

# **OASIS Digital Signature Services**

## **Remote Signing**

**ENISA Trust Services Forum, Berlin**

- Digital Signature Services (**DSS-X**)'s Mission:  
*“Defining an **XML** interface to process digital signatures for Web services”.*
- OASIS Digital Signature Services TC produced a set of OASIS standards (in 2007), including the core protocols and a number of profiles.
- New OASIS Digital Signature Services eXtended (DSS-X) TC created operating under OASIS RF IPR mode.
- Committee specification, version 2.0
  - Multiple transport representations (e.g. JSON) support
  - Core streamlined
  - Processing feedback

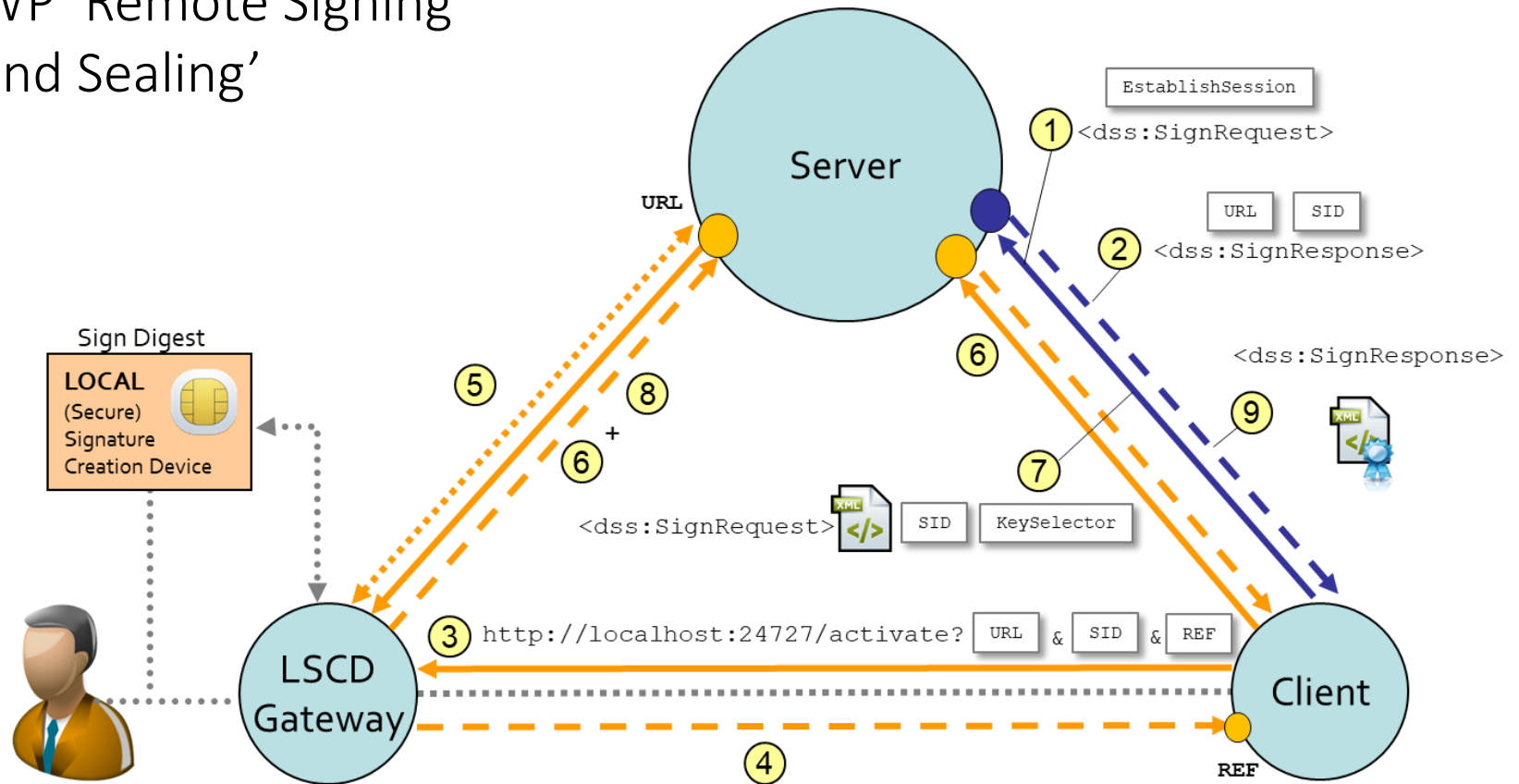
- **DSS-X Profile: Local Signature Computation**
- **Status: Committee draft**
- **Support different key placement variants**
  - **Dedicated Key servers**
    - May require user's explicit consent
  - **User's smart card**
    - User agent not addressable directly
  - **Mobile devices**
    - User agent addressable by mobile infrastructure
- **Signature requestor location**
  - Collocated
  - Distributed

- DSS-X Profile: Local Signature Computation
- Status: Committee draft
- Support
  - Device
  - User
  - Mobile
    - User agent addressable by mobile infrastructure
- Signature requestor location
  - Collocated
  - Distributed

The 'Local Signing' scenario is the most complex model. We consider 'Remote Signing' as a specialization of the 'Local' approach!

- **DSS-X contribution: Chip Gateway Protocol**
- Contributed to foster eIDAS-Regulation(EU) No. 910/2014 by luxtrust and ecsec
- **Focus user controlled tokens**
  - User's smart card
  - Mobile devices
- **Implementation by the EU-funded ,FutureTrust' project**

# WP 'Remote Signing and Sealing'



<b>5</b>	LG → S : LG → S : <code>&lt;lsp:GetCommand&gt;</code> / command, as requested by Server, including	<b>Connect</b>
<b>6</b>	S → LG: <code>&lt;lsp:ListTokensRequest&gt;</code> , followed by <code>&lt;lsp:ListTokensResponse&gt;</code> S → LG: <code>&lt;lsp:ListCertificatesRequest&gt;</code> , followed by <code>&lt;lsp:ListCertificatesResponse&gt;</code>	<b>List</b>
<b>8</b>	S → LG: <code>&lt;lsp:SignRequest&gt;</code> , followed by <code>&lt;lsp:SignResponse&gt;</code> S → LG: <code>&lt;lsp:Terminate&gt;</code> , followed by redirect to REF	<b>Sign</b>

## ■ DSS-X TC Public page:

- <https://www.oasis-open.org/committees/dss-x>

## ■ Document access:

- <http://docs.oasis-open.org/dss-x/dss-core/v2.0/csprd01/dss-core-v2.0-csprd01.html>
- <http://docs.oasis-open.org/dss-x/localsig/v1.0/cs02/localsig-v1.0-cs02.html>
- <https://www.oasis-open.org/committees/download.php/60049/ChipGateway-Specification-OASIS.pdf>



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