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| **SKILLS FRAMEWORK FOR INFOCOMM TECHNOLOGY SKILLS MAP – ASSOCIATE DATABASE SUPPORT ENGINEER** | | | | | |
| **Sector** | Infocomm Technology | | | | |
| **Track** | Operations and Support | | | | |
| **Sub-track** | Database Support | | | | |
| **Occupation** | Database Support Engineer | | | | |
| **Job Role** | **Associate Database Support Engineer** | | | | |
| **Job Role Description** | The Associate Database Support Engineer identifies, tests and deploys all database technologies and support tools. He/She ensures system improvements are successfully implemented and is responsible for verifying all data to be entered into database meets set standards and requirements as well as installing, configuring and maintaining the database infrastructure within assigned span-of-control. He assists in project planning by establishing work plans, estimates, milestones and schedules. He is required to be on standby with on-call availability to resolve database related incidents.  He works in a team setting and is proficient in database administration, database management-related tools and techniques. He is also familiar with the relevant software platforms on which the database is deployed.   The Associate Database Support Engineer is able to quickly and effectively solve issues as they arise. He is able to methodically identify the cause of the issue, evaluate it and develop a solution in collaboration with the team. He is able to communicate effectively and displays high service level standards. | | | | |
| **Critical Work Functions and Key Tasks** | **Critical Work Functions** | **Key Tasks** | | | |
| **Oversee service level agreements and service improvements** | Assist in developing service-level objectives and targets | | | |
| Maintain log of service level performance metrics | | | |
| Suggest improvements for procedures and controls to enhance performance and client satisfaction | | | |
| Identify recurring incidents and potential issues for senior management | | | |
| **Oversee database administration** | Maintain development, production and multiple testing environments | | | |
| Assist in upgrades of databases, new structures or elements | | | |
| Assist in installation, configuration and maintenance of database management systems software | | | |
| Implement database back-up and recovery procedures | | | |
| **Design and develop new database** | Assist in business needs analysis for database design | | | |
| Assist with testing of new database procedures and protocols | | | |
| Assist in establishing database system flows | | | |
| Maintain data documentation and metadata models | | | |
| Code, edit and install stored procedures and functions for accessing, maintaining and populating databases | | | |
| **Optimise database performance** | Perform ongoing optimisation of database components to ensure availability, reliability, scalability, and security | | | |
| Assist with database audits and maintenance activities | | | |
| Maintain documentation of database optimisation activities | | | |
| Track key operational metrics, performance, utilisation, throughput and capacity for reporting | | | |
| Ensure optimal database performance and availability | | | |
| **Resolve database incidents** | Identify and resolve database issues | | | |
| Determines appropriate course of action for resolving database issues, identify and mitigate risks | | | |
| Escalate unresolved database issues | | | |
| Ensure adherence to organisational database procedures, policies and protocols | | | |
| **Manage database security** | Implement database security and data integrity controls | | | |
| Control privileges and permissions to database users | | | |
| Adhere to information security policies, procedures and protocols in all tasks | | | |
| **Skills and Competencies** | **Technical Skills and Competencies** | | | **Generic Skills and Competencies** | |
| Business Needs Analysis | | Level 2 | Communication | Basic |
| Configuration Tracking | | Level 1, Level 2 | Interpersonal Skills | Basic |
| Cyber and Data Breach Incident Management | | Level 2 | Problem Solving | Basic |
| Data Engineering | | Level 2 | Service Orientation | Basic |
| Data Migration | | Level 3 | Teamwork | Basic |
| Database Administration | | Level 2 |  | |
| Infrastructure Support | | Level 1, Level 2 |
| IT Asset Management | | Level 2 |
| Problem Management | | Level 3 |
| Process Improvement and Optimisation | | Level 3 |
| Procurement | | Level 2 |
| Project Management | | Level 3 |
| Security Administration | | Level 2 |
| Service Level Management | | Level 3 |
| Stakeholder Management | | Level 2, Level 3 |
| **Programme Listing** | For a list of Training Programmes available for the ICT sector, please visit: www.skillsfuture.sg/skills-framework/ict | | | | |
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| The information contained in this document serves as a guide. | | | | | |