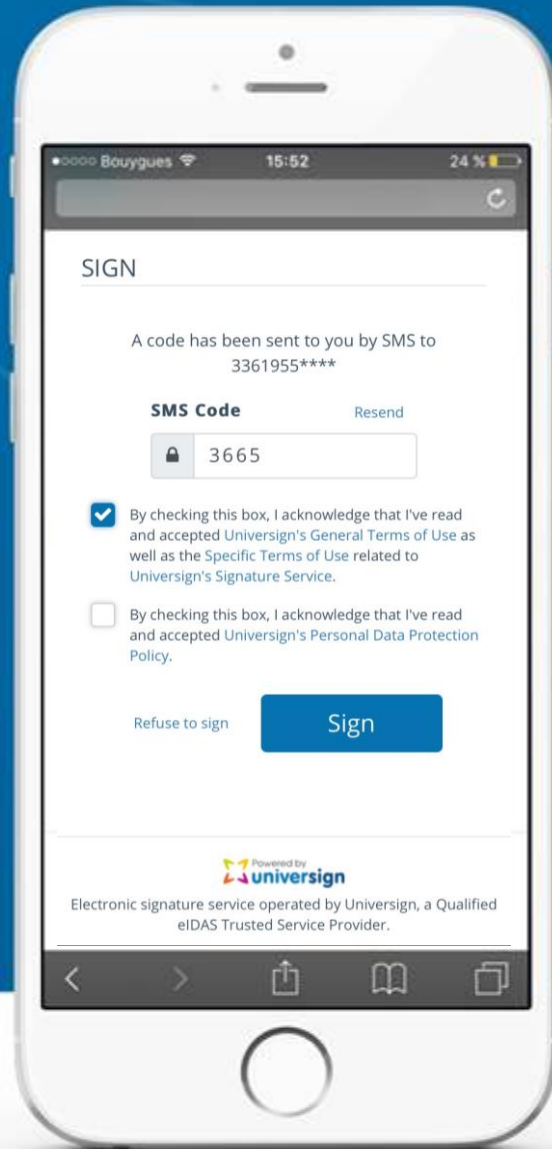




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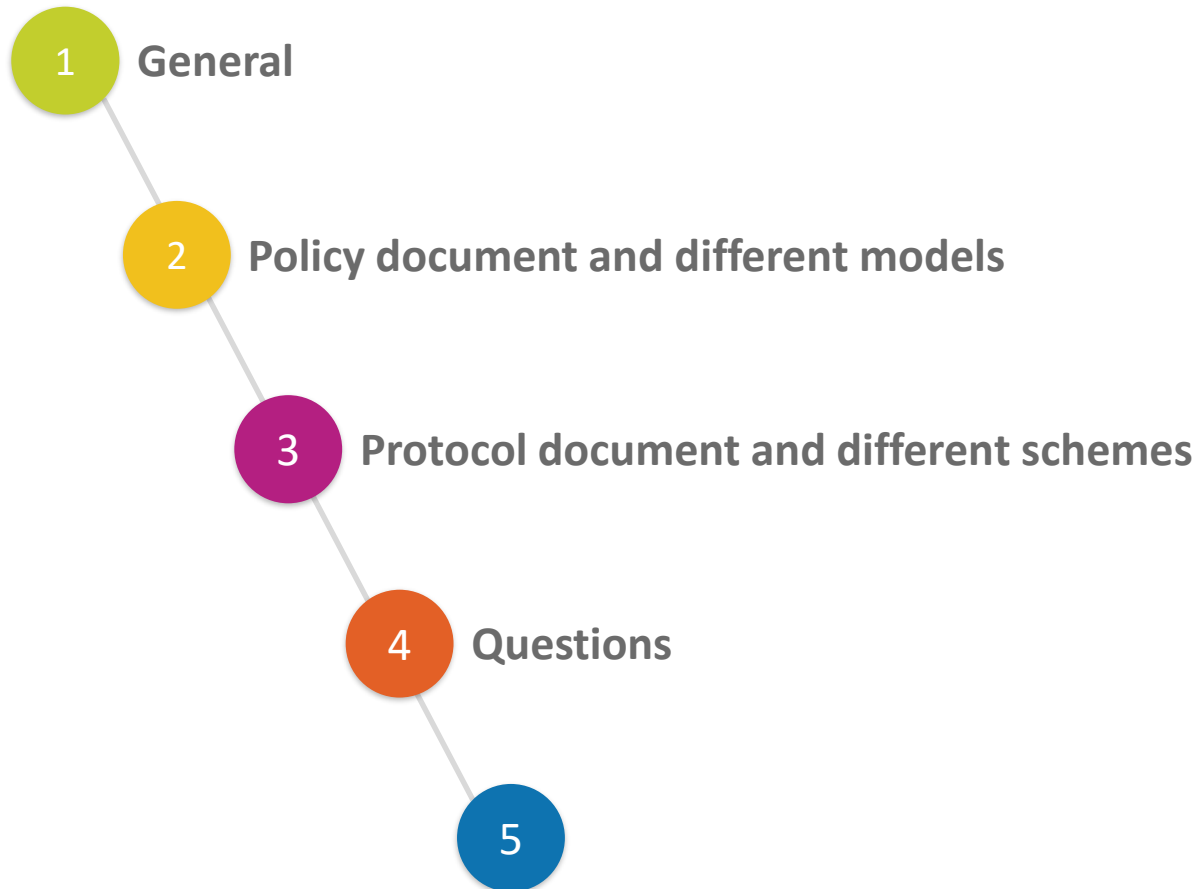


