

Red Hat in Azure ed Azure piattaforma per Red Hat: la forza di Tech Data "aggregator"

Tech Data Italia

Vito Trentadue (Pre-Sales Cloud Solution Architect – Microsoft) vito.trentadue@techdata.com

Lorenzo Cella (Technical Presales Specialist - RedHat) lorenzo.cella@techdata.com





Red Hat and Microsoft Joint Solutions *Summary*

Red Hat Enterprise Linux in Azure

> Cost savings and operational efficiency gained from using consistent/standard OS platforms across your hybrid infrastructures

Integrated support for RHEL in the Azure Marketplace

Red Hat subscription flexibility/portability

Red Hat OpenShift in Azure

> Easily build, deploy, and manage modern containerbased apps

Technology that enables digital transformation and application modernization

Consistent application platform for hybrid cloud infrastructures.

Azure Red Hat OpenShift (ARO) ... Fully managed Red Hat OpenShift service available via Microsoft SQL Server on Red Hat Enterprise Linux

> Industry-leading, mostsecure data platform on a leading OS and cloud platform

Optimize with a modern data platform

Red Hat Enterprise Linux for SAP Solutions in Azure

Most-powerful and scalable cloud for SAP HANA

Deep partnership among SAP, Microsoft and Red Hat

First-class hybrid support experience for Red Hat on Azure

Integrated management portal experience





Red Hat and Microsoft Joint Solutions *Summary*

- Red Hat Enterprise Linux in Azure
- Red Hat OpenShift in Azure
- SQL Server on Red Hat Enterprise Linux
- Red Hat Enterprise Linux for SAP Solutions in Azure



Ansible can automate
RHEL, Azure, SAP, OpenShift
and nearly everything else in your IT stack







RHEL Overview

Introduction

Red Hat® Enterprise Linux® is the world's leading enterprise Linux platform.* It's an open source operating system (OS).

It's the foundation from which you can scale existing apps—and roll out emerging technologies—across bare-metal, virtual, container, and <u>all types of cloud environments</u>.

*Worldwide Operating Systems and Subsystems Market Shares, 2018; released November 2019







RHEL Overview

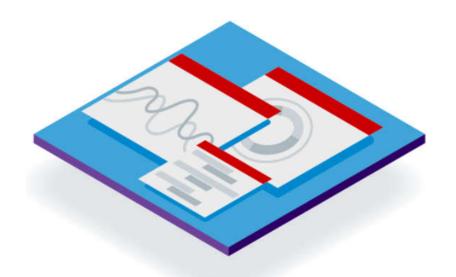
Features and benefits

Combat intrusions, control compliance and conquer complexity

Administrators can set up algorithmic criteria using <u>system-wide</u> <u>security</u> policies so apps automatically use the appropriate <u>cryptographic</u> package.

Each subscription comes with Red Hat Insights, a <u>predictive IT</u> <u>analytics</u> service that identifies potential issues before they become problems.

Red Hat Satellite is a management and provisioning module that allow you to provision, patch, configure, and fully control your Red Hat Enterprise Linux development, test, and production systems.







RHEL Overview

Subscription Model

What is a subscription?

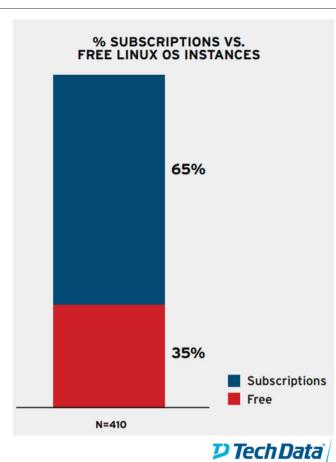
With Red Hat subscriptions, there are no license or upgrade fees. And Red Hat doesn't charge additional maintenance fees, per-incident support fees, or user access fees.

No expensive upgrades

Subscriptions take the pain out of buying software. Everything—including upgrades and updates—is provided in 1 all-inclusive price.

Is support included?

A Red Hat subscription includes support services. When you purchase a subscription, you choose a level of support services to cover specific use cases and environments.







Cloud Access Overview

Migrate Subscriptions

What is it?

Red Hat® Cloud Access is the program that allows our customers to run <u>eligible Red Hat product subscriptions</u> (RHEL, OpenShift, etc) on certified public cloud providers. (Microsoft Azure, etc)

It makes your subscriptions portable, so you may choose the best architecture and infrastructure for your needs—in your datacenter or on public clouds.

Keep your current IT

Preserve your current IT investment by maintaining the consistency and security of your applications.



Move to the cloud

Easily move subscriptions and virtual images to certified public cloud providers with a Cloud Access custom image.

The terms of your subscription with Red Hat, including pricing, remain the same.

You pay Red Hat for subscriptions, and pay the cloud provider for services used on their cloud service.





RHEL Overview RHEL on Azure

What are the advantages?

Get unified global support

Save yourself time, hassle, and stress by taking advantage of the industry's only coordinated global user support service. This unique, co-located support service by Azure and Red Hat features multilingual support engineers across 18 regions, a coordinated escalation and resolution process, and integrated ticketing.

Use pre-provisioned VMs or create your own

Provision your own Red Hat Enterprise Linux VMs on Azure or choose from hundreds of preprovisioned images from the Azure Marketplace.





SQL Server on RHEL

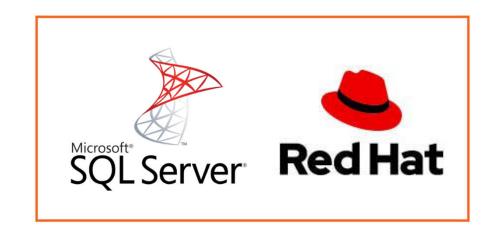
Description

How do we deliver the modern database operations functionality our organization needs?

Red Hat® and Microsoft provide the accelerated database performance critical for meeting modern demands.

