



# RHEL by Numbers

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# What we'll discuss today

- ▶ Red Hat Enterprise Linux (RHEL) by The Numbers
- ▶ RHEL Lifecycle - Convert2Rhel & Leapp
- ▶ Image Mode
- ▶ RHEL AI

# Red Hat Enterprise Linux by the numbers

# BENEFITS OF RED HAT SUBSCRIPTION MODEL

## EXPERTISE

- Customer portal and forums
- Knowledgebase

## TECHNICAL SUPPORT

- 24x7
- Unlimited incidents
- Multi-vendor case ownership

## ONGOING DELIVERY

- Major release life cycle of up to 10 years
- Patches / Updates / Upgrades
- Pro-active Security
  - Security response team
  - Red Hat Insights



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# Red Hat<sup>®</sup> Enterprise Linux<sup>®</sup> serves **33,818 customers**



More than **90%** of companies in the Fortune 500 rely on Red Hat technologies.

U.S. Fortune 500 companies and public sector organizations rely on Red Hat Enterprise Linux:



**100%**  
of commercial  
banks



**100%**  
of telecommunications  
companies



**100%**  
of airlines



**95%**  
of healthcare  
companies



**100%**  
of U.S. Executive  
Departments

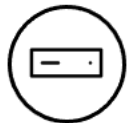
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# Industry leaders certify their products with Red Hat Enterprise Linux

# Red Hat Enterprise Linux works with your preferred vendors

Rely on certified hardware, software, and cloud providers

>5,200



certified third-party  
hardware configurations

>4,900



certified third-party  
software applications

>200



certified cloud &  
service providers

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Find certified [hardware](#), [software](#), and [cloud providers](#) in the Red Hat Ecosystem Catalog.



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Red Hat Enterprise Linux  
is **#1 in paid Linux server  
operating system  
shipments** for 2022.

Red Hat Enterprise Linux is  
**#1 in paid Linux server**  
OS shipments for 2022, with:

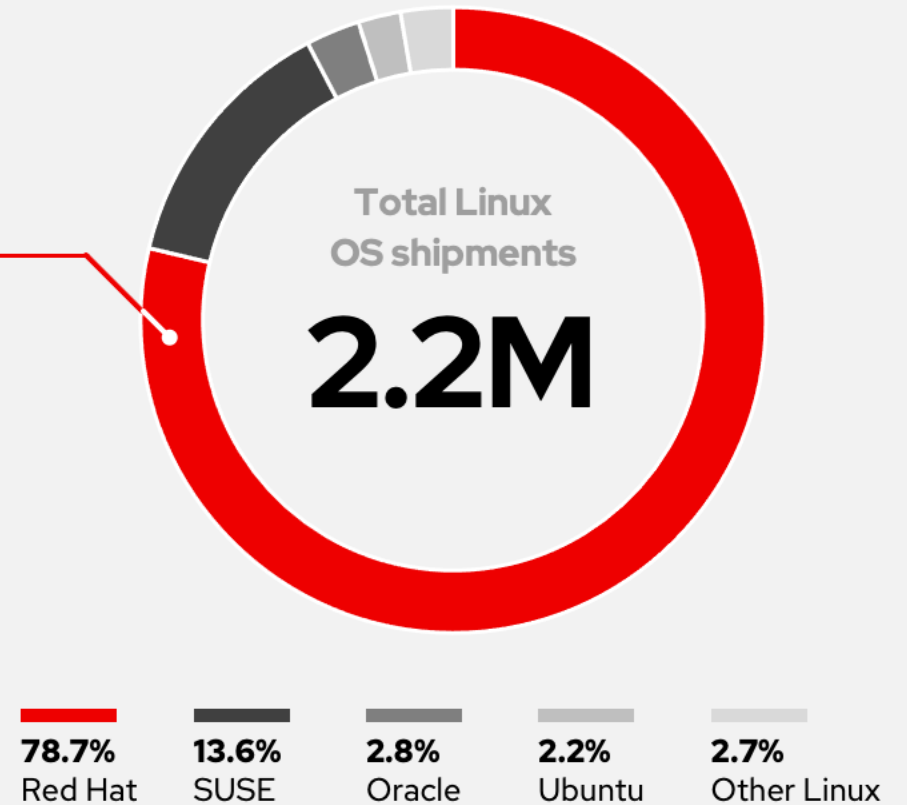
**78.7%**  
Market share for paid Linux  
server OS shipments.



