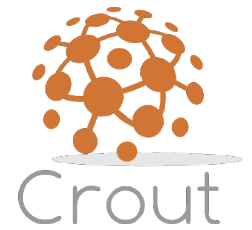# Crout GmbH

we **IoT**ivate your business!

company presentation 2016

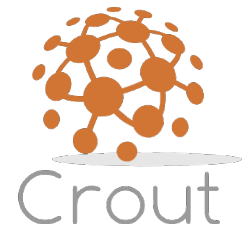# Agenda

The Company

Overview of Products and Services
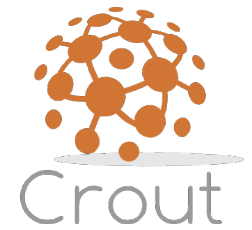
Crout Cloud Integration

Every thin"k" will be connected with every thin"g"!

Evolution

Overview
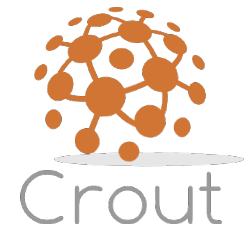
Crout GmbH

- founded as **ASPIDER M2M Deutschland GmbH** in 2012 as a JV between ASPIDER Solutions M2M B.V. with 4M2M GmbH
- a worldwide active IoT connectivity provider and integrator licensed in Germany

International MNO partner:

- Founded in 2002
- Own core network and SIM, registered in the Netherlands
- > 250 employees
- Active customer base: > 2.8 m active SIMs

Local MNO partner: Deutsche Telekom AG

Cloud operations partner

IoT integration platform

Portfolio

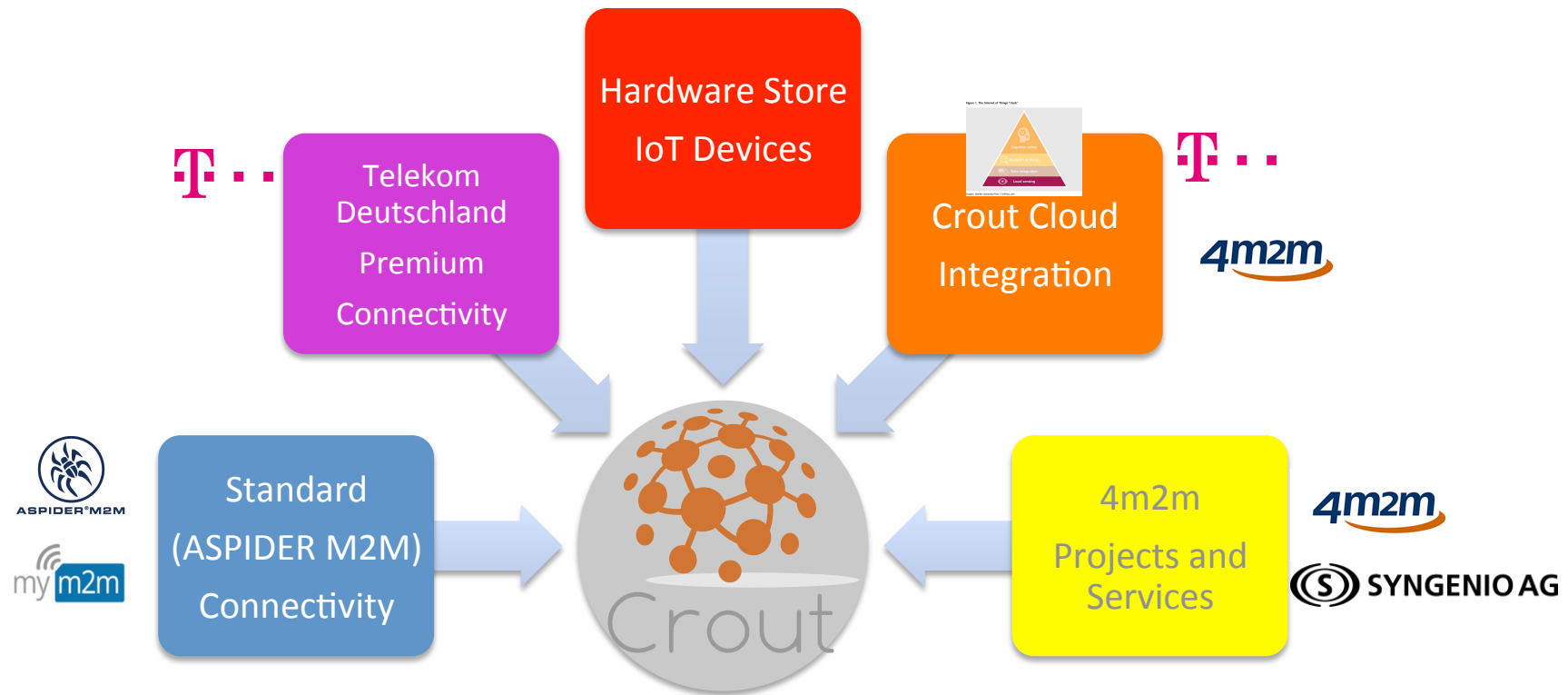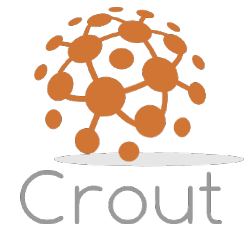Telekom Deutschland Premium Connectivity

