



InterPARES 3 Project

International Research on Permanent Authentic Records in Electronic Systems

Trusted 3rd Party Digital Repositories

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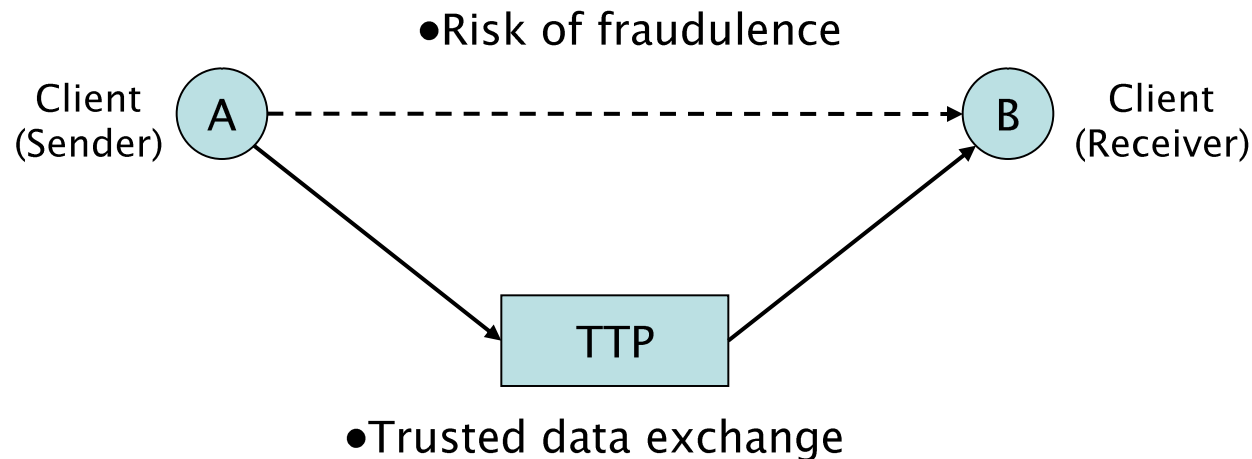
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- Background of trusted 3rd party digital repositories
- Types of Trusted 3rd party digital repositories
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- Case 2. e-Notary model
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- Issues and questions

Overview

◆ What is 'Trusted Third Party Digital Repository' ?

◆ Trusted Third Party (TTP)

- An authority that acts as an intermediary between participating parties for trustworthy interactions between the parties
- A trusted third party authority that is trusted by both parties (A, B)

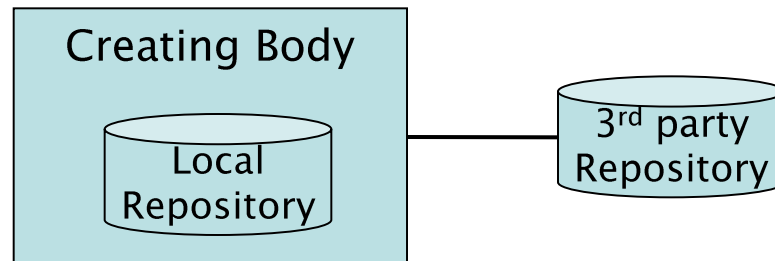


Overview

◆ What is 'Trusted Third Party Digital Repository' ?

