Market Roundup
November 10, 2006

VMware Launches Virtual Appliance Market
Next Generation Clusters from IBM
Microsoft and Novell: Bambi Meets Godzilla?
HP and the Panda

VMware Launches Virtual Appliance Market

By Tony Lock

This week VMware announced the creation of a marketplace and a certification program for virtual appliances. The Virtual Appliance Marketplace already boasts 300+ virtual appliances available for customers to evaluate or purchase. Virtual Appliances already available include offerings supporting collaboration, email security, firewalls, intrusion detection/prevention, and traffic management as well as basic operating systems. In addition to the marketplace itself ISVs looking to create virtual appliances can now choose to certify their appliances through the VMware Virtual Appliance Certification Program to ensure that their appliances and the ISV itself can fully support their solutions in this new environment. Certified appliances are currently available from a range of vendors including Zeus, Zimbra, Red Hat, ProofPoint, CohesiveFT, LoadBalancer and PortWise.

It is clear that the use of Virtual Machine software in the enterprise is moving beyond test and development and into mainstream business use supporting key front-line business applications. This is verified not simply by a number of recent surveys but also by speaking with many of the 7,000 or so delegates attending the VMworld 2006. Organizations now have sufficient trust and experience of virtual machines, especially those supplied by VMware, to start using them in everyday operations.

Virtual Appliances are designed to help address much of the complexity still facing organizations as they seek to deploy applications, whether directly on server platforms or on virtual machines; particularly the complexity of installation and optimizing operating systems, middleware, and application software to get a functioning system. In essence a virtual appliance is a pre-built, pre-configured, and ready-to-run software application packaged with the operating system inside a virtual machine. All that is needed is to copy the file containing the virtual appliance to a VMware platform and it is ready to use. More importantly it has been built and “tweaked” to ensure that performance is good and that the appliance is reliable. All of the potential for software stack clashes and conflict are removed as the virtual appliance is entirely self-contained. In many respects Virtual Appliances are not simply a software distribution solution but a complete distribution, installation, and management technology that allows very fast adoption of mainstream software into production.

If one considers virtual machine software on the x86 platform as still a young technology that is now ready for production use, VMware Virtual Appliance technology is even younger, but it is built on the VMware platform that has earned a fair degree of trust. Overall, we are supporters of the software-appliance approach to computing and we hope that the VMware Virtual Appliance Marketplace will become an important resource for many organizations. However, it is clear that VMware will need to carry out a lot of education and evangelism to ensure that IT organizations understand the Virtual Appliance approach to computing. If organizations learn to understand where they could exploit this architecture, the VMware Virtual Appliance Marketplace could, in time, become a very heavily visited and exploited resource. Indeed, when considered alongside the company's well known offerings and its other recent developments such as the VMware Virtual Desktop Infrastructure and ACE, Virtual Appliances gives VMware a well rounded set of solutions to sell. It will be fascinating to see how quickly business application ISVs port their offerings to Virtual Appliances. Equally, as such appliances can be deployed and removed easily, we shall watch eagerly to see if customers start asking the ISVs to offer new licensing schemes alongside a Virtual Appliance.

The Sageza Group, Inc.
32108 Alvarado Blvd #354
Union City, CA 94587
510·675·0700 fax 650·649·2302
London +44 (0) 20·7900·2819
Milan +39 02·9544·1646

Next Generation Clusters from IBM

By Clay Ryder

IBM has announced its latest generation processor systems and blades, high-speed connectivity, and coprocessor acceleration technology for the IBM System Cluster 1350. The new technology has the capability to scale to 1,024 nodes and is targeted at organizations looking to supercomputing solutions in a variety of industries including financial services, industrial, petroleum, and life sciences. The new System Cluster 1350 delivers high levels of speed, choice, and flexibility to create hybrid supercomputers in a fully integrated, factory-built, and tested solution. Key server products available in the new IBM System Cluster 1350 portfolio include: Opteron-based System x3455, System x3655, System x3755, BladeCenter LS21, and BladeCenter LS41; Xeon-based System x3550, System x3650 and BladeCenter HS21; Power-based System p5 505, System p5 505Q, System p5 510, System p5 510Q, System p5 550 and System p5 550Q and BladeCenter JS21; and as Cell Broadband Engine-based systems, including IBM BladeCenter QS20. The System Cluster 1350 features networking options, including Ethernet, Infiniband, and Myrinet interconnects. HyperTransport (HTx) can be leveraged with Opteron-based systems thus allowing the 1350 to support the Qlogic/PathScale HTx adapters for memory-intensive High Performance Computing and Business Performance Computing applications that commonly are constrained by processor-memory and I/O performance. High-performance interconnects including 10GBps Ethernet and Infiniband networking from Cisco and the native 10GBps BladeCenter H Infiniband switch blade, along with Myricom Myri-10G (10GBps) adapters and switches, as well as double bandwidth (20 GBps) Voltaire Infiniband products such as the Voltaire Infiniband Pass through Module for Blades, which can eliminate the need for intermediate switches, are among the interconnectivity solutions supported. The System Cluster 1350 will also offer ClearSpeed Advance accelerator boards, PCI-X adaptors designed to improve the performance of numerically intensive workloads by routing math library routines to the ClearSpeed accelerator board. IBM System Cluster 1350 pricing varies with the specific configuration.

