

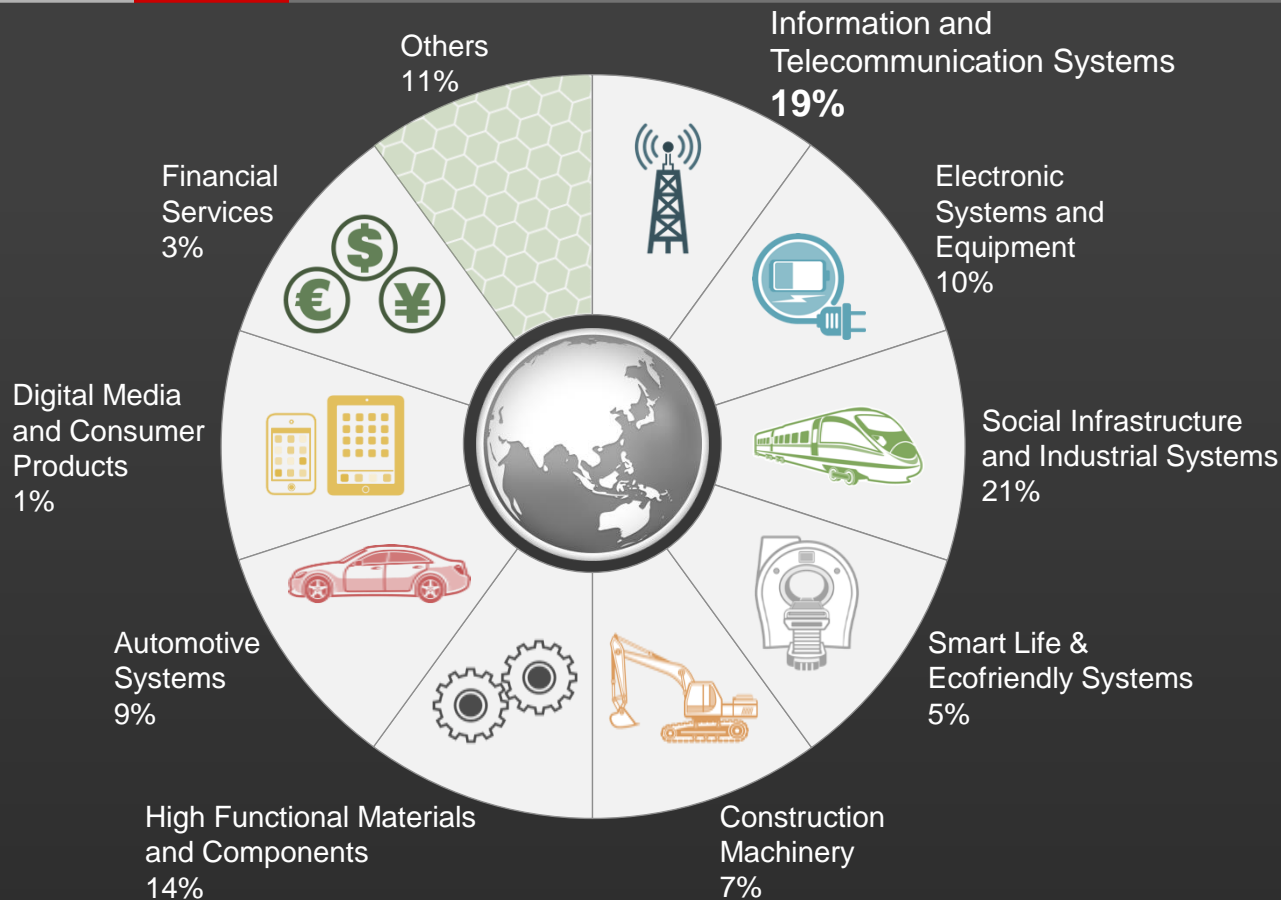
POWER THE DIGITAL ENTERPRISE

Change the Game with HDS solutions for SAP HANA

Stefano Locelso

Channel & Alliance Manager Italy

October 2016



HITACHI

Inspire the Next

- Founded in **1910**
- **US\$98.6B** FY15
- **950+** subsidiaries
- **335,000** employees
- **#1** worldwide for patent applications in **big data** analysis foundation technology
- **#79** in the 2015 FORTUNE® Global 500

We Bring the Vision and Deep Industry Expertise of Hitachi to Your Transformation

HITACHI
Inspire the Next

SOCIAL INNOVATION

Deliver innovative solutions to global markets by aligning our broad technology capabilities with our vast industry expertise for the enrichment of society.



