Краеугольный камень ИТ-трансформации в Новую Экономическую Эру
Huawei-SAP Collaboration History

- In 2012 Q2, Huawei and SAP set up official partnership, and Huawei became SAP's first global technical partner in China.
- In 2012 Q4, Jim Snabe, former SAP CEO, visited Huawei HQ and determined the strategic collaboration direction for Huawei and SAP with Ren Zhengfei (Huawei founder) and Xu Zhijun (Huawei rotating CEO).
- In 2013, Huawei and SAP delivered the world's largest SAP HANA cluster for Sinopec.
- In 2014 Q1, Huawei and SAP signed an official strategic collaboration agreement.
- At CeBIT 2014, Huawei and SAP signed IoT and Industry 4.0 collaboration memorandum, enlarging the collaboration scope of the two parties.
- In 2014 Q1, Huawei SAP HANA appliance (24 TB, single node) went live in Huawei internal IT.
- Huawei joined SAP Sapphire 2016 as a top sponsor.
- SAP HANA on FusionSphere was certified.
- Huawei and SAP delivered the world's largest SAP HANA cluster for Sinopec.
- Huawei and SAP jointly held 2016 SAP Shenzhen Forum.
- Huawei SAP HANA appliance (24 TB, single node) went live in Huawei internal IT.
- SAP held Huawei Day in its HQ Walldorf, Germany.
- SAP HANA on FusionSphere was certified.
- Huawei and SAP jointly held 2016 SAP Shenzhen Forum.
- FusionCube SAP HANA was launched.
- Huawei joined SAP Sapphire 2016 as a top sponsor.
- SAP HANA on FusionSphere was certified.
- Huawei and SAP jointly held 2016 SAP Shenzhen Forum.
- Sinopec
- Huawei Enterprise Cloud was certified as the first IaaS platform in China.
- FusionCube SAP HANA was launched.
- Huawei Enterprise Cloud was certified as the first IaaS platform in China.
- Huawei is launching SAP solution on Huawei Enterprise Cloud.
- Huawei Enterprise Cloud was certified as the first IaaS platform in China.
Huawei-SAP Joint Innovations Enable Digital Transformation

- **Industry 4.0**
  - Huawei's big data product FusionInsight and SAP HANA
  - Integrated to form a hierarchical data processing solution for big data.

- **Big Data**
  - Huawei intelligent IoT gateway+SAP PCo/ME/MII
  - Implemets factory process IT enablement, improving production efficiency and reducing operation costs.

- **SAP on Huawei Cloud**
  - FusionSphere cloud OS
  - Enables SAP application and HANA cloudification, reducing enterprises' CAPAX and simplifying IT O&M.

- **Hardware Solution for SAP HANA**
  - Supports E2E SAP HANA infrastructure platforms.
  - Enables real-time services, helping customers get out of conventional closed IT architectures.

- **Connected Fleet Management Joint Solution (IoT)**
  - Huawei IoT gateway/IoT platform/HANA appliance+SAP HANA/HCP/BO
  - Enables product intelligence and service cloudification, helping customers transform to service-oriented manufacturing.
SAP HANA Solution Overview

Single-Node
Business Warehouse on HANA, Business Suite S/4 on HANA, B1 on HANA

Scale out
Business Warehouse on HANA

Tailored Data Center
Business Warehouse on HANA, Business Suite, S/4 on HANA

Huawei 32P Server
All-in-One HANA

Based on Hyper-Convergent Infrastructures

Leading Storage Products

- Huawei V3
  - 16TB cache
  - 3000000 IOPS
  - 9600 disk

- 500%
- 300%
- 300%
Huawei SAP HANA Solution for Customers Worldwide

- Delivered the world's largest HANA cluster for Sinopec.
- Cooperating with Deutsche Telecom in providing SAP cloud services for top 500 customers in Europe.
- Serving customers in over 40 countries and delivers hardware with a total of over 1500 TB memory capacity.
SAP Portfolio On FusionSphere

On-Premise
- BW
- ERP
- SD
- FICO
- SCM
- MM
- ...
- HANA

HANA Enterprise Cloud
- HANA Enterprise cloud
- BW
- APO
- SRM
- Simple Finance
- Hybris
- ...
- HANA

