Identity and Access Management-as-a-Service: Enabling and Protecting Digital Relationships
Welcome to the Application Economy

Today, digital relationships drive business. Simply put, applications have become the heart of the enterprise economy. Customers use them to consume your products and services, and your employees, partners and contractors rely on them as key enablers of productivity.

To thrive in this new reality, you must deliver innovative, user-friendly and secure experiences that enhance how people interact with your brand. Those that do this well, prosper:

A Vanson Bourne survey of senior business executives revealed that “leaders” in the application economy significantly outperform “laggards” with 68 percent higher profit growth.¹

However, the question facing many is, “How do we keep our business responsive while also minimizing risk?”

The New Face of Business

User demand for applications is on the rise—and your competitors are responding. In fact:

JP Morgan Chase has more software developers than Google, and more technologists than Microsoft.²

Over the past year:

• 51 percent of businesses have released four or more external customer applications.³
• 56 percent have released four or more internal applications.⁴

¹ CA. How to Survive and Thrive in the Application Economy. September, 2014.
² Anish Bhimani: A Leader in Risk Management
³ CA. How to Survive and Thrive in the Application Economy. September, 2014.
⁴ Ibid
The Growing Security Demands of Business

Like it or not, every enterprise is now in the software business, and the challenges ahead are daunting. Budget constraints continue to be a common obstacle, but they are closely followed by security concerns.

Many have found that protecting the identity of users and safeguarding sensitive data are easier said than done when contending with:

**Exploding user and application populations.** The sheer volume of applications, their rate of change and the diversity of end users have never been greater. To enable and protect the business, enterprises must efficiently manage the identities of this growing user base and their access to the appropriate applications.

**The externalization of IT.** To meet the break-neck pace of application demand while keeping costs low, enterprises have turned to cloud-based deployment models. What’s more, businesses are increasingly embracing partner-delivered services and third-party applications to enhance their lineup of digital experiences. This diversity in application environments has erased the once well-defined boundaries of an enterprise, introducing new security considerations.

**Varied endpoints.** Applications are everywhere — as are the employees, partners and customers accessing them. And, these users are leveraging a dizzying array of devices, from PCs and tablets to smartphones and wearables. In order to protect the business and grant the appropriate level of access, organizations must authenticate each user and each endpoint.
As digital interactions increase in volume and complexity, identity and access security have become more critical for both the organization and end user. However, security measures should not be achieved at the cost of convenience.

**Today, intuitive and easy-to-use functionality drives application adoption.** If a customer has to jump through awkward authentication hurdles, he or she will not hesitate to look elsewhere. And if an employee, partner or contractor must juggle multiple log-ins to gain access to essential services, frustration will quickly grow while productivity plummets.

In this culture, where security is paramount and the user experience is king, the ultimate goal is to provide users with easy and secure access to the applications they require—whether on-premises or in the cloud—based on their identity, role and associated entitlements.

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Identity: The New Perimeter

So, how do we ensure appropriate security levels within this complex and rapidly evolving application economy? The answer lies in a centralized identity and access management (IAM) service. This approach ensures all identity-related functions, such as authentication—and ultimately authorization—are consistently managed by the enterprise and executed reliably across diverse channels.

And true to the trends, many have begun to leverage IAM as a hosted cloud service for its cost-saving, flexible and elastic qualities.

Leveraging this elastic model, you can quickly obtain enterprise-grade IAM security capabilities without having to deploy or manage the large IT infrastructure typically associated with on-premises solutions.

What’s driving cloud IAM adoption?

WITH CLOUD-BASED IAM, YOU CAN:

• **Expand or contract identity services** based on your current needs.

• **Reduce resource and cost pressures.** The cloud-based model eliminates the need for the procurement of hardware, facilities, security specialists and other expensive IT infrastructure needed to support on-premises solutions.

• **Accelerate the release of new business services** with centralized and consistent IAM across on-premises and cloud-based apps.
Key IAM Considerations for Employees, Contractors, Partners and Customers

The right cloud-based IAM service offers a comprehensive set of capabilities that help you manage the identities of end users throughout the entire lifecycle of access, including:

**Low-friction onboarding:** As the user’s first interaction with an application, registration processes set the initial tone of the overall experience. Onboarding that is too complex may result in high abandonment rates, especially for customers with multiple options. Low-friction processes, such as bring your own credentials (registration by social identity) and bulk administrative uploads, help reduce the number of actions a user must take.

**Automated birthright provisioning:** Based on a user’s assigned group entitlements, he or she is authorized to access particular services and application tiers. Automated birthright provisioning enables entry to the appropriate services—whether on-premises or in public or private clouds—from day one.

**Seamless Single Sign-On (SSO):** Employees and customers often require access to a broad set of both SaaS and on-premises applications. You need to provide a smooth SSO experience that facilitates seamless movement across multiple applications, organizational domains and partner sites/services. Standards-based federation makes this possible, with support for SAML, OAuth, WS Fed, WS Trust, OpenID and OpenID Connect.