Running Microsoft SQL Server on Red Hat Enterprise Linux® gives you a flexible, reliable, and secure database no matter where you choose to deploy, be it on-premise or cloud. Make data easily accessible to users and apps—and get more consistency and support at a lower cost.

Microsoft SQL on RHEL use the same licenses model as Microsoft SQL on Windows Server.







RHEL for SAP *Introduction*







Your business relies on your SAP environment

Standardizing on Red Hat's integrated portfolio across your IT and SAP infrastructure can help you optimize your environment and operations while preparing for future digital leadership. Combining an intelligent operating system with predictive management tools and SAP-specific content, Red Hat® Enterprise Linux® for SAP Solutions provides a single, consistent foundation for SAP and non-SAP workloads. It also lets you extend your IT to hybrid cloud and container environments using Red Hat OpenShift®, an enterprise-grade Kubernetes platform.

Red Hat Enterprise Linux for SAP Solutions is an optimized offering that includes:

- The Red Hat Enterprise Linux operating system.
- <u>High Availability Add-On</u> for increased uptime.
- <u>Red Hat Smart Management</u> for life-cycle management.
- Red Hat Insights for proactive issue identification and remediation.
- Update Services for SAP Solutions up to four years.
- In-place upgrades and live patching for critical and important security issues.





RHEL for SAP *Introduction*







Three ways to deploy Red Hat Enterprise Linux for SAP Solutions on Microsoft Azure

Use Red Hat Gold Images

Deploy pre-built, certified Red Hat Gold Images directly from your Azure CLI or console.

- ✓ Use your Red Hat subscriptions.
- ✓ Get support from Red Hat.
- You must use Cloud Access. What is Cloud Access?

Red Hat offers specific Gold Images for Generation 2 VMs. Learn more

Build and upload images

Build or migrate your own custom images into Microsoft Azure using Red Hat Image Builder or your own manual processes.

- ✓ Use your Red Hat subscriptions.
- ✓ Get support from Red Hat.
- You must use Cloud Access. What is Cloud Access?

Purchase hourly images from Microsoft Azure

Microsoft offers pay-as-you-go, ondemand images at flat, hourly rates.

Microsoft Azure provides support for Red Hat products purchased ondemand from Microsoft, Learn more

This image is named **Red Hat Enterprise Linux for SAP with HA and US.**

These instances do not consume Red Hat Subscriptions, and they should not be registered with Red Hat Subscription Management or Red Hat Satellite.





Red Hat OpenShift Platform

Introduction

What are containers?

A container is a standard unit of software that packages up code and all its dependencies so the application runs quickly and reliably from one computing environment to another.



Container = the App + all the Libraries that the App need to be executed on a Container Runtime without particular customization of it and of the OS

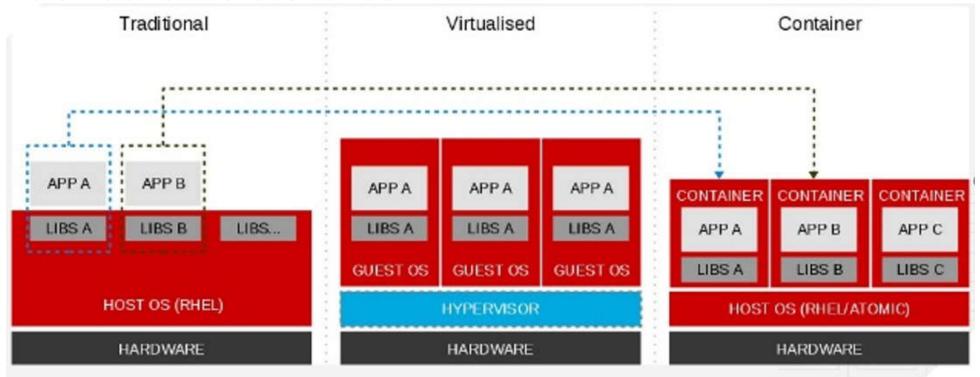




Red Hat OpenShift Platform

Introduction

Bare Metal vs VMs vs Containers



Better resources usage





Red Hat OpenShift Platform Introduction

If implemented and maintained correctly, Kubernetes offers everyone - IT operations, developers, and business owners - great benefits:

Scalability

Kubernetes can run on a local machine or across multiple clusters in widespread availability zones. It horizontally scales your cluster when you need it, and scales it back when you don't.

Workload portability

Kubernetes runs on-premise in your own datacenter, in a public cloud, or a hybrid cloud configuration, deploying containers the same way, every time.

Separation of concerns

Operations value stability, while developers value speed. Kubernetes resolves this conflict, so businesses can focus on what everyone wants: innovation and growth.

Source: https://www.openshift.com/learn/topics/kubernetes/





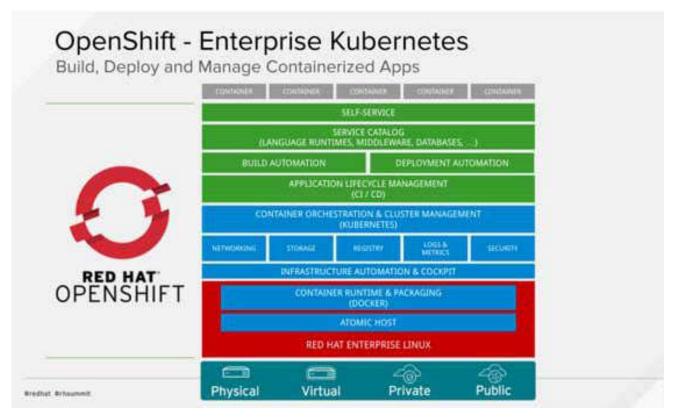
RHEL OpenShift Platform

Features and benefits

Build fast. Ship first. Deploy everywhere.

Red Hat OpenShift helps teams build with speed, agility, confidence, and choice. Code in production mode anywhere you choose to build. Get back to doing work that matters.

Red Hat® OpenShift® is a container platform for Kubernetes that can automate the provisioning, management and scaling of applications so that you can focus on writing the code for your next big idea.







