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| **SKILLS FRAMEWORK FOR INFOCOMM TECHNOLOGY SKILLS MAP – ASSOCIATE INFRASTRUCTURE ENGINEER** | | | | | | |
| **Sector** | Infocomm Technology | | | | | |
| **Track** | Infrastructure | | | | | |
| **Sub-track** | Build and Maintain | | | | | |
| **Occupation** | Infrastructure Engineer | | | | | |
| **Job Role** | **Associate Infrastructure Engineer** | | | | | |
| **Job Role Description** | The Associate Infrastructure Engineer assists with infrastructure deployment and maintenance. He/She supports the configuration and integration of infrastructure, and acts as a liaison with third-party vendors. He assists with technical infrastructure performance analysis to identify problems and risks, makes improvement recommendations and supports implementation of preventive solutions. He troubleshoots infrastructure problems and incidents and takes appropriate corrective action where possible, in accordance to procedures, processes and quality standards.  He possesses knowledge of and is willing to gain experience across multiple infrastructure platforms and systems.  The Associate Infrastructure Engineer displays a natural curiosity for investigating issues and applying an analytical approach to solutions development and implementation. He has effective interpersonal skills to work well with internal and external stakeholders. | | | | | |
| **Critical Work Functions and Key Tasks** | **Critical Work Functions** | **Key Tasks** | | | | |
| **Oversee infrastructure deployment** | Assist in the configuration of infrastructure such as computer hardware, systems software, and applications software | | | | |
| Assist with infrastructure testing and implementation | | | | |
| Research emerging cloud and infrastructure technologies | | | | |
| Assist with piloting of new tools, technologies, and/or processes | | | | |
| Coordinate with third-party vendors for integration of cloud technologies | | | | |
| Execute infrastructure operations activities and installation of infrastructure systems according to design specifications | | | | |
| Adhere to security requirements and report security issues with infrastructure | | | | |
| **Optimise infrastructure performance and systems** | Collate performance and data performance statistics for capacity planning and reporting of existing infrastructure | | | | |
| Monitor infrastructure traffic and performance in accordance with defined operational metrics | | | | |
| Assist in infrastructure capacity workload modelling and availability analysis | | | | |
| Maintain documentation of infrastructure operations activities, maintenance procedures and tests, and infrastructure optimisation | | | | |
| **Resolve infrastructure-related incidents** | Troubleshoot escalated server, storage and maintenance issues | | | | |
| Simulate user problems to resolve operating difficulties | | | | |
| Suggest improvements to infrastructure resolution methods and techniques | | | | |
| Monitor compliance to procedures and policies for infrastructure-related incidents | | | | |
| **Manage infrastructure upgrades** | Assist with the implementation of agreed infrastructure changes and maintenance routines | | | | |
| Document infrastructure change requests and maintenance routines | | | | |
| Coordinate planned maintenance and system back-up processes | | | | |
| **Skills and Competencies** | **Technical Skills and Competencies** | | | **Generic Skills and Competencies** | | |
| Business Environment Analysis | | Level 2 | Service Orientation | | Basic |
| Business Needs Analysis | | Level 2 | Problem Solving | | Intermediate |
| Cloud Computing | | Level 3 | Resource Management | | Basic |
| Cyber and Data Breach Incident Management | | Level 3 | Teamwork | | Basic |
| Data Analytics | | Level 2 | Sense Making | | Basic |
| Emerging Technology Synthesis | | Level 3 |  | | |
| Infrastructure Deployment | | Level 1, Level 2 |
| Infrastructure Design | | Level 3 |
| Infrastructure Support | | Level 1, Level 2 |
| IT Asset Management | | Level 2 |
| Network Administration and Maintenance | | Level 1, Level 2 |
| Network Configuration | | Level 2 |
| Network Security | | Level 3 |
| Problem Management | | Level 3 |
| Process Improvement and Optimisation | | Level 3 |
| Procurement | | Level 2 |
| Project Management | | Level 3 |
| Service Level Management | | Level 3 |
| Stakeholder Management | | Level 2 |
| Test Planning | | Level 2 |
| Vendor Management | | 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. | | | | | | |