Actual Changes in IT-Management





What is this about?

- Short history of NETHINKS and what we do
- Changes in IT-Management
- How to monitor the IT-Infrastucture
- **Generic Inventory Gerry** (working title)







Intelligente Netzwerklösungen Iutelligeute Netzmerklösungen

some numbers

30 Gbit/s Core-capacity





- more than 700 customer connections
- more than 30 Gbit/s-Internet-Connectivity
- one of the oldest active DeCIX-members
- connected with more than 200 carriers
- we support open standards for connectivity











Our relationship to OpenNMS

- Partners since 2008
- we organized this and four former OUCE together with OpenNMS
- we do a lot of projects together
- Thanks for the patience





Our offerings



WAN-connectivity



IT-Monitoring



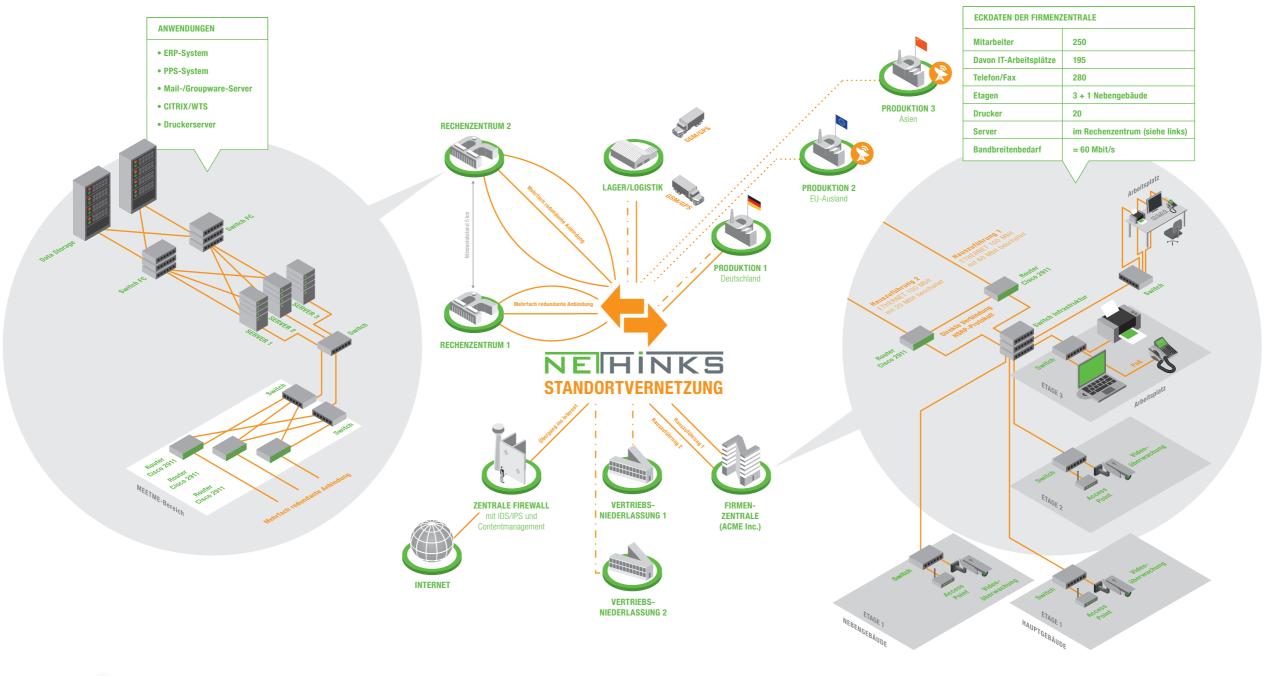
Telephony







WAN - Network for companies





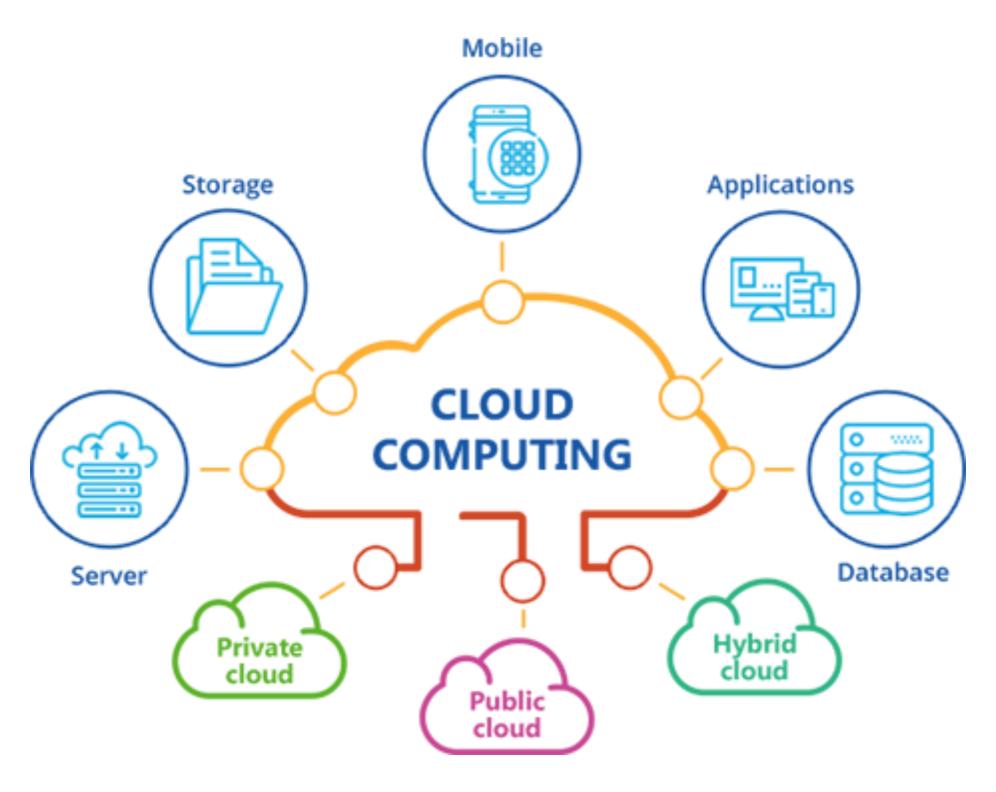


Changes in IT-Management















INDUSTRIAL IOT DATA PROCESSING LAYER STACK

CLOUD LAYER

Big Data Processing Business Logic Data Warehousing

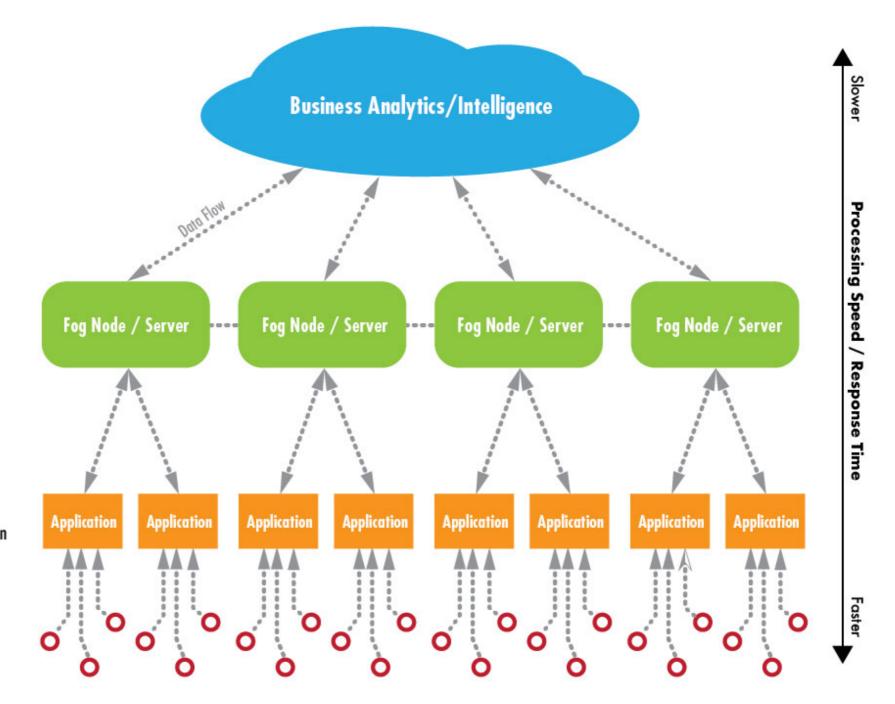
FOG LAYER

Local Network
Data Analysis & Reduction
Control Response
Virtualization/Standardization

EDGE LAYER

Large Volume Real-time Data Processing At Source/On Premises Data Visualization Industrial PCs Embedded Systems Gateways Micro Data Storage

Sensors & Controllers (data origination)







The IT in companies is changing

- Many services in the company are centralized
- Many services are outsourced
 - Sometimes even mission critical services
- New type of CIO is needed





IT-Department in the past

- Do the capacity planning
- Test new services
- Install new services
- Support services
- Support users





IT-Department now

- Keep control over Processes in the company
- Organize the outsourcing partners
 - Service delivery
 - Service support
- Keep independence from partners as long as it is possible
- Take care of security





Characteristics of the CIO

The past

- deep knowledge of hardware, software
- some organizational talent

Now

- generalized knowledge about IT
- very good organizational talent
- familiar with processes





Most important thing:

Keep control





some helpful tools:











Issues with customers

- Getting data about what to monitor was always the most important job
- many companies, even the biggest ones have a lot of different, strange Inventory systems
- taking care of the interfaces between OpenNMS and the Inventory was the most challenging job





Issues at NETHINKS

- Our own backbone is growing as well as the number of our customer
- Our own infrastructure is getting more and more complex
- Delivery, changes, dismantling process became complex





A new inventory system was needed

- available systems doesn't fit our needs
 - to expensiv
 - to rigid, inflexible
- We decided to create a new one
- Handover to Mark Heumüller



