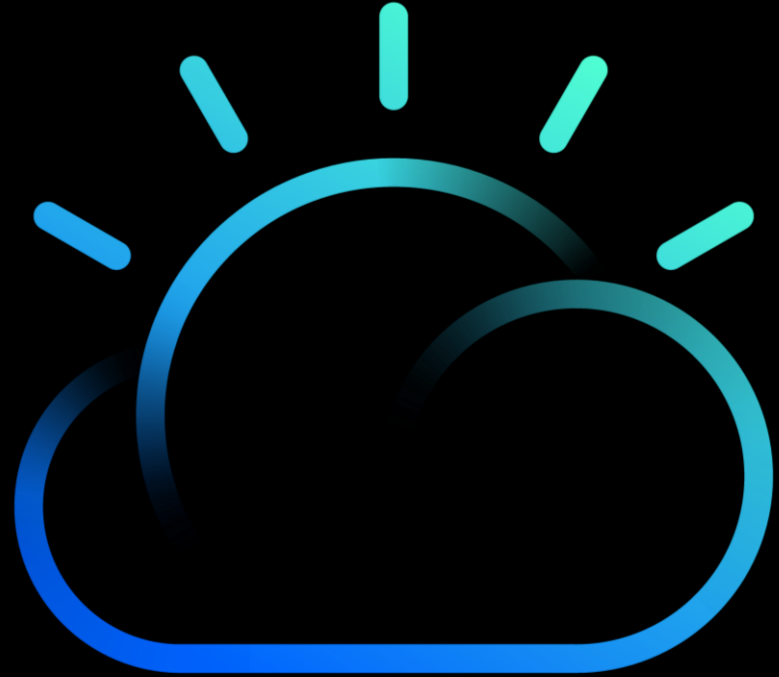


IBM Cloud Pak for Multicloud Management with Version 2.0 Updates



IBM IT Management

Current use cases

Incident
Resolution &
Outage Avoidance

Governance &
Compliance

Cost
Management

Hybrid
Application
Deployment

Infused with

AI & Automation

Delivered via

Watson AIOps

Cloud Pak for Multi-Cloud Management

Enriched by

Strong partner ecosystem

turbonomic

Sysdig

hazelcast

humio

Cloud Pak for Multicloud Management is a Hybrid Multicloud management control plane



Cloud Pak for Multicloud Management is designed as a platform allowing partners to plugin in using public APIs.

Cloud Pak for Multicloud Management Provided Function

Application Deployment and Lifecycle	Compliance Enforcement	Chargeback / License Mgmt.
Visibility/ Dashboard	Day 2 Operations (APM/Event)	SRE Tooling

