Day 0 considerations for IT Operations to improve Observability and Efficiency

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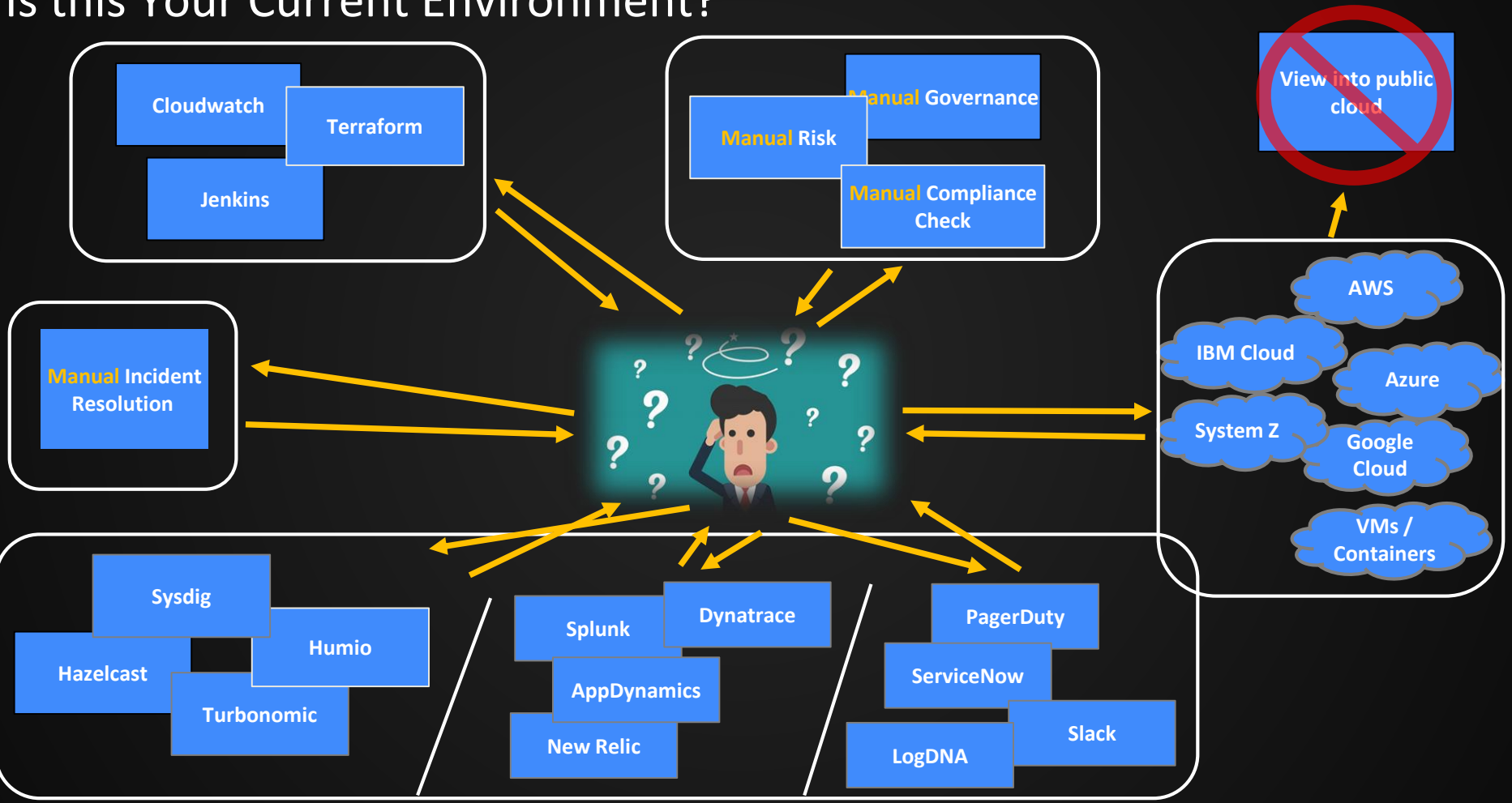
“What is Day 0” ?

Day 0: Requirements and Design

Day 1: Installation and Initial configuration to a working state

Day 2: Ready to begin providing services

Is this Your Current Environment?



Common Business Problems to Address

“I need full visibility across my entire hybrid multi cloud environment so that I can mange effectively and efficiently”

“I need to be able to detect problems across my environment before they negatively impact my clients”

“I need to be able to automatically perform repeatable tasks across my cloud environment eg. provision infrastructure, deploy/move apps, etc.”

