

Cloud Signature Consortium and Validation Services

Andrea Valle | Chairman of the Board 25–27 сентября 2018 года, г. Санкт-Петербург







The Cloud Signature Consortium

- The Cloud Signature Consortium was been founded in 2016 by an international cooperation group of industry and academic experts, including solutions, technology and trust service providers
 - Promoting cloud-based electronic Trust Services.
 - Design a common architecture and building blocks to facilitate the interaction between Solution, Technology and Trust Service Providers.

 Develop technical specifications for protocols and APIs to make these interactions easy and interoperable.

Publishing the specifications as open standards.

Application Service Provider Signature applications, solutions and Trust **Technology** services, System Service Provider **Provider** Integration HSM. QTSP Compliance, Authentication, RA, CA, Mobile apps, HW, Timestamp, Identity, Compliance Validation. Preservation

Founding Members

Adobe Ireland/USA

Italy

Germany

Spain

Certinomis / Docapost France

Cryptolog / Universign France

Intesi Group

InfoCert Italy

Asseco Data Systems Poland

D-Trust/Bundesdruckerei Germany

Intarsys

SafeLayer

Technische Universitat Graz

Austria

Unibridge Norway

























Current status

- The Consortium has been incorporated as a Not For Profit Association
 - It has acquired legal personality to support its membership expansion worldwide.
 - Working with ETSI to establish a Cooperation Agreement to allow mutual exchange of contributions for the development of standards for trust services.
- The first release of the CSC Specifications is publicly available
 - http://www.clousignatureconsortium.org/specifications
- The Consortium is developing a Conformity Checker
 - Test service implementations for interoperability and performance analysis.

Interested to join? <u>www.cloudsignatureconsortium.org/cor</u>



A quick look into the Standard



The Cloud Signature Consortium Technical Specifications

- The first release of the CSC Specifications aimed at covering architectures, protocols and APIs for Remote Signature creation.
 - Defines Web Service APIs based on REST protocol and JSON data-interchange. Modern and easy to implement.
- Able to dynamically grow, with self discovery capacity
 - Designed to support of growing and modular services, in line with the mission/capabilities of providers.
 - Services may implement only a particular subset of the API. Clients can easily discover the supported APIs.
- Complete support of client and user authentication
 - Covers all possible implementation contexts: desktop and mobile apps, cloud and on-premise services.
 - Supports password-based, OAuth-based, SAML, federated authentication.
- Flexible support of credential authorization mechanisms
 - Static secret, synchronous and asynchronous OTP, OAuth-based, SAML.
 - Multi-Factor-Authorization can be obtained by combining multiple mechanisms.
- Designed to support eIDAS requirements and CEN / ETSI standards
 - Also supports a broader set of requirements, including those outside of the EU standardization domain.



Validation Services Technical Specification

- The Consortium has developed API specification for Validation Services
 - Contribution from various CSC members, in particular from Asseco.
 - Based on the experience with existing services (e.g. WebNotarius) and with the implementation of PEPPOL projects.
- Will be submitted to ETSI as part of the Cooperation Agreement
 - Contribution as a protocol profile for signature validation (e.g. TS 119 442).
- Current draft under review to evaluate the alignment with the STF work
 - Will be available for public comments.



Main characteristics supported by CSC Signature Validation Services

- Synchronous and asynchronous operations
- Multi-policy support
- Support of EUTL and other Trusted Lists (non-EU, custom)
- Certificate chain Validation
- Signature Validation and Augmentation
- Hook for Preservation services
- Lightweight JSON protocol
- Privacy by design

Next steps of the Consortium



Standardization roadmap

- The Cloud Signature Consortium's roadmap includes protocols and API supporting multiple trust services
 - Cloud Signature (Remote Signature)
 - Signature validation and augmentation
 - Electronic Identity
 - Long-term Preservation
- Services benefit from a common API framework and unified approach
 - Client and user authentication
 - Resource authorization
 - REST+JSON API
 - Standard and interoperable by design
 - Privacy by design





Thank you

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