



## S3 AUTHENTICATION SUITE V9.2 SOLUTION BRIEF

SOLUTION BRIEF

### BUSINESS CHALLENGES

Authentication serves as the “front door” to digital services, yet traditional approaches struggle to meet the demands of today’s digital world.

Legacy authentication solutions force a tradeoff among user experience, security, and cost, resulting in significant hidden expenses. Password management alone is estimated to cost between \$10 to \$100 per user per year<sup>1</sup> - excluding the substantial \$9.3B lost to fraud each year<sup>2</sup>, much of which stems from phishing attacks.

Forrester Research has declared that passwords should belong in time capsules and not in our current authentication ecosystem. They strongly recommend organizations prioritize passwordless solutions<sup>3</sup>. Forrester predicts that FIDO passkey authentication will soon become mainstream for both workforce and customer authentication, identifying it as one of the leading trends in identity and access management<sup>4</sup>.

The industry is ready for a change.

### WHAT WE OFFER

The Nok Nok platform simplifies passkey deployment, offering a seamless replacement for passwords and legacy MFA. With server and App SDKs that abstract the complexity of diverse customer environments, the Nok Nok™ S3 Authentication Suite (S3 Suite) significantly reduces the effort, time, and costs of supporting all your digital channels and use cases.

### Highlights

- Comprehensive support for passkeys across the widest range of devices and 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™ Quick Authentication for zero authentication latency
- Authenticates users to apps, cloud services, and - in combination with the Nok Nok™ IoT SDK - to IoT device

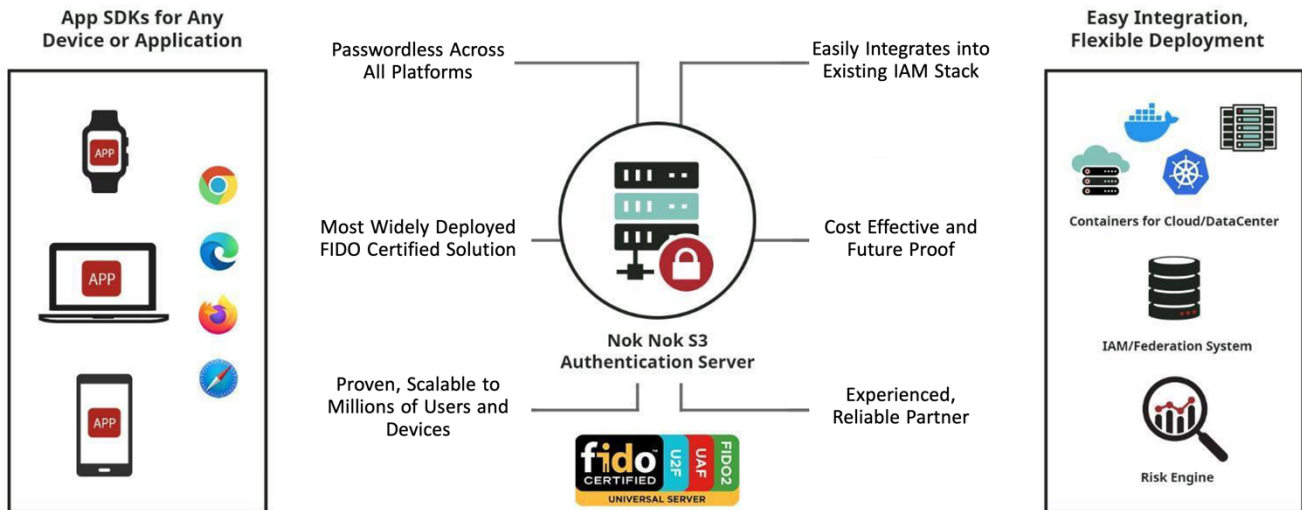
<sup>1</sup> <https://www.frost.com/wp-content/uploads/2021/02/Nok-Nok-Labs-Award-Write-up-Final.pdf>

<sup>2</sup> <https://www.bai.org/banking-strategies/the-banking-industrys-multi-billion-dollar-problem/>

<sup>3</sup> <https://www.forrester.com/blogs/passwords-belong-in-time-capsules-not-it-ecosystems/>

<sup>4</sup> <https://www.forrester.com/report/the-top-trends-shaping-identity-and-access-management-in-2024/RES180871>

## S3 Suite Solution Architecture



### S3 SUITE SOLUTION OVERVIEW

The Nok Nok™ S3 Authentication Suite delivers seamless passwordless authentication, including passkeys, across all major platforms including iOS, Android, web applications, and smartwatches.

The Nok Nok™ Authentication Server was the first to achieve certification for all FIDO protocols (UAF, U2F and FIDO2/WebAuthn), making it a true “FIDO Universal Server”. It is globally deployed at scale by industry leading customers and partners. Designed for simplicity, security, flexibility, and scalability, the S3 Suite seamlessly integrates with a broad range of authenticators, including passkey providers and FIDO Platform Authenticators that support biometric and non-biometric modalities such as fingerprint, voice, face recognition, PINs, and security keys with various form factors and transport protocols.

### KEY BENEFITS & CAPABILITIES

The S3 Suite is packed with advanced features that dramatically enhance the customer experience, provide strong protection against account takeovers, and make the transition from traditional authentication methods to passkeys smooth and straightforward.

