

Dell EMC Research Europe

October 2017

The Dell EMC logo, featuring the word "DELL" in a stylized font with a diagonal line through the "E", followed by "EMC".

Dell EMC Research Europe

Advancing Dell EMC's market leadership through Research and Innovation

Collaborative Research

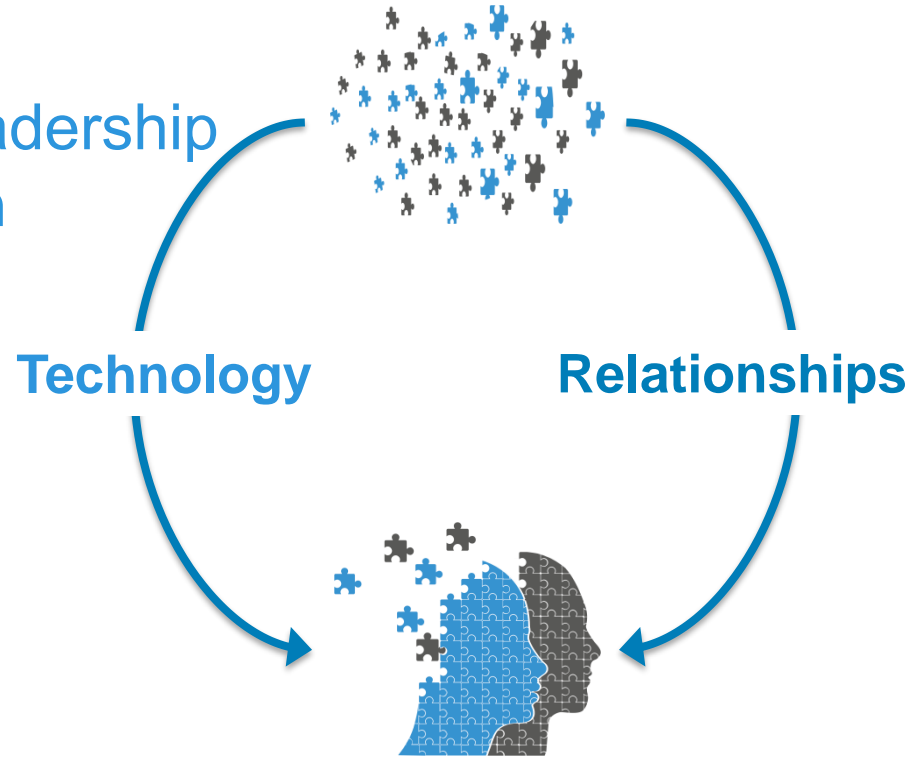
- Externally funded research programs

Customer Engagement

- Advanced proof of concepts and testbeds

Product Group Partnership

- Engagement at pre-roadmap stage



Research Focus

Application Areas

- Critical Infrastructure Protection
- Cloud Security & Privacy
- Cloud Management & Orchestration
- IoT Testbeds
- IT Infrastructure Management
- Digital Transformation for Regulated Industries

Technologies

- Machine Learning & Data Analytics
- Software-Defined Networking
- Secure Containers (e.g. SGX)
- Semantic Modelling (e.g. RDF)
- Edge Processing
- Storage Virtualisation (e.g. CoprHD)



EU Funded Projects

EU Research and Innovation Projects

2013 - 2017



Cloud Security as-a-Service

Security-as-a-Service to enhance security capabilities of Cloud services.
Linking security to CSP SLA's.



Cyber Protection of Smart Grids

Smart grid anomaly detection tools using security analytics.
Security analytics for endpoint and O/T.



Software-Defined Cloud

Software-Defined Cloud computing data centers.
Emerging use cases for Cloud and converged infrastructures.



Cloud Privacy and Security

Enabling data owners to maintain control of their data in the Cloud.
Reference architectures and security controls.



Application Aware Network Services

Optimising data transfer across IP networks based on application needs.
SD enabled backups and recovery.



Next Generation Cryptography

Next generation cryptography.
Key Management to enable security and privacy-preserving data analytics.

New EU Research and Innovation Projects 2017-2020

SliceNet

**5G network
slicing**

End-to-End Cognitive Network Slicing and
Slice Management Framework in Virtualised
Multi-Domain, Multi-Tenant 5G Networks



**Intelligent
Manufacturing**

Multi-level sensing, Predictive analytics, AI
and AR for autonomous factory of the future
Advanced IoT systems and smart devices



**Next-generation
data center**

Terahertz based wireless data centre
network
Automated network device discovery



**Coastal urban
development**

Heterogeneous data-driven public sector
policy for coastal cities planning; social,
environmental, economic impacts

Security Experience

Quantum safe TLS

- Lattice-based cryptography
- OpenSSL Integration for use in Dell EMCs Key Trust Platform

5G security architectures

- End-to-end protection for data on 5G network slices
- Deployable virtual network functions (containers) enabling secure channels
- Provision for Lawful Intercept

Privacy Preserving Analytics

- Data privacy regulation compliance (GDPR)

Key Management infrastructures

- Integration of KMIP into applications

Anomaly detection

- Smart Grids
- Factory of the Future

Cloud Security

- Security SLAs
- Data Protection tools

Dell Technologies Security Portfolio

The RSA logo is displayed in a bold, red, sans-serif font.

**Network Monitoring &
Forensics**

Endpoint Threat Detection

Malware Detection

GRC

IAM

The Secureworks logo features the word "Secureworks" in a black, sans-serif font, with a blue circular icon containing a white dot positioned between the "o" and "r".

**Advanced Threat
Protection**

**Intelligence-Driven
Security Solutions**

Compliance Management

**CyberSec Risk
Management**

The "Working Groups" logo is written in a bold, blue, sans-serif font.

SGX

Blockchain

KMIP

IoT (EdgeX Foundry)

D  **LEMC**