

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 analyse, design, implement and validate strategies for continuous digital service deployment using DevOps.

Performance criteria

You must be able to:

1. design and implement automated dynamic environments to support the needs of DevOps digital delivery teams
2. collaborate with functional and technical team members to develop deployment strategies for existing and new types of digital services and products
3. implement plans for digital solution deployment activities in line with organisational standards
4. manage software releases from development stage to software deployment
5. manage the end to end processes for development, testing, deployment, and support of digital services
6. review existing cloud environments to develop more efficient and profitable uses of digital service technologies
7. implement the organisations security architecture in all DevOps developments to protect against security breaches

Knowledge and understanding

You need to know and understand:

1. how to implement the DevOps methods particularly the development pipeline and iterative nature of it
2. how to develop deployment strategies for existing and new types of services
3. how to maximise the use of automated production techniques, virtual environments and cloud based tools and services
4. how to improve the planning of test and deployment
5. the benefits of agile project management and software development methods and how to apply them
6. how to matrix-manage multi-disciplinary teams
7. how to implement the organisations security architecture in all DevOps developments
8. the importance of engaging and building trust with staff involved in DevOps delivery
9. how to define the roadmap for any given product and translate this into user stories

Manage DevOps activities

Developed by	e-skills
Version Number	1
Date Approved	March 2016
Indicative Review Date	April 2019
Validity	Current
Status	Original
Originating Organisation	The Tech Partnership
Original URN	TECIT50751
Relevant Occupations	Information and Communication Technology; Information and Communication Technology Officer; Information and Communication Technology Professionals
Suite	IT and Telecoms
Keywords	DevOps, digital delivery