



Keeping down those mainframe data center costs

As IT budgets are squeezed more and more tightly, mainframe data centers are coming under close scrutiny by finance directors. Despite the superior total cost of ownership of large systems, there are ways of driving costs down even further.

Most enterprises are focusing far more clearly on bottom-line cost right now than on the level of competitive edge offered by their in-house data centers. As far as IT is concerned, the business relies 101% on existing data center services; but someone somewhere will be doing the sums, and working out just how much it would cost to outsource those services, whatever the disruption involved. Outsourcing companies (particularly off-shore businesses) are booming, and their sales proposition is not technical, it's financial.

None of this is music to the ears of the beleaguered data center manager, who is increasingly being asked to play the numbers game and shave a little more off the IT service budget each year. What makes this harder is that the mainframe is already a highly cost-effective platform in terms of total cost of ownership, and finding savings can be a tall order. On the other hand, mainframe software prices (especially some ISV charges) can take an ever larger slice of the pie, which is attracting the attention of CFOs who are juggling with frozen budgets. One way or another, mainframe costs have to be kept under control.

There are many issues to explore in driving down mainframe-related costs. For example:

- *Linux*. Linux is proving to be a major aid to reducing IT costs generally, and zLinux (whether or not running under VM) offers a range of opportunities for consolidating distributed systems, and allowing more flexible deployment of new applications within the mainframe environment. Open Source software is slowly changing the whole cost management issue for large systems.
- *Asset management*. Good software asset management is essential to cost reduction. Again, the mainframe is doing much better than some



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other platforms here - at least you know where all your mainframes are; who can say the same about their PCs? But over years of business evolution and constant change, keeping track of each legacy software package and utility, and monitoring its usage accurately, has become fundamental to the cost-efficiency of large systems. Y2K gave companies the incentive to build an accurate software inventory, but for many this was merely a 'snapshot' exercise, and has not subsequently been built into the change management process. Companies such as Isogon, who have long been providing asset management tools for the mainframe, are now helping users to extend these practices to other platforms across the network, to provide a clear enterprise-wide picture of software usage and areas of potential savings.

- *License reduction.* Many users feel they are getting a poor deal from some of their mainframe ISVs right now, but it may be possible to reduce the number of licenses held without affecting business operations. Cost-conscious users have employed techniques such as the Resource Routing capabilities of Trident Services' OS/EM tool-set to route all workloads specific to particular packages to the logical partition where they are installed. As a result, these users have been able to cut right down on the number of licenses required. Tools like this are well worth considering.

- *Downsizing.* I have never been a great enthusiast of downsizing from the mainframe, as client/server costs are inevitably less predictable and more difficult to calculate, and few *large* mainframe installations have ever downsized successfully. However, it pays to do the sums regularly, and to check that applications really are running on the most cost-effective platform for the level of availability and performance required. For users below the 40 MIPS level, there are now some good migration offerings available that emulate the CICS workload under Unix (such as those offered by Sun's Rehosting Division), or that emulate the S/390 architecture on a low-cost Intel-based machine.

- *Offloading non-critical workloads.* While downsizing is an undesirable step for larger users, it's essential to consider all the options for relieving the mainframe of unnecessary tasks that place extra demands on capacity. Corigin's Zero Overhead Access solutions, for example, allow open systems applications to access mainframe data on shared storage sub-systems directly via a fiber connection, relieving the mainframe of the need to service data requests (a saving which, in some cases, can amount to 5-10% of mainframe capacity). Most data center managers would not normally go looking for a technology of this kind, and yet the



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benefits - in terms of saved capacity and manpower resources - can be very considerable.

One of the great things about the mainframe platform, for all its complexity, is that it continues to offer highly innovative ways to improve performance and manageability. The solutions are out there, but it's essential to keep an open mind about the opportunities available to reduce costs.

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