TUT20326

SLES for VMware Migration

Best Practices

Jeff Lindholm

Sales Engineer

SUSE

JLindholm@suse.com

Agenda

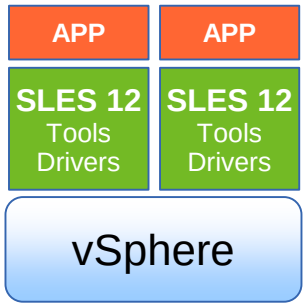
- SUSE and VMware Alliance Update
- SUSE Linux Enterprise Technology Roadmap
  - SLES for VMware Status / End of Life
  - Supported migration paths
- SLES for VMware Support Transition Program
- Migration Best Practices, Automation, Demonstration
- Subscription Renewal Options
- Q/A

VMware and SUSE Partnership

- Alliance partnership for 10+ years, still going strong
- Joint certification and support
- Integrated VMware tools and drivers in SUSE Linux Enterprise Server
- VMware soft appliances based on SUSE Linux Enterprise Server
- SUSE Linux Enterprise Server supported in vCloud Air
- SUSE OpenStack Cloud supports ESX, NSX, vSAN
- SUSE Linux Enterprise Server recommended for SAP virtualized on VMware
- SUSE Linux Enterprise High Availability Extension complements VMware HA for mission-critical virtualized environments

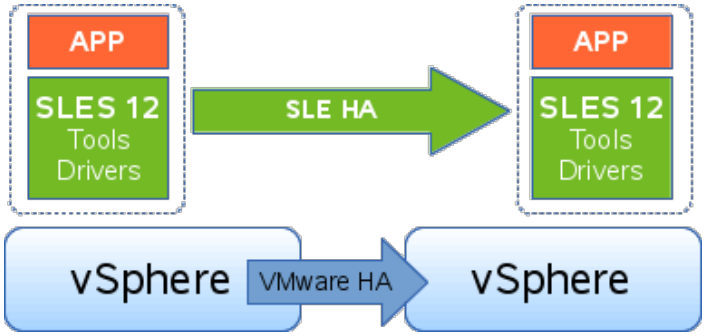
Full-Featured with Optimized vSphere Guest Performance

- Integrated Xen and KVM hypervisor for physical or virtual deployment
- VMware tools and drivers **integrated with SLES 12** for best out-of-the-box experience
  - **open-vm-tools**: eliminates the need to separately install VMware Tools and reduces operational expenses and virtual machine downtime
  - **vmware_balloon**: physical memory management driver
  - **vmw_vmci, vmw_vsock**: provide for fast and efficient communications between guest virtual machines and hypervisors
  - **vmxnet3**: next generation of a paravirtualized NIC designed for performance
  - **vmw_pvscsi**: driver for paravirtualized SCSI device which improves disk performance
  - **vmwgfx**: kernel driver for 3D graphics
- Fully supported by VMware via L3 support agreement