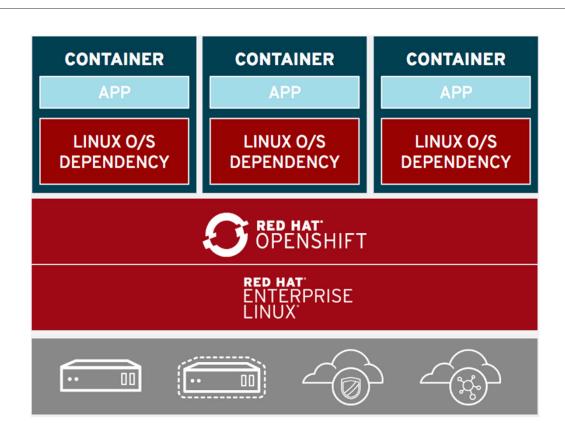
Red Hat OpenShift Platform Features and benefits

Build fast. Ship first. Deploy everywhere.

Red Hat OpenShift is deployable to any infrastructure:

- On Physical Servers
- . On Virtual Machines
- On Private Cloud
- On Public Cloud

Red Hat OpenShift lets you easily and quickly build, develop, and deploy in nearly any infrastructure, public or private. Whether it's on-premise, in a public cloud, or hosted, you have an award-winning platform to get your next big idea to market ahead of your competition.







Red Hat OpenShift Platform Features and benefits

Streamline the delivery process

Standardizing workflows, supporting multiple environments, enabling continuous integration, and managing builds—OpenShift gives you tools for the complete development lifecycle.

Managing builds and deployment

OpenShift is designed for building and deploying applications. You can choose to focus your development within an OpenShift project by using it to build an application from scratch, or bring an application (binary, container image, source code) you have already developed in a separate environment and deploy it to OpenShift.

Take control of containers

Your developers need to get their applications deployed. Most of them just want to write code and don't want to learn about the specifics of the infrastructure where it runs. Your architects and lead developers might want to explore using containers and Kubernetes. Either way, OpenShift has you covered.

With a container platform that can run on-premises, in the cloud, or in hybrid deployments, enable your development teams to do the job they want with the least friction, all while giving you, the operator, control, visibility, and management.





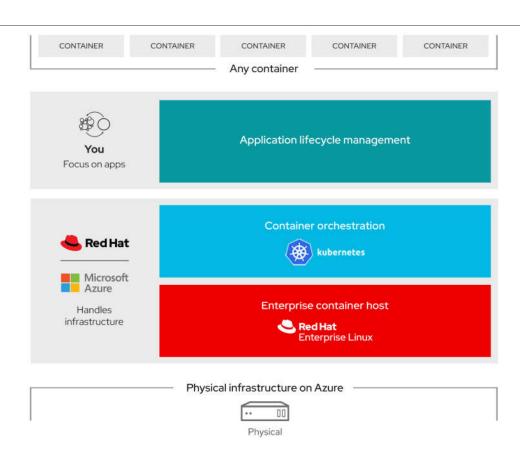
Azure Red Hat Openshift Introduction

Build & scale applications with confidence. We manage the rest.

Azure Red Hat OpenShift is a fully managed service of Red Hat OpenShift on Azure, jointly, engineered, operated and supported by Microsoft and Red Hat.

What is it?

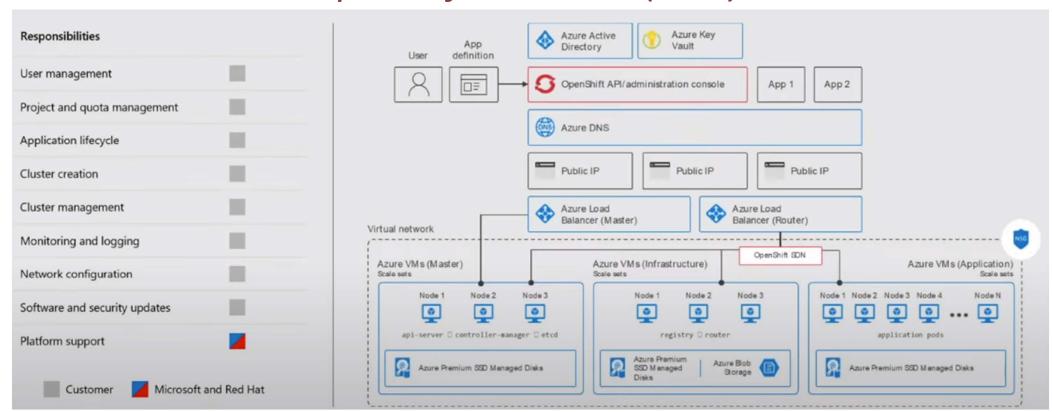
Jointly operated and supported by Microsoft and Red Hat, Azure Red Hat OpenShift takes care of management and updates, freeing developers to focus on developing new services. Azure Red Hat OpenShift offers highly-available, fully-managed master, infrastructure, and application nodes—no virtual machines to operate, no patching required.







Azure Red Hat Openshift What there is on Openshift on Azure (OCP)







Azure Red Hat Openshift

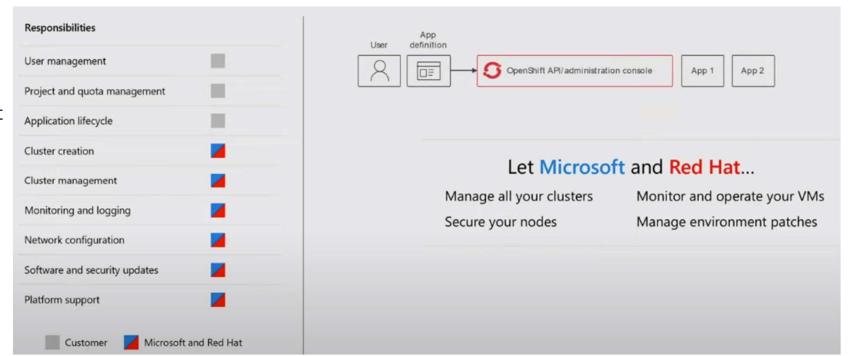
... What you see with Azure Red Hat Openshift (ARO)

Build & scale applications with

Azure Red Hat OpenShift is a fully managed service

What is it?

