MAXIMIZE THE VALUE OF THE SAP HANA PLATFORM: FROM PRODUCTION DEPLOYMENT TO BUSINESS VALUE

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Learn how to adopt SAP HANA organically and cost-effectively. We will present Hitachi “Live in Five” services that support SAP HANA business use cases and identify related business ROI. For the data center, we will discuss SAP HANA deployment options that support service level agreements (SLAs).

Benefits of this session

- Learn about the “Live in Five” program for SAP HANA
- See how to identify and demonstrate the business value of a SAP HANA implementation
- Hear industry use cases
- Understand data center deployment options and how you can deliver SLAs
- Learn about SAP HANA disaster recovery strategies
DISCUSSION TOPICS

- Hitachi & SAP
- SAP HANA & What it can deliver
- Mission-Critical SAP HANA Deployments with Hitachi
- From the Appliance to Business Value: “Live in 5”
- Customer Use Cases
- Q & A
DEEP INNOVATION RESOURCES

HITACHI
Inspire the Next

- Founded in 1910
- US$96.1B FY12
- 1000 subsidiaries
- 326,000 employees
- Thousands of PhDs

us$3.6B
INNOVATION BUDGET

#38 in the 2012 FORTUNE® Global 500
TRUSTED BY LEADING ORGANIZATIONS

FORTUNE® GLOBAL 500 COMPANIES

- 9/10 of technology firms
- >1/2 of energy, retail, manufacturing, insurance, transportation, financial services
- 3/4 of healthcare and telco
- 82% of Fortune Global 100
OUR INTEGRATED STRATEGY

INFRASTRUCTURE
- Virtualization, Mobility
- Integrated Management
- Data Center Convergence
- Infrastructure on Demand

CONTENT
- Search, Discover and Integrate Independent of Applications
- On Demand Content
- Archiving as a Service

INFORMATION
- Business Intelligence
- Big Data
- Analytics
- Integration

SINGLE VIRTUALIZATION PLATFORM FOR INFRASTRUCTURE, CONTENT AND INFORMATION
Hitachi has a long standing, award winning relationship with SAP

SAP AWARDS
- SAP Pinnacle Award for SAP Global SME-Market Sales in 2007
- SAP Award for Highest Customer Satisfaction 10x since 1998
Hitachi Data Systems – SAP Solution Focus

**SAP HANA**
Truly enterprise-grade platform for the real-time business

**SAP ILM**
Natively integrated object storage for archiving and compliance

**SAP LVM**
Effective SAP landscape management with Hitachi storage

**The Strength of The Platform**
Storage, server, and Unified Compute Platform (UCP) solutions supporting SAP environments
Global SAP Practice Highlights

- SAP Global Services Partner
- Over 700 global projects
- US-based SAP Focus w/ 20% growth
- Comprehensive SAP Industry Solutions Portfolio
  - HANA CoE
  - BusinessObjects
  - BPC versions on SQL, NW and HANA
  - Data Services (ETL)
  - SAP BW on HANA, HANA Enterprise, BPC on HANA, Business Suite on HANA
- Offshore development and services team
- Managed Services

Industry Focus

- Consumer Products
- Communications, Media and Entertainment
- Aerospace & Defense
- Chemicals/Process Industry
- Industrial Products
- Public Sector
- High Tech Products
Hitachi is equipped to support every aspect of a HANA solution. We are one of the very few SAP Partners who can provide this level of support.
SAP HANA: THE VIEW FROM 10,000 FT

POWERING THE REAL-TIME BUSINESS

- SAP HANA is an in-memory database platform that allows the processing of massive quantities of real time data – delivered as an appliance.

- What it means to the business:
  - React in real-time to events
  - Gain deep business visibility
  - Drive business value from data
  - Simplify operation
  - Shorten time-to-value
  - Enable business strategies in innovative and transformative ways
CLOSER LOOK AT SAP HANA

ENABLING INNOVATIVE IN-MEMORY SOLUTIONS

- SAP HANA is much more than an analytical **in-memory database**
  - Scalable, high performance Appliance
  - Row and Columnar based data stores
  - Data Integration engine
  - Parallel Calculation engine
  - Parallel Planning engine
  - Application function libraries
  - Text Analytics (unstructured data)
  - Web and Application server engine
  - Standard and specialized interfaces
  - Integrated Development and Management platform
SAP HANA – Scale-Up:
- Single-node SAP HANA appliance
- Sizes: 256 GB (S), 512 GB (M), 1024 GB (L), 2048 GB (L+, only for ‘Suite on HANA’)
- Generally used for POCs, test, demo, smaller production environments, or ‘Suite on HANA’

