Why Linux Solutions from IBM?

10. Linux solutions offer customers flexibility, choice and control.

*Linux is supported by all major IT systems vendors as well the broader open source community, but IBM is also a leading contributor to the Linux kernel and applications. IBM Linux-based solutions offer long term choice and control based on open standards - freeing you from single vendor lock-in.

*Linux users upgrade when it makes business sense. With Red Hat for instance, RHEL4 subscribers can upgrade to RHEL5 today at no cost – or wait until they have a business need. (http://www.redhat.com/rhel/benefits/, 5/07)

*HPUX, Tru64 and Solaris users with systems based on end-of-life PA-RISC, Alpha, UltraSPARC IIIi, and SPARC IV processors are all being forced into a forklift upgrade by Sun and HP. The good news? IBM offers a stable, industry leading roadmap with Linux on IBM's x86/x64, POWER, BladeCenter and mainframe products. IBM systems roadmaps have been stable and easily upgraded from one generation to the next without the forklift upgrade.

9. Linux can create significant cost and performance advantages.

*Linux was found to be 40% less expensive than Windows/x86 and 54% less expensive than a comparable Solaris/SPARC solution based on a 3-year period of ownership for systems supporting 100,000 operations per second on the SPECjbb benchmark. ("TCO for Application Servers: Comparing ", Robert Frances Group, 8/05)

*Web-tier performance: Linux was the chosen operating system for 94% of all results submitted for spec.org's WEB2005 benchmark. Windows server does not appear at all in the results. IBM's HS21 blade running Linux outperforms Sun's T2000 running Solaris 10 by 134% per core according to published SPEC WEB2005 results! (http://www.spec.org/web2005/ as of 3/07)

*HPC performance: Linux powers 82% of the Top 500 Supercomputers while Windows does not have a single appearance. Of the 9 systems listed from Sun, 7 run Linux and only 2 run Solaris. (http://www.top500.org, 3/07)

* According to Nationwide Insurance, virtualizing hundreds of servers with Linux on IBM System z™ for critical workloads will save $15M over 3 years. ("Managing System z Mainframe SOA...", Software Strategies, 1/07)

*The U.K. Office of Government Commerce found that servers running Linux could combat the rising problem of e-waste because Linux servers last on average twice as long as servers running Windows. ("Linux makes for Green Computing", Techworld, 3/07)

8. Linux offers world class security.
*The Linux security model is based on the UNIX model giving fine grain security rights to users and applications.
*With SELinux and AppArmor Mandatory Access Controls (MAC), Linux integrates enterprise security features out of the box in a general purpose operating system unlike other competing server operating systems. (3/07)
*IBM has Linux solutions certified at CAPP EAL 4+ while supporting the development of SELinux and use with IBM software.

*New encrypted file system capabilities (eCryptfs) developed by IBM have been adopted in the Linux kernel protecting user data by encrypting files at the file system level. This feature is not currently available in Solaris 10.

***7. Linux skills and resources are readily available.**

*Linux has a natural fit with academic study and has become a foundation of university information technology and computer science coursework.

* "There are 4 million developers now worldwide doing Linux development. The groundswell has been significant." (John Andrews, Evans Data Corp. 8/06)

*Over 100,000 ISV, corporate and independent developers are actively creating Linux-based applications that work with IBM software.

6. Linux is growing as a hub for community innovation.

*Linux is the fastest growing operating system worldwide with server revenue growing four times faster than Windows and five times faster than the server market in 2006. (Gartner, Inc., "Quarterly Statistics: Server Revenue, Worldwide, 4Q06" by Adrian O'Connell et al, January 25, 2007.)

*Linux evolved from edge of network to mission critical workloads. Customers are using Linux for innovative applications previously difficult or impossible. e.g. IBM, Raytheon, and Red Hat collaborated to deliver the U.S. Navy an innovative real-time Linux and Java solution for mission critical systems.

*The Linux community is ahead of the game supporting next generation platforms like IBM's Cell BE processor, next generation mobile devices, and even gaming consoles. As new markets are built on Linux, the investments in the community increases.

