

NDIIPP – All Partner Meeting

Dec 6, 2011



California's Progress

Office of Legislative Counsel

NDIIPP Projects – Historical Statutes

2

- **Chaptered Bills (Statutes) 1849-1988 into Electronic Format**

- XML Wrapper
- CAML Format for drafting
- Public Website

NDIIPP Project – Authentication

3

- **Whitepaper – Authentication and Pricing Options for Primary Legal Material**
 - Legal Situation & Requirements
 - Basic Authentication Methods
 - Commercial Product Offerings
 - Six Typical Configurations
 - Advantages & Disadvantages
 - Costs

Legal Situation

4

- **Paper Legislative Documents**
 - State Printing Office – Official Publisher
 - Secretary of State – Archives
- **Electronic Legislative Documents**
 - OLC responsible for public access
- **Proposing to Enact UELMA**
 - OLC will become the official publisher and be responsible for authentication, access and archiving.

Requirements

5

- **Authenticity of Origin** - verification that the document is actually from the source that it claims to come from (*e.g. the State of California Office of Legislative Counsel*).
- **Document Integrity** - verification that the document has not been altered since it left its source.

What We Are Authenticating

6

- **Chaptered Bills (Statutes)**
- **Chaptered Resolutions**
- **Constitutional Amendments**
- **State Constitution**
- **State Codes**

Authentication Building Blocks

7

Hash Codes

fb4e ... a67d

Encryption



Certificates



Authority



Digital Signatures

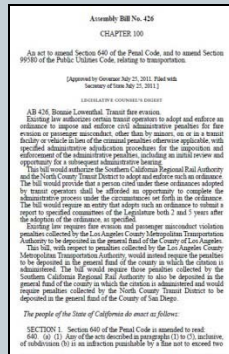


Public Key Infrastructure (PKI)



Verifying a Hash Code

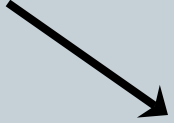
8



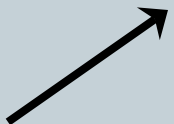
Generate Hash Code



fb4e ... a67d



Compare



fb4e ... a67d

Retrieve Hash Code



Secure Communications

Secure Server/Website



Creating a Signed Document

9

Generate Hash Code

Encrypt with Private Key

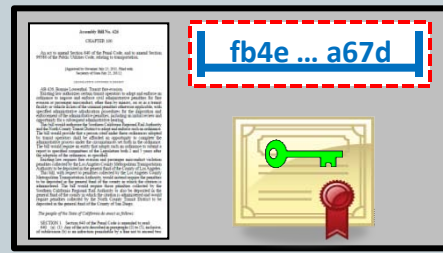
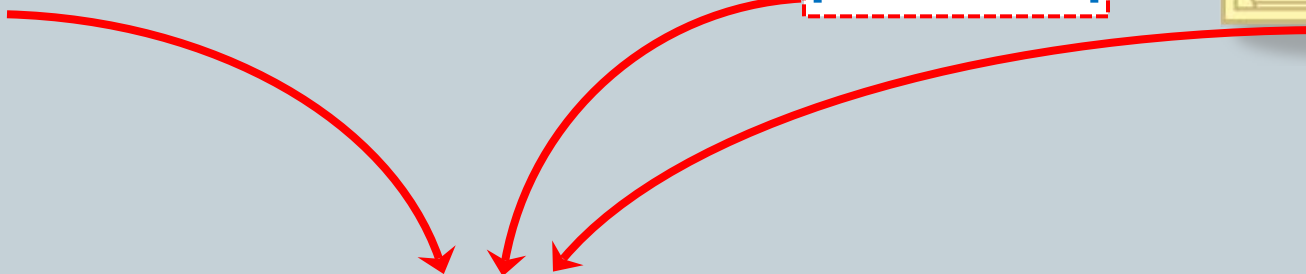
Certificate



