

**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 Technology & Database Support/HUB Operations
5. Working Title (What the agency calls the position) ITPA12 – Senior Database Administrator	11. Section Architecture & Database Support
6. Name and Position Code Description of Direct Supervisor KOTA, NAGRAJ V; INFO TECH MANAGER-3	12. Unit Database Support Team 2
7. Name and Position Code Description of Second Level Supervisor KODALI, SRINIVAS; STATE ADMINISTRATIVE MANAGER-1	13. Work Location (City and Address)/Hours of Work Elliott Larsen, 320 S Walnut, Lansing, MI 48933 / Monday-Friday 8am to 5pm / 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 Agency Services supporting MDHHS, Technology and Database Support Division. This individual will be looked upon to provide technical support to other team members and evaluate new database solutions and technologies. Provide maintenance, support and assistance to specialist DBAs with installation and configuration of clustered database failover, database replication, and database backup solutions.

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 database 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 involve 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 up appropriate alert thresholds.
- Implement defined initialization parameters, database instance 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: 20

DCH SQL Server Database infrastructure administration and support for several azure based SQL server Databases.

Individual tasks related to the duty:

- Perform daily monitoring of database backups and ensure Disaster Recovery and High Availability requirements are met.
- Manage, identify and resolve any issues with data file space allocations and ensure adequate database server capacity.
- Ensure the databases are performing with optimal response times.
- Ensure timely resolution of issues being reported by several monitoring tools like Dynatrace, Red Gate etc.
- Implement, configure and support reporting processes and jobs, ensure successful execution of reports and provide troubleshooting as necessary.

Duty 3

General Summary:

Percentage: 10

Relevant database technology training and research – involves an understanding of business requirements combined with knowledge of database technology required for developing database solutions for the client agency.

Individual tasks related to the duty:

- Actively seek training opportunities for professional development.
- Research database technology trends and software versions.
- Plan and attend training, as required, to maintain work competencies and skills.
- Identify and share information related to database software tools and technology with application development and technical support staff.

Duty 4

General Summary:

Percentage: 10

Organizational Activities – Contribute to the overall operation and support of the Agency

Individual tasks related to the duty:

May include but not limited to the following.

- Participate in team meetings and work groups to coordinate standards and methods, and to promote sharing of technical information.
- Assist with database unit work planning efforts.
- Prepare budget information and support documentation when required.
- Coordinate on-site coverage to meet published service levels for database support.
- Perform time and status reporting per Agency requirements.
- Perform other duties as assigned by the manager

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

Decisions involved resolving database performance issues, issues with database backups, stability, availability and uptime.
Decisions to enforce database procedures required to improve technical support.
Decisions to enforce database security and database integrity.

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

Decisions impacting team, agency and/or section goals or priorities.
Proposals to change policies, standards and procedures affecting team, section and agency.
Approval of requested hardware and software purchases as per normal departmental approval processes.

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 involves tasks that are complex in nature and involve a large number of variables both within, and externally, to the scope of the database specialty. The assigned responsibilities require the proper interaction of several distinct subject areas, including database system software configuration and management, hardware/software integration, enterprise security, change management, application database management, database design, and organizational protocol (such as enforcing policies, standards, guidelines, and procedures).

The essential duties of this position include:

- Implement and Manage SQL Server Database Management system software (both on prem/Cloud platforms) for client agency.
- Enforce security measures to ensure the integrity of data residing within the database architecture.
- Coordinate database implementation and issue resolutions with infrastructure support staff to maximize the availability of database environments. Critical Job Role – SQL Server Database Administrator

Required Competencies: Adaptability, Building Trust, Communication, Contributing to Team Success, Customer Focus, Technical/Professional Knowledge

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 Agency and Database Support Section provides application, web and database hosting support services to the Application Development sections and DCH. The function of the work area is to provide dependable, secure, load-bearing core database architecture that fully supports business application databases and ensures the integrity of the data for the client agency. This position will serve as the senior Database Administrator for SQL Server database hosting architecture and for providing effective, efficient and flexible database environments for the Department of Human and Health Services. The position will provide database support, administration and maintenance through the use of standard Data Management practices applied to database system software configuration and management, database hardware/software integration, database security, disaster recovery, and database performance tuning.

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:

- SQL Server database administration skills.
- Experience with SQL Server database administration skills.
- Experience with SQL Server database software installations, migrations, and version upgrades.
- Knowledge of Database Security, including database authentication, authorization, profiles, roles and patch management procedures.
- Knowledge of Transact-SQL, some experience with database packages, stored procedures, functions and triggers.
- Experience with MS SQL Server Database Administration, Installations and Upgrades.
- Working knowledge of Windows, VM-Ware, network administration and security.
- Knowledge of database design and modeling.
- Experience with SQL Server database performance monitoring, tuning and database optimizations.
- Ability to be organized, creative, adaptable to changing priorities, and dedicated to the security and data management responsibilities of the position. Equivalent combinations of education and experience that can be shown to provide the required knowledge, skills and abilities will be evaluated on an individual basis. Certain positions may require that only individuals with specific education and experience qualifications be appointed.

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

8/19/2026

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