

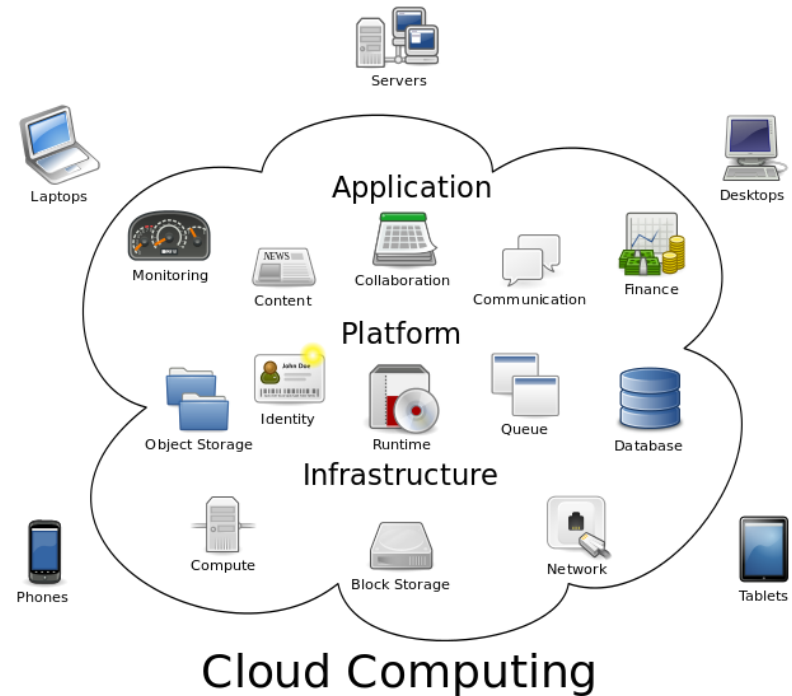


Bull in D/A/CH. Wir schaffen Vorsprung.

22. 11. 2013 | Andreas Morawec, MSc
PreSales & Consultant

Cloud? – Das meint Wikipedia

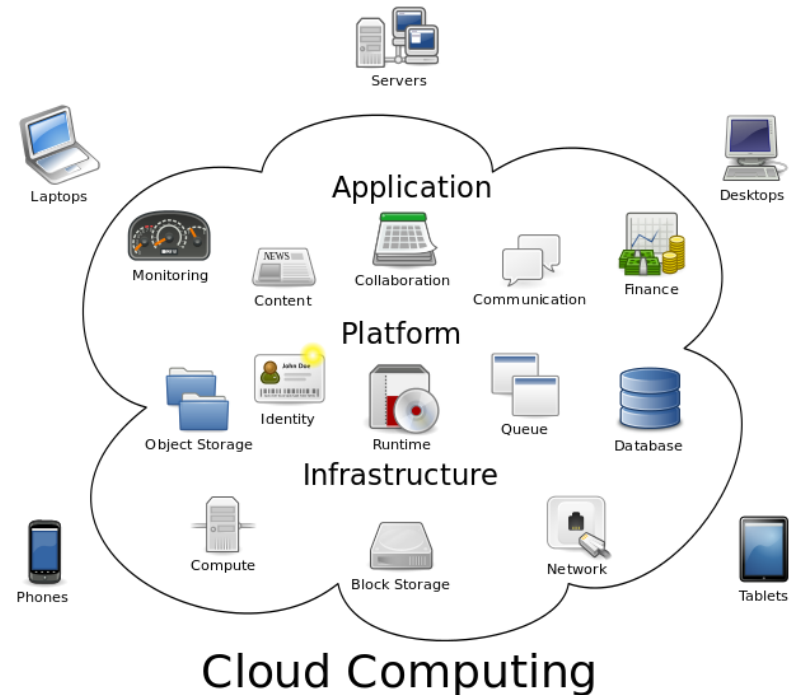
“**Cloud computing** is an expression used to describe a variety of computing concepts that involve a large number of computers connected through a real-time communication network such as the Internet. In science, cloud computing is a synonym for distributed computing over a network, and means the ability to run a program or application on many connected computers at the same time. The phrase also more commonly refers to network-based services, which appear to be provided by real server hardware, and are in fact served up by virtual hardware, simulated by software running on one or more real machines. Such virtual servers do not physically exist and can therefore be moved around and scaled up (or down) on the fly without affecting the end user - arguably, rather like a cloud.”



