

Colocation and Connectivity - Enabler for Hybrid IT

Berne, 24.05.2018

Disruption forces business transformation

Who wants to be a CIO or CDO?



Changing business models –

»Am I prepared to face new competitors?«

Limited capacity –

»Is my existing IT prepared to keep pace with a changing business?«

Fast change –

»Do I know the right partners and technologies that help me to achieve my goals?«

The Way Businesses Engage Is Changing

Digital Transformation is also Business Transformation

Customers are Digital



2.4B smartphone users in 2017. Digitize end-to-end customer experience

Channels are Digital



By 2018 13% of all sales will be online

Competitors are Digital



Major competitor disruption, e.g. Netflix has 3x users as Comcast

Products are Digital



Digitally enhanced products, location- & context-aware apps with embedded sensors

Employees are Digital



Tracking of employee utilization; employee mobile engagement

Business Operations are Digital

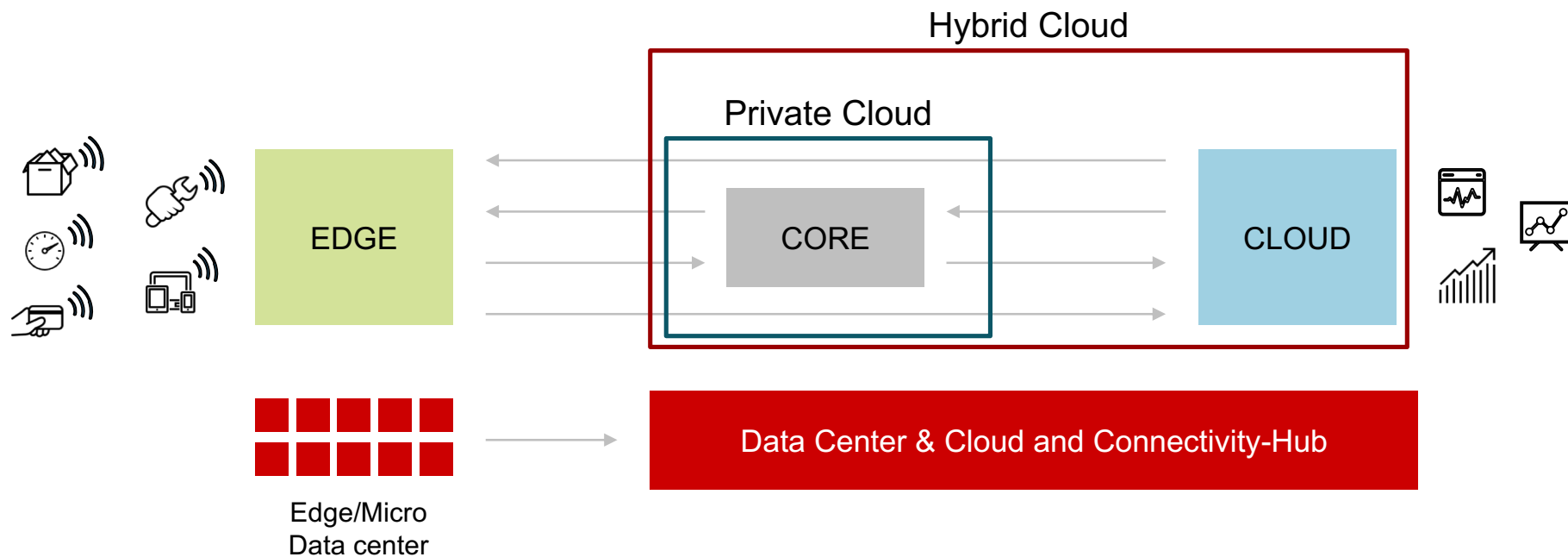


100% stock accuracy with RFID technology



Colocation – data center and connectivity is the key to digital transformation

IoT, connected and driverless cars will drive edge computing (micro data center) and connectivity (5G).



Reliable, cost efficient, compliant and secure data centers to manage the data.

