Okta Secure Identity Commitment

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Provide marketleading secure Identity products and services



Champion customer best practices to help ensure they are best protected



Elevate our industry to be more protected against Identity attacks



Harden our corporate infrastructure



okta

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Executive Summary

Identity is the primary enterprise security entry point for all workforce and consumer applications. Meanwhile, the volume and complexity of attacks against entities large and small continues to accelerate. Detecting and protecting against these attacks is mission critical.

As a leading independent Identity company, Okta is at the forefront of dealing with attacks. As a result, we have launched the Okta Secure Identity Commitment to:

- · Provide market-leading secure Identity products and services
- Champion customer best practices to help ensure they are best protected
- Elevate our industry to be more protected from Identity attacks
- Harden our corporate infrastructure

Under this initiative, we have already delivered or announced a number of important features and upgrades within both our corporate infrastructure and our product portfolio. A summary of these updates is detailed below.

We know that our work is never complete, and we will continue to invest as needed in proactive anticipation of, and in response to, the dynamic cyber threat landscape.

Introduction

When we founded Okta in 2009, we focused primarily on IT management and — in particular — on using Identity as a means of connecting people with technology.

Since then, two major trends have driven a dramatic change both in how Identity is regarded and, by extension, in the demand for Identity solutions:

- 1. Identity is now the primary enterprise security entry point for all workforce and consumer applications
- 2. The volume and complexity of cyber attacks has grown, with a range of threat actors including ransomware groups, nation-state actors, and malicious insiders developing advanced tactics, techniques, and procedures (TTPs) to bypass defenses and evade detection

These trends have driven a significant shift for the industry and imposed upon us the responsibility to evolve from connecting people with technology to serving as a critical entry point for protecting every organization's important data.

And this responsibility is captured within our vision to free everyone to safely use any technology.

Okta Secure Identity Commitment

Identity has become mission-critical security infrastructure.

As a leading independent Identity company, Okta is at the forefront of the fight against Identity attacks. Our product, engineering, security, and business technology teams continually innovate our technology platform to protect our 18,000+ customers. For example:

- Okta ThreatInsight detects and prevents ~2B+ malicious requests within a 30-day period (Based on internal reporting over the period of December 5, 2023 to January 4, 2024)
- We've reduced credential stuffing attempts and malicious bot traffic by more than 90% for some of our largest customers over a 90-day period (Based on internal reporting of anonymized data from Enterprise Customers over the period of October 5, 2023 to January 4, 2024)

 We're shaping industry best practices - 100% of Okta Employees use Okta FastPass with device assurance and Adaptive MFA (AMFA) for phishing resistant factors (Based on internal reporting as of February 2024)

We are committed to continue leading the industry forward and to protect our customers and their most sensitive assets. As a result, we have launched the Okta Secure Identity Commitment.

This commitment is built upon four pillars, shown below. The remainder of this document explains how we are delivering on our commitments.

Provide market-leading secure Identity products and services

Champion customer best practices to help ensure they are best protected

Elevate our industry to be more protected against Identity attacks

Harden our corporate infrastructure

Provide market-leading secure Identity products and services

We recognize that our security offerings are your security posture, which is why we are dedicated to advancing and prioritizing security features within our Identity products and services.

Through this continuous focus, we help ensure that the trust invested in us by globally recognized brands is met with the strongest and most innovative protection measures.

At Oktane 2023, we announced a host of customer security boosting capabilities — including many with Okta Al.

