

# 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:

Hardware Partitioning  
Hypervisor Implementations  
Kernel Implementations

Many to One:

Grid Computing  
Parallel Virtual Machines  
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 Dynamic Logical Partions, Micro and Virtual 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](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 Virtualization” <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.