

SailPoint IdentityNow Architecture

Multi-Tenancy & Microservices



The “cloud” is a term referring to a pool of computing resources used to store and deliver applications and data over the Internet. As more and more companies begin looking to the cloud to solve their IT and security challenges, it is important to understand the differences between a multi-tenant SaaS cloud service and a cloud hosted single tenant application.

Single tenant, monolithic software hosted in the cloud may provide advantages for organizations who prioritize extensibility. However, organizations should take note of the tradeoff in management, security and reliability that they are making in order to gain that extensibility. Upgrade cycles and scaling the application can also introduce the need for additional resources when managing hosted single tenant applications, potentially slowing down delivery.

Multi-tenant SaaS applications run all users on the same code-base. This means individual businesses gain the benefit of every feature or security enhancement as soon as it is available, but they do give up the ability to customize the solution for specific proprietary needs. However, because multi-tenant solutions are able to build industry best practices into the platform, many organizations benefit from the elimination of highly customized solutions, as it leads to reduced IT complexity and costs over time.

What is a multi-tenant SaaS service?

Think of a multi-tenant service as a high-rise condominium building with units of different sizes to fit the needs of each tenant. All residents get access to premium, shared amenities like the pool, spa, workout facility, dry cleaning services, etc. at a fraction of what they would normally cost. All maintenance is taken care of and the building is continuously renovated weekly to leverage the latest innovations.

IdentityNow is similar in this regard. SailPoint provisions a tenant based on the size and number of identities for each customer, just like condos can be selected to fit the size of a family.

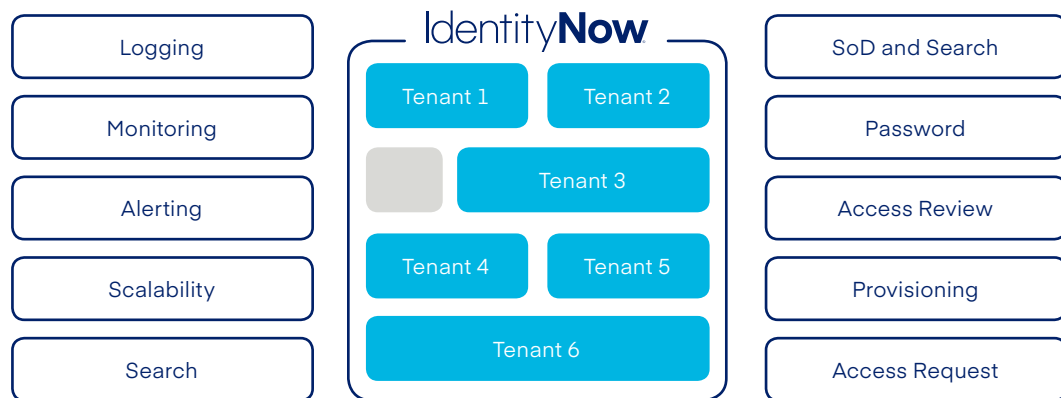


Figure 1: IdentityNow Multi-tenant Architecture

Just as condos have premium shared amenities, so does IdentityNow. The features we provide are immediately made available to all tenants and are constantly maintained and upgraded. Additionally, as the demand for resources increases, the system elastically adapts to increase or decrease in workload requirements. Users get a seamless experience without the need for costly upgrades or changes to underlying systems to support times of peak demand.

