

NYS Integrated Justice Portal - Web Services for LEA Interfaces





Background

- NYSPIN (NY Statewide Police Information Network)
- Suite of services for in-state LE and criminal justice users plus agencies nationwide
- Provides access to information on:
 - ✦ Wanted, Missing & Unidentified Persons
 - ✦ Stolen Property
 - ✦ License and Registration
 - ✦ Orders of Protection
 - ✦ Gang or Terrorist members



Background

- Phased migration from Legacy Mainframe to IJ Portal SOA
- 2009: Move of the message switch back end to service oriented architecture
- 2010: Move from dedicated standalone legacy workstations to browser based portlets
- 2012: Began the migration of LEA's Server-to-Server interfaces to web services
 - Currently these devices are directly connected to NYSP Transitional Gateways
 - Transitional Gateways translate legacy requests before submitting to the Portal



Moving Forward

- Move to Web Services critical
- Network technology supporting dedicated lines must be retired
- Cost of dedicated lines is expensive
- Transitional Gateway – well, it was meant to be “transitional”
- Insufficient resources to support legacy and the IJP at the same time
- Connectivity will be via Internet or OneNet



LEA Server-to-Server Interfaces

- CAD, RMS, MDT
- Availability is critical for Officer Safety - 24 hours x 7 days a week
- Consumer is Law Enforcement Officer, Dispatch, Records Management System
- Support for the servers varies from Agency to Agency
 - Law Enforcement
 - Public Safety
 - County IT
 - Vendor

IJP Architecture



Channels and Business Applications Client Layer

Browser

Enforcer 2K **Metros (Legacy)**

Server to Server

Presentation Layer / Transitional

IBM Websphere Portal

Transitional Websphere Integration Message Broker

IBM DataPower

Synchronous

Asynchronous

Asynchronous

Business Service Interface Layer

WebSphere Application Server

Transitional Java Wrapper (Message Driven Beans) Web Service

Enterprise Java Beans (Stateless Session Beans)

Business Services (One per business domain)

Fine Grain Business Services (Reused across coarse grain)

Service Agency Abstraction Layer Data Abstraction Layer

Business Service Layer

XML **JMS (Asynchronous)**

Integration Services Layer

WebSphere Business Integration Message Broker

Integration Bus (MQ/JMS/WebServices)

Service Agency / Data Layer

Connector DMV

Connector DTF

Connector NCIC

Connector NLETS

NWS

LOJACK

CCH, Hotfiles

ODS



The Puzzle Pieces

50+ Portal Web Services

35+ Vendors/
In-house Development

CJIS Security
Policy

140+ LEA
Interfaces



Meeting CJIS Security Policy Requirements

- CJIS Security Policy AA must be met by deadline of 9/30/2013 (CJIS Security Policy 5.1 Section 5.6.2.2.1)
- Policy applies to all NYS public safety agencies that connect directly or indirectly to NCIC (FBI)
- Within New York State all criminal justice agencies obtain CJIS information by accessing the New York State Integrated Justice Portal directly via a browser interface or indirectly via a server interface connection to NCIC



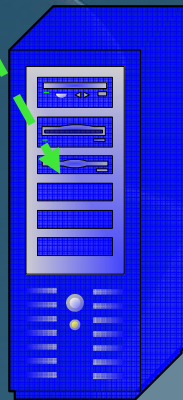
Meeting CJIS Security Policy Requirements

- Responsibility for insuring that these agencies are compliant with the all aspects of the CJIS Security Policy is the function of NYSP & DCJS
- The migration of servers to web services will satisfy the CJIS advanced authentication requirement for the connectivity between the server and IJP
- *Note: It is the responsibility for the agency that maintains the server interface to ensure that the CJIS advanced authentication requirement is satisfied from the remote client application to the server*



