

Adaptive Computing Virtualization

Key Benefits and Customer References



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SAP AG

THE BEST-RUN BUSINESSES RUN SAP™



Agenda



Today's Challenges

The Need for Sustainable Operations

The Need to Reduce Costs

The Need for Simplified, Flexible Operations

SAP's Adaptive Computing Virtualization

Customer References

Summary

Today's Challenges



← CEOs need to achieve sustainable operations at reduced cost

← CIOs need to reduce cost of operations

← IT Organizations need to simplify operations

← Growing complexity has to be countered with enhanced flexibility

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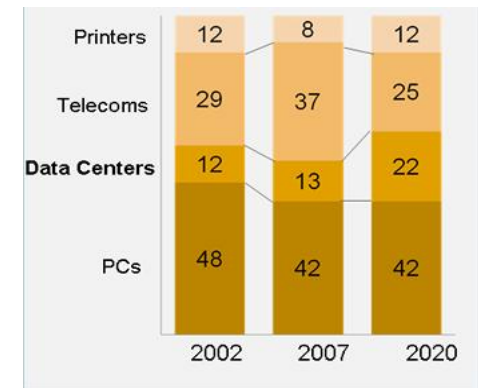
Summary

The Need for Sustainable Operations



Key Facts

- IT and telecom make up 2 percent of the global carbon footprint, as much as the entire airline industry. By 2020, it will be 3 percent (source: McKinsey).
- By 2020, data centers will have a **higher share of the IT carbon footprint.**
- **Data centers** are typically **under-utilized.**
 - Less than 1 percent of energy demand is used for business transactions.
 - Up to 90 percent is consumed by computers that idle and for cooling.
- **IT energy consumption can be reduced by up to 30%** by taking low-cost and high-impact optimization measures such as turning off un-used equipment.
- The IT sector is seen as a **key enabler of sustainable operations.**
- SAP is working to systematically reduce its own carbon footprint by, for example, improving efficiencies throughout data centers



Share of IT and telecom Energy Demand

Adaptive Computing Virtualization enables sustainable operations — dynamically assigning application and server capacity on demand

- Reducing energy demand for operations and cooling
- Reducing emissions
- Saving natural resources

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The Need to Reduce Costs



Key Facts

- World-wide demand for energy is increasing while energy resources are dwindling.
- Energy prices are rising and so are IT power bills.
- High saving potential — Data centers are typically under-utilized.
- Higher profitability through optimized operations

Adaptive Computing Virtualization can reduce costs by up to 30-40% — dynamically assigning application and server capacity on demand

- Reducing energy use for operations and cooling
- Saving IT infrastructure costs
- Saving overall costs through higher efficiency



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The Need for Simplified, Flexible Operations



Key Facts

Operations need to be simplified

- Hide complexity of the physical and virtual landscape
- Simplified SAP data center management with automated mass operations
- Operator enablement for SAP solution landscape

Flexibility needs to be enhanced

- Flexible assignment of resources
- Easy adjustment of performance capabilities
- Fast reaction on dynamically changing business needs
- Full scalability regarding varying demand for server capacity

Adaptive Computing Virtualization enables simplified operations with high flexibility.

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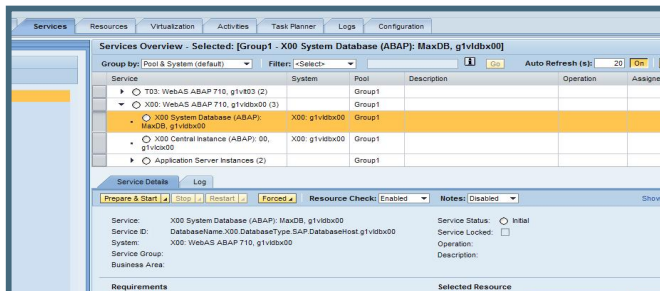
Summary

Adaptive Computing Virtualization Use Cases



- **Easy management of SAP System growth**
Start with small servers and relocate to bigger ones with growing requirements.
- **System parking lot**
Stop idle SAP Systems and “wake them up” whenever they are needed.
- **Easy and fast hardware replacement**
Easy and fast replacement of servers in the AC landscape.
- **Mass Operations for hardware maintenance weekend**
Shut down and start up all systems with a few clicks in the ACC.
- **Adapt to growing demand during upgrades and conversions**
Use the most powerful server for upgrade or conversion procedures.
- **Schedule operations tasks**
Schedule tasks such as start/stop/move SAP systems.
- **Balance performance peaks**
Provide the required performance for dedicated systems.
- **Relocate SAP Systems and instances**
Across physical and virtual servers with AC application virtualization.
Real-time migration across servers without downtime.