IBM Product Integrations

Cloud Pak for Security	Other Cloud Paks.
Netcool Operations Insight	Q-radar

Partner Products Integration

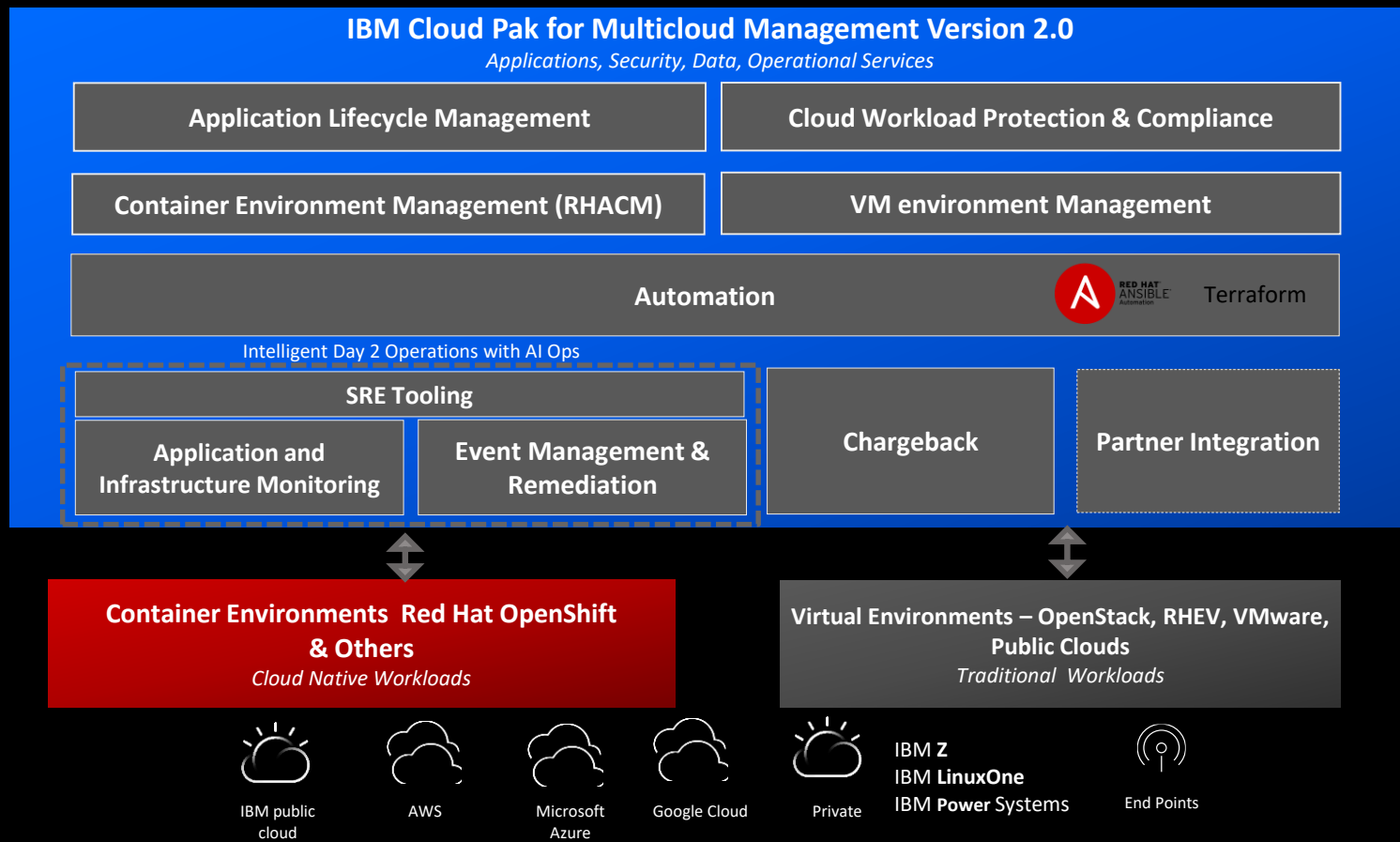
 Advance Compliance	 Application Resource Management
 Log Management	 Application acceleration
More coming...	

Cloud Pak for Multicloud Management (Hybrid Management Control Plane)

