



IoT Security Technician Skill Zone – CSSIA.ORG

2. Information Communication Technologies

2.6 Identity Management

1. Explain the purpose and type of identity management systems.
2. Describe the common components of an access control and identify management system.
3. Describe the difference and application of policy-based and risk adaptive access control and identify management systems related to IoT networks.
4. Describe and demonstrate the implementation of biometric systems in IoT networks.
5. Describe and demonstrate the implementation of directory services in IoT networks.

6. Describe the implementation of identity management to reduce exploitations and control authorized access to IoT, WSN and SCADA systems.

Identity Management

Identify management is the process of identifying individuals that access devices and information in an IoT environment. Access to IoT devices and information should be tightly controlled.

Identification is nothing more than claiming you are somebody. In the information security world, this is analogous to entering a username.

It's not analogous to entering a password. Entering a password is a method for verifying that you are who you identified yourself as, and that's the next one on our list. Authentication is how one proves that they are who they say they are. The final part of an identify management systems is assigning right and access control to individuals, this is referred to as authorization.

Authorization is what takes place after a person has been both identified and authenticated; it's the step used to determine what and when an individual can then do on the system.



Existing Course Cross Reference

Cisco Networking Academy Courses

[NDG Linux Essentials](#)

[Cisco Security Essentials](#)

[CCNA Security](#)

[NDG Linux I & II](#)

Cisco Partner Courses

[Security+ \(CSSIA.ORG\)](#)

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

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

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

[Application and Database Security](#)

Curriculum Resources

Videos

COURSERA.COM

Cybersecurity and the Internet of Things

OPENLEARNING.COM

Cyber Security

CYBRARY.IT

Security+, CISSP & CASP

Textbooks

Oracles Database 12c OU Courses

Oracle Learning Library

Oracle Database 12c Security Cookbook By:

Pavlovic, Veselica

Publisher:Packt June 2016, ISBN:978-1-78217-213-0, ISBN 10:1-78217-213-0

Database Security, 1st Edition by Basta, Zgola

Cengage 2012, ISBN-10: 1435453905, ISBN-13: 9781435453906

NIST Special Publication 800-8

Security Issues in the Database Language SQL
W. Timothy Polk and Lawrence E. Bassham

Assessment Resources

Activities

CISCO – CYBERSECURITY ESSENTIALS

4.2.4.5 – Identify Authentication Methods

CISCO – CCNA SECURITY

3.1.2.4 – Identify the Characteristics of AAA

Labs

CISCO – CYBERSECURITY ESSENTIALS

4.3.3.4 PT Configuring VPN Transport Mode

4.3.3.5 PT Configuring VPN Tunnel Mode

CISCO – CCNA SECURITY

Lab 3.6.1.1 Securing Administration Access
Using AAA and RADIUS

Quizzes/Exams

CISCO – CYBER SECURITY ESSENTIALS

Exam 8 – Item 8.2.2

CISCO – CCNA SECURITY

Exam 3 – 3.1.2

Quizlet.com

[Security+ - Access Control](#)

[Identification and Authentication](#)

[SCADA Vocabulary](#)