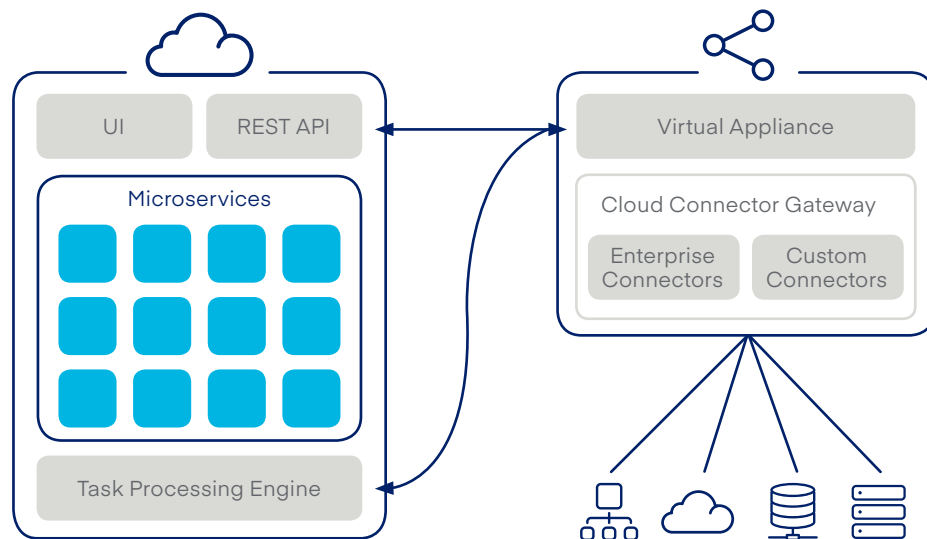


Figure 2: IdentityNow Microservices Architecture

What is a Microservice?

A microservice architecture, or simply microservices, is a distinctive method of developing software that focuses on building purpose-built service modules with well-defined interfaces and operations. Microservices can help create scalable, testable software that can be delivered daily, instead of annually, providing faster time-to-value and increased innovation for businesses of all sizes. The trend has grown popular in recent years as enterprises look to become more agile and adopt DevOps methodologies with continuous testing practices.

In the simplest form, microservices help build an application as a loosely coupled, but well-integrated suite of small services. Each running in its own process and remaining independently deployable. This enables quality, security, scalability of SaaS solutions.

IdentityNow: The First Multi-tenant, Microservices, SaaS IGA Service Built from the Ground Up

IdentityNow is the industry's first multi-tenant, microservices, SaaS identity governance platform, delivering a comprehensive approach for user provisioning, access request, access review, separation-of-duty policy, and password management. The benefits derived from this architecture are unparalleled in the identity governance market. IdentityNow is designed with configurable best practices, which accelerates speed of deployment and simplifies operations while ensuring each user's identity data is protected with industry-leading and patented encryption. Unlike other cloud-based identity solution providers who deliver their applications from a hosted single tenant cloud instance, IdentityNow is continuously updated, managed and automatically scaled dynamically with zero involvement from the organization.

The Benefits of Multi-tenant, Microservices SaaS

Not all cloud is the same. Single tenant applications hosted in the cloud often tout the benefits of accessibility and ease of management, but fail to mention that they lack many of the benefits provided by multi-tenant SaaS solutions. Multi-tenant SaaS provide the following:

- **Always up-to-date.** Unlike single tenant applications, where vendors often release 1-2 updates per year and have customers running a wide variety of versions and patch levels; a multi-tenant, microservices architecture delivers continuous releases and ensures all customers are always running with the latest features and security updates.
- **Continuous monitoring,** with the ability to respond to security issues immediately. Unlike single tenant applications with multiple versions that are limited in their ability to monitor every customer's configuration, multi-tenant SaaS applications often detect and address threats before customers are even aware of an issue.
- **Automatic upgrades.** Owned and managed by the vendor, seamlessly pushed to the customer, and require zero customer downtime.

- **Reliability.** Frequent delivery of updates demands quality and flexibility in design. A microservice architecture ensures that any issues with code are smaller and contained within a single microservice; allowing for simple rollback of individual services if issues are identified. Single tenant applications can suffer from larger failures since they don't inherently have any containment mechanisms in place and do not have the ability to rollback a single service. This means small code issues can cause large-scale failures and downtime.
- **Better total cost of ownership.** No need for dedicated identity experts, with advanced skill sets, to deploy and manage your specific implementation. Eliminate hardware costs associated with maintenance or upgrades and better manage budgets with predictable OPEX costs.

Determining Priorities

Prioritizing goals around security, management, cost, and need for customization can help to guide a decision on the best cloud identity governance platform for any business.

IdentityNow's multi-tenant, microservices SaaS identity governance platform has proven to provide seamless security and ease of management for businesses across a variety of industries. While recognizing limitations to customization, companies prioritizing a continuously improving solution with high reliability and a lower total cost of ownership have found IdentityNow to complement their goals.

SAILPOINT: THE POWER OF IDENTITY™

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SailPoint, the leader in enterprise identity management, brings the Power of Identity to customers around the world. SailPoint's open identity platform gives organizations the power to enter new markets, scale their workforces, embrace new technologies, innovate faster and compete on a global basis. As both an industry pioneer and market leader in identity governance, SailPoint delivers security, operational efficiency and compliance to enterprises with complex IT environments. SailPoint's customers are among the world's largest companies.