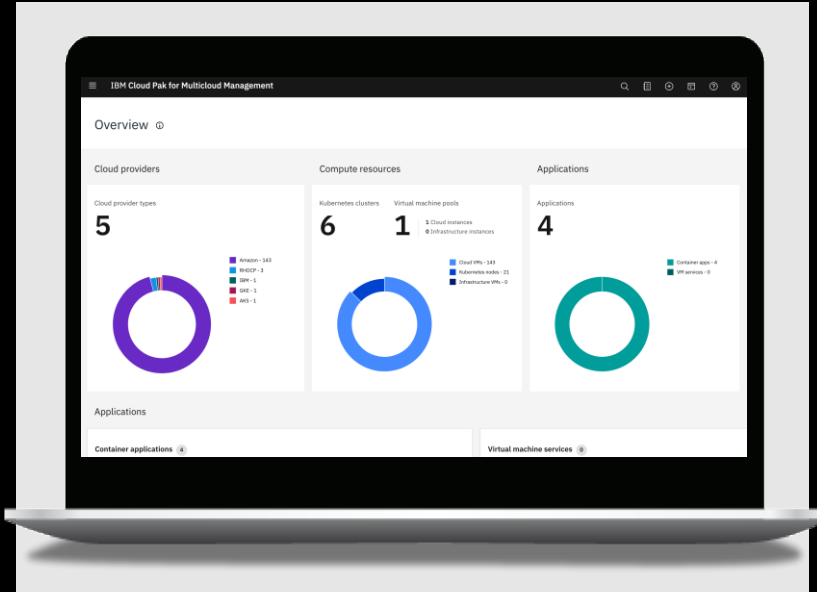
Kubernetes & Virtual Machines

 IBM public cloud	 AWS	 Microsoft Azure	 Google Cloud	 Private	VMware RHV OpenStack	IBM Z IBM LinuxOne IBM Power Systems	 End Points
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Overall Solution Capability



Cloud Pak for Multicloud Management

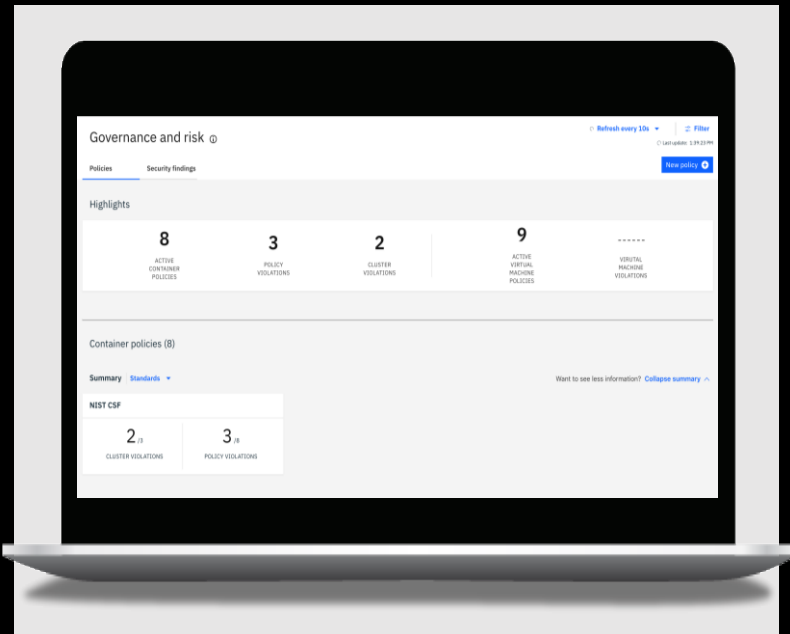


Intelligent Governance, Risk,
Compliance

Intelligent Cost and Asset
Management

Intelligent Hybrid Application
Management

Intelligent Compliance and Governance for Hybrid Cloud Management



Governance & Compliance Management

Enforces policies and ensure compliance across hybrid infrastructures and applications

Scans and monitors workloads continuously for vulnerabilities and mutations

Creates auditability of all policies, known vulnerability exposures and regulatory requirement tracking

