

A large red stylized bracket icon is positioned to the left of the title text.

QWAC and QSeal – Tools against fake news and over-identification

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Ort	CA-Day
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Qualified certificate for electronic Seals (QSeal)

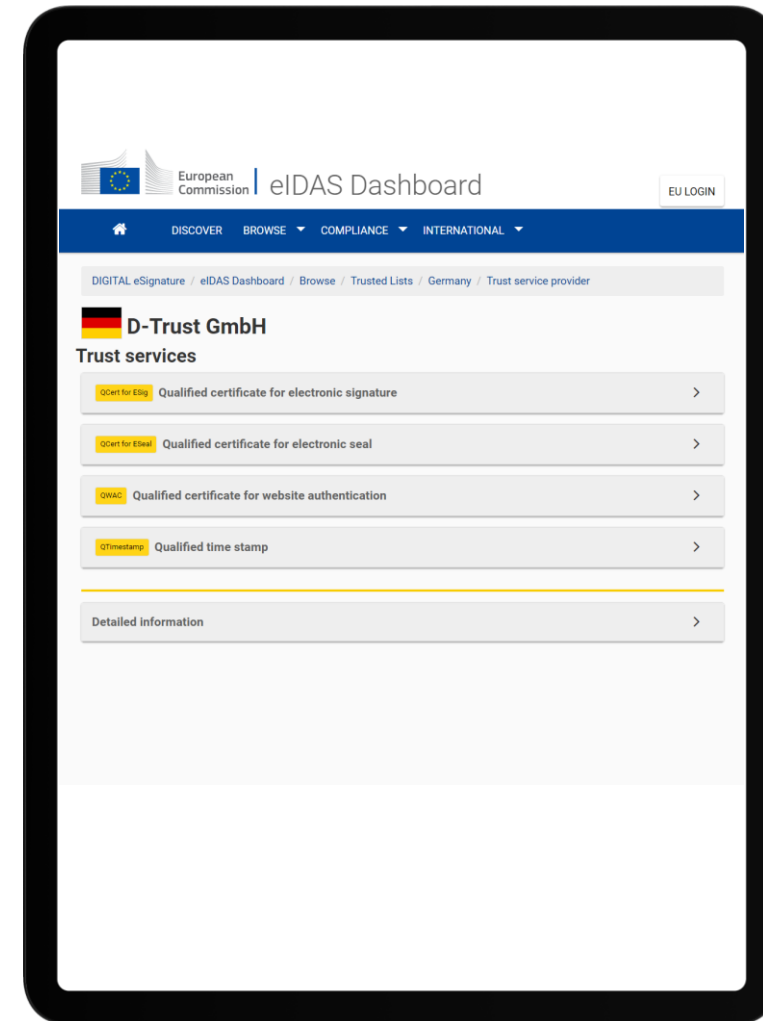
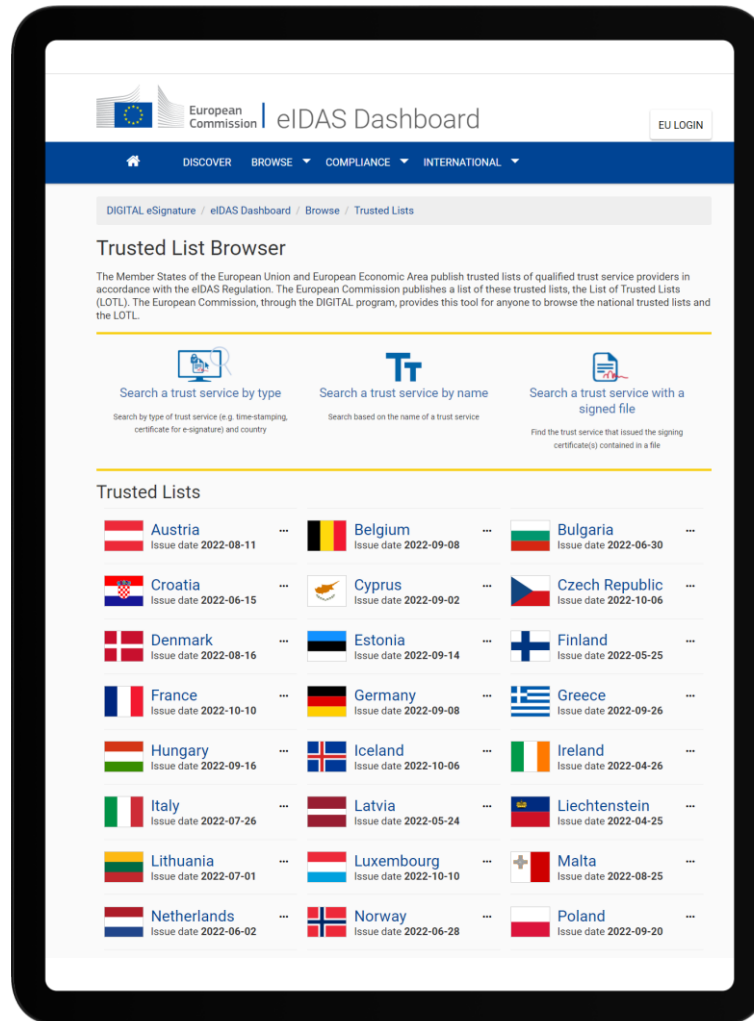
- Serves as evidence that the data was issued by a legal entity
- Proves the integrity and origin of the data (eIDAS Article 35)
- Legal effect and admissible as evidence in court proceedings
- A representative of the legal entity has been identified
- **Secures the application layer**