Quelle: http://en.wikipedia.org/wiki/Cloud_computing

Cloud? – Das meint das NIST

“**Cloud computing** is a model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction. This cloud model promotes availability and is composed of five essential characteristics (On-demand self-service, Broad network access, Resource pooling, Rapid elasticity, Measured Service); three service models (Cloud Software as a Service (SaaS), Cloud Platform as a Service (PaaS), Cloud Infrastructure as a Service (IaaS)); and, four deployment models (Private cloud, Community cloud, Public cloud, Hybrid cloud). Key enabling technologies include: (1) fast wide-area networks, (2) powerful, inexpensive server computers, and (3) high-performance virtualization for commodity hardware.”



Quelle: <http://www.nist.gov/itl/cloud/index.cfm>

Eigenschaften der Cloud



Attribute

Dynamisch

Pooled

Flexibel

Skalierbar

Agil

Effizient

Kostengünstig

Sicher

Organisatorische Unterscheidung



Private Cloud

- Single Tenancy
- CAPEX model
- Owned and managed by customer
- Customer has Complete control over resources
- Upto 40% cost savings compared to managing physical data center
- LOB within the organization are the consumers of private cloud



Public Cloud

- Multi-Tenancy
- OPEX Model
- Owned and Managed by Cloud Service Provider(CSP)
- CSP has complete control on resources
- Customer has limited control over his applications



Hybrid Cloud

- Federation of Private and Public Cloud
- Ideal for critical workloads on Private cloud and non critical workloads on Public cloud
- Results in 40 -60 % cost savings compared managing Infrastructure in house and Physical data center

Technische Unterscheidung

Infrastruktur-as-a-Service (IaaS)

