

Red Hat
Summit

MSP Q2 RHUG RED HAT SUMMIT OVERVIEW

June 30, 2021

Mike Dahlgren - Regional Chief Architect

The narrative continues to evolve

2011



“Software is eating the world.”

Marc Andreessen
cofounder and general partner,
Andreessen Horowitz

2015



“Open source keeps eating the world.”

Deutsche Bank
in its year-end annual predictions

2016 - today



“Every company is a software company.”

Seemingly everyone in tech

Source:

[Why software is eating the world](#)

[Embrace Open Source Software, For the Good of Nerdmunity](#)

V0000000





Red Hat Summit 2021 announcements

Expanding hybrid cloud innovation to the edge

Introducing Red Hat Edge, a portfolio-wide extension of Red Hat's open hybrid cloud strategy

Red Hat Enterprise Linux 8.4, adding new capabilities tailored for containerized workloads at the edge

Collaboration with exida to bring a continuously-certified, updatable RHEL-based operating system to the connected car market

Accelerating hybrid cloud operations at scale

\$570M+ partnership with Boston University to advance open source innovation & hybrid cloud operations

Red Hat OpenShift Platform Plus to enable customers to adopt DevSecOps across the entirety of the hybrid cloud

Red Hat Insights expansion to bring greater visibility and analysis into hybrid cloud operating environments

Introducing new managed cloud services

Enabling customers build next-gen apps with a focus on distributing data, understanding it & enabling API-driven access to it with:

- **Red Hat OpenShift API Management**
- **Red Hat OpenShift Streams for Apache Kafka**
- **Red Hat OpenShift Data Science**