Qualified certificates for website authentication (QWAC)

- Assures the user that there is a genuine and legitimate entity standing behind the website (recital 67 eIDAS 1.0 & recital 32 eIDAS 2.0)
- A representative of the legal entity has been identified
- **Secures the transport layer**

The EU Trusted List – The source of trust



The EU Trusted List (EU TL) provides a European and vendor-independent directory of QTSPs

Authentic source according to the draft of eIDAS revision by the EU Council (December 2022) (Article 3 Nr. 46)

'authentic source' is a repository or system, held under the responsibility of a public sector body or private entity, that contains and provides attributes about a natural or legal person and is considered to be a primary source of that information or recognised as authentic in accordance with Union or national law, including administrative practice;

Take away: In QWAC and QSeal verified attributes from authentic sources, especially state registers, can be included

Origin of digital content

Coalition for Content Provenance and Authenticity (C2PA)

- Initiative to establish trust in digital content (even content created by AI)
- Defines technical standards to ensure origin, history and authenticity of digital content
- Supports cryptographic technologies (digital signatures/ seals) in providing evidence for the creation, discovery, ownership and movement of digital content over time
- Enables the user to check the information regarding the content's origin at any time

Content Authenticity Initiative

- Cross-industry initiative
- Aims for authentic storytelling through digital content origin
- Applies the standards of C2PA and develops prototypes for implementation

Take away: Signatures/ seals play an important role by creating trust in digital content



Protection against fake news and misinformation

- Digital images
- Press releases
- AI products
- Web pages
- And many more to come

But: No protection against intentional fakes by the originator!

Take away: QSeals ensure the integrity of a product and link it to a verified identity





