St. Louis Linux User Group

Michael Carrington
"Engineer"
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Agenda

• Introduction
• Liberty Linux
• SUSE Rancher
• Harvester
• Q&A
Introduction
What is Liberty Linux?

How do the recent changes to CentOS open doors for SUSE?
SUSE Liberty Linux is …

... a new technology and support offering that provides customers a unified support experience for managing their heterogeneous IT environments.
What happened?

In December, 2020 Red Hat announced a shift in focus for the CentOS project.

It will be rebranded as CentOS Streams and become a rolling, pre-production release for Red Hat Enterprise Linux.
What did they do?

- **Open Source Community**
  - Continuous development & release

- **Fedora Project**
  - Development (Rawhide) & point-in-time (Fedora) community-supported releases

- **Red Hat Enterprise Linux**
  - Fully tested, point-in-time supported release for production use

- **CentOS Project**
  - Recompiled production code from RHEL with trademarked property removed
What did they do?

Open Source Community

Continuous development & release

Fedora Project

Development (Rawhide) & point-in-time (Fedora) community-supported releases

Red Hat Enterprise Linux

Fully tested, point-in-time supported release for production use

CentOS Project

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Oracle Enterprise Linux

Amazon Linux

Alibaba Cloud Linux

SUSE Expanded Support
What did they do?

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CentOS Lifecycle
Historically followed the lifecycle for Red Hat Enterprise Linux

CentOS 6
— EOL Nov 30, 2020

CentOS 7
— EOL June 30, 2024

CentOS 8
— EOL: May 29, 2029
— **New EOL: Dec 31, 2021**
What is SUSE Liberty Linux?

Enterprise-grade support for SLES, RHEL and CentOS

- Simplified customer experience
- Broaderest range of support options
- Market-leading Linux support to enterprises for three decades with a rich Linux history

Works with management & automation tools for multiple Linux distributions

- Operate, secure, and audit from a single pane of glass.
- Reduce complexity with automation
- Drive efficiencies by shifting routine work away from your IT staff

Fully compatible updates minimize disruption during onboarding

- Fully compatible, source code and binaries
- Regularly released binary compatible security patches and maintenance updates
- No migration; zero disruption
Expanded Support Unleashed

Expanded Support

• Not on the public price list
• Approval needed for quote
• Customers must commit to migration to SLE codebase

SUSE Liberty Linux

• On the public price lists (MLA/VLA, MSP, IHV/ISV)
• No pre-approval needed
• No migration commitment
Simplify management during and after migration

SUSE Manager provides a **single console** to manage mixed Linux estates

**Simplify patching and updating** all Linux distributions

- SUSE Linux Enterprise
- Red Hat Enterprise Linux (RHEL)
- CentOS
- Ubuntu
What SUSE Liberty Linux Supports

Operating System Support
• **Included:** RHEL, CentOS (same versions as RHEL, not CentOS Stream), SLES
• Upon request (ask PM): Oracle Linux, Scientific Linux

Support details
• RHEL/CentOS versions supported: 8, 7, 6 (Reactive LTSS), 5 (XLSS; upon request)
• RHEL 9 is under investigation (when available; pending technical and legal feasibility)
• RHEL extensions: High Availability, Resilient Storage and Load Balancer (covered with Liberty HA extension)
• RHEL AppStreams
• Support covers only the most recent minor release of each major supported version
# What SUSE Liberty Linux Doesn't Support

<table>
<thead>
<tr>
<th>Not included item</th>
<th>Description</th>
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<tbody>
<tr>
<td>NO legal advice</td>
<td><strong>SUSE does not provide legal representation or guidance for RHEL related agreements.</strong></td>
</tr>
<tr>
<td>SUSE Manager</td>
<td>SUSE Manager is NOT included in SUSE Liberty Linux. Customer can choose to use SUSE Manager to manage multiple Linux distros.</td>
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<tr>
<td>Ubuntu and other Linux distributions</td>
<td>Alma Linux, Rocky Linux, Ubuntu, CentOS Stream, openSUSE and other Linux distributions are not covered. If the Linux OS is based on CentOS then contact the Product Manager with business case and more details. However, <strong>SUSE Manager can manage several Linux distros</strong> — RHEL, CentOS, Ubuntu, Debian, etc</td>
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<tr>
<th>Following RHEL components are NOT supported</th>
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<tr>
<td>• RHEL 3, 4 – RHEL 5 and RHEL 6 are possible bundled with LTSS</td>
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<tr>
<td>• Red Hat Virtualization (RHEV) (KVM is covered as a part of RHEL)</td>
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<td>• Red Hat Network Satellite (SUSE Manager could be used instead), Red Hat Insights</td>
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<tr>
<td>• Extended Update Support for older minor releases</td>
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<tr>
<td>• RHEL add-ons, besides High Availability, Resilient Storage and Load Balancer (use SUSE Liberty HA Extension for those)</td>
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<tr>
<td>• Separate CentOS update channels (same packages as RHEL)</td>
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<tr>
<td>• Knowledge Base, Documentation</td>
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<tr>
<td>• Additional repositories (Optional, Supplementary, EPEL - Extra Packages for Enterprise Linux)</td>
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<tr>
<td>• RHEL Desktop, RHEL Workstation (under review)</td>
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| JBoss, Ansible, OpenShift etc. | Reach out to local pre-sales and consulting services team for migration of non-Linux components |