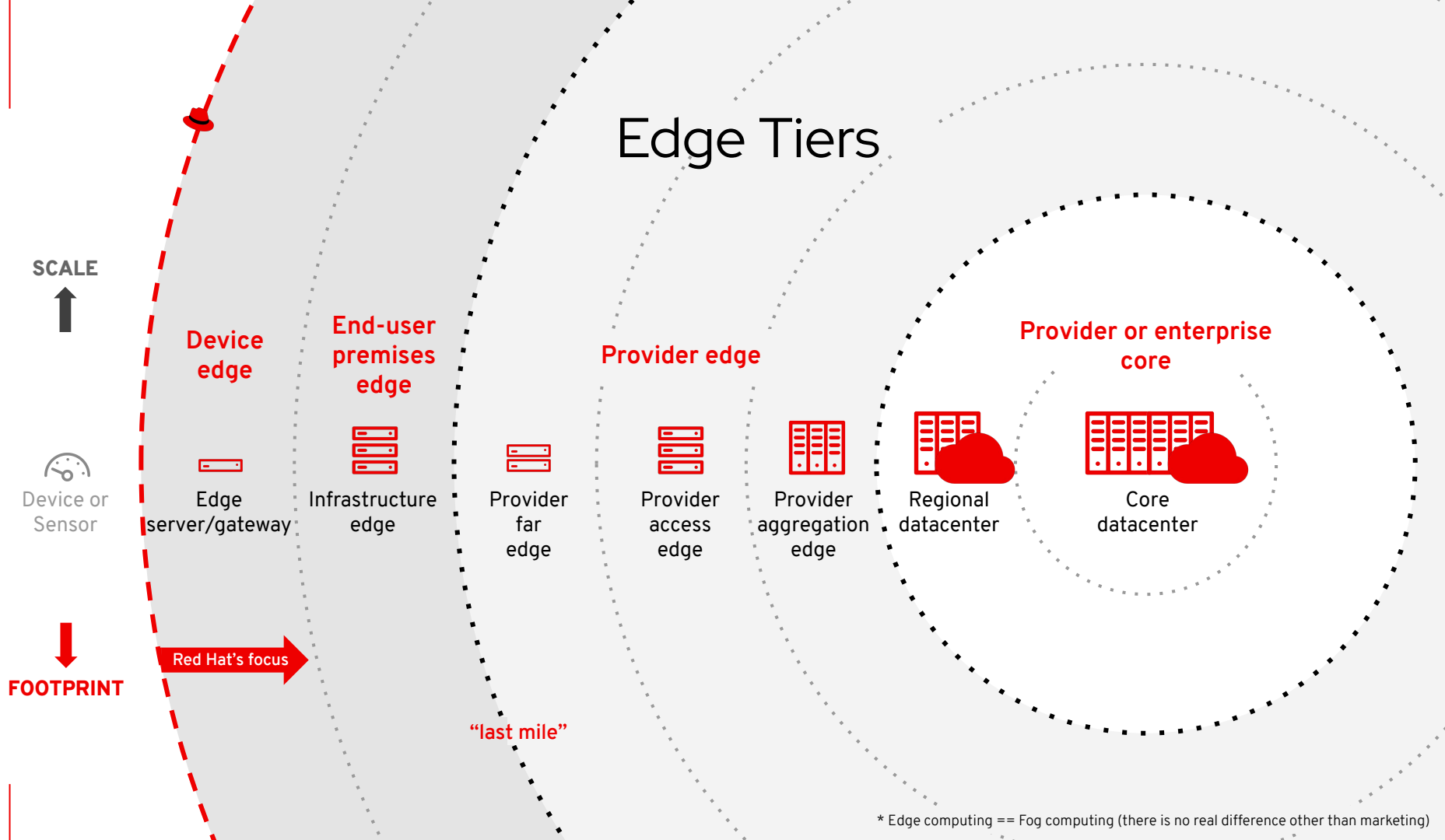


Introducing a
portfolio-wide extension
of Red Hat's open hybrid
cloud strategy



Red Hat
Edge

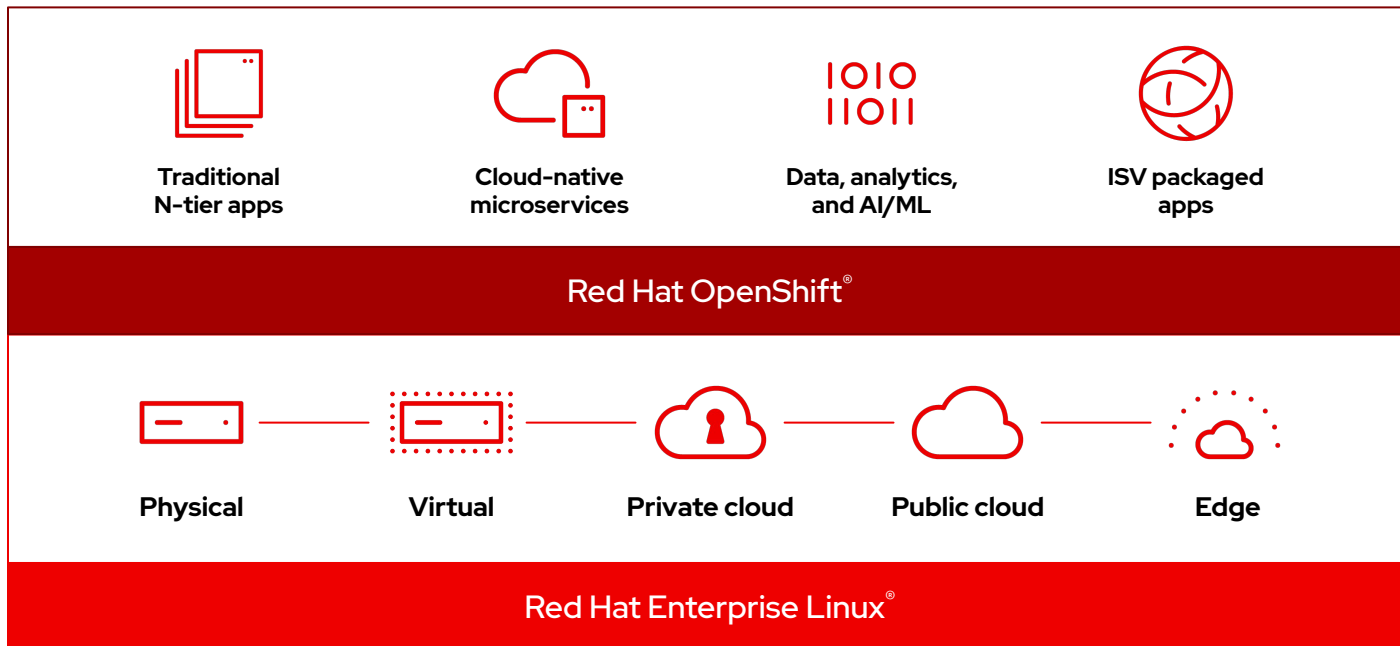
Edge Tiers



* Edge computing == Fog computing (there is no real difference other than marketing)