Hardware Store IoT Devices

Crout Cloud Integration

Standard (ASPIDER M2M) Connectivity

4m2m Projects and Services

Full choice of global connectivity

Central „Crout" Management Systems

for worlwide connectivity

ASPIDER M2M
M(V)NO
„One" SIM

Local SIMs

ASPIDER

MNO x
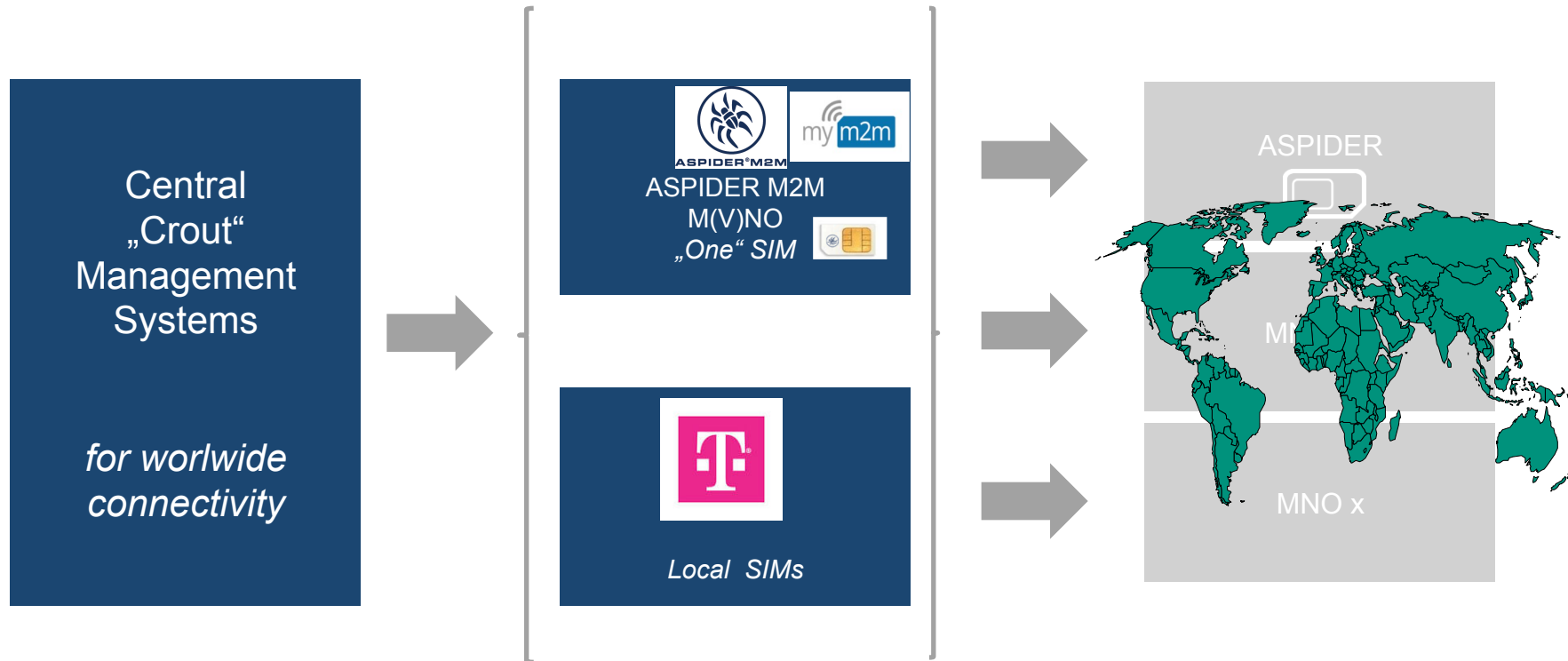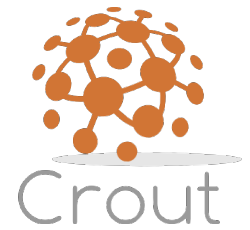
Full choice of global connectivity with local partners and our ASPIDER SIM and strong local partners for very special demands,