5. IBM has the largest commercial Linux team in the world.

*IBM has the most comprehensive Linux team in the world with 600+ developers in the Linux Technology Center, more than 7,000 skilled Linux Global Services consultants worldwide, and another 10,000 IBM employees involved with Linux via porting centers, R&D, sales and marketing.

*IBM's Linux Technology Center has objectives to: Make Linux Better, Expand Linux's reach, Enable IBM products on Linux, and Customer Collaboration.

*A LWN.net analysis of Linux kernel changes from 2.6.16 to 2.6.20 identified IBM as the #2 commercial contributor, and top systems vendor to the Linux kernel. (http://lwn.net/Articles/222773/, 2/07)

*IBM maintains Linux Integration Centers worldwide to help clients integrate Linux based middleware and software solutions.

*IBM was ranked the #1 vendor for servers running open source operating systems; one in five developers (22%) chose IBM. ("OSS/Linux Development Survey", Evans Data Corporation, Spring 2007)

4. IBM leads in comprehensive Linux solutions.

*Linux is certified and supported on IBM's entire family of server and storage Systems (System z™, System i™, System p™, System x™, BladeCenter®, System Cluster, System Storage, BlueGene, and Cell based products).

*IBM has more than 500 middleware products from WebSphere, Lotus, Tivoli, Information Management, and Rational on Linux. IBM also supports desktop applications such as Lotus Notes, Expeditor, and Sametime on Linux.

*IBM's Support Line offers customers Linux operating system support on the same level as AIX 5L, z/OS, and i5/OS support.

3. IBM is a leader in the Linux and open source community.

*IBM has been involved with development of Apache, Eclipse, Linux, and over 100 other open source projects that benefit our customers. IBM is a Platinum Member of The Linux Foundation, Strategic Member of Eclipse.org, and a founding member of Open Invention Network.

*IBM continues to work closely with Novell and Red Hat, IBM Premier Business Partners who have entered into Strategic Alliance Agreements with IBM.

*IBM led the way for opening up hardware as well creating an innovative open standards ecosystem with Blade.org and Power.org. The Global Venture Capital Firms invested over $1 billion in the last two years to fund Blade.org companies developing emerging solutions on the open Blade.org platform.

2. IBM leads in supporting ISVs and Business Partners for Linux.

*IBM has more than 6,000 Business Partners supporting Linux with over 10,000 Linux-based industry customer solutions. IBM's ValueNet program pairs multiple IBM Business Partners jointly to deliver comprehensive solutions.

*IBM teams with leading industry ISVs in financial markets, banking, retail, telecommunications, media and entertainment, EDA, life sciences, energy and utility, manufacturing, professional services, and cross-industry applications.

*IBM has programs to support ISVs with Linux (porting, testing and marketing). For example, the Chiphopper™ program was created to enable ISVs with x86 Linux applications on multi-platform IBM System p, System i, and System z.

*IBM's multiplatform Linux strategy has evolved with 7,500+ ISV applications for Linux on IBM systems and software including over 2,700 Linux on POWER applications and over 1,000 applications for Linux on IBM System z™.

1. IBM is committed to customers' success with Linux.

*IBM's leadership with open source and open standards creates an environment to support dynamic, flexible, interchangeable business processes.

*IBM uses Linux, open source and industry standard architectures to extend the value of our software, hardware and services to provide customers choice without vendor lock-in. IBM Migration Factory offers assistance for customers that want to modernize or consolidate their legacy platforms to Linux on IBM.

*IBM has over 15,000 Linux-related customer engagements worldwide in every industry and market.

*Over 3,000 IBM engagements for Linux have involved customers migrating from Solaris to Linux on IBM platforms in order to help lower TCO, increase performance and business flexibility with a stable, open technology roadmap.

*IBM customers using Linux leverage community innovation for growth and competitive advantage. Visit us at ibm.com/linux today to help grow your business with lower costs and long term flexibility with IBM products for Linux.