

Database Services Competencies

Level 1

Analyze and design database

- Perform research and analyze requirements
- Determine target environment and/or platform

Develop and implement database

- Develop physical database characteristics and define user interface
- Create database objects
- Select unique identifiers and normalize the data model
- Support population of database
- Develop back and front-end connectivity
- Install and deploy database
- Produce business and technical documents

Provide data assurance

- Gather and document security requirements
- Protect corporate data

Provide database client and user services

- Provide and support development and production environments
- Identify additional requirements

Perform database testing

- Develop test procedures
- Perform tests
- Document test results and make recommendations

Level 2

Analyze and design database

- Perform research and analyze requirements
- Determine target environment and/or platform
- Create and refine and distribute conceptual and logical data models
- Identify high-level business rules for data model
- Adapt conceptual and logical data models to enterprise model
- Validate conceptual and logical data models with clients

- Identify backup and recovery requirements and create recovery plan
- Identify access and concurrency requirements
- Analyze database relative to other database

Develop and implement database

- Develop physical database characteristics and define user interface
- Create database objects
- Select unique identifiers and normalize the data model
- Support population of database
- Integrate high-level business rules with code
- Develop back and front-end connectivity
- Develop and validate database implementation plan
- Install and deploy database
- Produce business and technical documents
- Tune database and optimize performance

Provide database administration and maintenance

- Develop and implement monitoring plan
- Analyze monitoring data
- Manage backup and recovery both on-site and off-site
- Create and implement maintenance plan for regular integrity checks
- Maintain physical organization of database objects
- Apply upgrades and fixes and migrate to new versions
- Plan and manage physical resource requirements and enhancements
- Administer and enforce standards
- Audit database systems
- Manage database systems using available database tools.

Provide data assurance

- Gather and document security requirements
- Design and document security plan
- Implement and enforce security requirements

- Maintain and improve security in response to industry developments and user experience
- Protect corporate data

Provide database client and user services

- Provide and support development and production environments
- Plan and deliver user training
- Identify additional requirements
- Adapt existing structure to new business environments

Perform database testing

- Develop test plan and system
- Develop test procedures
- Perform tests
- Document test results and make recommendations

Level 3

Analyze and design database

- Perform research and analyze requirements
- Determine target environment and/or platform
- Create and refine and distribute conceptual and logical data models
- Identify high-level business rules for data model
- Adapt conceptual and logical data models to enterprise model
- Validate conceptual and logical data models with clients
- Identify access and concurrency requirements
- Analyze database relative to other database

Develop and implement database

- Develop physical database characteristics and define user interface
- Create database objects
- Integrate high-level business rules with code
- Develop back and front-end connectivity
- Develop and validate database implementation plan
- Install and deploy database
- Produce business and technical documents

- Tune database and optimize performance

Provide database administration and maintenance

- Develop and implement monitoring plan
- Manage backup and recovery both on-site and off-site
- Create and implement maintenance plan for regular integrity checks
- Maintain physical organization of database objects
- Apply upgrades and fixes and migrate to new versions
- Plan and manage physical resource requirements and enhancements
- Administer and enforce standards
- Audit database systems
- Manage database systems using available database tools

Provide data assurance

- Design and document security plan
- Implement and enforce security requirements
- Maintain and improve security in response to industry developments and user experience
- Protect corporate data

Provide Database client and user services

- Adapt existing structure to new business environments

Perform database testing

- Develop test procedures
- Perform tests
- Document test results and make recommendations