THINEX
MOBILE OTP

Founded in 1997 by Professor K.Y. Lam, PrivyLink is geared to meet the strong industrial demands for high-assurance delivery channels in secure electronic transactions and information exchange. We have established ourselves as the key innovator of strong security solutions. Our products offer adaptive end-to-end security protection for applications and data exchanged over fixed networks and mobile channels. In addition, we have been engaged by reputable organizations to provide consulting services, security system design and review. Our clients include government agencies, financial institutions and MNCs.
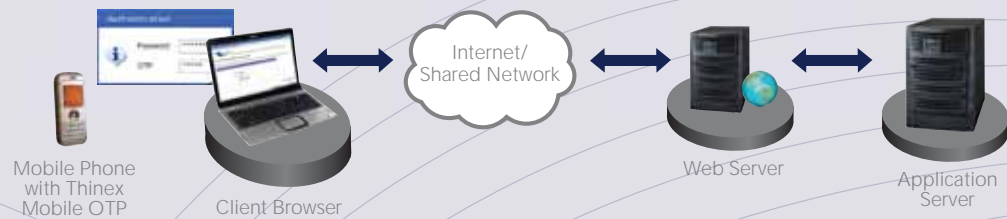
THINEX
MOBILE OTP

One-time-password generators embedded in mobile devices

Thinex Mobile OTP is an innovative one-time-password solution to the increasing call for stronger authentication requirement of a vast variety of web services, online applications, access control to private networks and systems. Thinex Mobile OTP are hardware-based OTP generators suitable for use with virtually all models of GSM-compliant cellular phones and mobile devices.

For more information, please visit our website at http://www.privylink.com/ or contact us by email: sales@privylink.com.sg

PrivyLink

Multi-Factor Authentication

Mobile Phone with Thinex Mobile OTP — Client Browser — Internet/ Shared Network — Web Server — Application Server

In a multi-factor authentication system, more than a PIN or personal password is required for identity verification. A user requesting for service or access right may produce an additional one-time-password shared only between the user and the service provider. Thinex Mobile OTP embedded in a mobile phone generates the secret OTPs necessary for successful authentication by the corresponding application servers.
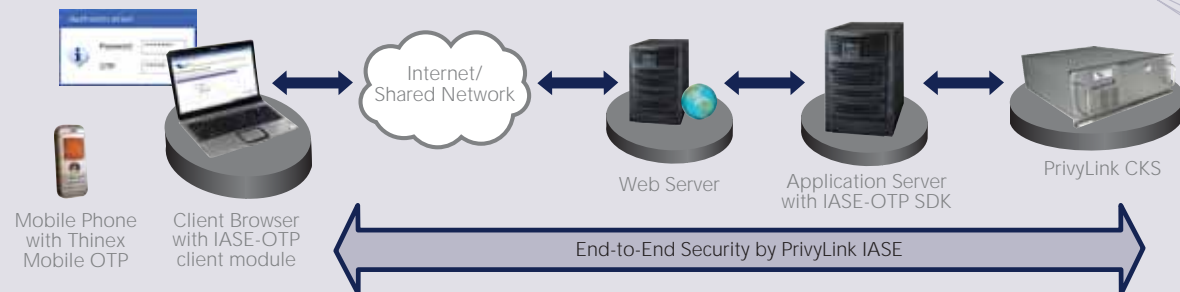
In the financial industry, more and more banks and payment operators across the world are exploring multi-factor authentication. This is mainly driven by regulatory requirements and increasing customer concerns over online security. For other service providers and network administrators, implementation of the right multi-factor authentication strategy results in a drastic reduction in the incidence of frauds and related financial losses.

Thinex Mobile OTP for End Users

Thinex Mobile is IETF standard compliant OTP generator. It derives secret random codes that are shared by the users and their service providers. The generated passwords are valid for a single login or authentication session. Use of one-time-passwords complements PIN-only systems and it has been recognized as an effective means against Trojan-horse type of security attacks.

Thinex Mobile cards are configured as thin extension of the SIM (subscriber identity module) cards commonly used in mobile phones or cellular devices. Thinex cards can easily be snapped on to users' SIM to provide value-added applications. They are hardware-based code generators that work seamlessly with cellular devices compliant with the widely supported GSM STK / 3G USAT standards.

End-to-End Security Solution

Mobile Phone with Thinex Mobile OTP — Client Browser with IASE-OTP client module — Internet/ Shared Network — Web Server — Application Server with IASE-OTP SDK — PrivyLink CKS

End-to-End Security by PrivyLink IASE

IETF-RFC-4226 specifies the use of secure channel for all OTP communications. PrivyLink's IASE and CKS products enable enterprises and service providers to meet this requirement, as they provide end-to-end security from users' web browsers all the way to the application servers. Please contact us for further information and consultation.

Hassle-Free Features

Thinex cards add OTP functionality and other value-added applications to ordinary 2G / 3G GSM-compliant cellular phones. When prompted for an OTP in a typical online banking or VPN login session, the user simply opens the Thinex application menu in his mobile phone and selects the appropriate option (i.e. OTP Generator). The phone would then display the one-time code generated by the attached Thinex card. This code uniquely identifies the user to the corresponding bank or VPN application server for the current logon session.

Thinex Mobile cards offer great advantages to the end users over conventional standalone OTP devices:

- It is less likely for a user to misplace or forget to bring his Thinex card along as it is an integral part of the user's mobile phone
- Thinex cards are attached to SIM cards, as such, they do not take up additional physical space. In contrast, standalone OTP devices are bulky as they require integrated display screens and battery cells
- Thinex cards do not require costly and inconvenient battery replacement

In addition, Thinex does not require any download or installation of client software on mobile phones and it offers great security and flexibility to service providers:

- Independent implementation and distribution of OTP and other value-added services by way of SIM Toolkit applications on Thinex
- Applications stored on Thinex can be administered and updated over the air
- Thinex cards are in-device OTP generators, thus they do not experience any delivery delay encountered by SMS based OTP systems

Thinex Mobile OTP's hassle-free features surpass end users' expectation. More importantly, they are compatible with virtually all GSM-compliant mobile phones and SIM / 3G USIM.