

Best Educational Effort – Winner



Bill Fisher, John Beltz NIST Public Safety-First Responder ICAM Project Team

Roughly 60,000 state, local, tribal, territorial, and federal organizations in the United States are charged with keeping citizens safe from crime and threats to life and property. Any obstacle to information sharing and communication among these public safety organizations (PSOs) can have cascading consequences, impacting the ability of police, fire, and emergency medical responders to deliver critical services to the communities they support.

Over the past several years, the NIST Public Safety First Responder Identity, Credential, and Access Management (ICAM) project team, managed by NIST's William (Bill) Fisher and John Beltz, has worked closely with PSOs to identify and prioritize their ICAM challenges and opportunities. The ICAM team led a workshop that included more than 80 federal, state, and local PSO stakeholders and leaders that had identified ICAM as their top technology challenge. That is, how do they get the right data to the right people at the right time using the right protections and only if it is for the proper reason and in an efficient manner.

To address this challenge, this year the ICAM team published a suite of critical technical resources to educate and guide PSOs in addressing their ICAM challenges and to help them make better-informed decisions. These resources include:

- NISTIR 8334: Using Mobile Device Biometrics for Authenticating First Responders: This report examines how first responders may use mobile device biometrics in an authentication system and what challenges they might face in implementation.
- NISTIR 8335: Identity as a Service (IDaaS) for Public Safety Organization:. This report informs PSOs about IDaaS and how they can benefit from it. It lists questions that PSOs may ask IDaaS providers when evaluating their services to ensure the PSOs' authentication needs are met and the risk associated with authentication is mitigated properly.



- NISTIR 8336: Background on Identity Federation Technologies for the Public Safety Community: This primer on identity federation aids PSOs in adopting identity federation technologies.
- NIST SP 1800-13: Mobile Application Single Sign-On: Improving Authentication for Public Safety-First Responders (third and final draft). This guide describes a reference design for multifactor authentication and mobile single sign-on for native and web applications while improving interoperability among mobile platforms, applications, and identity providers, regardless of the application development platform used in their construction.

To develop the best possible and most relevant ICAM guidance and information, the team collaborated with technology providers such as Microsoft, Axon, Datamaxx, AT&T, and Nlets: PSOs such as the Texas Department of Public Safety, the Florida Department of Law Enforcement, the Kansas Bureau of Investigation; and federal agencies including DHS, the First Responder Network Authority, and the FBI, as well as other NIST divisions and departments, such as the Advanced Networking Technologies Division, The Image Group at the Information Access Division, and the Trusted Identities Group.

The team has been educating PSOs by presenting their work and findings at more than 30 industry and government conferences and workshops. the Team continues to act as an advisory resource to the PSO community on cybersecurity, identity management, and other related topics.