Public Cloud
- Other Apps
- ARIBA
- 3rd Party
- C4C
- ...
- HANA
- HANA
- HANA

Huawei FusionSphere

On demand SAP service running on FusionSphere
## SAP Cloud Solutions

The First **OpenStack based** Public Cloud optimized for **SAP Workload**

### Solutions
- S/4HANA
- SAP Business Suite
- SAP Business Warehouse
- SAP Business All-in-One (A1)
- SAP Business Objects BI Solutions

### Databases
- SAP HANA DB
- Microsoft SQL Server 2012

### Operating Systems
- SUSE Linux Enterprise Server (SLES) for SAP Applications 11.4, 12.1 or higher
# Key Benefits for SAP Customers

<table>
<thead>
<tr>
<th>Benefits</th>
<th>SAP Cloud</th>
<th>On Premise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost Saving</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Openness</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>User Friendliness</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Speed and Agility</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Scalability</td>
<td>✔</td>
<td></td>
</tr>
</tbody>
</table>
Key Benefits for SAP– Cost Saving

- Transparent price models
- Demand-oriented: Usage-dependent, monthly payment or upfront – no investment costs for hardware or data center (OPEX rather than CAPEX)

- Reserved price model
  - Monthly quota of hours of flavour types for a contract duration of 12, 24 or 36 months. Monthly payment (Reserved) or advance payment (Upfront Reserved).
  - Cost-effective for long-term use. Dynamically change the number of booked flavour types within quota according to computing demand

- Elastic price model
  - Only pay for resources used, usage metering, pay-as-you-go- mode, prices based on hourly rates.
  - Flexibility for the spontaneous.

- Flavours
  - Packages comprising virtual CPUs, virtual RAM and operating system use

ATTRACTIVE PRICING OUT OF responsibility AND A GREAT ALTERNATIVE TO STANDARD MARKET OFFERINGS FOR THE PUBLIC CLOUD
Key Benefit for SAP – Openness

- Multi-cloud management is efficiently supported
- Docker Container Service for simple migration of data and workloads
- Ideal environment for native applications
  - High degree of maturity
  - Driven by many large industrial companies and the community
- Independence
  - Reduction of technical dependencies, open standard API
  - No vendor lock-in
  - Freedom of choice with simple service exit
  - Already established in the cloud environment

Future-proof with OpenStack

Potential for the desired cloud standard

Openness out of responsibility FOR OUR CUSTOMERS’ AGILE
Key Benefit for SAP – User Friendliness

- Rapid availability
- Provision of virtual machines within seconds to add cloud resources to own IT as needed
- Tailor-made packages
- Selection of machines without technical knowledge by establishing business requirements and simple price indication using a cost calculator
- Easy boarding and exit
- Use of standard APIs for easy cloud boarding, management of cloud resources and connection to own IT resources
- Intuitive self-service portal
- User-friendly, easy-to-use self service portal for the provision and management of cloud resources

USER FRIENDLINESS OUT OF RESPONSIBILITY FOR SAVING TIME IN DEALINGS WITH OUR CUSTOMERS
Key Benefit for SAP – Security

- SAP cloud on OTC meets local Law
- Security based on responsibility for the security and protection of our customers’ data
- Contracts and management in accordance with German law: Open Telekom Cloud meets German data security and privacy requirements
- Twin-core principle
- Operated by T-Systems in highly secure Tier 3+ data centers in Germany (Biere / Magdeburg) with 99.95% availability
- Audited cloud infrastructure
- Certificates confirm the proper operation of the infrastructure platform:
  - CSA STAR level 2, TÜV Trusted Cloud Service, ESARIS
- E2E security concept
- A special security concept was developed for the Open Telekom Cloud, so customers need take no further measures
Key Benefit for SAP – Speed and Agility

- Provision compute, storage and network infrastructure for SAP S/4HANA in hours vs. weeks or months with traditional infrastructure.

- Provision temporary infrastructure for SAP S/4HANA POCs, migration tests, etc.

