



IBM Remakes Unix Availability with Mainframe Technology Affordable to More Customers

By Joyce Tompsett Becknell

The new IBM eServer p670 is not just a smaller, more affordable version of the p690 that so many IT managers have lusted after. The news behind this launch is that IBM continues to drive its mainframe philosophy of system design into the UNIX market, and to midrange customers.

The latest and greatest technology is always introduced at the high end where customers have the application and the budget for the fastest performance and the greatest availability features. For years vendors have followed a pattern of rolling out new features at the high end and then propagating them throughout the rest of the family. Rarely have vendors rolled out features across platforms and families. However, this is the story behind the IBM eServer family nomenclature, which encompasses all IBM servers, including mainframe and UNIX technologies.

IBM customers familiar with the mainframe architecture will immediately recognize the benefits of technologies such as the Server on a Chip that implements the POWER4 architecture, as well as the ultra-dense building blocks and partitioning capabilities. These technologies combine microprocessors, cache, the system switch, and the I/O interface on one chip. The processors are actually physically bolted to the backplane in these systems. This philosophy has been one of the reasons for mainframes' large mean time between failure (MTBF) numbers in the area of ten years.

Mainstream UNIX and NT users on the other hand may find this to be a rather different concept for system architecture. Wintel users in particular have gotten used to offerings of faster processors about as frequently as Nike offers new trainers to the market, and having every component hot swappable, hot pluggable, or easy to swap, repair, or replace has become de rigueur for UNIX systems.

Both of these architectures have valid points and different strengths. In order to upgrade a p670 processor, planned downtime will be required. On the other hand, many users require chips that stay up rather than chips that are easily replaceable. They may upgrade to entirely new systems before they upgrade processors. For these users, the appeal of additional reliability outweighs flexibility of upgrade.

Finally, in offering partitioning of resources, the new p670 offers resource allocation down to the individual processor, PCI slot, or even individual gigabyte of memory. This system flexibility allows managers to customize systems to fit individual workloads.

For the midrange customer of a smaller enterprise, or a departmental manager within a larger enterprise, these systems offer the capability for server consolidation, and provide price/performance that fit more comfortably into their budgets. With the p670 IT managers just may be able to have their cake and eat it too.