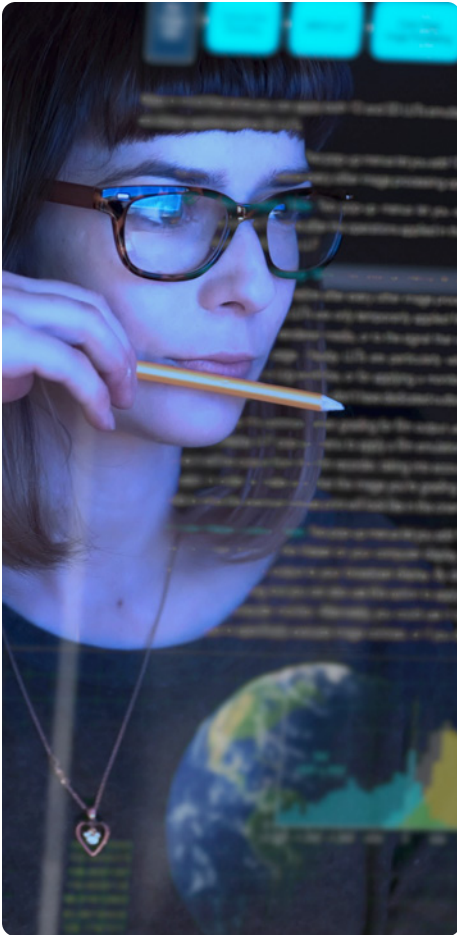


SAFE™ FOR SECURE CLOUD

Securely automate the entire physical identity and access management (PIAM) process in an economical way



Executive Summary

This white paper provides insights into the evolution of cloud computing and its benefit to enterprises in managing their key business processes. The white paper also introduces SAFE™ for Secure Cloud, which is a secure, hosted Software-as-a-Service (SaaS) that manages complex physical identity and access management (PIAM) challenges in organizations.

With the evolution of enterprise cloud computing, organizations can now utilize business applications to manage their key processes without investing heavily on datacenters, bandwidth or servers. While the data shows that security-related concerns are still top-of-mind, the real story underlying these findings is that organizations are quickly gaining more confidence in the security of their cloud services providers and that virtual private cloud best practices match or are better than those of on-premise solutions.

The majority of organizations worldwide continue to manage their physical access directly within the physical access control systems and implement spreadsheet, email and paper-based processes for physical security and compliance processes. Even though these manual processes constitute a big risk to security and compliance, organizations continue to use these processes because :

- They are uncertain about the reliability and security of cloud solutions
- The essential software licenses, servers, IT charges and ongoing admin costs result in large capital expenditures that make automation projects difficult to justify
- There is a lack of comprehensive end-to-end solutions in the cloud that are flexible enough to manage entire physical security and compliance needs of the organization

SAFE for Secure Cloud is a highly secure SaaS offering that gives organizations the ability to address all of their complex PIAM challenges through the SAFE Software Suite without the need for costly and complex in-house systems. This will keep organizations safe and compliant at a much lower cost and without the risk of critical information being visible to external threats.

Cloud Computing

Cloud computing is a significant trend with the potential to increase agility and lower costs. It is fast becoming a key driver to ensure that organizations continue to evolve their capabilities without an exorbitant investment on internal IT systems.



Cloud for Key Business Processes

There is no longer any doubt that as a critical set of enabling technologies, the cloud can significantly impact how any organization conducts its business. Today's organizations are placing more emphasis on determining how to leverage the cloud to enable business transformation. For most of these organizations, IT and business teams work together to develop a cloud strategy to ensure a well-thought-out and articulated security posture.

Organizations have started or have plans to start adopting the cloud for a large number of their key business processes such as sourcing and procurement; supply chain and logistics; finance, accounting and financial management; business intelligence and analytics; and even tax. Clearly, this indicates that more essential and sensitive data and processes are moving to the cloud. This is because these organizations understand the benefits of adopting the cloud and are quickly gaining a better understanding and more confidence in the security of their cloud services providers.

SAFE for Secure Cloud

SAFE for Secure Cloud is the cloud-based version of the SAFE Software Suite, a Software as a Service (SaaS) offering utilizing Amazon's Virtual Private Cloud technology.

On-Premise vs. Public Cloud vs. Virtual Private Cloud

Public Cloud is highly affordable but can raise issues regarding security, features and performance when it compares with the on-premise version of the application.