SAP HANA – Scale-Out:
- Multi-node SAP HANA appliance with built-in HA
- Certified for up to 16 nodes, beyond that custom check with SAP
- Used for larger HANA environments
- Certified for DR

Selection Criteria?
- Required HANA memory size about or larger than 1 TB? Use Scale-Out (except for ‘Suite in HANA’)
- HA required? Use Scale-Out
- DR of interest? Use Scale-Out
- “Suite on HANA”? Use Scale-Up (today)
HITACHI UCP SELECT FOR SAP HANA - SCALE-UP: FEATURES & BENEFITS

KEY BENEFITS:

- **Scalability & Efficiency**
  Up to four Hitachi Blades delivering a single HANA node with up to 80 cores and 1,024 GB of memory (CB 2000).

- **Availability**
  Fibre-channel storage for 99.999% data availability (HUS 130)

- **Performance**
  Well-balanced system with fibre-channel storage.

<table>
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<th>MEMORY</th>
<th># BLADE</th>
<th>SOCKETS</th>
<th>CORES</th>
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<td>20</td>
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<td>512 GB</td>
<td>2</td>
<td>4</td>
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<td>1,024 GB</td>
<td>4</td>
<td>8</td>
<td>80</td>
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<td>L+*</td>
<td>2,048 GB</td>
<td>4</td>
<td>8</td>
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</tr>
</tbody>
</table>

*S Only supported for ERP, CRM, SCM.*

SAP HANA preloaded by HDS
Smoothly grow your HANA platform without rip & replace, lower TCO & protect the investment

Deploy an SAP environment “in a box”, saving TCO
HITACHI UCP SELECT FOR SAP HANA - SCALE-OUT

BENEFITS AND DIFFERENTIATION

Key components:

- The same Hitachi blades as for S/M/L (CB 2000). Node size: 500 GB (M)
- Tier 1 enterprise-class direct-attach block storage (VSP), as used today for core SAP
- Usage of SAP HANA Storage Connector API for data and logs instead of NFS-type setups

Key benefits:

- True mission-critical robustness & performance
- Ideal for DR implementations (synchronous replication certified, asynchronous in planning)
- Low TCO – leverage DR appliance for QA… with the same storage array!
- Hitachi customers can rely on the same processes they use for ERP today
- Free of issues that NFS/MPFS implementations have (see SAP Note 1740136)
SCALE-OUT & DATA AVAILABILITY: HA & DR

DATA CENTER A

Active Nodes
- Node 2
- Node 3
- Node 4

Standby Nodes
- Node 1

DATA CENTER B

Active Nodes
- Node 1
- Node 2
- Node 3
- Node 4

Standby Nodes

Synchronous Replication
(Certified as of 06/13/2013 – see SAP Note 1755396)

Asynchronous Replication*
(planned for later in 2013)

Clients

Application Servers

Co-location of QA with DR on same appliance and same storage array** – see SAP Note 1755396!

** Additional disk space is required for QA system, only one instance can run at a time.

* Roadmap – features & timing can change w/o notice
SAP HANA PLATFORM SERVICE OFFERINGS

SAP HANA Install Services
- Implementation planning
- On-site implementation
- Network conductivity

SAP HANA Base Services
- SAP HANA Studio
- SAP HANA DB & BW upgrades
- BW migration
- SLT, BOBJ, DXC, SRS, DS Configuration

SAP HANA Live In Five
- Proof of Value
- Use Case implementations
- On or off premise
- Your data

SAP HANA Appliance Training
- Configuration
- Management
- Monitoring

SAP HANA Managed Service
- SAP HANA software patching
- SuSe patching
- Monitoring

Hitachi Communications

Hitachi Consulting
Rapid use case(s) solution development
- Defined project metrics and ROI
- Rapid time to value for phase 1

1-2 day Workshop to define use case(s) / scope
- 5 weeks from start to finish!

