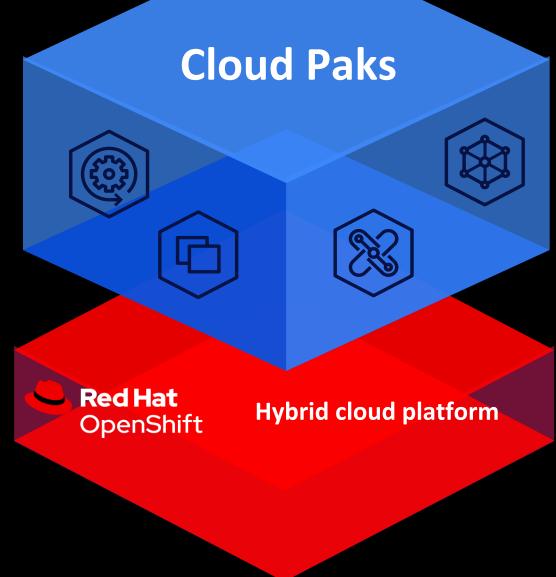
Cloud Integration Expert Labs— Cloud Pak
CoE

KRISHNA KUMAR S

VENKATESH K

SUNDARAGOPAL V

IBM CLOUD INTEGRATION EXPERT LABS











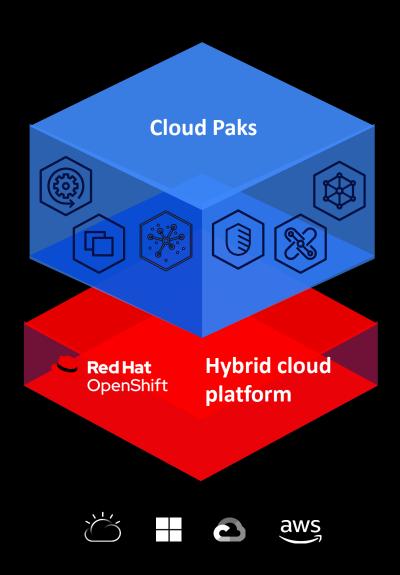
IBM Cloud Paks: Intentional, Integrated Solutions

IBM has expanded the benefits of our solutions to address a broader set of use cases through one integrated hybrid platform – delivering more value through a consistent architecture and common operational and security services.

Cloud Paks provide:

- Consistent security and operations: A common management experience, across all environments, with higher operational productivity and a lower TCO
- Pre-integration: Accelerating innovation and efficiency to unlock immediate value and ROI
- Portability: Runs on Red Hat OpenShift, so you can build once and deploy anywhere

Cloud Paks deliver consistent, quality experiences across environments and channels.

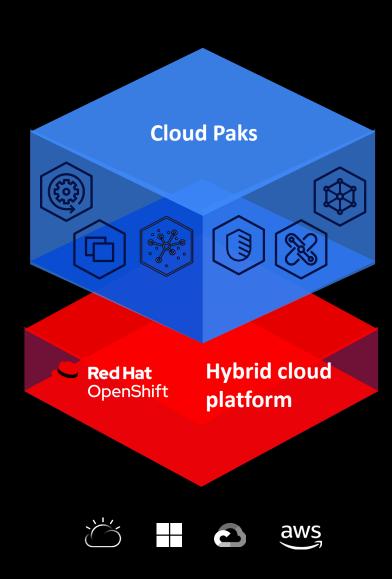




Transformation requires a common platform and integrated solutions...

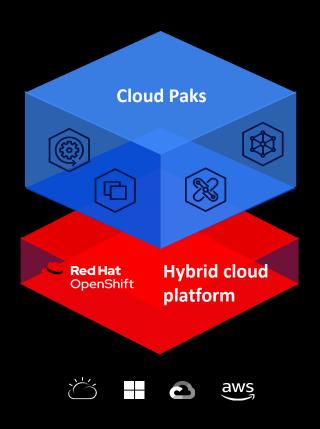
IBM helps you intelligently access, integrate and deliver your data, applications, and workflows —anywhere.