to offer seamless M2M & Internet of Things Products & Services.

Standard Mobile Connectivity

FOCUS

◆ „Einfach M2M" simplicity

◆ low data volume (LDV) best local coverage

◆ low data volume (LDV) worldwide coverage

USPs

◆ flexible BUT robust

◆ low cost for low data volume usage

◆ flexible business model support

◆ good quality connectivity

„one world one tarif"

Worldwide wireless connectivity!

- **We are using our unique position of working with a full M(V)NO with its own core network and at the same time acting as a service provider with local MNO's.**

- **We do offer reliable data transfer and other telecommunication services through networks operators in more than 200 countries.**

Europe (Zone 1A+2)	World (Zone 1B)	World (Zone 3-6)	World (Zone 7-9)

October 2015

Deutsche Telekom SIM

FOCUS

◆ high data volume (HDV) local coverage

◆ best local german network

◆ highest reputation

USPs

◆ secured in Germany

◆ high end SLA

◆ high quality connectivity

Hardware Store

FOCUS

◆ IoT / M2M in one box

◆ bundling of devices with connectivity

USPs

◆ plug and play solutions

◆ good hardware pricing for SME customers

◆ full installation support „pre-configuration"

Hardware Store

UNDER CONSTRUCTION

We currently do only advice our customers and

put them in contact with hardware suppliers.
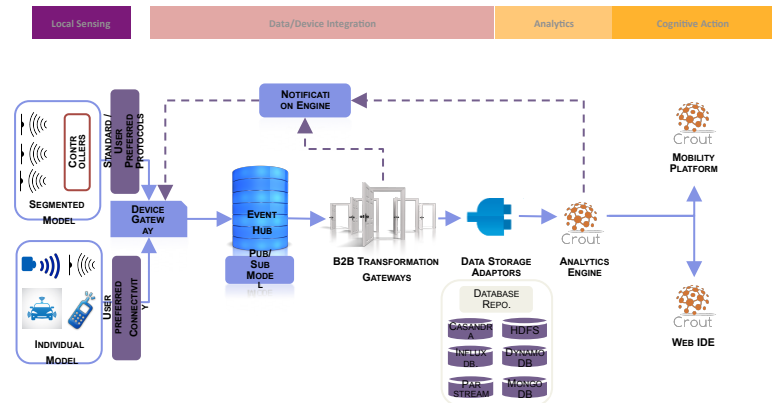
Crout Cloud „Application Integration"