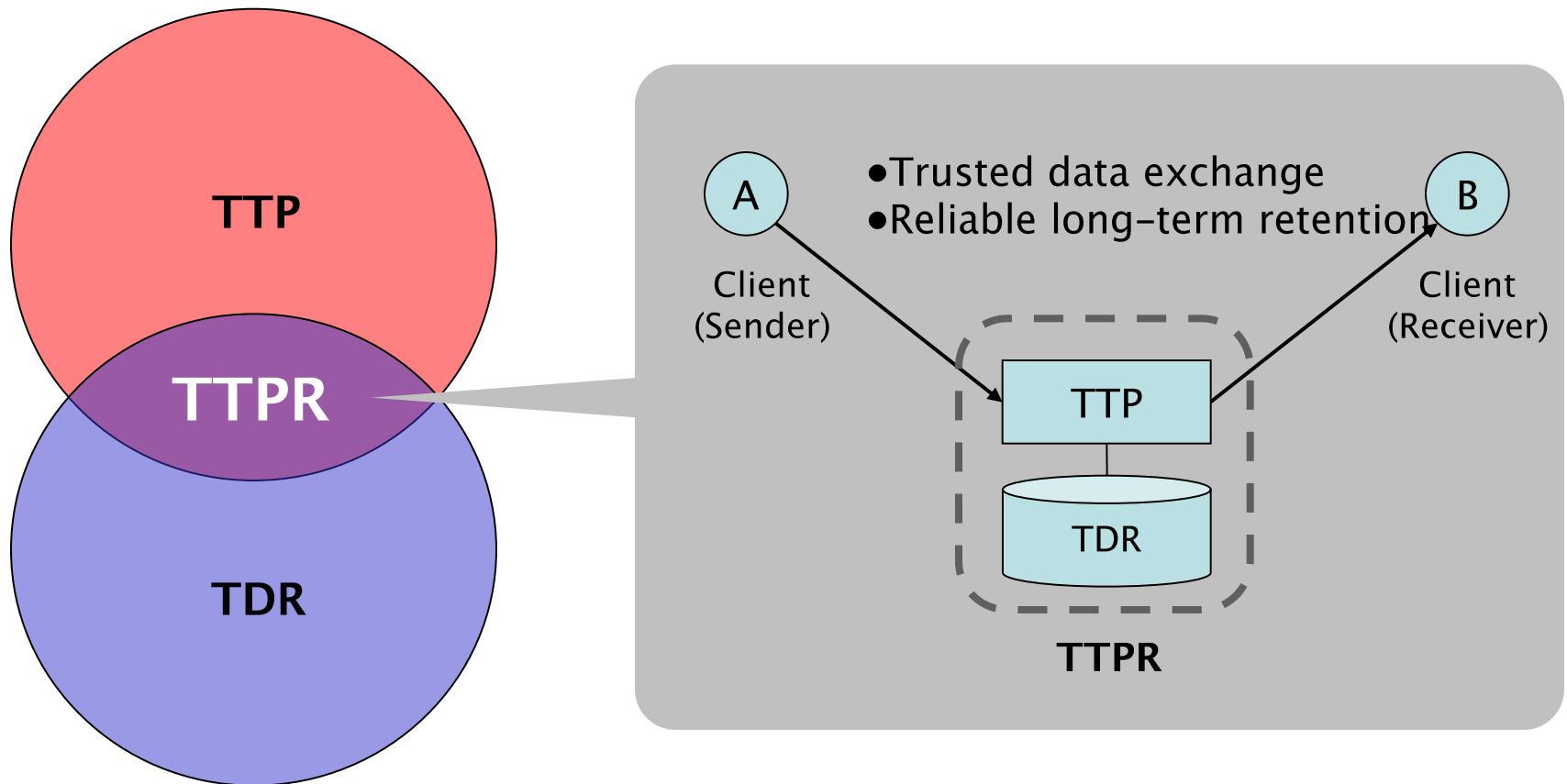
◆ Trusted Digital Repository (TDR)

- “A trusted digital repository provides reliable, long-term access to managed digital resources to its designated community, now and in the future.” (OCLC/RLG, 2002, p. 5)
 - Accept responsibility for the long-term maintenance of digital documents
 - Demonstrate fiscal responsibility and sustainability
 - Design its system in accordance with standards
 - Establish methodologies for system evaluation
 - Have policies, practices, performances that can be audited and measured
 - Can be either local repository or third-party repository



Overview

◆ What is 'Trusted Third Party Digital Repository' ? (TTPR)



Background of trusted 3rd party digital repositories

Industrial

- Ensuring e-document's reliability and authenticity
- Building trust between e-document exchange parties
- Promoting e-business and improving business efficiency and speed