HEALTHCARE



MANUFACTURING



RAIL



FINANCE



ENERGY



BUILDING
SYSTEMS



WATER



AUTOMOTIVE



CONSTRUCTION

Hitachi Data Systems Is Ready To Help Your Transformation

HITACHI
Inspire the Next



GLOBAL EXPERTISE

6,300
Employees

100+
Countries



PROVEN PORTFOLIO

#1 High-End Storage Platform (Gartner)

TOP Enterprise Object Store (Gartner, IDC)



EFFECTIVE CLOUD

Blend the best of shared and dedicated on-premises, consumption-based cloud



TRUSTED SERVICES

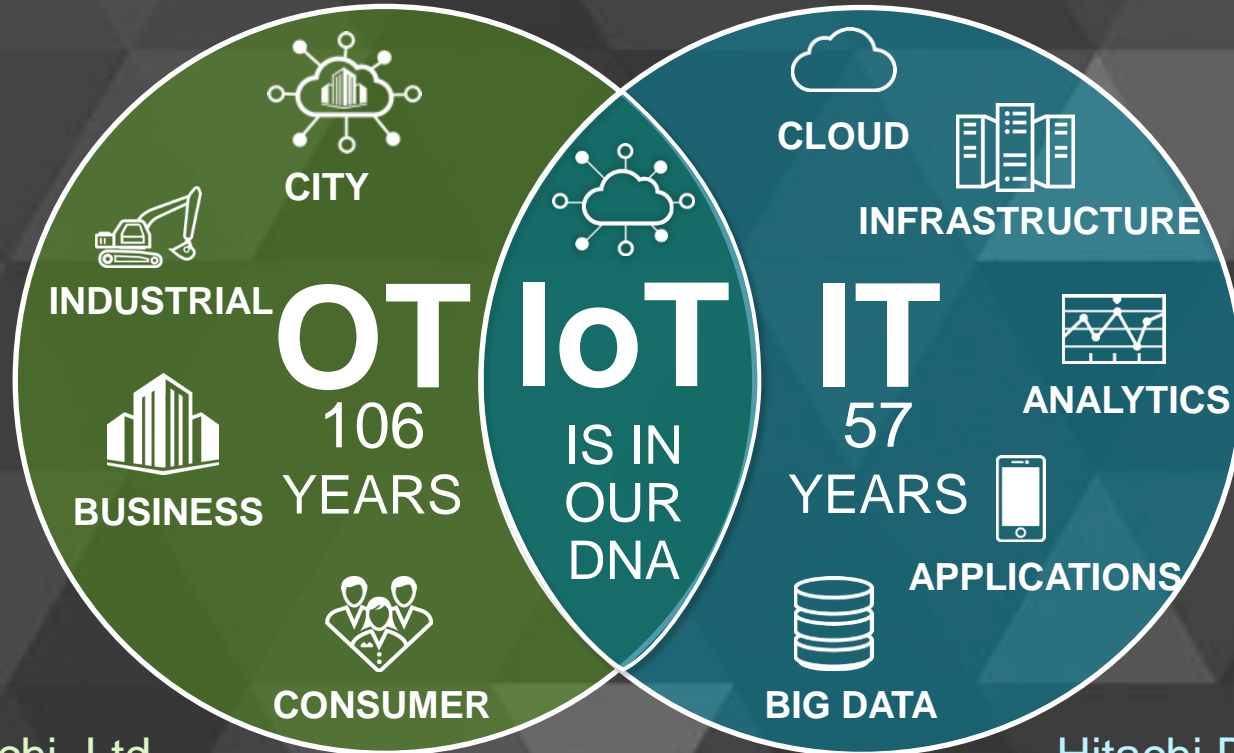
Turn legacy IT into digital advantage with our tiered portfolio of support services:

- Cloud
- Big data analytics
- Data protection
- Infrastructure
- Application

Draw From Hitachi Integration of IT, OT and IoT for Valuable Insights and Outcomes

HITACHI
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Hitachi Insight Group



Hitachi, Ltd.