**7.5%**  
Year-over-year (YoY)  
shipments growth



Worldwide paid physical Linux server  
operating system (OS) shipments, 2022

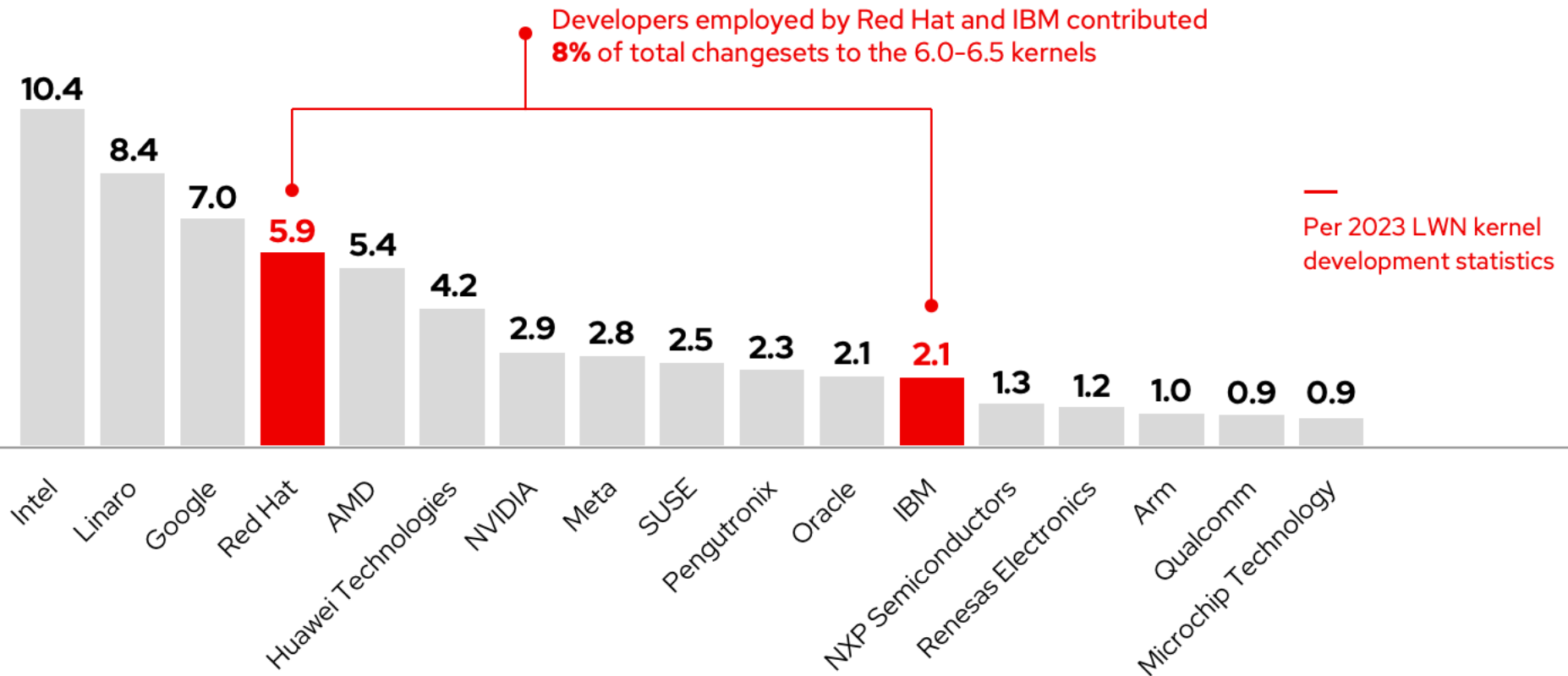


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Red Hat is a leader in the  
**open source community.**