Single console to remediate GRC vulnerabilities regardless of deployment model

Unified Policy Creation and Enforcement in a Hybrid Cloud World



IBM Cloud Pak for Multicloud Management

Governance and risk / Policies /

Create policy ⓘ

Cancel Create

Namespace * ⓘ
The namespace of your security policy. ▾

Specifications * ⓘ
Begin typing to search for label to select ▾

Cluster binding * ⓘ
Begin typing to search for label to select ▾

Standards ⓘ
Begin typing to search for label to select ▾

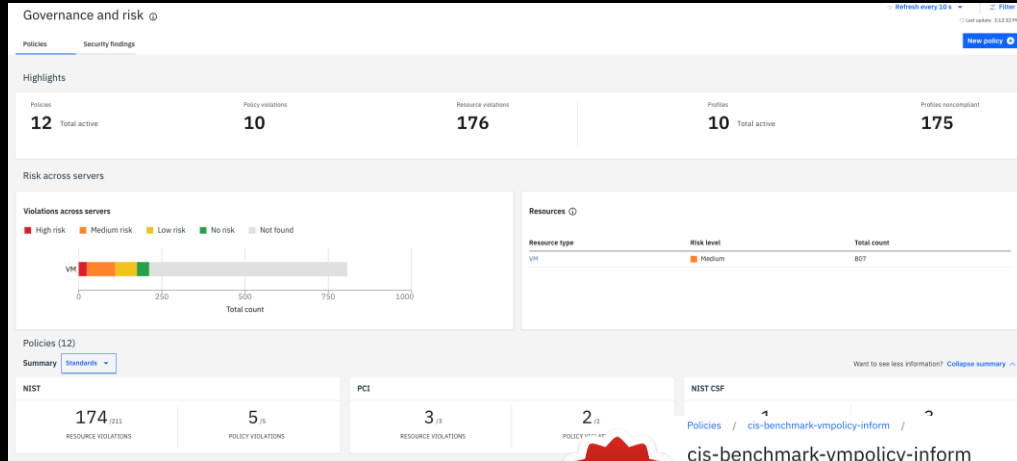
Categories ⓘ
Begin typing to search for label to select ▾

Controls ⓘ
Begin typing to search for label to select ▾

```
6 annotations:
7   policy.mcm.ibm.com/standards:
8   policy.mcm.ibm.com/categories:
9   policy.mcm.ibm.com/controls:
10 spec:
11   complianceType: musthave
12   remediationAction: inform
13   disabled: false
14   namespaces:
15     exclude: ["kube-*"]
16     include: ["default"]
17 ---
18 apiVersion: mcm.ibm.com/v1alpha1
19 kind: PlacementBinding
20 metadata:
21   name: binding-policy-grc
22   namespace:
23   placementRef:
24     name: placement-policy-grc
25   kind: PlacementPolicy
26   apiGroup: mcm.ibm.com
27 subjects:
28   - name: policy-grc
29     kind: Policy
30     apiGroup: policy.mcm.ibm.com
31 ---
32 apiVersion: mcm.ibm.com/v1alpha1
33 kind: PlacementPolicy
34 metadata:
35   name: placement-policy-grc
36   namespace:
37 spec:
38   clusterLabels:
39     matchExpressions:
```

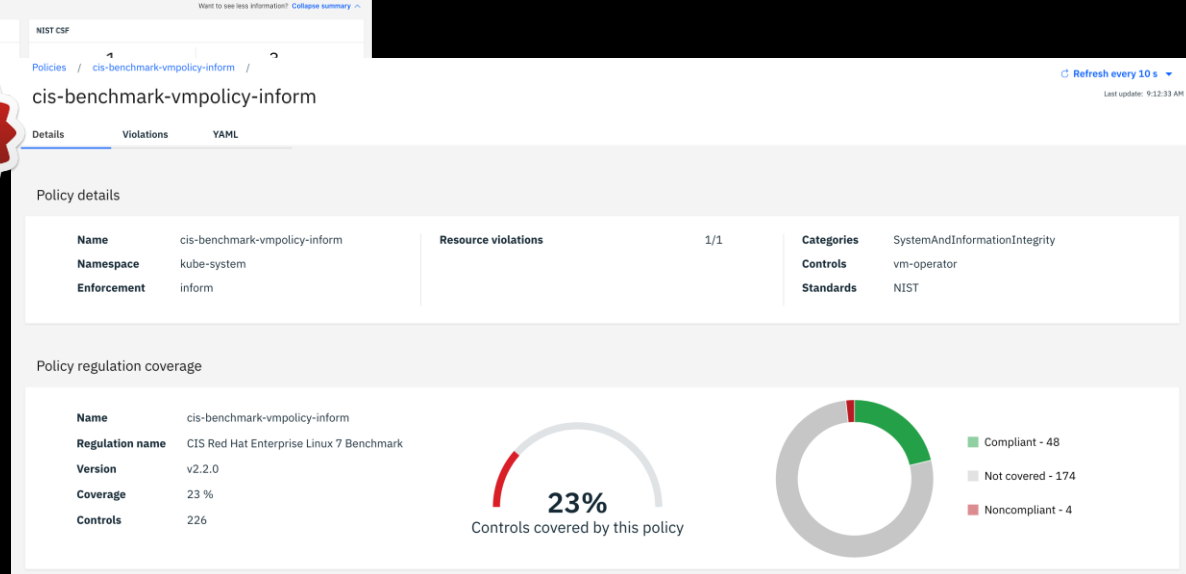
Build policies with pre-built configurations to accelerate a repeatable **hybrid governance model**. Group policies using labels to rapidly measure regulatory compliance posture for requirements such as **HIPAA, FISMA, NIST and PCI**