Hitachi Data Systems



DATA

FOUNDATION TO ACCELERATE
DIGITAL TRANSFORMATION

Create Business Value With the Right Data Strategy

SOURCES

Structured



Unstructured



IoT



SaaS



MONETIZATION CAPABILITIES

Enterprise Data Strategy

Spark Hadoop AGILE I.T. ENVIRONMENT openstack amazon S3

DATA MANAGEMENT



DATA GOVERNANCE



DATA MOBILITY



DATA ANALYTICS



Hitachi's Agile IT Infrastructure

Converged, Hyper-Converged, Flash Accelerated, Virtualized

OUTCOMES



Operational and
Process



Customer
Experience



New Business
Models

HITACHI
Inspire the Next

Change the Game with HDS solutions for SAP HANA

Hitachi and SAP Partnership



**Celebrating
20 years !**



1994-1999

SAP Service Partner
Channel Partner
SAP Technology Partner



2000-2007
Expansion of
regional
partnerships



2008-2011

SAP Global Service
Partner (GSP)
SAP Global Technology
Partner (GTP)



2012 - 2014

1st GTP with SAP
HANA resell ability
HANA Live in Five

2015

Strategic
Acquisitions:
- oXya
- Pentaho

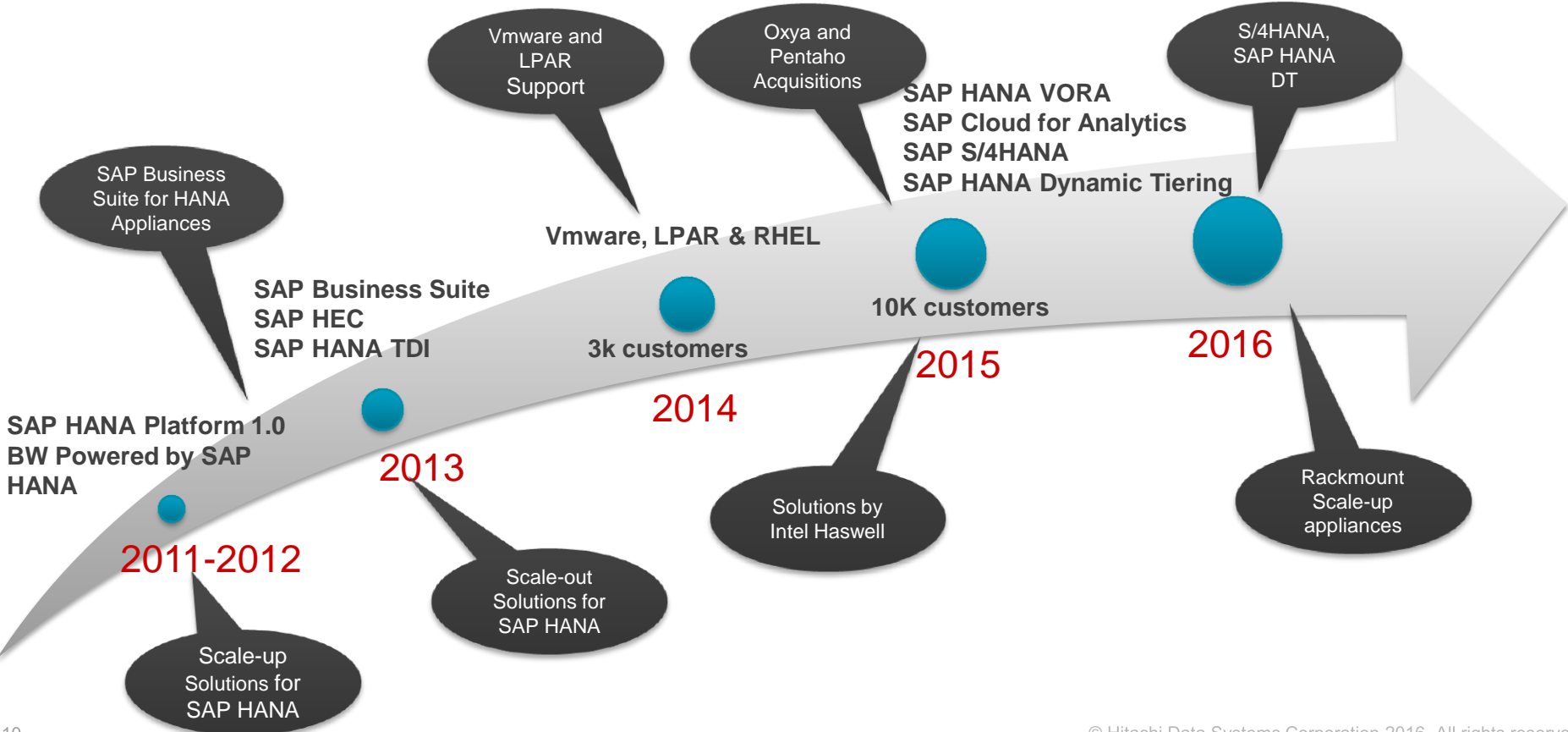


SAP awards winner

- Two decades of collaboration and integration experience for joint solutions
- **SAP Pinnacle Award** for SAP Global SME-Market Sales in 2007