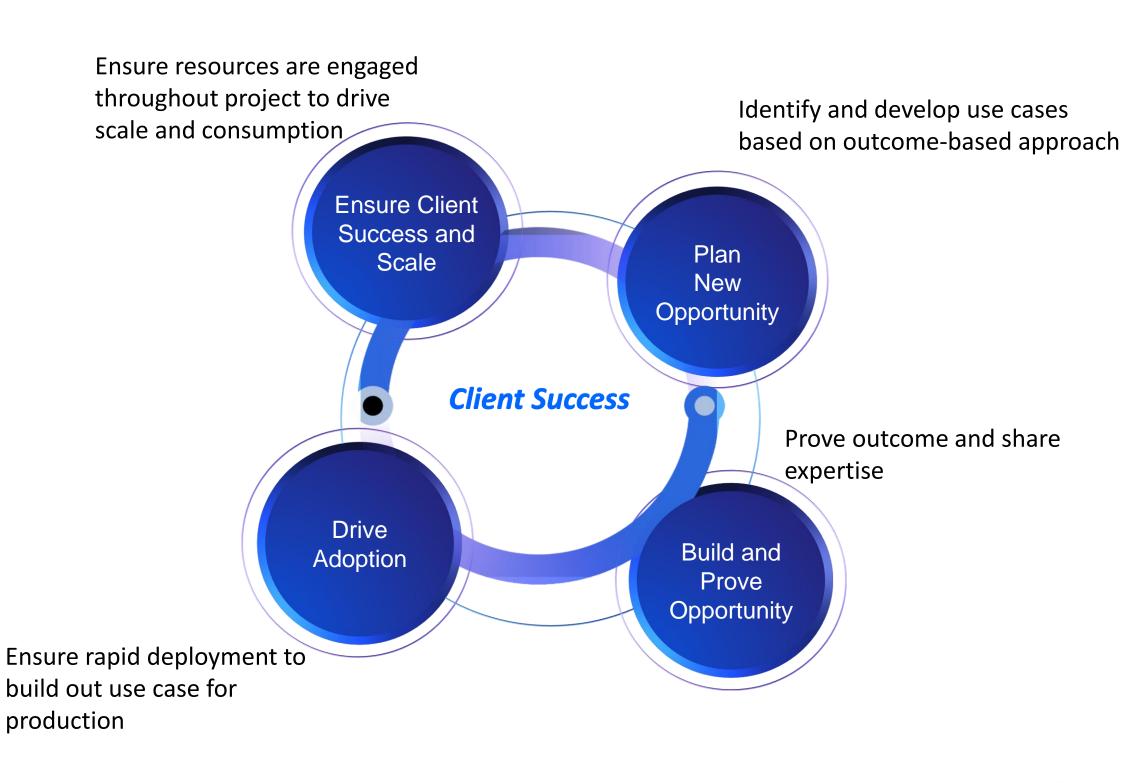
- ACCELERATE innovation and efficiency to unlock immediate value
- **INTEGRATE** and connect applications, data, and services across multiple clouds
- MANAGE applications intelligently across your environment
- RUN on Red Hat OpenShift, so you can build once and deploy anywhere

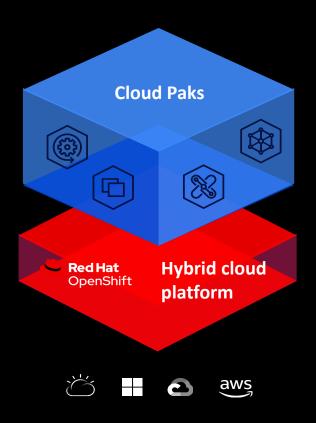




Client Success Lifecycle







Cloud Pak deployment Challenges

- Risk & Prioritization of Change
- Data & Regulatory Concerns
- Culture & Skills Transformation
- Security & Management
- Cost Management
- Connecting the siloed dots on enterprise landscape

A risk-free path that builds a solid foundation for Cloud Pak deployment across Private / Public Cloud

- IBM Cloud Pak CoE offers remote installation of the Cloud Paks across various on-premises and cloud platforms
 - Bare metal
 - VMs
 - **IBM Cloud**
 - Azure
 - **AWS**
 - Google Cloud Platform

using pre-defined activity templates.

The CoE templates and the team experience are hardened through its continued engagements with Cloud Pak deployments around the globe, for the benefits of its upcoming users.