Legal

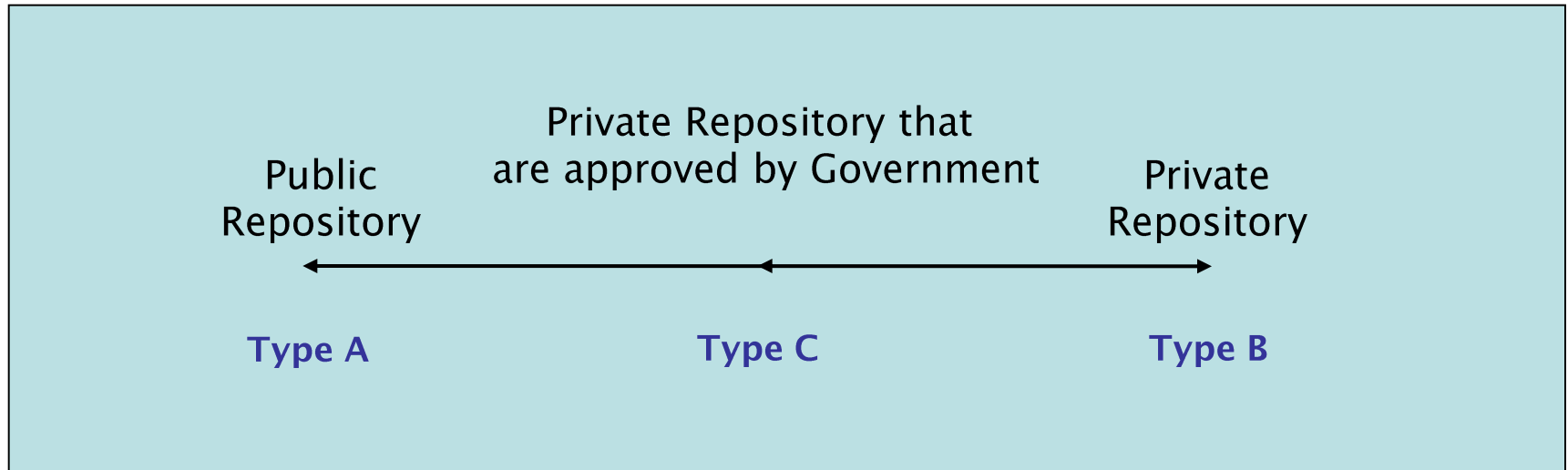
- Resolving relevant laws and regulations into unified requirements in dealing with e-documents
- Offering legal, procedural and technical standards in establishing digital repository
- Endowing scanned documents with legal authority

Technical

- Based on development of security technology and storage technology
- Supporting electronic document exchange and sharing

