

Back to basics.

Keeping your IT operations' costs down is just one of many reasons why more companies are getting back to the basics of standards.

By Tom Farre

More now than ever before, IT leaders are recognising the value of an IT infrastructure based on standards. One reason: a standards-based infrastructure helps address pressing challenges that most companies face.

First among them is the cost of IT operations — "keeping the lights on," if you will — estimated to be as much as 80 percent of the typical IT budget. Spending so much on nonstrategic tasks leaves little room for innovation. And when IT processes aren't standardised and repeatable, the quality of services may suffer.

Overhead is especially high at companies running aging, proprietary technology such as RISC servers, which may require pricey maintenance contracts, unique skills and perhaps standalone management tools. They are costly to manage even as they trail current servers in performance and energy efficiency. "Given all the special skills and administrative

attention required to manage a legacy environment, the cost to administer an open systems data centre is significantly less," says David Reine, senior analyst at The Clipper Group. Another drawback to a nonstandard infrastructure is vendor lock-in. It limits choices and increases risk, with the potential for prices to be kept artificially high. Innovation is more likely when many suppliers compete for business.

How standards improve IT.

The solution is to move toward an IT environment based on open industry standards and best practices. Companies that adopt a standards-based infrastructure and processes can realise benefits that include interoperability, uniformity, flexibility and other efficiencies that can lower costs, boost productivity and improve service levels. Let's take a look at these five benefits:

1. Interoperability.

Every IT environment requires products and services from multiple vendors to work together — as enabled by industry standards. "Dell believes the noble thing is to recognise the best ideas in the marketplace, bring them to customers, and work aggressively to ensure interoperability," says Anthony Dina, senior manager for solutions marketing at Dell. "Standards give IT executives the option to choose the best solutions, while ensuring they won't have to replace what they've already invested in."

10-gigabit Ethernet (10GbE), an emerging industry standard, provides a good example. With 10GbE, and follow on 40- and 100GbE, an ecosystem of vendors provides interoperable products to create a unified fabric of networking, storage and server clusters. The standard simplifies network infrastructure purchases, is easier to deploy and manage, and is interoperable with existing Ethernet technology.

2. Uniformity.

"In the past, companies often procured IT equipment to perform a particular function, purpose-built for what they needed to do at the time," says Dina. "That adds complexity through variation, which can

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be very costly to manage." The antidote is uniformity through common platforms, unified fabrics and standards-based tools. Dell, for instance, replaced proprietary RISC technology with industry-standard x86 servers, saving millions of dollars in the process. The uniformity allows the company to work with just two primary server images, one for Oracle/Linux and one for the .NET/ Windows architecture, simplifying software licensing, monitoring tools and support.

A uniform infrastructure standardised on newer servers can also assist in virtualisation projects. Pre-built hardware configurations of x86 servers make it easier to deploy and integrate virtual environments. Hardware procurement costs can be lower as well. "If IT standardises on servers, desktops and laptops, its buying power is improved by purchasing larger quantities at a better price," says Lisa Erickson-Harris, research director at Enterprise Management Associates. "This helps to reduce IT's 'keep the lights on' budget."

3. Human resource efficiency.

When a company adopts a broadly accepted standard, a larger pool of trained engineers and administrators is available to hire. The cost should be lower as well — consider, for example, the salaries of LAN administrators versus Fibre Channel experts. And staff trained on standards such as Ethernet or x86 servers can more easily share tasks and responsibilities.

In addition, staff will be more efficient when adhering to standard processes. "In a standards-free environment, all IT staff are left to their own devices in terms of acceptable work products and practices," says Graham Price, principal consultant at Pink Elephant, an international ITIL consulting and training firm with headquarters in Ontario, Canada. "Without standards, it is difficult to direct and coordinate the efforts of groups of 'cowboys' all intent on doing their own thing."

4. Easier manageability.

Silos of unintegrated technology can create a management nightmare. In contrast, a standardised, more uniform infrastructure can result in fewer operating systems and unique architectures to manage, fewer management tools to do the job and fewer staff to operate the tools.

That proved to be the case at Aon Holdings Corretores de Seguros, a Brazilian risk management and insurance provider. Poor performance and costly and complex management of specialised UNIX servers and storage were creating difficulties for internal IT processes. To save costs and reduce complexity, Aon decided to migrate from its UNIX platform to an open, easy-tomanage x86 platform running Linux. After a successful migration to Dell x86 servers and Dell/EMC storage, the firm greatly increased the productivity and efficiency of its IT process, while also improving performance and lowering maintenance costs. "As an added bonus," says IT infrastructure manager Eduardo Lopez Ferreira at Aon, "not only have we reduced management costs, but we've also reduced power and cooling costs in the data centre for a green IT solution."

5. Greater use of automation.

The uniformity and simplification of a standards-based infrastructure pays dividends in process automation. Provisioning, workload management, data management, disaster recovery, the service desk and other strategic functions are easier to automate, which reduces manual intervention and boosts staff productivity. At Dell, automation enables servers to be imaged and deployed in just hours, not days or weeks, and clients can be reimaged via user self-service in about one hour. What's more, a standardised environment gives you the flexibility to incorporate cloud computing and other managed services, where appropriate, to ease staff workloads and enhance application availability.

As you work to standardise, simplify and automate the IT environment, always remember to bring business executives into the loop. When they see the improvements in IT services and the resources freed for business innovation, they are likely to support your efforts.

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Getting there from here.

To reap these benefits of standards-based IT, consider the following guidelines:

- Evaluate new infrastructure purchases in terms of your vendor's commitment to industry standards.
- > Avoid vendor lock-in by lining up multiple sources for infrastructure building blocks.
- Prioritise pain points from proprietary systems such as RISC servers and devise a plan for migrating to x86 technology.
- > Standardise software images on to simplify provisioning and support. Standardise on a limited number of hardware configurations to enhance buying power and simplify support.
- Investigate the integration capabilities of management tools you are considering. Leverage unused automation functions of tools you already own.
- Deploy self-service portals with automated provisioning whenever possible.

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