Since then, we have been steadily executing on a few key themes to further strengthen our products and services, including:

- Hardening administrative access to customer administration consoles
- Strengthening session, user, application, and device security
- Supporting security best practices across our customer base

Recently Delivered or Announced for end of May 2024

Workforce Identity Cloud

- Identity Threat Protection with Okta Al
- · Govern Okta admin roles
- Require MFA to access the Okta Admin Console
- Require MFA for protected actions in Admin Console
- Allow admins to detect and block requests from anonymizing services
- Apply IP and ASN binding to Admin Console
- Enforce an allow-listed network Zone for APIs
- Enforce token binding for M2M application service integrations
- Prevent account lockout for Okta users

Features planned by July 2024

Workforce Identity Cloud

- Identity Security Posture Management
- Expand in-product best practice guides
- Enforce MFA for first-party admin app access
- Secure agent deployment for Active Directory

Customer Identity Cloud

- Enhance Bot Detection on password recovery
- Refresh Token Management API
- Customer-Managed Keys
- Customize sessions with extensibility

Features planned by October 2024

Workforce Identity Cloud

- Restrict enrollment of FastPass to managed devices
- Step-up authentication for sensitive tenant flows
- Okta Privilege Access for Service Accounts in SaaS

Customer Identity Cloud

· Concurrent-sessions control

Customer Identity Cloud

- Fine Grained Authorization
- Fourth-generation Bot Detection with Okta Al
- · Auth challenge
- Require MFA for all dashboard admins
- Extend OIDC Back-Channel Logout with Initiators
- Enforce ASN binding for Auth0 admin sessions
- Manage session and refresh token management API
- Define progressive factor enrollment for end-users

- Define organization level session timeouts
- Secure tenant-level access control

Recently delivered

Recent product and feature launches that strengthen customer security include:

Workforce Identity Cloud

- Identity Threat Protection with Okta AI: Enhance your identity's
 resilience post-authentication by continuously assessing risks on your
 identities. Leverage integrated signals from first-party and third-party
 partners to proactively counter emerging threats from any origin
 post-authentication.
- Govern Okta admin roles: Deliver zero standing privileges for your
 Okta administrator privileges with time-bound, ad-hoc access requests
 for individual access and access reviews for existing administrators.

^{*}Please note that all roadmap items are subject to change. We will update customers regularly on the status of previously communicated projects.

- Require MFA for access to Admin Console: Prevent administrators from creating authentication policies that only require a single factor. Opt-in to prevent any single factor access to the admin console.
- Require MFA for protected actions in Admin Console: Provide an additional layer of protection for critical actions in Okta by requiring step-up authentication for admins to perform high-impact actions.
- Allow admins to detect and block requests from anonymizing services: Provide administrators the ability to allow or deny access based on an evaluation of whether a source IP address is associated with anonymizers, to strengthen an organization's control against unauthorized access through such sources.
- Apply IP and ASN binding to Admin Console: To thwart potential session takeovers of critical (first party) resources, Okta automatically revokes an Okta Admin Console session if the ASN (Autonomous System Number) observed during an API or web request differs from the ASN recorded when the session was established. Customer administrators are also able to automatically revoke an administrative session if the IP address observed at session creation changes during an active session within the following Okta products: Workflows Admin, Okta Access Requests (Inbox), Okta Privileged Access (OPA), Okta Admin Console.
- Enforce an Allow-listed Network Zone for APIs: Restrict attackers and malware from stealing SSWS tokens, and from replaying them outside of the specified IP range in order to gain unauthorized access.
- Enforce token binding for M2M application service integrations: Okta has enhanced the security of automated transactions by enforcing, by default, token binding in machine-to-machine (M2M) integrations using proof of possession to help ensure that only authenticated applications can use tokens to access Okta APIs.
- Prevent account lockout for Okta users: Okta has provided a feature
 to block suspicious sign-in attempts from unknown devices. When the
 feature is enabled, it prevents legitimate users (including admins) from
 being locked out if another device that is unknown to Okta causes
 a lockout.

