

# Unifying Security Across Web, APIs and Mobile

## API Security with CA API Gateway and CA Single Sign-On



## Going Beyond Web for Cloud and Mobile with APIs

Enterprises have traditionally exposed data and applications through internal services or carefully controlled webbased applications. Now, the rise of mobile and cloud technologies is forcing enterprises to open new channels. Programmable interfaces—or APIs—are now fundamental to connecting mobile apps and cloud services with enterprise data and applications. APIs enable new revenue models, prepare the enterprise for bring your own device (BYOD) and expand the value of existing customer and partner relationships.

Accessing enterprise data and applications from the cloud and mobile devices creates novel challenges around application integration, security, service discovery, developer management, SLA enforcement and data analytics.

CA API Gateway provides the industry's leading API platform. The CA's API Management Suite empowers organizations to securely expose existing resources to mobile apps and cloud services via APIs. CA API Gateway technology enables organizations to leverage existing application investments through protocol adaptation, protects against external threats and inappropriate access, and reaches new markets and third-party developer networks through an API developer portal.

### Key Benefits/Results

CA API Gateway has been integrated with CA Single Sign-On (CA SSO) to allow you to:

- **Extend Internal SSO**  
Enable API access control using existing identity stores.
- **Enable Mobile and BYOD**  
Expose OAuth and OpenID, and providing the ability to connect mobile interfaces to enterprise data assets and bridge to internal identities.
- **Enforce Identity Policies**  
Dynamically enforce mediation policies based on identity attributes from CA SSO.

## The Role of Identity in API Management and Security

Identity is a cornerstone of enterprise-grade API management and security. Mobile applications, in particular, require a layered identity model in which the mobile end user, application developer and internal data access persona can each represent unique identities that can be authenticated, authorized, mapped and managed. Identity defines these access rules but also forms the bedrock for defining enhanced user profiles and available actions. Routing, versioning, traffic shaping, throttling and mediation decisions can all be made dynamically, based on the identities of the involved parties, as well as contextual information about the transaction.

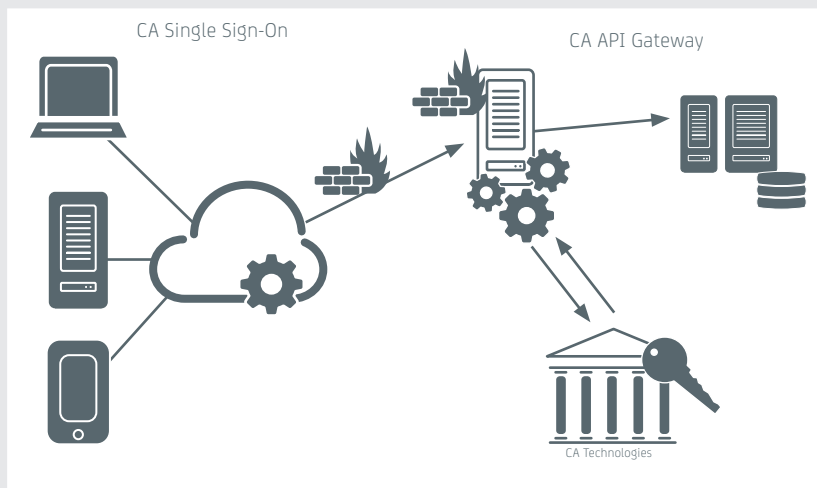
Many enterprises have made investments in identity management solutions that represent internal or Web-based identities for secure single sign-on (SSO). CA Single Sign-On (CA SSO, formerly CA SiteMinder) provides the secure, Internet-scale SSO and Web access management that organizations need in order to authenticate users and authorize access to Web applications/portals. It enables the secure delivery of essential information and applications to enterprise employees, partners, suppliers and customers, via secure SSO.

## The Role of Identity in API Management

The combination of CA API Gateway and CA SSO enables an identity-centric API management and security infrastructure for powerful mobile and cloud initiatives. Common use cases include:

- Creating a unified security view across Web, API, mobile and the cloud, using an existing CA SSO framework
- Exposing OAuth for mobile apps, bridging user tokens to CA SSO identity tokens and delegating authorization

The CA API Gateway and CA Single Sign-On Architecture



### Key Features of CA API Gateway and CA Single Sign-On Integration

Identity and Security		
API Security	<ul style="list-style-type: none"><li>▪ API threat protection and data validation</li><li>▪ End-to-end data protection and protocol security</li></ul>	<ul style="list-style-type: none"><li>▪ JSON/XML content filtering</li></ul>
Enhanced Identity Operations	<ul style="list-style-type: none"><li>▪ Identity-based access to services/operations</li><li>▪ SSO to API providers and third-party SaaS</li><li>▪ Support for SAML, X.509 certs, custom tokens</li><li>▪ Client support for OAuth integrations</li></ul>	<ul style="list-style-type: none"><li>▪ Full integration with all currently supported versions of CA Single Sign-On</li><li>▪ Support for HTTP basic, digest, mutual SSL, Microsoft SPNEGO, etc.</li></ul>
Documentation and Resources	<ul style="list-style-type: none"><li>▪ Interactive API documentation, API explorer, example code, and sample applications to help developers speed the creation of applications</li><li>▪ Provide announcements, developer support, FAQ, and discussion forums to foster community among developers</li></ul>	
Application Creation	<ul style="list-style-type: none"><li>▪ Automatically generate client-side code in most popular programming languages, including JavaScript, node.js, Python, Ruby, PHP, Objective C, Java, and Curl</li><li>▪ Ability for a developer to add multiple APIs to an application with a single click</li></ul>	
OAuth and OpenID Connect		
Scenario Support	<ul style="list-style-type: none"><li>▪ Support for two- and three-legged OAuth implementations</li><li>▪ Functionality for every stage of OAuth protocol flow—users, client, authorization server, runtime, token validation, administrative token management</li></ul>	
Supported Standards		
XML, JSON, SOAP, REST, PCI-DSS, AJAX, XPath, XSLT, WSDL, XML Schema, LDAP, RADIUS, SAML, XACML, OAuth 1.0a/2.0, PKCS, Kerberos, X.509 Certificates, FIPS 140-2, XML Signature, XML Encryption, SSL/TLS, SNMP, SMTP, POP3, IMAP4, HTTP(S), JMS, MQ Series, Tibco EMS, Raw TCP, FTP(S), WS-Security, WSTrust, WS-Federation, WSSecureExchange, WSIL, WS-I, WS-Addressing, WS-Policy, SSecureConversation, WS-MetadataExchange, WS-SecurityPolicy, WSPolicyAttachment,WS-I BSP, UDDI, WSRR, MTOM, IPv6, WCF		

CA Technologies (NASDAQ: CA) creates software that fuels transformation for companies and enables them to seize the opportunities of the application economy. Software is at the heart of every business, in every industry. From planning to development to management and security, CA is working with companies worldwide to change the way we live, transact and communicate – across mobile, private and public cloud, distributed and mainframe environments. Learn more at [ca.com](http://ca.com).