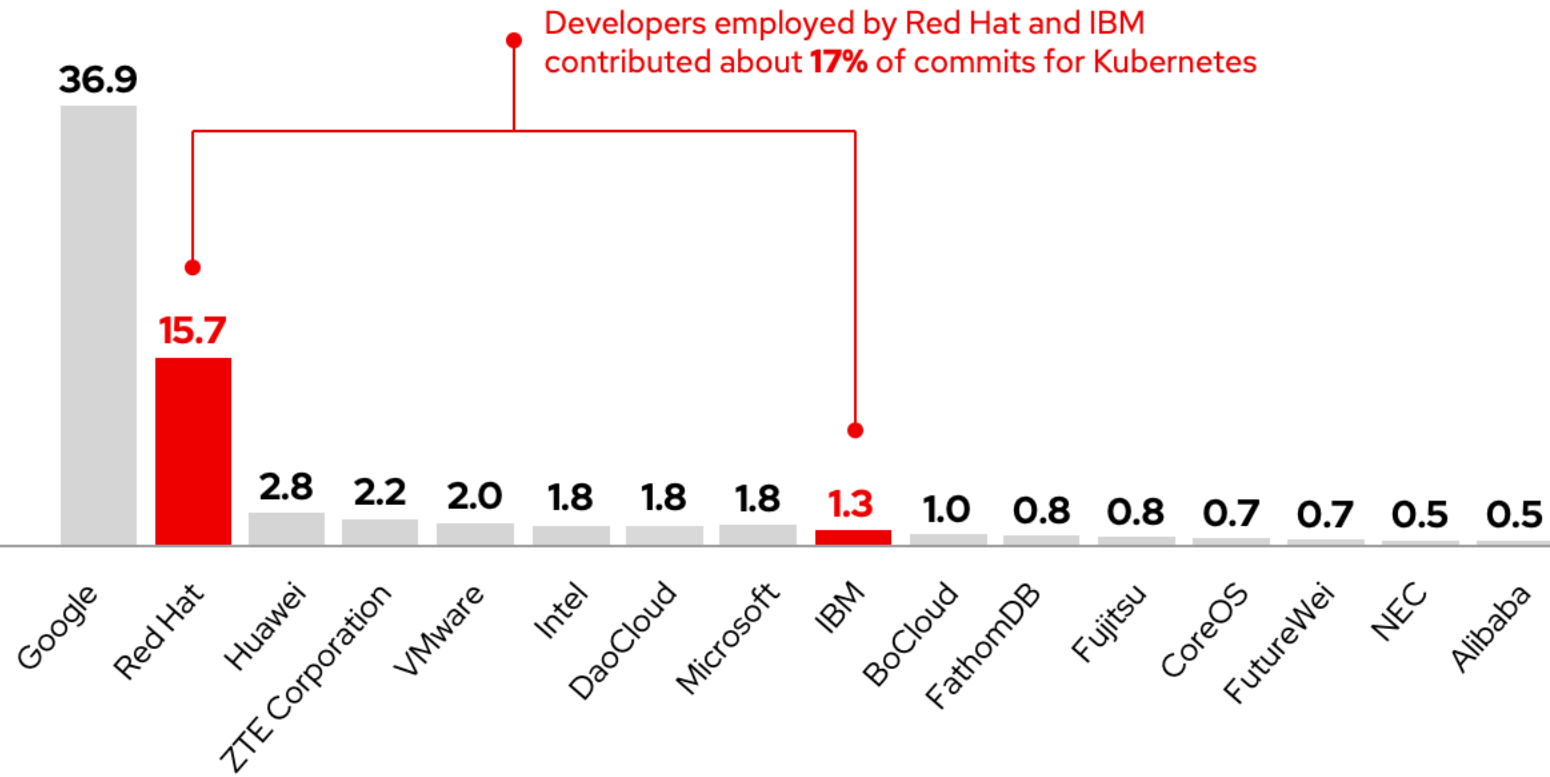
# Red Hat continues to be one of the top kernel contributors

