4th Arab Forum: E-transactions Security & Public Key Infrastructure

“PKI Deployment In Kingdom of Saudi Arabia”
عبد الله القحطاني، مدير إدارة تطوير الأعمال والإعلام، والمشرف على إدارة وتطوير الأعمال والتسويق والأنشطة الإعلامية في المركز الوطني للتصديق الرقمي (NCDC). حاصل على درجة البكالوريوس في نظام المعلومات من جامعة الملك سعود.
Agenda

1. NCDC PKI EcoSystem
2. National PKI in Saudi Arabia
3. PKI Regulation in Saudi Arabia
4. NCDC Products
Glossary

- **NCDC**: National Center for Digital Certification
- **GCSP**: Government Certification Service Provider
- **CCSP**: Commercial Certification Service Provider
- **CA**: Certificate Authorization
- **PA**: Policy Administrator
- **RA**: Registration Authorization
- **PKI**: Public Key Infrastructure
- **RCA**: Root Certificate Authority
Introduction

• PKI in KSA is regulated by the Electronic Transaction Law and its bylaws.
• NCDC has implemented and is currently operating the Saudi National Root-CA and the Government CA.
• Ten (10) Government Certification Service Providers (GCSPs) have been established and are issuing certificates to their end users.
• PKI Solution, implemented by NCDC, is based on products from leading vendors including Entrust and SafeNet.
• NCDC has achieved WebTrust Certification for the second year.
• NCDC will be transparently trusted by Microsoft and included in all its products by November 2014.
NCDC PKI EcoSystem

Certificate Issuance
- Storage
  - Smart Cards
  - USB Tokens
  - Administration
- Clients
  - Browsers
  - Cryptographic Providers
- CSPs
  - Registration & Verification
  - Enrollment
  - Administration
  - OpenSSL
  - Others
  - Policy & Audit

Certificate Usage
- PKI Enablement
  - Out of the Box PKI Support
  - Custom Development
    - MS Crypto API
    - JAVA APIs
    - OpenSSL
    - PKCS#11
    - Entrust PKI Toolkits
    - Smart Card APIs
  - Advisory & Consulting
  - Research & Development
  - Training
  - NCDC provided APIs or Sample Code
  - Secure Email
  - Secure File
  - Custom Application

NCDC PKI Infrastructure and associated Services
- Regulation and Policies
- Best Practices
- Compliance
- Advisory & Consulting
- Research & Development
- Training
- NCDC provided APIs or Sample Code
National PKI in Saudi Arabia - Architecture
PKI Regulation in Saudi Arabia
PKI Regulation in Saudi Arabia - Policies

- Saudi National PKI Policy
- Saudi National Root-CA Certificate Policy
- NCDC Government CA Certificate Policy
- NCDC Cross Certification Policy
- NCDC Privacy Policy
NCDC Products

- Yesser GSN Internal Secure Site Certificate
- Secure Timestamps
- Secure Site
- Cloud Applications
- Mobile VPN / WiFi Access
- Document Signing
- Organization Signing Certificate
- Name ID Certificate
- Yesser GSN Client Authentication Certificate
- Email ID Certificate
NCDC Products (example)
Thank you