Going Hybrid: What Enterprises want from Cloud Service Providers - Key Findings

84%



Multi-Cloud

Enterprises use **Multi-Cloud-Environments** due to perceived speed, cost and business agility benefits.

63%



Hybrid-Cloud

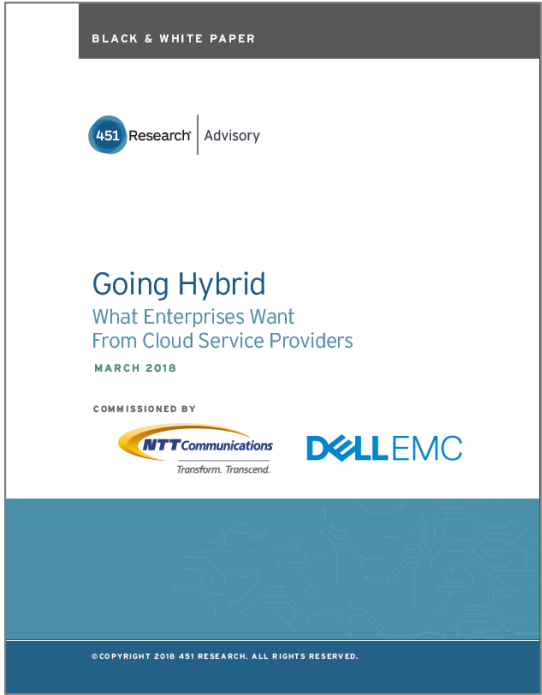
European enterprises have a **formal strategy** or pilot in place **for hybrid cloud**.

45%



Security

Data **security**, privacy and regulatory obligations – including concerns about GDPR – **will dictate the location of hybrid cloud data**



Source: 451Research, Going Hybrid What Enterprises Want From Cloud Service Providers, March 2018

Data Center business is evolving

Data center business developed from facility management to facilitator for the digital transformation



Data Center 

- Wholesale and Colocation
- Facility
 - Power
 - Cooling and
 - Security



Interconnected & Carrier neutral 

- Connectivity
- “Carrier Hotels”
 - Large number of carriers



Cloud neutral 

- Hyperscalers
- CloudConnect (Bandwidth and Latency)
 - “Magnetic Effect”



