

**State of Michigan
Civil Service Commission**

Capitol Commons Center, P.O. Box 30002
Lansing, MI 48909

Position Code

1. ITPRANA

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 Supporting MDHHS
4. Civil Service Position Code Description Info Tech Prgmr Analyst-A	10. Division Data, Analytics, & Visualizations
5. Working Title (What the agency calls the position) ITPA12 – Senior Data Warehouse Database Administer	11. Section DW Admin & Health Systems Reporting
6. Name and Position Code Description of Direct Supervisor WILCOX, DAWN E; INFO TECH MANAGER-3	12. Unit Architecture and Administration
7. Name and Position Code Description of Second Level Supervisor HANNA, RYAN M; STATE ADMINISTRATIVE MANAGER-1	13. Work Location (City and Address)/Hours of Work Elliott-Larsen Building, 320 S Walnut St, Lansing, MI 48933 / 8:00am-5:00pm, Monday-Friday / Hybrid schedule

14. General Summary of Function/Purpose of Position

As a Senior Database Administrator, the employee performs a complete range of information system database analyst assignments including, but not limited to, designing, developing, testing, and implementing database systems for the Michigan Department of Health and Human Services (MDHHS) Data Warehouse (DW) located on the State of Michigan Enterprise Data Warehouse (EDW). This individual will be looked upon to provide technical support to other team members and evaluate new database solutions and technologies. They will provide maintenance, support and assistance to specialist DBAs with installation and configuration of clustered database failover, database replication, and database backup solutions.

This position will act as a Senior Data Warehouse (DW) DBA and has responsibility for the MDHHS Data Warehouse (DW) databases located on the State of Michigan Enterprise Data Warehouse (EDW), which is hosted on Teradata and Linux. MDHHS DW serves as a primary source of strategic and operational information. As a Sr DW DBA, the employee is responsible for granting access, providing security, builds to both Teradata and Linux, and providing technical support to DW development teams and DW users.

This position is vital to support DHHS's strategic directions, mission/goals, and day-to-day business needs. This is a highly technical area of responsibility with direct impact on the business processes for DHHS. The failure of the DHHS Data Warehouse would have statewide impact and hinder DHHS's ability to perform critical business processes surrounding client eligibility, child welfare, child support enforcement and Medicaid. The position requires knowledge of how DHHS's data is stored on the Data Warehouse in order to support legislative inquiries, federal and state mandates, audit inquiries, and MDHHS central and county offices reporting and analytical needs.

This individual will be looked upon to provide technical support to other MDHHS Data Warehouse team members, evaluate new database solutions and technologies, mentor lower-level DBAs, and provide maintenance, support and assistance to specialist DBAs.

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

As a senior level information technology programmer/analyst, uses advanced principles and procedures of systems design methodology, structured systems design and automated data processing techniques for new and existing complex computer applications.

Individual tasks related to the duty:

- Research, draft and recommend database standards and policies.
- Coordinate with vendor support to address technical issues that could not be resolved in-house.
- Participate in the planning process to match emerging technologies with future business needs.
- Establish standards and guidelines for database space allocation based on best practices and implementation considerations based on business requirements.
- Calculate disk space requirements for existing and/or new installations and growth based on changing business requirements.
- Measure and/or forecast current capacity, gauge the growth of capacity over time, and factor in the anticipated capacity requirements to determine whether the existing infrastructure can sustain the anticipated workload.
- Research, analyze, and determine appropriate changes to DBMS parameters to support future application and database needs.
- Research, analyze, and determine appropriate hardware changes to support future application and database needs. Report recommendations to appropriate DBA specialist and/or technical services.
- Review results of database integrity checks. Resolve identified issues.
- Design appropriate strategy to reorganize database objects to release unused space or repair fragmentation.
- Install database management software in any environment
- Install database patches and service packs in any environment.
- Provide maintenance, support and assistance to specialist DBAs with installation and configuration of clustered database failover, database replication solutions, and database backup solutions.
- Review, install, analyze and implement security patches to be applied to remain Payment Cared Industry (PCI) compliant, vendor compliant, and Michigan Cyber Security compliant.
- Designs the security model based on set standards. Create database user accounts and schemas in production environments based on defined and approved forms and procedures.
- Define/design roles and profiles.
- Recommend standard password security policies.
- Implement data encryption.
- Design, configure, and initiate auditing with appropriate options as needed.
- Create and deploy new databases in development and test environments.
- Ensures and validates the integrity and quality of the scripts to be promoted to any of the environments.
- Provide guidance to systems analysts, based on documented standards, in creating and modifying application specific database objects.
- Perform Data Export/Import/Load and data transformations between databases in production environments.
- Perform production data file transfers between different systems, across state agencies, federal government, vendors, etc.
- Analyze and resolve database space utilization in production environments. Analyze and resolve issues with database integrity in development, test, and production environments.
- Design and implement database backup solutions based on the business needs which include configuration, testing, implementation, modification, automation and monitoring of the backup and recovery solution as needed; troubleshoot and resolve more complex backup issues. Work with the Enterprise Backup and Recovery (EBUR) team to design and implement backup policy using available technology.
- Perform database restorations and point in time recovery to avoid data loss and meet service levels objectives.
- Perform troubleshooting of performance issues and provide required solution.
- Analyze databases for optimal performance and investigate poorly performing SQL statements and offending database sessions. Perform database performance tuning by identifying index candidates, updating database statistics, using appropriate optimization techniques, optimizer hints and other methods. Document tuning procedures.
- Perform thorough analysis and investigation to resolve locking conflicts. (For example: Locking conflicts can be shared or exclusive. Shared involves multiple users accessing the data or table at the same time. Exclusive is when only one user or process can access the data at a time. Locking conflicts can also be at different levels and an incorrect resolution can cause corruption or loss of data.)
- Analyze and resolve issues related to undo/redo/transaction log configuration and sizing in development, test and production environments.
- Analyze and resolve server generated and threshold-based alerts. Perform resolution for the alert causes and provide recommendations for setting appropriate alert thresholds.
- Implement defined initialization parameters, database memory structures and physical data layout for optimal performances.
- Monitor database jobs and scheduled processes, perform troubleshooting and provide resolution for any issues with jobs/processes as necessary. Document solution and provide root cause analysis.
- Agrees to follow all policy, standards and procedures of DTMB.

Duty 2

General Summary:

Percentage: 35

Provides support of MDHHS DW fundamental processes that are crucial to the MDHHS DW batch load jobs.

Individual tasks related to the duty:

- Monitor database jobs and scheduled processes, assist development / batch support teams with troubleshooting and provide resolution for any issues with jobs/processes as necessary. Document solution and provide root cause analysis.
- Promote Teradata and Linux configuration items (Cis) between environments via manual and Azure DevOps processes.
- Responsible for support of Common Citizen, Common Address, Common Event, and Consolidated Inquiry Systems
- Responsible for support, maintenance, and enhancement of Common Framework and Common Scheduler
- Responsible for refinement and communication of MDHHS DW Processes, Standards, and FAQs
- Conducts Elevated Access and other Security Audits as needed.
- Responsible for designing, creating, and modifying system reports to ensure compliance and efficiency.

Duty 3**General Summary:****Percentage: 5**

Perform special assignments as required.

Individual tasks related to the duty:

- Perform special functions appropriate to the position assigned by the immediate supervisor.
- Make presentations to development teams, customers, Agency management, representatives from other State agencies/departments and others.
- Lead or participate in task forces, special committees, and research groups, to support development of major data processing applications and establishment of Agency standards.

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

Changes in the look and feel of assigned databases - affects the supported agency
Implementation of authorized changes to the assigned databases- affects the supported agency
Database optimization decisions based on database performance analysis – affects the supported agency
Decisions regarding allocation of system resources – affects the supported agency and DTMB development and database staff

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

When process will require endorsement from managers of other impacted systems, and/or impact budget and staffing needs.
When a decision impacts the strategic priorities of the client agency.
Security considerations impacting the enterprise or requiring additional review by policy.
Recommendations for technical design that may have a direct impact on other supported agency's systems, other State Agency systems or the Enterprise Data Warehouse.