Jointly operated and supported by Microsoft and Red

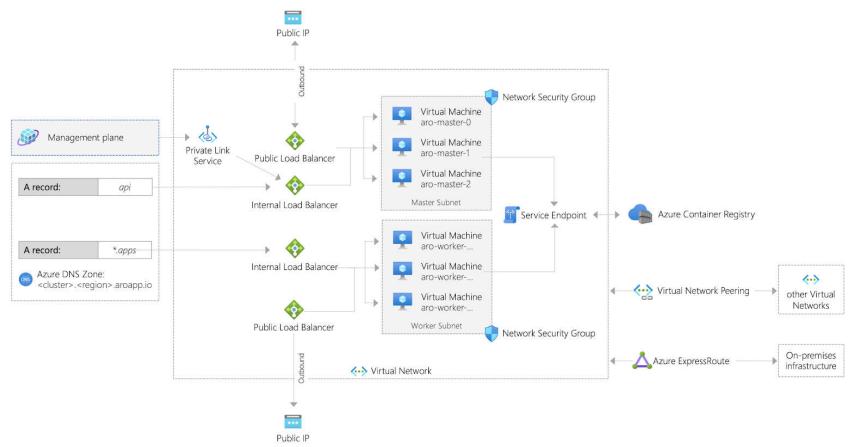






Azure Red Hat Openshift

What there is on Azure Red Hat Openshift (ARO)...







Azure Red Hat Openshift What's new on Openshift 4.3

Kubernetes 1.16 on Red Hat Enterprise Linux CoreOS

An immutable, container optimized, Linux OS host that is delivered and installed as a component of OpenShift.

Private cluster management and ingress endpoints

Choose between public and private endpoints.

Cluster-admin role

Full cluster administrator capabilities enabling running privileged containers and installing Custom Resource Definitions (CRDs).

Bring your own Virtual Network

Create clusters into your own Virtual Network and connect to onpremises environments using Azure Express Route.

Multi-Availability Zones clusters

To ensure the highest resiliency, cluster components are deployed across 3 Azure Availability Zones in supported Azure regions.

Bring your own identity provider

In addition to Azure Active Directory, configure supported OpenShift identity providers, for example using OpenID Connect.

Industry compliance certifications

Certified for PCI DSS, HITRUST and FedRAMP.

FIPS 140-2 Level 1 compliant encryption

Strong encryption controls to protect sensitive data including platform secrets and application configuration data.

Operator Framework

Support for community and certified operators with developer self-service as well as Custom Resource Definitions (CRDs).

OpenShift Service Mesh

Integrated Service Mesh for enhanced security and network segmentation of microservices applications, based on Istio, Jaeger and Kiali.

OpenShift Serverless (Tech Preview)

Build functions based applications that can scale to zero, based on the Knative framework.

OpenShift Do (odo)

A fast, iterative, and straightforward CLI tool for developers who write, build, and deploy applications on OpenShift.





Azure Red Hat Openshift Market Comparison

OpenShift on Azure

- Installed and managed by end customer
- Purchased from Red Hat
- Red Hat Enterprise Linux, Containers, Kubernetes, etc





Azure Red Hat OpenShift

- Managed Service by Red Hat and Microsoft
- Purchased from Microsoft
- Red Hat Enterprise Linux, Containers, Kubernetes, etc





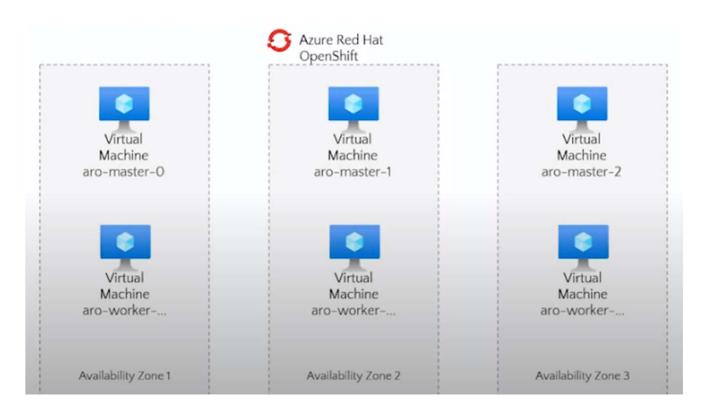




Azure Red Hat Openshift ARO Features

Multi-Availability Zone clusters and 99,9% SLA

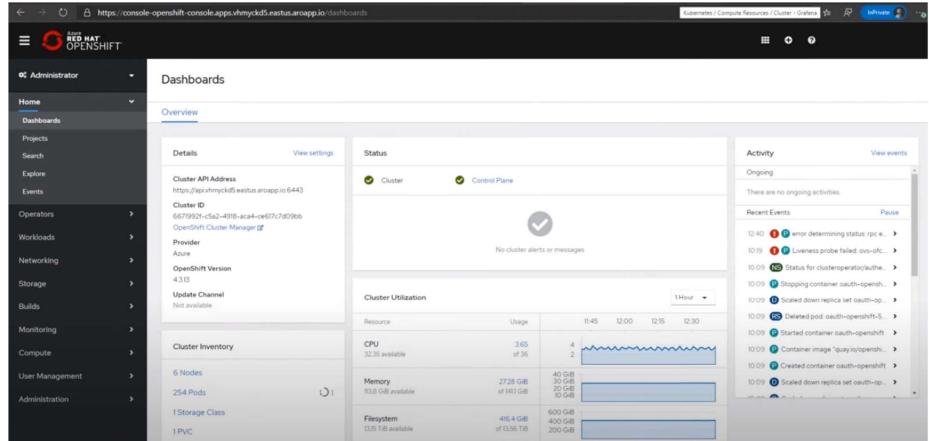
To ensure the highest resiliency, cluster components are deployed across 3 Azure Availability Zones in supported Azure Regions