- 10x SAP Award for **Highest Customer Satisfaction** since 1998
- Competency Center at SAP HQ in Walldorf to enhance and develop solutions

SAP HANA Platform Evolution

with Hitachi UCP



Convergence and Cloud: HDS Is Ready

HITACHI
Inspire the Next

Hitachi Unified Compute Platform

*Growing Faster
Than Market*

*Big Additions
Coming in 2016*

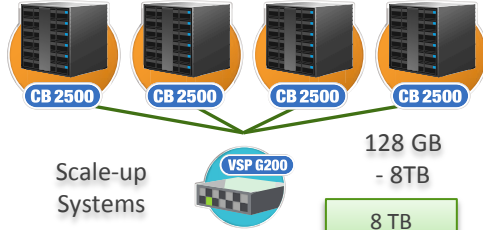


Best Hardware
Deep Automation
Open Architecture
Leading Economics

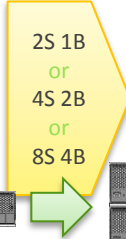
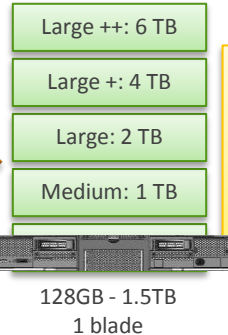
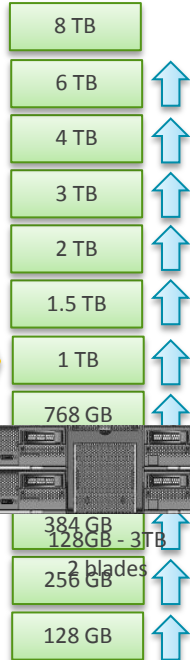
UCP for SAP HANA – Core Hitachi Values

Reliable, Available, Scalable

- Easy scalability, high density, no rip and replace
- Simplified management
- Resilient, high quality architecture

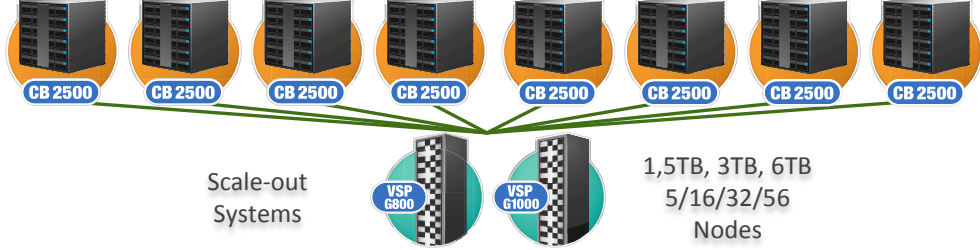


128 GB - 8TB

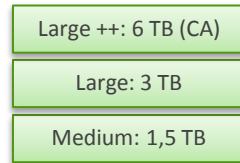


Future Proof

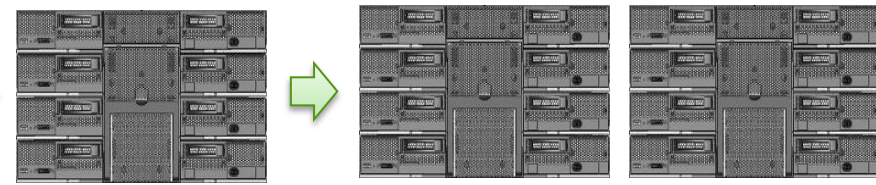
- Manage incremental data growth
- Lower TCO when scaling up or out
- Protect investment in solution



1,5TB, 3TB, 6TB
5/16/32/56
Nodes



Scale out to 24/48/168TB for SAP BW analytics
With enterprise class storage – VSP Gx00 and G1000