**Centralized user management and self-service identity controls:** User entitlements are in a constant state of change. Employees are promoted; a company acquisition introduces a new set of apps and services; and applications are routinely introduced to enhance and deepen existing digital relationships. Each event requires the manipulation of a user identity. Centralized controls allow you to aggregate users and manage access rights across on-premises and cloud applications. Furthermore, self-service controls, such as password resets, profile updates and access requests, automate once-manual processes, drastically reducing help tickets and accelerating efficiency.

**Automated offboarding:** When an account is suspended, an employee leaves the company or a subscription to a service ends, automated deprovisioning reduces administrative operations and protects data by halting unauthorized access.

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Managing the Full Identity Lifecycle with IAM as-a-Service

IAM as-a-Service brings together three critical capability areas to help you manage this full identity lifecycle. By combining the operational benefits of the cloud deployment model with enterprise-class IAM, you can quickly introduce flexible security services while maintaining the necessary control over users and their access to cloud and on-premises applications.

- Securing user actions with Identity Management
- Protecting critical applications with Strong Authentication
- Fostering convenience through Single Sign-On
Application and user numbers are undeniably on the rise. In fact, it is not uncommon for operations to manage a customer user base of one million-plus and/or an employee, partner and contractor population in the hundreds of thousands. IAM as-a-Service enables you to centrally manage identities from account creation and assignment of access rights to fielding access requests and managing related user attributes.

CA Identity Manager SaaS
FEATURES:
- Synchronization to identity repositories
- Provisioning to on-premises and cloud apps
- Self-service user management
- Simple access requests and automated approval processes
- Automated deprovisioning

View data sheet
Your IT department can no longer firmly establish a network perimeter and rely on simple username and password credentials for security. There are more users, more information and more points of entry to safeguard. With critical data and applications online, strong authentication capabilities are essential to protect and enable business—but they need to be applied in a convenient and risk-appropriate manner so as not to disrupt the overall user experience.

CA Advanced Authentication SaaS

FEATURES:

- Security Q&As, one-time passwords via SMS/email and two-factor software credentials with patented security
- Roaming support for mobile devices
- Risk analysis and adaptive authentication
- Device identification and geo-location

View data sheet
Fostering Convenience Through SSO

To better serve your customers and employees, you provide a wide range of applications on-premises, from the cloud and through partners. For your users, the net result is a confusing matrix of identities that must be leveraged to gain access to services. The ultimate experience is a seamless, SSO process where users log in once and proof of their authentication and related attributes are securely shared to associated services without requiring additional end-user action.

CA Single Sign-on SaaS

FEATURES:
- Standards-based federation
- Token translation
- Just-in-time provisioning
- Integration with cloud-based and on-premises solutions and services

Federation Standards
- SAML 1.1, 2.0
- OpenID
- OpenID Connect
- OAuth 2.0
- WS-Fed
- WS-Trust
- AD, LDAP, UNIX, MF, etc.
IAM as-a-Service: Sample Employee Use Case

The following scenarios illustrate how cloud-based IAM can be leveraged within your organization to help ensure safe and convenient access to employee- and customer-facing applications.

**Scenario 1: Onsite/on the network**

An employee is online within the company network. By entering their normal Windows login, they are granted immediate access to a wide range of on-premises and SaaS applications. What made it possible? A combination of on-premises SSO and cloud-based federation.

**Scenario 2: Remote access**

Later that evening, this same employee is working remotely from home. The user accesses a web portal and enters their login information. Because the employee is remote and using a mobile device, they are required to complete additional forms of authentication. Once validated they are granted access to the appropriate set of on-premises and SaaS applications.

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**Onsite/on the network**

- Automatic access via domain login
- Synchronization between AD/LDAP, IAMaaS and on-premise SSO
- Integrated Windows Authentication (IWA)

**Remote Access**

- Login to Web portal
- Optional strong authentication for login to portal or for select higher risk applications
IAM as-a-Service: Sample Customer-facing Use Case

The following example demonstrates the use of Bring Your Own Credentials (Social Identities)—an onboarding tactic ideal for low-risk interactions.

Social identity login

A customer bypasses the traditional application registration process by using an existing social identity such as Facebook or Google. By enabling this frictionless onboarding process, you can increase the registration rate, get more prospects into the top end of your sales funnel and streamline the end-user experience.
About CA Technologies

CA Secure Cloud is a market-leading IAM as-a-Service solution from CA Technologies. It includes powerful Identity Management, Advanced Authentication and Single Sign-On services that allow your organization to reduce security risk while promoting a positive end-user experience.

Leveraging this cloud service model, you are primed to address the demands of the application economy with the ability to scale as needed and extend powerful IAM security throughout your enterprise—both on-premises and in the cloud.

Our security solutions have been proven at thousands of customer sites, across numerous industries, company sizes and usage models.

“In one test, CA Secure Cloud allowed a team to accomplish in just three days what had taken almost two months of building, installing, configuration and testing with an on-premise approach.”

– Drew Koenig, President, CA Security Global User Community

To learn more, please contact your CA Technologies sales representative or visit our website.

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.

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