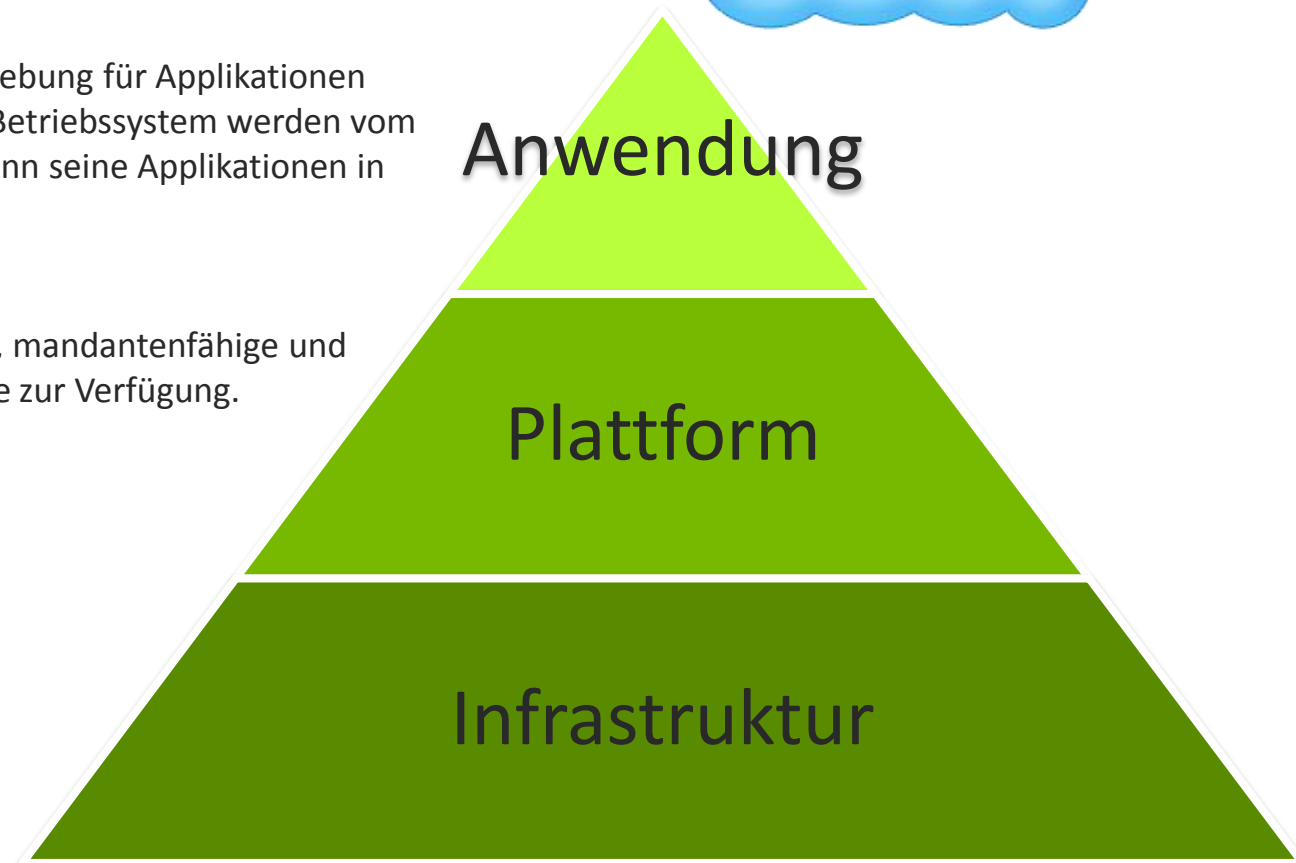
Die Cloud stellt Ressourcen (CPU, RAM, Speicher) zur Verfügung. Diese können in Form von zum Beispiel frei konfigurierbaren virtuellen Maschinen verwendet werden.

Plattform-as-a-Service (PaaS)

