



Xen 3.3 Data Sheet

Xen 3.3 Secure Hypervisor

Xen.org proudly announces the release of its state of the art open source hypervisor solution, Xen® 3.3. Xen 3.3 delivers the capabilities needed by enterprise customers and gives computing industry leaders a solid, secure platform to build upon for their virtualization solutions.

The Xen 3.3 hypervisor is the fastest and most secure infrastructure virtualization software available today, supporting a wide range of guest operating systems including Windows®, Linux®, Solaris®, and various versions of the BSD operating system. As an open source project, customers can easily deploy their virtualization solutions based on Xen 3.3 or take advantage of the broad industry support for Xen by working with virtualization solutions from leading computing vendors including Oracle, Red Hat, Novell, Sun, Lenovo, Samsung, Fujitsu, and others that are built on Xen.

Open Source Hypervisor Supported by Leading Enterprise Vendors

The Xen 3.3 hypervisor is a unique open source technology, the result of a tremendous community effort, with contributions from over 150 developers world wide, and more than 20 enterprise infrastructure vendors, as well as the OSDL and top tier universities. Major backers of the Xen 3.3 hypervisor release include Intel, AMD, HP, Dell, IBM, Novell, Red Hat, Sun, Fujitsu, Samsung, and Oracle.

CPU Portability

Xen 3.3 now enables administrators to move active virtual machines from one server to another independent of various CPU virtualization support. This new feature offers greater flexibility in heterogeneous server farms with various CPU virtualization versions.

Green Computing

Xen 3.3 takes advantage of the latest hardware support for power consumption monitoring and reduction by intelligently powering down components within an individual processor. Power savings are also gained by offering virtualization solutions built on Xen the ability to manage servers and server farms for greater power savings.

Security

Xen 3.3 delivers new solutions to better secure virtual machine start-up as well reduce possible hacking opportunities by moving critical management processing out of global space into separate virtual sessions.

Performance & Scalability

Xen 3.3 significantly improves the already impressive Xen performance by offering new memory access algorithms to reduce system wait time during critical memory requests and new scanning technology to optimize framebuffer searches. Several scalability enhancements were also implemented including 2MB page support for EPT/NPT.

Xen 3.3 Secure Hypervisor Virtualization for Mainstream Operating Systems



Xen 3.3 Feature List

The complete list of new features in Xen 3.3 includes:

- *Performance and Scalability*
 - *CPUID Levelling*
 - *Shadow 3 Page Table Optimizations*
 - *EPT/NPT 2MB Page Support*
 - *Hardware-accelerated HVM video memory updates tracking*
 - *PVSCSI -- SCSI Support for PV Guests*
 - *Full 16-bit Emulation on Intel VT*
 - *Support for memory overcommit allowing more VMs per physical machine for some workloads*
- *Security*
 - *PVGRUB Secure Replacement for PYGRUB*
 - *IO Emulation "stub domains" for HVM IO*
- *Green Computing*
 - *Enhanced C & P State Power Management*
- *Graphics Support*
 - *VT-d Device Pass-Through Support*
 - *Direct OpenGL-accelerated video output scaling*
- *Miscellaneous*
 - *Upgrade QEMU Version*
 - *Multi-Queue Support for Modern NICs*
 - *Removal of Domain Lock for PV Guests*
 - *Message Signaled Interrupts*
 - *Greatly improved precision for time-sensitive SMP VMs*

Xen 3.3 Hypervisor Engine for Enterprise Virtualization

"We believe Xen 3.3 marks a significant step forward in the overall performance of our open source hypervisor," said Ian Pratt, founder and project chairman of Xen.org. "This new release is consistent with our vision of providing a highly scalable and secure open source engine which is increasingly becoming an industry standard."

To obtain the latest source code and build of Xen 3.3 go to <http://www.xen.org>.



About Xen.org. Xen.org is the home of the open source Xen® hypervisor, a fast, secure industry standard code base for operating system virtualization. Founded and led by Ian Pratt the community benefits from the hundreds of contributors from leading hardware, software, and security vendors. Xen.org is guided by the Xen Advisory Board, which is drawn from key contributors to the project. For more information, visit www.xen.org.