| RHEL for SAP | RHEL for SAP is not supported. However, running SAP on RHEL supported by SUSE is supported for up to 6 months by SAP |

| IBM Z, IBM POWER, Arm | Only x86_64 is supported. Other platforms, such as IBM Z, Power, Arm are not supported |

| RHEL on Azure or CSPs | Only on-prem RHEL instances are supported. BYOS (Bring your own subscription) for SLES is supported |
SUSE Rancher

Industry’s only platform to manage all Kubernetes distributions
Our Unique Approach

- It's a multi-cluster world
- Treat all Kubernetes distributions as first class citizens
- Value is in Kubernetes management
- ‘Open’ approach to open source
Where do we belong in the stack?

### Container Security
- Image Scanning
- Runtime Protection
- Container Firewall

### DevOps Automation
- Pipeline
- Code Repository
- Registry
- CI/CD
- Collaboration

### Kubernetes Management Platform
- User
- Policy
- Operations
- Provisioning
- Monitoring
- Catalog

### HYBRID / MULTI-CLOUD
- Shifts the responsibility of the K8s cluster to the cloud provider
- Stable, flexible, scalable platform
- Run containers on bare metal for higher performance
- Run containers on premise to reduce cloud costs

### IT SECURITY
- Vulnerability Mgmt
- Policy Enforcement
- Access Control
- Secrets Management
- Audit and Compliance

### IT ORGANIZATION
- Directory Services
- Infrastructure
- Auth/RBAC
- Service Desk
- Monitoring
- Provisioning
Simplify complexity across your infrastructure

Containerized App 1
- Container Security
- Rancher Catalog
- Monitoring & Alerts
- Dashboards & Observability
- Service Mesh
- Istio
- Longhorn Storage

Containerized App 2
- Platform Services (Build & Secure)
- Policy Enforcement & Governance
- Centralized Audit & CIS Benchmarking
- AIOPS, Monitoring & Logging
- OPA & KubeWarden
- RBAC, Pod & Network Policies

Containerized App 3
- Simplified Cluster Operations & Infrastructure Management (Run & Manage)
- K8s Version Management
- GitOps Continuous Delivery
- Cluster Templates & Config Enforcement
- Node Pool Management
- Cluster Provisioning & Lifecycle Management
- Virtualized Machine & OS* Management

Amazon EKS
Azure AKS
Google GKE

RKE
K3S

Datacenter
Dev
Branch
Edge

Cloud

Cloud-Native Hyperconverged Infrastructure

SUSE Linux Enterprise
RancherOS*
SUSE Liberty & RHEL
Ubuntu Linux
Oracle Linux
Amazon Linux

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Harvester

Open, Interoperable, Hyperconverged Infrastructure
What is Harvester?

- ‘Open, Interoperable Hyperconverged Infrastructure Solution’
  - 100% Open-Source
  - No Licensing & Hardware Fees
- Modern solution built on cloud-native technology
  - Kubernetes, Longhorn, Kubevirt
- Production-ready, turn-key conventional HCI experience
- Implements HCI on bare metal services
- Lightweight, software-driven
  - Doesn’t require any additional hardware, external SANs
  - Reliable at the Edge
- Native Integration with Rancher for containerized workloads
Why Harvester?

1. Enabling users to manage their entire infrastructure environments by utilizing modern technology solutions including GitOps and cloud-native tooling

2. Customers should be able to simplify their IT operations and manage VMs and Containers from within a single console

3. Empower operators to utilize advanced infrastructure innovation and customization capabilities to help them scale
Harvester bridges the classic and cloud-native infrastructure use cases together with Rancher.

**Virtual Machine / HCI**
- MySQL
- Java

**Kubernetes / Containers**
- TensorFlow
- Golang

**IT Modernization Journey**

**Blended Use Cases**

**Rancher**

**Harvester**

Enterprise IT

Cloud Native IT
A new approach with Rancher and Harvester

- It's a hybrid-IT world
- Treat all workloads as first class citizens
- Value is in infrastructure management
- ‘Open’ approach to open source
SUSE Portfolio

Catalog
Security

SUSE RANCHER
The platform for managing all Kubernetes distributions

Storage
Governance

RKE
Datacenter

K3S
Edge

LONGHORN
Block Storage

NeuVector
Container Security

Harness

SUSE Linux
Enterprise
The most adaptable Linux operating system

Compliance
Security

Availability
Management

SLE Desktop / POS

SLES for SAP Applications

SLE Micro

SUSE Manager

SLE Server

SLE HPC

SLE Extensions

Linux

Other Linux

SLE HPC

SLE Extensions

Hybrid
Infrastructure

Dev

Datacenter

Cloud

Branch

Edge

Support & Services