Types of trusted 3rd party digital repositories

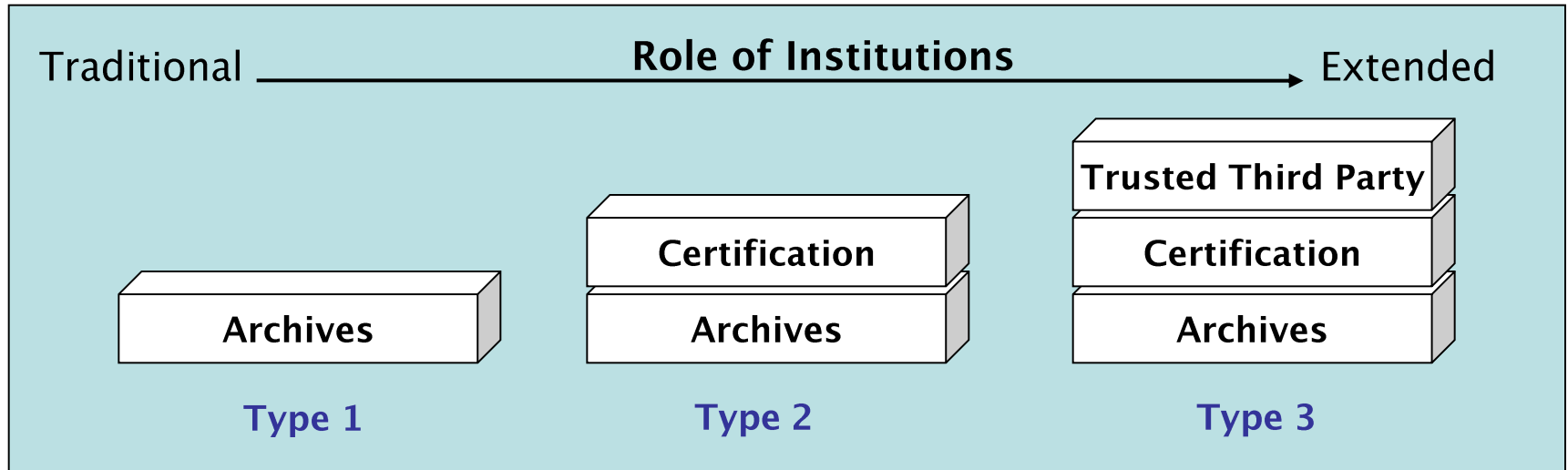
◆ By Types of Institutions



- Type A: Official repositories that are governed and operated by Government (e.g. US, Spain)
- Type B: Commercial repositories (e.g. US, Iron Mt.)
- Type C: Commercial repositories that are approved by Government (e.g. Korea, Japan)

Types of trusted 3rd party digital repositories

◆ By Major Role



- Type 1: Archives retaining and preserving e-documents (e.g. US Iron Mt., Spain)
- Type 2: Archives + Certification or Notarization of e-documents (e.g. US, Japan)
- Type 3: Archives + Certification + Trusted Third Party (e.g. Korea)

