

Brent Kerby, Product Marketing Manager for AMD's Server/Workstation Division, and Ward Ralston, Senior Technical Product Manager of Microsoft's Windows Server Division, discuss energy efficiency and reducing the industry's environmental impact.

How do energy-efficient technologies contribute to an organization's financial bottom line?

Ralston: The power bill is the second largest datacenter expense, only trailing the phone bill. Hence, most IT departments are discovering the value of developing an energy strategy. Energy-efficiency technologies can reduce costs, reduce datacenter management demands, and free-up resources. With energy prices expected to keep rising, efficient technologies will be even more significant to the IT budget. Environmental sustainability is a fundamental, long-term business strategy for Windows Server.

EXECUTIVE INTERVIEW

Is AMD committed to reducing its environmental impact?

Kerby: AMD is committed to managing the environmental impact of both its products and operations. Specifically, AMD has taken action to purchase renewable energy, maximize energy efficiency, and lower costs and reduce environmental impact through its technology design, manufacturing innovations, and facilities design and operations.

What are AMD's short-term and long-term goals related to reducing its environmental impact?

Kerby: AMD is focused on three things:

1. outsourcing energy supplies with lower global-warming impact;
2. optimizing existing manufacturing processes, associated facilities, and technology upgrades; and
3. lowering gas emissions with new facilities and new equipment.

Long term, we are committed to continued innovation toward products that boost processor performance, and lower power consumption and continued work with the industry on environmental issues.

AMD has demonstrated its commitment to energy efficiency and environmental stewardship by partnering in voluntary initiatives, including the EPA's Climate Leaders program, Energy Star® and the Green Power Partnership. In 2006, AMD became one of the founding members of the technology industry coalition, The Green Grid, which is dedicated to promoting energy-efficient computing in the data center.

How does AMD assist customers in reducing their environmental impact and increasing energy savings?

Kerby: Our commitment to energy efficiency spreads throughout the technology ecosystem, and to customers, helping address power concerns at a global level. One way we manage our influence on the global climate is by providing customers with energy efficient technology solutions, because from our perspective, energy-efficiency is just as important as speed and performance in computing innovation. In real terms, AMD is helping reduce business energy costs for server processors by up to 30-50 percent. The technologies and products we design to help customers build more energy efficient products include:

1. The latest generation of AMD Opteron™ processors are geared toward maximizing computing power in the datacenter, while minimizing

power consumption. Power-efficient Quad-Core AMD Opteron processor-based systems, utilizing DDR2 memory and Direct Connect Architecture with integrated memory controller, can consume less power at the wall than comparable systems.

2. Dual Dynamic Power Management™ (DDPM) provides independent power supply to the cores and memory controller, allowing them to operate on different voltages, as determined by usage.
3. The innovative Enhanced AMD PowerNow!™ Technology strengthens the per-watt performance capabilities of the AMD Opteron processor.

It also increases platform investment protection by reducing the strain on datacenter cooling and ventilation systems.

4. AMD's CoolCore™ Technology, can reduce energy consumption by turning off

unused parts of the processor. AMD Virtualization™ (AMD-V™) technology for virtualization enables multiple operating systems and applications to run simultaneously on the same server, resulting in a more efficient use of hardware and a significant reduction in energy used.

What features in Windows Server 2008 help consumers manage power consumption?

Ralston: Windows Server 2008 is Microsoft's most energy efficient server system to date. There are three main areas where Windows Server 2008 can provide power savings. First, organizations will see the most direct power benefit from Hyper-V's virtualization capabilities. With consolidation of up to eight underutilized servers onto one physical server, organizations can immediately see significant power savings. Second, Windows Server 2008 has the ability to throttle power to hardware components that consume large amounts of power. The CPU, for example, can account for as much as 45 percent of server power. Windows Server 2008 continually evaluates the CPU load and can reduce the CPU power by as much as 50 percent. Third, the next generation of multi-core CPUs can extract four to eight-times the processing power without increasing CPU power consumption.

CONTACT

AMD

One AMD Place, P.O. Box 3453, Sunnyvale, CA 94088

(408) 749-4000 customer.inquiry@amd.com

www.amd.com

Microsoft

One Microsoft Way, Redmond, WA 98052

(800) 642-7676 <http://support.microsoft.com/contactus/>

www.microsoft.com/windowsserver2008/



Windows Server® 2008

Windows IT Pro