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.

Standard office environment. Use of personal computer using keyboard and mouse to perform trouble shooting, create and edit technical materials, communications with staff and clients, and reports. A minimum effort may be required to walk or drive to other locations. Majority of work is performed sitting at an ergonomic prepared workstation suitable for a personal computer or attending meetings in standard conference room settings. This position is subject to stress and pressure to resolve problems quickly and effectively.

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):

- | | |
|---|--|
| ☐ Complete and sign service ratings. | ☐ Assign work. |
| ☐ Provide formal written counseling. | ☐ Approve work. |
| ☐ Approve leave requests. | ☐ Review work. |
| ☐ Approve time and attendance. | ☐ Provide guidance on work methods. |
| ☐ Orally reprimand. | ☐ 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?

This position's essential duties are administration, development, implementation and continued operation of the MDHHS Data Warehouse databases, located on the State of Michigan Enterprise Data Warehouse Teradata and Linux platforms, which support MDHHS's reporting and analytical needs.

The position must communicate effectively with other DBAs, the Data Warehouse DBA specialist, the Data Warehouse Architects, developers, analysts, project managers, managers, and with the DW users, both listening and lending professional advice. Presentations may be required.

This position must work in a team-focused environment.

Competencies: Building Strategic Working Relationships, Communication, Customer Focus, Decision Making, Innovation, Initiating Action, Planning and Organizing, Technical/Professional Skills

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 Data, Analytics, & Visualizations (DAV) Division develops and maintains Data Warehouse (DW) applications to support Michigan Department of Health and Human Services (MDHHS) programs.

This position is part of the support structure of a service-oriented organization. Knowledgeable, technical staff is needed to meet the commitments of the Department/Agency without further compromising staffing of other priority projects.

The MDHHS Data Warehouse serves as a primary source of strategic and operational information. This position has responsibility for the MDHHS Data Warehouse databases located on the State of Michigan Enterprise Data Warehouse (EDW), which is hosted on Teradata and Linux. This position is responsible for granting access, providing security, and designing and maintaining databases on the MDHHS DW. It is responsible for builds to both Teradata and Linux and providing technical support to DW development teams and DW users.

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

EDUCATION:

Information Technology Programmer/Analyst 9

Possession of an Associate's degree with 16 semester (24 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.

Information Technology Programmer/Analyst P11/12

Possession of a Bachelor's degree with 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 Programmer/Analyst 12

Two years of professional experience equivalent to an Information Technology Infrastructure or Programmer/Analyst P11.

Alternate Education and Experience

Information Technology Programmer/Analyst P11 - 12

Possession of an associate's degree with 16 semester (24 term) credits in computer science, information assurance, data processing, computer information, data communications, networking, systems analysis, computer programming, IT project management, or mathematics and two years of experience as an application programmer, computer operator, or information technology technician; or two years (4,160 hours) of experience as an Information Technology Student Assistant may be substituted for the education requirement.

OR

Completion of high school and four years of experience as an application programmer, computer operator, information technology technician, or four years (8,320 hours) of experience as an Information Technology Student Assistant may be substituted for the education requirement.

KNOWLEDGE, SKILLS, AND ABILITIES:

Knowledge of:

- Database design methods and support utilities
- Relational database modeling, database administration, data warehousing, SQL
- One or more computer programming languages and basic programming logic
- Teradata
- Linux

Skills:

- Linux shell scripting
- Teradata database administration

Ability to:

- work with minimal supervision
- independently apply critical analytical thinking
- set priorities and assign work to other professionals
- use excellent oral and written communication skills, as well as interview and elicitation skills
- use excellent organization, facilitation, and coordination skills
- organize and coordinate the work of others.
- set priorities and assign work to other professionals
- be a strong team player and work effectively within a team and more broadly with people from a variety of backgrounds and areas across the organization.
- troubleshoot issues under pressure.

CERTIFICATES, LICENSES, REGISTRATIONS:

Duties may involve the use of a vehicle.

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

Appointing Authority

8/12/2026

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