



ORACLE

Oracle's shift to the open source oVirt project for server virtualization

oVirt 2021 online conference

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Direct – Product Management
Oracle Linux and Virtualization
Product Management

- Oracle VM
- Oracle Linux Virtualization Manager

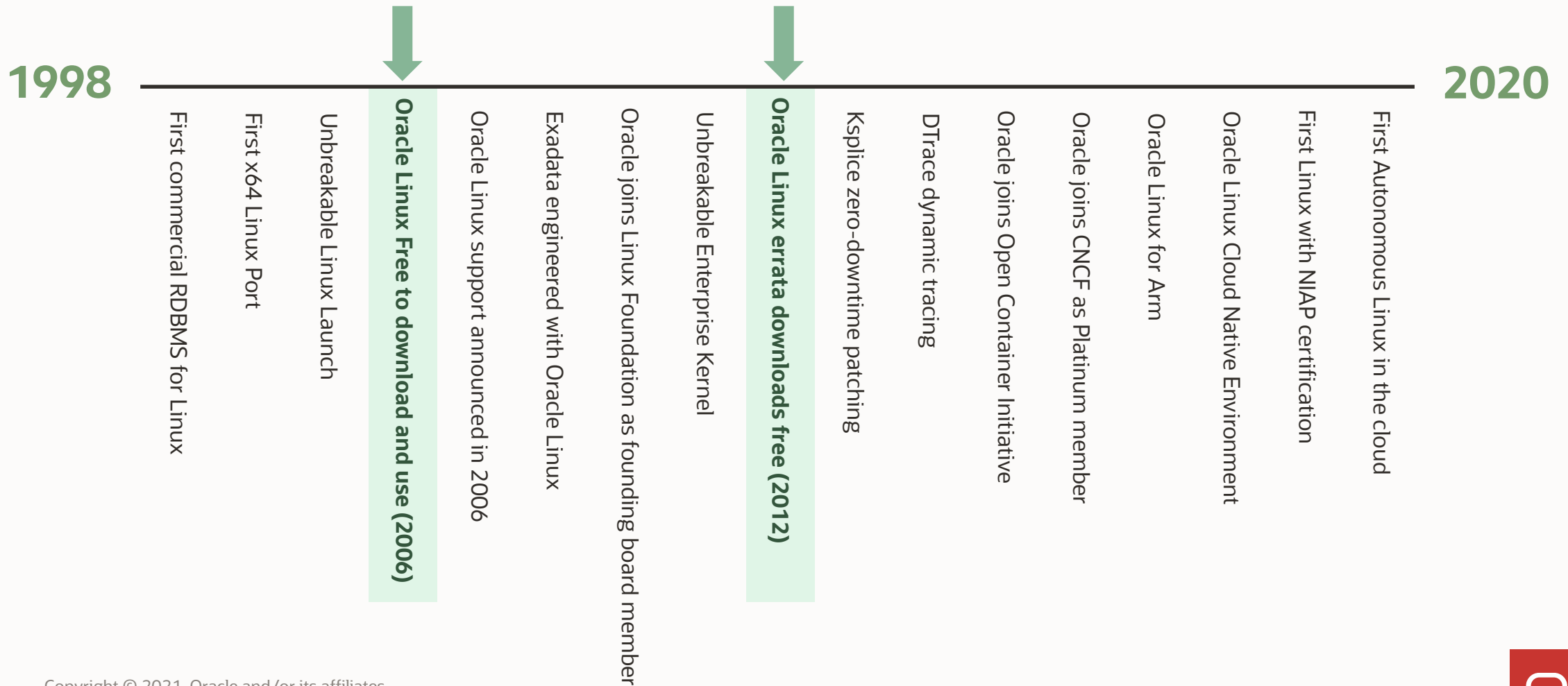
Session Outline

Oracle has released the Oracle Linux Virtualization Manager using the oVirt project as the foundation. In this session, the Oracle team will share its experience adopting oVirt for on-premise server virtualization with Oracle Linux KVM:

- oVirt benefits and features
- Building and testing OLVM
- Working with the oVirt community
- Plans to help enhance the oVirt project

Oracle Linux – 20+ years of contribution and growth

Free to download and use since 2006



Oracle Linux and Virtualization investment areas

Optimize and secure your infrastructure



Cloud

Easy and quick on-boarding to cloud with the same stack on-premises or in the cloud



