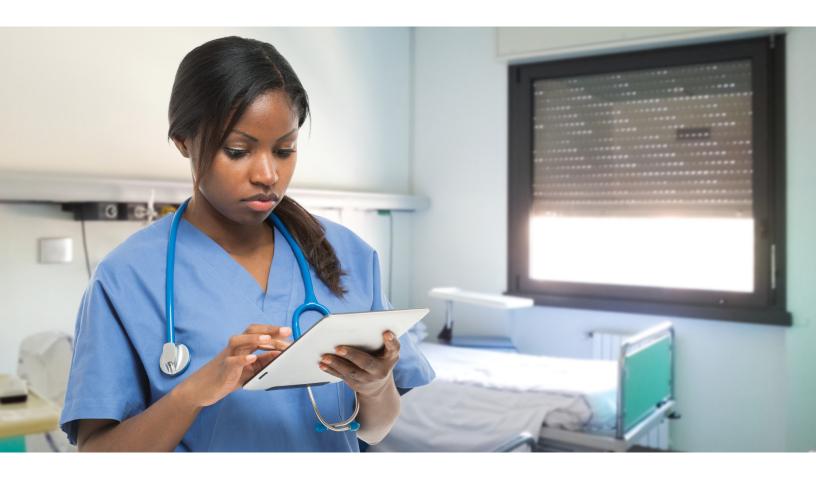
CITRIX®



Net iD for Citrix

A comprehensive security solution for enhanced mobility and productivity

Net iD for Citrix coupled with NetScaler® Unified Gateway™ and StoreFront™ lets organizations upgrade their business security beyond usernames and passwords, giving employees prompt and secure access to business-critical information.





Many organizations wish to move beyond simple passwords as they seek to provide secure remote access to internal apps and virtual desktops. Traditional usernames and passwords have proven insufficient and insecure, exposing organizations to unacceptable levels of risk. Popular one-time passwords (OTPs) and short message service (SMS) messages are time-consuming to manage, and add to login complexity. To remain productive, users need to be able to authenticate quickly and easily—on any device, from anywhere.

Citrix Workspace

Only Citrix offers the most complete and integrated workspace to enable people to securely access their apps, desktops, and data from anywhere. Rely on Windows app and desktop delivery from XenApp* and XenDesktop*, device security from XenMobile*, secure file sync and sharing with ShareFile*, and network security with NetScaler. Only a Citrix Workspace offers you complete choice of device, cloud and network, streamlined for IT control and simple, secure access for users.

Net iD for Citrix makes it possible for users to access business-critical information quickly, easily, and securely. Multifactor authentication secures remote access to the internal Citrix Workspace from any computer using a trusted certificate. Single sign-on (SSO) support provides instantaneous access to all authorized applications and data with a single PIN code.

Net iD for Citrix with NetScaler

In healthcare companies and other concerns, employees often need to log into multiple applications to access sensitive information. Improving data security means moving beyond cumbersome and fallible passwords. In an increasingly challenging security environment, poor personal password practices are endemic, and can easily affect and compromise enterprise environments.¹

Multifactor authentication dramatically reduces the risk of security breaches. Solutions must be comprehensive, with support for the full range of on-premise applications, legacy enterprise applications, virtual desktops, newer software as a service (SaaS) applications, and cloud applications. Users need to be able to authenticate quickly and easily while retaining secure access to their own personal applications and data.

With Net iD for Citrix, organizations can upgrade their business security beyond passwords. Partnered with Citrix since 2003, Net iD provides fully secure employee access to business-critical information and applications on laptops, smartphones, and tablets using an organization's existing security solutions and public key infrastructure (PKI). Net iD for Citrix provides multifactor authentication to Citrix environments such as XenDesktop and XenApp by integrating with StoreFront and NetScaler Unified Gateway, utilizing existing smartcards or mobile devices for authentication. Use of modern web and mobile applications makes it easier for end users to comply with security policies and requirements without impacting productivity.



¹ <u>digitalguardian.com/blog/uncovering-password-habits-are-users-password-security-habits</u> <u>improving-infographic</u>



Context-aware security and multifactor authentication through a single URL

Organizations are often faced with stitching together two or more point solutions for multifactor authentication, single sign-on, endpoint access, password management, and even physical control access. This leaves users to grapple with a less productive environment and causes administrative headaches, complexity, and security vulnerabilities. For example, many users leaving an organization typically retain access to on-line corporate assets—simply because of existing administrative complexity.

The combination of Net iD for Citrix with NetScaler Application Delivery Controller™ (NetScaler ADC™) provides security and compliance beyond the corporate network to users that access Citrix Workspaces as well as other applications. The solution provides access and secures the endpoint, offering secure single sign-on (SSO) access through a single URL via a customizable portal. Combined with StoreFront and NetScaler Unified Gateway, Net iD provides easy-to-use two-factor authentication, simplifying security for both administrators and users.

SSO access to all applications

Citrix Unified Gateway provides users with one access point and SSO to business applications and data deployed across diverse devices including laptops, desktops, thin clients, tablets and smart phones. It provides consolidation, helps reduce the footprint of remote access infrastructure, reduces cost, and provides ease of management as well as a better end-user experience. Organizations using third-party single sign-on and application delivery solutions and gateways can deploy a single solution for all their single sign-on needs by consolidating on NetScaler Unified Gateway.