Companies most active on Linux 6.0-6.5 kernel (by percentage of total changesets made)

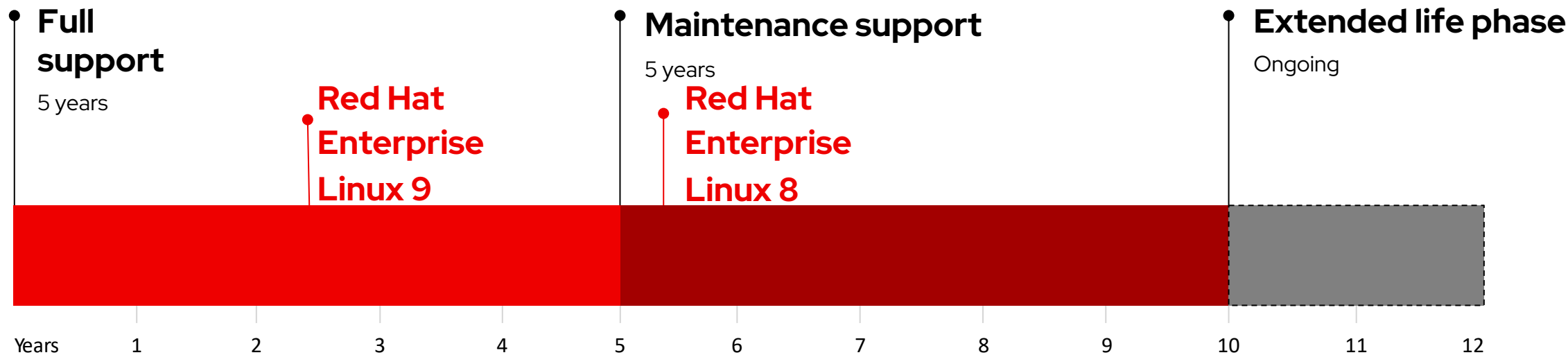


# Red Hat is one of the top contributors to Kubernetes

Companies most active on Kubernetes (by percentage of total commits)



# Red Hat Enterprise Linux 8 and 9



Extended life cycle support (ELS) add-on

## Key life cycle milestones



### **CentOS Linux 7** **End of life**

June 30th, 2024



### **CentOS Stream 8** **End of life**

May 31st, 2024



### **Red Hat Enterprise Linux 6** **End of ELS support**

June 30, 2024



### **Red Hat Enterprise Linux 7** **End of maintenance**

June 30, 2024 | Will require ELS add-on



### **Red Hat Enterprise Linux 8** **Start of maintenance**

May 31, 2024



### **Red Hat Enterprise Linux 9** **End of full support**

May 31, 2027

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# Migrations & Upgrades





# Convert2RHEL

## More options for converting to Red Hat Enterprise Linux

Convert from	Becomes
Alma Linux 8.10 Alma Linux 8.8	Red Hat Enterprise Linux 8.10 Red Hat Enterprise Linux 8.8
CentOS Linux 8.5 CentOS Linux 7.9	Red Hat Enterprise Linux 8.5* Red Hat Enterprise Linux 7.9
Oracle Linux 8 Oracle Linux 7	Red Hat Enterprise Linux 8.10 Red Hat Enterprise Linux 7.9
Rocky Linux 8.10 Rocky Linux 8.8	Red Hat Enterprise Linux 8.10 Red Hat Enterprise Linux 8.8