SAP HANA Live in Five
Proof of Value for Enterprise and BW on SAP HANA

1. Workshop
- Use Case development
- Metrics, goals for project
- Scope, data sources
- Develop Project timelines

2. Blueprint to execution
- Standard Content and Modeling
- Data integration development
- Reporting and analytics development
- Knowledge transfer

3. Tuning and testing
- User testing
- Technology testing & validation

4. Validation
- Business and IT Metrics
- Goals

5. Acceptance
- Solution signoff

6. Develop plan to move into production
CUSTOMER USE CASES AND VALUE

HOW ARE OUR CUSTOMERS USING SAP HANA?

1. Enterprise Data Warehouse
2. Agile Marts
3. Near Real-Time SAP Operational Reporting
4. Near Real-Time Data Hub
5. Big Data Analytics platform
6. Demand Signal Repository
7. Custom Web and Mobile Application platform
8. Advanced Analytics and Predictive Modeling platform
CUSTOMER USE CASES AND VALUE (1/8)

HOW ARE OUR CUSTOMERS USING SAP HANA?

1. Enterprise Data Warehouse

**OUR CLIENT:** Large Wholesale Distributor.

**SOLUTION DESCRIPTION:** Finance: shorten financial close process and increase insight into detailed product-store profitability.

**SOLUTION:** BW on SAP HANA, BusinessObjects.

**BENEFITS:**
- Detailed and timely Profitability Analysis.
- Shortened batch windows and closing process.
- Greatly improved query performance.
HOW ARE OUR CUSTOMERS USING SAP HANA?

1. Enterprise Data Warehouse

2. Agile Marts

OUR CLIENT: Large Media company.

SOLUTION DESCRIPTION: Sales: Analyze and improve effectiveness of commercials.

SOLUTION: SAP HANA Enterprise, Data Services, BusinessObjects, data from multiple internal systems and 3rd party syndicated data providers.

BENEFITS:
- Increased insight into impact and effectiveness of TV and radio commercials.
- Supported decisions to maximize revenue from commercials.
- Near real-time availability of data.
- Greatly improved query and load performance.
- Simplified data architecture.
HOW ARE OUR CUSTOMERS USING SAP HANA?

1. Enterprise Data Warehouse
2. Agile Marts
3. Near Real-Time SAP Operational Reporting

OUR CLIENT: Global Manufacturer.

SOLUTION DESCRIPTION: Near real-time enterprise reporting of ECC data.

SOLUTION: ECC, SLT, SAP HANA Enterprise, HANA Live, BusinessObjects.

BENEFITS:
- Improved business operational reporting and analysis performance
- Enabled near real-time reporting
- Decreased load on production ECC system
- Shortened time-to-value
- Increased flexibility
HOW ARE OUR CUSTOMERS USING SAP HANA?

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OUR CLIENT: Global Food Manufacturer.

SOLUTION DESCRIPTION: Near real-time enterprise data hub to share standardized enterprise data from SAP and non-SAP sources with consuming applications and systems.

SOLUTION: SLT, SRS, HANA Enterprise, HANA Live, Data Services, MQ.

BENEFITS:
- Enable business to change systems without impacting dependent, up or downstream systems
- Minimize data redundancy
- Shortened time-to-value
- Increased flexibility
- Simplified solution
HOW ARE OUR CUSTOMERS USING SAP HANA?

1. Enterprise Data Warehouse
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OUR CLIENT: International Aerospace and Defense company.

SOLUTION DESCRIPTION: Scientific computing – Advanced analysis and visualization of very large amounts of complex, structured and unstructured data generated by multi-spectral imaging systems (e.g. radar).

SOLUTION: Hadoop, Data Services, HANA Enterprise, BusinessObjects Visual Intelligence.

BENEFITS:
- Increased effectiveness of identification of objects of interest.
- Reduced the time from event to analysis to decision.
- Improved performance and analyst experience.
- Integration Hadoop-HANA solution.
HOW ARE OUR CUSTOMERS USING SAP HANA?

1. Enterprise Data Warehouse
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CUSTOMER USE CASES AND VALUE (6/8)

OUR CLIENT: Global Manufacturer.

SOLUTION DESCRIPTION: Supply Chain and Sales: custom solution to integrate, harmonize, enrich, analyze and manage billions of rows of POS and other retailer and internal data to support advanced analysis and decision making.

SOLUTION: HANA Enterprise, Data Services, SLT, BusinessObjects.

BENEFITS:
- Scalable, high performance DSR platform with cross retailer POS, syndicated and internal data enabling advanced, business analytical apps.
- Load, manage and analyze very large volumes of data.
- Shortened time-to-value.
- Increased flexibility.
- Improved performance.
CUSTOMER USE CASES AND VALUE (7/8)

HOW ARE OUR CUSTOMERS USING SAP HANA?