Customer Identity Cloud

- <u>Fine Grained Authorization</u>: Empower developers to define authorization logic with greater scalability, availability, and auditability than traditional access control methods. Available on both Workforce and Customer Identity Clouds.
- Fourth-generation Bot Detection with Okta Al: Incorporating thirdparty risk signals and an updated Machine Learning (ML) model, the new version of Bot Detection will have fine-tuned models specifically designed to protect against fraudulent registrations.
- Auth challenge: Reduce bot activity with Auth Challenge, which uses browser and device signals to make it more challenging for bots compared to traditional CAPTCHAs.
- Require MFA for all dashboard admins: Previously, MFA was an
 optional requirement for AuthO administrators; MFA is now mandatory
 for all admins with a username/password-based login or third-party
 social login.
- Extend OIDC Back-Channel Logout with Initiators: Adds Account
 Deleted and Email Changed events to the existing list of logout initiators
 (Password Changed, Session Expired, and various Logout events),
 which hook up to session termination events to request applications log
 out users whenever that session is invalidated.
- Enforce ASN binding for AuthO admin sessions: Okta will
 automatically revoke an Okta Admin Console session if the ASN
 (Autonomous System Number) observed during an API or web request
 differs from the ASN recorded when the session was established.
- Manage session and refresh token management API: Gives
 centralized access to the list, management, and revocation of user
 permissions across applications. In the event that a business suspects a
 session has been hijacked, they can preemptively revoke the session —
 protecting their customers and organization.
- Define progressive factor enrollment for end-users: Using a Post-Login Action, businesses can define the secondary factors their endusers must enroll into MFA, enabling customers to exert greater control over authentication policies that align with their security objectives.

Features planned for release by July 2024

Workforce Identity Cloud

- Identity Security Posture Management: Proactively reduce your Identity attack surface by identifying and prioritizing risks like excessive permissions, misconfigurations, and MFA gaps across your Identity infrastructure, cloud, and SaaS apps.
- Expand in-product best practice guides: Okta will provide additional in-product guides to help customers implement best practices to protect their Okta tenants.
- Enforce MFA for first-party admin app access: The admin console
 policy will be applied to first-party admin apps across Okta access
 certifications, Okta entitlement management, Okta Access Requests
 Admin.Access to these apps will require MFA.
- Secure agent deployment for Active Directory: Upgrading AD
 Agent to leverage an OIDC Proof of Possession-based approach
 to communicate with Okta and prevent unauthorized parties from
 accessing sensitive information.

Customer Identity Cloud

- Enhance bot detection on password recovery: Introduce the option for customers to enable Bot Detection on password recovery flows (in addition to sign-up and sign-in, which already exist) to add an extra defense against account takeover attempts.
- Refresh Token Management API: Provide developers remote control
 of their users' authentication status through additional management
 API endpoints.
- Customer-Managed Keys: Provide customers with the ability to securely replace and manage their tenant's top-level encryption keys, including BYOK (Bring Your Own Keys) and CYOK (Control Your Own Keys).
- Customize sessions with extensibility: Define custom behaviors based on risk signals to revoke suspicious sessions, and set policies to detect and respond to hacking by leveraging the Session Management API with our Actions Extensibility platform.

- Define organization session timeouts: Customize session timeouts using additional logic, including Organization.
- Secure tenant-level access control: Provide the ability for customers
 to block traffic from specific IPs, Classless Inter-Domain Routing (CIDR)
 blocks, and geographies to help combat DDOS attacks by blocking
 requests at the edge.

Features planned for release by October 2024

Workforce Identity Cloud

- Restrict enrollment of FastPass to managed devices: Okta will
 provide administrators greater control by letting them configure policies
 that require users to meet a prerequisite before authenticators can be
 enrolled by these users. In the first phase, we will enable the capability
 for users to only enroll in Okta Verify FastPass only if these users are on
 a managed device.
- Step-up authentication for sensitive tenant flows: Get an additional layer of security and control for user's authentication processes.
- Okta Privilege Access for Service Accounts in SaaS: Accelerate
 service accounts in SaaS and hyperscalers as a protected resource in
 Okta Privileged Access. This provides customers with native product
 capabilities to gain visibility and manage the lifecycle of service
 accounts including discovery, management, governance, visibility,
 and fulfillment.

Customer Identity Cloud

Concurrent-sessions control: Introducing concurrent session control
capabilities allows your tenants to keep the number of active devices
for your users under control. Either as a cap to shared credentials or as
a risk signal, concurrent session control allows you to reject new logins
above limits defined by your business.