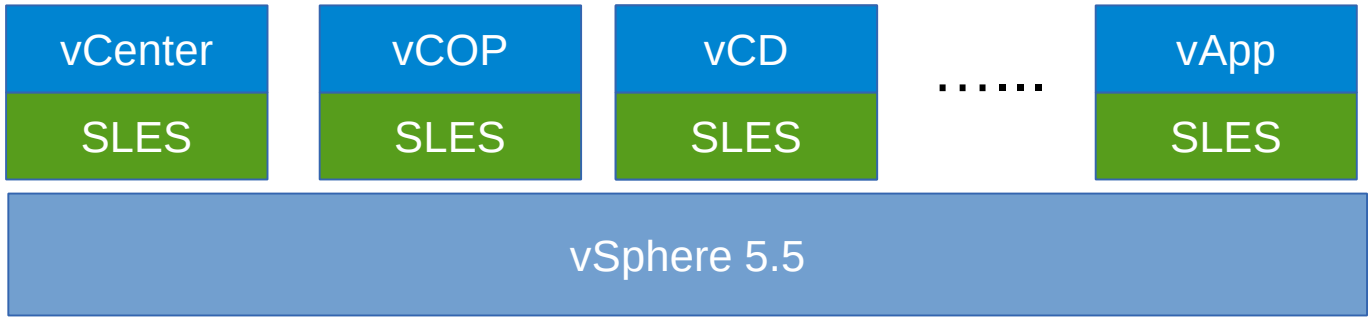
SUSE Linux Enterprise HA + VMware

- **SUSE Linux Enterprise HA Extension** complements VMware host-level HA solution for mission critical applications
- Features
  - Application level HA protects active memory contents
  - Scripts for monitoring open source services (e.g., Apache, MySQL, NFS, PostgreSQL, Tomcat, KVM, Xen) and 3rd party applications (egg, SAP, Oracle, IBM DB2, WebSphere)
  - Policy-driven cluster resource manager
  - Cluster-aware file system and volume management
  - Continuous data replication
  - User-centric management tools



VMware Soft Appliances use SLES

- VMware applications are delivered as soft appliances for ease of installation and use
- SUSE Linux Enterprise Server is the OS optimized for and bundled with VMware soft appliances



SLES for VMware

SLES for VMware

- Over 100,000 SLES for VMware downloads since end of 2010
- SLES for VMware offer ended June 2014; customers who activated maintenance are entitled to BASIC through August 2016
- SLES 11 SP3 for VMware is the last version; activated customers entitled to upgrade to regular SLES and continue to receive BASIC
- Activated users receive maintenance only, no support (unless purchased from VMware)

Options for SLES for VMware Users

- Upgrade to standard or priority subscription to SLES 12 or SLES 11 SP4 with support from SUSE
- Upgrade to standard or priority subscription to SLES 11 SP3 with support from SUSE and migrate by the end of January
- SUSE standard or priority subscription will support existing installation of SLES for VMware until 11 SP3 EOL, then migrate to 11 SP4 or SLES 12
- Stay on SLES 11 SP3 and get LTSS from SUSE

Why Move to a SUSE Subscription?

- Increased Protection: 12x5 and 24x7 subscriptions provide prompt resolution of support issues to maintain system uptime and business continuity
- Increased Flexibility: Not limited to VM-only deployments: Standard/Priority subscriptions can be used for physical and virtual servers, and can run on multiple hypervisors, including Xen, KVM and Hyper-V leading to cost reduction
- Extendable: Add SLE HA for high availability workload protection on vSphere
- Advanced Management: Use SUSE Manager for complete lifecycle management
- Optimized Performance: Upgrade to SLES for SAP applications for support and performance optimizations for hosting SAP workloads
- Longer Life: LTSS for SUSE Subscriptions extends SP life by 3 years
- Training: Take advantage of SUSE trainings

SUSE Worldwide Award Winning Support

	SLES for VMware	SUSE Standard	SUSE Priority
Software Upgrades & Updates	Yes, expires Aug 2016	Yes	Yes
Technical Support	None	Unlimited	Unlimited
Physical / Virtual	Virtual only	Physical and Virtual	Physical and Virtual
Methods of Access	None	Chat, Phone, E-mail	Chat, Phone, E-mail
Hours of Access	NA	12x5	24x7
Response Time			
Severity 1	NA	2 hrs	1 hr
Severity 2	NA	4 hrs	2 hrs
Severity 3	NA	Next Bus Day	4 hrs
Severity 4	NA	Next Bus Day	Next Bus Day

Upgrade to SLES for SAP Applications

- SUSE Linux Enterprise Server is the best performing operating systems in a VMware-SAP environment
  - Install wizard for SAP software and Linux infrastructure
  - Optimized for SAP performance on Linux
  - Includes components for implementing highly available Linux clusters
  - Integrated priority support and maintenance through SAP solution manager from both SUSE and SAP
  - Page cache limits to improve performance for large workloads
  - SUSE Linux Enterprise Server is the **recommended OS for SAP HANA** on vSphere

