Hard Tokens Used to Be the Highest Level of Security
In today’s highly connected world, passwords are simply not good enough. Nearly every business has critical data and applications that require an elevated level of security. And organizations—especially those in highly regulated industries—have turned to hard tokens for their security needs.

Hard tokens are traditionally thought of as being the most secure level of token technology. They create a one-time password or passcode that regenerates according to a set amount of time. Hard tokens became popular because they are compact and easy for users to take with them.

If your company is using hard-token technology, however, you’ve probably encountered their limitations, especially as data and applications become more mobile and move to the cloud. In the past, everything that users needed to access was controlled and managed by IT. In today’s world, the authentication needs have changed—and hard tokens suffer from some key shortcomings:

Tokens are easily forgotten by the user—they become another thing to remember to carry, and the simple fact is that a hard token doesn’t do much good if the person does not have it with them.

Fortunately There Is an Alternative…
Soft tokens replace the physical hard token with a software application that can run on a variety of devices. They offer a more flexible, dynamic, secure and easy-to-manage option in today’s increasingly mobile and cloud-based environments.

This solution is cost effective and can be rolled out broadly. It easily integrates with hardware and devices your users already have—like smartphones. By ensuring everyone in the organization is using the same security protocol, soft tokens simplify security management. And they...
are cost-effective since companies don’t need to distribute and manage corporate-owned devices. Soft tokens are easy to implement, easy to manage and don’t require dedicated hardware—they can be run on certain identity software programs integrated into Google or other platforms. They provide increased speed of access and a broad range of deployment.

Soft tokens also enhance employee and customer experience because devices are already owned and used like smartphones. In fact, most smartphone users have their device with them at all times, ensuring users won’t forget their token at home. Because soft tokens integrate with existing technology, no training is needed, alleviating the need for IT set-up and assistance.

**AS A CONCEPT, IT ISN’T NEW**
Where soft-token technologies get really interesting is when you combine them with other next-generation access technologies. Since the soft-token technology doesn’t have to be tied to a particular infrastructure, it is easier to adopt and implement the latest technology. If possible, look for a solution that gives you flexibility to incorporate other authentication tools (SMS, voice, OTP solutions, iTouch) for a multi-factor solution.

Additionally, soft tokens are supported by Single Sign-on (SSO) solutions. Combining soft-token technology with SSO not only makes data and applications more secure, it creates a better user experience. SSO offers advanced authentication so users won’t need to create and remember passwords for multiple accounts. Users will experience increased productivity instead of wasting time logging in to different applications, and will have access to everything they need with an SSO. SSO increases user satisfaction with a more convenient and secure solution.

**AMAZING THINGS HAPPEN WHEN YOU PUT IDENTITY AT THE HEART OF TOKEN-BASED ACCESS**
Advanced authentication offers more value when combined with SSO—but making it happen can be a challenge. SSO is an advantage for end users but can cause headaches for compliance and access management. For SSO to work well, you need to think of it as part of a comprehensive identity and access strategy.

NetIQ offers Identity-Powered Access and Security solutions that allow you to leverage powerful identity information. With NetIQ, you can create a strong SSO solution with an incredibly secure soft-token solution. NetIQ® Identity-Powered solutions are also flexible and broad enough to operate as a single solution that address authentication needs—inside your organization, for cloud-based services, on mobile devices and more.

Implementing a flexible soft-token solution will make sense for many companies currently using hard tokens. There are many soft-token options available, but consider how your solution fits with your broader identity, security and access strategy.
Users find themselves in need of access from more diverse situations than ever before: PC, Mac, tablet or phone; in the airport, coffee shop or office; and spanning across cities, states and countries. The right solution provides the right authentication options to fit these diverse needs.

Identity-Powered Access solutions from NetIQ help you tame the complexities of authentication in today’s cloud and mobile world. NetIQ also provides a flexible foundation that allows you to adapt as your organization’s needs change. Consider these access solutions from NetIQ that incorporate the Power of Identity:

1. **NetIQ Advanced Authentication Framework**
   - Move beyond username and password to a more secure way to protect your sensitive information.
   - Use any of the different types of authentication mechanisms, such as smart cards, proximity cards, one-time password, etc., together using a single framework.

2. **NetIQ Access Manager™**
   - Provide a simple yet secure and scalable solution that can handle your entire web access needs—both internal as well as in the cloud.
   - Deliver a fast and convenient SSO experience for most multi-factor authentication methods.

3. **NetIQ Cloud Access**
   - Extend what you already do to automatically provision users and grant only the right amount of access—all without any corporate credentials ever leaving the enterprise.
   - Make it easier for organizations to secure and manage access to important applications.

4. **NetIQ SecureLogin**
   - Streamline user authentication for enterprise applications by providing a single login experience and eliminate password reset calls.
   - Protect against unauthorized access to business applications and integrate with almost any authentication device.

Learn what next steps you can take by going to: [www.netiq.com](http://www.netiq.com)
About NetIQ

NetIQ is a global enterprise software provider that helps companies use the Power of Identity™ to solve their most pressing security and access challenges, while providing comprehensive tools to manage today's hybrid IT environments.

Using our solutions for identity and access management, security and data center management, our customers and partners can survive and thrive today and in the future by gaining the competitive advantage that comes from understanding, maintaining and making sense of the shifting relationships between individuals, devices, behaviors and technology services. Our Identity-Powered Solutions help our customers secure, manage and measure the things that matter. From simplifying access to the applications that users need—in the cloud or from mobile devices—to identifying security breaches and quickly moving to appropriate remediation. From granting and revoking access to applications and data quickly and easily to understanding what privileged users are actually doing with their root-level access—even to addressing governance and compliance requirements through automation.

Additionally, NetIQ's Data Center Solutions integrate service management, application management and systems management to give our customers a holistic view of their IT environment and business services. From backing up business-critical data to making sure that critical applications have the hardware resources needed to run smoothly and effectively, our data center solutions help improve performance and availability to keep our customers' businesses running.

We also offer workload migration solutions to help eliminate the guesswork in our customers' virtualized environments. As part of NetIQ Data Center Management, NetIQ Workload Migration solutions provide upfront analysis and planning so customers can use their virtual resources efficiently, with minimal contention.

By doing all of these things and more, our customers are able to provide strategic value at the speed of business. Leading technology companies trust NetIQ technology to power their solutions across multiple delivery models (on-premises, off-premises or hybrid), giving them more choice in how to deploy the solutions that will drive value for their business.

Learn more about our award-winning software solutions at: www.netiq.com

Worldwide Headquarters
515 Post Oak Blvd, Suite 1200
Houston, Texas 77027 USA
+1 713 548 1700
888 323 6768
info@netiq.com
www.netiq.com
www.netiq.com/communities/

For a complete list of our offices in North America, Europe, the Middle East, Africa, Asia-Pacific and Latin America, please visit: www.netiq.com/contacts