£ $ € ¥

DA73F1559FF915D431

Tokens

Smart Cards

EMV Authentication

PKI

Certificates

Encrypted Passwords

safe SIGN

➔ SafeSign®

**End-to-End Security
Endless Possibilities**

- **Single enterprise-wide architecture for identity management and authentication**
- **Integrated solution for smart cards, tokens, PKI & EMV Authentication**
- **Genuinely new approach delivering flexible and dependable trust**
- **Making security an enabler for e-business**

www.thales-esecurity.com

THALES

Advanced Authentication in the Digital World

Strong authentication of users and transactions is critical in the provision of any secure e-business solution.

Password protection, even though widely accepted and used, is a weak method of authenticating users onto online services. Passwords can be stolen, are subject to interception and eavesdropping and even encrypted passwords are not always safe from replay attacks. Users can be particularly poor at remembering passwords and as a result, write them down, use the same passwords for many applications and don't always change them as often as required. To reduce the security risk created by the use of password, stronger authentication methods have been developed to provide businesses with the correct level of security.

Since the emergence of the Internet, building a successful e-business service has become vital in managing profitable business operations. Proving the identities of the participants involved in a transaction, and ensuring data cannot be read or modified by entities without proper authorisation, is essential in safeguarding e-business transactions.

SafeSign provides an advanced authentication solution able to address all of your security concerns; establishing trust with your customers and enhancing both internal and external relationships. The SafeSign end-to-end architecture makes security a real business enabler, delivering genuine Return on Investment.

SafeSign is an identity management, user authentication and transaction security solution that enables you to securely authenticate user identities and digitally sign business transactions. Utilising the latest web technology, SafeSign is user friendly and easy to configure and manage. Based on international standards for e-business and security, SafeSign removes the need for proprietary systems and enables you to meet the highest levels of security.

Created to offer multi-channel advanced authentication for secure applications, SafeSign can be used by many applications in different parts of the business, supporting a wide range of digital identities, including the SafeSign Personal Security Module. It is unique in providing support for multiple authentication schemes within a single application – adding multiple layers of security to your existing authentication operations and transaction processing with minimum integration effort.

Whether you are looking for security for your Internet applications, to authenticate your remote users or protect transactions in your e-Commerce solutions, SafeSign will provide you with access to all the security you need.
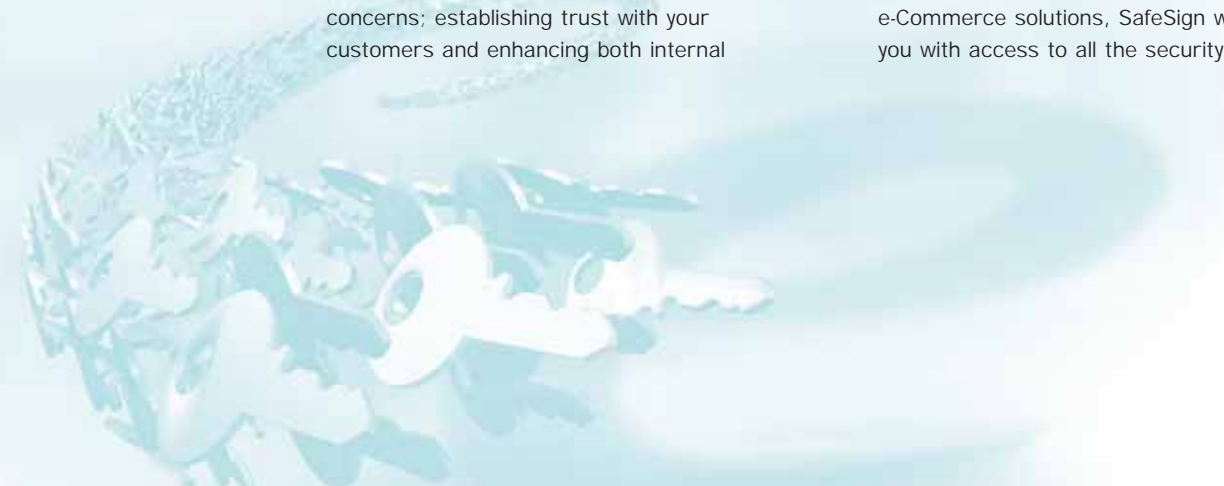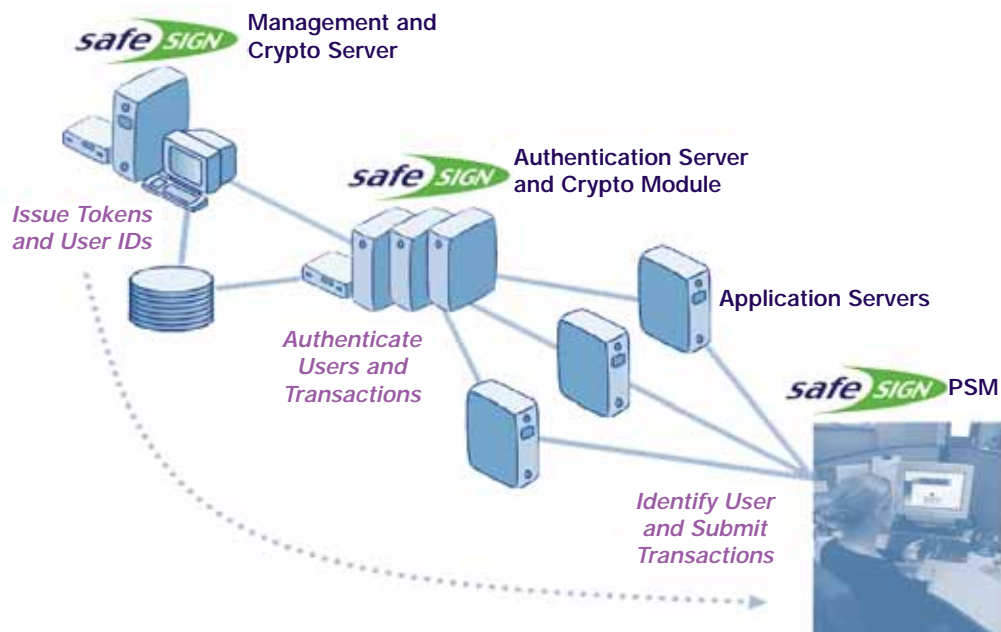
The SafeSign Architecture