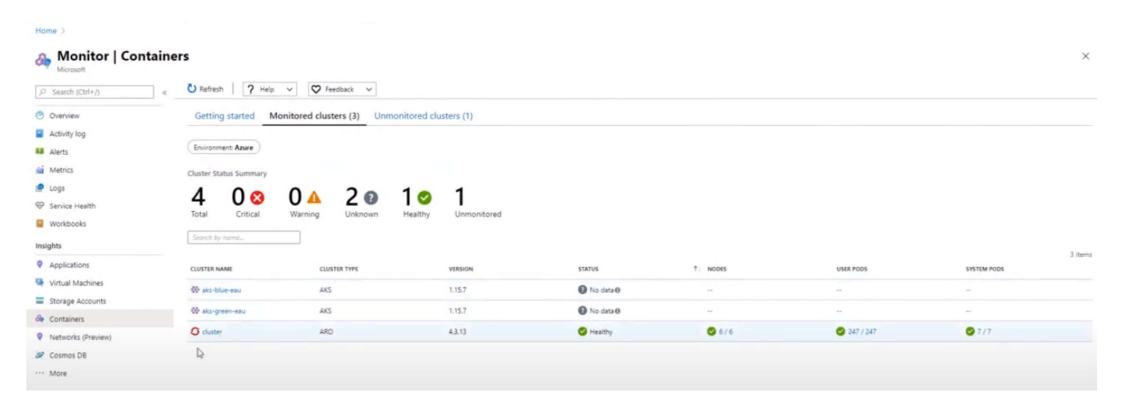
Azure Red Hat Openshift Openshift Dashboard







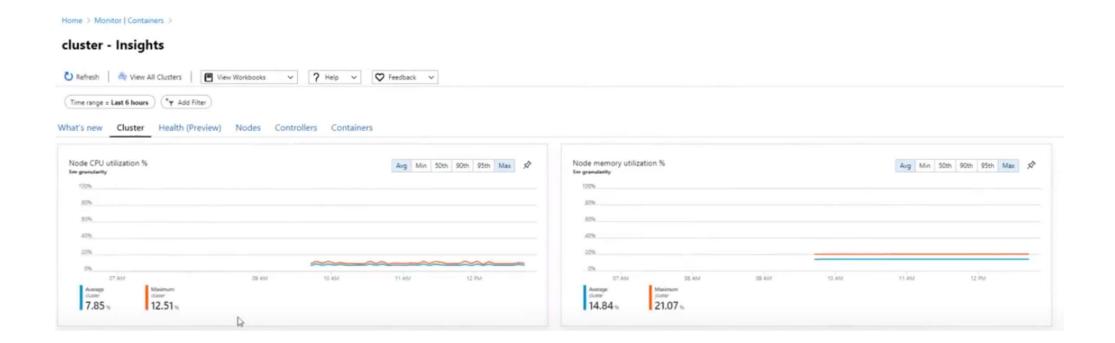
Azure Red Hat Openshift Azure Dashboard







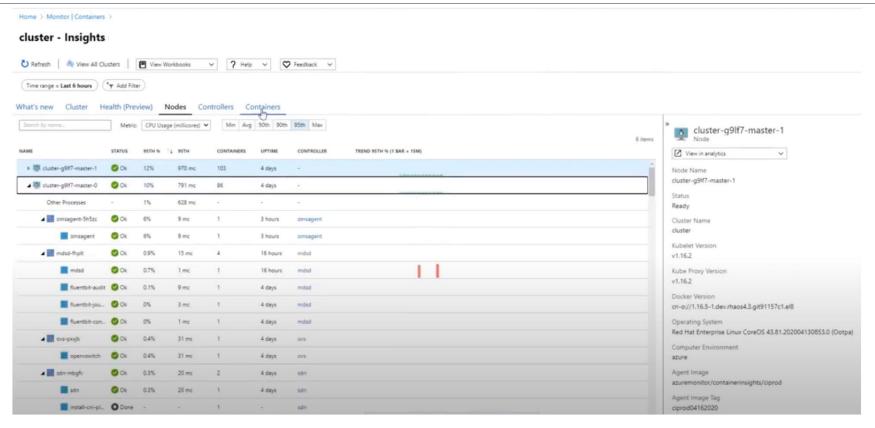
Azure Red Hat Openshift *Azure Dashboard*







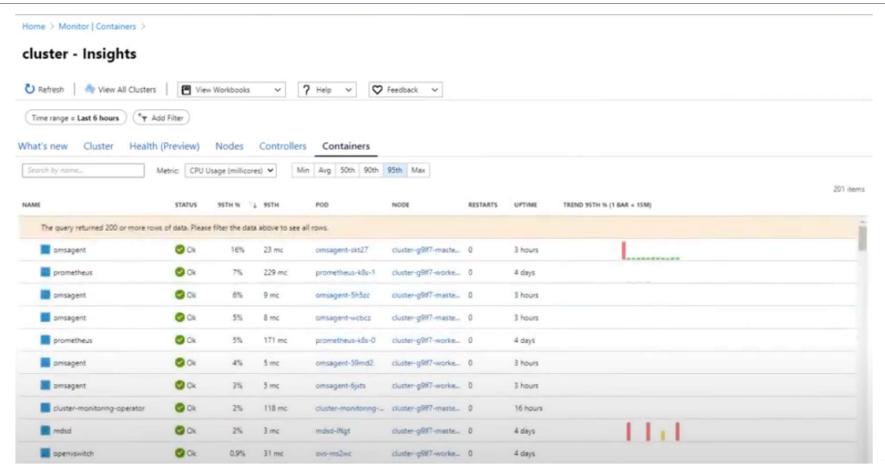
Azure Red Hat Openshift Azure Dashboard







Azure Red Hat Openshift *Azure Dashboard*







Ansible Overview *Introduction*

Simple, agentless IT automation that anyone can use

Ansible is a universal language, unraveling the mystery of how work gets done. Turn tough tasks into repeatable playbooks. Roll out enterprise-wide protocols with the push of a button.