Adaptive Computing Controller Feature, Functions and Releases



■ Features and Functions

- SAP System management (start / stop / relocate application services)
- Resource management of physical and virtual servers, Monitoring
- Mass operations

■ Adaptive Computing Controller 7.2

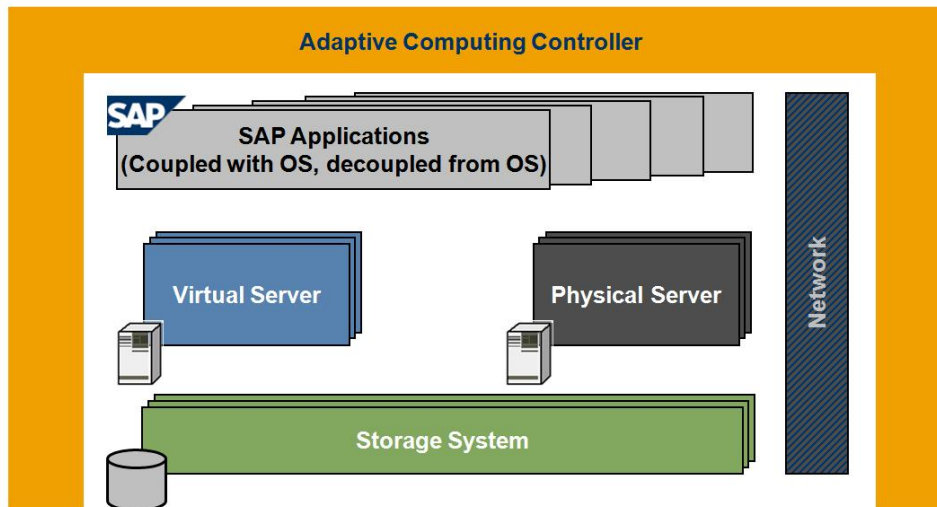
- Generally available as of May 2010
- Add-on to SAP NetWeaver CE 7.2