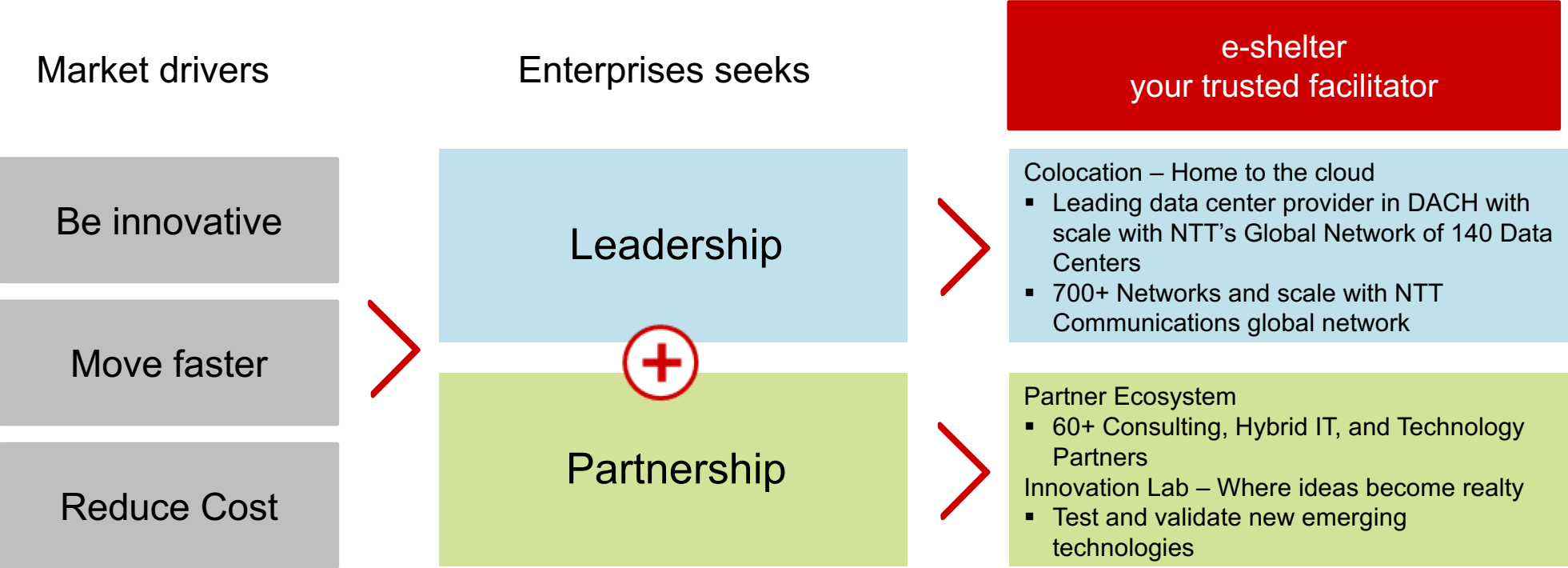
Partner neutral

- ICT-Partner
- Value Added Services
 - Partner Ecosystem
 - Innovation Lab



Data Center and Colocation is key for the Digital Transformation

Enterprises need to focus on innovation, time to market, and cost reduction.



e-shelter – on a page

What we do	Founded	Employees	Revenue (2017)	Customers
Leading data center operator in Europe and Home to the cloud	2000	Group: 500+ Germany: 450+	Total: €205 M	Worldwide: 500+

Focus Topics

- Best in class data centers
- Direct connect to the cloud (AWS, Google, MS Azure, Alibaba, ...)
- Access to Innovation Lab
- Direct access to Internet Exchanges and over 700 Networks
- Flexible bandwidth from 100 Mbps up to 100 Gbps
- Private data exchange across e-shelter data centers

Presence

- 9 data centers in DACH with more than 90,000 sqm space
- Access to a global network of 140 data centers



Home to the cloud

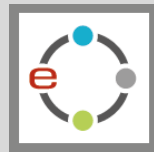
Space, power and beyond

Datacenter & Colocation



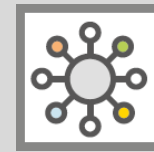
We design, build, operate and secure high availability data centers.

Connectivity



We connect enterprises, applications, users and customers to expand your business.

Partner ecosystem



We connect customers and partners to accelerate time to market.







e-shelter innovation lab



We provide the room to explore new emerging technologies to drive instant innovation.

Modern Mega Data Centers across Europe

The data centers are characterized by optimal availability, flexibility and connectivity

