

ADAPTIVE COMPUTING TO MANAGE YOUR SAP® SOFTWARE LANDSCAPE

RUN ANY SERVICE, ANY TIME, ON ANY SERVER

The Adaptive Computing Controller tool from SAP lets you manage entire SAP® software landscapes and IT infrastructures. This helps reduce complexity, cut data center costs, increase hardware utilization, and achieve the flexibility and scalability needed to improve IT efficiency and value.

Optimize IT Operations Using Virtualization

If you are like most IT organizations today, you host your applications on dedicated physical servers. Because every application is considered critical whenever you deploy a new productive application, you deploy new servers to support it. Calibrated to meet peak demand rather than average demand, these dedicated servers are seldom used to full capacity. This leads to a high rate of IT spend for both hardware and maintenance – even as your IT infrastructure remains underutilized.

Virtualization technology addresses this problem. With virtualization, you can spread application instances across available server resources to maximize infrastructure utilization. You also have the flexibility to move applications from server to server as circumstances dictate. The potential for driving down IT spend is tremendous. In fact, Gartner Inc. believes that “virtualization offers IT departments opportunities to reduce cost and increase agility.”¹

To help you capitalize on the potential of virtualization, SAP created the Adaptive Computing Controller tool. Part of the SAP NetWeaver® technology platform, this tool gives you centralized access for managing a virtualized or nonvirtualized SAP® software landscape. It works smoothly with offerings from a comprehensive list of SAP partners who provide operating systems, physical and virtual server technology (for example, “hypervisor” technology), and storage platforms. With the adaptive computing

virtualization concept, where the SAP applications are decoupled from the underlying operating system, you have the flexibility to dynamically reassign available resources to match the way you run your business.

Hiding the Complexity of Your IT Landscape

Adaptive Computing Controller provides a single point of control that allows your SAP software system administrator to visualize, monitor, and manage data center tasks for deployed SAP solutions.

Masking the underlying complexity of your IT infrastructure, this tool enables you to manage virtualized database and application instances and freely move them between physical and virtual servers as needed – all without logging in to the software each time you move an application (see the figure). Best of all, by also supporting nonvirtualized SAP applications in your landscape, the tool lets you move toward virtualization at a pace that makes sense for your business.

By combining the application virtualization provided by the controller tool with underlying server virtualization (for example, hypervisor technology), your application group gains the freedom and flexibility to move application instances across your IT landscape as needed. Endless coordination with other infrastructure domains for mundane maintenance and upgrade tasks are no longer necessary. You'll empower your administrators to match application performance to the demands of your business.

1. Philip Dawson and Thomas J. Bittman, “Virtualization Changes Virtually Everything,” Gartner Research, March 28, 2008 (ID number: G00156488).



