

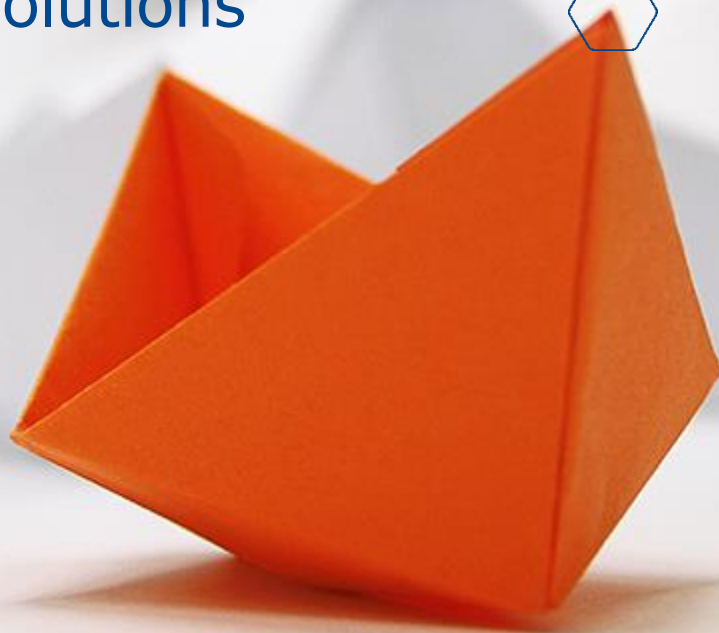


# **SWITCH RA Operator Meeting**

OCSP and Signing Solutions



März, 2017



# Agenda

## **OCSP**

- Why OCSP?
- Some figures
- Old Infrastructure
- New Infrastructure

## **Signing Solutions**

- Mass Signature
- Personal Signature

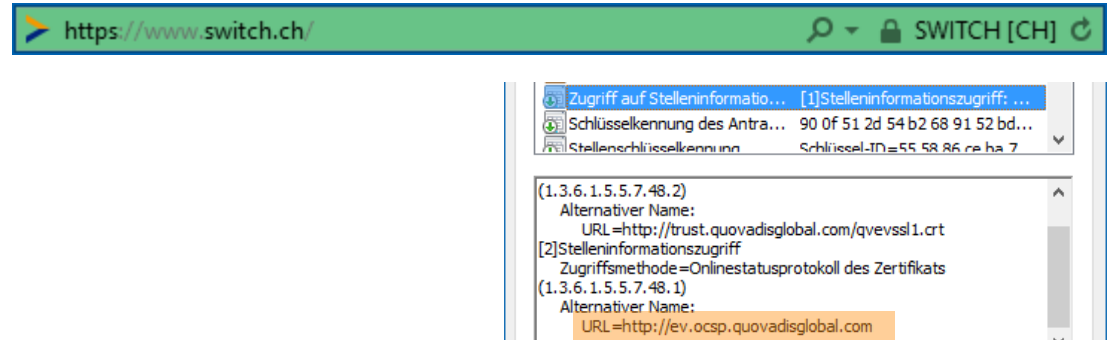


# **OCSP**

## Online Certificate Status Protocol



- OCSP is the Online Certificate Status Protocol
- URL for OCSP is visible in the certificate



## Examples:

- Visit a website with a QuoVadis certificate
- Signing /open a document with a QuoVadis certificate
- Signing / open an e-mail with a QuoVadis certificate

Why OCSP?