With Ansible, you can supercharge your Red Hat deployment, bringing Ansible's simple IT automation to all aspects of your business.

Easily and quickly deploy IT services, applications and environments, remove barriers between IT teams by automating routine activities with Ansible that has compatibility with many products of different vendors.







Features and benefits

Manage complex deployments

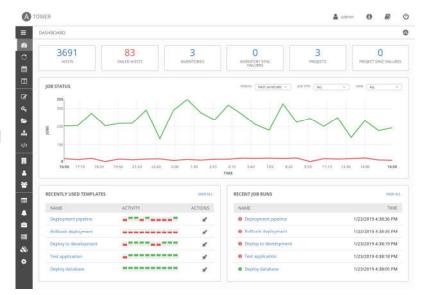
Centralize automation using Red Hat Ansible Tower—a built-in component of Ansible Automation Platform. Access a <u>visual dashboard</u>, grant <u>role-based access</u>, and <u>schedule jobs</u> with <u>real-time playbook feedback</u> across multiple geographic deployments.

Easily embed Ansible Tower into existing tools and processes with REST API and CLI.

Ansible Dashboard

The Ansible Tower dashboard provides a heads-up NOC-style display for everything going on in your Ansible environment.

As soon as you log in, you'll see your host and inventory status, all the recent job activity and a snapshot of recent job runs. Adjust your job status settings to graph data from specific job and time ranges.





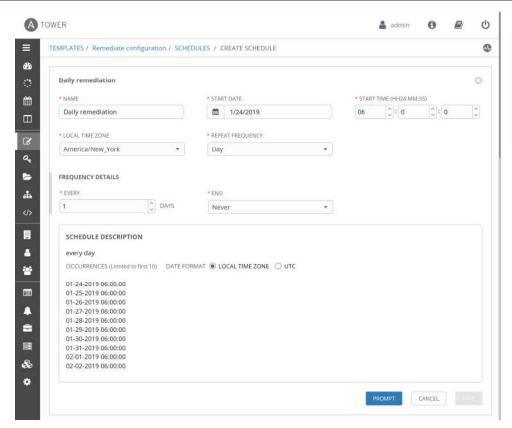


Features and benefits

Schedule Ansible jobs

Playbook runs, cloud inventory updates, and source control updates can be scheduled inside Ansible Tower - run now, run later, or run forever.

Set up occasional tasks like nightly backups, periodic configuration remediation for compliance, or a full continuous delivery pipeline with just a few clicks.



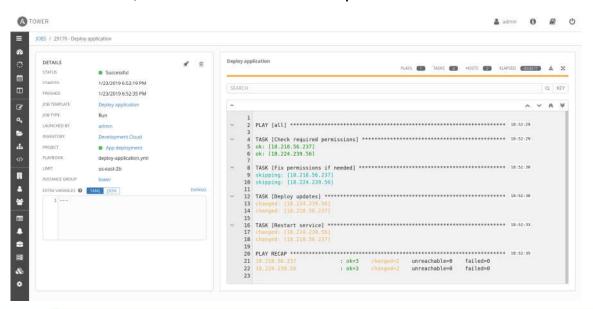




Features and benefits

Real-Time Job Status Update

Within Ansible Tower, playbook runs stream by in real time. As Ansible automates across your infrastructure, you'll see plays and tasks complete, broken down by each machine, and each success or failure, complete with output. Easily see the status of your automation, and what's next in the queue.



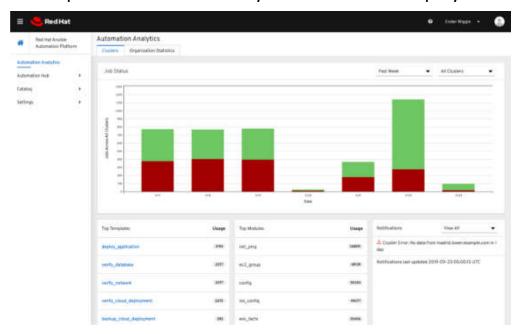




Features and benefits

Inform decisions with data

Automation Analytics—a SaaS capability that comes with your subscription—lets operations team members analyze and aggregate data, and generate reports on the status of your automation deployments.





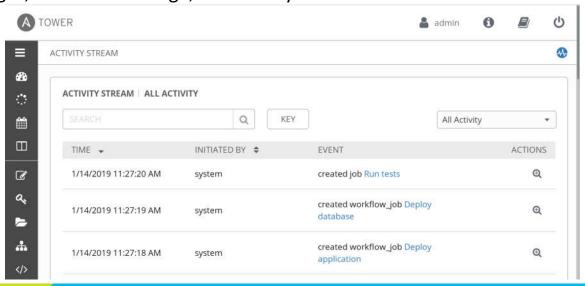


Features and benefits

Who ran what job when

With Ansible Tower, all automation activity is securely logged. Who ran it, how they customized it, what it did, where it happened - all securely stored and viewable later, or exported through Ansible Tower's API.

Activity streams extend this by showing a complete audit trail of all changes made to Ansible Tower itself - job creation, inventory changes, credential storage, all securely tracked.







Ansible on Azure Features and benefits



Migrate existing workload to Azure

Once you use Ansible to define your infrastructure, you can apply your application's playbook letting Azure automatically scale your environment as needed.

Automate cloud-native application in Azure

Ansible enables you to automate cloud-native applications in Azure using Azure microservices such as Azure Functions and Kubernetes on Azure.

Manage deployments with dynamic inventory

Via its dynamic inventory feature, Ansible provides the ability to pull inventory from Azure resources. You can then tag your existing Azure deployments and manage those tagged deployments through Ansible.





Ansible on Azure Features and benefits



Additional Azure Marketplace options

The Ansible Tower is an Azure Marketplace image by Red Hat.