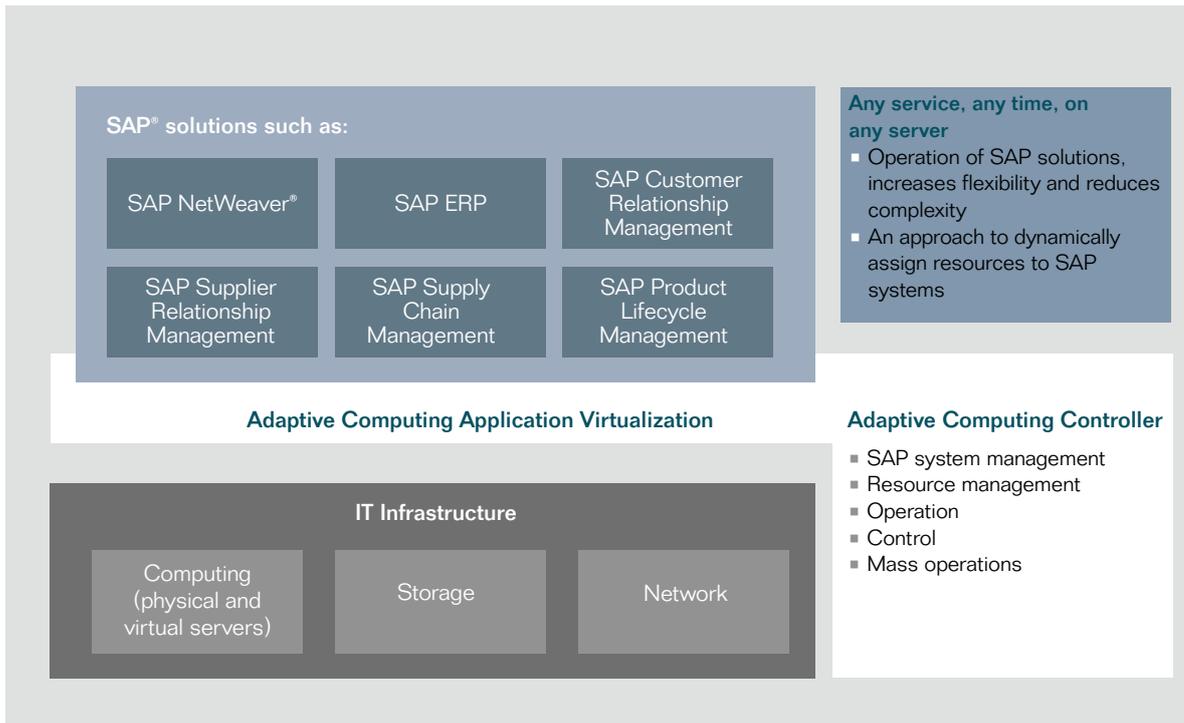


Figure: Adaptive Computing Concept Overview

Manage Shifting Application Demand

The Adaptive Computing Controller tool lets you respond to changing resource demands in a rapidly evolving business landscape. With just a few clicks, you can move your SAP application onto a physical or virtual server resource that best suits business requirements. If application demand grows, simply swap server resources to handle the extra demand.

The tool lets you move applications back and forth between physical and virtual servers, you can move applications off a virtual server configuration in order to patch or troubleshoot the affected servers.

You can even balance performance peaks by automatically allocating resources on a scheduled basis. The tool can shut down training systems in the evening and dedicate additional resources for nighttime batch operations – without manual intervention. If you notice that demand for an application has increased – due to more users or greater individual user demands – you can either move the application or start a new instance on any available server.

“Park” Idle SAP Applications

Don’t waste valuable computer resources when applications don’t need them. The tool lets you “park” idle applications to free up server resources for other tasks. When needed, you can reactivate those applications and move

them to any server with available capacity. For example, at the end of a class, you can park the training application that was used and start it on a free server resource the next time the class occurs.

Shut Down and Restart All SAP Software Systems with a Few Clicks

Manually stopping and starting SAP software systems across your data center takes a lot of time, even if you use customized scripts. What’s worse, you’re committing highly skilled staff to a task that adds no value. With the tool, you no longer need administrators and customized scripts to start and stop SAP software systems – an operator can start your entire SAP landscape with a mouse click – letting your people focus on tasks that deliver business value.

Save On Energy Costs

Adaptive Computing Controller can help you drive down energy costs. By quickly moving SAP applications between servers, you can shift applications to underutilized physical and virtual servers and shut down servers no longer needed – reducing the overall number of servers used. This helps you save significantly on powering and cooling costs in your data center.

Innovations That Support Service-Oriented Architecture

With Web service-based administration, automated configuration tasks, and a straightforward user interface, Adaptive Computing Controller is also important for managing landscapes that leverage service-oriented architecture (SOA). The flexibility and scalability of virtualization technology provides numerous advantages – especially at a time when so many organizations depend on composite services that borrow functionality from a wide range of IT components. For example, if an application that delivers a discrete piece of functionality for a larger composite service suddenly needs more capacity due to a spike in demand, the Adaptive Computing Controller tool can quickly allocate the extra capacity to maintain service performance.

