



ASEAN Single Window Authentication Requirements

Thailand Perspective

Context of ASEAN Single Window

- ASEAN Community Blue Print (2007)
 - Transform ASEAN, by 2015, into a single market and production base,
 - Highly competitive; equitable economic development, fully integrated into the global economy.
 - Free flow of goods a principal means to achieve aims of single market and production base
 - Single market for goods (and services) facilitates development of production networks;
 - Enhance ASEAN's capacity *as a global production centre / part of the global supply chain.*
 - Trade facilitation measures (e.g. ASEAN Single Window, integrating / harmonizing customs procedures), key to the free flow of goods.
 - Accelerate the ASEAN Customs Vision 2020, to 2015.

Context of ASEAN Single Window

- ASEAN Single Window (ASW) – Support AEC; Customs Vision
 - Critical in facilitating the free flow of goods,
 - promote harmonization of standards, conformance of procedures, e.g. Common Effective Preferential Tariffs (CEPT) Rules of Origin procedures.
 - Facilitate coordination / partnership amongst Customs Administrations,
 - Integration and transparency of customs procedures, sharing of customs intelligence for improved and modernized risk management,
 - Accelerate release of cargoes, reduce trade transaction costs and time
 - Enhance trade efficiency and competitiveness.
 - Facilitate ASEAN's participation in global and regional supply chains, key to the realization of the ASEAN Economic Community.

Context of ASEAN Single Window

- ASEAN Single Window
 - Integrated secured communication network environment operating in a federated manner, with no central server,
 - Where the Ten National Single Windows (NSW) of the AMS operate and integrate
 - Enable *standardized* information exchange, procedures, formalities, and *international best practices*.
- National Single Window
 - enable a single submission; synchronous processing of data and information,
 - single decision making point for customs clearance of cargo.
 - promote collaboration and partnership between the Customs Administration and other governmental agencies, economic agents and operators (e.g. importers, exporters, transport operators, express industries, customs brokers, freight forwarders, commercial banking entities and financial institutions, insurers).

ASW Pilot Component 2 – Scope & Requirements

- Scope
 - ASW Gateway Services integrated with the NSW of each of the participating AMS's, deployed within the secure environment of each NSW, and operated by the NSW
 - ASW Regional Services
 - Use of HTTP/S over the Internet through which each of the ASW Gateway Services and Regional Services exchange information.
- Requirements
 - Secure and reliable exchange of messages amongst all ASW Gateways and with their related NSW; where needed with Regional Services, characterized by:
 - Reliable Messaging / Guaranteed Delivery
 - Initiation of connections to the ASW Gateway by the NSW
 - Correct routing across national and regional domains;
 - High performance capability and Reliability
 - Message persistence pending delivery confirmation;
 - Message data integrity, authentication and authorization, payload encryption, PKI use and non-repudiation

ASW Pilot Component 2 – Scope & Requirements

- Requirements
 - Process ATIGA Form D (formerly CEPT Form D); ASEAN Customs Declaration Document (ACDD)
 - Regional Services, with its own Gateway Services includes:
 - Portal for authorized on-line changes to Reference Data, PKI Trusted Certificates, and Management Information;
 - Reference Data Service to manage the master copy of the regionally agreed reference (nomenclature) data and to disseminate the changes to all ASW Gateways;
 - Management Information System (PKI) to maintain the master copy of the trusted PKI certificate list and to disseminate changes to all ASW Gateways in the ASW network
 - Management Information Service to collect and consolidate relevant statistics and make it available to the users; also to manage the master copy of the unavailability data and disseminate changes to all in the ASW network.
 - Space for release management of the ASW as a whole.

PKI/CA Interoperability

- Problem
 - If the user in a PKI domain can trust the user in a different PKI domain
- PKI Interoperability
 - **Areas of Consideration**
 - **Technical Consideration**
 - Protocols, Data Structures, Standards and other
 - Sharing Certificates and Certificate Revocation Lists
 - **Policy and Business Relationship**
 - Existing and new Business Requirements
 - How certificate used in foreign domain will be used in local domain
 - **Legal Considerations**
 - Multi-Jurisdictional Environment
 - Responsibilities and liabilities
 - **Others**
 - Incentives
 - Funding

PKI in ASEAN Single Window

- Overview
 - ASEAN Member States (AMS) are considering to adopt Public Key Infrastructure (PKI) technology for secure data exchange via ASW Gateways.
 - Live Implementation of ASW Project : Q3 2015
- Requirements
 - Confidentiality, Integrity
 - Trust Infrastructure - Authenticity & Non-Repudiation (through use of Digital Signatures)

PKI in ASEAN Single Window

- Challenges
 - **Readiness of AMS:**
 - National Single Window
 - Legislation for Digital Signature (for recognition)
 - Certification Authority (Government Appointed), Certification Framework
 - Legislation to support ASW transactions
 - Supporting Computer Applications (National PKI Projects)
 - **Governance**
 - PKI Interoperability for Cross Border Transaction
 - Mutual Recognition Agreement(s)
 - Certificate Policy (CP) & Certificate Policy Statement (CPS) for ASW
 - Certificate Management

PKI in ASW - Thailand's Perspective

- Thailand's Requirement
 - **Authenticity of data/information being exchanged via ASW**
 - **Secured point-to-point data exchange between AMS**
 - **Valid and Enforceable data/information being exchanged via ASW**
- Thailand's Readiness
 - **National Single Window Transactions using Digital Signatures**
 - **Electronic Transaction Act for Validating and Enforcement of Digital Signatures**
 - **National Root CA governing all CAs**
 - **Legislation Framework to be enhanced to support ASW Implementation**
 - **Computer Applications already supporting Digital Certificates**

PKI in ASW – Way Forward

- Identify Requirements for All AMS
 - Data Security, Legal
- Survey AMS readiness for ASW Digital Signature Implementation
 - Assessment of current implementation at NSW level
 - Assessment of National Legislation Framework
- Implication of existing implementation (Legislation & NSW Process)
- Ensuring Legal provisions of Digital Signatures in ASW Transactions
- Mutual Recognition / Inter-Domain PKI framework of ASW Digital Signatures
 - Identify suitable trust model to enable interoperability
 - Identify desired governance structure for implementation Digital Signatures
 - Identify legal, business and operational requirements



T H A N K Y O U

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