Set guidelines for CICD/ deployment pipelines for various solution types incorporating DevSecOps.

Duty 2

General Summary:

Percentage: 20

Develop and maintain system level architecture components and design repositories (i.e. middleware, services, database, hardware). Manage projects related to architecture component design and development.

Individual tasks related to the duty:

- Perform technical requirements analysis for client enterprise level middleware, services, database, hardware components and objects.
- Oversee the design, development and testing of client enterprise level components, API's and related databases.
- Oversee and approve the development and changes to the architecture to ensure proper execution of the design.
- Provide technical support to application designers in the use of the architecture environment.
- Provide "practical" technical solutions to the development team to solve complex development problems.
- Chair appropriate change control boards.
- Oversee the development of testing plans, scenarios and test data to ensure compliance and fit with the overall architecture.
- Manage architecture components and documentation versions using the established configuration management process and tools.
- Manage associated projects to develop client enterprise level architecture components and objects.
- Review the security and account administration services.
- Act as the DTMB Management & Budget IT Architect on statewide and client enterprise application integration projects.
- Act as liaison to DTMB Enterprise Architecture and the Office of Enterprise Security.
- Direct the use of EA Solution Patterns and Reference Models with existing and proposed solutions within the area of responsibility. Assist in creating EA Solution Assessments and network diagrams.
- Participate in JECs as assigned to evaluate solution proposals representing IT and Agency Services.
- Periodically evaluate existing infrastructure, software components, and recommend timely upgrades.
- Review new infrastructure needs and recommend hosting solutions.
- Evaluate and analyze AI requirements and recommend proper use of such technologies in compliance with DTMB standards.

Duty 3**General Summary:****Percentage: 10**

Perform middleware, services, hardware support as required.

Individual tasks related to the duty:

- Provide assistance to the server hardware and database administrator on system level components, middleware and APIs (assets).
- o Ensure the installation, configuration, and implementation of the assets follow the architecture guidelines.
- o Ensure proper operation of the assets.

Duty 4**General Summary:****Percentage: 10**

Perform additional duties as assigned.

Individual tasks related to the duty:

- Participate in the development and implementation of processes that improve efficiency and enhance productivity.
- Provide leadership, consultation and expertise on special teams and projects as assigned.
- Ensure relevant administrative functions are complete and accurate.

16. Describe the types of decisions made independently in this position and tell who or what is affected by those decisions.

Final decision maker on the following:

- Technical architecture design – all projects, staff and systems users.
- Technology used to implement architectures – all projects, staff and system users.
- The best approach to resolve technical issues and troubleshoot problems – all projects, staff and system users.
- Plan, develop and administer architecture design related policies and procedures – all projects, staff and system users.

17. Describe the types of decisions that require the supervisor's review.

- Budgetary and purchase decisions.
- Decisions impacting team, agency and/or section goals or priorities.
- Proposal Changes in policies, standards and procedures affecting team, section and agency that may need to be passed to manager for approval.
- Approval of requested hardware and software purchases as per normal departmental approval processes.
- Decisions impacting client agencies.

18. What kind of physical effort is used to perform this job? What environmental conditions in this position physically exposed to on the job? Indicate the amount of time and intensity of each activity and condition. Refer to instructions.

- Normal office environment.
- Extensive use of VDT, mouse and keyboard.
- Equipment setup for system demonstration and training.
- Frequent heavy workloads and mandatory deadlines.

19. List the names and position code descriptions of each classified employee whom this position immediately supervises or oversees on a full-time, on-going basis.

Additional Subordinates

20. This position's responsibilities for the above-listed employees includes the following (check as many as apply):

- | | |
|---|--|
| <input type="checkbox"/> Complete and sign service ratings. | <input type="checkbox"/> Assign work. |
| <input type="checkbox"/> Provide formal written counseling. | <input type="checkbox"/> Approve work. |
| <input type="checkbox"/> Approve leave requests. | <input type="checkbox"/> Review work. |
| <input type="checkbox"/> Approve time and attendance. | <input type="checkbox"/> Provide guidance on work methods. |
| <input type="checkbox"/> Orally reprimand. | <input type="checkbox"/> Train employees in the work. |

22. Do you agree with the responses for items 1 through 20? If not, which items do you disagree with and why?

Yes

23. What are the essential functions of this position?

As the Solutions Architect for DTMB Management and Budget, this position is strategically responsible for the design and implementation of Management and Budget's enterprise level architecture, middleware, services, database and hardware components. This Specialist leads the alignment to SOM Digital Strategy; compiles or designs architectural models of current and proposed systems across the client enterprise; performs design reviews across the Agency Services client organization; leads the evaluation of vendor software targeted for possible integration into the systems or environment; defines and manages the IT design methodology; surveys external emerging developments, and evangelizes new technologies and standards; manages the development and maintenance of Management and Budget's architecture environment, and consults with application designers on how to implement enterprise architecture components and how to resolve issues.