Types of trusted 3rd party digital repositories

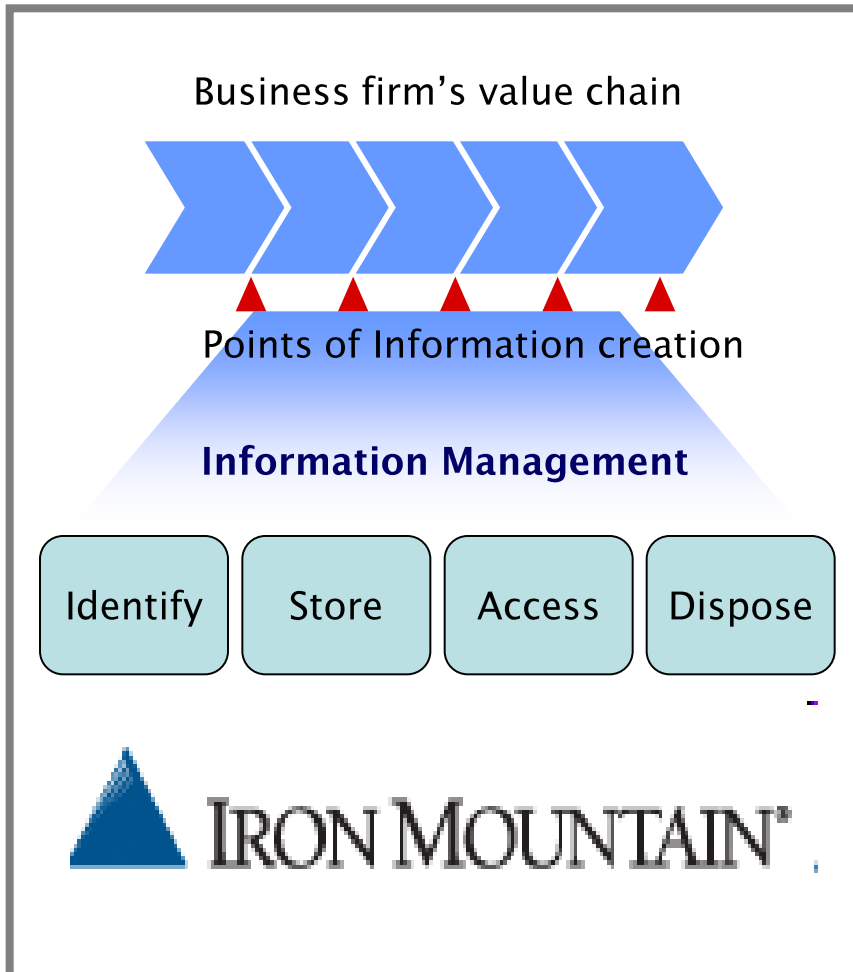
◆ Matrix of Roles and Institution Type

Roles	TTP + Certification + Archives		Certified e-Document Authority (Korea)	
	Certification + Archives		e-Notary by notary assc. (Japan)	e-Notary by lawyers (US)
	Archives	Gov agencies (Spain, US?)		corporations (US)
		Public		Private

Types of Institutions

Case 1. Archives model

◆ Iron Mountain, US: secure storage and destruction

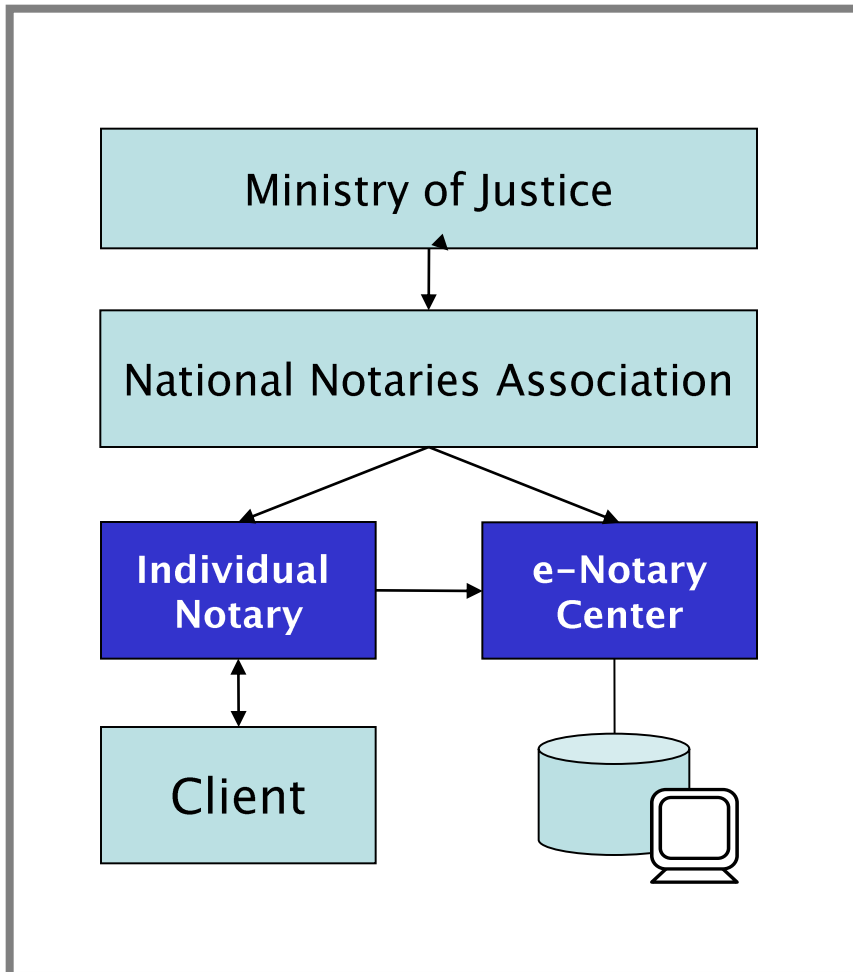


- Founded in 1951
- Offices in 37 countries

- **Records Management & Shredding**
 - Records Management (paper, digital)
 - Secure Destruction
- **Data Protection & Recovery**
 - Server Data protection
 - PC Data protection
- **Digital Services & Software**
 - e-Discovery
 - e-mail Management
- **Fulfillment Services**
 - Inventory Management
 - On-time document delivery

