

Sun's new Linux strategy

Dawn of an era

Jack O'Brien, manager of the Linux business office at Sun Microsystems, is the man behind Sun's new Linux strategy. **BY COLIN MURPHY**

Q What can you tell us about the new hardware for Sun's BigBear Linux ?

A The product's name is going to be the LX50. It will be a 1U form factor dual processor server. There will be more than one configuration offered. It will be based on the x86 architecture, so it uses Intel chips in the product.

Q Is there a reason why is it limited to just the one type of hardware ?

A This is just the first announcement of our first x86 product, it's by no means the only product that we have under development. We acquired the Cobalt Network organization almost two years ago now, the company has been shipping Linux appliances based on the x86 architecture for almost 4 years. The company is arguably the most successful Linux systems company ever, having shipped well over 100,000 units. We have a couple of different products in that portfolio, the webserving type product

“We want to be aggressive to the entry server market.”

“RAQ”, used by lots of Internet Service Providers, telecommunications companies.

We also have a 'customer premises appliance', the Qube – a neatly packaged internet server. We also have the Sun Cobalt Control Station, used in managing large installations, usually made up of “RAQ servers”. All of these are based on x86 and do use the Linux OS.

Q Is it true that the OS with the LX50 is really just a standard Red Hat 7.3 that you have 'tinkered' with ?

A Tinkered is not how I would describe it. The strategy that we settled on was to be as standard as possible with everything else that is out there. Linux has appropriate momentum of it's own, and we have just fallen right into place with that. We are Red Hat compatible, we have been running Red Hat applications on our systems and haven't found any problems. We have some Sun management tools, but we will be following all of the standard management interfaces.

The LX50 uses the standard RPM installation tools and we support all of the Intel hardware and software protocols like IPMI. The interfaces will be familiar to anyone who has administered a Linux system on x86 before.

Q How closely does Sun work with the Open Source community ?

A We work very closely with the Open Source community. We are one of the biggest contributors of code to the community. We have supported products like OpenOffice, NetBean, the Grid Engine product and Gnome. We have contributed the NFS file system and funded the NFS v4 port to Linux. We also funded the Blackdown Java project. There are lots of others too. We plan to ramp up our efforts with Open Source even more.

Most of our Linux engineers from our Cobalt division are guys that are very well connected to the Linux and Open Source community. These guys lead some of the major driver and module projects that are being developed.

Q How much of the LX50 will remain proprietary ?

A None of it will remain proprietary. We are following standard industry

Linux, and that includes all of the practices that come with it. We will release all of the code available and anyone can run it on suitable hardware. We will play by the rules.

Q Will Java ever be made open source ?

A Ha ha! I can not answer that. Ha ha...

Q Will the Sun Fire servers become more compatible with products like the LX50 due to the work that has been done with LinCAT ?

A We have a clear strength with the compatibility issues. LinCAT is a product released around March of this year. We have a very comprehensive Linux/Unix compatibility strategy. We want to be aggressive to the entry server market. By doing this we can bring some impressive technology to bare. First: Our world class Unix – Solaris, available on SPARC and x86. Second: Our enterprise ready, standard Linux for x86. Third: Great Linux to Unix compatibility.

There are a couple of layers to how we ensure this happens. Most important is the Java layer. Writing to Java, the J2DE edition from the Sun ONE stack is our way to ensure true cross platform independence. Adhering to all the standards like XML and SOAP. As the industry matures, developers are writing for these APIs, which are just one layer of abstraction above the operating system. We will focus a lot of attention to make sure this becomes a standard. We will also make sure that we have full application compatibility between Linux and Solaris.

What we also do is ensure good API, or source compatibility between Linux and Solaris. We will build into Solaris, APIs compatible to those in Linux, so that recompilation stops being an issue. LinCAT is a code analysis tool. It allows developers to check for differences or problems that might occur and helps create code that is source compatible.

We also have a package that ships with Solaris for x86 called lxrund that allows you to run the same binaries on the different platforms. We have a lot of engineering underway to ensure this compatibility. ■

At a press conference in San Francisco, Sun unveiled the LX50, an entry-level server using x86-architecture. The system will be pre-loaded with Sun and Open Source software, with a choice of Sun's new enterprise-ready Linux or the Solaris operating environments and a full suite of support services.

The Sun LX50 includes fully integrated infrastructure software, improved manageability, and the 7x24 support and professional services that most vendors' entry systems lack. The enterprise-ready LX50 server is aiming to lower the cost of ownership and to help to fill the security and stability gap that other Windows and Linux systems leave wide open.

The new system tries to satisfy the customers' needs to deploy infrastructure applications – such as Web serving, firewall/VPN and streaming media – through a low-cost, scalable hardware and Open source software.

A Software-Rich System

The Sun LX50 is the first Sun system to feature Sun Linux 5.0, the company's enterprise-ready Linux operating system optimized for a 32-bit, x86 system. Sun

A new day with the

Rising Sun

Scot McNealy announced that Sun Microsystems will bring their commercial systems know-how to the low-cost, entry level server market with a new Linux based system that brings together industry-leading software and system design. **BY COLIN MURPHY**

into a league of its own for edge applications, compute farms, high-performance technical computing or custom application deployment. Software applications include: Java 2 SDK Standard Edition, Sun ONE ASP for Linux, TomCat (JSP), MySQL (Database), Apache (Webserver), WU-FTP (FTP), Sendmail (Email Server), Bind (DNS Server), Sun Grid Engine and Sun Streaming Server.

Reliable Hardware

The Sun LX50 is powered by either single or dual 1.4GHz Intel Pentium

To integrate with other system management tools along with the Sun Management Center, the Control station uses standard SNMP interfaces. The Control Station is aimed at customers who need to control and manage racks of LX50 servers out of the box.

As the new system was announced, Sun also gave information on a new suite of training, support and consultation packages for both Sun Linux 5.0 and Solaris on the x86 architecture. This can cater from the replacement of parts to problem solving and the creation of software patches.

Sun is aiming to be a complete system provider for all the customer's needs for its Linux 5.0 and Solaris systems. The global service portfolio includes mission-critical operating environment support, a 3-year hardware warranty, an online support center, Web-based and instructor-led training, and integration and consulting services.

Partner Support

Because Sun has used open standards based architecture, Independent Software Vendors (ISVs) will find it easy to add and integrate their products. This in turn will increase the applications for the LX50 while in return give the ISVs a new low cost server platform for their growing customer base. ■



Sun's LX50, an entry-level server using x86-architecture

Linux 5.0 is based on the 2.4 Linux kernel and optimized for the Sun LX50 with a strong focus on stability, security, ease of installation, the set up and remote manageability. Sun Linux, similar to Solaris, includes optimized and tested drivers. It easily integrates with Sun's Java technology and the Sun ONE platform and as expected is supported by Sun's own support services.

The Sun LX50 includes some valuable software that aims to put the new server

processors in an industry standard, 1 3/4-inch (1U) high rackable server.

This new server can be managed remotely with ease using the Sun Cobalt Control Station. This gives the Sun LX50 horizontal scaling capacities on a massive scale. The browser-based Control Station is designed specifically for large volume server deployments. It monitors the system health, evaluates performance, can determine the hardware inventory as well as managing software provisioning.

INFO

The Sun LX50 starts at UU \$2,795 for a system with one 1.4GHz CPU, 512MB memory and 36GB SCSI disk.

A system with two 1.4GHz CPUs, 2GB RAM and 36GB SCSI disk sells for US \$5,295.

Sun Cobalt Control Station from US \$4,999. More information see www.sun.com.