eIDAS 2.0

Beim europäischen ID-Wallet droht die Überidentifikation

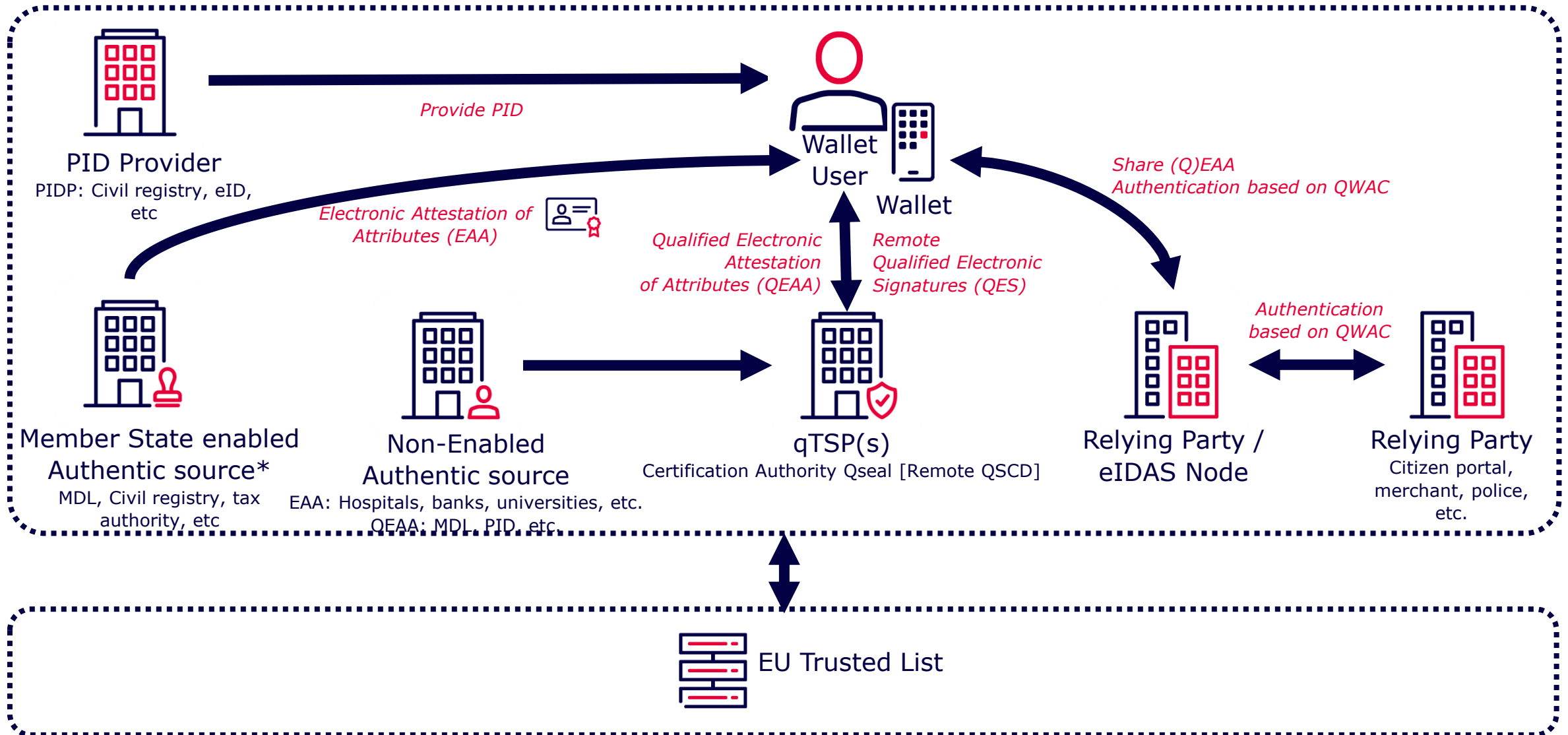
Die EU-Kommission will einen einheitlichen digitalen Identitätsnachweis einführen – inklusive lebenslanger Personenkennziffer, auf die auch Unternehmen zugreifen dürfen. Obwohl das EU-Parlament mehr Datenschutz in seinem Kompromissvorschlag durchsetzen will, gibt es weiterhin Kritik an den Plänen.