Public Cloud vs. On-Premise

Security: For many organizations (especially financial and banking services and tech firms), security is a gating factor. Some of these organizations are legally required to have their systems audited and cannot have their data vulnerable to cyberattacks over the Internet. Public cloud architectures offer limited security to the key data and IT resources, which leads to organizations preferring a seemingly more secure on-premise solution.

Customization: A public cloud solution delivers a minimally customized set of services. Public cloud applications often begin as one-size-fits-all and are not suitable for organizations with specific requirements. These organizations find the limitations and maturity of the offering too restrictive, despite the affordable nature of the public cloud solutions.

Affordability: Applications delivered from public clouds are charged on a usage basis and have the lowest impact on budgets.

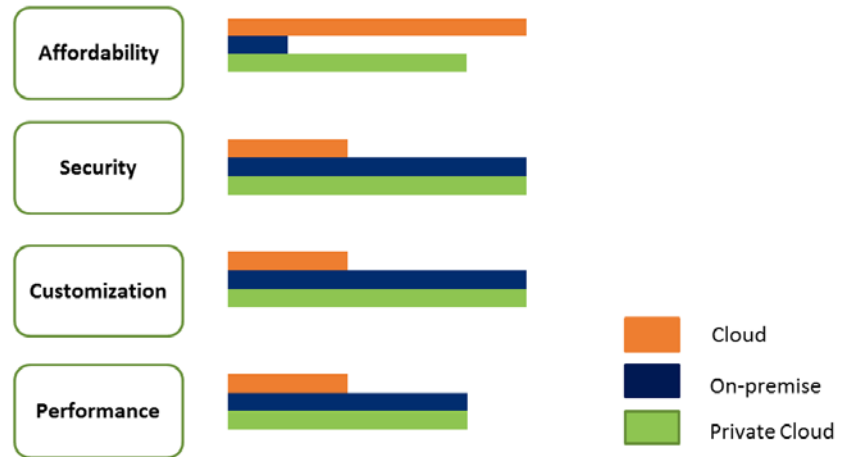
Virtual Private Cloud: Best of Both Worlds

Virtual Private Cloud Security: Virtual private cloud involves a distinct and secure cloud-based environment in which only the specified client can operate. Like the public cloud model of cloud computing, a virtual private cloud provides computing power as a service within a virtualized environment using an underlying pool of physical computing resource. However, unlike a public cloud a virtual private cloud is only accessible by authenticated users, providing the organization with greater control and privacy.



Virtual Private Cloud Customization: Virtual private cloud utilizes a single unique instance for each customer, and retains the full ease of customization found in on-premise solutions.

Virtual Private Cloud Affordability: Like applications delivered from public clouds, virtual private cloud solutions are charged on a usage basis and share the low impact on budgets.



Secure and Reliable

Virtual Private Cloud: SAFE for Secure Cloud utilizes dedicated cloud infrastructure for each client with no sharing of systems, data or virtual networks. Each virtual private cloud is locked down to only the IP addresses specified by the customer.

Secure VPN Connection: SAFE for Secure Cloud provides secure and hosted Software-as-a-Service (SaaS) which is accessible only to authorized users initiating the service via virtual private network (VPN). This ensures that the data is not visible to any unwanted personnel. Additionally, the connection uses SSL protocol that adds multiple layers of encryption to the VPN connection and ensures a secure connection.

Best-in-Class Data Centers: SAFE utilizes Amazon Web Services' world-class, highly secure data centers, which have state-of-the-art electronic surveillance and multi-factor access control systems. Trained security guards protect data centers, and access is authorized strictly on a least privileged basis.

High Availability: With datacenters and high availability servers provided by Amazon, downtime for the services is next to zero. Additionally, with multiple geographic regions and availability zones available, the cloud services for users can be running in the face of most failure modes, including natural disasters or system failures.

Low Start-Up Costs

SAFE for Secure Cloud eliminates high start-up costs, allowing many customers to utilize operational budgets instead of capital budgets. The first-year cost to the organization goes down substantially as they pay by their usage of the application and the services needed to launch the project. Furthermore, IT costs associated with server management, database administration, backups, upgrades, licensing fees and hardware maintenance are all eliminated. For many companies, this means they can move from a CAPEX to an OPEX budget keeping Finance and IT happy while reducing the IT impact.



Entire SAFE Suite Available With SAFE for Secure Cloud

SAFE for Secure Cloud is the cloud-based version of the SAFE Software Suite. As an alternative to an on- premise deployment, SAFE for Secure Cloud leverages our experience deploying PIAM solutions to over 100 customers around the world by providing a ready-to-use web-based solution for physical identity and access management, visitor management, compliance and security analytics. SAFE for Secure Cloud offers the entire SAFE suite to its customers in a virtual private cloud environment.

