

China institute unveils 64-bit Chinese Linux

China's Institute of Software, Chinese Academy of Sciences, has unveiled the world's first 64-bit Chinese Linux operating system. The release of this native server software, Chinese Penguin64, represents a major advance in Linux development.

The operating system is expected to combine the advantage of open-source computing and unlimited 64-bit processing power with native Chinese language capability.

The Institute of Software developed Chinese Penguin64 in collaboration with Donovan Systems, using Donovan's 64-bit hardware. Singapore-based Donovan Systems, the developer of 64-bit Linux systems, supported the development of Chinese Penguin64 by sharing their knowledge and expertise of 64-bit UltraSPARC processing technology.

The development of Chinese Penguin64 is also a significant milestone in China's efforts to build an indigenous software industry. Chinese Penguin64 fills a void in the Chinese software market that has been hampered by the lack of a true Chinese operating system and its dependence on expensive, imported, proprietary software.

The new server software is expected to prove popular with Web site operators, Chinese software developers and organizations with high-capacity needs.

Chinese Penguin64 takes advantage of the tremendous processing power and enhanced memory addressability of 64-bit computing — 4 billion times larger than the maximum address space of a 32-bit machine — to support large scale database, high capacity network applications and Internet services.

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“With 64-bit computing expected to be mainstream within two years, Chinese Penguin64 puts Chinese software programmers and application developers well ahead of the technology curve,” said Gary Foong, CEO of Donovan Systems.

“Now China has a strong foundation to accelerate the pace of local software development and further its ambition to be a software producer for the world market.”

He added that the Chinese Linux operating system is a major boost for the development of Chinese e-commerce and other commercial applications.

Chinese Penguin64 is the first Linux with true double-byte capacity in its kernel, doing away with the need for translation or emulation. The Chinese processing capability covers input, data processing, printing and display. Parallel and cluster computing capability are also found at the kernel level.

Chinese Penguin64 also supports a range of industry and international standards including SPARC VS and VP, the X11R6 interactive input standard XIM, the L10N (localization) standard, the I18N (internationalization) standard and all Solaris binary code applications.

The system comes complete with Internet applications including Web and e-mail server software, fax, file and print services. It supports all common Internet standards, Web-enabled remote network and system services as well as SSL security.

The system's 64-bit architecture provides high performance and memory capacity, with 64-bit data and address bus, up to 1.6Gbs data transfer, floating point calculations with quad-precision capability and a SUN graphical UPA port for professional graphical data processing ability.

Chinese Penguin64 is ideal for the Chinese Internet Service Provider market, Chinese language software developers, educational institutions, government and technical users.

It will help developers create a new wave of ground-breaking applications, including speech recognition, natural language processing and full-motion video software. It is also a powerful server software for high capacity business needs such as e-commerce and other enterprise applications.