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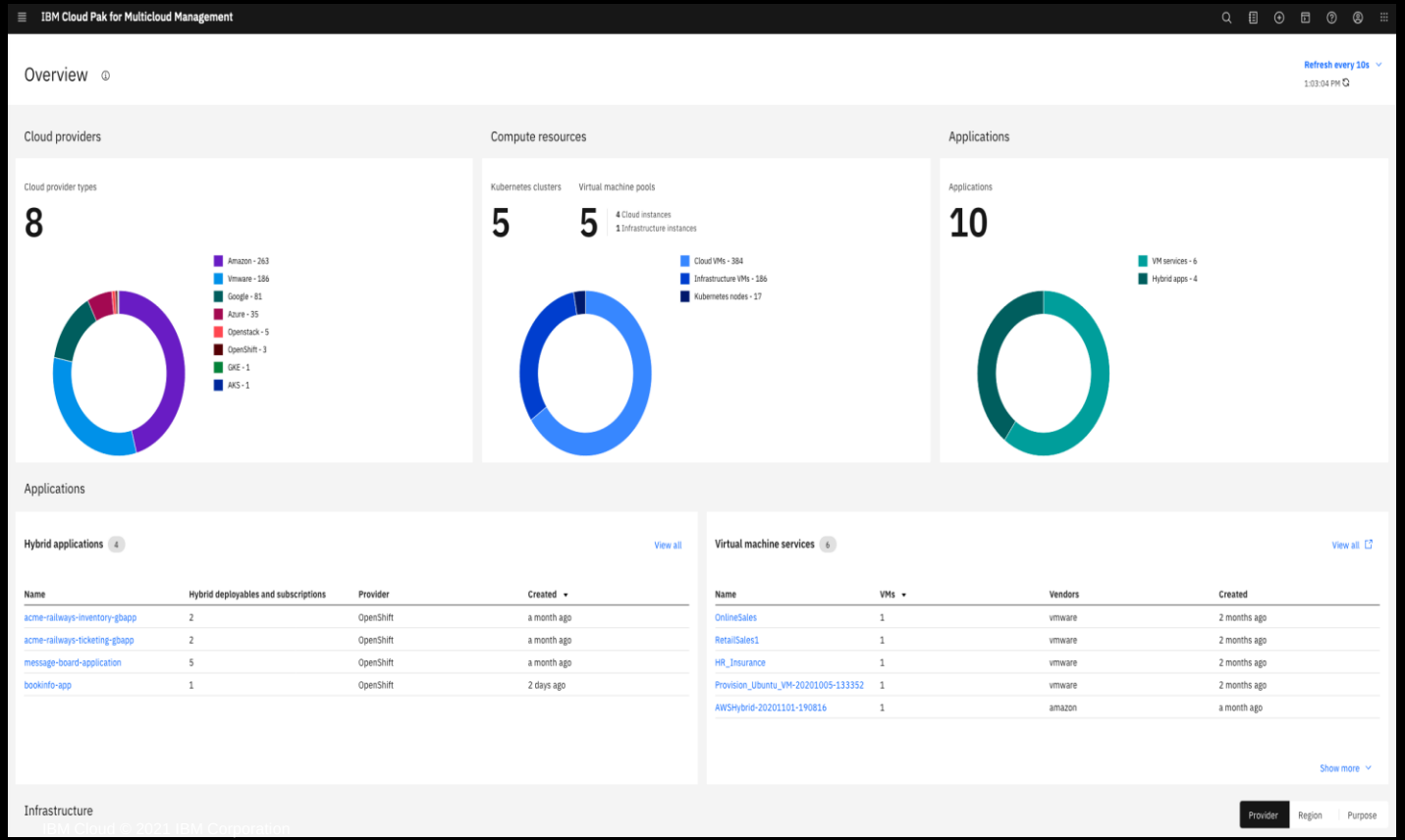
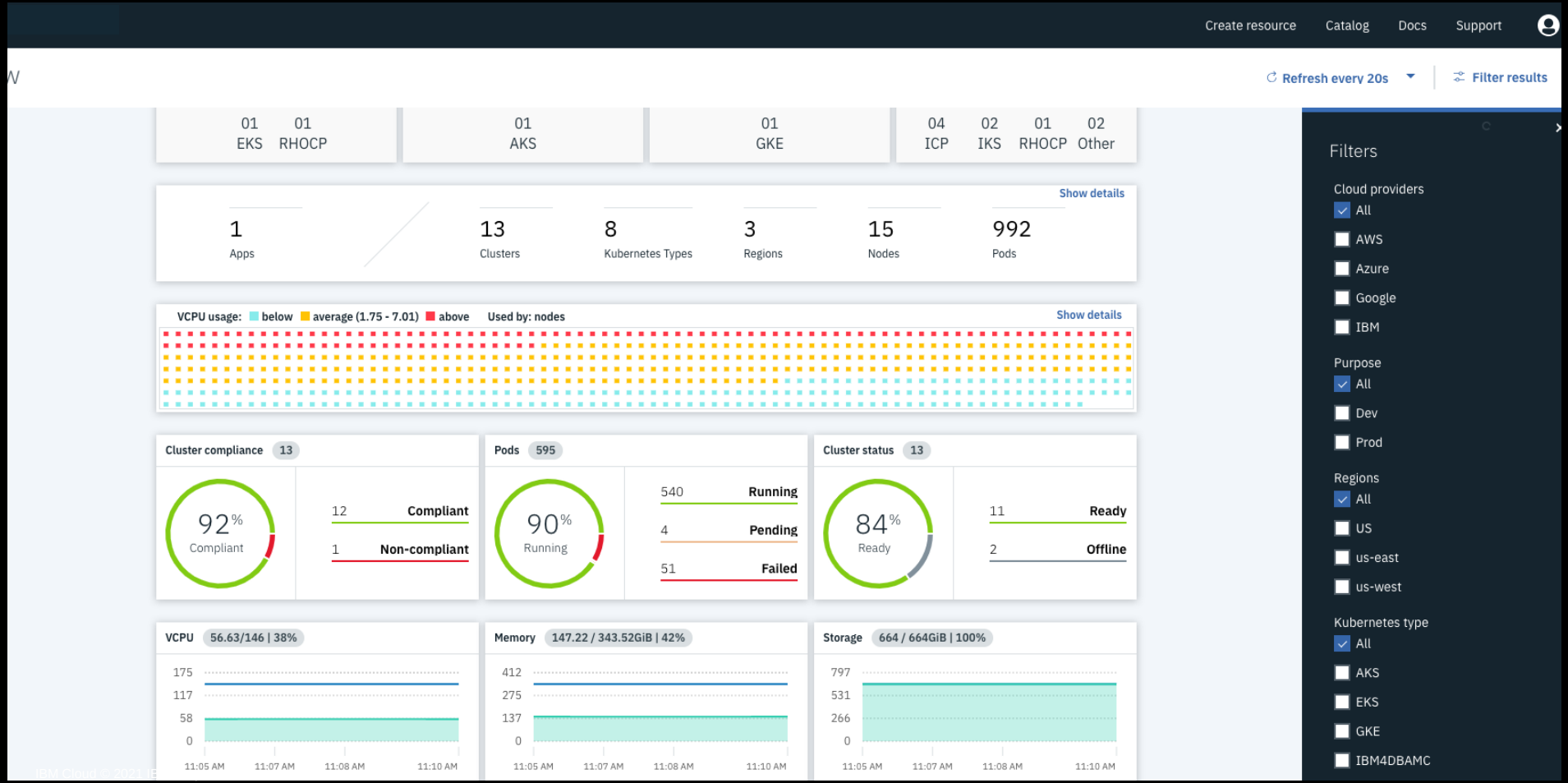
Overview Page: Single Pane of Glass for all your clusters virtual machines
A dashboard to view your clusters and VMs by cloud



