

Cutting Fat in the Data Center with Automation Tools

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The core of every data center is made up of key assets, including specific hardware, software and, most importantly, people. To make the data center more efficient, CIOs must understand the strengths of their core assets, and make certain they are used effectively. In doing so, CIOs can minimize hardware and software needed to implement the services that the data center is providing, as well as best utilize the people needed to operate those services.

Challenging issues such as implementing compliance, ensuring effective change management and increasing operational efficiency continue to place increasing pressure and heightened visibility on data center managers and CIOs. What's more, budgets aren't expanding to meet the needs brought on by these challenges. Recently, however, the introduction of new automation tools is enabling CIOs to more effectively control data center assets, dramatically reduce costs, and increase overall uptime. Investments in management tools give long-term business benefits and more than make up for their initial cost to deploy.

The following framework provides a simple and practical approach for implementing automation tools to enable a more efficient data center:

Understand the Utilization of Data Center Assets

Assets within the data center include servers, application loads and operational staff. Appropriate management tools enable CIOs to

understand overall usage patterns for each asset. In some cases, servers will sit idle while other servers crash because of overabundant application loads. The outcome is not related to the number of servers, but the correct usage of those servers. From a people perspective, tools can also determine when and how operations staff can most effectively be used.

Plan Capacity around the Utilization Patterns of Assets

Once you understand where assets are being over or underutilized, you can begin to plan for more effective usage of core data center assets. If spare capacity exists for a certain asset, you have to determine how capacity can be interleaved and used in other areas of the data center. Rather than having a server overload and crash, intelligent management tools can determine other servers with capacity to handle part of the data load. Tools can also determine what asset investments are needed to safely handle baseline system, database and application utilization loads, as well as utilization spikes.

Change the Configuration of Assets in Response to Utilization Patterns

Understanding and planning means nothing without effective response, change and implementation. As CIOs gather information, they need to be prepared to change the configuration of assets. Management software now enables assets to be "virtualized" and adapted, allowing for quick configuration to spread the utilization load at

any particular point in time. In addition, automation software can be used to focus employee resources. For example, a highly skilled database engineer should not be doing trivial administrative tasks. With appropriate management tools, employees are able to spend time contributing to core business activity and generating true value for the growth of the company.

Fine-tuning operational efficiency is critical for today's CIOs, not only to best utilize resources and people, but also to prepare for compliance requirements. With the advent of compliance, the data center is now a central part of a company's overall financial flows and business processes, and auditor requirements have become another catalyst for streamlining IT operations. Understanding your core database assets, planning for effective utilization capacity, and then implementing smart changes will make your data center more efficient, while also providing a solid foundation for compliance initiatives.

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