

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. If you would like to propose an alternative architecture or know of products that might be applicable to the challenge, 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

Mobile platforms offer a significant operational advantage to PSFR organizations and personnel by giving them access to mission critical information and services. PSFR personnel have come to rely heavily on mobile devices while in the field, which may be used to access sensitive information such as personally identifiable information (PII), law enforcement sensitive (LES) information, or protected health information (PHI). However, these advantages can be limited if unnecessary or complex authentication requirements stand in the way of an official providing emergency services, especially when any delay—even seconds—is a matter of containing or exacerbating an emergency situation. In order to adequately meet the needs of diverse personnel, missions, and operational environments, any solution must support deployments where devices may be shared amongst personnel and authentication factors have usability constraints.

GOALS

In order to help PSFR personnel efficiently and securely gain access to mission data via mobile devices and applications, PSFR entities should improve interoperability between mobile platforms, applications, and identity providers regardless of the application development platform used in their construction. The mobile application SSO project explores 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
- supports both Bring Your Own Device (BYOD) and Corporately Owned, Personally Enabled (COPE) scenarios

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.

LEARN MORE ABOUT NCCoE
Visit <http://nccoe.nist.gov>

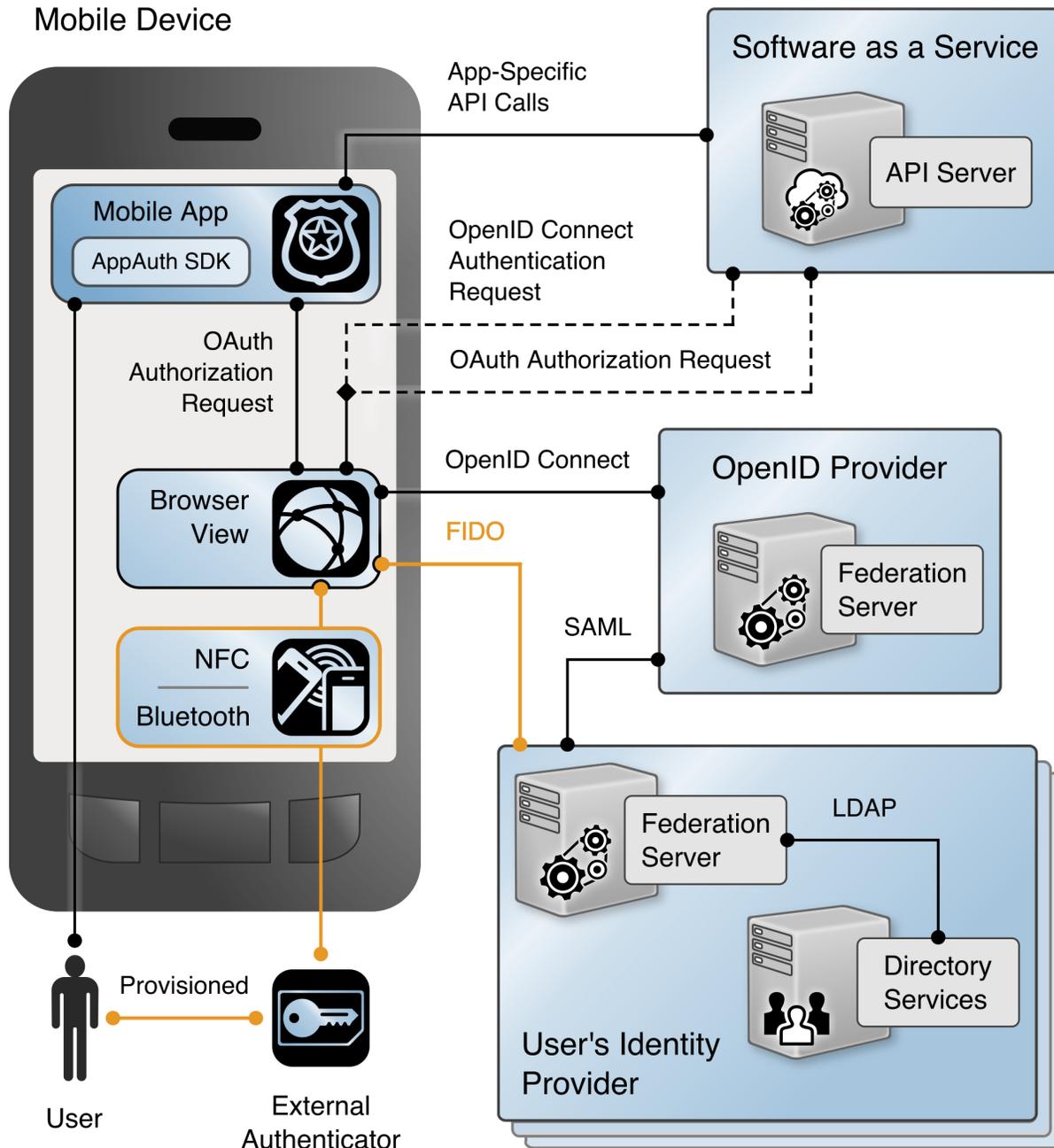
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BENEFITS

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
- improves interoperability between mobile platforms, applications, and identity providers regardless of the application development platform used in their construction
- provides an architecture and worked example that PSFR entities can quickly transition to PSFR operational domains

HIGH-LEVEL ARCHITECTURE



DOWNLOAD THE PROJECT DESCRIPTION

Visit https://nccoe.nist.gov/projects/use_cases/mobile-ss0 to learn more about this project.

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.