Edge is part of our open hybrid cloud strategy

Any workload, any footprint, **any location**



Introducing the latest version of the industry's leading enterprise Linux platform

Red Hat Enterprise Linux 8.4 delivers stability + innovation



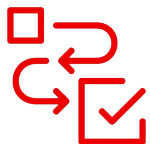
Innovate

Application Streams and enhanced RHEL Container Tools offer developers the flexibility to build where and how they need AND easily deploy on RHEL



Optimize

Performance Co-Pilot, Web Console, System Roles, and Red Hat Insights services provide guidance and expertise for configuring RHEL and workloads running on RHEL to achieve optimal performance, increase efficiency and streamline management at scale



Transform

Simplify and accelerate transformation of workloads to the cloud and edge. Purpose built tools ensure your workloads are optimized regardless of where they are deployed



Protect

SCAP Profiles, System Roles and the Red Hat Insights Vulnerability service help mitigate risk by identifying vulnerabilities and simplifying the enforcement of security configurations

Red Hat Enterprise Linux for the Edge

Ensured stability and deployment flexibility



Containerized Deployment

Package RHEL for the Edge image content in a container for quick and easy deployment



ISO/USB Installer Images

RHEL for the Edge images built as installable media [ISO or USB]
Deploy RHEL for the Edge in disconnected environments

Image Builder: Hybrid Cloud Your Way



Add a cloud source ✕

Register your provider to manage your Red Hat products in the cloud.

- 1 Name source
- 2 Select application**
- 3 Enable account access
 - Create IAM policy
 - Create IAM role
 - Enter ARN
- 4 Review details

Select application

Select an application to connect to your source. You can connect additional applications after source creation.

- Cost Management
Analyze, forecast, and optimize your Red Hat OpenShift cluster costs in hybrid cloud environments.
- RHEL management** Bundle
 - Red Hat Gold Images**
Unlock cloud images in AWS and bring your own subscription instead of paying hourly.
 - High precision subscription watch data**
View precise public cloud usage data in subscription watch.
 - Autoregistration**
Cloud instances automatically connect to cloud.redhat.com when provisioned.
 - Red Hat Connector**
Simplified set up and registration of connected hosts.
- No application

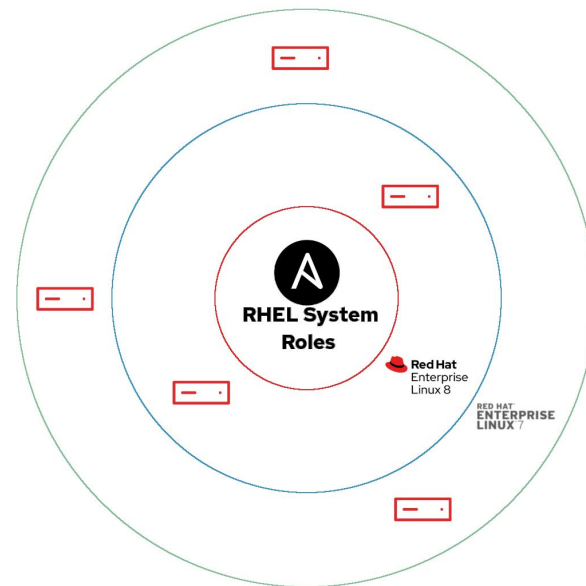
Next Back Cancel

- Simplified Cloud Experience **significantly** reduces the number of steps required to run RHEL on the public cloud.
- Configure account-level link and get:
 - Gold Images
 - High precision (<1 day) subscription reporting
 - Auto-registration of provisioned systems
 - Red Hat Insights

System Roles

A collection of supported Ansible roles that ensure consistent workflows and streamline the execution of manual tasks.

