Contextual Driven Access Control – Operational Pilot

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We develop and operate an intelligent platform that uses Physical and Logical environments to make real time contextual decision.

Funding
Team Profile

• SBIR Phase I (May ’09) -> Phase II (Jun ’10) -> Phase III (Jan ’12)
  – Evolution:
    • Developed location-based service for utilizing “location” as an attribute to provide authorization decision requests
    • Proof-of-concept pilot running @ S&T IdM Testbed
    • Operational Pilot with DC Gov.
    • Visitor Log Application
    • Standing up BAE & Additional Operational Pilots with FEMA and TSA
Customer Need

• Improving Access control decisions – Physical and Logical Entities
  – Today
    • If you have the right credential, you're granted access.
  – Tomorrow
    • Contextual / Adaptive / Intelligent Access Control
      – Aware of the environment
      – Responsive to conditions
      – Leverages physical and logical conditions
Approach

System Diagram

Physical

Logical

Permit/Deny (ARM Protocol)

Permit/Deny (XACML)

FASC-N/GUID (Other Attributes)

FASC-N/GUID (Other Attributes)

Sensor Data (Enabler Protocol)

Rule Processing

Behavioral Analytics

Geolocation Processing

Decisions

Virtual Directory Services

PIP

PACS Reader/Controller

RFID (Active/Passive) Biometrics Mobile Devices/GPS

Video Surveillance Computer Usage Terror Threat Levels

Cyber Security Division 2013 Principal Investigators’ Meeting

9/13/2013
Benefits

• Stronger and more flexible attributed based authentication.
  – Protect physical and logical resource access
  – Act based on real time policy requirements
  – Leverages multiple data points to make smarter access decisions.
• Leverages existing infrastructure and builds on top of ratified standards to ensure interoperability.
• Leverages geo-fencing and can protect entities base on physical attributes (i.e.: location) and external events.
• Supports Smartcards, Physical Access Control, Sensors, RFID and GPS, NFC, Bluetooth LTE, Smartphones, Analog Sensors
Current Status

- Sensor agnostic
- Vertical Market agnostic
- Cloud-based, Infrastructure agnostic
Current Status
Current Status

Platform Stats:
(as of 7/16/2013)

• 20 apps / solutions
• 27 sensor types & data streams
• 8,402 sensorial connections
• 153,505 decisions executed
Next Steps

- Published API for Physical Access Control Systems use to enable contextual security

- Exploring additional pilot installations within Federal & Local government, and financial services institutions

- Focusing on commercial deployments within Healthcare, Industrial, Pharma, Consumer applications.
Contact Information

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