Scalable SAP HANA platform with same compute and storage

Virtualization is Part of Hitachi DNA

**Hitachi Storage
Virtualization
Operating System
(SVOS)**



**Hypervisors and
LPAR**

Hitachi LPAR



**Virtualization
solutions for all
workloads**



SAP HANA



**Virtualization: a core technology
across Hitachi servers and storage**

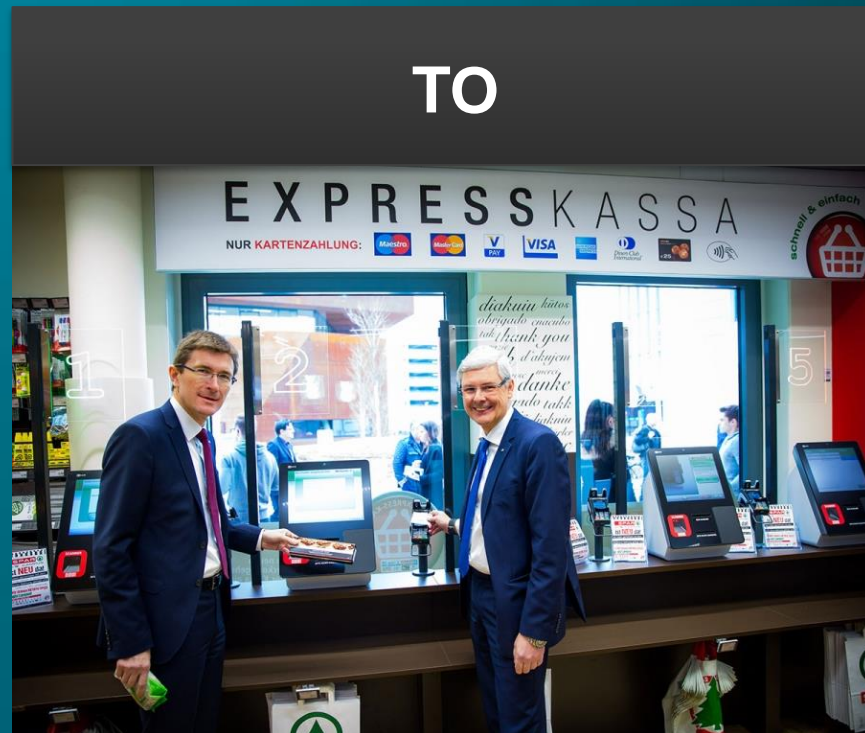
Adding Digital Innovation to Your Cart

HITACHI
Inspire the Next

FROM



TO



HITACHI
Inspire the Next

ACEA & HDS Enterprise solutions for SAP HANA

Marco Belli
Marco.belli@aceaspa.it

October 20th

Datacenter ACEA

Macro numeri



■ Fisico

- ❑ 128 Blade HP BL460c Gen9 per VMWARE
- ❑ 63 Blade Hitachi CB520X per SAP HANA
- ❑ 2 Cluster HNAS 4060 per NFS share
- ❑ 30 Server fisici
- ❑ 8 IBM Power System
- ❑ 3 Storage HDS VSP G1000 – 1,35 PByte
- ❑ 1 Storage IBM DS 8870 – 170 TByte
- ❑ 2 Storage NetApp – 180 TB
- ❑ Backup
 - 1 VTL + 1 TL
 - 2 HDS HUS 130 per Backup SAP HANA

■ Virtuale

- ❑ 1260 Server VMWARE
 - 953 Windows
 - 307 Linux
- ❑ 350 Server LPAR AIX

Infrastruttura SAP HANA per Acea – Data Center



Data Center Ostiense

- ❑ **Infrastruttura Storage:**
 - 420 TByte

- ❑ **Infrastruttura DB HANA**
 - 63 Server Fisici HDS CB520X Ivy Bridge
 - 1890 Core in 126 CPU
 - 57,5 TByte di RAM