Champion customer best practices to help ensure they are best protected

Misconfigured Identity is just another entry point for a threat actor or malicious insider. With 15 years of experience and 18,000+ customers, we have the unique expertise to ensure our customers have the right Identity configuration.

To make sure our customers benefit from our depth of experience, we are further strengthening our customer policies.

Moreover, we are committed to ensuring our products are deployed with Okta's security best practices to directly contribute to fortifying customers' defenses against Identity-related breaches.

To those ends, we are striving to equip our customers and the wider industry with best-practice guides and other education resources to stay in lockstep with the threat landscape:

- <u>Actions Template Implementation Guides:</u> Facilitates best practices by giving Customer Identity Cloud customers a secure configuration template to start their implementation.
- <u>Protecting Administrative Sessions in Okta</u>: Learn recommended configurations in Okta to protect administrative sessions and privileged access, reduce the attack surface, prevent account takeovers (ATOs), and limit the blast radius of stolen sessions.
- <u>Customer Identity Cloud Enhancements to Prevent Account</u>
 <u>Takeover</u>: Examines and explains the importance of new features that bolster defenses against ATOs.
- Okta Device Access now supports passwordless login and FIDO2
 Yubikeys for Desktop MFA (WIC): Okta has gone on the record with our stance that the best protected future will be passwordless, here's another example of us putting that into our feature set.
- Apply IP or ASN binding to Admin Console: (WIC, on by default):
 Secure by default is an industry best practice, and we've made IP
 Binding protection the default setting for customers. Which means
 that if an admin suddenly appears at a different IP than they logged
 in initially, they will be automatically logged out and asked to
 re-authenticate.

Elevate our industry to be more protected against Identity attacks

Leading the way in Identity security is an imperative at Okta. We are focused on helping to detect and mitigate Identity attacks for our industry, and we work towards these goals by accelerating our capabilities and embracing new technology such as AI.

We also take a proactive role in shaping the industry's approach to Identity security — addressing the escalating complexity and volume of cyber threats with leading-edge prevention, detection, protection strategies, and setting a high standard for the industry:

- How to Secure the SaaS Apps of the Future: Learn the essential
 requirements for securing modern SaaS applications against postauthentication attacks and elevating cybersecurity standards across
 the tech industry by advocating for the adoption of advanced security
 features such as proof-of-possession, continuous access evaluation,
 and universal logout capabilities.
- Leveraging the Okta Identity Security Commitment to Enable
 Zero Trust: Learn how Okta security features support Identitypowered Zero Trust strategies, placing each in the context of a Zero
 Trust theme from the NIST Cybersecurity Framework.
- <u>Learning grants address the tech industry skills gap</u>: Okta Learning grants support unemployed tech workers, including veterans and military spouses. They equip individuals with Okta's on-demand course catalog, 1 Premier Practice Exam, 1 Okta certification voucher, and more.
- Okta for Good has committed \$3.1M towards its \$50M philanthropy commitment, including two \$1M, five-year commitments to long-time partners and known leaders advancing digital transformation for the nonprofit sector.
- CISA's Secure by Design pledge: Okta signed the CISA Secure by Design pledge, along with companies around the globe, showcases our industry's commitment to take meaningful steps in adopting secure by design principles now.

Harden Okta's corporate infrastructure

We hold all of our internal people, processes, and technology to the same rigorous security standards as our customer-facing products — emphasizing a holistic, inside-out approach to security.

Additionally, we are accelerating our investments to further harden our ancillary (i.e., production-adjacent) and corporate systems.

Recently Delivered / Announced for end of May 202	Updates planned by July 2024	Updates planned by October 2024
 Extend phishing resistance for new employees Conduct an internal security assessment Standardized and centralized reporting for security risk management Conduct a SaaS application security assessment Enhanced detection and response capabilities, including: New security incident case management tool New threat intelligence platform Additional dark web monitoring capabilities 	 Extend phishing resistance for all existing employees Enhanced laptop protections Automate discovery and reporting of M2M service accounts in SaaS applications Enhanced mobile device protections 	 Standardized and centralized vulnerability management, asset management, and CSPM Improved logging ingestion and analysis tooling Enhanced scanning of open source software

^{*}Please note that all roadmap items are subject to change. We will update customers regularly on the status of previously communicated projects.