FOCUS
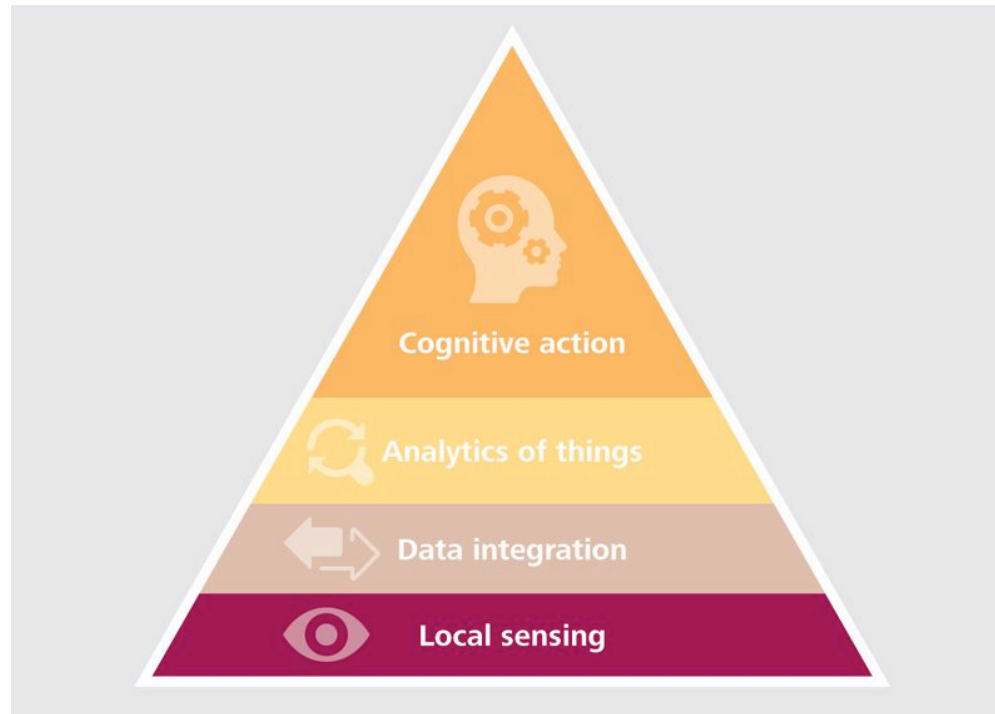
◆   full integration into the mobile network

◆   full use of services i.e. network SMS/Messaging

◆   customized application hosting

◆   standard applications

USPs

◆   HQ Storage solutions for IoT

◆   German Provider/Hosted Services

Crout Cloud Integration

The IoT „stack":

Graphic: Deloitte University Press | DUPress.com

In a view words

1st CASE: cloud space for our customers, to host their applications!

2nd CASE: IoT Plattform with standard functionality:

- Integration Layer: Specific Device integration functionality
- Integration Layer: Already integrated devices to choose from
- Standard IoT Database Layer
- Standard IoT Process Layer

- API for GUI & Process/System Integration
- VM in the cloud based „vCloud"
- Highly configurable
- Complete Track&Trace Solution with focus on UBI

More words
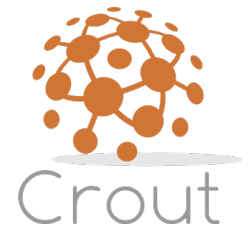
- Hosted in Germany
- High Availability
- High Scalabilty
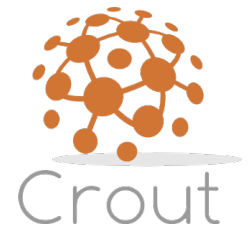- High Security

- **Closely connected to our „network(s)"**

**=> perfect for SME customers who do not have the experience and ressources
To develop and run their own cloud based solution.**

**⇒ perfect for customer solutions which do require a high scalabilty
in technical but also in monetary terms.**

Crout Cloud
Let us host your application!

Cloud space for our customers, to host their applications!

We are using the infrastructure of Telekom Deutschland to offer
Our customers the possibility to operate their applications close to our network in a
secure cloud environment.

- Connected to our APNs through VPNs
- SMPP integration with our network (SMSC connectivity)
- Customer VM set-up and customer operations possible

