Oracle Identity Cloud Service
Secure Identity and Access Management in the Cloud

Introduction

Today’s users expect a consistent login experience, whether they access your network from a mobile phone on the train or a computer in the office. Ideally, your information systems should recognize people in the same way and support a universal set of access controls, permissions, and password security constraints across all devices and locations.

However, as corporate computing services become more diverse and many aspects of the IT infrastructure move to the cloud, authorizing people to use enterprise information systems becomes progressively more challenging. How do you handle identity administration, authentication, trust management, access control, directory services, and governance for a disconnected workforce that uses a mix of cloud and on-premises applications?

The answer is Oracle Identity Cloud Service, a cloud-based identity management system that works by associating specific rights and restrictions with each user’s established identity. User provisioning, access control, and directory services are critical components of Oracle’s cloud-based security portfolio. Oracle Identity Cloud Service governs how employees, contractors, vendors, partners, customers, and other stakeholders use IT resources—and protects access to sensitive data.

Oracle’s cloud-based identity management system simplifies the information landscape for users and streamlines administration for IT professionals with an Identity as a Service (IDaaS) architecture that can help your IT security team protect corporate assets, simplify compliance, and minimize risks.

Sizing Up the Challenges of Cloud Security

Historically, user authentication and authorization was handled by directories associated with specific business applications and computer platforms—often taking the form of simple lists of users and their access privileges. This worked fine for homogeneous computing systems that were protected by a firewall. But controlling access within today’s network environments, which support many types of information systems both on-premises and in the cloud, is much more difficult—particularly in the face of today’s strict compliance regulations. Each new application and service often presents new user identities. IT professionals find themselves re-creating these identities again and again. These repetitive exercises create identity silos that spring up with each new deployment, making it difficult to audit usage and verify compliance with industry regulations about the safety and attestation of data. Organizations must be able to demonstrate that their system administrators have the correct privileges for
each application, and their users are correctly authorized to access those applications. This is a recurring challenge in the on-premises world that gets even more challenging as organizations introduce cloud apps.

Journey to Cloud

According to researchers at IDC, there are four basic models that characterize the journey to cloud for most companies:

**Everything in the cloud:** Many new companies have grown up using software as a service (SaaS) applications. They don’t have a large investment in on-premises applications and services because they have leverage cloud technologies from day one. These nimble firms benefit from rapid turn-up of new apps and services but they often face obstacles with security, risk, and compliance as they scale their businesses and the associated IT infrastructure. IDaaS capabilities can address these concerns and provide long-term value as these companies grow.

**A hybrid model:** Then there are those organizations with significant on-premises investments combined with occasional SaaS deployments. They have the flexibility of embracing either model as needs dictate. As these organizations move more and more resources to the cloud, an IDaaS solution can streamline user identity, access management, provisioning, and single-sign-on by seamlessly bridging on-premises and cloud environments. This hybrid model represents the majority of companies today.

**Cloud as a migration platform:** The third model includes customers that started with on-premises applications and are in the process of moving some or all of their infrastructure to the cloud. Exposing these applications to the user community often creates identity silos. IDaaS can help them transition fully to the cloud while providing a unifying view for managing both new and existing applications, people, and processes. These organizations often use the cloud as a migration platform and they leverage other cloud services to get there. Alternatively, they might leverage the cloud temporarily to host their data while they are migrating or updating their on-premises solutions. In either case, IDaaS can help.

**Everything on-premises:** Companies that have their entire infrastructure on premises are often looking for ways to transition key services out of the data center. They need to eliminate redundancies and enable cost-effective IT services for provisioning, single sign on, directory services, social authentication, federation, and LDAP integration. IDaaS solutions can help by simplifying the implementation and maintenance of identity management services.

