Dual Choices, Balancing Present and Future: A Smart Choice for Code Signing Solution

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In today's world, where software supply chain security is increasingly becoming a core issue, every developer and manager faces a critical choice: how to choose a code signing solution? Should they adhere to the time-tested traditional hardware security model, or embrace the efficient and agile future of cloud signing? This seemingly difficult choice now has a satisfactory answer. ZoTrus Technology's dual-track code signing solution — **a local UKEY certificate** and **code signing cloud service** — cleverly balances current reliability needs with future development trends.

1. Localization of Traditional Hard Certificates: China made UKey Solution

For many software companies, especially those with strict internal control requirements for security and compliance, "private keys must not leave the hardware" is an ironclad rule that must be adhered to, and it is also a requirement of international standards. While traditional hardware certificates (USB Keys) are secure, their reliance on international logistics and long waiting periods have long been unresolved.

ZoTrus Technology's China made UKEY solution is a precise optimization of this traditional model:

- **Turning "distant water" into "immediate thirst":** Through tight cooperation with CAs, ZoTrus Technology has enabled the use of China made compliant hardware UKey. Users no longer need to endure 10-15 days of international shipping and high shipping costs from US.

They can quickly obtain a pre-loaded security hardware certificate via domestic express delivery within 24 hours. This not only significantly improves the efficiency of initial deployment but also eliminates the need to replace the UKey for future certificate renewals, ensuring the UKey hardware remains usable indefinitely.

- **Retaining complete control**: The private key is generated within the UKEY and never leaves the device; all signing operations are performed locally on the hardware. Users enjoy complete physical control over their secure assets, perfectly aligning with the traditional security paradigm of industries such as finance and government, which have extremely high requirements for self-management.

- **Smooth transition path** : For teams with mature hardware management processes, this solution does not require changing their fundamental security concepts and work habits. It solves the most challenging "time and logistics" problem at minimal cost simply by changing the source of the hardware. Moreover, it is a complete and permanent solution that eliminates the need for new UKey.

This choice is a respect for the "**present**". It acknowledges and optimizes the core value of existing security systems, providing users who trust and require hardware-isolated security with a better, faster, and longer-lasting localized option.

2. A Revolution for the Future: Code Signing Cloud Service

If China made UKey represent an optimization of the present, then cloud-based code signing service are a paradigm shift towards the "**future**". They redefine the code signing experience, specifically designed for cloud-native teams seeking ultimate efficiency and automation.

ZoTrus code signing cloud service is reflected in:

- **Instant availability and rapid deployment**: Say goodbye to hardware. After identity verification and certificate issuance, the service is activated in seconds, achieving "code completion, signing is instantaneous", greatly accelerating the development, testing, and release cycle.

- **Unlimited count, sign as many as you want:** Overseas cloud signing services are charged

based on the number of signatures, but ZoTrus Technology, with its local cloud signing advantage, offers unlimited code signings and continues to adopt the annual fee model for hard certificate.

- **Professional and secure, simplified**: Private keys are stored in a cloud-based cryptographic machine (HSM) certified to FIPS 140-2 Level 3, offering a security level far exceeding that of most enterprise-built environments. Users no longer need to worry about the risks of lost, damaged, or mismanaged hardware UKey, entrusting professional security operations and maintenance to a professional company.

- **Born for automation, empowering DevOps**: Provides a cloud signing API based on international standards, which can be seamlessly integrated into CI/CD pipelines. Every system build can automatically complete code signing, a key step in achieving true **DevSecOps**, providing a solid security foundation for agile development and continuous delivery.

- **With forward-looking technology as a safeguard:** The cloud signing service is better protected: It incorporates built-in solutions for future technological challenges. ZoTrus Technology promises to be among the first to upgrade its cloud signing platform to support post-quantum cryptography (PQC) algorithm digital signatures free of charge, ensuring that enterprises' software supply chains can withstand future quantum computing threats, a significant advantage that traditional hardware struggles to flexibly implement.

This choice is an embrace of the "**future**". It represents the future direction of software security development: service-oriented, automated, flexible, intelligent, and post-quantum cryptography migration.

3. Intelligent Dual-Track System: Strategic Layout of ZoTrus Technology

ZoTrus Technology offers "dual options", which is not simply a matter of product stacking, but rather a well-thought-out market and customer service strategy:

- **Frictionless migration**: Allows customers to start with the most familiar hardware mode (UKey), paving the way for a natural transition to more advanced cloud service.
- **Covering all needs**: Whether it's "safe deposit box" style local security or "power plant"

style centralized service, the dual-track solution covers almost all types of customers' core needs at different stages of development, maximizing market coverage.

- **Differentiated Competition**: By combining "domestic UKey to solve logistics pain point" and "cloud service to provide automation and PQC future assurance", ZoTrus Technology has established unique advantages in both user experience and forward-looking vision, forming a strong differentiated competitive advantage.

4. Your present and future can be protected simultaneously.

In the wave of digital transformation, security and efficiency are like the two wings of a bird, neither can be dispensed with. ZoTrus dual-choice code signing solution is an outstanding practice of this concept.

- If your team values absolute physical control over secure assets, or is constrained by a strict internal compliance framework, a China made UKey hard certificate is the cornerstone for securing your "**present**".

- If you are committed to building a modern R&D system with rapid response and automated delivery, and want to prepare for the upcoming technological changes, code signing cloud services are undoubtedly a fast track to the "**future**".

More importantly, you don't need to make a difficult and irreversible choice between the two. ZoTrus Technology, through this "dual-choice" architecture, gives you the flexibility to freely select or combine them according to project needs and team stages. This is not just about two products, but also a customer success philosophy that balances reality and ideals, and stability and innovation.

Choosing ZoTrus Technology means choosing a partner who can reliably ensure security today while confidently striding towards tomorrow's efficiency. Only by operating on two parallel tracks can we achieve steady and sustainable progress. Now, make this wise choice for yourself and your team's **present** and **future**.

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