As mind boggling as it can be, the capability of state-of-the-art computational prowess packaged up into a standalone server is sometimes just not enough for some workloads as the demand in many organizations can easily outstrip this capacity. Although for smaller deployments a collection of discrete servers can generally meet the workload demand, for those with serious needs the cluster has always provided a creative way to build a solution robust yet flexible enough to handle varied workloads within, and sometimes outside of, organizations. One historic challenge with clusters was interconnecting all of the components without running into bandwidth and latency limitations between the interconnects. We have witnessed substantial improvements in short-distance interconnects in recent times, and technology such as the Voltaire Infiniband Pass-through Module. The ability to offer 20 GBps throughput over longer distances is a far cry from the 10MBps Ethernet or even 100MBps FDDI we had a scant decade ago. Alternatively, HTx provides a chip level interconnectivity with throughput that would have been found only in the dreams of science fiction a generation ago. Of course, on top of all of this is the sheer computational horsepower of the System x, System p, or BladeCenter blades: almost an embarrassment of riches to offer to the cluster-oriented customer.

Technically there is a lot here to appreciate, but technology does not sell itself; it must support a solution that the market wants to buy. Obviously, the sheer scaling potential of the 1350 is impressive, but there are a relative few who need such a solution. However, scale works both ways, and a cluster is not necessarily made of 1024 or even 512 nodes; it is quite viable with five or ten. The challenge for IBM is to deliver a family of clustered offerings that target specific needs, perhaps with a vertical orientation, that clearly articulate an answer to problems that organizations are facing and will be easy to understand. In some respects, the answer to customer problems needs to be simple and direct, even if it is implemented through a relatively complex clustered solution. While Big Blue, and the industry overall, have gotten better at engaging in business-focused as opposed to technology-focused discussions, clusters have a high geek factor, yet as with most things geek they ultimately experience their highest success and market potential when the technology takes the supporting role to the business discussion, as opposed to the other way around.

The Sageza Group, Inc.
32108 Alvarado Blvd #354
Union City, CA 94587
510·675·0700 fax 650·649·2302
London +44 (0) 20·7900·2819
Milan +39 02·9544·1646

Microsoft and Novell: Bambi Meets Godzilla?

By Joyce Tompsett Becknell

Microsoft and Novell have recently announced a set of agreements to build, market, and support a series of new solutions to make their products work better together. Microsoft will now recommend SUSE Linux Enterprise for customers who want Windows and Linux together. The two companies are going to create a joint research facility at which Microsoft and Novell technical experts will architect and test new solutions with customers and the open source community, including virtualization solutions, Web services and service-oriented architectures (SOA), and interoperability between office productivity applications. They have also promised to provide each other's customers with patent coverage for their respective products. Microsoft and Novell will each provide covenants that promise not to assert their respective patent rights against customers who have purchased or licensed products from the other. Microsoft has also made some agreements with Novell regarding the open source community. Finally, the two companies will pursue a variety of joint marketing activities to promote the adoption of technologies on which they've collaborated. Novell has posted a FAQ on its web page for the open source community explaining details of the agreement as it relates to the community.

The implications of what Microsoft and Novell are up to should keep pundits busy for awhile. Certainly a flotilla of lawyers are earning their holiday bonuses this year. But we're more interested in the why of it all, and more importantly, why now? Novell has been losing ground to Red Hat and others despite the fact that many believe SUSE to be the superior distribution from a technical viewpoint and despite the fact that companies like IBM have made significant financial contributions to make sure Novell could do the right things with SUSE. At the same time, Microsoft is turning up the heat as Vista hit RTM (release to manufacturing) this week, surrounded by discussions of changes to the wording of its upgrade policy, concerns over what features are available on which versions of Vista, and what exactly the WGA (Windows Genuine Advantage) will be like under Vista and how likely this is to turn customers off to Microsoft and cause them to seek alternatives. Certainly both companies are vulnerable. Novell has had many recent changes in executives and strategy and has yet to find a compelling message for its mix of open source SUSE and traditional Novell products. Microsoft's announcements, changes, and re-announcements around Vista have led to the development of a web community akin to that which follows the television series *Lost*, as the curious try to figure out exactly what is really going on and what it all actually means.