ETSI Standardization for Preservation Services

Andrea Röck – CA day

26/09/2019

Agenda





General

Preservation services in eIDAS

Regulation (EU) No 910/2014:

*a **qualified preservation service for qualified electronic signatures***

- *may only be provided by a **qualified trust service provider***
- *that uses procedures and technologies capable of **extending the trustworthiness of the qualified electronic signature beyond the technological validity period***

ETSI document on preservation services - goals

- **First goal:** to support the service as defined in eIDAS
- **Second goal:** to go beyond the service as defined in eIDAS
 - Also for non qualified electronic signatures / seals
 - Also for unsigned documents
- **Difficulties**
 - Requirements from eIDAS not very technical
 - Already different services with different models in place

ETSI document on preservation services - documents

- ETSI TS 119 511
 - Policy and security requirements for trust service providers providing long-term preservation of digital signatures or general data using digital signature techniques
 - Published 2019-06:
https://www.etsi.org/deliver/etsi_ts/119500_119599/119511/01.01.01_60/ts_119511v010101p.pdf
- ETSI TS 119 512
 - Protocols for trust service providers providing long-term data preservation services
 - Accepted, will be published soon



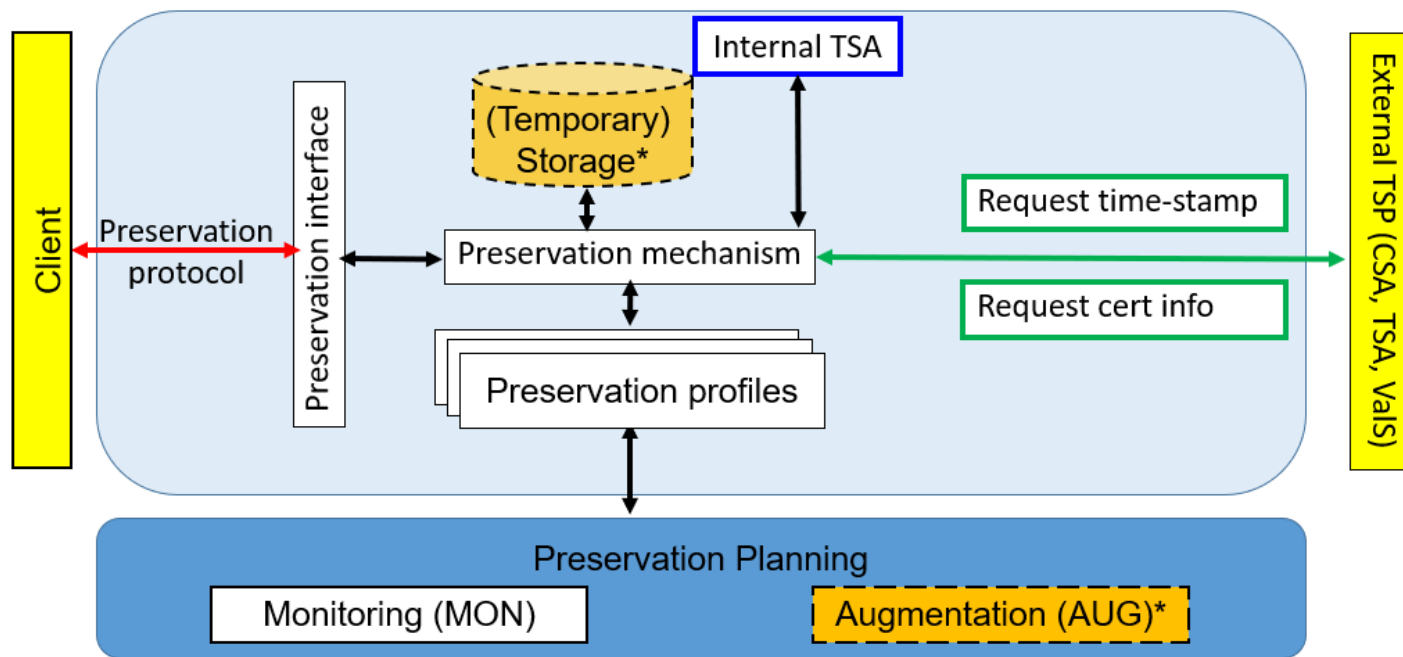
Policy document and different models

- Based on ETSI EN 319 401 for general
- General requirements in the main document
- Requirements aimed for qualified preservation service
 - It must be possible to have an entry in the trusted list