■ Adaptive Computing Controller 7.3

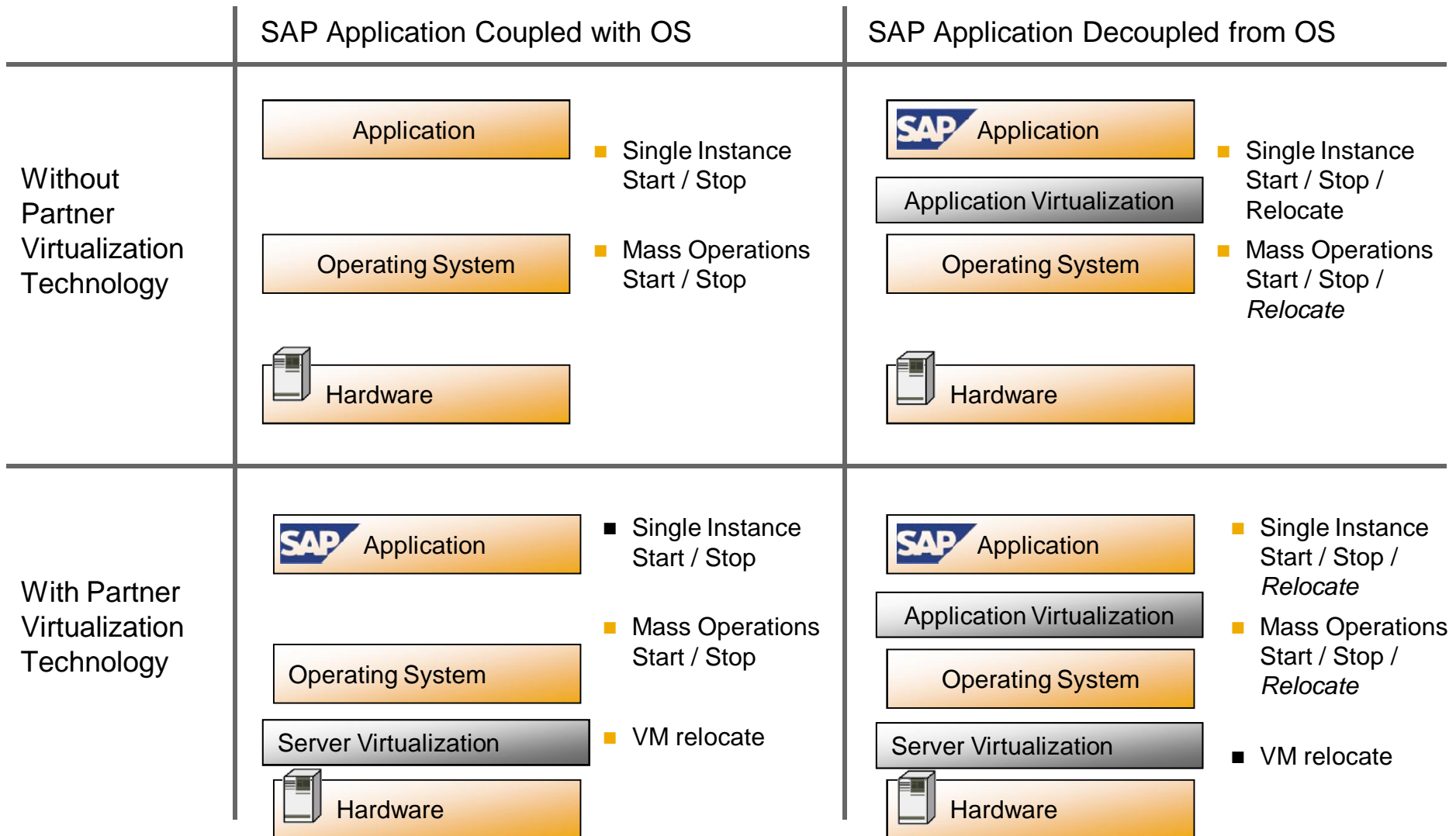
- Generally available as of December 6, 2010
- Add-on to SAP NetWeaver CE 7.2 (and 7.3)

■ Managed Landscape:

- Supports releases from 4.6C (4.6D Kernel) up to the most current release.
- Operates with physical and virtual server technology.



Adaptive Computing Options



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BTC IT Services GmbH uses SAP® NetWeaver Adaptive Computing Controller 7.3



QUICK FACTS

BTC IT Services GmbH (Subsidiary of BTC AG)

Headquarters: Oldenburg, Germany

- Industry: Service Provider
- Products and services: Outsourcing, Outtasking, Technology Consulting, Service Desk, Desktop Services
- Revenue: 143 Mio. Euro (BTC Group)
- Employees: 200 (BTC Group: 1.500)
- Web site: www.btc-it-services.com
- SAP® solutions and services: Adaptive Computing Controller 7.3, Solution Manager, BI, CRM, SAP NW, Mobile Engine, R/3 Enterprise,...

“The implementation of SAP ACC in combination with other SAP Business Suite products has increased our efficiency in the administration of customer data. We believe in the potential to significantly reduce our Total Costs of Ownership, which we will be able to pass on to our customers, giving us a tangible competitive advantage in the marketplace.”