- Multicloud Overview Dashboard
- Organize your clusters and VMs by clouds
- View compliance and health status

Overview Page (more) : Check compliance & health status of all your clusters



Demo (04:04 mins)

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Simplify monitoring for modern applications

Learn from the SRE discipline – and focus on the golden signals

Latency

The time it takes to service a request

Errors

Trend view of request error rate

Traffic

Demand being placed on the system

Saturation

View of utilization against max capacity

Symptoms

Causes

Why monitor golden signals?

- Golden signals are a common language to monitor across technologies and clouds, simplifying communication and troubleshooting without having to be an SME
- Golden signals are a direct measure of signals that impact the end user, making it clear when an important issue occurs
- Waste less time reacting to unclear or unnecessary alerts

Demo (02:56 + 03:14 mins)

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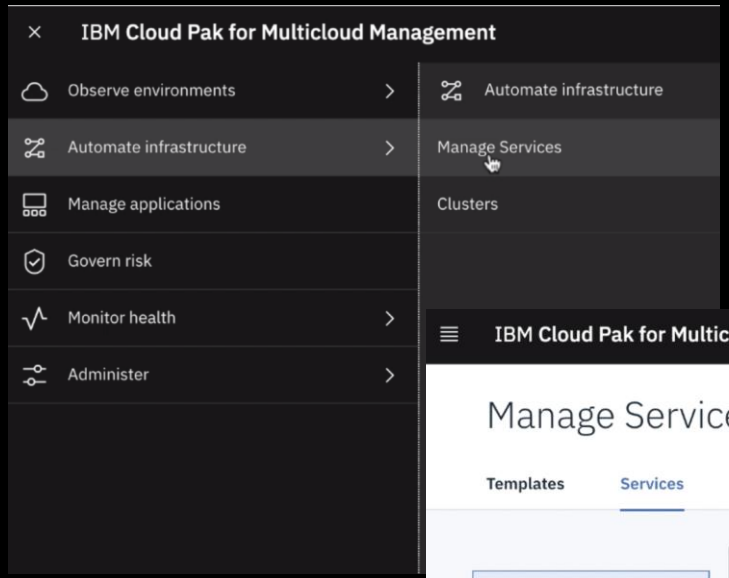
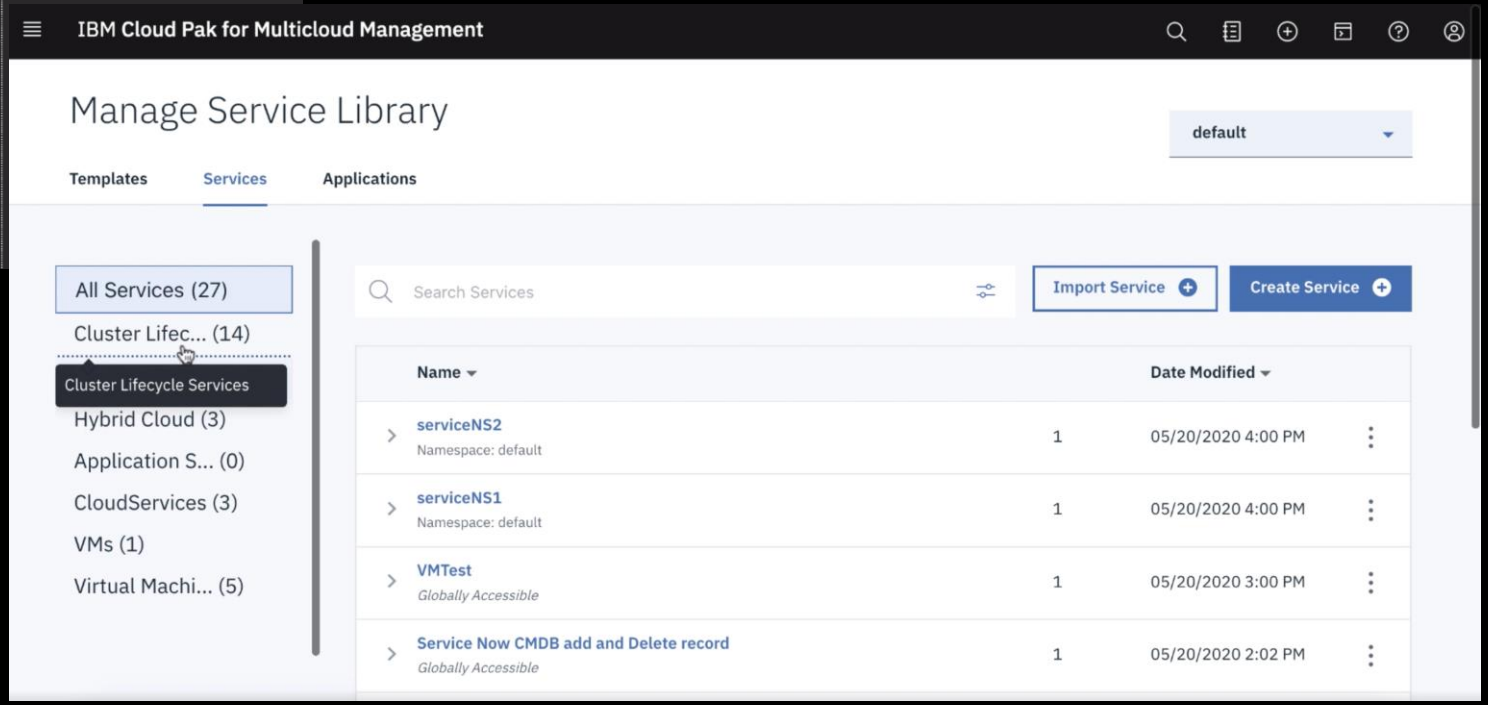
Self-Service Capabilities with a Service Library

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





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

Personas and key use-cases

Todd, IT Operations

- I want to use a UI-driven way to compose service flows
- I want to be able define a complex service flow comprising of provisioning VMs + kubernetes cluster + deploy an application
- I want a library of deployable services to publish these new services for Jane to use.

Jane, Development Owner

- ✓ I want to see the list of available services that my team can use to provision infrastructure and services for their application.
- ✓ I want to see a list of service instances that have been provisioned in my team's account.

Services Library is the consumption console for self-service

Todd creates services to provision infrastructure

Optionally, composes Applications using app definition as part of the service flow

Optionally Tests services

Publishes services to the Service Library

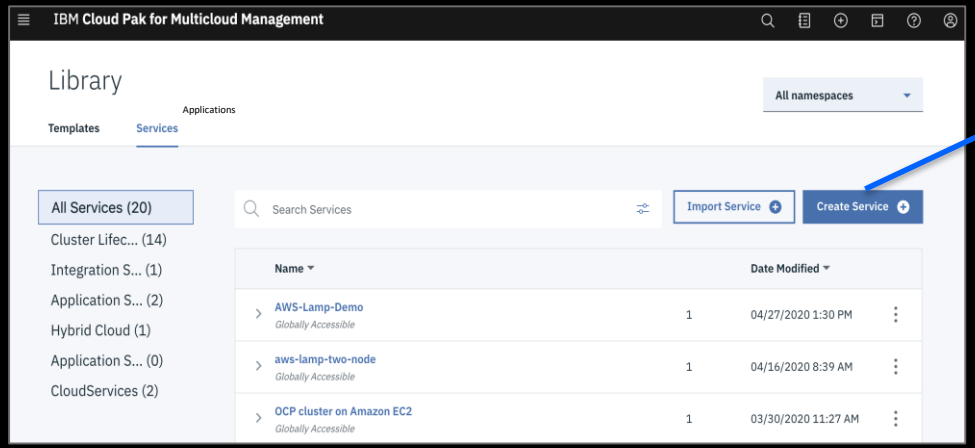
Assigns published services to users.