Constituents of the offering are:



An Assessment workshop to understand in detail about the at the target deployment platform for Cloud Pak



Build

Solution Architecture workshop to arrive at the deployment blueprint of the Cloud Pak to be deployed

Discovery



Install the Cloud Pak on the target platform. Configure DevOps pipeline for 3 micro services



Functional testing / troubleshooting of Cloud Pak deployed and knowledge transfer including 8 hours of enablement on Cloud Pak

Install



Deliverables



- ✓ Discovery Assessment Report
- ✓ Installation Pre-Reg Checker Report
- ✓ Cloud Pak Deployment Report



Enablement

Business Value

- ✓ Optimize deployment timelines
- ✓ Reduce deployment costs
- ✓ Faster route to Cloud Consumption



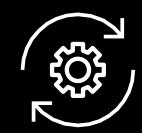






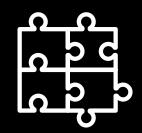


- Certified Experts
- Specialists with Complex **Deployments**
- Collective experience of 15+ Person years of Cloud Pak Deployments
- Global Team of Experts
- Deep skilled experts on Hybrid Cloud and IBM technologies



Process

- Continuous Innovation
- Continuous Development
- Automation
- Delivery Acceleration
- Sustained Enablement
- Delivery Excellence



Practice

- Rapid Tooling
- Standardization
- Methodologies
- Knowledge Base
- Product Team Integration
- Early adopters of technology



Red Hat

Cloud Paks

Hybrid cloud

platform

IBM Cloud Pak CoE - Differentiators

Why CoE

- A Structured program Seamless experience of Cloud Paks deployment & adoption
- 100% IBM Cloud Pak certified Consultant with tested skills across platforms
- Ushering confidence Walk the talk with Experts
- Assets & Accelerators
- Stricter scope & adherence
- Best practices
- Rapid Rol

Platforms Supported

On Premise:

- Baremetal
- Virtual Machines



Cloud

IBM Cloud



Azure

AWS

aws

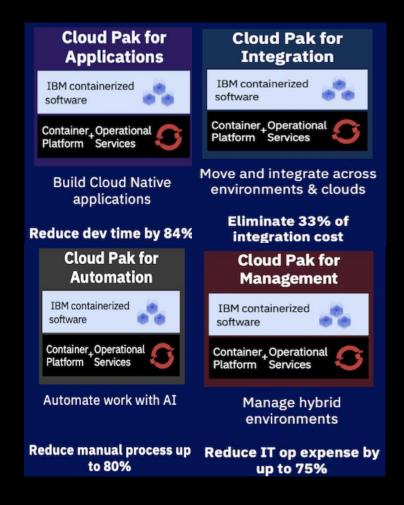
Google



Deployment Models

- UPI/IPI except Bare metal
- UPI supported for Bare metal
- Public/Private topology