Unified Hybrid Policy Enforcement & Management



This means consistent policy placement, auditability, and enforcement across VM and Containerized applications.

From a single module support full auditability and visibility of policies across all your hybrid applications



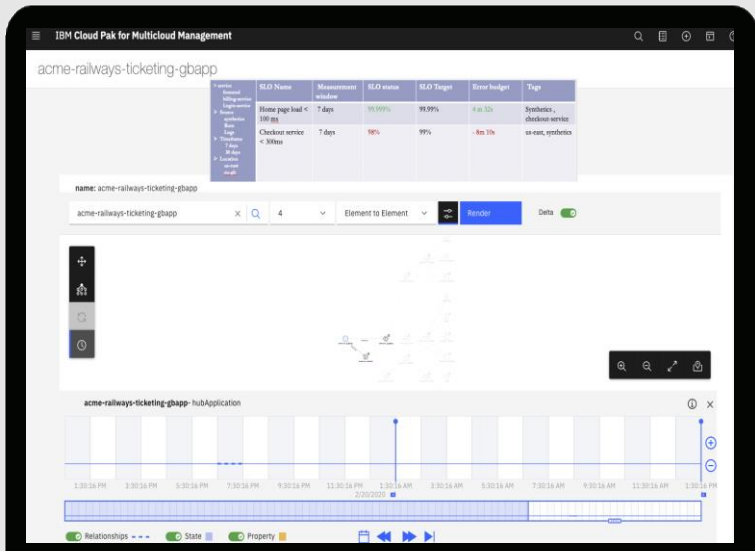
Accelerate SREs with Tooling for Hybrid Applications



Bastion Control –

- Enables a secure connection to all your servers, even those behind a firewall. This results in a single unified console bringing together all regions and all applications for full visibility across deployment models and regions.
- Enables session replay that drives audit capability, compliance, and SRE postmortem reviews. This allows SRE teams to have a single source of truth to review and provide feedback for future incident response and resolution.

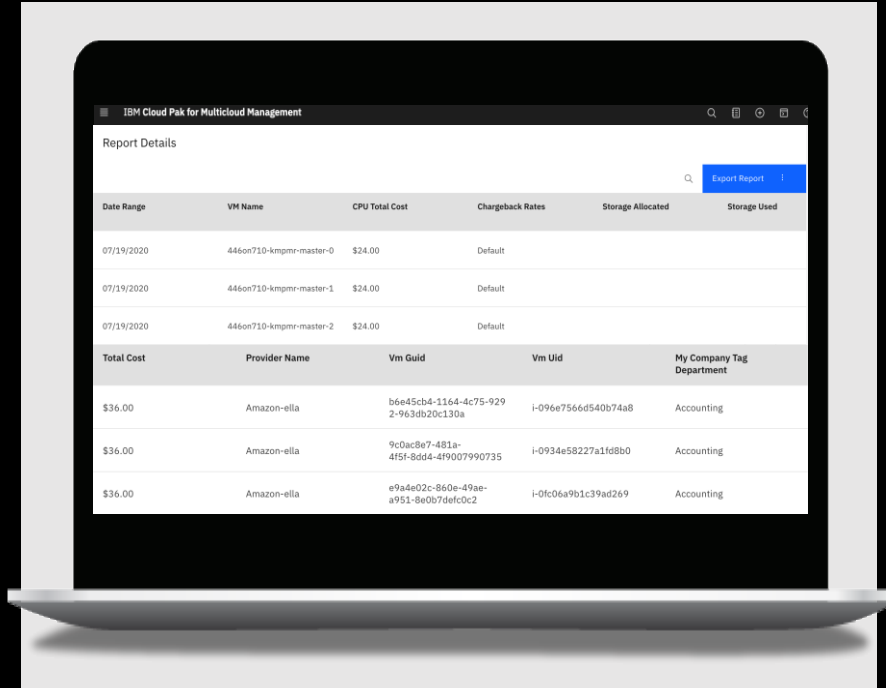
ChatOps – Accelerate remediation actions for incidents and drive automation by connecting to your preferred tools such as PagerDuty and Slack, directly from the Cloud Pak for Multicloud Management