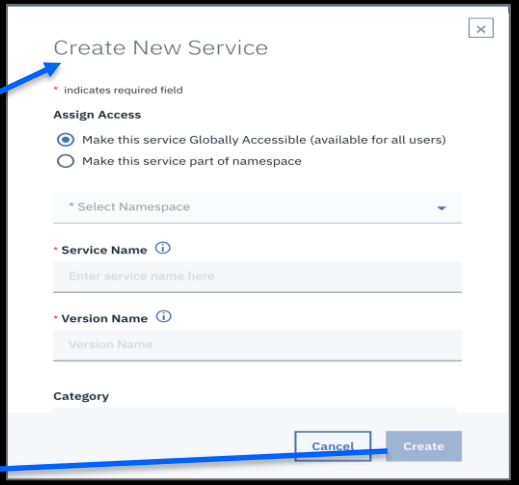
Jane can view services in the Service Library under different categories

Jane provisions services from the Service Library

Can spin up clusters, VMs and deploy applications from the Service Library

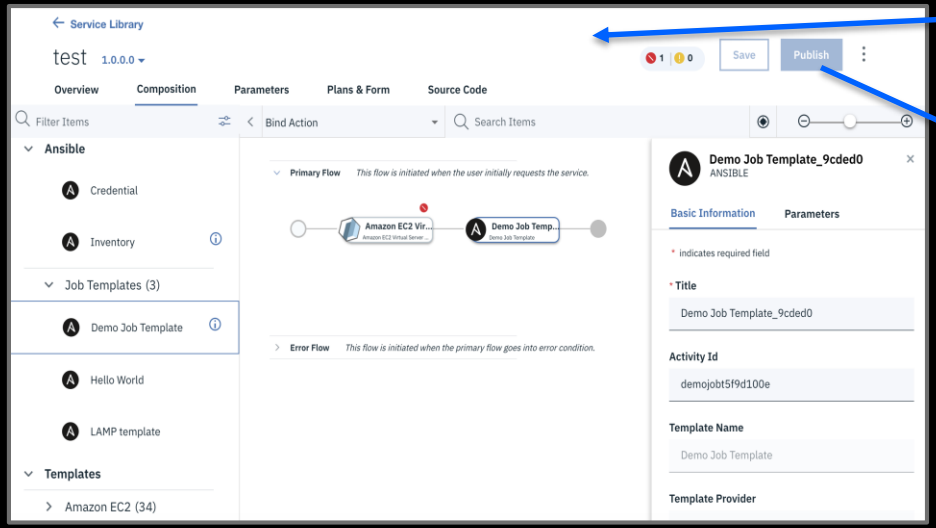
Can see the list of provisioned services in her account