Cloud Paks

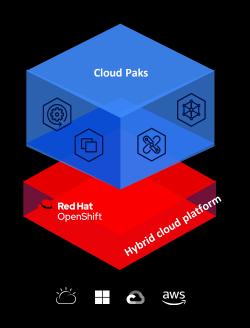


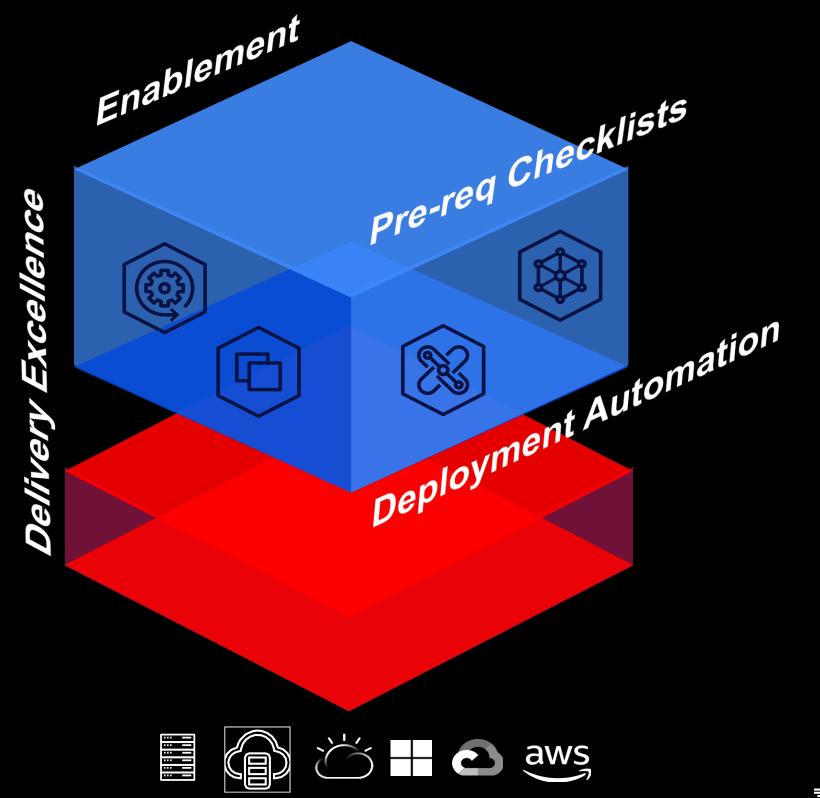
How we do it

- **Assets & Accelerators**
- Faster TAT
- 28+ Assets on Deploying Cloud Paks across platforms
- Readily consumable Pre-req checklist for customers
- Project Management templates
- Deployment automation
- **DelEx Templates**
- Knowledge base (KB)



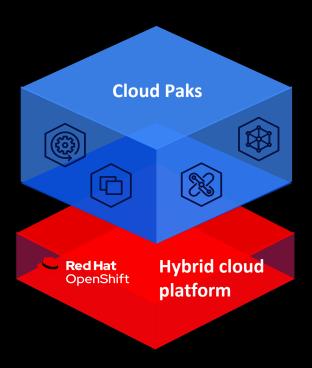
Accelerators







Accelerators











Pre- Req Checklist

Prerequisite ID	Prerequisite Description						Status
1	Compute requirements	Installation Pro-requis	ites – On-premise BareM	otal		IBI	plete
		•	•	etai			_ plete
		3.2 Firewall R	equirements				olete
							plete
		Grant open interne	t access on all nodes d	uring installation of th	ne products	to pull	
		images for platforn	n containers and provi	de telemetry data to R	Red Hat.	•	plete
2	Storage requirements	0 1	•	·			olete
			•	lation, then the followi	ng sites nee	d to be	plete
		whitelisted on comp	pletion of the installati	on.			plete
							olete
		• registry.re	edhat.io Provides cor	e container images			plete
4	Network connectivity requirements	 *.quay.io] 	Provides core container	images			plete
5	Networking requirements for user-provisioned infr	 sso.redhat 	.com The https://clo	oud.redhat.com/open	shift site u	ses	plete
6	Network topology requirements	authenticatio	n from sso.redhat.co	m			ing
7	User-provisioned DNS requirements						olete
8	Open Internet Availability	Whitelist any site that	at provides resources fo	r a language or framew	ork that you	r builds	plete
9	Firewall Requirements	require.					olete
10	[0					Term	olete
11	Installation Pre-requisites – On-p	remise BareMet	tal			=====	olete
12							plete
	2 0 Coffware proper	uicitos/bir	arias				alaa

3.8 Software prerequisites/binaries

▶ **≙** Estim

3.8.2 IBM Cloud Pak for Applications v4.2:

- For Cloud Pak for Application, please provide the entitlement key that was assigned to your IBM account on purchase of IBM Cloud Pak for Applications v4.2. Please refer to this link for the procedure for obtaining the entitlement key.
- The Cloud Pak for Applications installer command-line interface (CLI) is used to install Accelerators for Teams, Transformation Advisor, Application Navigator, and Mobile Foundation.

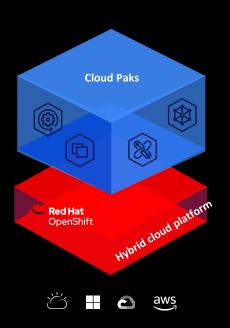
Required Cloud Pak installer CLI software

Software	Version	Notes
Docker	17.05+	The Cloud Pak installer CLI requires Docker version 17.05 or later.
GitHub or GitHub Enterprise		GitHub or GitHub Enterprise is required only if you want to add application stacks to your GitHub or GitHub Enterprise
		organization, which is recommended. Ensure that your GitHub or GitHub Enterprise instance is reachable by the OCP cluster.
		GitHub or GitHub Enterprise is not required to install the cloud pak.