NEW

Declarative Model for SLOs – Natively build, monitor and enforce SLOs, error budgets. Define SLO targets, error budgets, and monitor SLO status continuously with synthetic testing natively available. By using this feature, the SRE can create and ensure adherence to the objectives that are jointly determined with development.

Intelligent Cost And Asset Management



IBM Cloud Pak for Multicloud Management

Report Details

Export Report

Date Range	VM Name	CPU Total Cost	Chargeback Rates	Storage Allocated	Storage Used
07/19/2020	446on710-kmpmr-master-0	\$24.00	Default		
07/19/2020	446on710-kmpmr-master-1	\$24.00	Default		
07/19/2020	446on710-kmpmr-master-2	\$24.00	Default		

Total Cost	Provider Name	Vm Guid	Vm Uid	My Company Tag Department
\$36.00	Amazon-ella	b6e45cb4-1164-4c75-9292-963db20c130a	i-096e7566d540b74a8	Accounting
\$36.00	Amazon-ella	9cdac8e7-481a-4f5f-8dd4-4f9007990735	i-0934e58227a1fd8b0	Accounting
\$36.00	Amazon-ella	e9a4e02c-860e-49ae-a951-8e0b7defc0c2	i-0fc06a9b1c39ad269	Accounting

IT Cost Modeling, Showback, and Chargeback - have all been enhanced with new visibility features to find resources and more detailed report generation/exporting.

Chargeback generation - steps have been simplified to 3 key steps:

- Define rate cards
- Assign rate cards
- Generate the chargeback report.

Usage Quotas– Build governance to resource usage by generating enforceable limitations

License Advisor GA



IBM Cloud Pak for Multicloud Management

Products /
VPC for Cloud Paks in April

Product Name	Value/Threshold	
IBM Cloud Pak for Applications	11/100	✓
IBM Cloud Pak for Integration	21/50	✓

IBM Cloud Pak

Products / IBM Cloud Pak for Integration /
License usage by cluster
Product: IBM Cloud Pak for Integration
Period: April 2020, Peak date: 2020-04-01

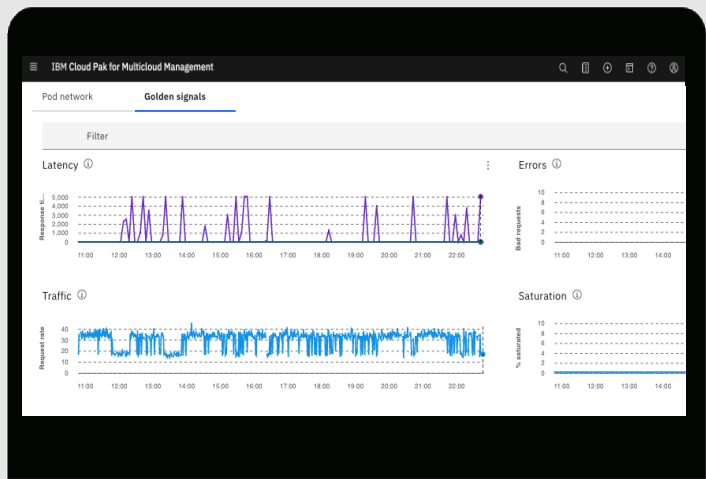
Cluster Name	VPC
cluster-demo-fyre	5
lmt-demo-softlayer	16
Total	21

License Advisor supports aggregation of license data across hybrid, multicloud environments including management of IBM License usage.