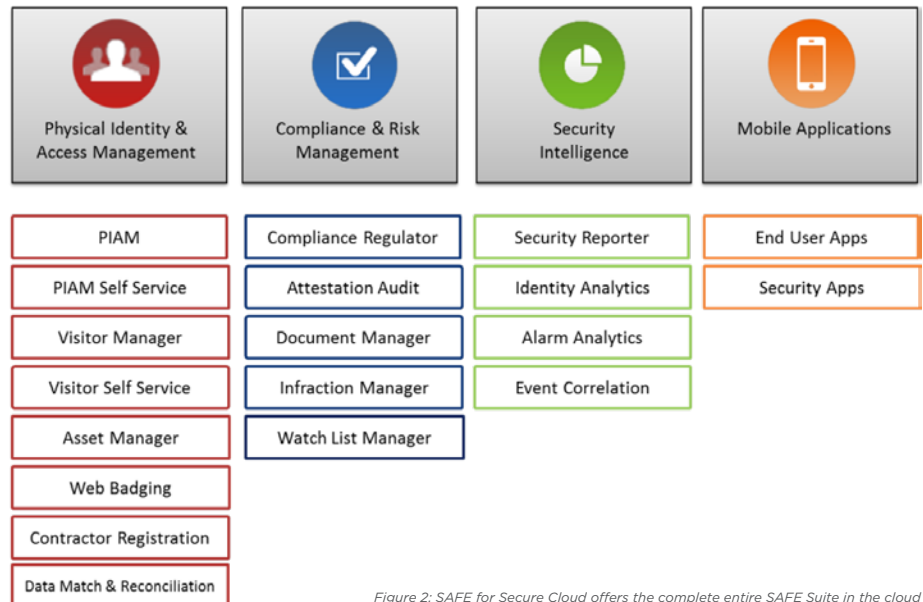


Figure 2: SAFE for Secure Cloud offers the complete entire SAFE Suite in the cloud

SAFE for Secure Cloud - Architecture

SAFE gives security organizations flexibility to choose from the following secure cloud models based on their needs:

- 1) SAFE for Secure Cloud—Client2SAFE:** This form of SAFE for Secure Cloud allows individual users to establish secure connections with the remote SAFE server hosted over the cloud. These users can access the SAFE server on that network as if they were directly plugged in to the network's servers.
- 2) SAFE for Secure Cloud—Site2SAFE:** In this form of SAFE for Secure Cloud, an intranet- based site- to-site VPN allows offices in multiple fixed locations to establish secure connections with the SAFE server hosted on the secure cloud.



Figure 3: SAFE for Secure Cloud - Architecture

Key Benefits Offered

SAFE for Secure Cloud offers the following key benefits to customers and partners:

- Secure and reliable virtual private cloud
- Reduces start-up and capital expenses
- Full SAFE software suite included

Conclusion

As more businesses understand that their data, applications and intellectual property are reliable, accessible and safe in the cloud, the adoption of cloud solutions for business processes will continue to increase. Key benefits of cloud solutions such as reduced cost, high security and comprehensive yet customizable solutions are guiding decisions to transition from on-premise to cloud today.

SAFE for Secure Cloud fulfills the critical physical security and compliance requirements of many organizations by managing their complex PIAM challenges with the best in-class data servers from Amazon Web Services and a secure VPN connection. SAFE for Secure Cloud is a secure and reliable private SaaS, which eliminates the security concerns of organizations worldwide. With innovative pay- as-you-go payment options and low investment needed for datacenters, bandwidth and licenses, this solution reduces the IT costs and start-up costs for the solution. SAFE for Secure Cloud is the answer to physical security related challenges of organizations worldwide.



hidglobal.com

North America: +1 512 776 9000

Toll Free: 1 800 237 7769

Europe, Middle East, Africa: +44 1440 714 850

Asia Pacific: +852 3160 9800

Latin America: +52 55 9171 1108

© 2020 HID Global Corporation/ASSA ABLOY AB. All rights reserved. HID, HID Global, the HID Blue Brick logo, the Chain Design are trademarks or registered trademarks of HID Global or its licensor(s)/supplier(s) in the US and other countries and may not be used without permission. All other trademarks, service marks, and product or service names are trademarks or registered trademarks of their respective owners.

2020-03-16-iam-safe-for-secure-cloud-wp-en

PLT-Q5028