- ▶ Ensure consistent and repeatable configuration
- ▶ Reduce technical burdens and streamline administration
- ▶ Execute tasks consistently across hybrid cloud footprints
- ▶ Scale with Red Hat Smart Management and Automation



RHEL System Roles available today

Streamline system deployment and management with System Roles



Security

Automate security workflows and maintain them over time, at scale with minimal resources. Consistency helps streamline governance and compliance requirements.

- SELinux
- Certificate
- NBDE client & server
- Tlog (session recording)
- SSH Client (8.4)
- SSH Server (8.4)
- Crypto Policies (8.4)



Configuration

Save time and streamline deployments by automating manual tasks that ensure a consistent administrative experience and scales across systems.

- Kdump
- Network
- Storage
- Timesync
- Kernel settings
- Logging
- Metrics
- Postfix (tech preview)
- HA Cluster (tech preview) (8.4)



Workloads

Easily optimize the most popular workloads at the time of deployment and simplify ongoing administration by automating workload-specific tasks.

- SAP
- SQL Server (on roadmap)

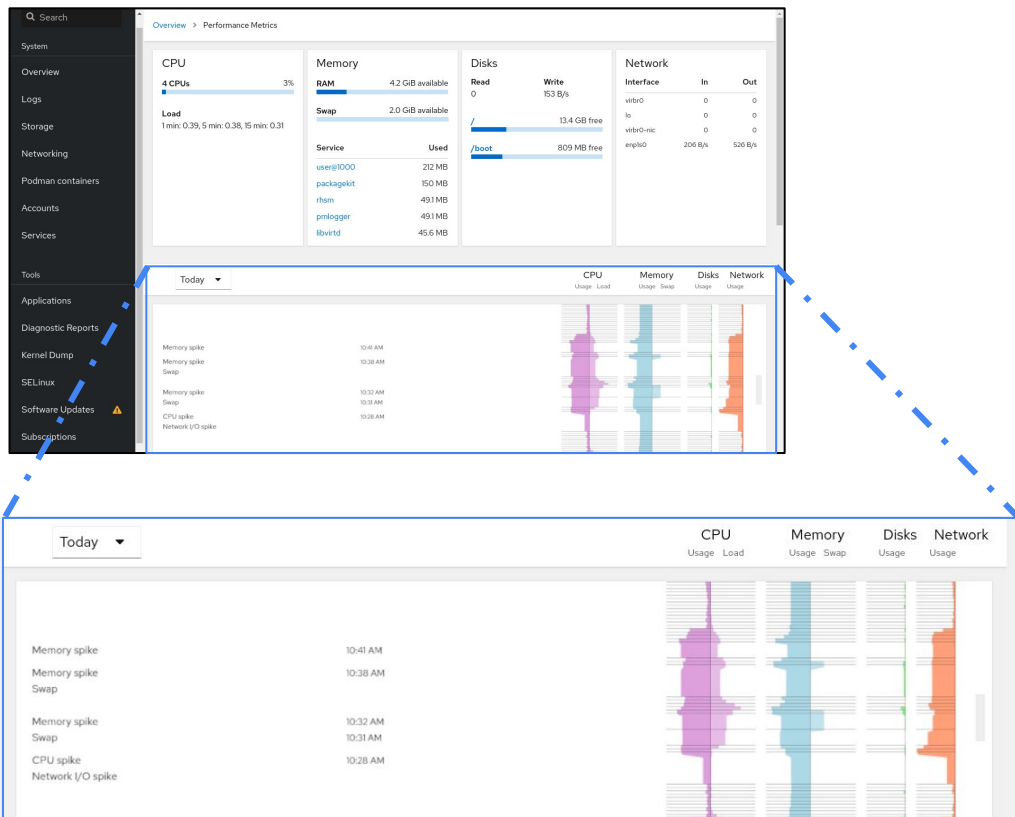


Improved SAP Customer Experience

SAP® Certified
Integration with SAP S/4HANA®

- ▶ Updated RHEL System Roles include system validation options
- ▶ RHEL HA Cluster Monitoring (via Performance Co-Pilot integration)
- ▶ In-place LEAPP upgrades from RHEL 7.7 to RHEL 8.2
- ▶ RHEL HA multi-site HA cluster support (Multi Target Replication)
- ▶ IBM Power + Intel 64 HW enablement for SAP HANA

