

I D C D A T - A - G L A N C E



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Linux on System Z in Australia

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Linux and other open source environments include all operating systems deployed aboard servers, workstations, minicomputers, and clients that are based on Linux or other Unix-like open source environments. Typically this software is available both commercially with associated support and maintenance costs and at little or no cost in source code form. Over the last 5 years, Linux has made steady progress to become a real option for enterprise server customers around the world. Although coming from a small base Linux adoption has grown strongly at double digit growth rates, clearly outgrowing the overall OS market. The client computing environment on the other hand remains to be a challenging playingfield for Linux distributions as interoperability between common productivity tools and different end-point devices (PDAs, MP3 players, Smartphones, GPS Systems) inhibit broader user adoption.

Linux on System Z gives mainframe customers access to the full spectrum of IBM software and middleware range while facilitating cross platform collaboration through the flexibility of the Linux operating system

Market Trends

- IDC forecasts also show that Linux server revenue will grow by 85.5% between 2008 and 2012 in the non-x86 server space equaling a four year compound annual growth rate of 16.7%.
- Measured in new license shipments/subscriptions, IDC expects paid Linux SOE offerings to outgrow non-paid deployments between 2007-2012. Linux on the desktop remains to be a minority use case as interoperability challenges and limited user familiarity are the key inhibitors for adoption. Despite this trends, a number of hardware vendors provide Linux installed desktop and notebook products.
- Globally IDC forecast the Linux SOE installed base to reach 11.9 million in 2012 growing from an installed base of 7.9 million in 2008.
- In late 2007, Australia elected a new federal government who promptly ratified the Kyoto protocol. The result of this is the introduction of a carbon trading scheme and an emphasis on reducing carbon dioxide output. This will directly impact how CIOs view power consumption in their datacentres. IDC research shows that in Australia, facilities are only paying for power in 5% of cases whereas in the USA the figure is 42%. On top of the power cost increases associated with a carbon trading scheme, changes in accounting standards will shift the responsibility of power consumption to the CIO.

Market Accelerators

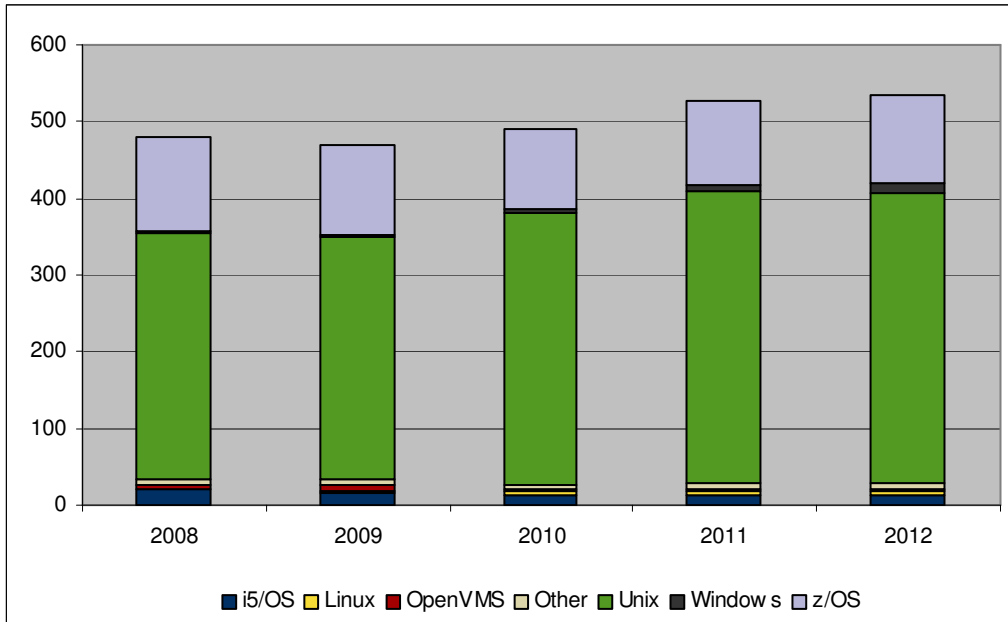
- As virtualisation is maturing into a mainstream solution Linux is becoming more prominent in the Australia and New Zealand markets. Many Linux vendors have launched offerings with unlimited guest deployment rights which presents companies with a strong value proposition during their consolidation process.
- The relatively similarity between Linux and Unix, combined with the increasingly compelling price-performance story associated with x86 hardware will fuel the migration from Unix to Linux.
- A complete spectrum of system middleware and software is supported on Linux running on System Z. Linux on System Z is a 'tier-1' platform for all middleware products underscoring the strategic value of the Linux operating system for System Z. This allows IBM to support all key middleware offerings on two key Linux distributions; Red Hat Enterprise Linux (RHEL) and Novel SUSE Linux Enterprise Server (SLES) for System Z.