Produktstandort Deutschland
Sicherheit Made in Germany
Sichere Lösungen nach deutschen Datenschutz-Standards
In einem sicherheitszertifizierten Twin Core Rechenzentrum in Deutschland
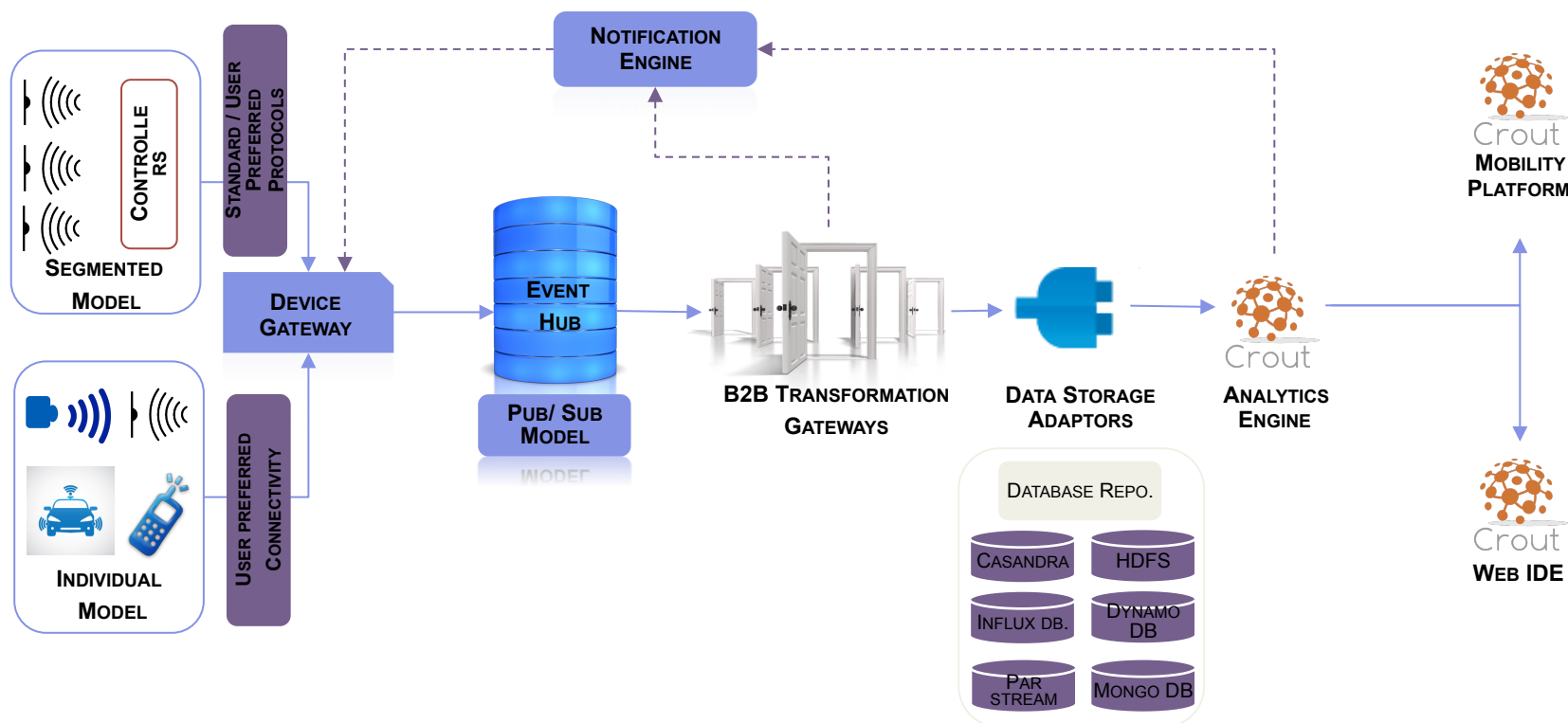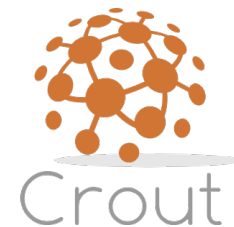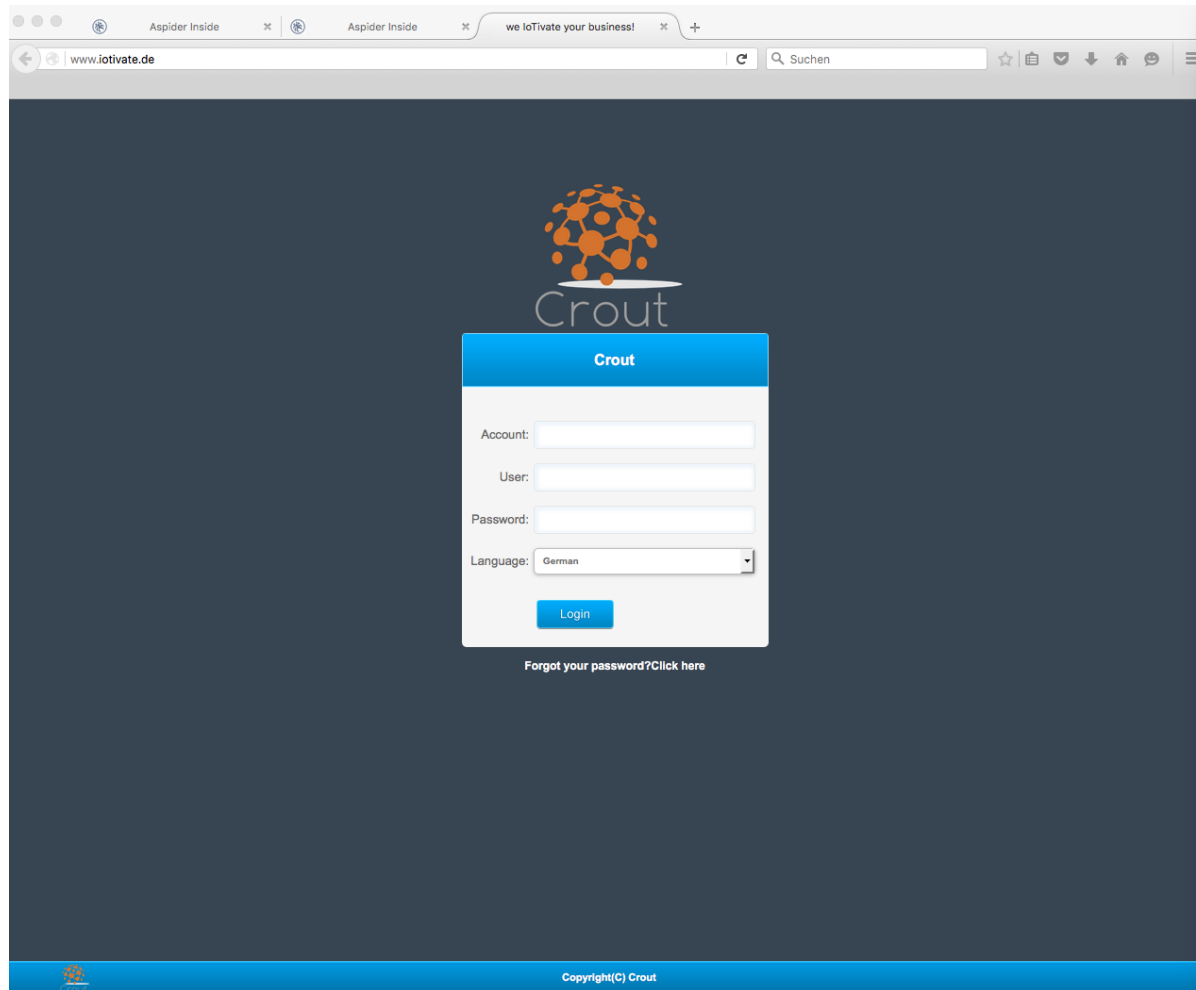Verfügbarkeit von **99,98 % p.a.**
Die Verfügbarkeit von **99,98 % p.a**. eignet sich für die meisten Produktivumgebungen.