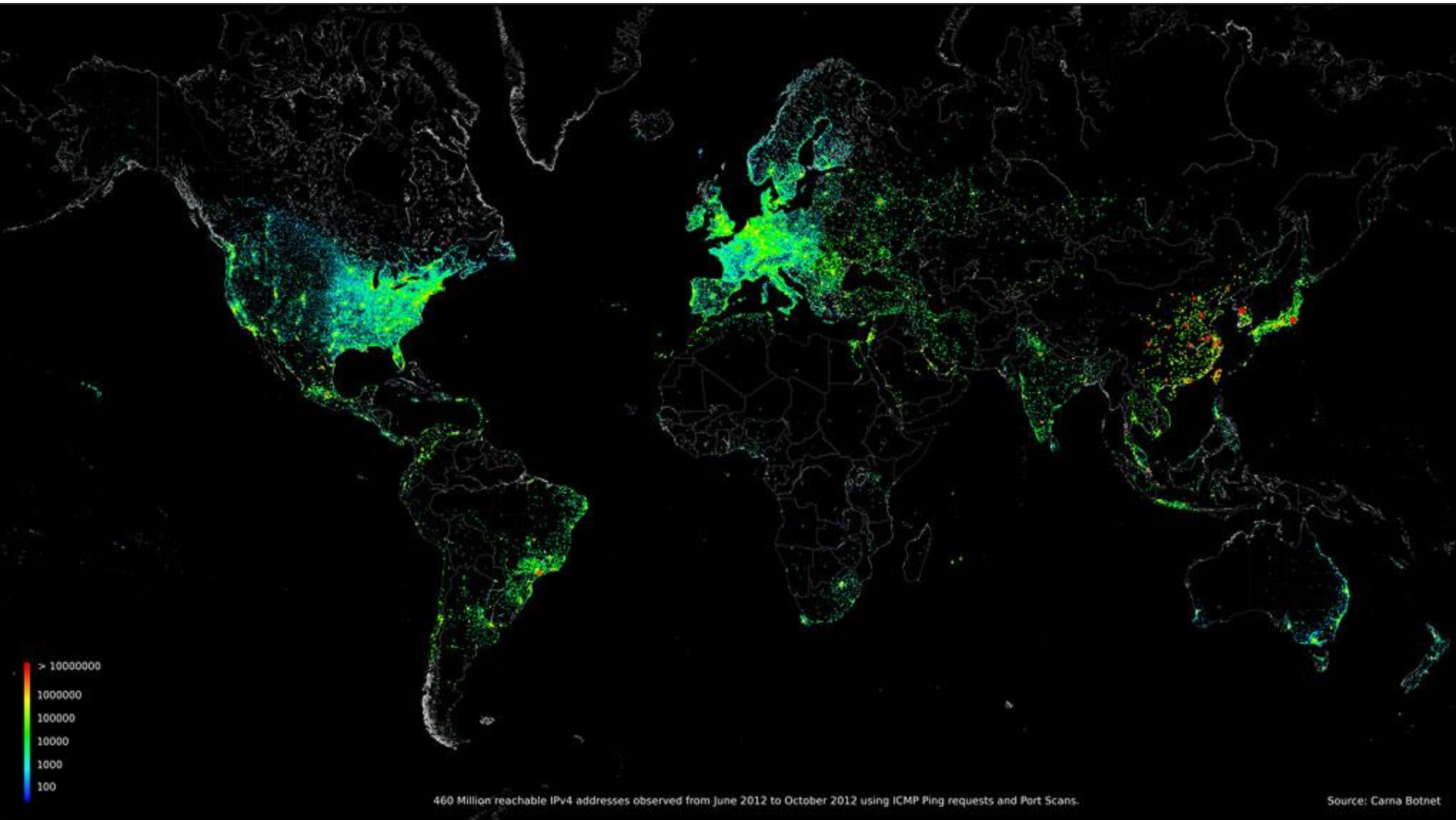
Die Cloud stellt die Laufzeitumgebung für Applikationen zur Verfügung. Die Server inkl. Betriebssystem werden vom Anbieter betreut. Der Nutzer kann seine Applikationen in der Cloud betreiben.

Software-as-a-Service (SaaS)

