# System software administration SYSP

Installing, managing, and maintaining operating systems, data management, office automation, and utility software across various infrastructure environments.

|  |
| --- |
| **Guidance Notes:**  System software encompasses a wide range of software components that support the functioning and management of technology infrastructure, including operating systems, infrastructure software, data management products, office automation products, middleware and utility software. It may run in cloud, virtual, or physical hardware environments and enables applications to run effectively.  Activities may include, but are not limited to:   * monitoring and optimising the performance of system software * developing and maintaining diagnostic tools and procedures for system software troubleshooting and performance analysis * resolving service problems with system software components * evaluating, provisioning, and testing new system software, including cloud based solutions * reviewing system software updates and upgrades * provisioning and testing system software updates and configurations * adhering to established safety, security, and quality standards * managing system software in hybrid and multi-cloud environments |

## Level 2

Assists with system software administration tasks under routine supervision.  
Supports the installation and configuration of system software.  
Helps monitor system performance and resource usage.  
Assists in documenting system software settings and updates.

## Level 3

Monitors operational systems for resource usage and failure rates, to inform and facilitate system software tuning.  
Applies system software settings to optimise performance, enabling maximum throughput and efficient resource utilisation.  
Installs and tests new versions of system software.   
Assists in creating software implementation procedures, including fall back contingency plans.

## Level 4

Monitors system software metrics and adjusts configurations for optimum availability and performance.  
Applies technical expertise to investigates and resolve complex system software issues, requesting action from supplier if required.   
Analyses system software updates and determines which ones require actions.   
Develops comprehensive software implementation procedures with robust contingency plans.

## Level 5

Ensures that system software is provisioned and configured to support the achievement of service objectives.   
Develops and maintains diagnostic tools and processes for troubleshooting and performance analysis.   
Evaluates new system software and recommends adoption if appropriate. Plans the provisioning and testing of new versions of system software.   
Ensures that operational procedures and diagnostics for system software are current, accessible and well understood. Investigates and coordinates the resolution of potential and actual service problems.