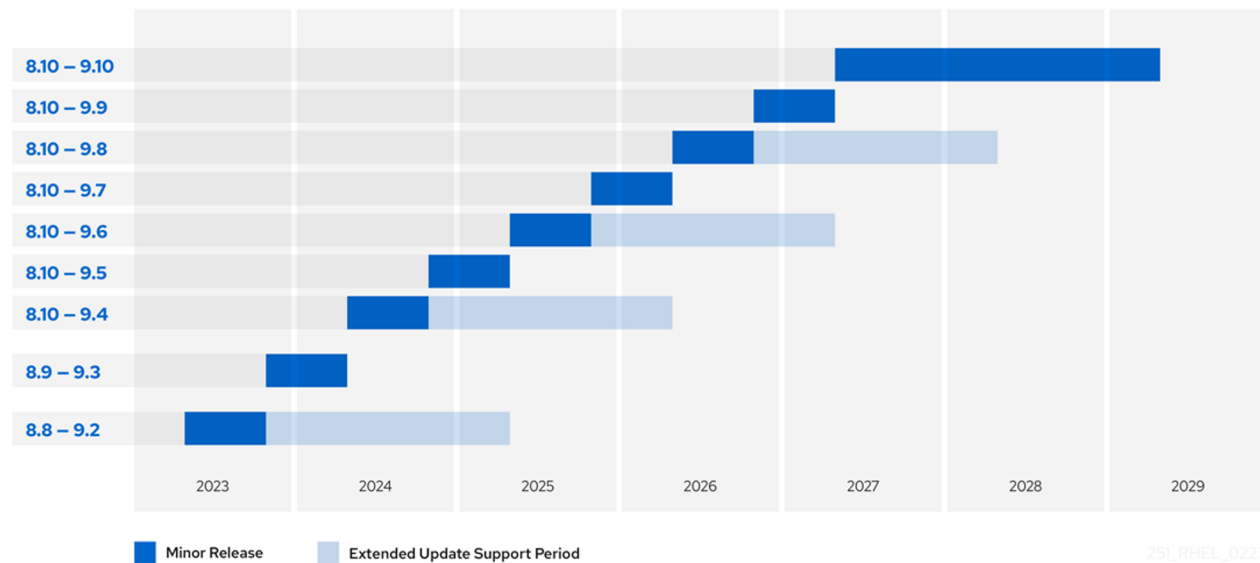
\*Note that RHEL 8.5 is now out of support, so users will need to update to a supported version of RHEL 8 after converting.

- ▶ Convert2RHEL now supports Rocky Linux and Alma Linux!
- ▶ Third-party Linux Migration offering available for on-premise, AWS, and Azure

Source:

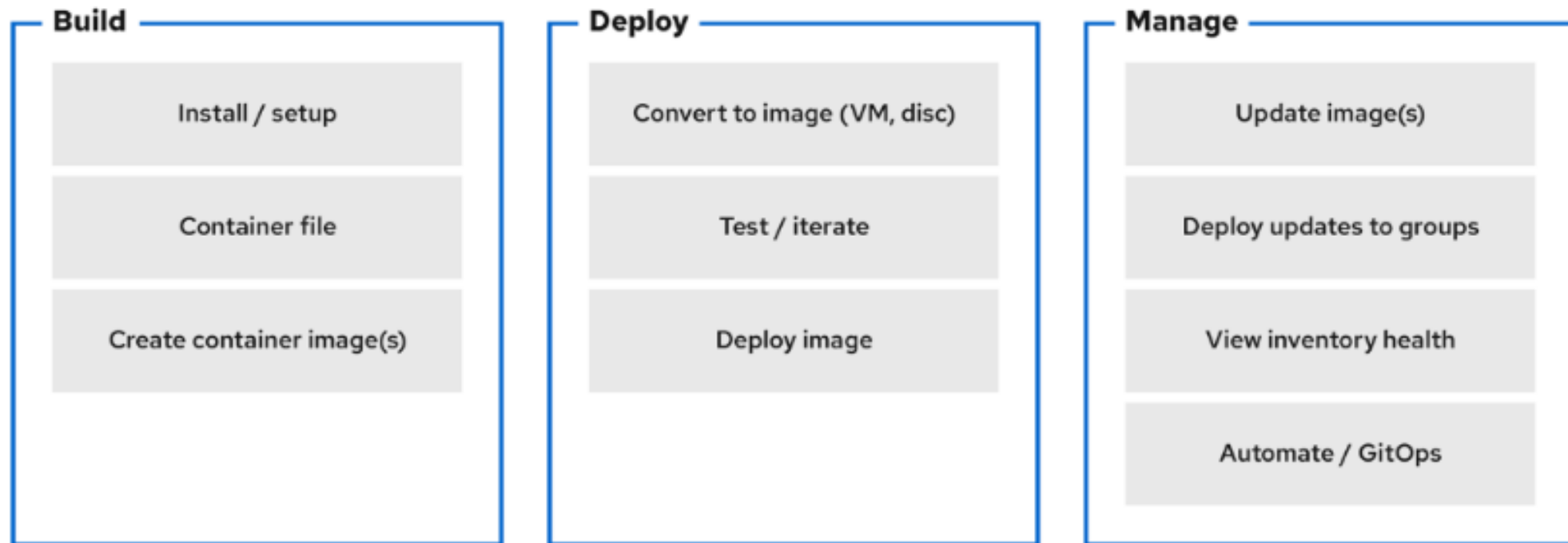
[https://access.redhat.com/documentation/en-us/red\\_hat\\_enterprise\\_linux/8/html-single/convertng\\_from\\_an\\_rpm-based\\_linux\\_distribution\\_to\\_rhel/index#con\\_supported-conversion-paths\\_convertng-from-a-linux-distribution-to-rhel](https://access.redhat.com/documentation/en-us/red_hat_enterprise_linux/8/html-single/convertng_from_an_rpm-based_linux_distribution_to_rhel/index#con_supported-conversion-paths_convertng-from-a-linux-distribution-to-rhel)

# Leapp in-place upgrades

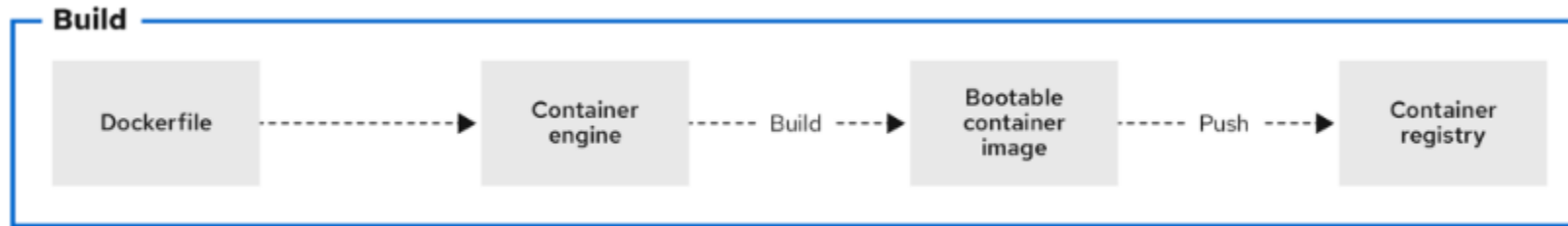


- ▶ Leapp was introduced in RHEL 7
- ▶ Available in RHEL 7, 8, 9, and planned for 10
- ▶ Available as a one-off utility or in bulk with Ansible Automation Platform or Satellite
- ▶ Pre-upgrade assessment available from the command line

