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| **TSC Category** | Development and Implementation | | | | | |
| **TSC Title** | Software Configuration | | | | | |
| **TSC Description** | Configure software products and apply scripts and automation tools to integrate and deploy software releases to various platforms and operating environments. This includes subsequent modifications to software configuration, based on outcomes of systems and/or configuration tests | | | | | |
| **TSC Proficiency Description** | **Level 1** | **Level 2** | **Level 3** | **Level 4** | **Level 5** | **Level 6** |
|  | **ICT-DIT-2014-1.1** | **ICT-DIT-3014-1.1** | **ICT-DIT-4014-1.1** |  |  |
|  | Apply standard scripts and tools to deploy software products, and document release and deployment activities as well as modifications to software configurations | Identify appropriate scripts and tools, and configure software products to run effectively on various platforms | Establish and revise an effective release and configuration plan, and evaluate configuration test results to recommend modifications to the product or deployment process |  |  |
| **Knowledge** |  | * Standard scripts and tools for software configuration * Basic tests and checks for deployment of software to a platform * Signs of errors or issues in software deployment | * Types and usage of scripts and tools for integrating and deploying software products * Software configuration procedures * Configuration tests and their purposes * Interpretation of configuration test results * Elements of the software configuration and deployment process | * Critical elements and considerations in a software configuration plan * New and emerging software configuration tools and methodologies * Script development for software configuration * Pros, cons and applicability of various systems or configuration tests * Implications of configuration testing results on software deployment process |  |  |
| **Abilities** |  | * Apply standard scripts and tools to deploy software products to a specific platform * Perform simple tests or checks on platform specific versions of software products * Identify compatibility and functionality issues arising from checks * Execute modifications to software configuration, based on clear directions and guidelines * Document updates to software products and deployment instructions * Record release activities for future reference | * Analyse release components * Coordinate with relevant stakeholders on release scheduling to align release processes and procedures * Select appropriate scripts and tools for integrating and deploying software products * Configure software products to integrate and deploy software releases to various platforms * Execute configuration tests on platform specific versions of software products in line with testing procedures * Diagnose issues surfaced from configuration testing * Identify potential improvements and modifications to the software configuration and deployment process or the software code * Implement modifications to platform-specific software products and processes | * Develop a release policy for the organisation * Lead the planning and design of release packages * Establish plan for configuration of software products to run across various suitable platforms * Introduce new and emerging software configuration tools and methodologies * Develop new scripts to enable complex software configurations * Select appropriate systems and configuration tests * Revise the software configuration plan based on testing results * Manage modifications to software product or configuration code, to enable software products to run as intended |  |  |
| **Range of Application** | Approaches and practices for software configuration may include:   * Continuous Integration * Continuous Deployment * Software Version Control * DevOps | | | | | |