Web Console Update



- Enhanced Web Console performance graphics (pictured)
 - Quickly interpret system utilization data
 - Important events automatically logged
- Improved update management with tracer integration. Now, web console checks for mandatory reboots and reduces unnecessary rebooting

podman 3.0



Automatic container image updates

podman 3.0 ships with `podman-auto-update.service` systemd unit. Triggered daily, by default, checks registry and pulls updated container image, then restarts affected containers using `systemd`

Docker volume support

podman now supports Docker volumes, a method for persistent container storage, further making podman a drop-in replacement

Secure short names

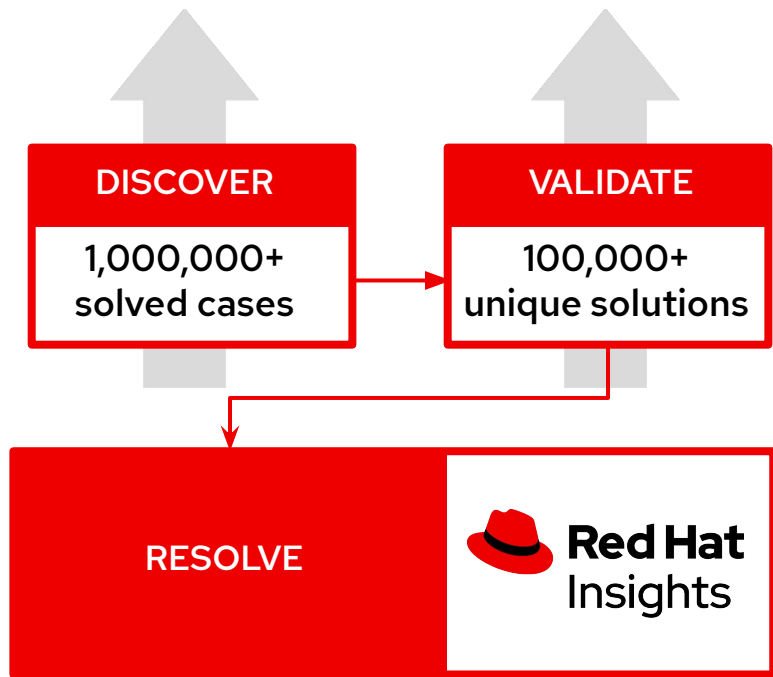
When using a shortname without the container registry, users will be asked to verify the pull prior to execution

Included in `container-tools:rhel8` and `container-tools:3.0`



Insights is integrated with Red Hat Support

Automated, experience driven, proactive guidance for customer success



"85% of critical issues raised to Red Hat® support are already known to Red Hat or our partners."

– RED HAT GLOBAL SUPPORT SERVICES

- Continuous identification of new risks driven by unique industry data
- Based on real-world results from millions of enterprise deployments
- Proactive, prescriptive recommendations and resolutions