LEA Server Interface to IJP

Mobile Devices and/or
User Workstations



Law Enforcement Agency CAD Server
or other Remote Computer System
with Static IP

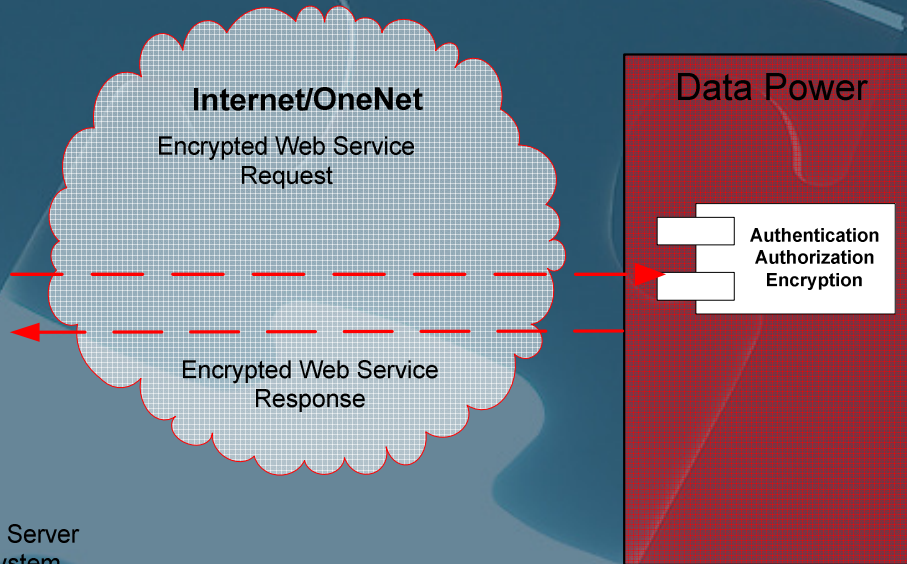
Internet/OneNet

Encrypted Web Service
Request

Encrypted Web Service
Response

Data Power

Authentication
Authorization
Encryption





Meeting CJIS Security Policy

- CSO (CJIS Systems Officer) wants *all* applications to meet or exceed the policy requirements
- NYSPIN being first to implement for web services
- Must fit the solution within the defined architecture
- Transport Level encryption used as easier to implement



Approach to Satisfy the CJIS Policy Requirements

- Advanced Authentication is based on a match between IJP LDAP userid and password assigned to the LEA server plus valid certificate
- Certificates will be issued by Certificate Authority
- Encryption must be minimum 128 bit and certified to meet FIPS 140-2 standard
- NYSP purchasing for all LEA servers