The SafeSign family consists of three separate components all designed to be interoperable with your existing infrastructure. This provides a complete solution that delivers the most comprehensive security available, together with the consistent experience and service level that your customers demand. Each component can also be integrated into your middle office as a standalone solution.

The SafeSign Authentication Server is the central component in the SafeSign architecture providing the capability to achieve strong user authentication as well as providing all the security functions necessary for secure e-business transactions. It allows user identities and transaction data to be authenticated centrally supporting multiple authentication methods and devices across multiple applications.

The SafeSign Management Server offers a card and digital identity management system that unites users and tokens, allowing issuance, management and maintenance of digital identities. It is a web-based system which enables you to define your own business rules and set your own security policies. Providing a workflow driven interface, tasks are presented as a step-by-step process making it easy to use and manage.

The SafeSign Crypto Module is the hardware security module delivering optimised cryptographic functions specific to the needs of both the SafeSign Authentication and Management Servers. It offers high security, high availability and high performance to the entire SafeSign architecture accommodating all key management requirements.

safe SIGN **Management and Crypto Server**

Issue Tokens and User IDs

safe SIGN **Authentication Server and Crypto Module**

Authenticate Users and Transactions

Application Servers

safe SIGN PSM

Identify User and Submit Transactions

Key Features

Advanced Authentication

→ Authenticate users according to your specified security policy

→ Support multiple authentication methods across your entire business

→ Consolidate all authentication requirements for your applications on a single platform, maximising Return on Investment

→ Support SafeSign Personal Security Module or third party technologies without modifying the core software

Authentication Methods

→ Encrypted Passwords

→ Handheld Tokens (including support for SafeSign Personal Security Module)

→ EMV Authentication

→ Smart cards

→ PKI cards, soft certificates or USB tokens

→ Generic Triple DES based tokens

Identity and Token Management

→ Enrol users from multiple sources, such as databases or Directory services

→ Personalise and generate identity tokens according to your business requirements

→ Interface to your existing security infrastructure, such as Certification Authorities

→ Manage users throughout their life cycle - update and revoke smart cards, tokens and other digital credentials

High Security

→ Ensure personnel have been strongly authenticated to gain access to the system and to perform critical security functions