Recently delivered:

Recent changes, upgrades, and enhancements to Okta's corporate infrastructure include:

- Extend phishing resistance for new employees: We've long deployed Okta FastPass for Phishing resistant MFA; we have recently implemented phishing resistance via Yubikeys for all new employees for whom the whole employee lifecycle, from onboarding to recovery, is 100% passwordless.
- Conduct an internal security assessment: In partnership with a
 leading global advisory firm, we conducted a comprehensive security
 review of our products, infrastructure, and corporate systems, including
 completed security assessments of our internal financial, sales, data
 warehouse, marketing, laaS & integration systems.
- Standardized and centralized reporting for security risk
 management: We deployed a single-vendor solution to centralize risk
 and issue management related to our governance, risk and compliance
 program, including third-party risk management.
- Conduct a SaaS application security assessment: In partnership with third-party security experts, we conducted security assessments of our critical SaaS applications, including the Okta Help Center, and our financial, customer relationship management (CRM), human capital management (HCM), sales, data warehouse, marketing, infrastructure as a service (laaS), and integration systems.

Enhanced detection and response capabilities, including:

- New security incident case management tool: Our new tooling has improved response time, automation, and accuracy.
- **New threat intelligence platform:** Our new platform will enable automation and correlation of threat intelligence to enhance our threat detection and response capabilities.
- Additional dark web monitoring capabilities: We are now proactively identifying potential threats by regularly scanning the dark web for content related to Okta.

Updates planned for release by July 2024:

- Extend phishing resistance for all existing employees: We will extend phishing resistance via Yubikeys across all existing employees.
- Enhanced laptop protections: We will further limit and restrict how
 Okta laptops can be used, continuing to emphasize least privilege and granularly scoped roles.
- Automate discovery and reporting of M2M service accounts in SaaS applications: We will implement a tool that provides visibility into local service accounts created within SaaS applications, improving our ability to manage and rotate the secrets used for authentication.
- Enhanced mobile device protections: We will be taking a hard line with mobile device security. While the Okta Verify product already provides assurance - such as mandating PIN, encryption, and operating system, we will improve our overall mobile device management (MDM) security posture through additional restrictions on privileged access.

Updates planned for release by October 2024:

- Standardized and centralized reporting for vulnerability
 management, asset management, and cloud security posture
 management (CSPM): We will deploy a single-vendor solution to
 centralize all vulnerability-related information across our production and
 corporate environments.
- Improved logging ingestion and analysis tooling: We will improve our logging capabilities to enable more relevant alerts. This will allow us to investigate an incident across our logging environment in a more timely manner.
- Enhanced scanning of open source software (OSS): To improve security hygiene, all security libraries will be scanned against supply chain attacks.

Conclusion

Okta is committed to being an industry leader in the fight against Identity-based attacks. As a result, we launched the Okta Secure Identity Commitment, which is based on four pillars:

- Provide market-leading secure Identity products and services
- Champion customer best practices to help ensure they are best protected
- Elevate our industry to be more protected from Identity attacks
- Harden our corporate infrastructure

This is a long-term commitment and we will continue to evolve along with the technology and threat landscape.

About Okta

Okta is the World's Identity Company. As the leading independent Identity partner, we free everyone to safely use any technology—anywhere, on any device or app. The most trusted brands trust Okta to enable secure access, authentication, and automation. With flexibility and neutrality at the core of our Okta Workforce Identity and Customer Identity Clouds, business leaders and developers can focus on innovation and accelerate digital transformation, thanks to customizable solutions and more than 7,000 pre-built integrations. We're building a world where Identity belongs to you. Learn more at dx.doi.org/doi.org/00.000/journal-partner/