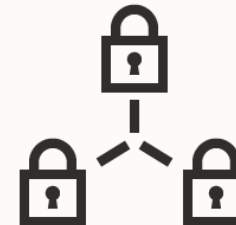
Linux Kernel

Optimization for all workloads, supports x86 and Arm, and powers Oracle Cloud and Engineered Systems



Virtualization

Acceleration of your apps deployment and service delivery, simplified and integrated management



Security

Ksplice zero-downtime security update, FIPS and CC, and NIAP Compliance

Oracle Linux



Free download

Including updates. No license or subscription fees



Compatible and enhanced

14+ Years. Zero compatibility bugs logged



Designed for all workloads

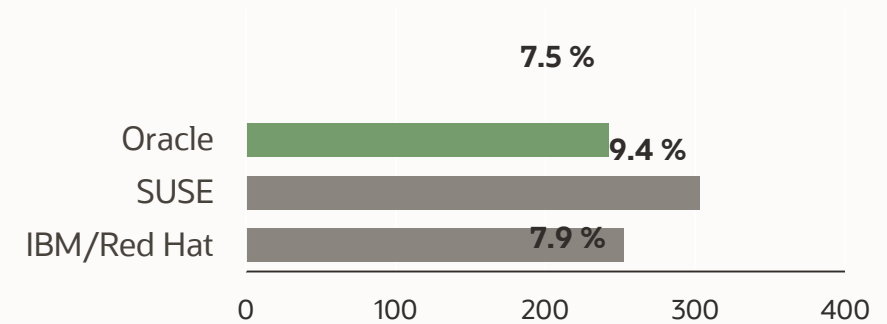
Oracle and third-party apps, DBs, Clouds, x86 & Arm

Top 4 Kernel contributor

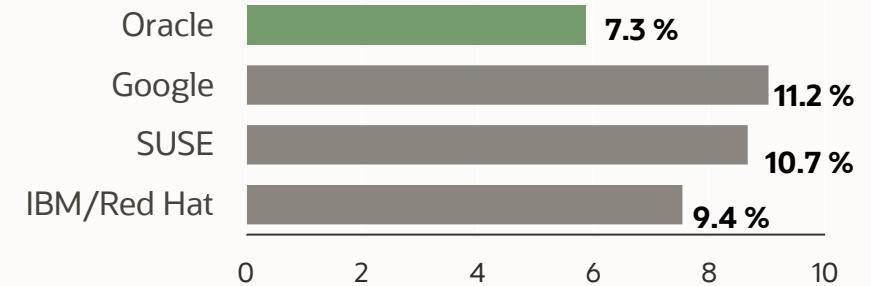
Oracle's contribution in core Linux kernel
(fs, mm, kernel) since 5.10

Source: git.kernel.org

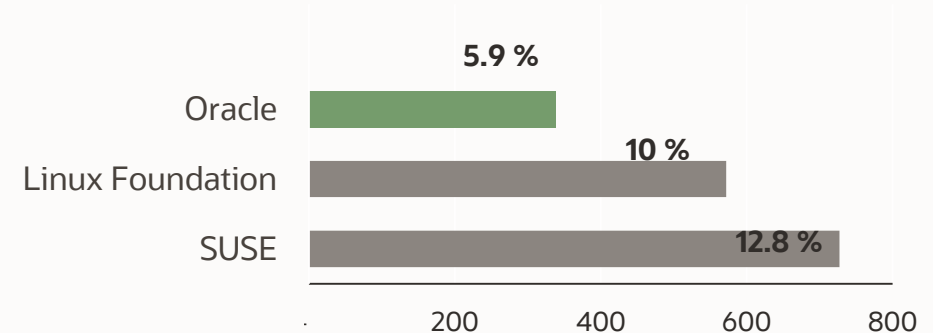
Changesets



Lines changed (thousands)



Employers with most sign-offs





“On average, an Oracle kernel engineer sent an upstream patch or review every 10 minutes during the last year.”

