S3 Authentication Suite v9 Solution Brief

Business Challenges

Authentication is the "front door" to digital services, but traditional approaches to authentication create challenges for today's highly digital world.

Legacy authentication solutions force a tradeoff among user experience, security and cost. We all have experienced the results and the results are even more expensive than what might be expected. The cost of password management is estimated to be between $10 to $100 per user per year[1] - which doesn't include the cost of fraud which is approximately $9.3B each year[2], primarily caused by phishing attacks.

Forrester Research stated that passwords should belong in time capsules and not in our current authentication industry and strongly recommends organizations evaluate passwordless solutions[3]. Gartner has identified passwordless authentication as one of the "Top 7 security and risk trends for 2019".[4]

The industry is ready for a change.

What we offer

The Nok Nok platform makes it easy to deploy passwordless customer authentication. With Server and App SDKs that abstract the complexity of your customers' heterogeneous environments, the Nok Nok[TM] S3 Authentication Suite (S3 Suite) reduces the effort, time, and cost of supporting all your digital channels and use cases.

Highlights

- Comprehensive support for passkeys and FIDO security keys

- Supports all your digital channels and use cases making passwordless practical today

- First authentication suite built and deployed from the inception of FIDO authentication protocols

- Most widely deployed FIDO-based solution

- Protects against phishing and Man in the Middle (MITM) attacks

- Proven, highly scalable platform supporting tens of millions of identities

- Adaptive policies for context aware, risk-based authentication

- Support for transaction confirmation and Secure Payment Confirmation (SPC)

- Easy to use and powerful APIs combined with granular administrator permissions simplify integration and operation

- Includes Nok Nok[TM] Quick Authentication for high latency environments

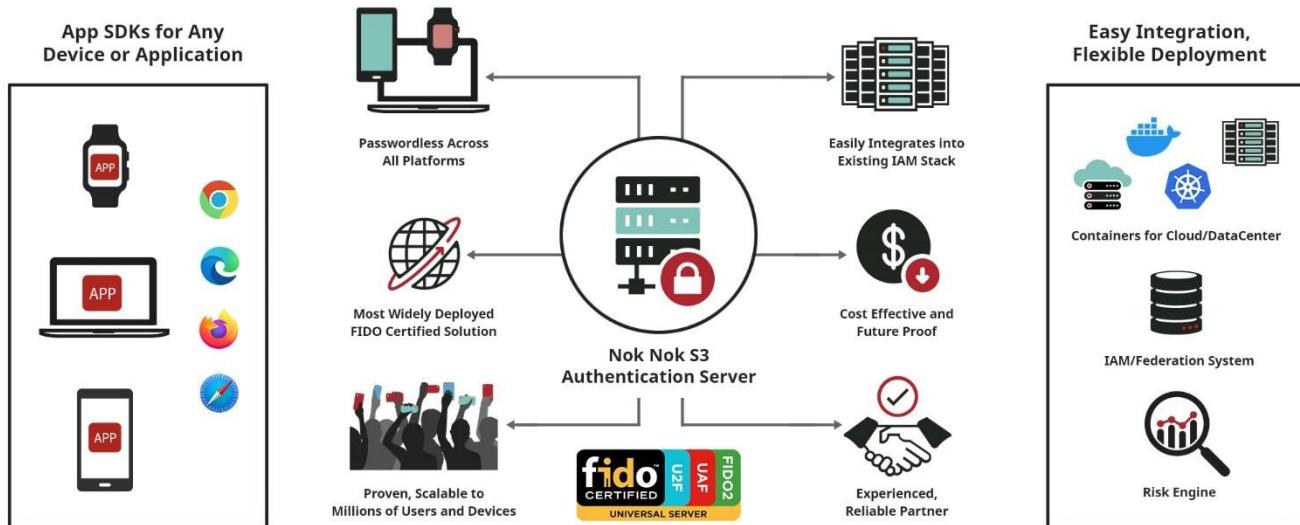- Authenticates users to apps, cloud services, and - in combination with the Nok Nok[TM] IoT SDK - to IoT device

[1] https://www.frost.com/wp-content/uploads/2021/02/Nok-Nok-Labs-Award-Write-up-Final.pdf
[2] https://www.bai.org/banking-strategies/the-banking-industrys-multi-billion-dollar-problem/
[3] https://www.forrester.com/blogs/passwords-belong-in-time-capsules-not-it-ecosystems/
[4] https://www.gartner.com/smarterwithgartner/gartner-top-7-security-and-risk-trends-for-2019

S3 Suite Solution Architecture

App SDKs for Any Device or Application

Passwordless Across All Platforms

Easily Integrates into Existing IAM Stack

Most Widely Deployed FIDO Certified Solution

Cost Effective and Future Proof

Proven, Scalable to Millions of Users and Devices

Experienced, Reliable Partner

Nok Nok S3 Authentication Server

Easy Integration, Flexible Deployment

Containers for Cloud/DataCenter

IAM/Federation System

Risk Engine

S3 SUITE SOLUTION OVERVIEW

The Nok Nok™ S3 Authentication Suite provides passwordless authentication across all channels including iOS, Android, web applications, and smartwatches.

The Nok Nok™ Authentication Server was the first server certified for all FIDO protocols (UAF, U2F and FIDO2/WebAuthn) – i.e., a "FIDO Universal Server". It is globally deployed at scale by industry leading customers and partners. Built for simplicity, security, and scalability, the S3 Suite integrates with a wide range of authenticators. These authenticators include, for example, FIDO Platform Authenticators that support various biometric and non-biometric modalities, such as fingerprint, voice, or face recognition or PINs and security keys with various form factors and transport protocols.