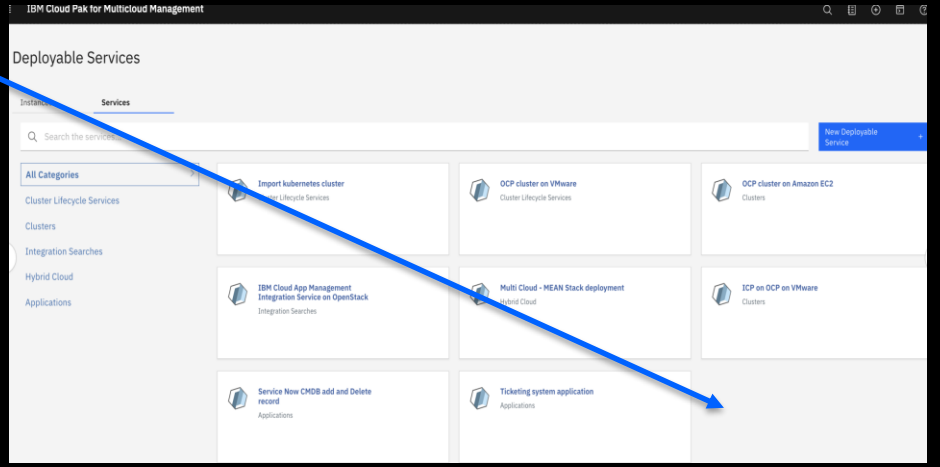




Service Creation flow

Todd, IT Ops

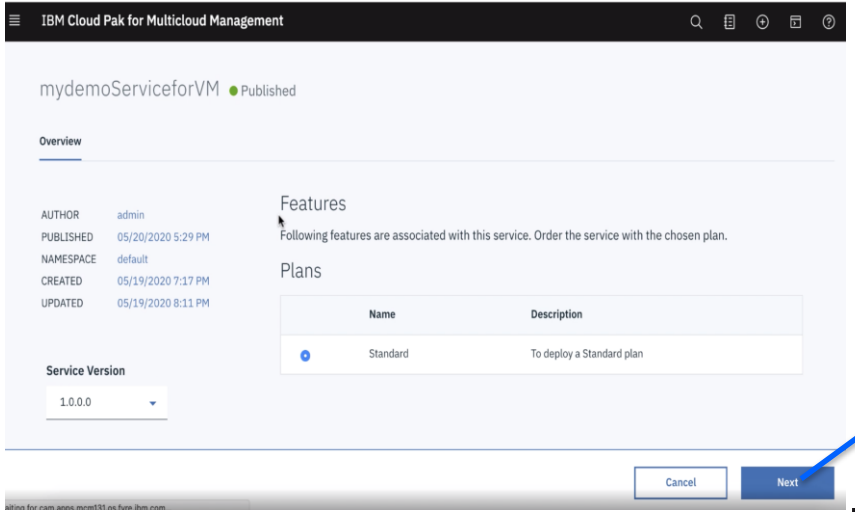


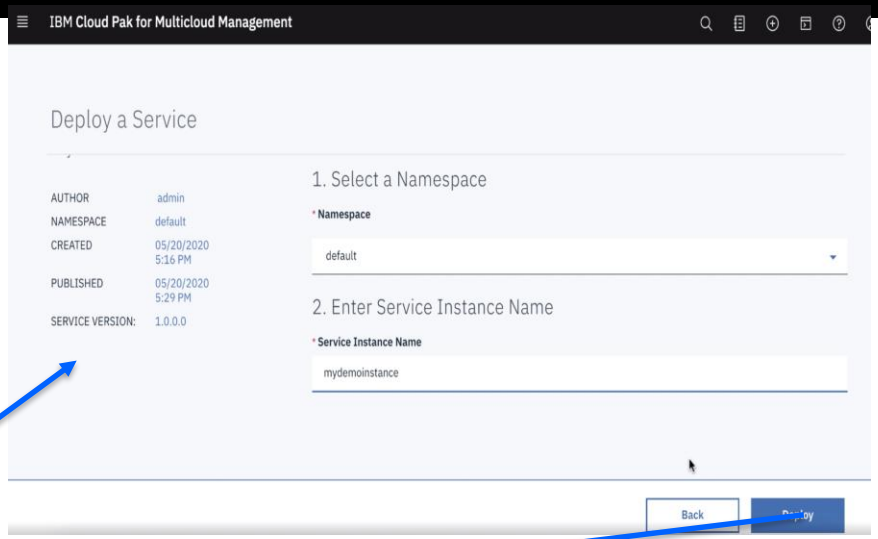


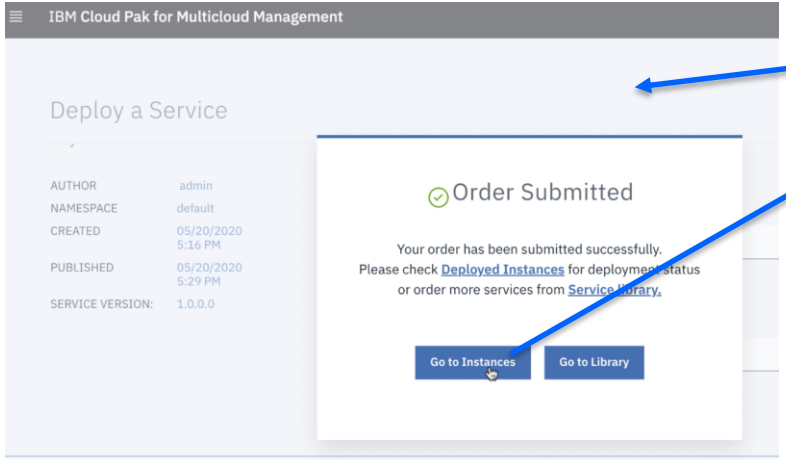
Drag and drop canvas to easily create service flows

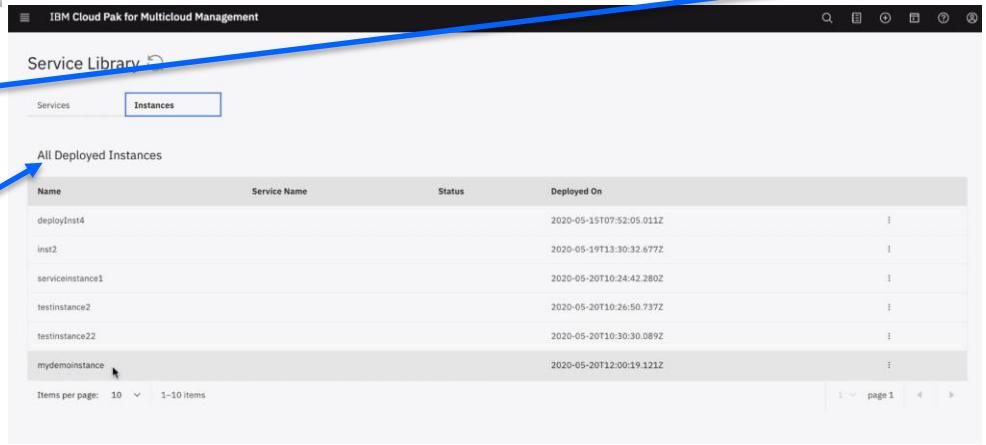
Published Services show up in the Service Library

Jane flow to provision a service instance from the Service Library









Demo (02:43 mins)

