IoT Security Technician Skill Zone – CSSIA.ORG

2. Information Communication Technologies

2.16 Web Technology

1.   Describe the web technologies, standards, protocols and products associated with IoT, industrial controls and WSN networks.

2.   Describe the use of HTML5, Web sockets, Web Real-Time Communications (WebRTC) and Node.js.

3.   Describe the IoT as a platform service.

4.   Describe the difference between the Internet-of-Things (IoT) and the Web-of-Things (WoT).

5.   Demonstrate the use of penetration testing tools, and techniques used to conduct vulnerability scanning associated with IoT and industrial control systems.

Web Technology

Web Technology includes web based systems that enable an organization to deploy, authenticate, control and collect data from their IoT devices. The growth of web based technologies in the IoT field has grown exponentially and understanding of the underlying technology is a critical skill for the IoT security technician.

These technologies can include Amazon web services, HTML5, Web sockets and Web Real-time Communications. Other web services include role based security, anti-tampering and detection technologies and auto enrollment and provisioning.

Existing Course Cross Reference

Cisco Networking Academy Courses

CPA: Programming Essentials in C++

Cisco Partner Courses

Python Programming for Security Technicians (CSSIA.ORG)

IoT and ICS Security Controls (CSSIA.ORG)

ICS and SCADA Security (CSSIA.ORG)

CISSP (CSSIA.ORG)

Non-Cisco Partner Courses

Internet of Things - Innovation Labs - Wyliodrin IoT Summer School

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 1, 2, 9
Internet of Things
Chapter 2, 3, 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