



## Xen 3.2 Data Sheet

### **Xen 3.2 Increases Server Utilization**

Enterprises looking to increase server utilization, consolidate server farms, reduce complexity, and decrease total cost of ownership are embracing server virtualization. The Xen® 3.2 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.

With Xen 3.2 virtualization, a thin software layer known as the Xen hypervisor is inserted between the server's hardware and the operating system. This provides an abstraction layer that allows each physical server to run one or more "virtual servers", effectively decoupling the operating system and its applications from the underlying physical server.

### **Open Standard Hypervisor Supported by Leading Enterprise Vendors**

The Xen 3.2 hypervisor is a unique open source technology, the result of a tremendous community effort, with contributions to date from over 150 developers world wide, and more than 20 enterprise infrastructure vendors, as well as the OSDL and ten top tier universities. Major backers of the Xen hypervisor include Intel,

AMD, Dell, HP, IBM, NetApp, Novell, Red Hat, Sun, and Veritas.

### **64-bit Host Platform Support**

Xen 3.2 now supports 32 and 64 bit paravirtualized and HVM guests running simultaneously on a 64 bit Xen hypervisor platform. This new feature delivers greater flexibility and allows users to leverage existing 32 bit solutions as they transition to new 64 bit hardware.

### **Full HVM Guest Live Relocation**

Xen 3.2 provides users with the ability to not only do a live relocation on a paravirtualized guest but also for HVM guests. For example, an active Windows HVM guest can move from one Xen platform machine to another while actively running with no noticeably performance issues.

### **Paravirtualization Provides High Security with Near-Native Performance**

Xen technology's paravirtualization technology is widely acknowledged as the fastest and most secure virtualization software in the industry. Xen 3.2 offers near-native performance for virtual servers, with up to ten times less overhead than proprietary virtualization software, and benchmarked overhead of well under 5% in most cases compared to 35% or higher overhead for non-paravirtualized virtualization technologies.

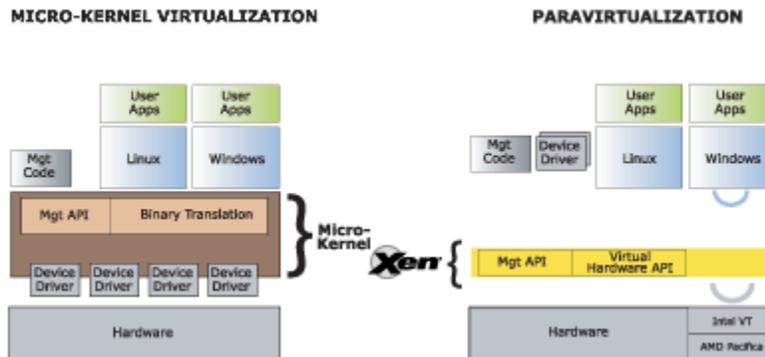
## **Xen 3.2 Virtualizes Server Environments, Enabling Server Consolidation**



The Xen hypervisor's paravirtualization technology avoids the need to dynamically patch the operating system of a running virtual server – a slow and insecure technique used in today's proprietary x86 virtualization products – cutting virtualization overhead and increasing performance. This enables virtual servers to run natively, at full processor speed, while Xen technology guarantees precise control of per-virtual server CPU, memory and I/O resources.

Paravirtualized guests running on Xen technology typically incur between 0.1 percent and 3.5 percent overhead for virtualization, up to 10 times less than today's proprietary software virtualization products. The Xen hypervisor's I/O model re-uses standard Linux device drivers, ensuring superb device support and minimizing certification headaches.

### **In Paravirtualization, Guest OS and Hypervisor Collaborate to Achieve Optimal Performance**



### **Improve Business Continuity and Streamline the Application Lifecycle**

Xen 3.2 provides business continuity and high availability through dynamic provisioning, allowing applications to be migrated in cases of server failure to a backup pool of server resources with less than 100 ms migration time. It also enables IT managers to streamline the application lifecycle, enabling seamless migration of applications from test and development to data center environments by moving them from one virtual server to another.

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### **Technical Specifications**

- Enterprise Linux guest operating systems supported: Red Hat Enterprise Linux 5.0, Fedora Core 8, CentOS 5, SUSE Open Linux 10.3, and others
- Intel VT-x support
- Supports 32 bit and 64 bit PV and HVM guests on 64 bit hardware
- Full HVM guest live relocation
- Live virtual server relocation in typically less than 100 ms

To obtain the latest source code and build of Xen 3.2 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](http://www.xen.org).