→ Use a certified tamper resistant hardware security module enabling secure management of all your key processes and digital credentials

→ Seamless integration of all the SafeSign components ensuring maximum security of keys and data

Key Management

→ Generate keys and certificate requests for your choice of token

→ Securely manage and store keys and perform the cryptographic operations necessary for delivering your choice of security service

→ Provide the highest level of security ensuring keys and digital credentials are transferred according to the best key management practices

PKI technology

→ Define a trust hierarchy based on public-key certificates and digital signature services

→ Digitally sign transactions ensuring strong authentication of the sender

→ Verify and authenticate the validity of the digital signature across multiple channels, providing evidence that the data has not been altered in transmission

Audit Trails

→ Monitor and track your transaction history to ensure the transaction has occurred, who made that transaction and whether the data has been subsequently altered

→ Maintain a legally enforceable tamper evident audit report identifying each stage of the transaction process and the users involved in each task

SafeSign Benefits

Scalable and Flexible

SafeSign enables you to quickly expand your security platform to increase service performance, accommodating changing business requirements.

Uniform Solution

The SafeSign family provides a consistent unified approach for all your applications and business units making it easy to implement, manage and maintain.

Easy Integration

The SafeSign infrastructure provides standard interfaces making it easy to integrate into your middle office environment. All the SafeSign components are designed to work seamlessly with each other.

Cost Savings

By keeping all authentication, issuance and management centralised, your infrastructure costs will inevitably be reduced compared with operating multiple security solutions.

Improved Return on Investment

Implementing a single security solution across multiple applications and for different parts of the business will reduce your overall development costs increasing your Return on Investment.

Improvements in Workflow Efficiency

SafeSign's user friendly interfaces improve productivity by enabling users to spend more time at their specified tasks as opposed to operating security systems on a complex security infrastructure.

Risk Management

Dramatically reduce the risk of unauthorised access and fraud attempts by ensuring you are aware of who is accessing your system.

Expandable

The SafeSign architecture provides the assurance that your system can be expanded to accommodate additional authentication methods, without the need to integrate and invest in other authentication or management systems. This provides the flexibility to embrace new technologies as they emerge.

End-To-End Security, Endless Possibilities

SafeSign adds up to a complete, flexible and dependable trust model for today's and tomorrow's e-business world. It offers a solution that grows organically with your changing business environment and seamlessly embraces new transaction technologies and channels. SafeSign provides a manageable and scalable solution that is interoperable with your existing infrastructure and is user-friendly for users and system managers alike.

End-to-end security for your business –
Endless possibilities for your customers.

About Thales

Thales is an established and profitable world leader in the supply of cryptographic security products and solutions used to protect a range of critical information infrastructures. Thales is one of the top five businesses in the world of security with many of the world's banks, governments and blue chip companies as customers, spread around the world. With worldwide offices and channels dedicated to e-Security in more than 80 countries, Thales offers its customer-base a single reference point for security that is compatible with the widest implementations and the most complicated requirements.

Thales has more than 20-years experience in securing global financial and banking systems, and is the world's foremost authority on safeguarding transactions from end-to-end.

Thales' security solutions protect transactions and user identities throughout their entire lifecycle, reaching all the way from the back office, through the middle office, to the front office.

EUROPE, MIDDLE EAST, AFRICA
THALES e-SECURITY LTD.
Meadow View House
Crendon Industrial Estate
Long Crendon, Aylesbury
Buckinghamshire HP18 9EQ, UK
Tel: +44 (0)1844 201800
Fax: +44 (0)1844 208550
e-mail: emea.sales@thales-esecurity.com

AMERICAS
THALES e-SECURITY, INC.
2200 N. Commerce Parkway
Suite 200
Weston, Florida 33326, USA
Tel: +1 888 744 4976
or: +1 954 888 6200
Fax: +1 954 888 6211
e-mail: sales@thalesesec.com

ASIA PACIFIC
THALES e-SECURITY (ASIA) LTD.
Asia Pacific
Units 2205-06, 22/F Vicwood Plaza
199 Des Voeux Road
Central, Hong Kong, PRC
Tel: +852 2815 8633
Fax: +852 2815 8141
e-mail: asia.sales@thales-security.com

Certificate no. EMS 73838   Certificate no. FS69836