



Partner Use Case

PKI USB token authentication for Industrie 4.0

The certificate based ePass Public Key Infrastructure (PKI) USB tokens enable users to secure virtual communications and transactions with advanced digital signature and data encryption features, mainly for intellectual property protection and authentication in critical industrial installations and upgrades functionality.



Product

SLE 78



Use case

Application context and security requirement

Industrie 4.0 applications, secure communication, authentication in critical installations and upgrades functionality is becoming increasingly important. Without this security, the industrial automation and productivity will be easily attacked, and result in potential business losses.

Such kind of security solution needs a wide range of platform support, powerful self-contained features, and task specific specialization. That means it should be suited for large scale deployment and can afford highly secure algorithms.

Challenge

- › Smart factories need to be stable and beneficial
- › Know-how needs to be secured successfully
- › Manufacturing tools are linked together internally and externally. Therefore they need to be protected from manipulation
- › The smart factory needs to be able to control complexity and to be robust against dysfunctions

Implementation

Easy to implement in Industrie 4.0 applications, the ePass PKI USB Token features 'Plug & Play' access with onboard middleware compatible with Window and Linux operating systems and a full speed USB port, without additional hardware or software investments. Smaller than your thumb and weighing less than a coin, ePass PKI USB Token is a secure solution to be used within Industrie 4.0 applications.

User benefits

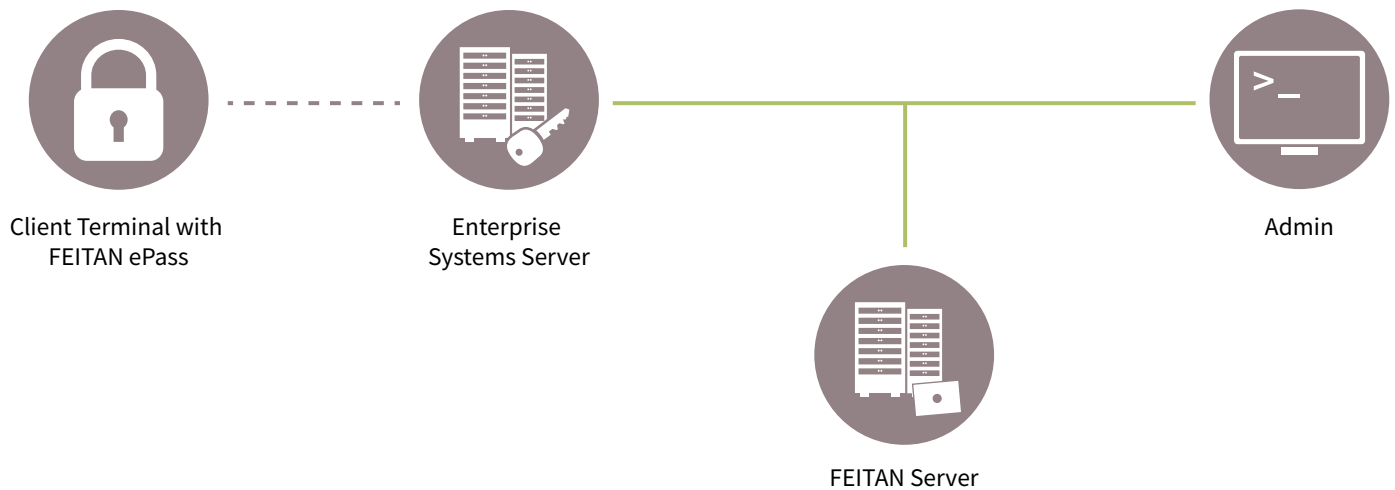
- › A 'Plug & Play' device that delivers strong security and practical usability
- › A flexible solution for Industrie 4.0 projects wide range introduction and upgrade
- › An all-inclusive solution effective in cost, deployment and maintenance

Solution

Know-how, intellectual property, product characteristics and manufacturing processes must be secured. FEITIAN ePass PKI USB Token is a complete 'Plug & Play' solution. The device can hold all necessary software programs, such as middleware.

Upon inserting the token to the host computer, the software can be installed automatically. No extra storage, media or internet connection is required. This effectively reduces dependency on a host computer working environment, prevents fraud attacks and is highly convenient for end users. It supports onboard RSA2048, AES, SHA-1, SHA-2 authentication algorithms, and boasts the capability to store and protect digital certificates, which improve accountability and system security of Industrie 4.0 network.

The smart factory masters the complexity of intelligent systems, increases the efficiency in the production and is robust against disruptions.



Main benefits of the Infineon product

- > Latest technologies in the industry
- > Infineon's [SLE 78](#) is recognized as a competitive product to bring security solutions and business value to end customers

Partner

Partners from the Infineon Security Partner Network help you secure your devices and applications: understand which threats can undermine your business, propose solutions that will protect your business, build and implement such security solutions and, when relevant manage their operation. They have been selected by Infineon on the basis of their system security competence and ability to design and deliver strong and trustworthy security solutions. Their activities are diverse and include security consulting, security solution provision, electronic design, systems integration and trust services management. For some, offers are off-the-shelf; while for others, offers are custom-built.

Feitian Technologies

FEITIAN Technologies is one of the global leaders in smart card and embedded security solution providers. Since its foundation in 1998, FEITIAN has focused on the innovation and development of the intelligent authentication industry. FEITIAN has grown to be one of the leading intelligent authentication and software protection suppliers in the world.

FEITIAN headquarters in Beijing, has more than 800+ employees and more than RMB 1 billion sales revenue in 2014. With branch offices in Guangzhou, Shanghai, Chengdu, Wuhan and Shenzhen, FEITIAN is working with over 50 resellers around the world, providing hardware-based embedded security solutions to customers from Asia, Europe, the Americas, Australia, the Middle East and Africa. So far, FEITIAN has provided high-quality products and services for more than 6,000 customers and 180 banks all over the world. Each year FEITIAN produce over 90 million authentication devices for customers around the world.

Feitian's contribution to the Infineon Security Partner Network

FEITIAN has mature R&D capability covering embedded operating systems, authentication technology, cloud platform and encryption algorithm, and also has established strategic partnership with China National Information Technology Security Research Center, China UnionPay and other third-parties.

FEITIAN and Infineon are cooperating to build hardware-based security solutions in the embedded security market. The partnership between FEITIAN and Infineon will bring win-win value-added service to end customers. For example, FEITIAN is approaching V2V (Vehicle-to-Vehicle) applications. The solution could bring hardware-based security solution by integrating Infineon [SLI 97 V2V](#) security chip and FEITIAN self-developed operating system, and will support all relevant crypto schemes and is targeted for Common Criteria EAL 5+ High certification, making it a perfect solution for secure in-Car connectivity.

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Additional information

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