# Image mode for RHEL



# Image mode for RHEL



```
FROM registry.redhat.io/rhel9/rhel-bootc:latest
```

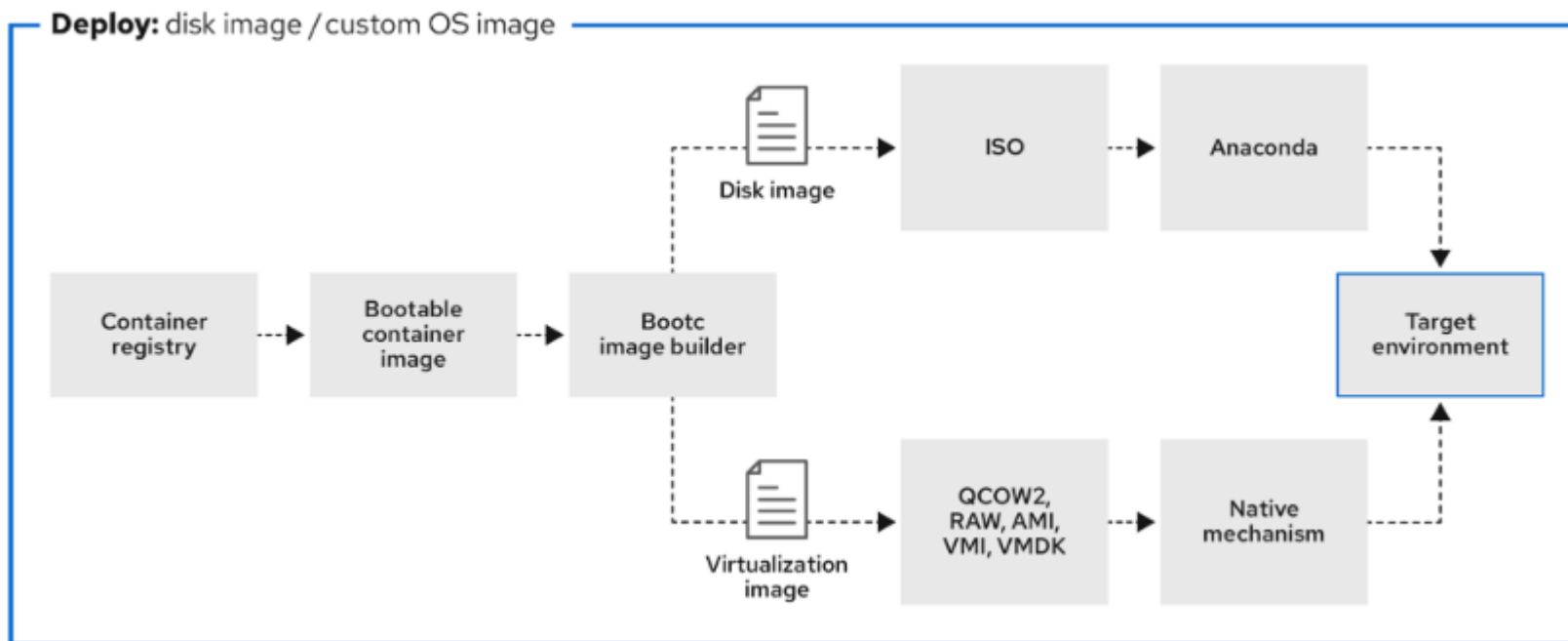
```
RUN dnf -y install [software] [dependencies] && dnf clean all
```

```
ADD [application]
```

```
ADD [configuration files]
```

```
RUN [config scripts]
```

# Image mode for RHEL





# Red Hat Enterprise Linux AI

## Foundation Model Platform

Seamlessly develop, test, and run Granite family large language models (LLMs) for enterprise applications.



### Granite family models

Open source-licensed LLMs, distributed under the Apache-2.0 license, with complete transparency on training datasets.



### InstructLab model alignment tools

Scalable, cost-effective solution for enhancing LLM capabilities and making AI model development open and accessible to all users.



### Optimized bootable model runtime instances

Granite models & InstructLab tooling packaged as a bootable RHEL image, including Pytorch/runtime libraries and hardware optimization (NVIDIA, Intel and AMD).