# OCSP

## Some figures

8 OCSP responders

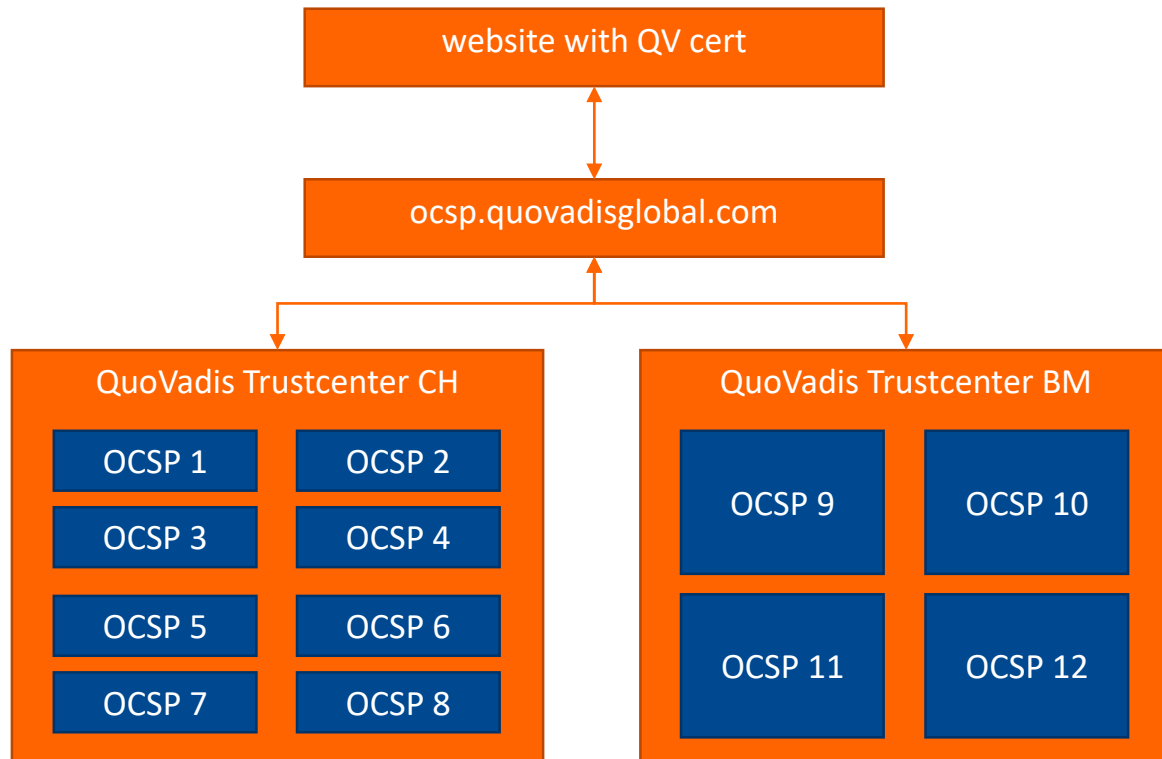
56 Mio OCSP requests per Day

7 Mio OCSP requests per responder per Day

650 OCSP requests per second

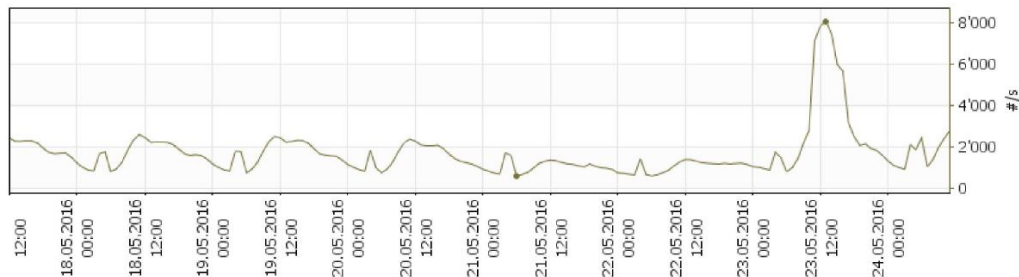
# OCSP

Old Infrastructure



## Disadvantages

- Performance



- Failed requests

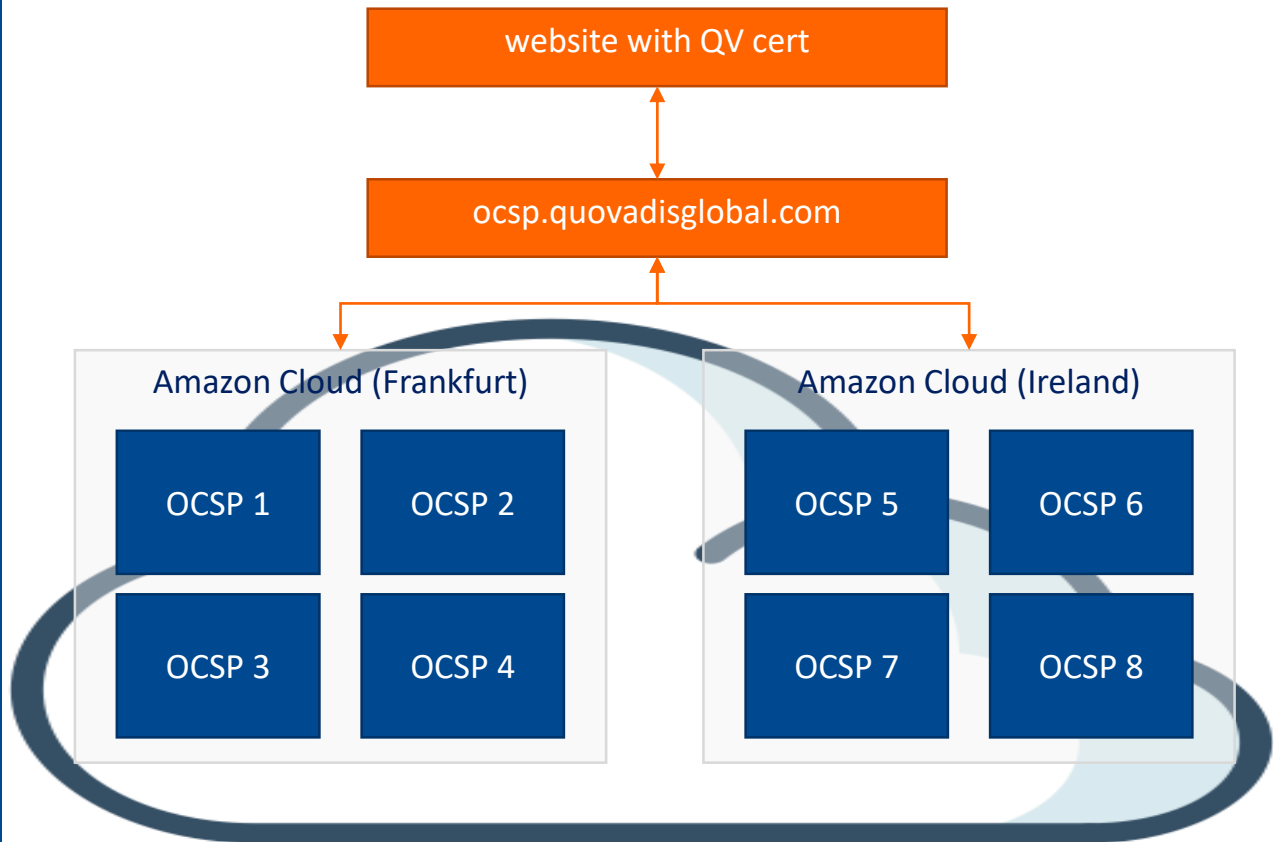
Performance graph	Company site	OS	Outage hh:mm:ss	Failed Req%	DNS	Connect	First byte	Total	Kb/s	size(K)
<a href="#">ocsp.quovadisglobal.com</a>	<a href="#">ocsp.quovadisglobal.com</a>	Windows Server 2008	0:00:00	0.131	0.115	0.089	0.184	0.185	-	0

- Scalability

Old Infrastructure

# OCSP

## New Infrastructure





## Advantages

- Performance
- No failed requests

Performance graph	Company site	OS	Outage hh:mm:ss	Failed Req%	DNS	Connect	First byte	Total	Kb/s	size(K)
	<a href="https://ocsp.gandi.net">ocsp.gandi.net</a>	Linux	0:00:00	0.000	0.204	0.038	0.073	0.073	-	0
	<a href="https://ocsp.trustsign.com.br">ocsp.trustsign.com.br</a>	Linux	0:00:00	0.000	0.363	0.039	0.076	0.076	-	0
	<a href="https://ocsp.comodoca4.com">ocsp.comodoca4.com</a>	Linux	0:00:00	0.000	0.144	0.039	0.072	0.072	-	0
	<a href="https://ocsp.cs.auscert.org.au">ocsp.cs.auscert.org.au</a>	Linux	0:00:00	0.000	0.845	0.041	0.074	0.074	-	0
	<a href="https://ocsp.tcs.terena.org">ocsp.tcs.terena.org</a>	Linux	0:00:00	0.000	0.284	0.045	0.082	0.082	-	0
	<a href="https://ocsp.quovadisglobal.com">ocsp.quovadisglobal.com</a>	Linux	0:00:00	0.000	0.106	0.071	0.143	0.143	-	0

- Scalability
- Add more locations

- We have learned from the past
- There are no failed requests with the new infrastructure (netcraft report)
- We are ready for a lot more certificates in the future 😊

Questions?

QuoVadis 

# Signing Solutions



# Signing Solutions

## Case – Mass Signature

### Case

Digital process for signing the certificates after every semester.