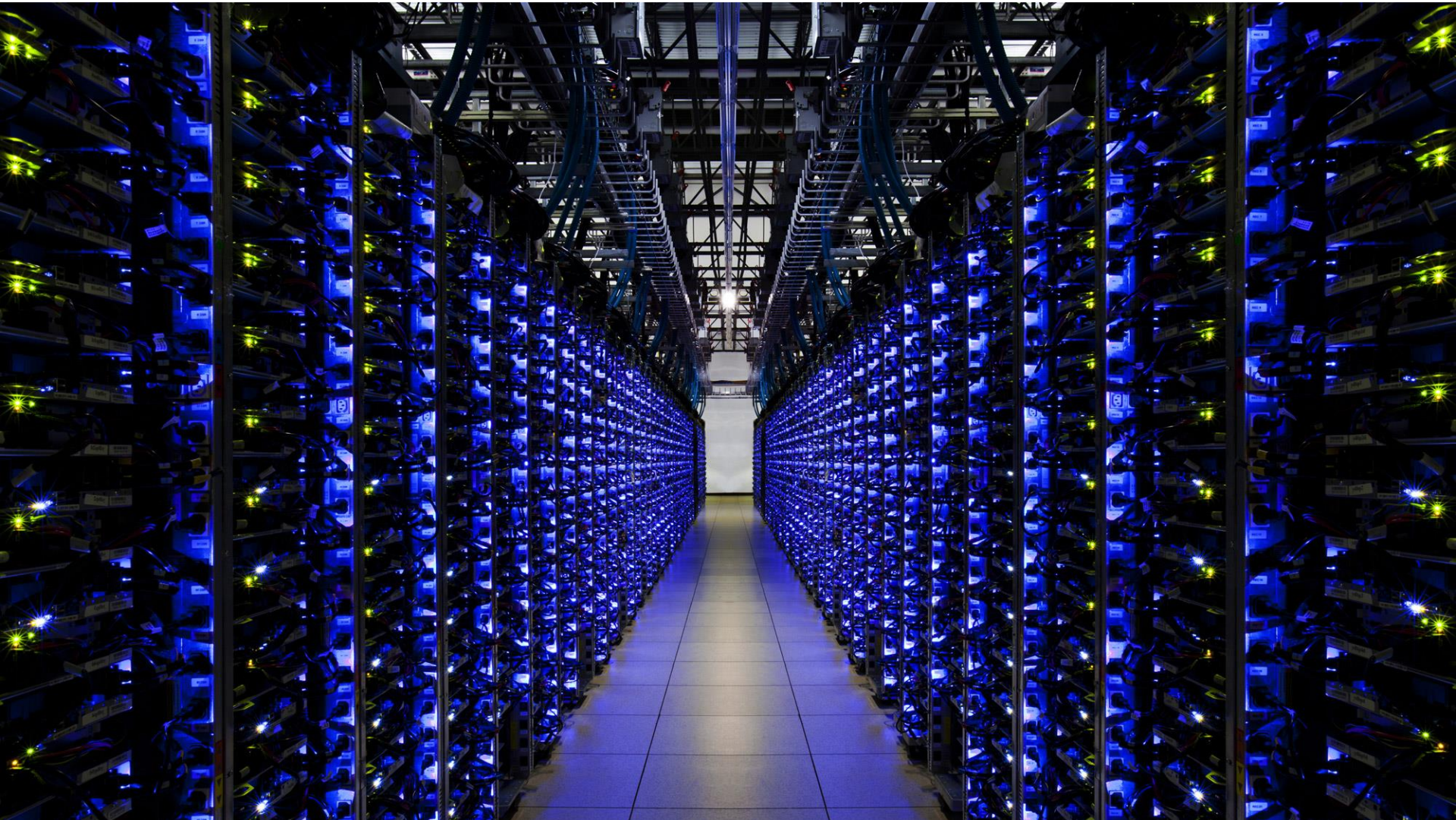
Die Cloud bietet eine modulare, mandantenfähige und dynamisch skalierende Software zur Verfügung.



Wo ist die Cloud?



Wo ist die Cloud?



Wo ist die Cloud?



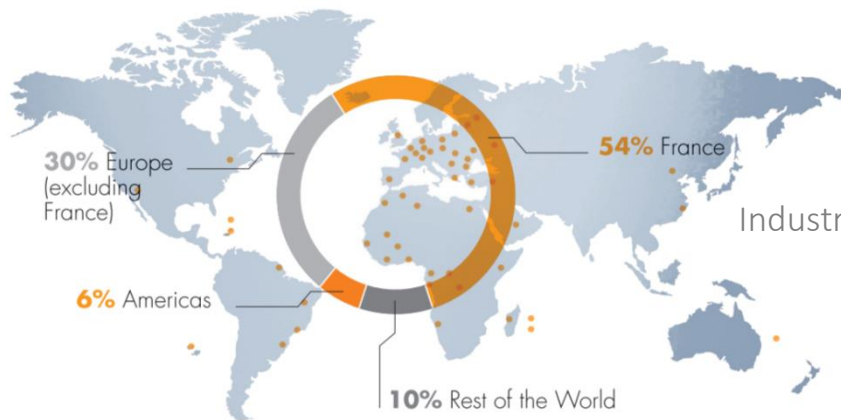
Eine Internetminute...



