### TSC Category
- Operations and User Support

### TSC
- Data Migration

### TSC Description
Plan and perform activities to migrate data between computer storage types or file formats

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<thead>
<tr>
<th>TSC Proficiency Description</th>
<th>Level 1</th>
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<td>Prepare data and perform manual or automated data migration, troubleshoot database errors faced, and validate migrated data post-migration to ensure accuracy.</td>
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<td>Determine the business need for data migration and plan data migration activities, establishing guidelines and strategies to minimise impact on daily business operations.</td>
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### Knowledge
- Manual data migration procedures
- Types, categories and usage of data movers including host-based software, array-based software and network appliances
- Usage of database migration tools
- Duration of different data migration processes and downtime required
- Potential risks to the business from data migration activities
- Data corruption, application performance issues, missed or lost data, and other potential technical compatibility issues related to data migration
- Methods of cleaning and validating data
- Key drivers and objectives of data migration
- Industry best practices and methodologies for data migration
- Emerging trends in data migration and management
- Data migration and database management system software and tools - their applications, pros and cons
- Impact of data migration on daily business operations
- Applications of different data movers for different contexts and purpose
- Scheduling, replication, hardware, data volume and data value requirements for data migration
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<tr>
<th>Abilities</th>
<th>Range of Application</th>
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| • Perform extraction, transformation and de-duplication of data before migration  
• Install migration software and configure required hardware according to the communicated data migration plan  
• Apply tools to automate and accelerate the data migration process, according to a data migration plan  
• Perform standard manual transfer of data to new storage types, formats or systems according to data migration instructions  
• Apply data migration policies to move data in an orderly manner  
• Troubleshoot database errors or problems faced in database migration activities  
• Validate the migrated data to ensure accuracy  
• Document the data migration process. | • Determine the business need for data migration  
• Gather impact of data migration activities on business operations and other potential risks or costs  
• Formulate a data migration plan to facilitate the transfer of data to new storage types, formats or computer systems  
• Communicate methodologies for data migration  
• Determine appropriate database management and migration tools and system software to be used, in ensuring they are fit for organisational purposes  
• Manage the installation of migration software and the configuration of required hardware  
• Develop strategies to minimise impact of data migration on daily business operations  
• Set guidelines for migration documentation to facilitate tracking  
• Validate post-migration statistics to determine data accuracy |