Case 2. e-Notary model

◆ National e-Notary System, Japan

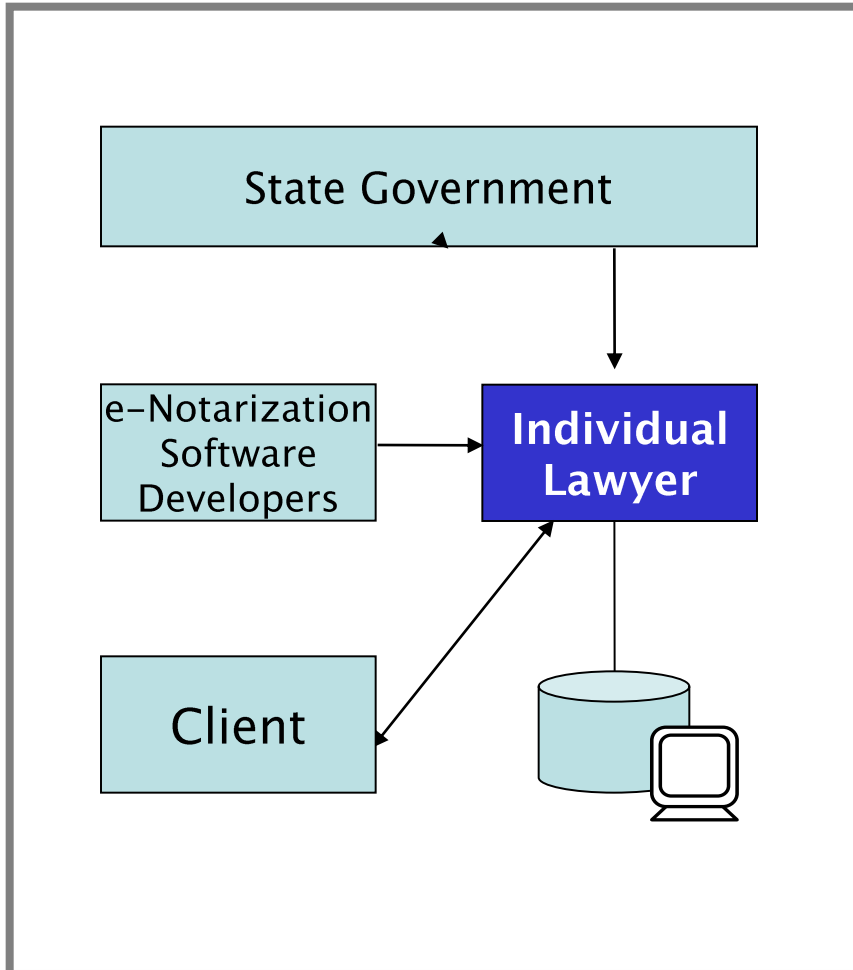


- Amendment of Notary law in 2000
- Started in 2002

- **Ministry of Justice**
 - Established rules and regulations on electronic notary
 - Issues electronic certificates
 - Authorize and supervise notaries
- **National Notaries Association**
 - Runs 'e-Notary Center'
- **Individual Notary**
 - Create electronic notaries
 - Notarize electronic private document
- **e-Notary Center**
 - Retain e-notarized documents for 20 years
 - Outsourced by Hitachi Co.