Adoption Trends

- Adoption of Linux on System Z in the Australia and New Zealand market has been happening at a faster rate than the rest of Asia Pacific. Large Australian and New Zealand banks have deployed Linux on System Z exclusively with IFL (Integrated Facility for Linux) engines which are well suited to I/O intensive applications and environments where workloads peak at different times.
- While many CIOs balk at the up front cost of acquiring IBM System Z, progress has been made by both customers and IBM on how the costing of the product is interpreted financially. The business case for zLinux is best viewed when looking at a lifecycle total cost of ownership assessment. CIOs and CFOs with a long term view of their landscape are embracing mainframe technology as not only a more reliable, scalable and available solution to multiple x86 servers but also a cheaper one when considering power, people and management.
- The significance of IBM's support for Linux on System Z is that users have access to middleware products such as system management, workload provisioning and orchestration IBM Websphere for application serving and transaction processing in end-to-end applications; IBM Lotus/Domino for collaborative software, support of Web Portals, and IBM DB2 a relational database. This means that customers who have adopted Linux and Open Source software and have invested in Linux skill Sets can see the application of these skill sets on System Z.
- Customers deploying Linux on System Z can address many shortfalls associated with Linux on x86 such as:
 - The capability of rapidly creating cloned images for high demand environments
 - Ability to lock down code that should be static like the Linux kernel using z/VM
 - Ability to quickly deploy servers that fit pre-defined corporate security requirements
 - Low-use servers can be varied off or left idle with little to no resource use
 - Easily apply changes at kernel level to clone version

FIGURE 1

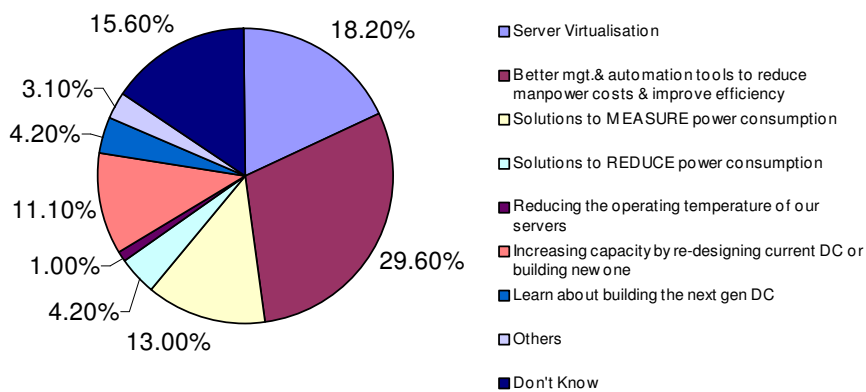
ANZ Server Forecast in Revenue (US Dollars)



Source: IDC 2008

FIGURE 2

Australian CIO's responses to the question, "What are you key datacentre priorities?"



Source: IDC Continuum Survey 2008

ABOUT THIS ANALYST

Matthew Oostveen is a Research Manager for IDC's Asia/Pacific Enterprise Servers and Workstations group, based in Sydney. He is primarily responsible for Enterprise Servers and Workstation markets in Australia and New Zealand, covering quarterly market sizing, competitive analysis, market segmentation by vertical industries and business segments, and channel dynamics impacting the enterprise computing market in the region.

Matthew has over 10 years of experience in the Information Technology industry in the Asia/Pacific region. Prior to joining IDC, he was the Competitive Strategy Manager for Microsoft Asia based in Singapore.

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