Olaf Bolz
Area Manager
BTC IT Services GmbH

Challenges and Opportunities

- Requirement for increased availability via switching systems across different hardware
- Ensure common procedures for recovery following system failure

Objectives

- Common procedures for starting and stopping a variety of system constellations
- Establish simple, standardised procedures for High Availability scenarios

■ ACC Benefits

- Reduced data center operating costs
- Performance and availability overview by customer
- Linkage to Green IT efforts by appropriate allocation of needed computing power

Implementation Highlights

- Speed of installation and configuration
- Runs on a small platform
- Automatic detection of all services from a single host
- Implementation of nearly 200 Services



Mahindra Satyam uses SAP® NetWeaver Adaptive Computing Controller 7.2



QUICK FACTS

Mahindra Satyam

- Location : Chennai, India
- Industry: Business Consulting and IT Services
- Products and services: Global Business Consulting and IT services
- Web site: www.mahindrasatyam.com
- SAP® solutions and services: Adaptive Computing Controller 7.2
- Implementation partner(s): Yes

“SAP NW ACC had helped us in making our footprint towards our virtualization and cloud strategy, enabling us towards green initiative in our SAP datacenter. It had helped us in making optimal usage of our SAP servers and minimizing our operational costs on managing the SAP servers”

Radee (Radhakrishnan Malayandi)
Head – SAP Solution Studio
Mahindra Satyam

Challenges and Opportunities

- Managing and maintaining Complex SAP Landscape Data Center operations
- Balancing underutilized Hardware resources & fulfilling adhoc needs of Hardware Resource for Trainings and POC/Demo's
- Exhaustive requirements of Hardware for Training & Development Environment.
- Green Computing initiative

Objectives

- Cost Reduction by effective utilization of Hardware resources
- Cater to the Changing Business needs without additional investment on hardware.
- Centralized & Simplified SAP datacenter management
- Rapid Allocation & extension of Hardware Infrastructure for Training & Development Environment
- Green & Cloud Computing Environment

Implementation Highlights

- Implemented ACC without any additional investment with in house team
- Aligned with Msat strategy on Virtualization and Cloud computing
- Excellent Support from SAP ACC product group members, providing us with critical inputs.

ACC Benefits

- Reduced data center operational costs
- Optimum utilization of data center resources
- Full scalability regarding varying demand for server capacity
- Easy Mass operations of SAP servers during datacenter maintenance
- Flexibility during On demand, quick allocation of Hardware resources

TCS Reduces System Administration Efforts with SAP NetWeaver® ACC 7.2



QUICK FACTS

Tata Consultancy Services (TCS)

- Headquarters: Mumbai, India
- Industry: High tech
- Products and services: Information technology services and consulting
- Revenue: US\$ 6.3 billion
- Employees: More than 100,000
- Web site: www.tcs.com
- SAP® solutions and services: SAP NetWeaver® Adaptive Computing Controller tool 7.2

“The SAP NetWeaver Adaptive Computing Controller tool has been invaluable in helping us reduce the administrative effort required to manage our large and complex SAP center of excellence.”

Haseen Perwez
SAP Basis Center of Excellence Lead
Tata Consultancy Services

Challenges and Opportunities

- Provide centralized control across a landscape of 15 systems
- Reduce administrative costs and effort for both operations and support
- Gain ability to manage multiple instances from one system

Objectives

- Reduce number of administrative tasks associated with instance management
- Use latest SAP NetWeaver® technology to efficiently manage an SAP® software center of excellence (CoE)

Implementation Highlights

- Short two-week implementation – from installation to configuration

Why SAP

- No other product or tool matches SAP NetWeaver ACC 7.2 capability
- Seamless integration with SAP Systems

Benefits

- Improved management of multiple instances of both ABAP and Java stack systems in CoE
- Significantly reduced the number of operation tasks
- Automated many regularly-performed instance management tasks
- Simplified operation of entire landscape with one central management console



TATA CONSULTANCY SERVICES

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Summary — Adaptive Computing Virtualization

Key Benefits in a Nutshell



Sustainable Operations - “Green IT”

- Saving energy on operations and cooling
- Reduced emissions
- Saving natural resources through effective use

Reduced Cost

- Reduced overall operational costs due to higher efficiency
- Reduced hardware costs due to more effective use
- Lower energy bills due to power savings

Simplified Operations

- Hide complexity of the physical and virtual landscape
- Simplified and harmonized SAP data center management
- Enabling operators

Flexibility and Scalability

- Flexible assignment of resources
- Easy adjustment of performance capabilities
- Fast reaction on dynamically changing business needs
- High service levels with lower budgets
- Increased productivity



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