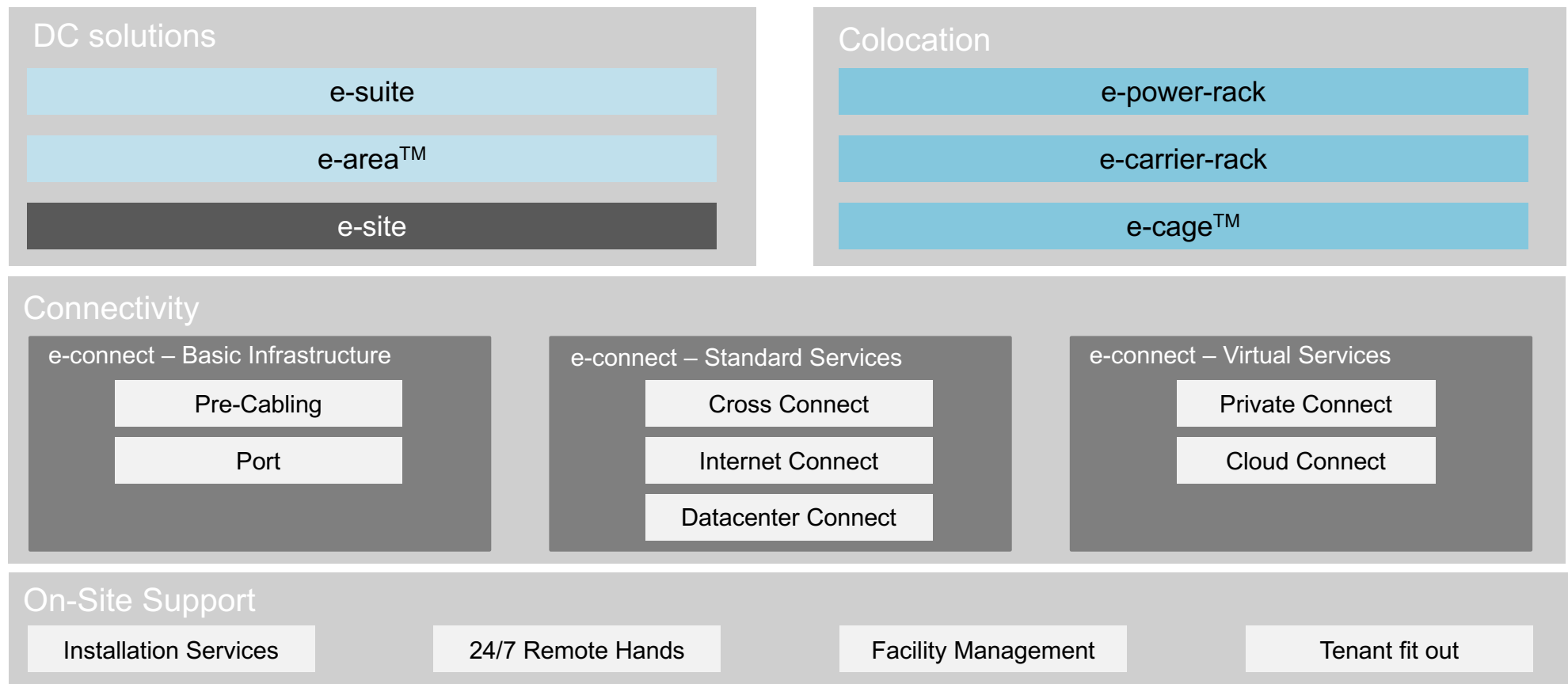
	DC Amsterdam 10 MW 16,000 sqm DC space
	DC Berlin 30 MW 13,000 sqm DC space
	DC Rhine-Ruhr 15 MW 2,700 sqm DC space
	DC Campus Frankfurt 1 120 MW 75,000 sqm DC space
	DC Campus Frankfurt 3 90 MW 8,800 sqm DC space add'l 8,800 sqm planned
	DC Campus Frankfurt 4 60 MW 24,000 sqm DC space



	DC Hamburg 1 MW 1,200 sqm DC space
	DC London 90 MW 24,000 sqm DC space
	DC Madrid 8 MW 3,600 sqm DC space
	DC Munich 2 20 MW 2,800 sqm DC space add'l 2,800 sqm planned
	DC Vienna 20 MW 2,800 sqm DC space add'l 5,600 sqm planned
	DC Zurich 30 MW 7,000 sqm DC space add'l 6,000 sqm planned