**OUR CLIENT:** Large Manufacturer.

**SOLUTION DESCRIPTION:** Production Planning – Custom HTML5 based web and mobile in-memory application combining transactional and analytical functionality.

**SOLUTION:** HANA XS Engine, SAP HANA Enterprise, SLT, HANA Live, SAPUI5 Toolkit.

**BENEFITS:**
- Lower cost, extremely fast, real-time, user friendly, web & mobile based solution.
- Minimized data redundancy.
- Improved application performance.
- Integrated end-to-end development platform.
- Shortened time-to-value.
- Simplified landscape.

7. Custom Web and Mobile Application platform

8. Advanced Analytics and Predictive Modeling platform
### CUSTOMER USE CASES AND VALUE (8/8)

HOW ARE OUR CUSTOMERS USING SAP HANA?

1. Enterprise Data Warehouse

| OUR CLIENT: | Large CP company. |
| SOLUTION DESCRIPTION: | Supply Chain/Sales: Out of shelf/Out of stock advanced analysis and predictive modeling solution replacing legacy statistical vendor package. |
| SOLUTION: | HANA Enterprise, SAP HANA PAL, SAP Predictive Analysis. |
| BENEFITS: | 
- No need to extract data and move into separate platform.  
- Run models against complete data sets instead of sub sets of data.  
- Improved performance of predictive models.  
- Shortened time-to-value.  
- Simplified landscape. |

8. Advanced Analytics and Predictive Modeling platform
CUSTOMER USE CASES AND VALUE – RECOMMENDATIONS

FINAL THOUGHTS

1. Enterprise Data Warehouse
2. Agile Marts
3. Near Real-Time SAP Operational Reporting
4. Near Real-Time Data Hub
5. Big Data Analytics platform
6. Demand Signal Repository
7. Custom Web and Mobile Application platform
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THINK OUTSIDE THE BOX!

Our platform for SAP HANA enables innovative, transformative solutions far beyond the standard data warehouse use case.

Our Live in Five Offering can be applied to any of these use cases.
1 & 1 INTERNET AG

SAP SAPPHIRE & TECHED EMEA

- Overview
  - Leading Internet Service Provider
  - Businesses in Germany, Austria, Switzerland, UK, France, Spain, US, and others
  - 42 M accounts // 70,000 servers // 11 M contracts

- Challenge
  - Optimize debt management and lose no money on customer accounts
  - Provide instant access and full view on debtor data
  - SAP ECC with IS-T provides insufficient reporting

- Why Hitachi and SAP HANA
  - BW on SAP HANA provided best solution to analyze Big Data
  - Hitachi because of Know-How, Scalability, Price, and Fast Delivery
  - 10,000 times faster using SAP HANA on Hitachi
SUMMARY - SAP AND HITACHI

WHY HITACHI FOR SAP HANA?

- Long-Term Alliance with SAP
- The strength of the SAP HANA platform – delivering enterprise SLA and low TCO
  - Only vendor using external FC storage across the SAP HANA portfolio
  - Only vendor to use tier 1 enterprise-class storage in XL appliances
  - Disaster Recovery architectures leveraging the same appliance and array for DR and QA
  - One vendor for servers & storage
- One vendor for platform and services delivering reduced OPEX and CAPEX
- One experienced SAP HANA partner to guide you during your SAP HANA journey
  - SAP HANA powered BI Strategy and Reference Architecture
  - SAP HANA ‘Live in Five’ Proof of Value and Business Case
  - Full blown SAP HANA implementations (Suite on SAP HANA, BW on SAP HANA, BPC on SAP HANA, agile marts for SAP HANA, SAP packaged applications, custom SAP HANA XS based applications)
  - SAP HANA hosting and managed service
QUESTIONS?

Hitachi – Accelerating your HANA ROI with the Service Levels you need

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UPCOMING WEBTECHS

- Eliminate Data Center Clutter: Move Some Data to the Cloud, June 26, 9 a.m. PT, noon ET
- Stay tuned for our WebTech series on Maximize IT

Check [www.hds.com/webtech](http://www.hds.com/webtech) for

- Links to the recording, the presentation, and Q&A (available next week)
- Schedule and registration for upcoming WebTech sessions
THANK YOU