Ansible Tower is a web-based UI and dashboard for Ansible that has the following features:

- Enables you to define role-based access control, job scheduling, and graphical inventory management.
- Includes a REST API and CLI so you can insert Tower into existing tools and processes.
- Supports real-time output of playbook runs.
- Encrypts credentials such as Azure and SSH keys so you can delegate tasks without exposing credentials.

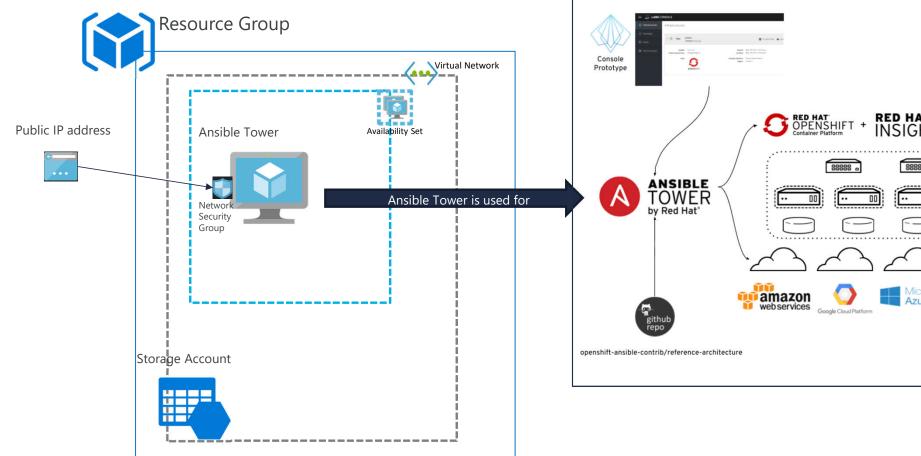
Ansible module and version matrix for Azure

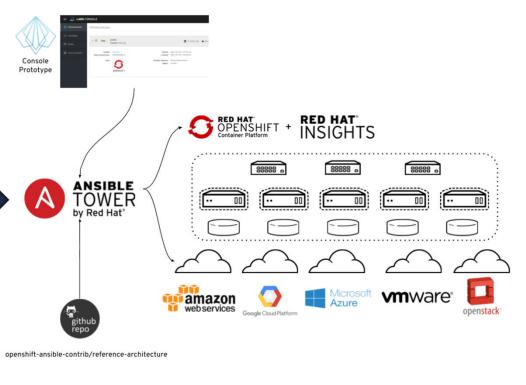
Ansible includes a suite of modules for use in provisioning and configuring Azure resources. These resources include virtual machines, scale sets, networking services, and container services. The Ansible matrix lists the Ansible modules for Azure and the Ansible versions in which they ship.





Architecture Design









Ansible Tower on Azure Components

Resource	Properties	Description
Virtual Machine	1 Ansible Tower VM	The Ansible Tower VM
Disk	1 OS Disks for the VM	The OS Disk is used for the Operating System of the Virtual Machine
Storage Account	Storage Account for Boot Diagnostics	This storage account is used to store diagnostics
Network Interface Card	1 NIC for the VM	The Network Interface Card is what connects the Virtual Machine to the Network Security Group
Network Security Group	1 NSG for the VM	The purpose of NSG is to restrict traffic from outside of the VNet to servers inside of the VNet. They are also used to restrict server to server communications inside the VNet.
Availability Set	1 Availability Set	The Azure Service that is used to ensure High Availability when 2 VMs are deployed
Public IP Address	Public IP Address for the VM	IP address for the VM
Virtual Network	Virtual Network of the VM	VNET for the routing and Inbound outbound port



THANKYOU!

Business Unit Microsoft softwareteam@techdata.it

Business Unit Red Hat ITRedHat@techdata.com





Tech Data Cloud Solution Factory

Alessandro Stefanini

Business Development Manager – Tech Data

Tech Data Solutions Value Chain

Operations

Solution **Factory**









Presales



Sales



- Leveraging Tech Data's Ecosystem of ISVs by building CTR Solutions and create joint GTM with key ISVs.
- Realizing an end-to-end product setup of new available CTR Solutions in StreamOne.
 - Managed & Unified Billing Experience
 - Business Support, Billing support, Professional and Managed Services.
- Creating awareness & demand gen. programs/campaigns.
 - Collaterals and Technical Documentation

 Providing technical guidance and support for partners in solution practices, CTR solutions and architectures.

Enabling partners on solutions practices and CTR solutions.

