Security For Data Facilities Update 2005

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Topics for Today

- Convergence of Physical Security & IT
- Smart Cards & FIPS 201
- Biometrics
- CPTED
- Planning
- What Do You Need to Look Out For?
- What is Hype and What is Reality



Convergence of Physical Security & IT

- Wiring Infrastructure
- Hardware Physical Look and Feel
- PoE
- Edge Functionality
- Active Directory and LDAP
- SNMP Support
- Single Credential for Access to Physical Plant and the Network



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Smart Cards

- Contact and Contactless Readers & Cards
- Contactless Smart Card Classifications from ISO
 - ISO 14443 Type A proximity cards
 - More commonly or synonymously referred to as MIFARE®
 - DESFire is another implementation of Type A with a more powerful encryption algorithm
 - ISO 14443 Type B proximity cards
 - Started out as a complementary technology to Type A; modulation and other technical differences. Other differences are manufacturer specific
 - ISO 15693 vicinity cards
 - Originally developed for logistics applications—provides longer range but slower data transfer



Smart Cards & FIPS 201

- Homeland Security Presidential Directive (HSPD) 12
 - Personal Identification Verification (PIV) smart card for all federal employees and contractors
- Various Government Specifications
 - FIPS 201
 - TIG SCEPACS
 - TWIC
 - NIST Interoperability Specification
 - SP800 73



Biometrics

- Technologies
 - Fingerprint
 - Hand Geometry
 - Iris Scan
- Template Storage
- Acceptance
 - FIPS 201
 - Commercial Piggly Wiggley Supermarkets



CPTED

- Crime Prevention Through Environmental Design
- Old Concept and Especially Valuable Today
- Free Security
- Lower Liability, Lower Vulnerability
- Requires Very Early Involvement of Security Perspective



Planning

- Architectural Planning at an Early Stage
 - Egressing Requirements
 - Dead End Corridors
 - Egress from Higher to Lower Security Spaces
 - Magnetic Locks
 - Concentric Rings
 - Inclusion of Infrastructure in Security Plan
- Operational Planning for Operation Under Normal and Emergencies and Events



What Do You Need to Look Out For?

- Patching Security Onto A Site
- Integration Promises
- Relying on Manual Video Monitoring



What is Hype and What is Reality?

- Video Compression and Architectures that are TI Appropriate
- Smart Cards
- Multi-Tech Access Card Readers
- IP Video Opportunities



Thermal Cameras

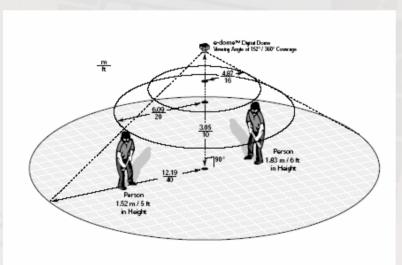
Left – Day / Night Camera Right – Thermal Camera





360 Degree Imaging

- Continues to improve with newer mega pixel technology
- Will become more common with IP enterprise based systems





Pan, Tilt, and Zoom in History



Intelligent Video

Video Content Analysis



- Distinguish between humans and moving "background" objects: waving tree branches, rippling water, etc.
- Generate system alerts based on presence of humans
- Allow for tracking using a PTZ Camera

