



IoT Security Technician Skill Zone – CSSIA.ORG

2. Information Communication Technologies

2.9 Internal Controls

1. Explain the purpose of internal security controls in an industrial controls or IoT environment.
2. Describe the Open Web Application Security Project (OWASP) Internet of Things Project.
3. Describe the Capability Maturity Model Integration (CMMI) process and its application.
4. Describe the selection and implementation of cost-effective security controls and the relationship to risk mitigation.

Internal Controls

Internal Controls refers to the security countermeasures that an organization takes to manage the threats and vulnerabilities to their information systems.

Security controls consists of policy, procedures, technologies and products used to mitigate the risk to the enterprise. The ISO 2700 series model identifies a comprehensive list of the types of controls an organization should consider when managing information security. The IoT security technician is responsible to identify which of these controls are appropriate and applicable in their environment.

The IoT security technician must be familiar with the types of policies, procedures, standards and technologies to protect data systems, communications and processing of information.

2.9 INFORMATION COMMUNICATION TECHNOLOGIES – INTERNAL CONTROLS



Existing Course Cross Reference

Cisco Partner Courses

[IoT and ICS Security Controls \(CSSIA.ORG\)](#)

[ICS and SCADA Security \(CSSIA.ORG\)](#)

[CISSP \(CSSIA.ORG\)](#)

Curriculum Resources

Videos

[YouTube.com – Configuration Management](#)

[YouTube.com – Cisco Nessus Configuration Management](#)

Web Links

[Configuration Management: Best Practices White Paper](#)

[SANS Institute InfoSec Reading Room, Secure Configuration Management Demystified](#)

[NIST Special Publication 800-82 Section 6.2](#)

Textbooks

Practical Internet of Things Security

Chapter 4, 7, 8, 9, 10

Internet of Things

Chapter 2, 3, 4, 5, 6, 7

Assessment Resources

Labs

None

Quizzes/Exams

[CSSIA CISSP Course](#)

Security Operations – Chapter Exam

Quizlet.com

[Configuration Management Flashcards](#)

[Configuration Planning and Management flashcards](#)