fb4e ... a67d



fb4e ... a67d

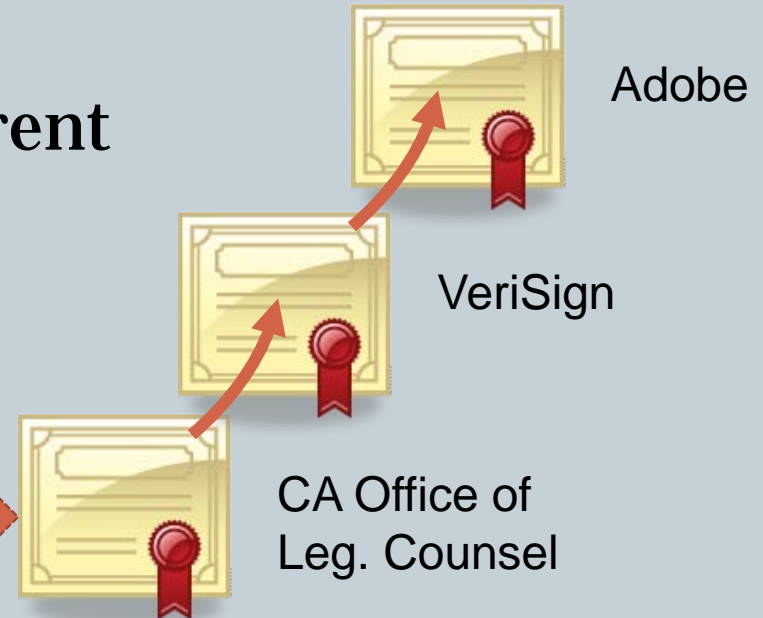
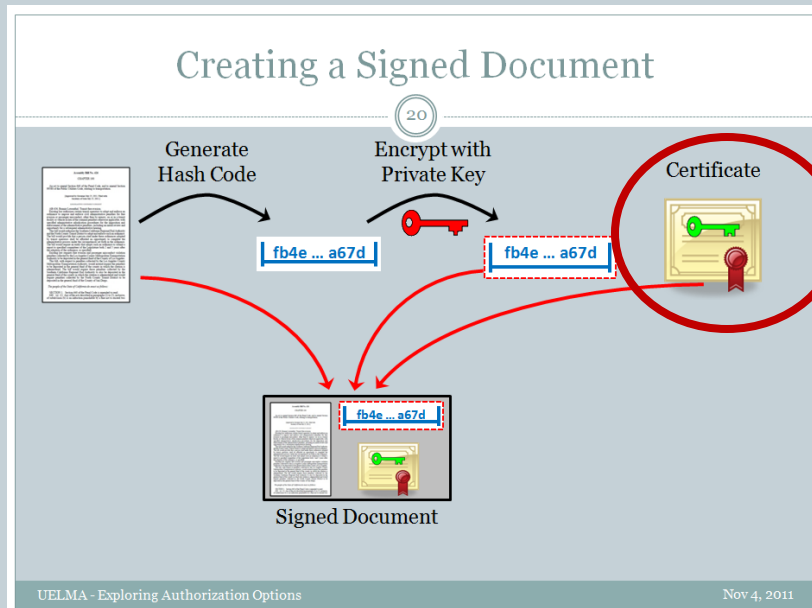


Signed Document

PKI Signed Document

10

- Same as Signed Document
- Only the Certificate is Different



Components of a Solution

11

- **File Type Considerations**
- **Certificates**
- **Signing Software**
- **Validation Software**

Six Typical Configurations

12

Sample	Security	Volume	Doc Types	Initial Cost	Annual Cost
Manual PDF	High	Low	PDF	\$1,049	\$618
PDF with iText	High	High	PDF	\$22,100	\$9,670
PDF with LiveCycle	High	High	PDF	\$170,100	\$44,620
XML with Java	Medium	High	XML	Dev. Only (Moderate)	TBD
PDF (XML, HTML)	High	High	XML, HTML, PDF	\$22,100	\$9,670
Multi-Doc Type	High	High	Any	Dev. Only (Higher)	TBD (Higher)

Next Steps

13

- **Choose and implement an authentication method**
- **Enact UELMA - Legislative Counsel the official publisher**
- **Develop an archiving solution**
- **Make additional Historical Documents available**
- **Make data available on our new public access site.**