On another front, patents come up frequently in these agreements. Said agreements are not irrevocable, and they are finite, but they certainly indicate an intent and a direction from the two companies. It is a sad statement on the state of the industry that more and more companies are making money from patents and intellectual property not by making products with them but by threatening other vendors who may be infringing those patents. SCO has certainly become the poster child for how not to do this, but respectable Linux supporters like HP came out early indemnifying its customers who used Linux in case the threat might be credible. As far as we know, no Linux customers have been sued for using a distribution, but vendor versus vendor could be the subject of the next Celebrity Deathmatch series on MTV. In this particular instance, although Microsoft and Novell have promised to play nice, many disgruntled folks in the open source community aren't sure if what Novell has done is actually in violation of the GPL or whether they're just selling out. This announcement has given the press a bit of excitement while they wait for the Zune and Vista launches. But in terms of real impact on users? Well, we're not holding our breath.

HP and the Panda

By Susan Dietz

HP and World Wildlife Fund-US (WWF-US), known for their use of a Panda as their logo, recently announced a joint worldwide initiative to reduce HP's greenhouse gas emissions from its operating facilities, to focus on educating and inspiring others to adopt best practices, and to use HP technology in conservation efforts around the world. Among the jointly stated goals is that by 2010, the carbon dioxide emissions from HP-owned and HP-leased facilities will be reduced by up to 15% below their 2006 levels. This will be achieved by both WWF-US and

The Sageza Group, Inc.
32108 Alvarado Blvd #354
Union City, CA 94587
510·675·0700 fax 650·649·2302
London +44 (0) 20·7900·2819
Milan +39 02·9544·1646

HP working together to identify the best technology and practices available to reduce energy use in these facilities. Another stated goal is that HP will ramp up its efforts to explore and purchase cost-effective renewable energy. Yet another goal is for HP to develop energy efficiency measurements for its products. WWF-US and HP will also work together to define and implement strategies to address and educate individuals and organizations about climate change, as well as to bring to light the top best practices adopted by both consumers and businesses. The two companies have stated they will also leverage HP technology to advance the science and ideas of adapting to the coming climate change. One of their initial joint projects also involves using funding from HP to study the effects of climate change on the ecosystem of North America's Bering Sea.

In our industry's ever-steady march toward eco-friendly policies and products, we believe that HP has taken another step in the right direction. In the famed report released by Greenpeace earlier this year, HP ranked sixth out of fourteen companies surveyed, somewhat behind Dell and Nokia. Not a bad showing, although none of the companies surveyed passed as being totally green. Dell and Nokia both earned a score of 7 out of 10, and as anyone who has gone to school knows, a 70% may be passing but it's hardly spectacular. However, by implementing these latest policies and procedures, as well as by working with the World Wildlife Fund-US, next year's Greenpeace ranking (if Greenpeace does do another survey next year) should up HP's score from its current 4.7 and move the company closer to the green. A current article on Greenpeace's website acknowledges efforts by HP to "green up" their practices.

This is great news for HP. When a formerly adversarial company publishes an article endorsing HP as one of the leaders in the industry in taking action against toxic chemicals, the sales to environmentally conscious consumers (or those that are just saying they are environmentally conscious for the good press it generates) are sure to follow. However, it is perhaps not really a shocker that when HP decided to team up with an environmental group, they choose the WWF-US rather than the more adversarial Greenpeace. Greenpeace's website is full of announcements and denouncements of tech companies and their poisonous policies. WWF-US, on the other hand, only provides one article about the tech companies: the one announcing the partnership with HP. Seems that sounding the warning alarm doesn't gain an organization any popularity points.

But who cares? As long as companies are moving forward in implementing environmentally friendly policies and practices, no matter how slow that forward motion is, it doesn't matter which conservation organization wins the piñata. We all eventually end up with the prizes of clean(er) water, clean(er) air, and amazing biodiversity.

The Sageza Group, Inc.
32108 Alvarado Blvd #354
Union City, CA 94587
510·675·0700 fax 650·649·2302
London +44 (0) 20·7900·2819
Milan +39 02·9544·1646