 - Preserver evidence needed to decide if a signature / seal is qualified
- Specific functionalities are required, protocol is only recommended
- Preservation profile
 - Details on how preservation is done

Different preservation storage models

- Preservation storage models

- **With storage** – store the data to be preserved and the evidence (*)
- **With temporary storage** – keep data to be preserved only as long needed to create the evidence, keep evidence only as long as needed to be retrieved by the client (*)
- **Without storage** – create synchronously the evidence and send it back



Different functional goals

- **Functional goals**
 - Preservation / proof of existence of general data
 - Preservation of signatures and associated signed data
 - Augmentation of evidence sent to preservation service (useful for moving data from one service to another)



Protocol document and different schemes

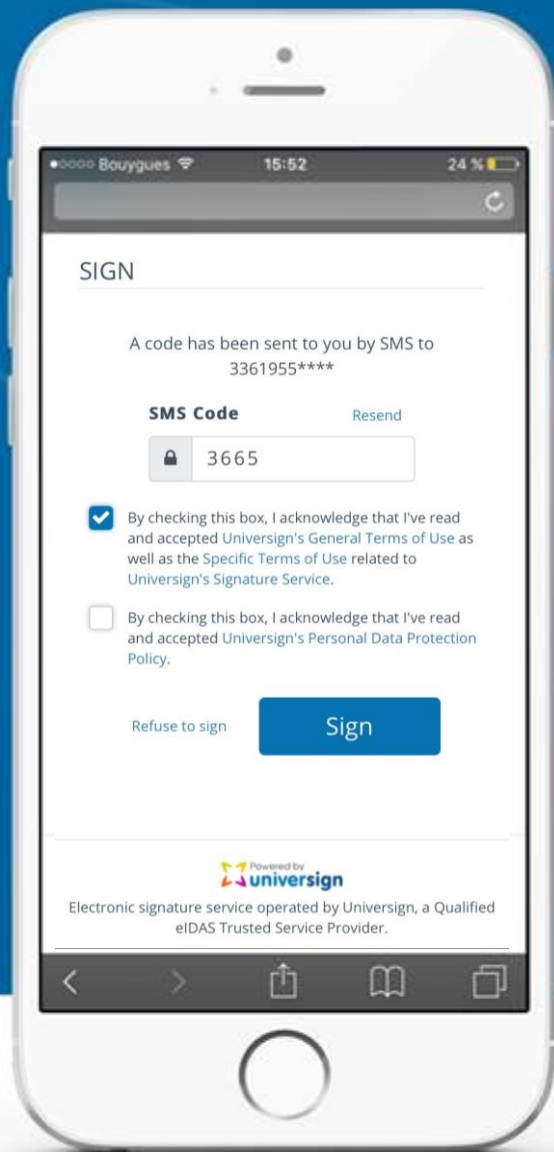
- Protocol for preservation service
- Machine readable version of preservation profile
- Implementation in XML and JSON
- Use OASIS standard to describe digital signature service metadata
 - Need to wait for publication
- Defines ASN.1 attributes which can be added in preservation evidence
 - Preservation service
 - Preservation evidence policy
 - Preservation profile

Examples of preservation schemes

- Preservation scheme with storage based on evidence records
- Preservation scheme with temporary storage based on evidence records
- Preservation scheme with signature augmentation and with storage
- Preservation scheme with signature augmentation and without storage



Questions?



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