

### **Mobile PKI**

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### The Needs of Mobile PKI

- More and more people own mobile devices such as smart phones/tablet computers.
- Governments and enterprises want to extend their online services to ubiquitous mobile users.
- The question is: How can mobile users get access to PKI-enabled services?
- The quick answer is: Mobile devices need to be PKI-enabled.
- Mobile PKI will be essential in the trend toward digital convergence



# The Challenge of Mobile PKI

- There is lack of common architecture or interface among different brands of mobile devices.
  - Most mobile devices do not support external USB readers.
  - Some mobile devices have no MicroSD slot.
  - Some mobile devices have no Near Filed Communication (NFC) interface.
- How can the certificate smartcard be used on mobile phones?





#### Multiple Solutions for Mobile PKI



- Multiple Solutions
- Single SDK





#### **Software Token**

#### **APP**

PKI Middleware (Capable of handling PKCS#12)

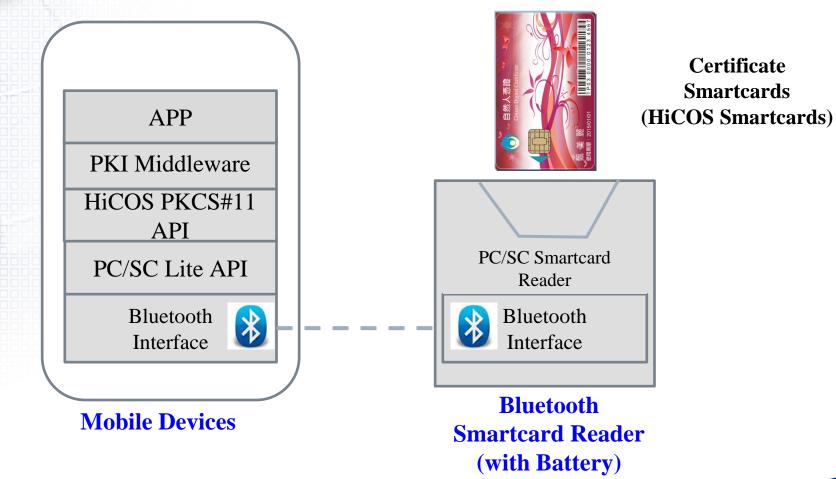
Software Token
(PKCS#12 file,
contains certificates and private keys encrypted by password)

OS for Mobile Device





#### **Bluetooth Smartcard Reader**





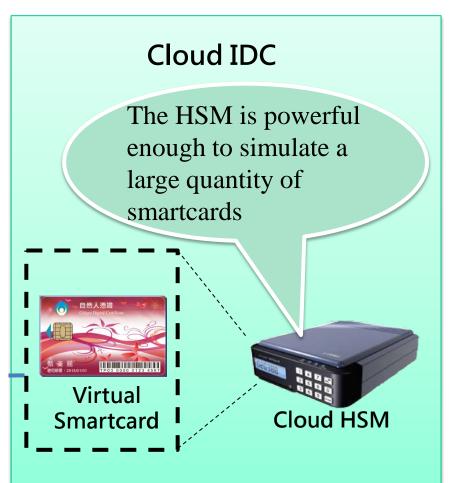
#### **Virtual Smartcard Reader**

APP
PKI Middleware
HiCOS PKCS#11
API

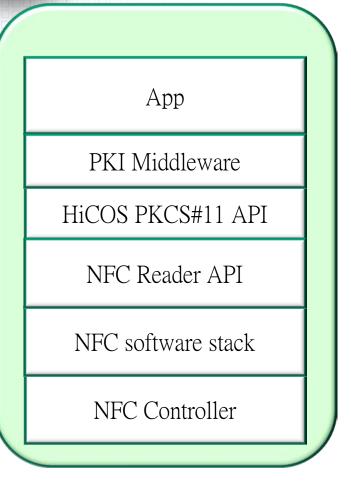
Virtual Smartcard
API

Secure connection

**Mobile Devices** 



#### **Combi Smartcard Reader**





Noe: currently, apple still not alow other vendors to use the NFC interface of iPhone 6, maybe in the future generation.



Combi Smartcard

The mobile devices are in NFC Reader Mode







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# Thank You