

Manage information security architecture activities

Overview

The protection of information, services and systems relies on a range of technical and procedural activities, often grouped in an information security architectural framework. The information security framework will contain technical and logical, physical and process controls that can be implemented across an organisation to reduce information and systems risk, identify and mitigate vulnerability, and satisfy compliance obligations.

This standard covers the competencies concerning with managing information security architecture activities. This includes establishing a culture of designing and maintaining effective security architectures that can be incorporated into information systems and networks through defining and implementing organisational policies, standards and processes.

Manage information security architecture activities

Performance criteria

You must be able to:

1. design and develop comprehensive information security architectures for complex network and information systems in line with organisational requirements
2. align information security architectures to business needs in order that information systems conform to their security profile
3. design, implement and maintain the standards and techniques for information security architecture activities in line with organisational procedures
4. monitor the compliance of networks and information systems with approved information security architectures and recommend improvements to maintain compliancy
5. justify to stakeholders the adoption of defined information security architectures as a control to reduce information security risk exposure for the organisation
6. advise others on all aspects of the development and implementation of information security architectures
7. lead teams to implement information security architectures in line with organisational requirements
8. update and maintain information security architectures to reflect the incorporation of new digital technologies
9. correctly identify the vulnerabilities and risks of information security architectures and make recommendations to improve and update them
10. report the progress of information security architecture assignments to senior management and other stakeholders

Manage information security architecture activities

Knowledge and understanding

You need to know and understand:

1. how to identify and select the most appropriate information security architecture models to support the information security requirements of the organisation
2. the impact of any legislation, regulation, internal and external standards relevant to the organisation on information security architecture models and roadmaps
3. the processes, tools and techniques for conducting information security architecture work and how to apply them
4. what information is required to update and maintain information security architectures, models and roadmaps
5. the sources of all current information that will be used during information security architecture activities
6. the potential vulnerabilities and threats that may impact on the organisation's information assets
7. the range of issues associated with information security architecture activities
8. the relationship between security architecture and enterprise architecture
9. what are the issues associated with undertaking information security architecture work
10. the potential implications of information security architecture activities on the design and development of information systems
11. the fact that information security architecture models and roadmaps are used to monitor the effective alignment of information systems with the business information security strategy and policies

Manage information security architecture 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	TECIS60351
Relevant Occupations	Information and Communication Technology; Information and Communication Technology Officer; Information and Communication Technology Professionals
Suite	Information Security
Keywords	Information security, cyber security, security architecture, secure solutions development