Wim Coekaerts

Oracle SVP, Software Development &
Vice Chairman, Linux Foundation



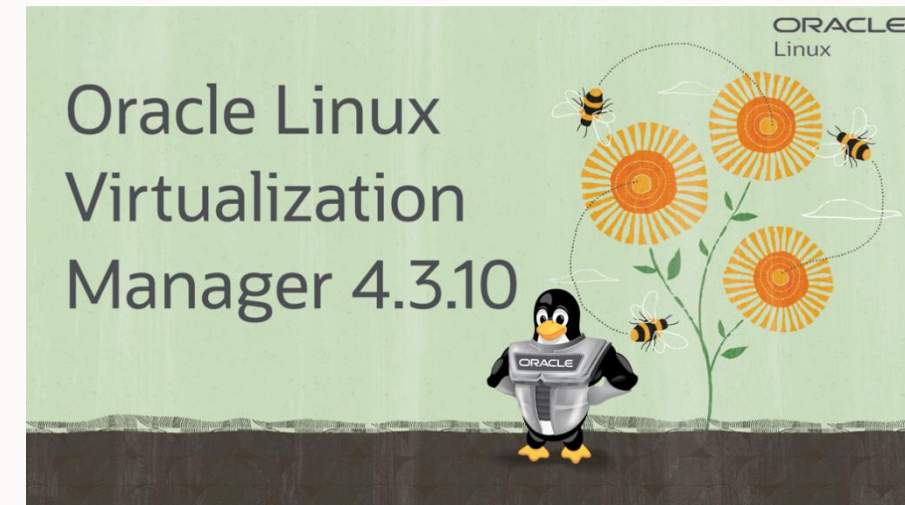
Oracle virtualization solution using KVM included with Oracle Linux

Oracle virtualization solution using KVM

- **Oracle Linux KVM (host)**
 - KVM hypervisor included in Oracle Linux 7 with UEK R5 and UEK R6
- **Oracle Linux Virtualization Manager (management)**
 - Based on open source oVirt project
 - Integrated, tested and supported by Oracle
 - Support for new features including Snapshots and Role Based Access Control
 - Available on yum.oracle.com and ULN for Oracle Linux 7
- **Oracle VirtIO drivers for Microsoft Windows**

Oracle Linux Virtualization Manager

- Why Oracle Linux KVM and Oracle Linux Virtualization Manager?
 - Based on modern open source KVM and oVirt
 - Provides an easy migration path to cloud
- Additions with OLVM 4.3
 - Self-hosted engine – running the manager as a virtual machine to be highly available
 - Virt-v2v – enables easy migration from Oracle VM and other hypervisors to Oracle Linux KVM
 - New guest OS support (OL/RHEL/CentOS 8, SLES 12/15, Ubuntu, Oracle Solaris)
 - Disaster recovery solution
- Errata updates



Oracle Linux KVM and Virtualization Manager

- Oracle Linux KVM is part of the overall Oracle Linux operating environment that provides robust, modern open source hypervisor and management technologies
 - Proven technology for scale and security, runs Oracle Cloud and Exadata
 - Supports all virtualization workloads
 - Provides customers an easy migration path to cloud
- **Oracle Linux Virtualization Manager has the following key differentiators:**
 - oVirt based Virtualization Manager - built by community with comprehensive capabilities
 - Recognized as hard partitioning technology for Oracle software licensing
 - Accelerate app deployments with VM templates
 - Enterprise Manager integration
- **Oracle Linux KVM and virtualization management included at no additional charge with Oracle Linux Premier Support**

oVirt benefits and features



- Enhanced virtualization management:
 - Snapshots
 - Role Based Access
 - Disaster Recovery
 - Multi-threaded job processing
- New user interface and simple/logical workflows
- Technology Preview features

Building and testing OLVM



- Dev/Test/Support team
- Built from oVirt source RPMs
 - Modified to support Oracle Linux and added Oracle logo
 - Resolved dependencies
 - Self Hosted Engine – community support
- **No major issues during test**
 - Learning curve to shift from legacy
 - Upstream reported
 - Upstream unreported

Working with the oVirt community



- Comprehensive documentation
- Developer forum
- Goal to shift focus upstream
 - Focus on core features and expand
 - Gain knowledge
 - Linux model

Plans to help enhance the oVirt project

- Feature enhancements
- Engage in oVirt forums
- File additional bugzillas
- Commit additional fixes



Question and Answers

Q1 – What does Oracle Linux Premier Support cover?

Q2 – When will Oracle support for oVirt 4.x?

Q3 – Is OLVM supported by third party integrations?



Key takeaways

- Oracle is a leader and strong contributor to the open source community
- Since 2006, Oracle Linux has been completely free to download and use. Free source code, binaries, and updates. Freely redistributable. Free for production use
- Oracle has shifted to a new server virtualization solution for our on-premise customers:
 - Hypervisor – Oracle Linux KVM
 - Management – oVirt based Oracle Linux Virtualization Manager
- The OLVM team is looking forward to continue working with the oVirt community to enhance the product and to expand the adoption of oVirt in customer data centers.

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