# DHS Science and Technology Directorate Identity and Access Management Technology Engine

#### **Context**

The Department of Homeland Security (DHS) Science and Technology Directorate (S&T) launched a series of high-profile, high-impact Apex programs to look strategically at the nation's security and address future challenges while supporting today's operational needs. Apex Engines were created to meet cross-cutting needs for all Apex programs.

## **Impact and Vision**

The Apex Identity and Access Management Technology Engine (IDAM-E) will help the Homeland Security Enterprise (HSE) enable identity and access management solutions via stakeholder engagement, problem identification, projects, and research and development (R&D) investments.

### **Description and Approach**

IDAM-E will bring expertise, technologies, tools, capabilities and approaches from government (U.S. & international) as well as external scientific, technical, industrial and academic sources to bear on identity, cyber and privacy problems identified by the Apex programs, IDAM-E, and DHS in general. When capabilities do not exist, build them via investments in research, prototypes, etc.

### **Key Activities**

- Leverage expertise and relationships that span the public and private sector to bring identity, information security and privacy capabilities to meet Apex program and HSE needs.
- Provide test-bed infrastructure and test and evaluation expertise to prototype, evaluate and validate technologies.
- Make R&D investments to close technology gaps in areas of importance to the HSE.

# **Engine Service Offerings**

#### **Expertise**

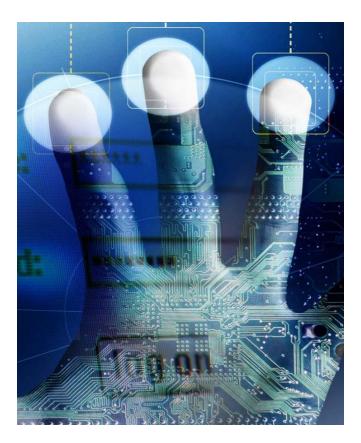
- Subject matter expertise
- > Ideation workshops
- ➤ Analysis of alternatives
- ➤ Mapping technology to needs

#### **Testbed Infrastructure**

- Prototyping
- > Proof of concepts
- Technology validation

# **Research & Development Investments**

- > To mature technology
- > To provide open standards
- > To provide multiple implementation choices
- To encourage private sector investment priorities



#### **Engine Competency and R&D Focus Areas**

- 1. Authentication of people and non-person entities
- 2. Risk based confirmation of identity that leads to trust
- 3. Data and application security at rest and in transit
- 4. Access control at the point of need
- 5. User experience that incorporates security, privacy and informed consent