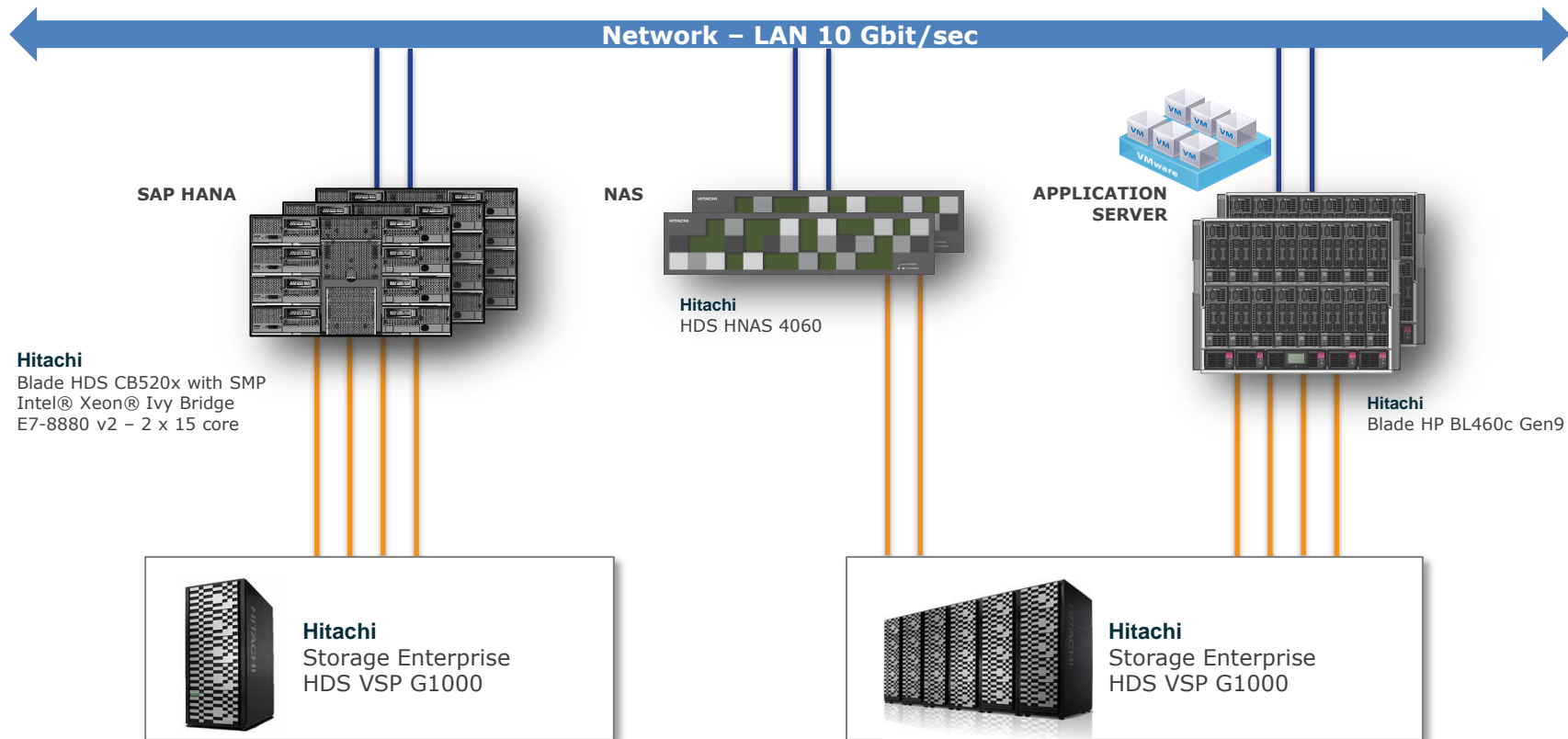
- ❑ **Infrastruttura di Backup:**
 - 390 Tbyte per Backup Giornalieri/Settimanali e Mensili

- ❑ **Infrastruttura Application Server per Sistemi SAP HANA-Based:**
 - 32 Server Fisici -> 150 Macchine Virtuali Vmware
 - 640 Core per 64 CPU
 - 8 TByte di RAM dedicata
 - **1.600.000 SAPS erogati**

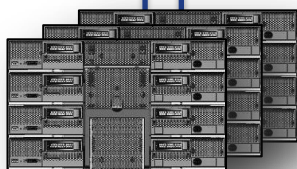


11 Rack (Armadi) dedicati nel Data Center
Interconnessione: 2 Km di cavi in Fibra Ottica
Tempo medio installazione e configurazione: **3 settimane**

Infrastruttura SAP HANA per Acea - Modello TDI



SAP HANA



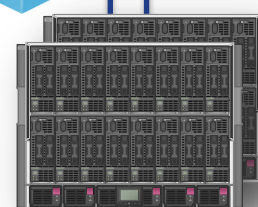
Hitachi
Blade HDS CB520x with SMP
Intel® Xeon® Ivy Bridge
E7-8880 v2 – 2 x 15 core