Crout IoT Platform
Let us use our standardized processes!

| Local Sensing | Data/Device Integration | Analytics | Cognitive Action |

Ready to use with your requirements

4m2m Projects

FOCUS

◆ specialists for different industries

◆ IT man power for critical projects

◆ enterprise IT integration know-how

USPs

◆ security

◆ SIM card experts

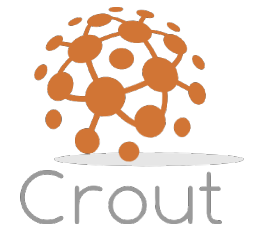◆ one stop shopping

4m2m Projects

Let us IoT TOGETHER!

We do have a a team of highly skilled consultants in our
group of companies to cover the complete scope of IoT

We do have specialists:

- in Enterprise IT
- IT security
- Embedded developments
- „On SIM" card developmnets
- …

Stay ahead of the evolution and avoid dead-end streets

we do have a prooven track-record in delivering the right solution at the right time to the market and to our partners and customers

we have developped best of breed services due to the fast changing environments, a strong competition, highly demanding customers and a none harmonised worldwide legis- and regulation

our DNA should therefore built the base to support you in your approach to delive seamless connectivity to your customers with your products and services

we are able to protect you to accidently hit a dead-end street by providing usually a second way to the desired destination

our abilities do especially count in difficult and sub-stable environments where a fast reaction without loosing the reliability is key