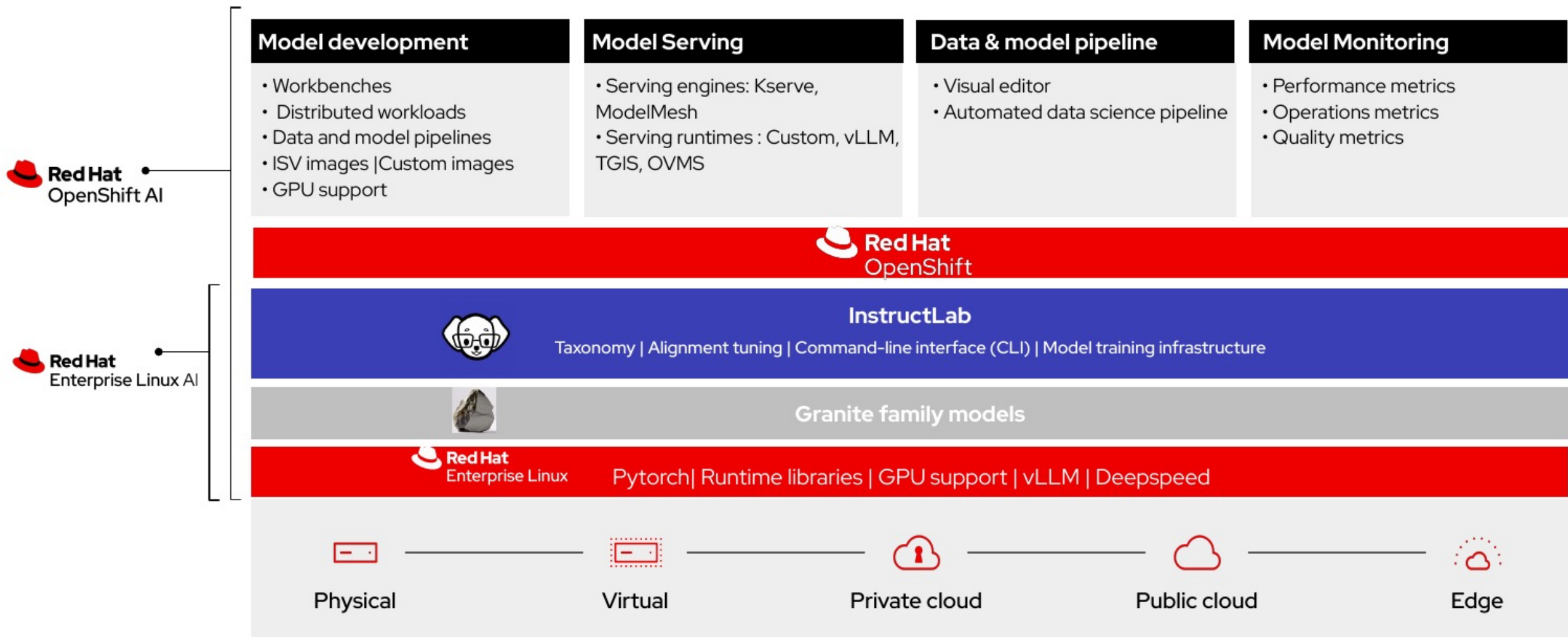


### Enterprise support, lifecycle & indemnification

Trusted enterprise platform, 24x7 production support, extended model lifecycle and model IP indemnification by Red Hat.

# Red Hat AI platforms

Generative AI and MLOps capabilities for building flexible, trusted AI solutions at scale



# Red Hat AI Portfolio



## InstructLab

### Open Source

Learn & experiment via limited desktop-scale training method (qlora) on small datasets. *Future potential Podman Desktop integration.*

 Laptop / desktop



## Red Hat Enterprise Linux AI

### Small Scale

Production-grade model training using full synthetic data generation, teacher and critic models. CLI tooling with building blocks.

 Server / VM



## Red Hat OpenShift AI

### Large Scale

Production-grade model training, serving, and monitoring using full power of hybrid cloud app platform for scaling, automation, and MLOps services.

 Cluster



**THANK YOU!**



**Red Hat**