In all of these scenarios, Oracle Identity Cloud Service provides a strategy for single sign-on access to applications and services across disparate security domains—without forcing IT pros to add large numbers of users to an enterprise directory or requiring people to manage multiple identities online. Oracle pioneered the concept of service-oriented security to refer to externalization of essential security functions. User administration, authentication, authorization, and auditing can all take place outside of the individual applications. Today, by providing well-defined external identity management services and a standardized, centralized infrastructure to deliver these services, Oracle has moved these capabilities to Oracle Cloud.

Bridging Old and New

A key part of Oracle’s IDaaS service is a unique technology known as Oracle identity Bridge that connects new and old identity management systems. Oracle Identity Bridge preserves investments in on-premises applications, including the time and effort that system
administrators may have spent setting up identities, groups, privileges, and entitlements for thousands of users. There is no need to duplicate these efforts or recreate the identities. Oracle Identity Cloud Service reuses these instructions and inherits existing entitlements with a few clicks. Instead of taking weeks or months to bring up another application and re-create all the user identities, you can now carry those investments forward with ease.

For the vast majority of organizations that rely on both cloud applications and on-premises applications, each with their own set of user identities and provisioning methods, Oracle Identity Cloud Service helps to rationalize and synchronize IDM activities. As new cloud applications come online they are replicated and synchronized with the on-premises apps, and vice versa. IT pros have a “single pane of glass” interface, enabling single-pane management of the IDM infrastructure.

Oracle Identity Cloud Service is highly scalable, which allows you to start small and leverage the same platform as your business grows. You can expand user identities to include multichannel experiences on phones, tablets, and computers via integrated API security hooks. Having a centralized, cloud-based identity management service not only simplifies access to enterprise information resources but also enables security pros to easily audit which users can access which resources at which times. They can maintain constant control and conduct complete entitlement reviews to catch situations where people no longer need access, with outbound credentials for hosted applications in the cloud and inbound credentials from third parties. Oracle streamlines the process of accepting trusted identities and granting access to all types of applications. This centralized approach dramatically expands your ability to leverage the identity platform for all of your user authorization needs.

Federated Identity and Social Networks
As devices, apps, and user personas multiply, user identities serve as our passports to a vast new world of online services. Federated IDM systems allow external users to securely access internal applications across organizational boundaries. Many organizations use digital identities not only to authorize employees, but also to build trust with customers and partners. In some cases those services are set up to support credentials from third-party social networks as well. They use federated identities to accept existing credentials from these networks as well as to socially enable other applications using social network credentials. This unified approach allows people to use their Facebook or LinkedIn credentials to establish an identity on other apps and information systems—an efficient strategy when you are creating an extended social network of customer and partner advocates.

Of course, ultimately the IT department wants unified credentials that can span multiple applications, devices, and platforms. That’s why single-sign-on is a key component of Oracle Identity Cloud Service. You can use the service to map user identities directly to social credentials such as LinkedIn, Facebook, and Twitter, yet still rely on a central identity management system for provisioning and de-provisioning needs. Oracle Identity Cloud Service also integrates with many Oracle Public Cloud offerings, which makes it easy for Oracle Cloud customers to adopt new cloud applications that work seamlessly with all the other applications in the enterprise. Regardless of where you stand on your journey to the cloud, Oracle can help you make a secure and successful transition.

ENJOYING THE RESULTS OF CLOUD-BASED IDM

» Employees are more productive because they no longer have to manage multiple user names and passwords
» Help desks have fewer tickets associated with insufficient access privileges and password resets
» Auditing becomes easier and more sustainable, thanks to robust governance and auditing controls
» The risk of a security breach and the associated loss of company assets is dramatically reduced
» It’s easier for developers to deploy new systems by leveraging a comprehensive, cloud-based security infrastructure

WHY STANDARDIZE ON ORACLE IDENTITY CLOUD SERVICE?

» Quicker implementation of security policies
» Faster turn-up of new applications
» Secure and pervasive single-sign-on capabilities
» Efficient resource provisioning
» Single pane of glass management

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Contact: 1.800.Oracle1

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