Operators now have a detailed view of license usage per Kubernetes cluster as well as bundled product utilization.

License Advisor gathers source of metered license usage data from ILMT and License Service.

Application Modernization and Management



Application Management

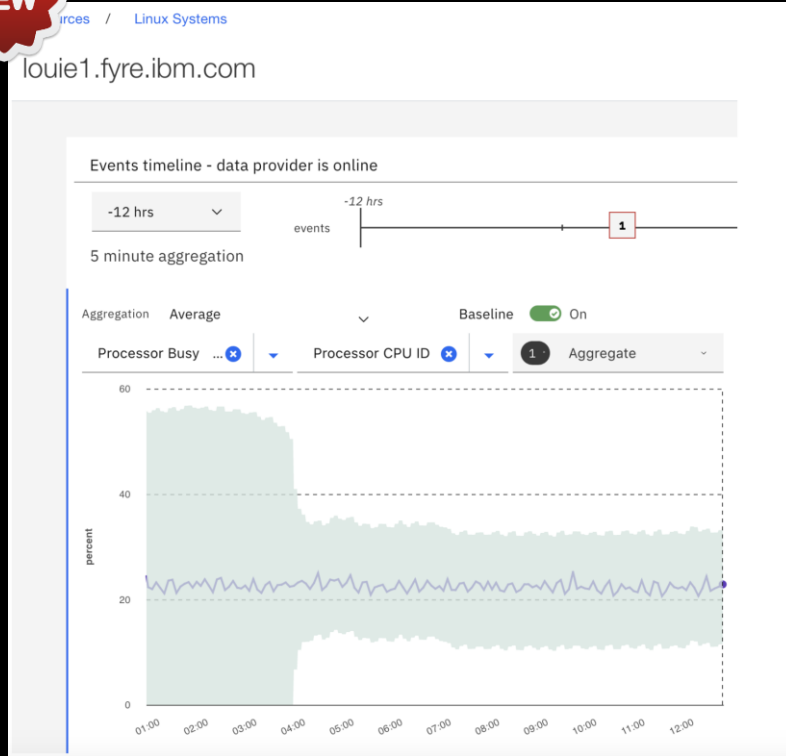
Deploy and move hybrid applications seamlessly across cloud deployments

Automatic incident routing, bringing together DevSecOps teams to resolve complex faults fast

Proactively prevent application bottlenecks and performance issues with real time metrics

Intelligent Alert Management: Predictive Insights

NEW



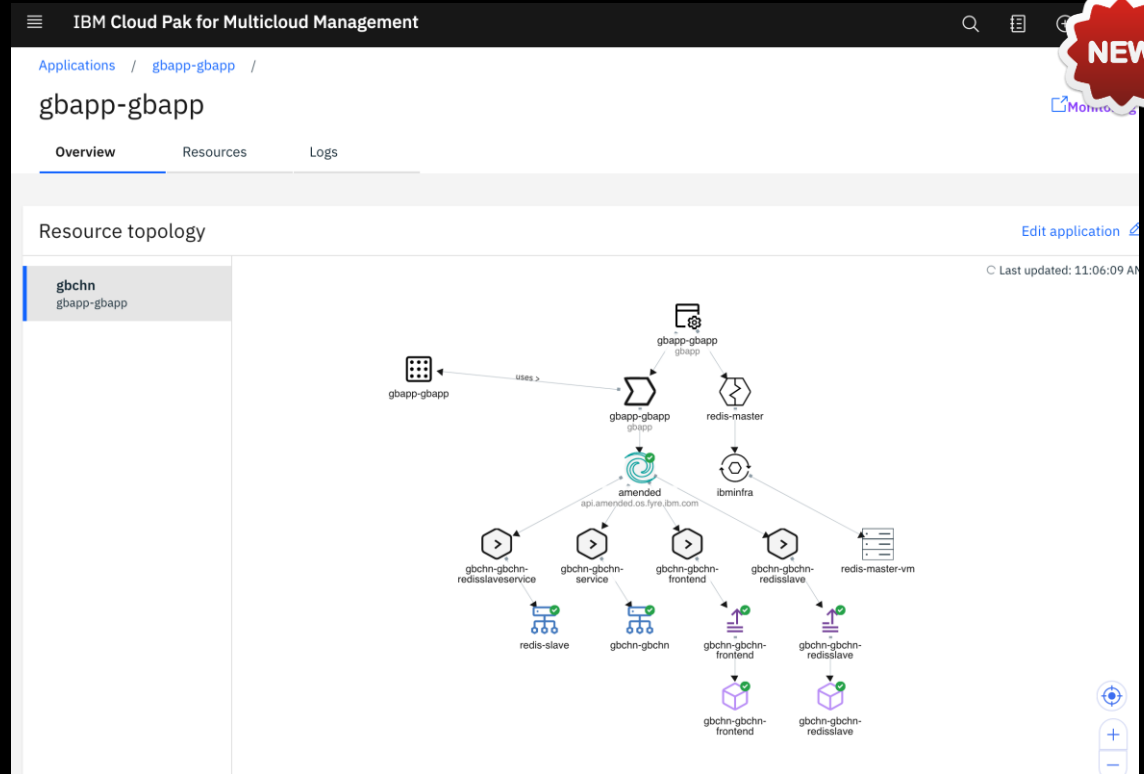
Real time performance analytics with anomaly detection to set increasingly more accurate dynamic thresholds leveraging machine learning, rather than manually managing thresholds