NAS



Hitachi
HDS HNAS 4060

APPLICATION
SERVER



Hitachi
Blade HP BL460c Gen9

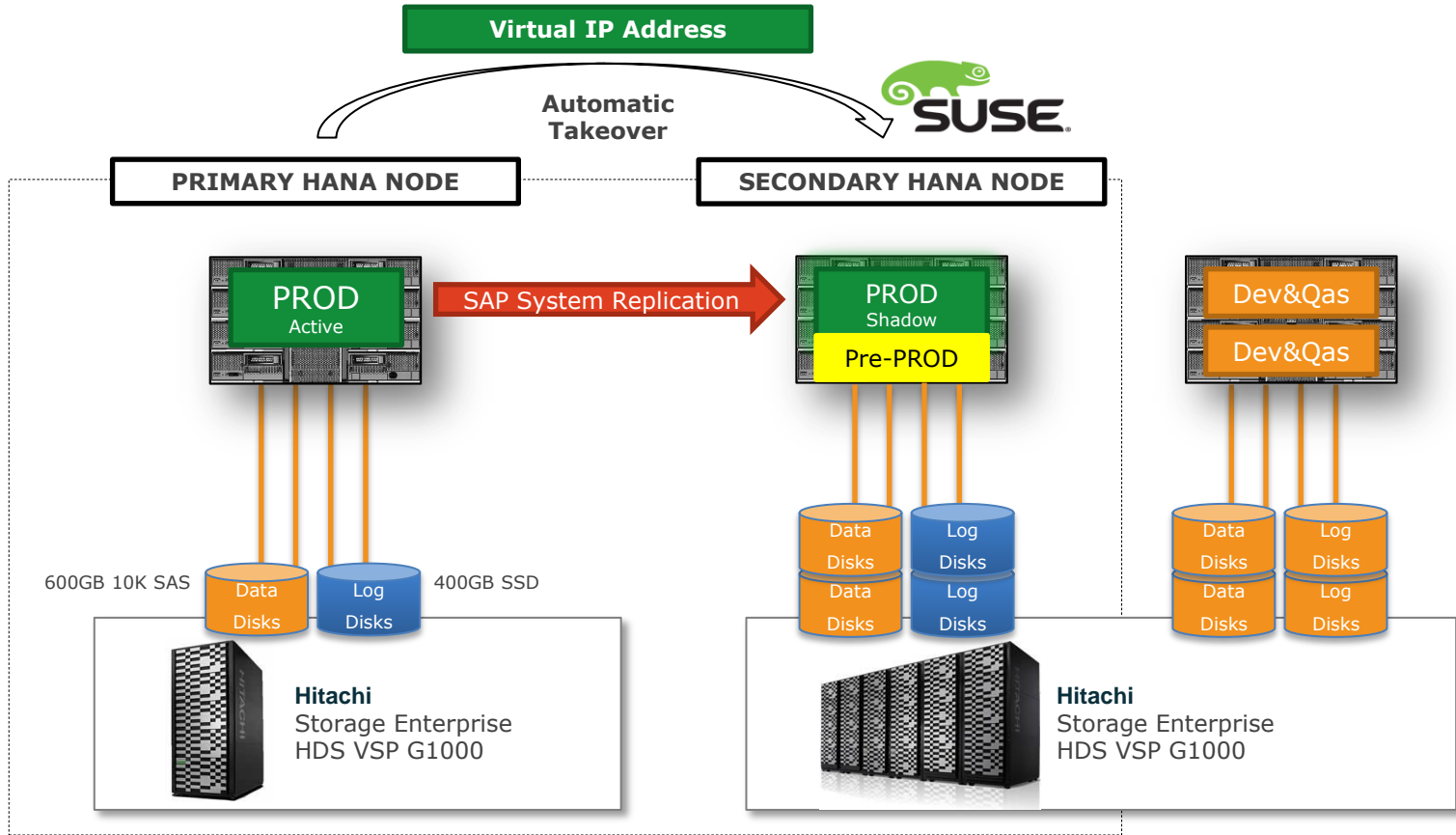


Hitachi
Storage Enterprise
HDS VSP G1000



Hitachi
Storage Enterprise
HDS VSP G1000

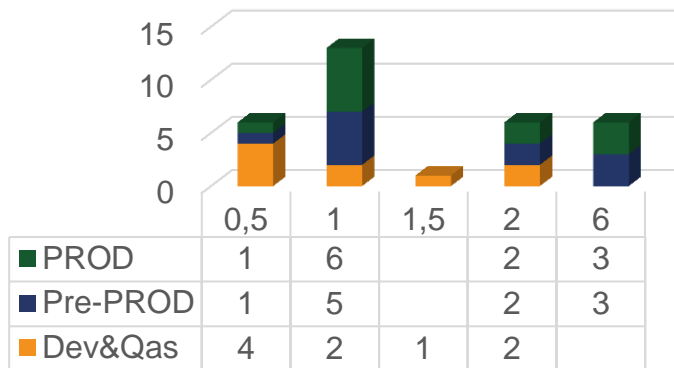
Infrastruttura SAP HANA per Acea - Landscape



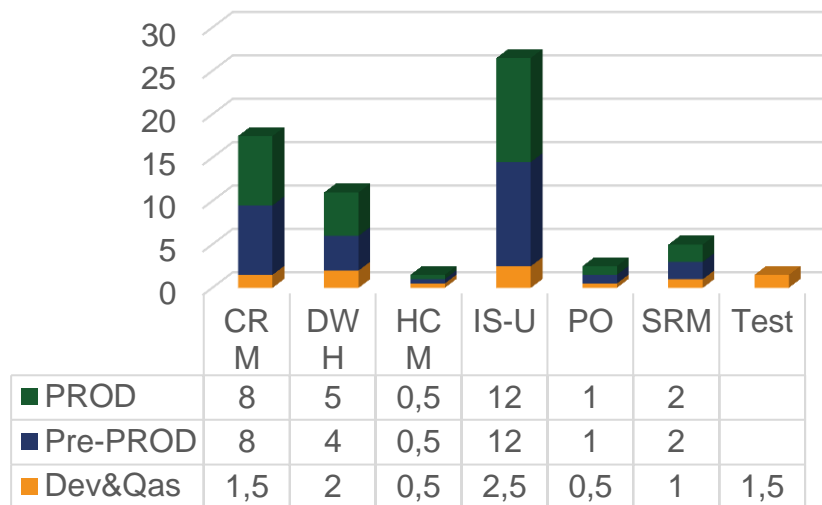
Infrastruttura SAP HANA per Acea - Landscape



NUMERO NODI HANA



RAM ALLOCATA PER APPLICAZIONE



Infrastruttura SAP Hana per Acea

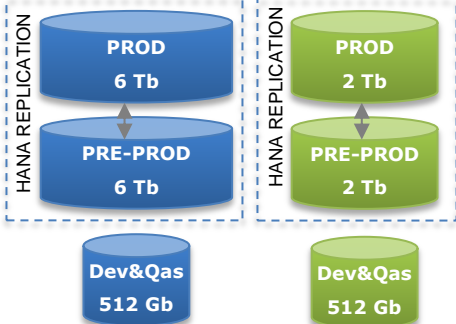
150 Application Server – Infrastruttura VmWare