KEY BENEFITS & CAPABILITIES

The S3 Suite is rich with capabilities that significantly improve customer experience, protect you and your customers against account takeover, and simplify the transition from legacy authentication to next generation passwordless authentication.

True Passwordless Authentication

Nok Nok's passwordless authentication platform delivers omnichannel, frictionless authentication to any device including mobile phones, desktops or laptops, tablets, smartwatches, smart TVs, ATMs,

and even call center authentication.

Synced passkeys, device-bound passkeys, new authenticators, and new biometric modalities are seamlessly supported making it easy for you to immediately benefit from new devices and device features as they are released to the market.

The S3 Suite is extensible allowing you to also leverage third party biometric products - such as speaker recognition that supports hands-free authentication.

The Nok Nok™ Silent Authentication feature with strong device binding can eliminate the need for explicit user authentication, such as viewing your account balance directly after launching the app and augmenting synced passkeys with device-bound keys for strong device binding.

Nok Nok's out-of-band technology enables your users to leverage their phone to securely authenticate to any other device, which is extremely useful for devices with no built-in authenticator (e.g., smart TVs, older desktops, older laptops and older phones).

Strong Multi-Factor Security

In a Zero Trust approach, identity is the new perimeter making authentication your first line of defense. Passwords have proven to be weak and legacy 2FA authentication does not protect against phishing attacks, which is the most significant source of data breaches.

Nok Nok's solution is a **game changer** in preventing these attacks. The S3 Suite helps phish-proof your organization and replaces the need for legacy step-up authentication solutions.

Compliance Ready

Customers demand privacy protection, and with CCPA and GDPR, regulators have mandated privacy laws and rules. As a result, many organizations want to reduce the data they store to the minimum necessary for their business.

The S3 Suite eliminates the need to centrally store biometric customer data for authentication purposes and follows a privacy-by-design approach. This makes regulatory compliance easier, even against the strictest privacy regulations.

The Nok Nok S3 Suite provides strong multi-factor authentication in a single, convenient gesture, with the ability to comply with FFIEC, PSD2 SCA, and HIPAA authentication requirements. It also allows enforcing the use of authenticators meeting specific security characteristics.

The S3 Suite enables transaction confirmation and Secure Payment Confirmation (SPC) for approving high value financial transactions and supports delegated authentication and W3C Secure Payment Confirmation as used by EMVCo 3D Secure.

Proven Scalable Platform

Authentication is a critical business function requiring high availability and zero downtime upgrades. With years of experience and deep domain expertise, Nok Nok delivers a solution that is proven, scalable, and future proof.

As an inventor of FIDO-based passwordless authentication, Nok Nok's platform was the first authentication suite built from the inception of the FIDO authentication protocols, and the industry's first FIDO deployment in 2014.

Since then, Nok Nok's platform has been deployed at major global brands, including large mobile network operators and banks that support tens of millions of customers.

With S3 Suite's multitenancy support, enterprises can serve multiple segregated user groups with authentication from a single platform improving operational efficiency.

The S3 Suite can operate in stateless containers, supporting the modern DevOps approach with its continuous integration / testing and release automation practices.

Adaptive Authentication

The S3 Suite's Adaptive Policies allow you to easily configure authentication and registration rulesets that dynamically respond to context. This is typically required when following a Continuous Adaptive Risk and Trust Assessment (CARTA) approach or implementing PSD2 SCA.

The S3 Suite Adaptive Policies can source multiple inputs including strong signals generated by the S3 Suite App SDKs, contextual information provided by the business applications, and even risk signals provided by 3rd party risk tools. This provides the flexibility needed to avoid additional authentication prompts (e.g., if the last login is recent and the risk is low or if a synced passkey is being used the first time on a new device), trigger authentication sequences (e.g., if the transaction amount is high), or deny access (e.g., when devices are not trusted).

Easy to Integrate

Whether Android, iOS, smartwatch, or web applications, S3 Suite's App SDKs make it easy for your organization to leverage the authenticators on any device through a single developer API – abstracting away the platform differences and reducing implementation complexity.

The S3 Authentication Suite is simple and straightforward to integrate with systems that provide additional contextual information, such as external risk engines and behavioral biometric systems.

The S3 Suite Plugin for Access Management Systems or the built-in federation capability through OpenID Connect lets you integrate with any identity provider and fits right into your IAM stack (e.g., ForgeRock, Ping Identity, Microsoft Azure AD B2C).

With the simplicity of enrolling new users, the S3 Suite integrates well with progressive profiling approaches that lowers the barriers for new users to enroll.

Strong ROI

The S3 Authentication Suite delivers tangible benefits in both cost savings and increased revenues.

Costs are significantly reduced due to:

- Reductions in call center traffic due to a direct reduction from end users requesting password resets

- Reductions in SMS costs

- Reduced costs associated with account takeover (ATO)

- Reduced development costs to support new devices and modalities

Increased customer engagement results in an increase in revenue due to:

- Reduced transaction abandonment

- Improved onboarding success rate

- Improved authentication speed

- Increased use of applications

- Improved app rating

FIND OUT MORE

For more information about the Nok Nok S3 Authentication Suite, please visit https://noknok.com/products/s3-authentication-suite/. Nok Nok provides a variety of trial options for the S3 Authentication Suite including Software-as-a-Service, container image, and installable software. To try Nok Nok's solutions, please visit https://www.noknok.com/demonstration/.