# CA Mobile App Services



#### At a Glance

Enterprises in the app economy are building dozens of apps to reach out to their customers, partners & employees. App developers are under tremendous pressure to deliver these apps to market faster than ever before. In this cycle of constant development, enterprises struggle to offer a great developer experience to their developers. As a result, developers spend a lot of time on building repetitive backend services than focusing on building immersive user experiences for their customers.

CA Mobile App Services accelerates the development of mobile apps with mobile SDKs and APIs. These are essential mobile services made simple and secure for the enterprise developer.

#### Key Benefits/Results

#### Accelerated App Development.

Develop mobile app backend services quickly with open APIs and SDKs.

**End-to-End Security.** Out-of-the-box standards based security weaved into the app & API fabric.

**Common App Building Blocks.** Quickly build collaborative apps using advanced user, group, messaging and storage services integrated to enterprise infrastructure.

#### **Key Features**

**User Management.** Retrieval and management of users via SCIM 2.0 APIs & native mobile SDKs.

**Group Management.** Management of enterprise and adhoc groups via SCIM 2.0 APIs & native mobile SDKs.

**Publish/Subscribe.** Messaging based delivery of events and data with MQTT 3.1.1 support, MQTT APIs and SDKs

**Messaging.** User messaging across the Enterprise via messaging APIs & SDKs with built-in security

**Secure Storage.** Easy to use local and cloud data store for developers via standards-based APIs & SDKs

**End-to-end Security.** Standards based mobile security using OAuth 2.0, OpenID Connect & PKI for mutual authentication and SSO

**Open SDK and APIs.** Mobile SDKs for developer convenience. RESTful API endpoints and SDKs for iOS providing extensibility through Open Source

# **Business Challenges**

Enterprises are facing challenges in the ability to go to market faster with mobile apps to reach out to employees, partners and customers. Customer apps require an immersive user experience (UX). but developers spend a lot of time on building a strong backend for such customer apps to offer strong security, access control, reliable messaging and local storage. Hence, they have a poor developer experience (DX) leading to low productivity levels.

**IoT Part of App Economy:** Today's enterprises are not just building mobile apps; they are integrating IoT devices, events and data as well. Developers need SDKs that can span across devices for messaging and management while retaining control of the data flow.

**Lack of Availability of an Open Toolkit:** Developers need an open SDK that can simplify redundant app development tasks. A standards-based open SDK cuts down development time by a significant time as well as avoids vendor lock-in.

**Difficulty in Collaboration**: Enterprise apps require user messaging with data security. Developers need SDKs that can quickly build them out to boost productivity.

**Building Reactive Apps:** Businesses need to utilize near real-time propagation of events and data via publish/subscribe.

# Solution Overview

## **Accelerate App Development**

CA Mobile App Services offers common backend services in the form of SDKs/APIs that can be used/shared across multiple mobile/IoT apps and can enable an enterprise to develop, deploy and manage multiple mobile/IoT apps rapidly, reducing the go-to-market time as well as reducing development time in creating repetitive, common functions through its APIs.

#### Essential mobile services for the enterprise developer made simple and secure

CA Mobile App Services extends CA API Management product capabilities, further supporting the needs of the developer. The open SDK that is part of CA Mobile App Services enables:

- User and group management through SCIM 2.0 interfaces
- Publish/subscribe management and message control with MQTT interfaces
- User messaging
- Local and cloud storage with data encryption

The SDK uses key standards like OAuth, OpenID Connect and PKI to leverage the underlying security in mobile operating systems, making it simple for developers to add SSO, mutual authentication and encrypted local storage to their apps.

# Critical Differentiators

CA Mobile App Services is uniquely positioned as a natural extension to CA API Management as well as leveraging the underlying security capabilities of CA Mobile Gateway. Some of the key differentiators are:

Features

- Unique group management features with support for adhoc groups for mobile apps
- SCIM 2.0 based interface for user and group management
- Secure messaging between users built over Publish/Subscribe infrastructure

### Related Products/Solutions

**Mobile API Gateway** provides the end-to-end security function for CA Mobile App Services.

**Mobile App Analytics** integrates with CA Mobile App Services for app analytics.

**API Developer Portal** helps manage your developers and APIs.

reatures	
User and Group Management	
User Management Services	<ul> <li>Retrieval &amp; management of users via</li> <li>SCIM 2.0 APIs</li> <li>Native mobile SDKs</li> <li>Simplified integration with identity providers that support LDAP</li> <li>OAuth protected endpoints</li> </ul>
Group Management Services	<ul> <li>Management of groups based on your app's needs via         <ul> <li>SCIM 2.0 APIs</li> <li>Native mobile SDKs</li> </ul> </li> <li>Different group types supporting different scenarios:         <ul> <li>Enterprise Groups</li> <li>Adhoc Groups</li> </ul> </li> <li>Internal group store for Adhoc groups</li> <li>OAuth protected endpoints</li> </ul>
Messaging	
Publish/ Subscribe Services	<ul> <li>Messaging based delivery of events and data providing increased decoupling between components</li> <li>MQTT 3.1.1 support</li> <li>Pub/Sub via:         <ul> <li>MQTT APIs</li> <li>Native mobile SDKs</li> </ul> </li> <li>Protected topics for users</li> <li>End-to-end security between publishers and subscribers</li> <li>Support for different QoS levels:         <ul> <li>At most once (0) - "fire and forget", or "best effort"</li> <li>At least once (1) - message stored until acknowledged by recipient</li> <li>Exactly once (2) - message stored until recipient acknowledged</li> </ul> </li> </ul>
Messaging Services	<ul> <li>Management of groups based on your app's needs via</li> <li>MQTT APIs</li> <li>Native mobile SDKs</li> <li>End-to-end security</li> </ul>
Storage	
Storage Services	<ul> <li>Easy to use local and cloud data store for developers via:</li> <li>Standard based APIs</li> <li>Native mobile SDKs</li> </ul>
Security	
Security Services	<ul> <li>Mobile &amp; API Security provided by CA Mobile API Gateway:</li> <li>OAuth 2.0 support</li> <li>OpenID Connect</li> <li>PKI support</li> </ul>

# For more information, please visit ca.com/mobileapps

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