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Approach to SLO / SLI

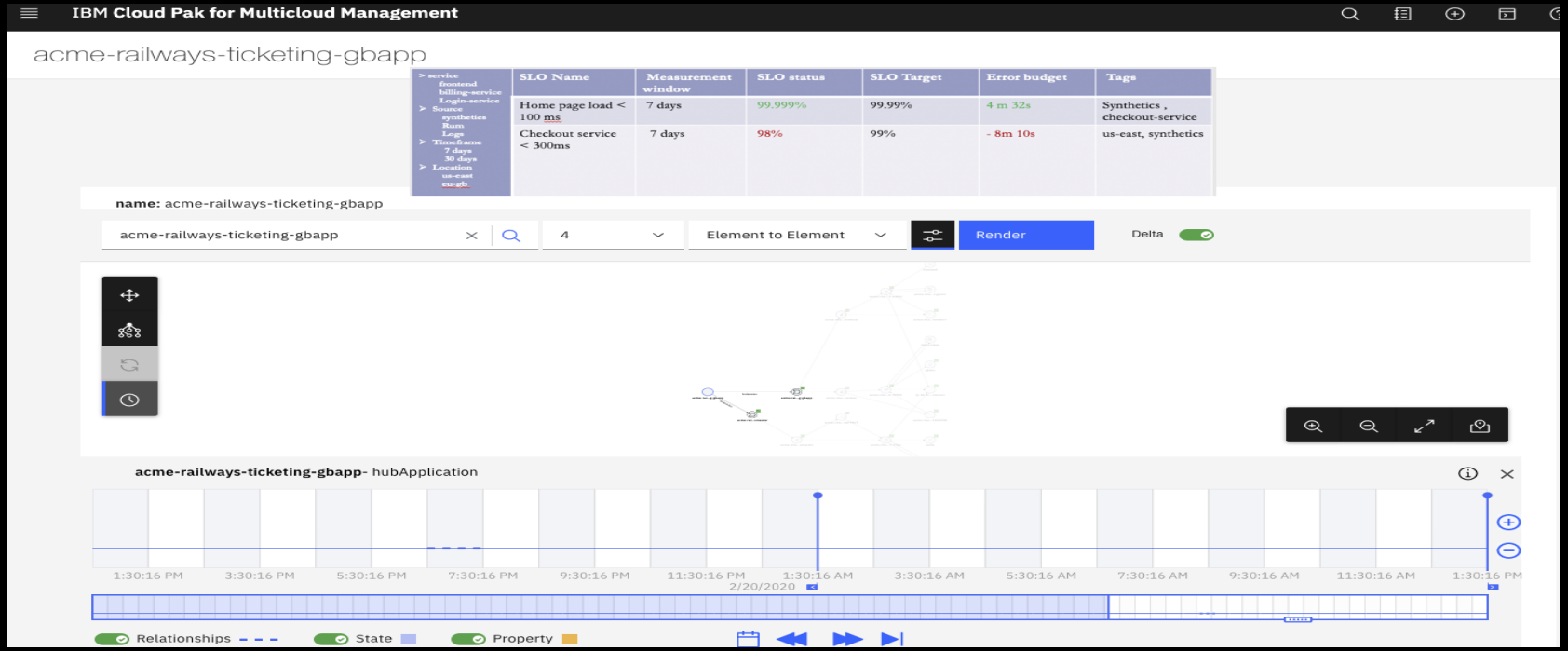
1	2	3	4	5	6	7
Identify system boundaries	**Articulate the capabilities**	**Explain what makes it available**	**Define SLI**	**Baseline**	**Apply an SLO**	**Reiterate**
Expose capabilities to external customers / components	Define capabilities exposed by each system	Plain-English definition of “available” for each capability	Define corresponding technical SLIs	Start measuring to get a baseline	Define SLO targets (per SLO or per Capability)	reiterate / refine over time

SLO numbers need to be
- What the team actually commits to supporting
- What the organization actually commits to supporting
- Reflective of technical reality

