MOBILE APPLICATION SINGLE SIGN-ON
For Public Safety and First Responders

The National Cybersecurity Center of Excellence (NCCoE) is helping the Public Safety and First Responder (PSFR) community address the challenge of securing sensitive information accessed on mobile applications through collaborative efforts with industry and the information technology (IT) community, including vendors of cybersecurity solutions. This fact sheet provides an overview of the Mobile Application Single Sign-On project description, including background and challenge, goals, and potential benefits. For inquiries about this project please contact us at psfr-nccoe@nist.gov.

BACKGROUND
On-demand access to public safety data is critical to ensuring that PSFR personnel can deliver the proper care and support during an emergency. The widespread adoption of mobile devices has led to a spate of mobile applications, many of which can support public safety activities. However, most mobile devices and applications are not designed with the unique constraints of the PSFR community in mind.

CHALLENGE
PSFR personnel need immediate access to public safety data to ensure they deliver the proper care and support during an emergency, especially when any delay—even seconds—is a matter of containing or exacerbating an emergency situation. Mobile technologies have helped facilitate this on-demand access; however, the diversity of public safety personnel, missions, and operational environments present unique challenges to implementing efficient and secure authentication mechanisms to protect access to sensitive information and systems.

GOALS
The Mobile Application Single Sign-On project aims to help PSFR personnel efficiently and securely gain access to mission-critical data via mobile devices and applications through multifactor authentication and mobile SSO solutions for native and web applications using standards-based commercially available and open source products.

This project will ultimately result in a reference design that:
- demonstrates multifactor authentication and mobile single sign on for native and web applications
- supports multiple authentication methods, taking into account unique environmental constraints faced by first responders in emergency medical services, law enforcement, and fire services

BENEFITS
The potential business benefits of the single sign-on solution explored by this project include:
- helps PSFR entities define requirements for MFA and mobile application SSO implementation
- improves interoperability between mobile platforms, applications, and identity providers (IdPs) regardless of the application development platform used in their construction
- demonstrates a worked example that PSFR entities can quickly transition to their operational domains
- enhances the efficiency of PSFR personnel by reducing the number of authentications, time needed to get access to critical data and the number of credentials that need to be managed
- supports a diverse set of credentials, enabling PSFR organizations to choose an MFA solution that best meets their individual needs

The National Cybersecurity Center of Excellence at the National Institute of Standards and Technology addresses businesses’ most pressing cybersecurity problems with practical, standards-based solutions using commercially available technologies. The NCCoE collaborates with industry, academic, and government experts to build modular, open, end-to-end reference designs that are broadly applicable and repeatable.
HOW TO PARTICIPATE

As a private-public partnership, we are always seeking collaborators, insights, and expertise from businesses, the public, and technology vendors. If you have questions about this project or would like to join the Public Safety/First Responder Community of Interest, please contact psfr-nccoe@nist.gov.

DOWNLOAD THE PROJECT DESCRIPTION
Visit https://nccoe.nist.gov/projects/use-cases/mobile-sso to learn more about this project.

TECHNOLOGY PARTNERS/COLLABORATORS

The technology vendors who are participating in this project submitted their capabilities in response to a call in the Federal Register. Companies with relevant products were invited to sign a Cooperative Research and Development Agreement with NIST, allowing them to participate in a consortium to build this example solution. Technology collaborators on this project include:

Motorola Solutions  Nok Nok  Ping Identity  StrongAuth  yubico

Certain commercial entities, equipment, or materials may be identified in order to describe an experimental procedure or concept adequately. Such identification is not intended to imply recommendation or endorsement by NIST or NCCoE, nor is it intended to imply that the entities, materials, or equipment are necessarily the best available for the purpose.

January 2018