#### True Passwordless Authentication

Nok Nok’s passwordless authentication platform delivers omnichannel, frictionless authentication to any device including mobile phones, desktops, laptops, tablets, smartwatches, smart TVs, ATMs, and even call center authentication.

The platform seamlessly supports synced passkeys, device-bound passkeys, new authenticators, and emerging biometric modalities, allowing you to immediately benefit when new devices and device features are released to the market.

Nok Nok Intelligent Credential Detection simplifies user priming. User priming is a method to familiarize users with specific iconography and terms, minimizing confusion when user actions are required.

The S3 Suite is extensible enabling you to integrate 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 an account balance directly after launching the app, and can be used to augment synced passkeys with device-bound keys for strong device binding.

Nok Nok’s out-of-band technology empowers users to utilize their smartphones to securely authenticate to other devices, making it especially useful for those without devices without built-in authenticators, such as smart TVs, older desktops, outdated laptops, and legacy phones).

#### Strong Multi-Factor Security

In a Zero Trust approach, identity serves as the new perimeter, positioning authentication as your first

line of defense. Passwords have proven to be weak and legacy 2FA authentication does not protect against phishing attacks, the primary cause of data breaches. Nok Nok's solution revolutionizes the way organizations defend against these threats. The S3 Suite effectively phish-proofs your organization and eliminates the reliance on legacy step-up authentication solutions.

### **Compliance Ready**

Customers demand privacy protection, and regulations like the CCPA and GDPR have imposed stringent privacy laws and guidelines. In response, organizations are striving to minimize the data they retain, only storing what is essential for their operations.

The S3 Suite adheres to a privacy-by-design philosophy and eliminates the need for centrally storing biometric customer authentication data. This approach significantly simplifies regulatory compliance, even against the strictest privacy regulations.

The Nok Nok S3 Suite delivers strong multi-factor authentication in a single, convenient gesture, simplifying compliance with key standards such as FFIEC, PSD2 SCA, and HIPAA. Additionally, it enables the enforcement of authenticators that meet specific security requirements.

The S3 Suite enables transaction confirmation and Secure Payment Confirmation (SPC) for authorizing high-value financial transactions. It also supports delegated authentication adheres to the W3C Secure Payment Confirmation standards as referenced by EMVCo 3D Secure.

### **Proven Scalable Platform**

Authentication is a critical business function that demands high availability and upgrades with zero downtime. Drawing on years of experience and extensive domain expertise, Nok Nok delivers a proven solution that is both scalable and future-proof.

As an inventor of FIDO-based passwordless authentication, Nok Nok's platform stands out as the first authentication suite developed from the ground up to adhere to the FIDO authentication protocols. Notably, it was also the industry's first FIDO deployment, going into production in 2014.

Since its inception, Nok Nok's platform has been successfully deployed at leading global brands,

including the world's largest mobile network operators and major banks, serving tens of millions of customers.

With the S3 Suite's multi-tenancy support, enterprises can efficiently manage multiple distinct user groups through a single authentication 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 processes.

### **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 Granular Adaptive Policies can source multiple inputs including strong signals generated by the S3 Suite App SDKs, contextual data provided by business applications, and risk signals provided by 3rd-party risk assessment tools. This approach provides the flexibility to minimize unnecessary authentication prompts, such as 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. Likewise, this approach will trigger authentication sequences if the risk is high, such as the transaction amount exceeds a set amount, or deny access altogether if a device is 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 unified developer API – abstracting away the platform differences and reducing implementation complexity.

The S3 Authentication Suite seamlessly integrates with systems that provide valuable contextual information, such as external risk engines and behavioral biometric systems.

The S3 Suite Plugin for Access Management Systems along with the built-in federation capabilities via OpenID Connect enables easy integration with any identity provider, seamlessly fitting into your existing IAM stack, such as ForgeRock, Ping Identity,

and Microsoft Azure AD B2C.

The S3 Suite simplifies enrolling new users, making it an excellent fit for progressive profiling strategies that lower barriers to entry and enhance the onboarding experience for new users.

### **Risk Signals Optimized for Passkeys**

Nok Nok Smart Sense optimizes user experience and reduces fraud by leveraging AI/ML to generate an anomaly score. This score is integrated into the rules engine to optimize actions, such as suggesting the creation of passkeys after legacy sign-in when the risk is low or requiring user verification when the risk is high. For instance, step-up authentication can be triggered on new devices only when the risk is high.

### **Smart Analytics**

Nok Nok Smart Analytics simplifies deployment optimization by measuring key performance indicators (KPIs) and benchmarking them against industry standards. It offers actionable insights, helping you easily identify areas for improvement and providing tailored suggestions, reducing the time

and effort needed to enhance performance.

### **Strong ROI**

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

- 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/>.



#### **ABOUT NOK NOK**

Nok Nok lets you create safer, faster user experiences with key-based passwordless authentication based on the FIDO standards that enable compliance with global user and data privacy regulations. Nok Nok is the leader in passwordless customer authentication and is trusted by the biggest banks, telcos and fintechs including BBVA, Mastercard, Intuit, NTT Docomo, Standard Bank, T-Mobile, and Verizon.