ECS Instance
- POC –XX months

ECS Instance
- New Implementation to Production

Public Cloud
- 1 day Physical Appliance
- Software Install
- Network setup

- 1 15 30 45 60 90 Days
**Key Benefit for SAP – Scalability**

- Scalability
- Time

**Project Start**
- 12 months
- 24 months
- 36 months

**Memory**
- 256 GB
- 512 GB
- 1 TB
- 2 TB

**Challenge**

- Estimating SAP S/4HANA initial and future memory requirements accurately can be challenging.

**Cloud Infrastructure**

- Infrastructure can be sized based on actual requirements and then increased as requirements increase.
Business Model: Self Services or Partner managed

- **Self-managed by:**
  - Customer or Partner

- **Managed by 3rd Partners**

- **Public Cloud**
  - Facilities
  - Servers
  - Storage
  - Network

- **Infrastructure**
  - OS Admin/Patching
  - Backup & Recovery
  - Network & Security
  - Monitoring

- **Infrastructure Services**
  - SAP BASIS Administration
  - SAP Installation/Operation
  - SAP Upgrades/Patching
  - SAP Monitoring

- **SAP Hosting Services**
  - SAP BASIS Administration
  - SAP Installation/Operation
  - SAP Upgrades/Patching
  - SAP Monitoring

- **SAP Software**
  - HANA
  - S/4HANA
  - SAP Business Suite...

- **BYOL**
  - Customer
  - BYOL

- **SAP Hosting Services**
  - SAP BASIS Administration
  - SAP Installation/Operation
  - SAP Upgrades/Patching
  - SAP Monitoring

- **SAP Software**
  - HANA
  - S/4HANA
  - SAP Business Suite...

- **Self-managed by:**
  - Customer or Partner

- **Managed by 3rd Partners**
DEPLOY A SAP HANA IN 5 STEPS 1/5

Create a new Hana ECS Instance

### OPEN TELEKOM CLOUD

**Cloud Server Console**

- Dashboard
- Elastic Cloud Server
- Elastic Volume Service
- Volume Backup Service
- Image Mgmt Service
- Auto Scaling
- Elastic Load Balance
- Key Pair

#### Elastic Cloud Server

An Elastic Cloud Server (ECS) is a virtual server that runs in a secure and isolated environment. You can create multiple ECSs and adjust their specifications at any time to meet changing service requirements. Learn More...

#### Cloud Server Operations

- Start
- Stop
- Restart
- Delete

#### ECS Configuration

<table>
<thead>
<tr>
<th>Name</th>
<th>Status</th>
<th>Specifications</th>
<th>Image</th>
<th>Private IP Address</th>
<th>AZ</th>
<th>Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>text</td>
<td>Running</td>
<td>CPU: 4 vCPUs, Memory: 128 GB</td>
<td>Enterprise_SLES 1</td>
<td>192.168.1.51</td>
<td>eu-de-01</td>
<td>Remote Login</td>
</tr>
<tr>
<td>ecs_hana_text</td>
<td>Running</td>
<td>CPU: 32 vCPUs, Memory: 512 GB</td>
<td>Enterprise_SLES 1</td>
<td>192.168.1.6</td>
<td>eu-de-01</td>
<td>Remote Login</td>
</tr>
</tbody>
</table>
DEPLOY A SAP HANA IN 5 STEPS 2/5

Select SAP Hana Deployment Options

- Define Hana Memory size
- Define CPU/Memory ratio according to the expected workload Type (Analytics/SoH)
DEPLOY A SAP HANA IN 5 STEPS 3/5

- Define server IP address
- Define user credentials for Operating System access
Final confirmation of selected Options
DEPLOY A SAP HANA IN 5 STEPS 5/5

Deployment runs – approximately 20 minutes, depending the system size.

ECS hana512 creation task submitted successfully.

This task normally takes several minutes to complete. Please wait...

The system will switch to the Elastic Cloud Server page in 7 seconds.

To switch to that page now, click Here.
THANK YOU

www.huawei.com

Copyright©2014 Huawei Technologies Co., Ltd. All Rights Reserved.

The information in this document may contain predictive statements including, without limitation, statements regarding the future financial and operating results, future product portfolio, new technology, etc. There are a number of factors that could cause actual results and developments to differ materially from those expressed or implied in the predictive statements. Therefore, such information is provided for reference purpose only and constitutes neither an offer nor an acceptance. Huawei may change the information at any time without notice.