Migration Best Practices

The path forward…

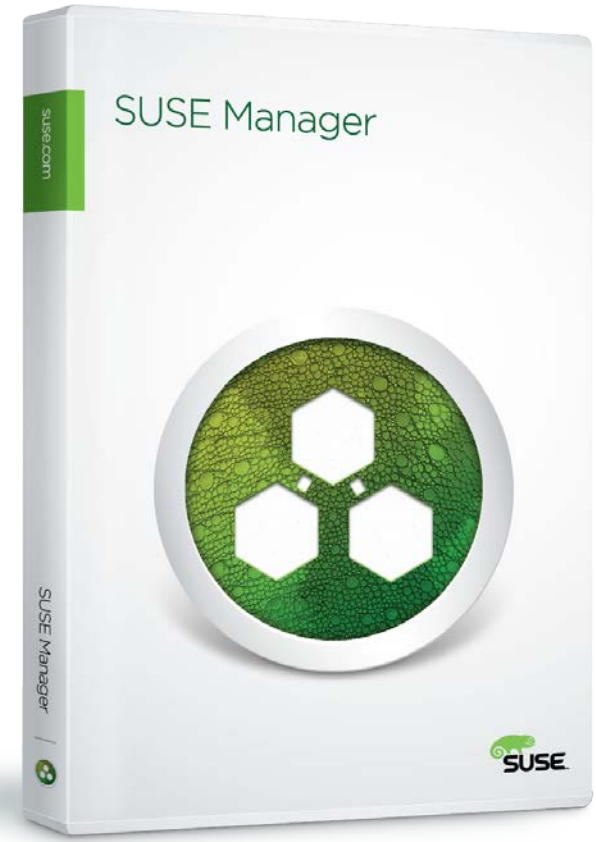
- In-place migration: No need to re-install or rebuild
- VMware Patch Subscription is available until August, 2016.
- Maintenance and Support from SUSE is available for purchase for SLES for VMware
- Long Term Service Pack Support (LTSS) is available beyond January, 2016 for SLES for VMware 11 SP3

SLES for VMware Migration 11SP3

Support Document / TID # 7015096

- https://www.suse.com/support/kb/doc.php?id=7015096
- Re-brand existing instance to ‘vanilla’ SLES
- Process
  - Backup
  - Test in the lab
  - Verify Result
- Script can be customized where necessary

SUSE Manager



Automated Linux systems management that enables you to comprehensively manage SUSE Linux Enterprise and Red Hat Enterprise Linux systems with a single, centralized solution across physical, virtual and cloud environments.

- Reduce complexity with automation
- Control, standardize and optimize converged, virtualized and cloud data centers
- Reduce risk and avoidable downtime through better change control, discovery and compliance tracking

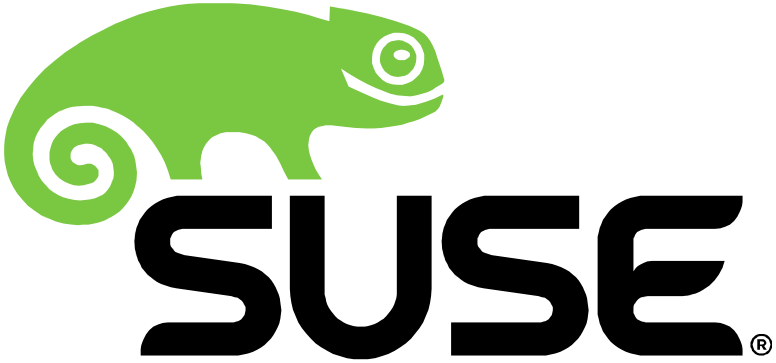
Demonstration

Next steps

- Contact your SUSE Sales representative or partner
- Consulting assistance is available where needed

Attend:
TUT20325 - Best Practices: Linux High Availability with VMware Virtual Machines

Thank you.


SUSE®
We adapt. You succeed.

Corporate Headquarters
Maxfeldstrasse 5
90409 Nuremberg
Germany

+49 911 740 53 0 (Worldwide)
www.suse.com

Join us on:
www.opensuse.org