

ITSC Top 6 Control Systems Security Recommendations

1

Document physical security system configuration

Document physical security system configuration using the same best practices as the rest of the enterprise.

- a. Depending on the organization, this may be self asserted or may be a 3rd party highly regulated audit
- b. Includes system and device documentation and configuration (network as-built diagrams and firmware revisions)

2

Follow a planned maintenance procedure

Follow a planned maintenance procedure that realistically addresses segmentation and physical security software compatibility issues while addressing the defense of the underlying network infrastructure.

- a. Patches, anti-virus
- b. Capability for remote monitoring and scanning
- c. Continuity of operations and service level agreements (SLAs)

3

Use standards based technology

Use standards based technology particularly with cryptography, and whenever possible maintain a validated interoperable infrastructure.

- a. Multiple interoperable implementations (at least three vendors)
- b. Standards based cryptography (PKIX, TLS)
- c. Multi-factor authentication (for example using Radius, PIV, FIDO)

4

Maintain and measure vendor supply chain

Maintain and measure vendor supply chain to ensure that it is healthy and capable of supporting the deployment on an ongoing basis.

- a. Principal point-of-contact (goals and measures, other relationships, buy maintenance)
- b. Integrators and service providers (help desk, escalation, training, credentialing)
- c. Vendors (interoperable components/services, help desk, escalation, training, credentialing, APIs)

5

Treat data within physical security infrastructure as sensitive enterprise data

Treat data within physical security infrastructure as sensitive enterprise data to protect confidentiality.

- a. Jurisdictions, industries, use cases
- b. Dependent on data infrastructure, platforms and applications
- c. Data security
- d. Data privacy

6

Follow the vendor's best practices

Follow the vendor's best practices regarding deployment and use of their solutions.

- a. Documentation (for example, sample configurations)
- b. Hardening guide (proper configuration and documentation of ports, protocols, etc.)
- c. User Forums
- d. Roadmap, general availability, and end-of-life