Insights expansion in April 2021

Expanding on enhanced security operations, ease-of-use, and business offerings



Enhanced Security Operations



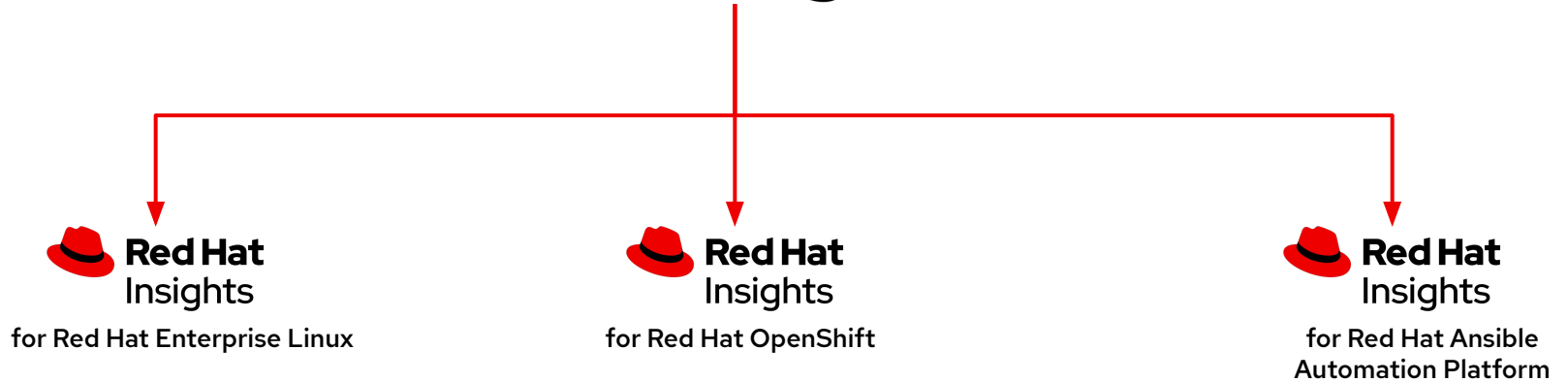
Ease-of-use



Business offerings

New Red Hat connector command line also offers simplified connectivity to Insights

Red Hat Insights is expanding in 2021

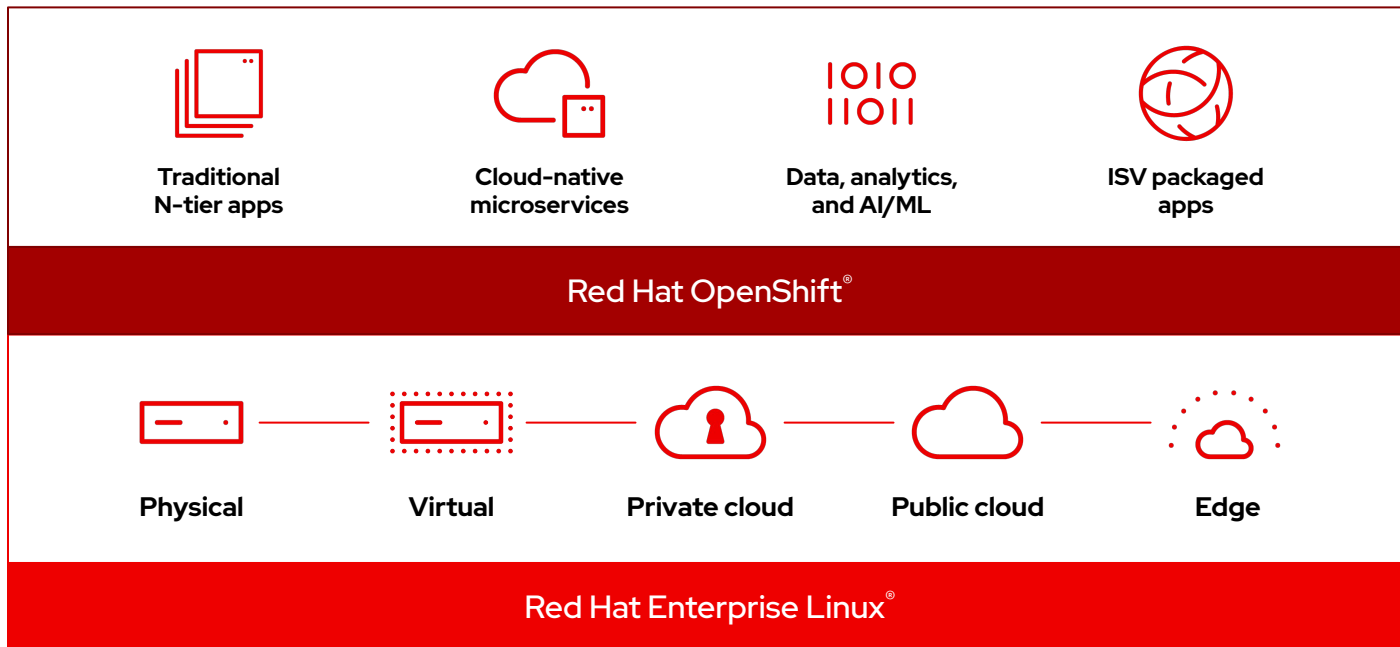




“Every CIO is a
cloud operator.”

