Next step of security on the edge and in Data Spaces
The truzzt box uses the on-chip-based Intel SGX enclave to process and ship data in federated data spaces.
It ensures the highest standards of confidential processing of any data, especially sensitive data, enabling and enhancing an integrated data exchange ecosystem that connects data providers and data consumers via hardware-based controls from the web to the edge to the device.
The integration of this technology framework as system integrator

Klaus Ottradovetz
Vice President Global Service Delivery at Atos SE
Atos: End-to-End *Hardware Security...*

**Embedded Security**

Horus V2X-HSM
Dedicated secure elements implemented into Embedded Control Units to encrypt V2X messages

**End-to-end Hardware Security**

Cloud Edge Continuum

**Back-end Security**

NetHSM
Intel SGX
Atos: ...well, rather n-to-m security...
Atos: ...even across different “device classes”...

<table>
<thead>
<tr>
<th>Device Class</th>
<th>Typical Distance</th>
<th>Average Latency</th>
<th>Power Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-Device</td>
<td>Millions</td>
<td>1 ms</td>
<td>kW</td>
</tr>
<tr>
<td>On-Premise</td>
<td>100,000s</td>
<td>2-5 ms</td>
<td>20-100 kW</td>
</tr>
<tr>
<td>Far Edge</td>
<td>1,000s-100s</td>
<td>100-200 ms</td>
<td>100kW-1MW</td>
</tr>
<tr>
<td>Near Edge</td>
<td>100-1000 km</td>
<td>10-20 ms</td>
<td>5-30 MW</td>
</tr>
<tr>
<td>Regional Edge</td>
<td>&gt;1000 km</td>
<td>&gt;20 ms</td>
<td>50-100 MW</td>
</tr>
<tr>
<td>Cloud</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Atos: ...requires a tightly integrated frameworks...
Atos: ...with distributed security architecture...

Global C-ITS PKI overview - L1 & L2 services
Atos: ...and across dataspaces and eco-systems
Applications will be distributed across devices, (different types of) Edges and clouds and across multiple providers.

Isolated, private and public networks need to (securely) connect to IT / OT (Factory shopfloor) / Mobile converge.

Scalable and performant security architecture across different device and compute classes and across networks is key to support sensitive applications.

Associations like International Data Spaces Association and Gaia-X provide the framework for trust and sovereign data-exchange.
Cloud, Web and Edge secured:

Next step in Confidential Computing

Rainer Sträter
Senior Vice President, Cloud Services and Global Platform Hosting at IONOS SE
Tesla

20 biggest car companies

1.260 Mrd. $

980 Mrd. $
DataSpace Eco-Systems by Gaia-X ...

... the european way of platforms
<table>
<thead>
<tr>
<th>Name</th>
<th>Domain</th>
<th>Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health-X</td>
<td>Health</td>
<td>Charite Berlin, Fraunhofer Institut, IDSA, FU Berlin...</td>
</tr>
<tr>
<td>Marispace-X</td>
<td>Maritim</td>
<td>TrueOcean, University Kiel, GEOMAR, Helmholtz...</td>
</tr>
<tr>
<td>MERLOT</td>
<td>Education</td>
<td>Imc AG, HPI, IBM, iServ GmbH, edu-sense GmbH...</td>
</tr>
<tr>
<td>POSSIBLE</td>
<td>Public</td>
<td>Bechtle AG, Dataport AöR, Scheer Institut, Univention...</td>
</tr>
<tr>
<td>OpenGPT-X</td>
<td>Industry</td>
<td>Fraunhofer, WDR, Aleph Alpha GmbH, KI Bundesverband...</td>
</tr>
<tr>
<td>TELLUS</td>
<td>all</td>
<td>DE-CIX, Trumpf, Stadtwerke Wolfsburg, Cloud&amp;Heat...</td>
</tr>
</tbody>
</table>
We don't like Slides ....
truzzt Alliance Use Case Witte Digital:

Sharing Key and Edge Device

Hannes Bauer
CEO truzzt GmbH, hosting the truzzt Alliance
Use Case Mobility Data Space:

MDS as full fledged and secured environment for the mobility ecosystem

Michael Schäfer
CEO of DRM Datenraum Mobilität GmbH, operating the Mobility Data Space Community
Challenges | Mobility, sustainability and security

- Climate change and sustainable mobility
- Data sovereignty
- Data security
- Accessibility
- Competitiveness & innovation capability
- Trust
Trust & security | Trusted data transmission in Mobility Data Space: Basis for innovative products, services and business models
Trust & security | Data sharing via Mobility Data Space

The secure space for data exchange between partners among equals

- Trust by secured identities
- Security by secured digital infrastructure
Ecosystem | Network of strong partners (selection)
Ecosystem | Wide range of mobility available data

- Traffic information
- Roadworks and road conditions
- Traffic flow information
- Parking information
- Fuel price and electromobility
- Traffic signs and speed information
- Weather information
- Public transport information
- Car and bike sharing
- Infrastructure
Success stories | Application scenarios fired by the Mobility Data Space

BMW
Local Hazard Information

Caruso
Sustainable use of electric drives

FIWARE
Smart Parking

FREE NOW
Travel mode recommendation in accordance with weather conditions

highQ
AI-based optimisation of current mobility offers

Mercedes-Benz
“Parking Monitoring” and “Slippery Road”

[uil] Urban Mobility Innovations
Information on capacity utilisation

Volkswagen
Local Hazard Information
Join the Data Sharing Community
Wrap Up!

(Invitation to join forces)

Olaf-Gerd Gemein

Business Architect, orbiter DataSpace GmbH