Network – LAN 10 Gbit/sec

IDRICO

SAP ERP/ISU

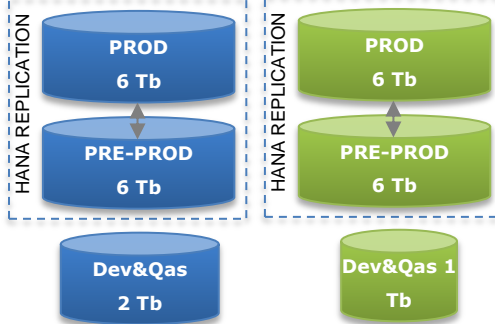
SAP CRM



ELETTRICO

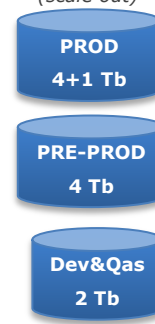
SAP ISU

SAP CRM



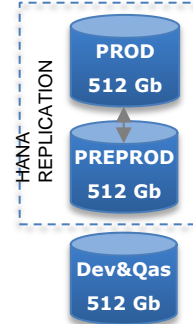
REPORTING

SAP BW (scale out)



HR

SAP HCM



APP. SERVER

DB SERVER



Hitachi
Storage Enterprise
Per istanze produttive
95 Tbyte



Hitachi
Storage Enterprise
per istanze non produttive
300 Tbyte



Hitachi
Storage Enterprise
per DWH
120 Tbyte

STORAGE



Thank You

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