2.16 INFORMATION COMMUNICATION TECHNOLOGIES – WEB TECHNOLOGY

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.
Curriculum Resources

Videos
- YouTube.com – Configuration Management
- YouTube.com – Cisco Nessus Configuration Management

Web Links
- Configuration Management: Best Practices
- 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

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