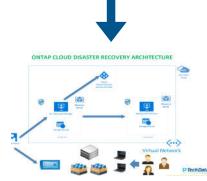


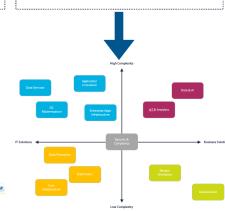




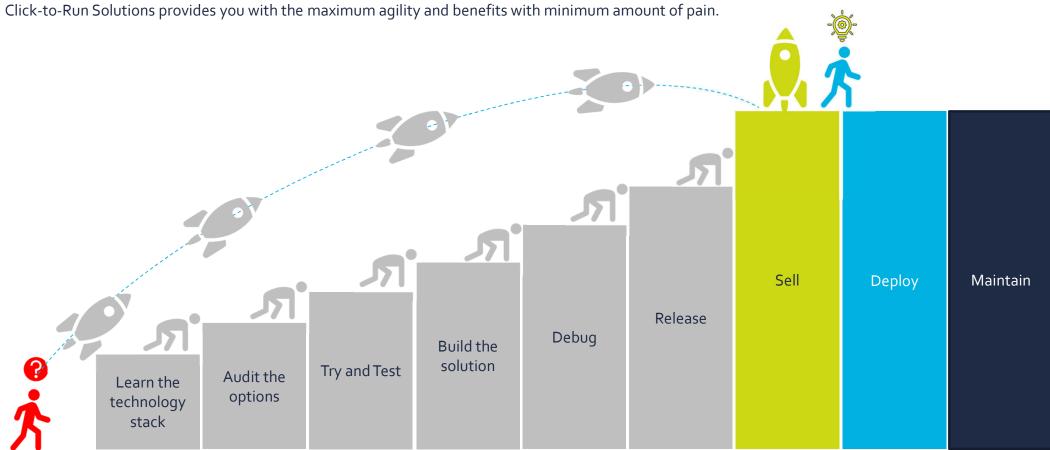






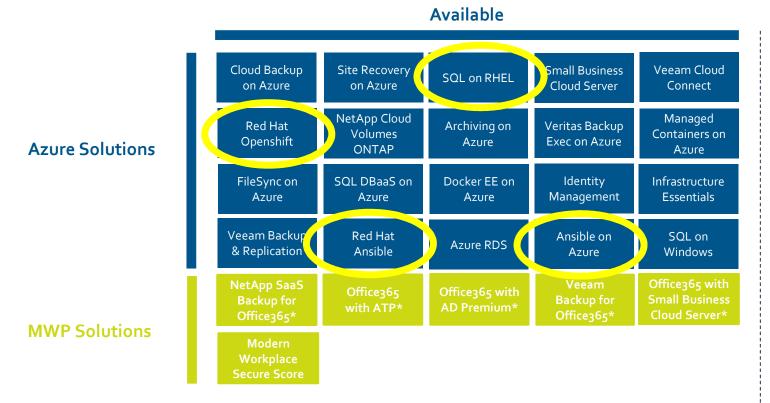


The Solution: A little bit of pre-architectural planning





Tech Data Click to Run Solutions Portfolio



NetApp CloudSync RHEL on Azure Development Sandbox Azure NetApp Files DevOps with Azure Warehouse

Upcoming

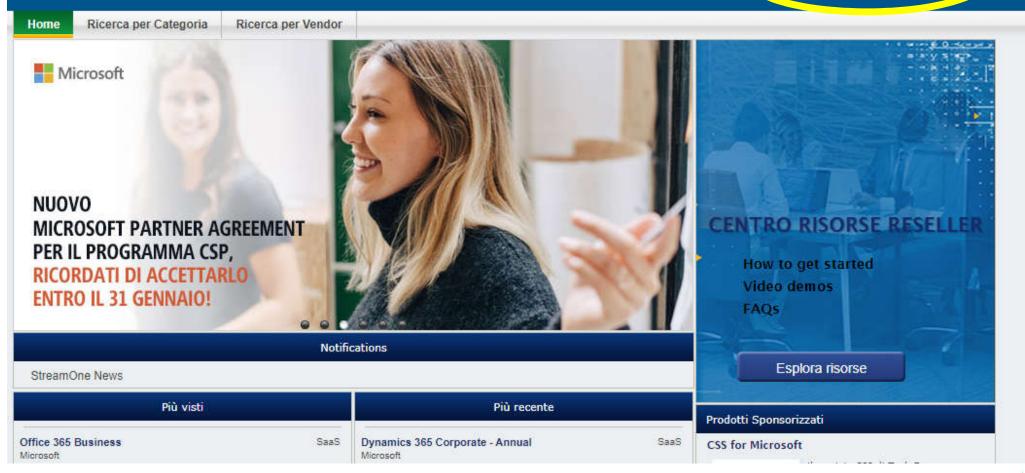






StreamOne™

Cloud Marketplace





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Microsoft Azure Solutions

Microsoft

Solve your publicase problems with proven combinations of Microsoft Azure services and related products. Whether you're just beginning in the cloud, or have years of experience developing cloud-based applications, we'll help you get started. Through our preconfigured Click-To-Run Solutions we help to remove complexity on your behalf, increasing your agility and speed to market

Dettagli

Screenshot

SaaS



Dynamics 365 Academic - Monthly

Microsoft

Microsoft Dynamics 365 Business is a set of cloud based CRM and ERP tools. This allows businesses to implement secure, automated and organised processes for finance, marketing, and sales. It consolidates customer information into a database for business users to easily access and manage. Dynamics 365 Business allows businesses to personalise customer experiences with end-to-end, outcome-focused journeys. It allows users to analyse internal and external data to identify patterns and predict outcomes using built-in reports. Microsoft's academic program allows institutions to incorporate business software into their curriculum and give students experience in dealing with ERP and CRM software.

Dettagli

Screenshot

INFORMAZIONI

INFORMAZIONI





Microsoft Azure Solutions





by Microsoft

Risolvi i problemi grazie a combinazioni comprovate di servizi Microsoft Azure e prodotti correlati. Se stai muovendo i primi passi sul cloud, oppure hai maturato anni di esperienza nello sviluppo di applicazioni basate sul cloud, siamo qui per aiutarti a iniziare. Con le nostre soluzioni click-to-run preconfigurate ti aiuteremo a eliminare la complessità, aumentando la tua agilità e velocità di immissione sul mercato.

Visualizza le caratteristiche

Nome dei prodotti

Cerca: Cercs per keyword	Annulla i filtri Visualizza:	Tutt ~
Nome	♦	Register
Azure Account Creation		+_
TD# SK45550 MFR#: MS-AZR-0145P-P		
TD-RDS-Existing Domains On Azure		+ 🖳
TD# SK98800 MFR#: TD-AzSol-Existing Domains On Azure		
Tech Data Ansible on Azure		+_
TD# SK77004 MFR#: TDANSIBLE_AZURE		
Tech Data Archiving on Azure		+_
TD# SK74770 MFR#: TD-ARCHIVING-AZURE		- ·
Tech Data Azure Active Directory Domain Services		





Business Unit Microsoft

softwareteam@techdata.it

Vito Trentadue

Pre-Sales Cloud Solution Architect – Microsoft

vito.trentadue@techdata.com

Alessandro Stefanini Business Development Manager alessandro.stefanini@techdata.com

Business Unit Red Hat

ITRedHat@techdata.com

Lorenzo Cella Technical Presales Specialist - RedHat Iorenzo.cella@techdata.com