Quelle: Intel (<http://www.intel.com/content/www/us/en/communications/internet-minute-infographic.html>)

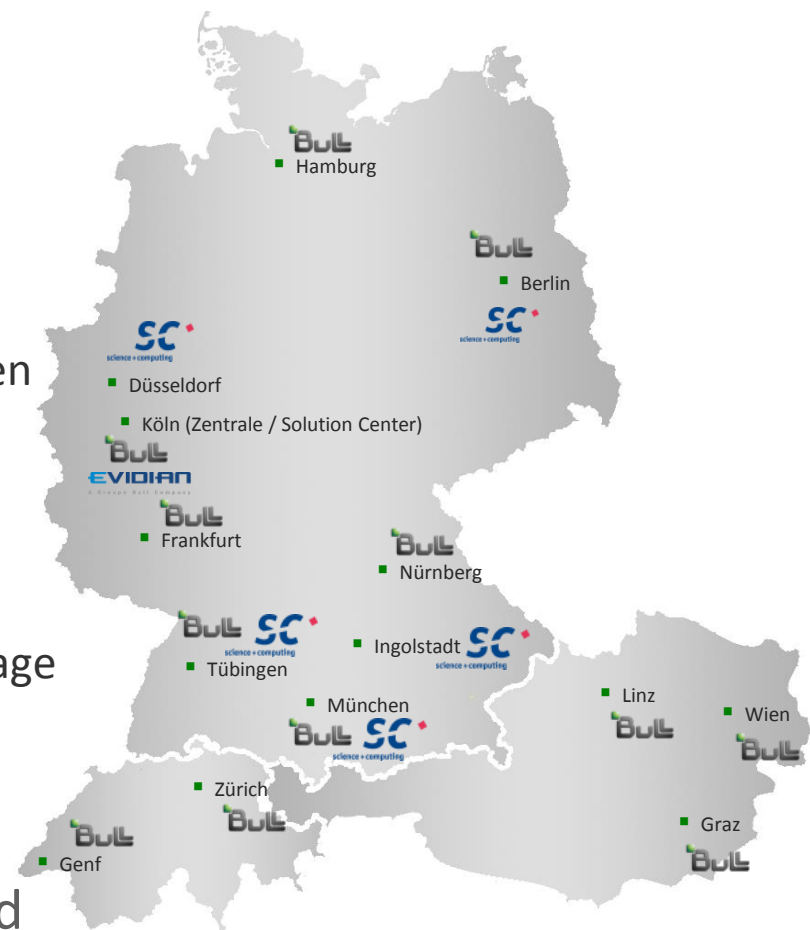
Die Bull Gruppe

- Das führende europäische IT-Unternehmen für sichere geschäftskritische digitale Systeme
- Entwickler und Hersteller von offenen, flexiblen und sicheren IT-Infrastrukturen
- Präsent in mehr als 50 Ländern, weltweites Partnernetzwerk
- 2012: 1,3 Mrd. € Umsatz, 9.300 Mitarbeiter



Die Bull-Gruppe in DACH

- Ein Unternehmen mit drei Marken:
 - Bull, science + computing ag, Evidian
- Ca. 550 Mitarbeiter an 14 Standorten
 - über 200 Experten für Managed Services und High Performance Computing
 - über 150 Service- und Consulting-Spezialisten
- Bull, s+c und Evidian: End-to-End-Lösungen
 - Infrastruktur, Solutions, Security, Sourcing
 - Solution Center für Virtualisierung und Storage
- Flächendeckendes Service-Netz
- ISO9001-zertifizierte Serviceprozesse
- Enge Kooperation mit Technologie- und Lösungspartnern



Bull Kunden in der DACH-Region

Öffentliche Hand Forschung & Lehre



Gesundheitswesen und Life Science



Handel



Industrie



Automotive, Luft- und Raumfahrt



Finanzdienstleister



Reiseveranstalter und Logistik



Sonstige