### Needs

- Automated process
- Reduce costs and speed up the process
- Documents should not leave the university

### Processes

- Certificates

# Signing Solutions

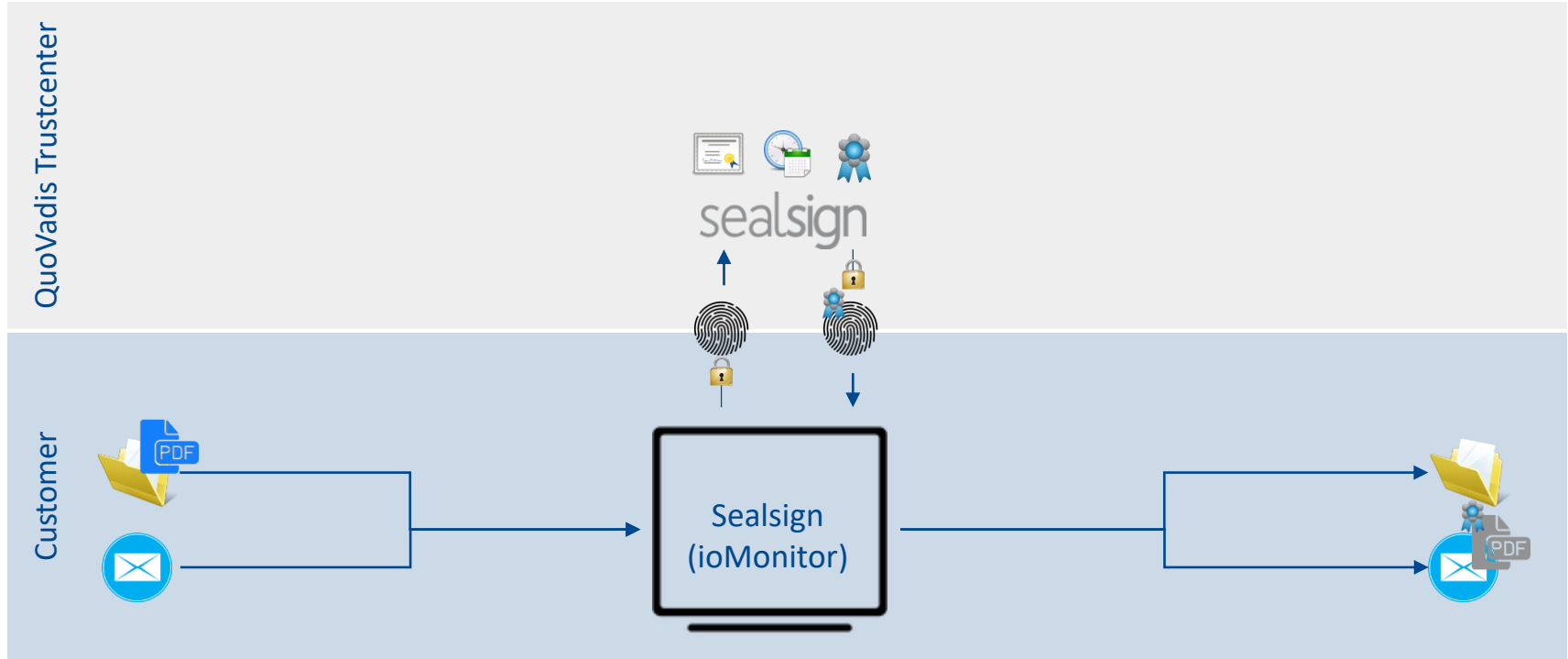
sealsign cloud

- Sign document (PDF, DOCX, etc.)
- Cloud based solution
- Company seal stored in the cloud to sign documents
- Only hashes will be transmitted to the cloud

Case – Mass Signature

# sealsign

## Technical Overview



# Signing Solutions

Live Demonstration





# Signing Solutions

## Case - Personal Signature

### Case

Sign local documents with a personal legally binding signature without token or smartcard.

### Needs

- Legally binding personal electronic signature
- Tokenless
- AATL compliant

### Processes

- Internal document workflow

# Signing Solutions

Case - Personal Signature

## Solution

SuisseID Signing Service by QuoVadis

- Legally binding (qualified certificate)
- Cloud based solution
- 2nd factor over smartphone
- Sign documents with common product, even Adobe eSign

# Signing Solutions

Live Demonstration



# Signing Solutions

## Summary

- Solutions available for:
  - automated processes based on company certificate
  - manual processes based on a personal legally binding signatures
- We do more than only issuing certificates

Questions?

# Thank you very much for your attention!



**Pascal Leu**  
Head of Professional  
Services

p.leu@quovadisglobal.com  
+41 272 60 60