



Study Guide for Week #8

Module 8: Emulating a Physical System - SCADA Security

Material Outline

- (1) What is SCADA?
- (2) SCADA Components
- (3) How SCADA affects me?
- (4) Who would attack SCADA?
- (5) SCADA Security
- (6) Vulnerability Analysis in SCADA

Provided Documents

Documents	Description
Week8-WatchMEfirst	Video explaining the goals of this week
Week8-StudyGuide.pdf	The guiding documents for the materials covered in this week, student work, and learning outcomes of this week.
Week8-Slides.ppt	PowerPoint slides regarding SCADA and SCADA security
Week8-Lecture	Video Lecture
Week8-PaperReading	Paper about “A Survey on SCADA Systems: Secure Protocols, Incidents, Threats and Tactics”
Week8-Resources: Reading - > Steps to improve Cyber Security of SCADA Networks	A PDF file with 21 steps to improve cyber security of SCADA. Please read all 21 steps

Documents	Description
Week8-Resources: Video -> What is SCADA?	Watch this 3-minute video that explains and shows what is SCADA.
Week8->Resources: Video -> Cyber Security Demo for Industrial Control Systems	Watch to 5-minutes video that introduces a demo for security in industrial control systems
Week8-Checklist	A checklist for your reference

Student Assignments

- Digest PowerPoint slides
- Watch the Lecture (or attend the in-person lecture)
- Read the Week 8 Material (All readings and papers provided)
- Watch explicative videos
- Submit the Project Initial Report

Learning Goals

This module is part of the learning outcomes

- (1) Understand SCADA and SCADA Security
- (2) Differentiate the different vulnerabilities of SCADA