Critical Job Role: Solutions Architecture

Competencies: Customer Focus, Technical/Professional Knowledge, Planning and Organizing Work, Communication, Building Trust, Contributing to Team Success.

24. Indicate specifically how the position's duties and responsibilities have changed since the position was last reviewed.

Establishment

25. What is the function of the work area and how does this position fit into that function?

The function of the Agency Services Management and Budget section is to provide application, QA, Configuration Management, Web services, and other IT support to various Management and Budget areas of DTMB including but not limited to Office of Support Services, State Facilities, Office of Infrastructure Protection & Cyber Security, Procurement, Financial Services, etc. This position will serve as the solution architect responsible for all systems and infrastructure under the stewardship of Agency Services supporting Management and Budget. This position provides the section and the division with vital solutions and architectural skills to support Agency Services Designers, Developers, Configuration Managers and Web/Middleware Administrators. The position will establish and maintain policies and procedures promoting a consistent architectural environment upon which DTMB can build, integrate and maintain quality systems, including reusable design components and services. The specialist is the multi-disciplinary authority responsible for design, planning, implementation and support of systems and infrastructure for these Management and Budget systems, interfacing systems, platforms and components. This position will work with appropriate personnel to ensure that all solution, application, database and middleware environments are secure, reliable, scalable and able to accommodate vast amounts of data and application transactions. Additionally, this position will be involved in understanding client Agency's business objectives and aligning information technology architecture to support these objectives. This position will also work closely with DTMB Enterprise Architecture Core Team, DTMB managers and directors.

26. What are the minimum education and experience qualifications needed to perform the essential functions of this position.

EDUCATION:

Possession of a bachelor's degree with at least 21 semester (32 term) credits in one or a combination of the following: computer science, data processing, computer information systems, data communications, networking, systems analysis, computer programming, information assurance, IT project management or mathematics.

EXPERIENCE:

Information Technology Specialist 14 - 15

Three years of professional experience equivalent to an Information Technology Infrastructure or Programmer/Analyst P11 or one year equivalent to an Information Technology Infrastructure or Programmer/Analyst 12.

KNOWLEDGE, SKILLS, AND ABILITIES:

- Proficient with Windows Server, RedHat Linux and container orchestration platforms
- Advanced level knowledge of Cloud Infrastructure Azure/AWS/GCP
- Advanced level knowledge with Tomcat, and IIS
- Advanced knowledge of SQL or PL/SQL, strong experience with database components, tools, packages, stored procedures, functions and triggers.
- High level knowledge in application authentication using various SSO protocols
- Advanced knowledge of C#, MVC, .net, Angular, React, jQuery, Node.js, XML, etc.
- Advanced knowledge of webservices and SOA
- Advanced knowledge of power platforms such as PowerApps and Power Pages
- Advanced scripting with PowerShell
- Expert level understanding with SOM/DTMB ASR processes and procedures
- Thorough understanding of SOM/DTMB network infrastructure, and ability to prepare and work with network diagrams and firewall rule requests
- High level knowledge of Azure DevOps and DevSecOps
- Thorough knowledge of Application, Web and Middleware security
- Thorough and updated knowledge of NIST/security controls
- Thorough knowledge of application monitoring, high availability and disaster recovery
- High level understanding of AI technologies
- Strong skills to analyze complex system architectures and highly complex points of system interaction.
- Strong skills to effectively communicate complex system architecture details and issues to both technical and business audiences.
- Ability to plan, resource and lead highly complex projects with broad scope and high impact to Agency business.
- Ability to quickly learn and implement new technologies and procedures.
- Ability to work collaboratively and establish and maintain good rapport with agency staff at all levels.

CERTIFICATES, LICENSES, REGISTRATIONS:

None

NOTE: Civil Service approval does not constitute agreement with or acceptance of the desired qualifications of this position.

I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.

Supervisor

Date

TO BE FILLED OUT BY APPOINTING AUTHORITY

Indicate any exceptions or additions to the statements of employee or supervisors.

N/A

I certify that the entries on these pages are accurate and complete.

AMY MILLER

8/14/2025

Appointing Authority

Date

I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.

Employee

Date