Case 2. e-Notary model

◆ e-Notary, US



● State Governments

- Amend rules and regulations on notarization for electronic documents
- Specify procedural, technical standard regarding e-notary
- Many states are in operation or in progress of e-notary planning

● e-Notarization software developers

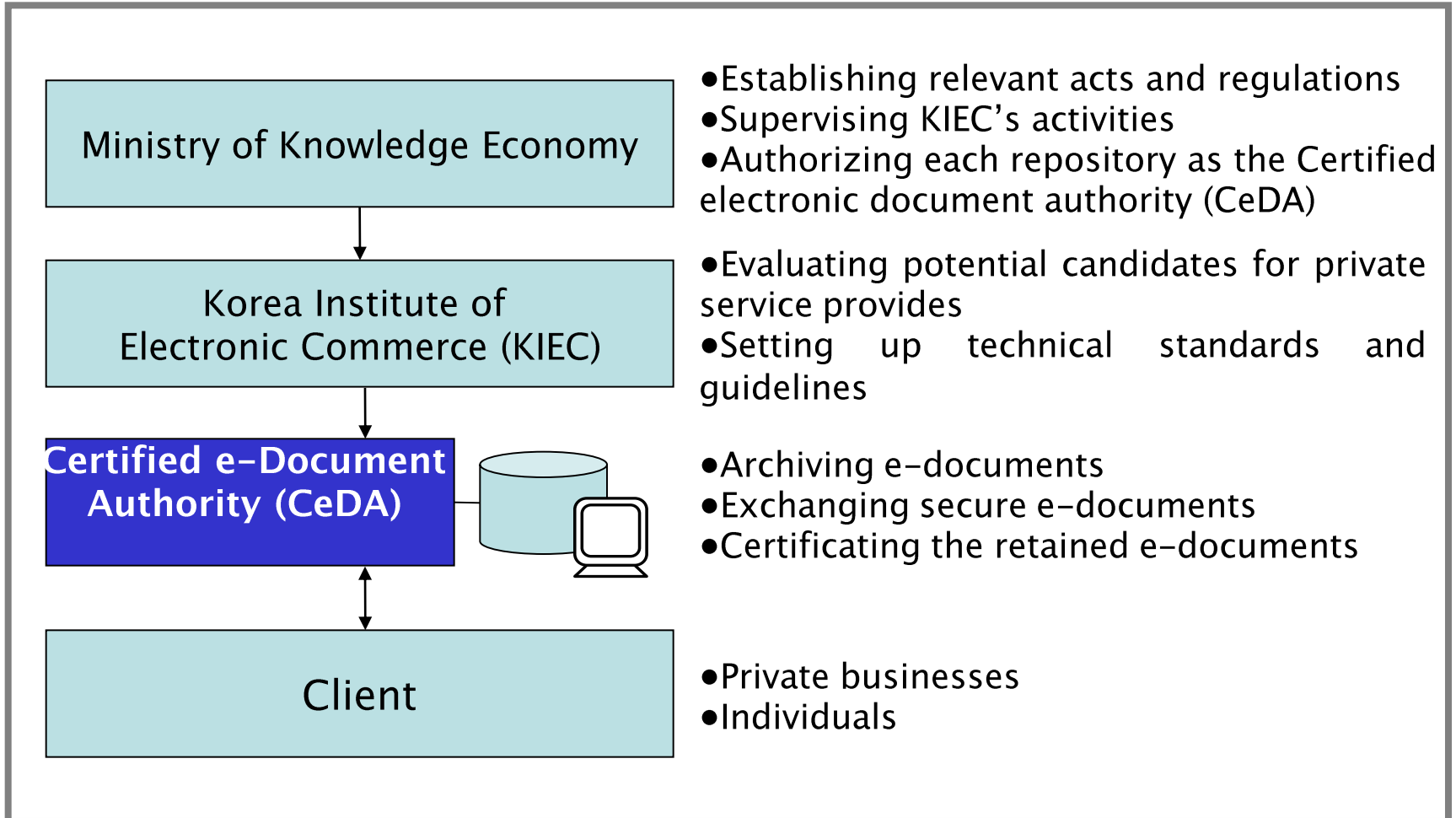
- Develop e-notarization software in accordance with standards
- Provide the software to each lawyer

● Individual Lawyer

- Create electronic notaries for private document
- Store e-notarized documents in their computer systems

