

Overview

DevOps covers the competencies required to develop digital services using appropriate software development methods in which requirements and solutions evolve through collaboration between self-organizing, cross-functional teams. The DevOps approach emphasises; collaboration, automation, lean, measurement and sharing.

The specific goals of a DevOps approach span the entire delivery pipeline. They include improved deployment frequency, which can lead to faster time to market, lower failure rate of new releases, shortened lead time between fixes, and faster time to recovery.

This standard covers the competencies needed to implement the DevOps infrastructure to support the development and deployment of new or updated digital products or services using the DevOps approach. This includes adopting collaboration and automation to streamline digital service delivery.

Performance criteria

You must be able to:

1. implement DevOps processes, systems and functions to build, test and deploy software updates into a live environment in line with organisational standards
2. apply the designated tools for continuous software integration and code management, using the specified version and source control systems
3. upgrade databases for DevOps projects in line with organisational requirements
4. identify and resolve issues with middleware and database systems in a timely manner, escalating serious issues to relevant specialists
5. work within a multi-disciplinary team of designers, developers and analysts to deliver improved digital services and products
6. test new digital services to check that user requirements have been fully met
7. provide performance measurement data for development processes in line with organisational requirements

Implement DevOps digital delivery infrastructure processes

Knowledge and understanding

You need to know and understand:

1. what is meant by DevOps
2. why implementing a DevOps approach is an important approach to improve the delivery and updating of digital products and services
3. what is meant by the DevOps principles of culture, automation, measurement and a shared approach to development
4. how to apply the DevOps principles
5. what are the organisational standards for DevOps and how to apply them
6. the importance of sharing knowledge of tools and techniques with the wider team, both developers and non-developer
7. what are the issues that arise when transitioning to DevOps style development
8. how to upgrade databases and applications for DevOps operations
9. the importance of a multidisciplinary approach to DevOps
10. how to work within a multi-disciplinary team
11. how to perform usability testing of new digital products or services
12. the importance of automated processes to reduce release cycle times
13. how to automate build and release processes for developing digital products and services
14. the importance of measurement and how to apply it to DevOps processes

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