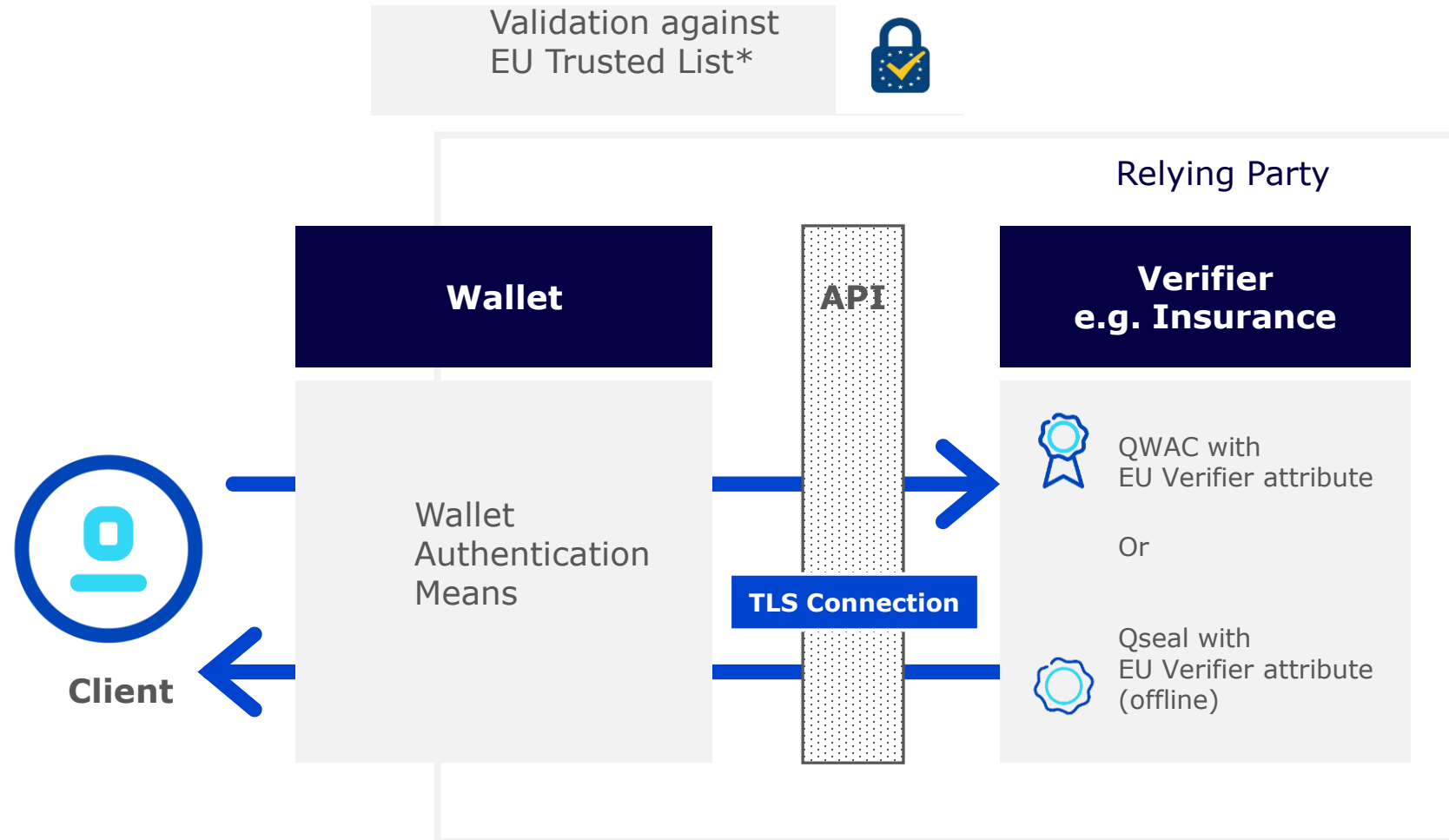
08.02.2023 um 16:31 Uhr - Daniel Leisegang - in Datenschutz - 15 Ergänzungen



- **Need for restriction and management of data access**

Architecture overview - Based on EU Wallet Architecture Reference Framework (D-Trust View)





*European Trust Service List according to Implementing Decision (EU) 2015/1505 (<https://webgate.ec.europa.eu/tl-browser>)

Data protection via the PSD2 model

- Access control via the attributes within QWACs and QSeals
- Attributes provide targeted access to data categories
- Verified identities -> protection against fraud
- QWAC displays the verified identity -> protection against phishing and quishing (QR-phishing)



Take away: Attribute-enhanced QWACs and QSeals combine verified identities with targeted access control

Conclusion

- QSeals and QWACs can prove the authorship of digital content like images, web pages and press products
- QSeals can also prove the integrity of a media product
- By including attributes from authentic sources, properties and rights can also be proven and inserted in qualified certificates
- Relying on the PSD2 model can help build a secure privacy-friendly ecosystem for data transfer to relying parties within EUDI-Wallets
- PSD2 model can be also used for other use cases, e.g. data spaces



Thank you.

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