Paul Cormier
president and CEO, Red Hat

Red Hat's vision for open hybrid cloud



Red Hat Ansible Automation Platform 2.0: Changes to know about

Some key changes to be aware of for Red Hat Ansible Automation Platform 2.0 release (July 9, 2021):

- “Ansible Tower” and “Ansible Engine” are now renamed and rebranded as components of the Red Hat Ansible Automation Platform.
 - *Note: Ansible Tower 3.8 and Ansible Engine 2.9 will be supported until November 2022*
- Added focus on the Enterprise Developer persona, as well as two new developer tools to support this (`ansible-builder`, `ansible-navigator`)
- Red Hat Insights for Red Hat Ansible Automation (replacing Automation Analytics)

OpenShift is the platform for cloud-native apps

Based on Kubernetes - the de facto standard for container management



Red Hat OpenShift

A leading
Kubernetes
contributor since
day 1

Trusted
implementation of
enterprise
Kubernetes

Automated, full-stack
installation from the
container host to
application services

Seamless Kubernetes
deployment to any
cloud or on-premises
environment

StackRox is now



Red Hat

Advanced Cluster Security for Kubernetes

Available as a Standalone product

Available as part of Red Hat OpenShift Platform Plus

Self-managed Red Hat OpenShift



Essential enterprise Kubernetes infrastructure

Includes:

- Enterprise Kubernetes runtime
- RHEL CoreOS immutable container OS
- Administrator console
- OpenShift Virtualization

Opinionated application development platform

Adds:

- Developer Console
- Log Mgt & Metering
- Serverless (Knative)
- Service Mesh (Istio)
- Pipelines & GitOps (Tekton, ArgoCD)
- **NEW: Red Hat Insights for OpenShift (Cost, Subscription, Advisor)**

Self-managed Red Hat OpenShift

 **Red Hat**
OpenShift Kubernetes Engine

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 **Red Hat**
OpenShift Container Platform

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 **Red Hat**
OpenShift Platform Plus

Manageability and consistency across hybrid and multicloud with advanced security for DevSecOps

Adds:





- Multicloud management
- Advanced observability and policy compliance
- Declarative security
- Threat detection and response
- Scalable global container registry

Red Hat OpenShift portfolio

A consistent platform no matter how or where you run




Start quickly, we manage it for you

Managed Red Hat OpenShift services

 Red Hat OpenShift Service on AWS	 Azure Red Hat OpenShift	 Red Hat OpenShift on IBM Cloud	 Red Hat OpenShift Dedicated ²
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You manage it, for control and flexibility

Self-managed Red Hat OpenShift

 Red Hat OpenShift Platform Plus	 Red Hat OpenShift Container Platform	 Red Hat OpenShift Kubernetes Engine	On public cloud, or on-premises on physical or virtual infrastructure ³
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Notes:

1 AWS managed OpenShift also available as Red Hat OpenShift Dedicated managed service running on user-supplied AWS infrastructure.

2 Red Hat managed service running on user-supplied GCP or AWS infrastructure

3 See docs.openshift.com for supported infrastructure options and configurations

Introducing new managed cloud services

A streamlined experience for developing, deploying, and scaling cloud-native apps and delivering data-driven insights



Red Hat OpenShift API Management

Fully available today as an add-on to Red Hat OpenShift Dedicated, and on Red Hat OpenShift Service on AWS.

Coming soon to other clouds, self-managed and on-premises OpenShift Container Platform



Red Hat OpenShift Streams for Apache Kafka

Available as a developer preview add-on for Red Hat OpenShift Dedicated and Red Hat OpenShift Service on AWS.

General availability later this year



Red Hat OpenShift Data Science

Available in beta as an add-on to Red Hat OpenShift Dedicated and Red Hat OpenShift Service on AWS.

General availability later this year

OpenShift + services = open hybrid cloud experience

APPLICATION
LAYER

STREAMLINED DEVELOPER EXPERIENCE

Unified platform to build cloud-native applications

APPLICATION
SERVICES

Data services

Identity services

Customer services

Partner services

Integration services

Decision services

Database services

Workflow services

native integration

KUBERNETES ENGINE



CLOUD
PROVIDERS



CUSTOMER
DATACENTER



Red Hat sets sights on
delivering first continuously
certified Linux platform for
road vehicles



Red Hat





Built from the trusted components of Red Hat Enterprise Linux, the world's leading enterprise Linux platform, this operating system will be designed for continuous updates throughout its lifecycle while still retaining crucial functional safety certifications

Red Hat & exida are collaborating to:

- **prepare for ISO 26262 certification**, an international standard governing the functional safety of electronic systems on road-vehicles
- work towards the **continuous certification of the intended Red Hat automotive Linux offering**, which will be developed and maintained by Red Hat and continuously certified by exida

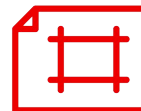
Who is exida?



exida is a leader in functional safety across industries, with 500+ work years of cumulative experience in functional safety & cybersecurity



exida maintains extensive relationships with many premium automotive OEMs & many more automotive suppliers globally



exida maintains the largest database of failure mode information on all component parts used in safety related applications with 400+ billion operating hours of real world field data



"From a technology perspective, we knew OpenShift was where we wanted to focus. We knew Kubernetes was going to be the future and that if we wanted to be a leader in the hybrid cloud monitoring space we had to be certified."

Marci Acquaviva
Senior Manager, Tech Alliances,
Dynatrace

Challenge

Help clients modernize and automate cloud operations as a Certified Red Hat® OpenShift® Operator.

Solution

Dynatrace became a Red Hat Certified Partner in 2016. Today it is a certified partner for Red Hat Enterprise Linux®, Red Hat OpenShift, and Red Hat Ansible® Automation Platform.

Why Red Hat

"We pursued this partnership with Red Hat. We see it as key to the whole cloud orchestration piece." – Marci Acquaviva, Senior Manager, Tech Alliances, Dynatrace

Results

- Improved monitoring reduced mean time to repair from 75% to 90% and cut problems reaching production by 80%
- Kept pace with dynamic changes to the industry and created a competitive point of difference
- Helped win new business across diverse industry sectors

Software and partner resources

Red Hat OpenShift

Red Hat Enterprise Linux

Red Hat Ansible Automation Platform

Red Hat Independent Software Vendors (ISV) Program





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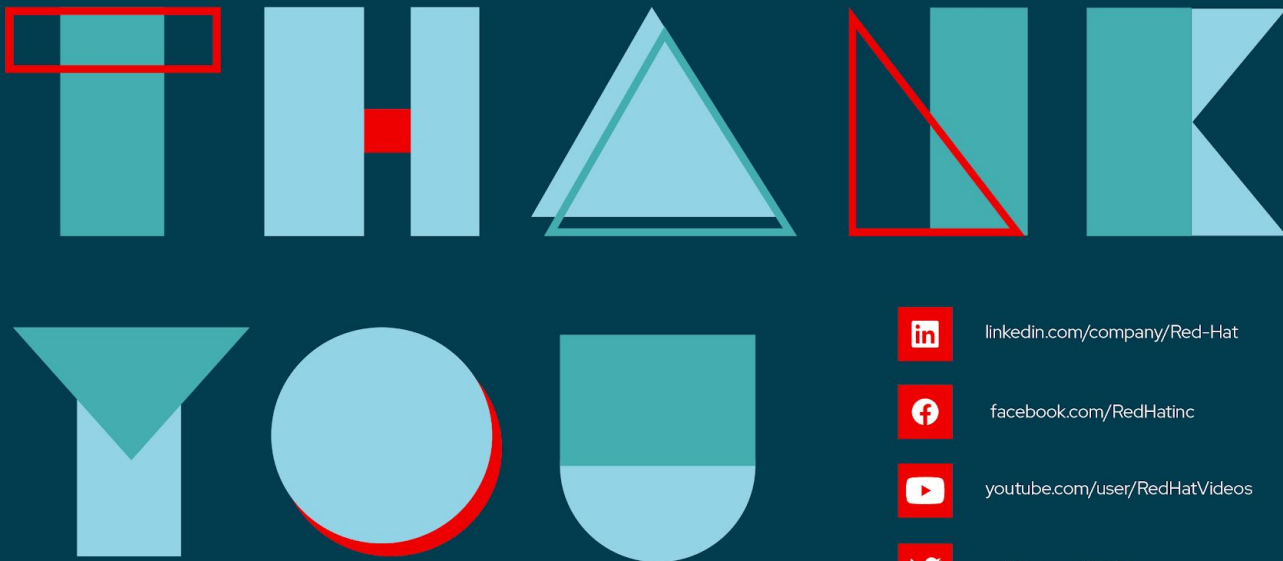
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Red Hat Summit



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