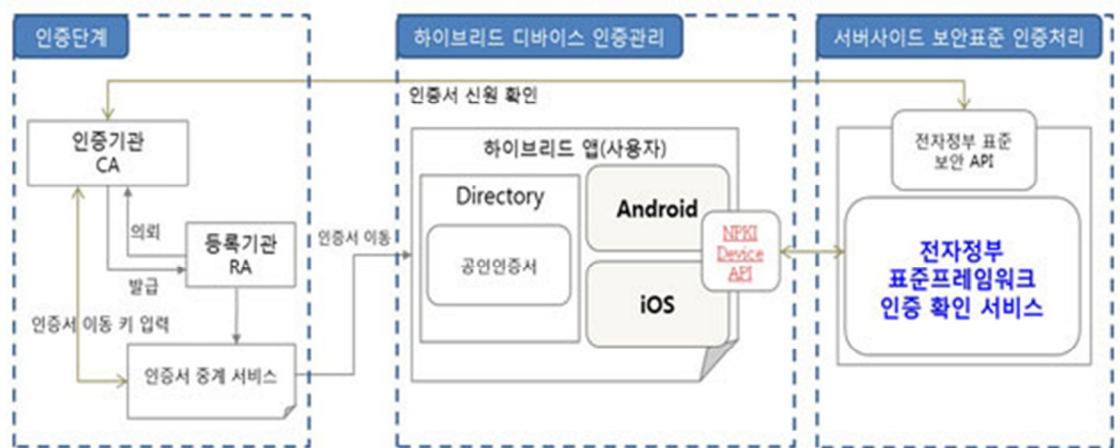


Mobile NPKI API

Outline

Mobile NPKI API meets the increasing demand for NPKI in the mobile devices from public agencies and financial institutes. Using certificates in the Hybrid Mobile Application environment, Mobile NPKI API for mobile devices supports mobile-based authentication services specific to eGovFramework.

In doing so, Mobile NPKI Authentication comprise **Authentication**, **Hybrid Device Authentication Management** and **Server Side Security Standard Authentication**.



Step	Detail	Function
Authentication Step	Authentication Institute	Issuance / Cancellation / Discardment of User's Open Key Certificate assigned to Users. Issuance of Mutual Certificate. Transfer of Open Keys of its own and superior institutes to Users.
	Registered Institute	Verify the relation between the holder of certificate and Open Key. Requests issuance of certificate to the user upon verification of identity and affiliation when applying for issuance of certificate.

Certificate Relay Service	Relay service for certificate to mobile devices
Certification management for hybrid devices	Directory information for storage and retrieval of certificates and user-related management. certificate pairs, CRL, etc.
NPKI Device API	NPKI Module for transfer, management and authorization of Mobile NPKI Certificate
Server-side security eGovFramework standard authorization	Standard eGovFramework Standard Security API for authentication

Concept

Mobile Security Authorization Module is now available in the device API runtime environment for management, signature and verification of the certificates signed. First thing you need to do for mobile certificate authentication is to transfer the mobile certificate to the mobile device using the relay service. Certificates transferred will then be signed by NPKI Module, followed by transfer of the signature to eGovFramework Standard Security API.

기능명	기능 흐름
공인 인증서를 이용한 인증서 인증	

Refer to the following for the functions provided by NPKI Module:

Function	Detail	Description
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Save Certificate to Mobile Devices	Receiving certificate number from the authentication server. Reposits and retrieves certificates.	Transfer Certificates
	Verification to install Olleh KT Certificate. Request the user certificate to Olleh KT Certi Interlocking with Olleh KT Certificate. ficate for reposition.	
Manage Certificates	Inquires the certificates list.	Inquires the certificates list and description.
	Delete Certificates	Deletes the certificates.
	Update Passwords	Updates certificate passwords.
	Verify Passwords	Verifies certificate passwords.
Sign Certificates	Electronic Signature	Performs electronic signature to return the E-signature value.
Verify Certificates	Verifies certificate validity.	Verifies certificate validity (CRL verification).

Open Sources used.

Services	Version	License
Android SDK	revision 18	Apache License 2.0
PhoneGap(cordova)	Cordova 2.9.0	MIT License
JavaScript Framework	eGovFramework User Experience (UX)	Apache License 2.0
Standard Security API (gpkiapi) V1.5.1 C++/JAVA		

Description

Source codes for NPKI Native service are available in NPKI Device API. NPKI-based development is thus feasible upon conclusion of the contract with the security module vendor.

- Establishing Android Platform

디렉토리			파일	비고	표준여부	
assets /www	css	egovframework			표준	
		mbl	cmm	*.css	모바일 실행환경 공통 css 파일	표준
			hyb	DeviceAPI.css	DeviceAPI 가이드 별 css 파일	표준
	js	egovframework			표준	
		mbl	cmm	*.js	모바일 실행환경의 공통 js 파일	표준
			hyb	DeviceAPI.js	DeviceAPI 가이드 별 js 파일	표준
				XXXXX.js	NPXI 모듈 호출을 위한 Plugin.js 파일	비표준
				index.html	DeviceAPI 가이드 UI 화면	표준
	libs			cordova.jar	폰갭 라이브러리 파일	표준
		XXXX.jar	NPXI 모듈	비표준		
		XXXXPlugin.jar	NPXI 모듈 사용을 위한 Plugin	비표준		
res				다양한 리소스를 관리하는 폴더이다.	표준	
			AndroioManiFest.xml	안드로이드 어플리케이션 환경설정 파일	표준	

- Establishing iOS Platform

디렉토리			파일	비고	표준여부	
www	css	egovframework				
		mbl	cmm	*.css	모바일 실행환경 공통 css 파일	표준
			hyb	DeviceAPI.css	DeviceAPI 가이드 별 css 파일	표준
	js	egovframework				
		mbl	cmm	*.js	모바일 실행환경의 공통 js 파일	표준
			hyb	DeviceAPI.js	DeviceAPI 가이드 별 js 파일	표준
				XXXX.js	NPKI 모듈 호출을 위한 Plugin js 파일	비표준
			index.html	DeviceAPI 가이드 UI 화면	표준	
plugin				Cordova.framework가 위치하는 폴더이다.	표준	
	Plugins		XXXX.a	NPKI 모듈 사용을 위한 Plugin 라이브러리	비표준	
			XXXX.h	NPKI 모듈 사용을 위한 헤더파일	비표준	
	Supporting Files		cordova.plist	앱과 모바일웹이 통신하기 위한 환경설정 파일	표준	
Classes	NPKI		XXXXX.a	NPKI 모듈 라이브러리	비표준	

- Distribution

Category

Description

Native Library NPKI Native Module developed by the security module vendor is not available.

PhoneGap Plugin PhoneGap Class and JavaScript are intended to help the developer use Native Library.

Device API Gui Server-side program using eGovFramework Standard Security API and Device API Guide Program do not have NPKI Native Module in it. Compilation is not supported.

Functions

Mobile NPKI Device API Guidance comprises **Certificate Inquiry, Choosing Certificate, Certificate Signature, Authorization and Authorization Log Inquiry.**

Certificate Inquiry

Choosing Certificate, Certificate Signature

Authorization Log Inquiry



- Inquires the certificate lists reposted in the mobile devices using NPPI Device API.
- Signature and authorization using the certificate selected out of the certificates list.
- Inquires the Certificate Authorization Log out of the web server application.

References

How to issue Standard Security API: <http://www.gpki.go.kr>
 Certificate Transfer Service : [Olleh KT Certificate](#)