Net iD for Citrix integrates with NetScaler, providing multifactor authentication to applications deployed in a datacenter, in the cloud, or delivered as SaaS, including:

- Traditional client/server or enterprise applications (e.g., Microsoft Outlook).
- Web applications (Microsoft Sharepoint, internal employee portals, etc.).
- · SaaS applications (Office 365, Salesforce, Workday, etc.).
- Virtual desktop infrastructure (VDI) including XenApp, XenDesktop, Microsoft RDP, and VMware Horizon.
- Mobile applications on any device.

The Citrix Ready® Program

The Citrix Ready Program showcases verified products that are trusted to enhance Citrix solutions for mobility, virtualization, networking and cloud platforms. The Citrix Ready designation is awarded to third-party partners that have successfully met test criteria set by Citrix, and gives customers added confidence in the compatibility of the joint solution offering.





Figure 1 provides an overview of Net iD for Citrix showing components that are described in the sections that follow.

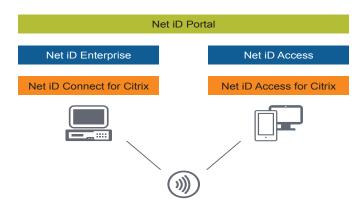


Figure 1. Net iD for Citrix provides authenticated access to Citrix Workspace independent of user location and endpoint device.

Net iD Portal

Managing and administering users' digital identities can be a complex and time-consuming task. Net iD Portal provides an easy-to-use web interface designed for the issuance and administration of users' digital identities within the organization. This functionality reduces the time and effort needed to manage identities, using either a centrally managed or self-service solution.

Net iD Enterprise

Net iD Enterprise is the market's most qualified PKI client, and is based on open standards. It integrates smart cards with all types of applications and IT environments, supporting certificate-based security. Net iD Enterprise enables simple and secure login with smart cards—offering single sign-on capabilities. Smart cards can be used to provide access to applications and web-based services that require electronic identification and signing based on PKI technology.

Net iD Connect for Citrix

Net iD Connect for Citrix provides certificate-based login to the Citrix platform with a PIN code, for a range of different devices and connection paths. It enables fast and easy login to applications and business-critical information independent of the user's actual location. Net iD Connect for Citrix supports all single sign-on protocols and offers fast reconnect times when roaming. The result is a unified and consistent experience independent of location or endpoint device.

Net iD Access and Net iD Access for Citrix

Net iD Access for Citrix provides a client for PCs and mobile devices. The client is a StoreFront plugin, and it enables out-of-band authentication via StoreFront and NetScaler Unified Gateway.





Net iD for Citrix integration with NetScaler and StoreFront

Before access is provided to critical applications or data, security protocols must identify the user and whether they really are who they say they are. Viable solutions must work with an extremely mobile and distributed workforce using a wide variety of endpoint devices. Figure 2 illustrates how Net iD for Citrix integrates with Citrix components such as NetScaler Unified Gateway and StoreFront to provide out-of-band multifactor authentication using a smart device.

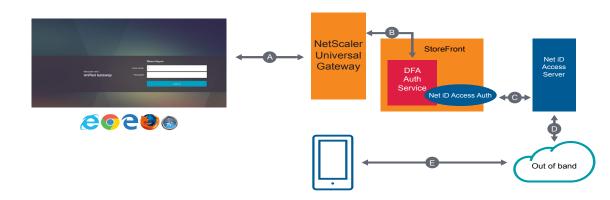


Figure 2. Net iD for Citrix works with NetScaler Unified Gateway and StoreFront, offering out-of-band multifactor authentication.

The authentication process proceeds when the user goes to the NetScaler Unified Gateway portal and is served a login form via Secure Sockets Layer (SSL). Subsequent steps follow, keyed to the illustration:

- A. The user enters their username (without password) and starts the login process with Net iD Access. Alternately, the user can enter a username and password, with Net iD Access for Citrix serving as a second authentication factor.
- B. NetScaler Unified Gateway communicates with StoreFront utilizing the Citrix delegated forms authentication (DFA) protocol. A check is then performed against the enterprise directory to make sure that the user exists and access is allowed.
- C. The Net iD Access for Citrix StoreFront plugin then asks the Net iD Access Server to authenticate the user
- D. The Net iD client and Net iD Access Server perform an out-of-band negotiation, resulting in a certificate-based login authenticating the user when successful.

The Net iD Server then informs StoreFront that the authentication was successful and the StoreFront server generates a Kerberos ticket, granting access to the user's approved applications and data.



Conclusion

The need for multifactor authentication and single sign-on has never been greater. Net iD for Citrix combined with NetScaler and StoreFront provides you secure and rapid access to critical applications and data whether on-premise, in the cloud, or delivered as SaaS. Sophisticated yet simple single sign-on from NetScaler combined with multifactor Net iD authentication greatly enhances secure access to Citrix Workspace environments.

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Citrix (NASDAQ:CTXS) is a leader in mobile workspaces, providing virtualization, mobility management, networking and cloud services to enable new ways to work better. Citrix solutions power business mobility through secure, personal workspaces that provide people with instant access to apps, desktops, data and communications on any device, over any network and cloud. Citrix solutions are in use at more than 330,000 organizations and by over 100 million users globally. Learn more at www.citrix.com.

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About SecMaker

SecMaker is a trusted supplier of security solutions based on certificates and PKI. Net iD product family protects and safeguards information, systems and data traffic for more than two million users. SecMaker has attained over 20 years a collection of unique, cutting-edge skills in IT security, authentication and PKI.

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