

+ Aladdin eToken and Cisco ISR Solution

The Challenge

As the network becomes the backbone of enabling value added critical business applications, organizations seek to provide round-the-clock operations in a secure, scalable, and cost-effective manner. When updating the network infrastructure, particularly at remote locations and for telecommute employees, it is critical that companies deploy solutions that protect sensitive customer data and corporate resources while enabling continuous business compliant operations.

The Solution

Aladdin and Cisco have teamed up to enable a unique offering of a secure, zero-touch deployment model for Cisco Integrated Services Router (ISR) series at customer locations.

The Cisco ISRs are the first routers in the industry featuring USB ports. The Cisco IOS® Software-level integration of Aladdin eToken drivers enables service providers and customers with simple, convenient, and secure provisioning solution for router configurations and secure deployment. At the customer site, the router's configuration file can be uploaded directly to the router upon attaching eToken to the router USB port. In addition, Aladdin eToken NG-Flash device enables to store Cisco IOS images and load them to the ISR for update services.

Cisco has embedded the eToken driver into the IOS software to support eToken USB smartcard and flash memory technology for secure provisioning. For organizations with remote locations, the Aladdin eToken and Cisco ISR solution provides a simple, convenient, and secure near Zero Touch provisioning of router configurations.



Solution Benefits

eToken provides a secure method to distribute ISR configuration files and IOS images, which offers:

- Simplified network management, reduced capital and operational costs, and protects network investment by strategically turning on new services as needed.
- Secure, near Zero Touch deployment: end users can boot up from the eToken device that securely stores the configuration file.
- Mobile storage of IOS images: on-site network technician can load multiple whole IOS images from eToken to the ISR.
- Portable credentials storage for IP-Sec VPN root Keys: eToken provides off-platform generation and secure storage of VPN credentials.
- Secure access to the network and routers: a PIN controls the access to load the config-file.
- Substantial cost reduction for routers handling - routers are shipped "pre-loaded" to customers from service provider partners, eliminating the need for on-site manual configuration.
- Reduced shipping cost – no need to ship router to the staging operation center.
- Timely implementation, support and updates - configuration and IOS images can be directly reloaded to the router on the customer site.
- Simple eToken configuration - using Token Management System (TMS) or IOS CLI commands.

Solution Features

Aladdin eToken

- On board security algorithms 1042/2048 bit, 3DES, SHA1, SHA256;
- Security certifications of FIPS 140-1 2&3; Common Criteria EAL5/EAL5+
- Stores the ISR config-file on its smartcard chip
- Stores the IOS images on the flash partition
- Protects config-file and IOS images with a PIN, which can be customized
- Stores VPN credentials on smartcard chip
- Loads keys to router when eToken is plugged in the USB port, and removes key when eToken is removed
- Storage area is 64K for the smartcard and up to 1GB for the flash memory partition

Aladdin eToken Management System (TMS)

- Enables loading the config-file to eToken smartcard chip for encrypted storage
- Assigns unique PIN for eToken per specific ISR
- Loads VPN key on board eToken
- Deploys, manages and tracks eToken devices per location
- Provides native support for the existing organizational user repository

Cisco ISR

- ISR provides a secure platform for data, voice, video, and wireless networking services
- Cisco IOS 12.3(14)T (K9 feature-set) and later version
- Router goes live after loading the config-file from eToken
- Supports USB flash file system image management, digital certificate storage, and secure credentials
- Router establishes IP-Sec VPN tunnel using the VPN keys from eToken
- When eToken is removed from the router, the VPN tunnel comes down after a configurable timeout

Cisco SDM and Config-Express Tools

- Cisco SDM is a Web-based device management to simplify router and security configuration through smart wizards
- Enables security Auditing, performance monitoring, troubleshooting and recovery features
- Cisco Configuration Express streamlines order fulfillment processes to facilitate cost-effective delivery of customized routers
- Config Express integrates with enterprise resource planning (ERP) systems – for order fulfillment cost reduction

How it works

The secure provisioning and Zero-Touch model is a straightforward process which is designed to streamline the deployment and reduce the costs of shipment and on-site support:

Step 1: The customer or SP orders routers from Cisco, or a channel partner. These can be shipped directly or to a remote location.

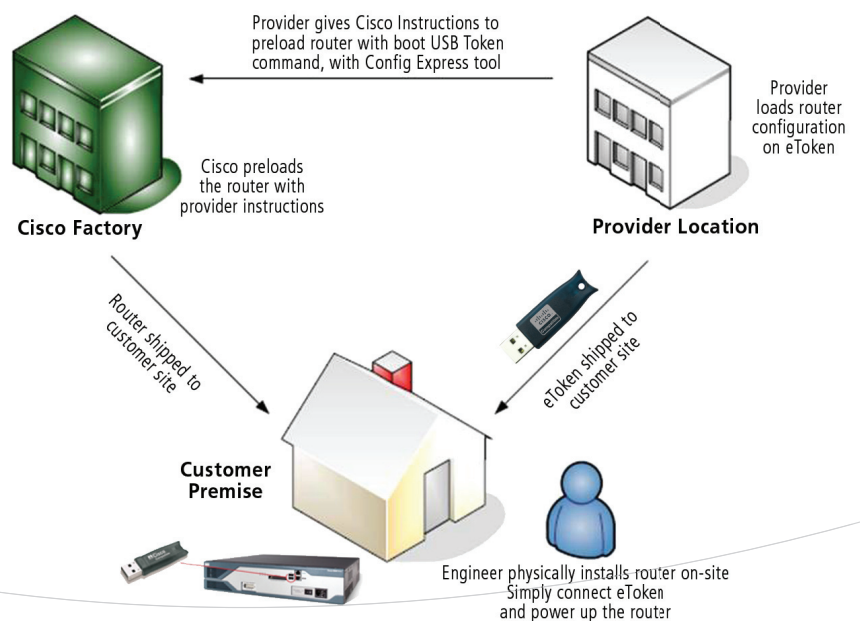
Step 2: The customer or SP orders eToken from Cisco or Aladdin and orders the TMS from Aladdin.

