Separation Technology Options
Separation Management Decisions
2012-10-17
Industrial Control Systems Joint Working Group

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Outline

- **Separation Technology Options**
    - High surety (each has implementation / process details)
        - Complete physical separation
        - Digital diodes for one-way communication
        - FSM input sequencers for limited function(state) control
        - Trusted system separation (TCBs in MSL modes)
    - Medium surety
        - Cryptographic separation
        - Trusted system separation (TCBs in MLS modes)
    - Low surety
        - VLAN separation
        - Band separation
- Separation Management Decisions

Outline

- **Separation Technology Options**

- **Separation Management Decisions**

  - Structured decisions based on

    - Options, basis, and decision framework in context

  - Some examples from all.net/ICSSec/index.html

    - Control Architecture: Change management:

    - Zones: Physical separation:

    - Zones: Zone separation verification:

    - Zones: SCADA placement and controls:

    - Redundancy: Interdependencies:

    - Technology: Physical perimeters:

  - Decisions are based on context

Thank You

http://all.net/ - fc at all.net