Hybrid Application and Discovery Model

Hybrid Application Discovery Model allows operators to onboard and manage an application built from both cloud native and a traditional deployment environment.

This model creates impactful capabilities for Kubernetes and VM-based deployments:

- Dynamically move your containerized workload to different Clusters with a simple change to placement policy
- Get visibility to Application topology distributed across your VMs and Cloud
- Get visibility into VM status from Topology



IBM Cloud Pak for Multicloud Management

- Observe environments >
- Automate infrastructure >
- Manage applications
- Govern risk
- Monitor health >
- Administer >

This update allows developers to quickly access components for application modeling while providing the IT Ops team a secure consistent way to respond to requests.

Self-Service Capabilities with a Service Library

Additional self-service capabilities in this release allow developers to provision infrastructure and application components from a predefined service flow.

IBM Cloud Pak for Multicloud Management

Manage Service Library

default

Templates Services Applications

All Services (27)

Cluster Lifec... (14)

Cluster Lifecycle Services

Hybrid Cloud (3)

Application S... (0)

CloudServices (3)

VMs (1)

Virtual Machi... (5)

Search Services

Import Service +

Create Service +

Name ▾

Date Modified ▾

>	serviceNS2 Namespace: default	1	05/20/2020 4:00 PM	⋮
>	serviceNS1 Namespace: default	1	05/20/2020 4:00 PM	⋮
>	VMTest Globally Accessible	1	05/20/2020 3:00 PM	⋮
>	Service Now CMDB add and Delete record Globally Accessible	1	05/20/2020 2:02 PM	⋮

NEW

Operator based install: Simplified Install & Upgrade

- 22 Operators (Some in Go, Many in Helm)
- Helm charts are wrapped in operators
- Constant health checks of every system component.
- Deployment of one Cloud Pak for Multicloud Management operator by the user and the rest install automatically.



Go Operators allows developers to write the operational logic for more flexibility to customize



Helm is used as a chart manager and supports install and upgrades

Watson AIOps – Solution Overview

Understand your environment

Unstructured Data

- Logs
- Tickets
- *Future: chats, collaboration*

Structured Data

- Topology
- Metrics
- Events
- Alerts

Input
Data

to
AIOps



IBM AIOps

- Combine signals across data channels
- Unstructured data analysis to detect hidden anomalies and identify similar incidents
- Filter and triage to support and streamline efforts

Send
Insights

to SREs

Improved Incident Resolution

- ✓ Insights, advice and next-best-actions to accelerate workflow
- ✓ Delivered in ChatOps for teams to act on in real-time
- ✓ Integration to external tools & dashboards for stakeholders and reporting

Thank you