

Scada Security [Internet Of Things]

1. Overview of Industrial Control Systems

- Overview of SCADA, DCS and PLCs
- ICS operations and components
- SCADA Systems
- Distributed Control Systems
- Programmable Logic Controllers
- Industrial Sectors and Their Interdependencies

2. SCADA Characteristics, Threats and Vulnerabilities

- Threats
- Vulnerabilities
- Risk Factors
- Possible Incident Scenarios
- Sources of Incidents
- Documented Incidents

3. Security Program Development and Deployment

- Business Case for Security
- Developing a comprehensive security program

4. Network Architecture

- Firewalls
- Logical Separated control network
- Network Segregation
- Recommended Defense in depth Architecture
- General firewall policies for ICS and SCADA
- Specific ICS firewall issues
- Single points of failure.
- Redundancy and Fault Tolerance

- Preventing Man in the middle attacks

5. Security Controls

- Management Controls
- Operational Controls
- Technical Controls

6. SCADA in action

- Detecting Cyber Attacks on SCADA systems
- Vulnerability Scanning
- Security Patch Management
- Anti-Virus Protection and Management
- SCADA security Standards
- Incidentant Handling and Forensics
- SIEM and SCADA