

## **WebSphere Virtual Enterprise and Server Virtualization Podcast**

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Question: What is WebSphere Virtual Enterprise and what does it do?

Answer: It is not an application server. It makes application server environments better. It provides:

- Policy-based workload management to meet Service Level Agreements (SLAs)
  - It has autonomies, traffic shaping and flow control capabilities to start and stop applications on demand, prioritize applications relative to each other to ensure the highest priority applications get the resources they need to meet their SLAs
- Health Management – A set of health conditions and actions that can be customized to a customer's environment
- Application Edition Management – The ability to rollout new applications and application versions (“rolling upgrades”) without bringing down the system/application and improve the availability of applications during upgrades.

Q: Does WebSphere Virtual Enterprise require server virtualization technologies? Do I really need both?

A: If a customer is using server virtualization technologies focused on machine resources, you can also use WebSphere Virtual Enterprise for virtualizing applications & application servers. They complement each other. What's the most important asset in a company? They are running applications, services, and business processes. WebSphere Virtual Enterprise has an application focus to support the management and virtualization of these critical assets.

If you are using server virtualization, there is a real value to using WebSphere Virtual Enterprise in conjunction with it. However, you don't need to use server virtualization to take advantage of WebSphere Virtual Enterprise.

Q: What is this new virtualization category IBM is talking about?

A: To distinguish ourselves from application virtualization which has been defined in the marketplace to mean desktop & client applications. We categorize WebSphere Virtual Enterprise as Application Infrastructure Virtualization. It separates the applications & application servers from the underlying physical infrastructure. It dynamically routes application server resources to the applications that need them and adds rich quality of service for applications.

Q: Let's talk about the specific benefits of WVE to server virtualization. The first area is around cost savings. Many people have started with server virtualization around a cost savings agenda. Can WVE help here?

A: Cost savings is the first objective that many customers have in deploying server virtualization technologies – VMware, IBM PowerVM. WebSphere Virtual Enterprise's workload management drives up utilization of your application server resources. This increase of utilization can result in greater cost savings as well as allows customers to consolidate a lot of smaller servers to fewer numbers of larger servers. This gives you more flexibility.

Q: A lot of people are using server virtualization to consolidate multiple applications that were previously on different servers and put them together on one server. Server virtualization allows these applications to live on the same machine without affecting one another. It's a big deal in multi-tenant hosting environments. How does WVE work with this?

A: You can have an application that can consume all the resources of a virtual machine and bring the machine down or slow it down dramatically. WVE manages virtual machines at the application level. It provides application isolation on top of the server isolation that server virtualization provides. There was a good article last year about Monster.com which highlighted the application contention issues they ran into just using server virtualization. They were not meeting their SLAs.

It's important that applications running in virtual machines meet the service policies of the business.

Q: Any notion of this working across multiple hypervisors and servers?

A: You can think of WebSphere Virtual Enterprise as a "hypervisor for application server". It works with VMware, IBM Lpars also called PowerVM, IBM z/VM. Server virtualization tends to focus on a single physical machine.

Q: We're starting to understand why application awareness is important. Are there any further benefits?

A: The health and availability of the applications is always going to be important. On an Intel VMware ESX Server, memory over-commitment is a critical issue. You can have as many as virtual machines as possible on a single physical machine. In a Java web application, the effects are quite dramatic in terms of throughput. This is a great capability, but if you over-commit memory, the results can be pretty bad.

WebSphere Virtual Enterprise can address this issue which is a huge benefits to customers. Other capabilities include horizontal scalability. Server virtualization focuses on vertical scalability. WVE offers horizontal scalability to improve performance and complement the vertical scalability of server virtualization.

Q: How can I find out more about WebSphere Virtual Enterprise?

A: Go to the WebSphere Virtual Enterprise homepage on ibm.com, <http://www-01.ibm.com/software/webservers/appserv/extend/virtualenterprise/>

You will find case studies, demos, white papers, and more.

IBM also provides a free Value Assessment that can show the ROI for deploying WebSphere Virtual Enterprise in just a few hours. Contact your IBM representative to arrange a Value Assessment today,

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