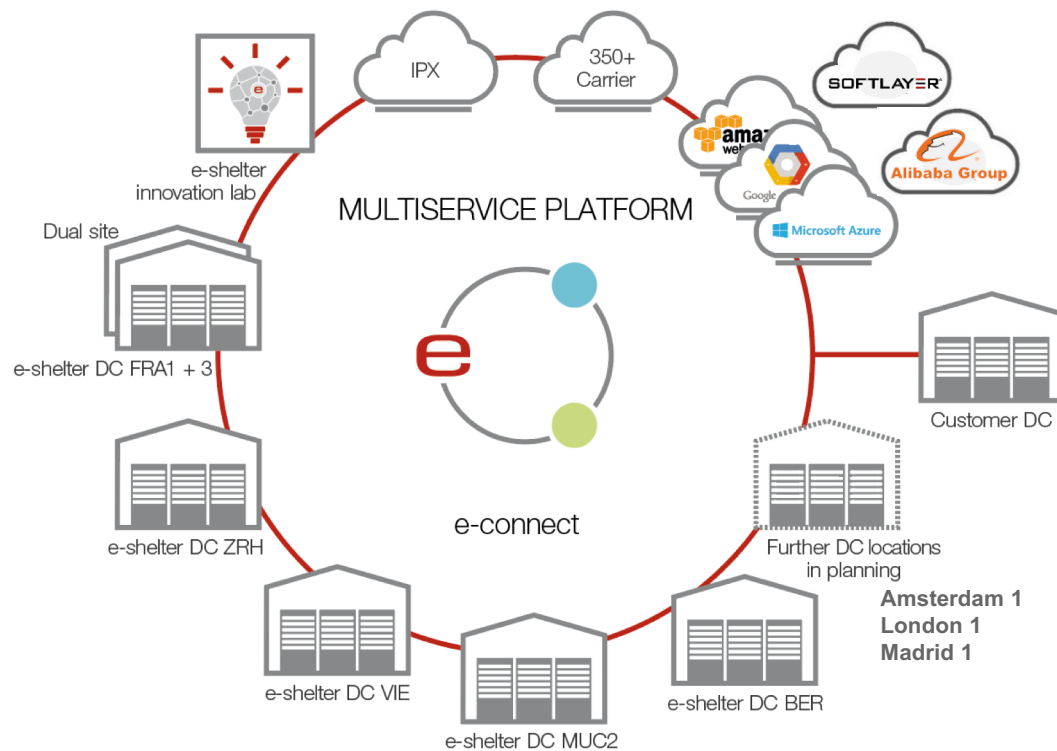
Product- and service platform

We provide integrated solutions for the housing of IT and network systems in highly resilient and secure environments



Home to the cloud

Enterprises gain access to a Hybrid- and Multi-Cloud environment with high performance connectivity and to the e-shelter cloud and innovation ecosystem



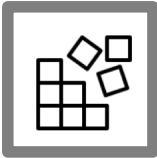
With the integration into the e-shelter ecosystem, Enterprises achieve:

- Best in Class Data Centers with room for growth
- Dual site with Data center Connect or Dark Fiber for geo-redundancy between Fra1 and Fra 3
- Direct connect with low latency to the cloud (AWS, MS Azure, GCP, Softlayer and Alibaba planned)
- Direct connectivity to all e-shelter Data Centers for Hybrid- and Multi-Cloud environments (e-connect)
- Direct access to over 350 Carriers for outside connectivity incl. global connectivity with NTT GIN

e-shelter innovation lab

What's in it?

Rich Ecosystem



Drive private and hybrid cloud use cases jointly with partners and customers of all sizes



Room for innovation



Test and validate distributed architectures in a real-world production environment and measure the impact on IT service delivery



Knowledge community



Share information via a regular series of webcasts, host and join bootcamps, meetups and hackathons



e-shelter innovation lab – use case validation

Test and validate new technologies as part of real world use cases

List of current use cases (excerpt)

- Enable a Multi-Cloud World >> Bringing Enterprises to the Cloud with a secure, intelligent platform for digital business
 - Partners: Cisco, SVA
- Develop locally, scale globally >> Kubernetes Cluster Federation – efficient hybrid cloud container orchestration tool
 - Partners: Google, Intel, inovex
- Rapid innovation by accessing on-demand resources >> Openstack powered by Ubuntu
 - Partners: Canonical, DellEMC
- RedHat Openstack Reference Architecture
 - Partners: RedHat, Lenovo

Complete use case catalog is available at:
<https://www.e-shelter.de/de/e-shelter-innovation-lab>



Home to the cloud

Let's start your hybrid cloud journey today

Shorter development cycles by working with market partners

Accelerated introduction of new cloud solutions



Testing new technologies and implementing innovations directly

State-of-the-art service platform