UNIX Virtualization Roundtable

UUASC L.A. Thu. March 1, 2007

Host: Jordan Schwartz

Panelists:

Phil Anthony, Sr. System Engineer, VMware

Darin Briskman, Sr. IT Architect, IBM

John Clingan, Technical Specialist, Sun

Charles Wyble, System Engineer

Overview

- Server Virtualization Introduction
- Panelist Presentations
- Round Table Discussion
- Conclusion
- Further discussion at CoCo's

What is Server Virtualization?

- Wikipedia Definition:

A virtual private server (also referred to as virtual dedicated server or virtual server, and abbreviated VPS or VDS) is a server run through virtualization in tandem with other virtualized servers on one physical computer. The practice of partitioning a single server so that it appears as multiple servers has long been common practice in mainframe computers, but has seen a resurgence lately with the development of virtualization software and technologies for other architectures.

What is Server Virtualization? (cont.)

- My definition:

Making one big box into smaller boxes OR making smaller boxes appear as one.

One to Many:	Many to One:
Hardware Partitioning	Grid Computing
Hypervisor Implementations	Parallel Virtual Machines
Kernel Implementations	Beowulf Clusters

This presentation focuses on One to Many solutions.

Features

- Server Consolidation
- Server Utilization
- Rapid Deployment
- Legacy System Hosting
- Security / Application Isolation

(Relatively) Recent Advancements

- VMWARE ESX, VMotion, Lab Manager
- XEN bundled with RHEL and SLES
- IBM Dynaminc Logical Partions, Micro and Vitrual I/O Partitions
- Sun Zones/ZFS, Logical Domains, Dynamic System Level Domains
- Intel VT/TXT - AMD-V

Panel Presentations

- Darin Briskman
- John Clingan
- Phil Anthony
- Charles Wyble

Round Table Discussion

- Questions
- Comments
- Concerns

References

- Tonight's slides will be linked from the UUASC.org site, http://rabbs.com/uuasc/unix_virtualization
- "Introduction to XEN" by Charles Wyble, http://www.thewybles.com/~charles/uuasc-xen
- "The Clingan Zone" by John Clingan, http://blogs.sun.com/jclingan
- "Sun Virtualization Solutions" http://www.sun.com/datacenter/consolidation/virtualization
- "VMware Technology Network" http://www.vmware.com/vmtn

References (cont.)

- “IBM Virtualization” http://www.ibm.com/systems/virtualization
- “Xen Virtualization in RHEL 5 and Fedora Core6: An Overview for Systems Administrators” Sam Folk-Williams http://www.socallinuxexpo.org/presentations/folkwilliams.pdf
- “Cobbler Provisioning Tool” http://cobbler.et.redhat.com
- “Linux Virtualization Wiki” http://virt.kernelnewbies.org/
- “AMD Virtualization Solutions” http://enterprise.amd.com/us-en/AMD-Business/Business-Solutions/Consolidation/Virtualization.aspx

References (cont.)

- “Intel Virtualization Technology (VT)” http://www.intel.com/technology/virtualization
- “Search Server Virtulalization” http://searchservervirtualization.com
- “Virtualization Info” http://www.virtualization.info

Conclusion

There are a wealth of UNIX/Linux server virtualization solutions that can scale up to large environment and down to smaller budgets.

Thanks for Attending!

- Special thanks to the panelists.
- See you all at CoCo's, (Free beer, as in "on me", for the panelists)
- Don't miss Mark Mellis "Virtualization on MacOS Intel" Monday March 12 at UUASC-OC in Irvine.