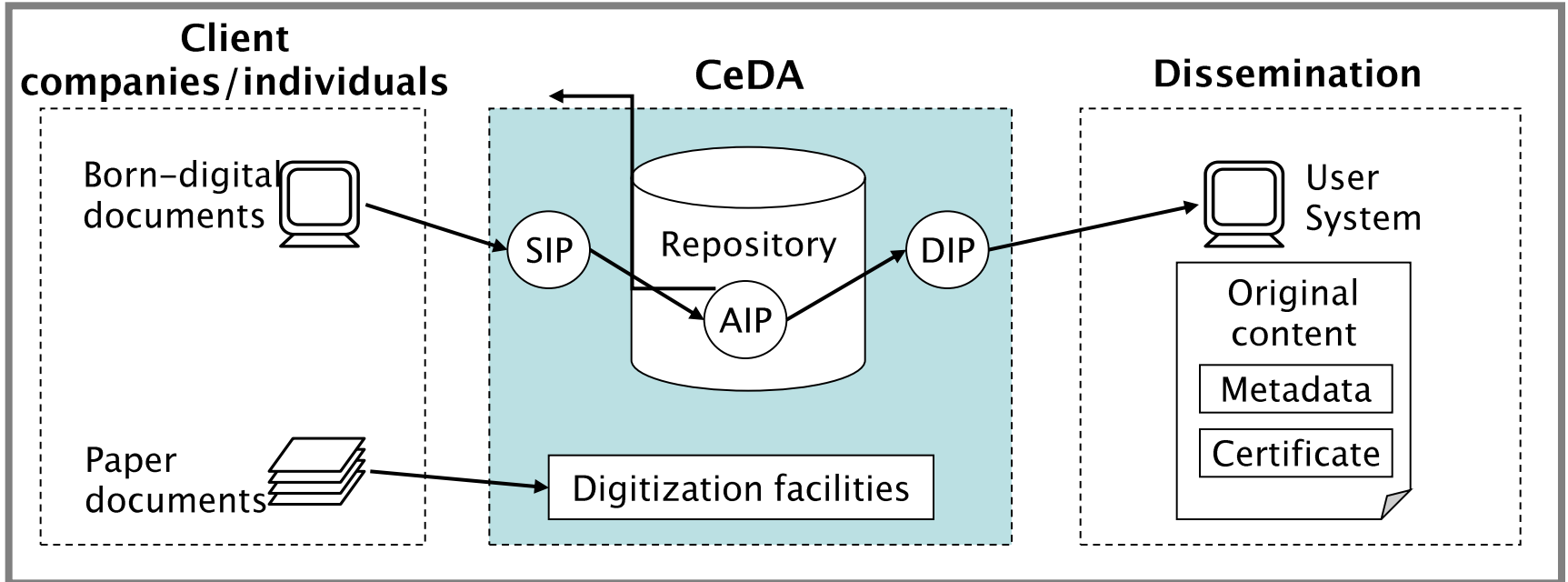
Case 3. Combination model

◆ Governance of CeDA



Case 3. Combination model

◆ Certified e-Documents Authority (CeDA), Korea



●Official repository that ensures e-document's reliability

- Preserving born-digital and digitized documents
- Ensuring legal authority of all retained documents
- Certifying the lifecycle of e-documents
- Being as an Intermediary for secure e-document exchange between parties

Issues

- Repositories may vary in their major role, organizational structure and governing body by each country's contexts.
- Each repository seems to have some ways to ensure authenticity, reliability and integrity of electronic documents by:
 - legal requirements;
 - technical specifications; and
 - operational procedures.
- However, we have some questions.
 - Do the repositories function appropriately?
 - Do the current methods to ensure authenticity, reliability and integrity of electronic documents appropriate?
 - How do they deal with loss of retained documents?

Further questions

1. Governance

- Are laws and regulations appropriate for establishing repositories?
- Do government agencies monitor and auditor repositories on a regular basis?

2. Management

- Do the repositories contain sufficient capability in technical expertise, managerial and operational expertise, and human resources?

3. Budget

- Who finances for establishing and operating the repositories?



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Thank you!

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