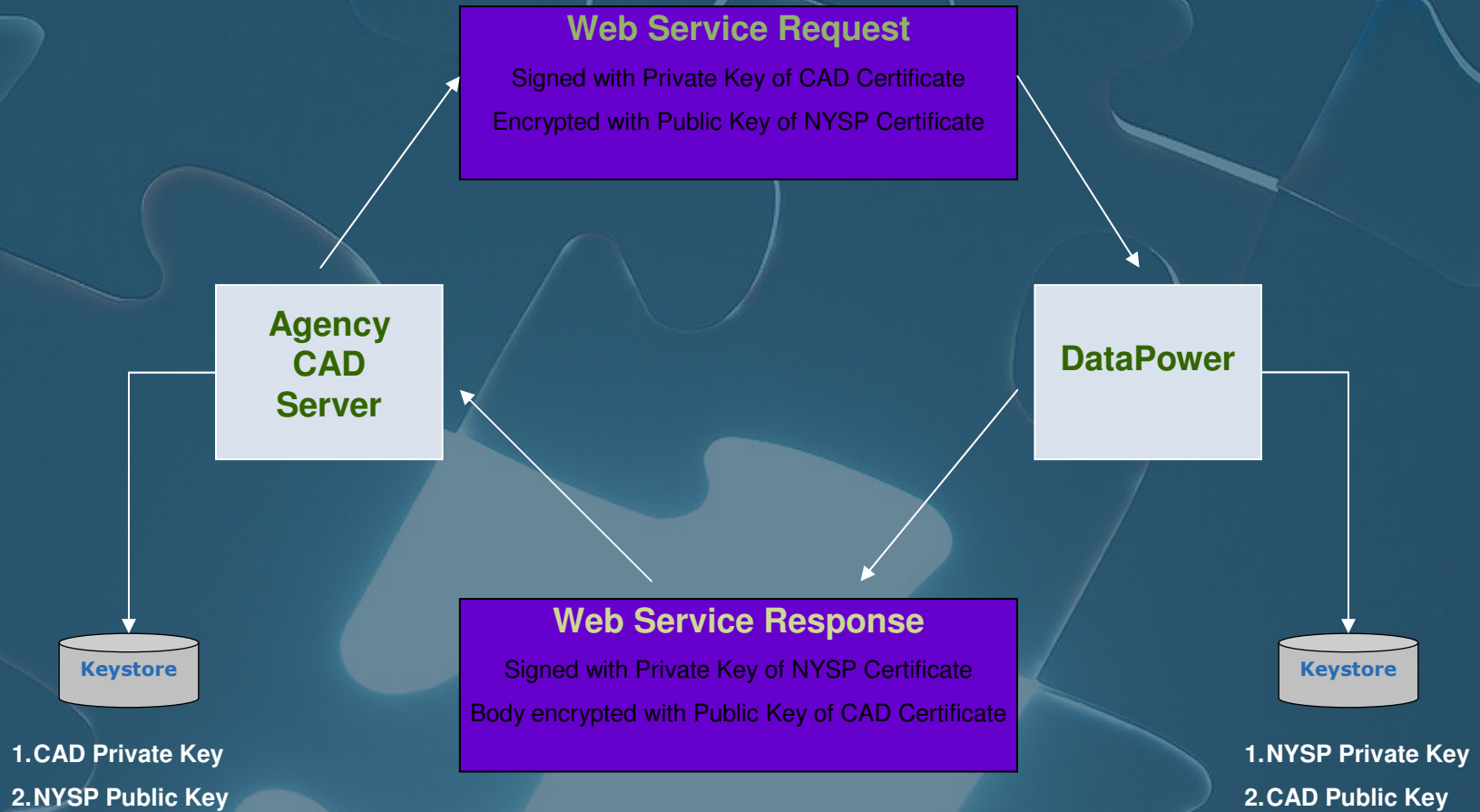


Symantec Managed PKI

- PKI addresses the multiple hop scenario which occurs on the internet and OneNet
- Trusted Source
- Covers any incident for \$250,000
- Supports multiple domains
 - NYENET.STATE.US
 - NY.GOV
- Portal Interface for Certificate/Key Management
 - Configurable by Customer
 - *Timely alerts for requests and expiration of Certs*



Managed PKI (Public Key Infrastructure)





Challenges with Certificates

- For Agencies using OneNet for connectivity, the state owns the domain and can issue the certificate without a "Domain Rights Confirmation"
- For Agencies using ISP, NYS does not own the domains
- Results in Symantec "whois" search and request to use domain for generating certificate



Domain Rights Confirmation

Dear Symantec,

I, _____,

Confirm that I am the administrative contact for the domain, *domain.name.com*, which is registered to *Domainowner*. NYS Office for Technology has the right to use, or has full control of the domain(s), *domain.name.com*.

Registrant acknowledges that it has granted Certificate Applicant the right to use the Domain in connection with its business and as a *common name in the Digital Certificate request referenced above* and any subsequent and/or additional certificates obtained by the Certificate Applicant during the validity of the above referenced certificate.



Domain Rights Confirmation

- Domain owner may not know about LEA project
- LEA personnel may not know the domain owner
- This is limited to generating certificate for use in the IJP server interface
- NYSP can *only* use for this purpose within the Managed PKI portal



Meet in the Middle

- NYSP did not want to pass the cost of the certificates to the Agencies
- Centralization of Certificate administration to prevent loss of service and ensures compliance
- Need implicit trust between LEAs, their IT support and Integrated Justice



CJIS Policy and IT Resources

- CJIS Security Policy requires all resources that have access to CJIS data to be:
 - Fingerprinted
 - Background check
 - CJIS Policy Training
- Includes Agency Resources, IT Resources and Vendors
- Next CJIS Audit is September 2013!



Contact Information

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Thank you!