Step 3: At the staging center, the SP or customer IT admin staff loads the configuration file and IOS image into the eToken device with a custom PIN and a command for auto-load.

Step 4: The eToken is shipped to the customer site, where the router was shipped directly from manufacturing.

Step 5: On site, a technician inserts eToken to the USB port of the router using a manual or automatic method.

Step 6: The PIN on the eToken is unlocked and the router retrieves the configuration file; the router goes live for a near Zero Touch deployment.



Solution Components

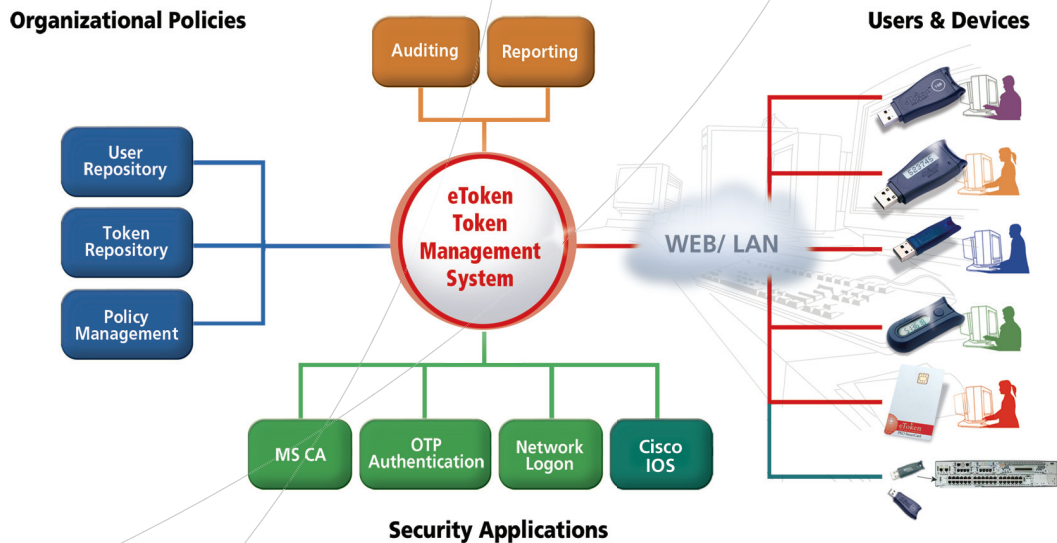
The eToken for secure, zero touch deployment of Cisco ISR includes the following components:

Hardware Platforms	Software
<ul style="list-style-type: none"> Integrated Services Routers (ISRs) <ul style="list-style-type: none"> 1800, 2800, 3800 series, 871, 880, and 890. 7200 series Aladdin eToken - a USB-based smart card device: <ul style="list-style-type: none"> eToken PRO 32K (4.20B), eToken PRO 64K (4.20) eToken NG-Flash 512K and 1GB 	<ul style="list-style-type: none"> Cisco IOS Software release 12.3(14)T and above Cisco Configuration Express Cisco Security Device Management (SDM) Aladdin Token Management Systems (TMS) Aladdin TMS Connector for Cisco IOS

eToken Token Management System

The Aladdin Token Management System (TMS™) is a robust management system that enables the deployment, provisioning, and maintenance of all eToken devices, including security tokens, smart cards, and ID badges within an organization. It supports a comprehensive range of security applications, such as network logon, VPN, web access, one-time password authentication, secure e-mail, and data encryption.

Aladdin TMS enables the secure and efficient loading of a router configuration file to the eToken secure smart card section, encrypting it on the device. In addition, with TMS, the specific eToken PIN can be set and re-set based on the customer security policy. Aladdin has developed a specific connector to the TMS that enables administrators to load a configuration file onto eToken.



When provisioning Cisco routers, TMS imports a generated configuration file for a specific router in a customer location. Aladdin TMS can associate this imported router configuration to an eToken device assigned to the router and upload the configuration to the token. The eToken is then sent to the customer for fast and secure configuration upload. By using the TMS, customers can track the eToken locations with the specific router Config-file and IOS images, as well as assign and change the dedicated PIN.

Customers and service provider partners can order Aladdin TMS directly from Aladdin at <http://www.aladdin.com/etoken/tms.aspx>. For information contact your local Aladdin and Cisco representative.

About Cisco ISR

Built on a foundation of comprehensive routing and switching management capabilities, Cisco Integrated Services Routers can help maximize the power of the network with innovative integrated switching and high-availability networking solutions that:

- Provide fewer points of management for the branch
- Reduce total ownership costs
- Facilitate resilient networks that store, protect, and deliver business-critical data



For more information on Cisco ISR, please visit <http://www.cisco.com/go/isr>

About Aladdin eToken

The eToken set of world leading security solutions that provide a robust and flexible framework for integration with many of today's leading security solutions, enabling strong authentication and password management. eToken provides secure network logon, secure VPN, web sign on (WSO), single sign on (SSO), secure email, secure provisioning of router configurations, and numerous other applications. eToken USB and traditional smart card form factors are available with physical access (RFID) capabilities and one time password (OTP) technology.



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