



Data Center Automation

Agility, Efficiency, and Cost Reduction in Complex Data Centers Management

Automate to Decrease IT Spendings

Today, IT departments spend about 75% of their budgets on the ongoing operations and maintenance of data centers¹. One contributor for this is the absence of advanced mechanisms to automate those tasks. Indeed, many IT organizations still use manual practices developed when servers were dedicated to single applications that seldom changed. Today, as manual techniques are obsolete, new solutions can take over.

Moreover, from a business perspective in the field of telecom, IT departments face specific constraints: cost-effectively manage complex multi-vendor infrastructures, integrate numerous and diversified third parties' applications and framework, dedicate development environment and tools to build new value-added services, while complying with corporate policies. In this context, there's only one way to meet the challenge. Automate.

HP & Intel's offer in IT Automation

HP Data Center Automation Center is a Business Service Automation solution that enables the provisioning of entire infrastructure stacks and the management of changes across lifecycles to keep business ahead in today's competitive markets.

DCA reduces the time to provision infrastructure by as much as 70%, and reduces the implementation effort from weeks to days (and potentially hours).

Combined with both Intel® Xeon® processors-based HP's servers performance and Intel® Virtualization Technology, HP Business Service Automation Integrated Toolset helps define and manage workflows across the IT processes. It also enforces internal patch and software policies automatically to consolidate complete solution stacks.

¹ Applimotion's white paper, 2009. A Practical Guide for Retiring Legacy Applications.

² Morse Infrastructure Services and Technology, 2009. http://www.morse.com/solution_14.htm, "Automation Benefits"

Next Generation Independent Software Vendors (ISV) Certification

Flexibility and agility are key enablers to launch new innovative value-added services. Enabling quick provisioning of development environment including hardware, software (both stand-alone and toolkits) are key to effectively test new services and allow ISVs to launch new applications in a more efficient and integrated manner. Thanks to Data Center Automation by HP and Intel, operators can now manage on demand environments and provide automated fast provisioning to accelerate time-to-market of new simple or complex applications. Fully dedicated testing environment also increases application quality by providing realistic environments where previous capabilities were only emulated or just non-dedicated.

On the Road to State-of-the-Art Data Centers

Automation combined with virtualization accelerates and facilitates the move of any data center to the next level of IT maturity. It reduces the time to provision infrastructure by as much as 70%, and reduces the implementation effort from weeks to days (and potentially hours)².

HP and Intel's solution helps lowering global footprints and reduce any waste in Information Technology Infrastructure Library (ITIL) processes and in the delivery of any service, be it regular or telecom specific IT.

On-Demand Facility with HP Business Technology Optimization (BTO) and Intel Xeon Processors

Based on a core infrastructure relying on servers with Intel Xeon processors and HP Data Center Automation software, an on-demand computing system grants ISVs, internal and external developers, as well as testers to access in an efficient and controlled manner a dedicated computed space with desired OS and possibly compliant software.

This organization greatly decreases commissioning of new machines and environments and effectively supports ITIL processes and best practices.

HP Server Automation registers telecom operators' facilities and machines underneath, and manages provisioning of operating systems (OS), software, customized packages, and such.

Finally, HP Operation Orchestration is a powerful workflow engine that leverages server automation scripts and includes them in complex processes including (ITIL) such as incident management, change management, problem management, and service desk, or operational procedure like commissioning or provisioning.

The HP Intel CME Solution Center has over a decade of collaborative success with the major players in the CME industry.

HP Intel Communications, Media and Entertainment (CME) Solution Center's team and facilities

Creating workflows to automate business processes, provision complex environments, and distribute patches over numerous servers is very relevant to the large data base and critical applications of the CME industry. At the HP Intel CME Solution Center, Data Center Automation is up and running. Several installation profiles have been defined, with different software policies in order to build a database of services. This environment is available for demonstration in our facilities.

The HP Intel Solution Center has over a decade of collaborative success with the major players in the CME industry thanks to its proven process: Come and learn through our **workshops** what your exact needs are and what DCA can bring to your infrastructure.

HP & Intel Key hardware components

HP Blade System c7000 Enclosure



The BladeSystem c7000 enclosure provides all the power, cooling, and I/O infrastructure needed to support modular server, interconnect, and storage

components today and throughout the next several years. The enclosure is 10U high and holds up to 32 servers or 16 storage blades plus optional redundant network and storage interconnect modules.



The HP Intel Solution Centers provide complete telecom infrastructures for demonstrating the Communications Media and Entertainment Solution Portfolio to HP customers and partners. The centers are located in the three regions: Grenoble, France for EMEA; Richardson, Texas, USA for Americas, and Shanghai, China for APJ. These unrivalled technical facilities offer our customers and partners, the unique opportunity to evaluate new services in real-world environments, test new technologies and select the solutions most likely to succeed.

Technology for better business outcomes

© 2008 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein. Copyright © 2008 Intel Corporation. All rights reserved. Intel, the Intel logo, Xeon and Xeon Inside are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries. * Other names and brands may be claimed as the property of others.

For more information, visit <http://www.hpintelco.net>

Data Center Automation Solution Brief, July 2009.

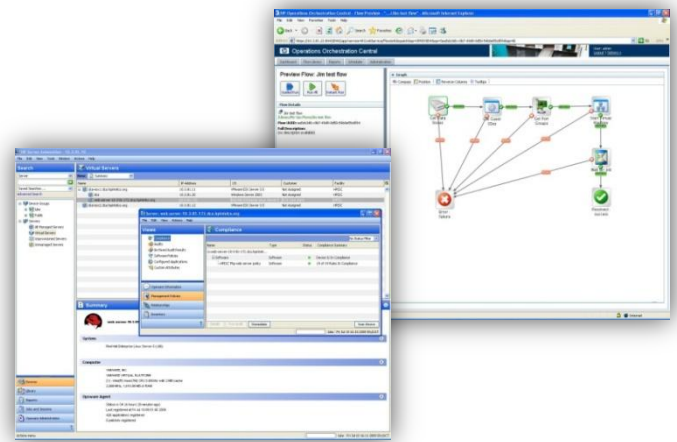


Fig. 1: HP Server Automation and HP Operation Orchestration graphical interfaces

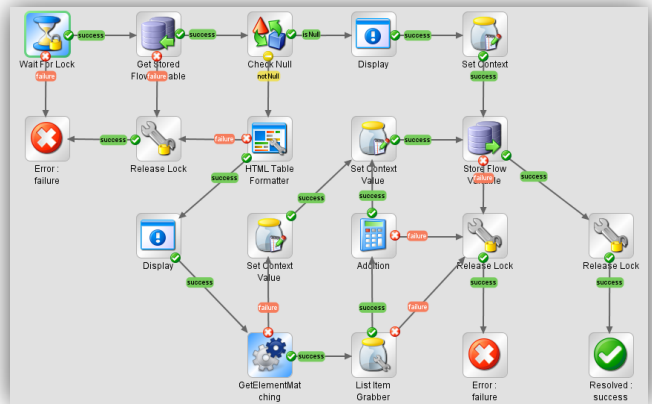


Fig. 2: Sample workflow generated by HP Operation Orchestration

Our team can help you **assess your data center** from a DCA angle, and we will be able to prototype what DCA can bring you through a **proof-of-concept** hosted in our data center.

Intel® Xeon® processors

The Intel Xeon processor 5500 series are built with 45nm new Nehalem micro architecture with up to eight cores in a two-processor configuration. This new micro architecture delivers more performance in the same platforms and at the same power consumption, giving customers the flexibility to match performance, power and cost requirements with your unique requirements and delivering advantages beyond just pure performance.