SLOs represent an ongoing commitment

When in doubt, measure first

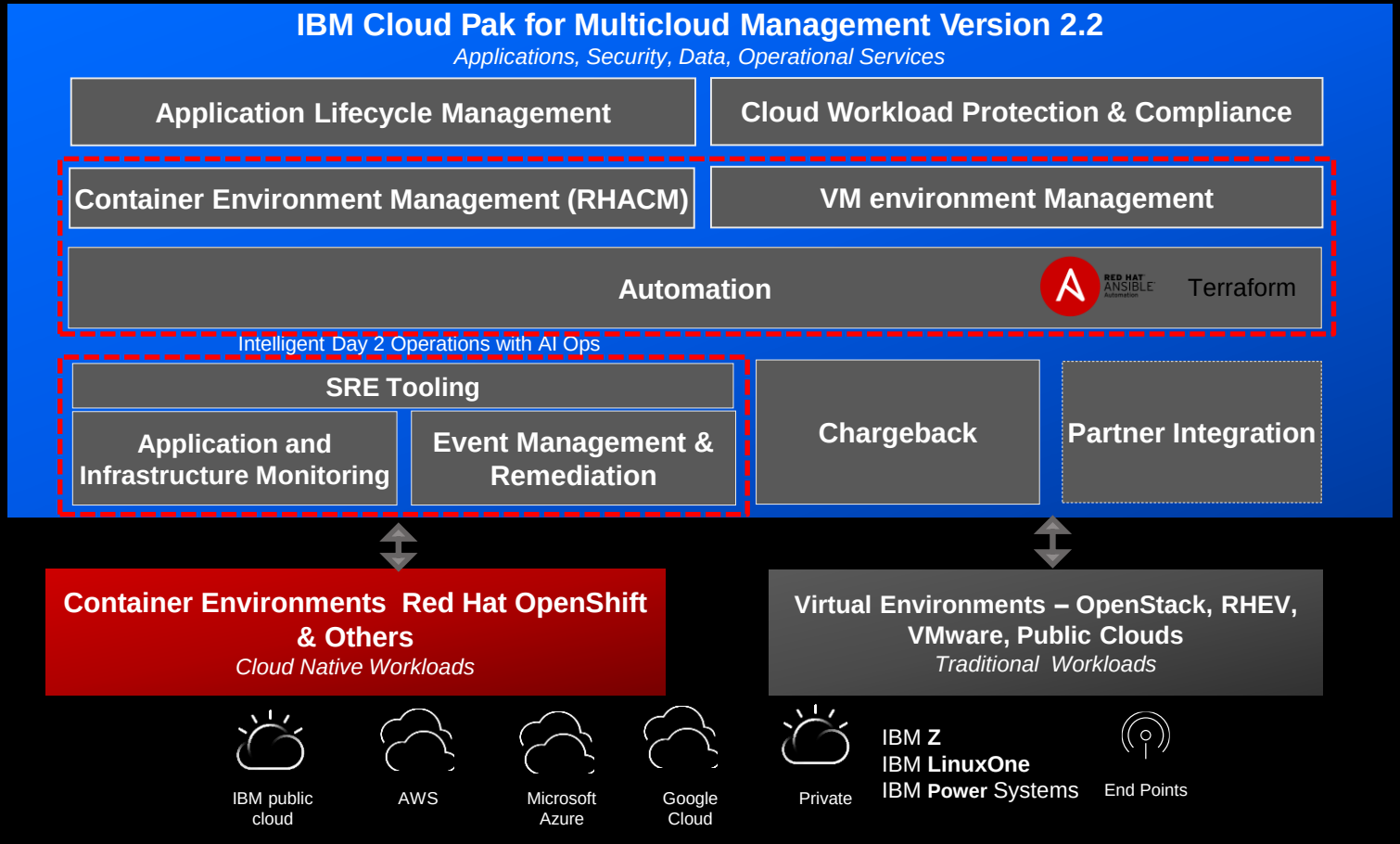
Measure the availability and reliability of applications based on key SLI/SLOs



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.

Demo (04:31 mins)

Overall Solution Capability



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Our purpose	How we drive success	How you benefit
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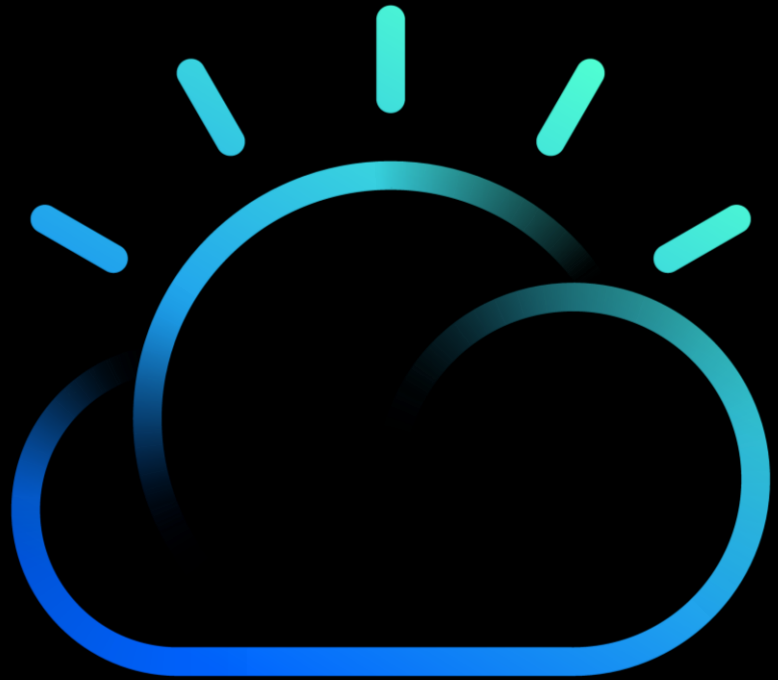
Understanding skill gaps and the paths to close those gaps	→	Skill Assessments & Augmentation with skill roadmap recommendations
Develop professional acumen	→	Validate your skills with IBM Cloud Certification and Digital Credentials

Motivated employees + **Trained employees** = **Increased employee productivity** + **Faster ROI**

To learn more, contact us: **CloudIntegrationEdu@uk.ibm.com**

Thank you!



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