The Power of Partnership

SAP partners providing operating systems, physical and virtual server technology, and storage platforms are committed to supporting adaptive computing with SAP NetWeaver. To facilitate cooperation, SAP has formed a

partner ecosystem that unites technology vendors in the development of solutions that integrate smoothly with your SAP applications.

Nearly any server and storage platform configuration you deploy will work with Adaptive Computing Controller – giving you the flexibility of virtualization to manage your IT application infrastructure. You can even help ensure that your server and storage platforms are tested in an adaptive computing landscape. Visit the adaptive computing compliance test page on the SAP Developer Network (SDN) site (go to www.sdn.sap.com/irj/sdn/adaptive and click the *Compliance Tests* link).

Managing the Data Center with One Tool

Adaptive Computing Controller provides a wide range of benefits that can help you increase the effectiveness and efficiency of IT operations. With the tool, you can:

- **Reduce IT complexity** by hiding the complexity of your physical and virtual landscape, simplifying data center management, and controlling your data center with a single operator
- **Achieve unprecedented levels of flexibility and scalability** by assigning physical and virtual server resources on the fly, adjusting performance capabilities, and rapidly responding to changing business requirements
- **Cut data center costs** by increasing administrative productivity, reducing the number of servers in your environment, maximizing server utilization, and minimizing power and cooling expenses through energy efficiencies

Adaptive Computing Controller provides a single point of control that allows your system administrator to visualize, monitor, and manage data center tasks for deployed SAP solutions.

Adaptive Computing Delivers Sweet Rewards to Mars

The implementation of the Adaptive Computing Controller tool by Mars Incorporated has increased the company's flexibility for managing SAP applications while improving utilization of its infrastructure assets. Today, Mars can increase SAP application capacity on request, adding and removing application servers as business needs dictate. For example, Mars boosts SAP application capacity whenever project activities slow down – shifting servers used for development and test systems into the production environment. In addition, by utilizing the tool's ability to quickly stop and restart servers, the company saves time and effort implementing scheduled outages.

Find Out More

To learn more about the Adaptive Computing Controller tool, call your SAP representative or visit us online at www.sap.com/usa/platform/netweaver/components/controller/index.epx or www.sdn.sap.com/irj/sdn/adaptive.

Summary

The Adaptive Computing Controller tool from SAP lets you manage entire SAP® software landscapes and IT infrastructures. This helps reduce complexity, cut data center costs, increase hardware utilization, and achieve the flexibility and scalability needed to improve IT efficiency and value.

Business Challenges

- Avoid high purchasing and maintenance costs due to applications hosted on dedicated physical servers
- Better utilize IT infrastructure resources
- Improve flexibility to relocate applications across servers
- Reduce excessive coordination required between the SAP software administrator and other infrastructure domains for routine maintenance and upgrade tasks

Key Features

- **Centralized administration** – Manage data center tasks related to SAP solutions from a single point of control
- **Application growth management** – Manage application growth with existing resources
- **IT maintenance** – Execute maintenance tasks faster and easier than before
- **Infrastructure control** – Enable better utilization of the existing infrastructure to balance performance peaks

Business Benefits

- **Reduce IT complexity** by hiding the complexity of your physical and virtual landscape, simplifying data center management, and controlling your data center with a single operator
- **Achieve unprecedented levels of flexibility and scalability** by assigning physical and virtual server resources, adjusting performance capabilities, and rapidly responding to changing business requirements
- **Cut data center costs** by increasing administrative productivity, reducing the number of servers in your environment, maximizing server utilization, and minimizing power and cooling expenses through energy efficiencies

For More Information

Call your SAP representative or visit us online at

www.sap.com/usa/platform/netweaver/components/controller/index.epx or
www.sdn.sap.com/irj/sdn/adaptive

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