Pre-Req Details

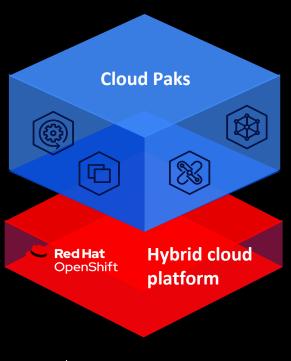
1	and Heater	II	
		n Pre-requisites – On-premise BareMetal	
T	able	of Contents	
1	Prerec	quisite customer signoff	
2	Introd	duction	
	2.1	Purpose	
	2.2	Scope considerations:	
3 B		equisite for IBM Cloud Pak for Applications v4.2 with OpenShift Container Platform 4	
	3.1	Compute requirements	
	3.2	Firewall Requirements	
	3.3	Network connectivity requirements	
	3.4	Certificate signing requests management	
	3.5	Networking requirements for user-provisioned infrastructure	
	3.6	Network topology requirements	
	3.7	User-provisioned DNS requirements	
	3.8	Software prerequisites/binaries	
	3.3.1	OpenShift Container Platform	
	3.8.2	✓IBM Cloud Pak for Applications v4.2:	
1	3.9	Persistent storage requirements:	
/	3,9.1	Requirements for Registry storage for bare metal:	
	3.9.2	Requirements for Cloud Pak for Applications components:	
/	3.10	Out of Scope considerations:	
4	Refere	ences:	
		ix- A : Basic system resource requirements based on components of Cloud Pak for Applications & academic purpose)	
	Appendi	x B: Storage requirement for Cloud Pak for Application components:	

Deployment Automation



Demonstration of Deployment Accelerator for IBM CloudPak for Multicloud Management v1.3

Accelerators













Deployment Report

UAT Topology (IBM Cloud Pack)

*.api.uat.xyz.com

*.apps.uat.xyz.com

Intranet

Internet

apps.uat.xyz.com

VNet1

VNet3

Gateway

Corporate Landing VNet

Internet Landing VNet

Public LB

Internet

Public DNS - xyz.com

Public IP Bastion node

2 Core

16 GB RAM

120GB

VM RHEL8

Master Node1

300 GB

Load balancer

(Private-master)

Load balancer worker 80/443

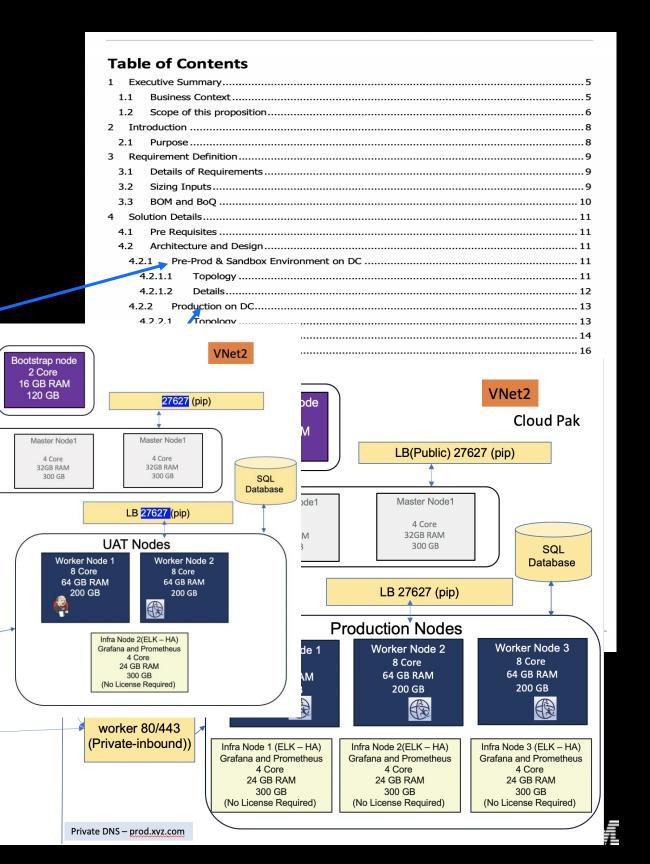
(Private-inbound))

Private DNS - uat.xvz.com

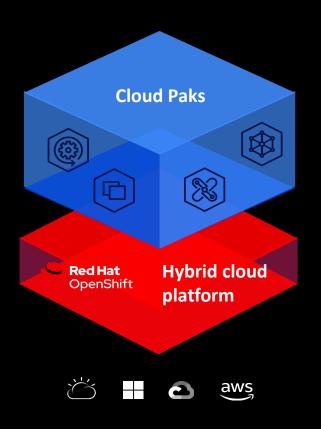
Public LB

Public DNS - xyz.com

Master(6443,226



Accelerators

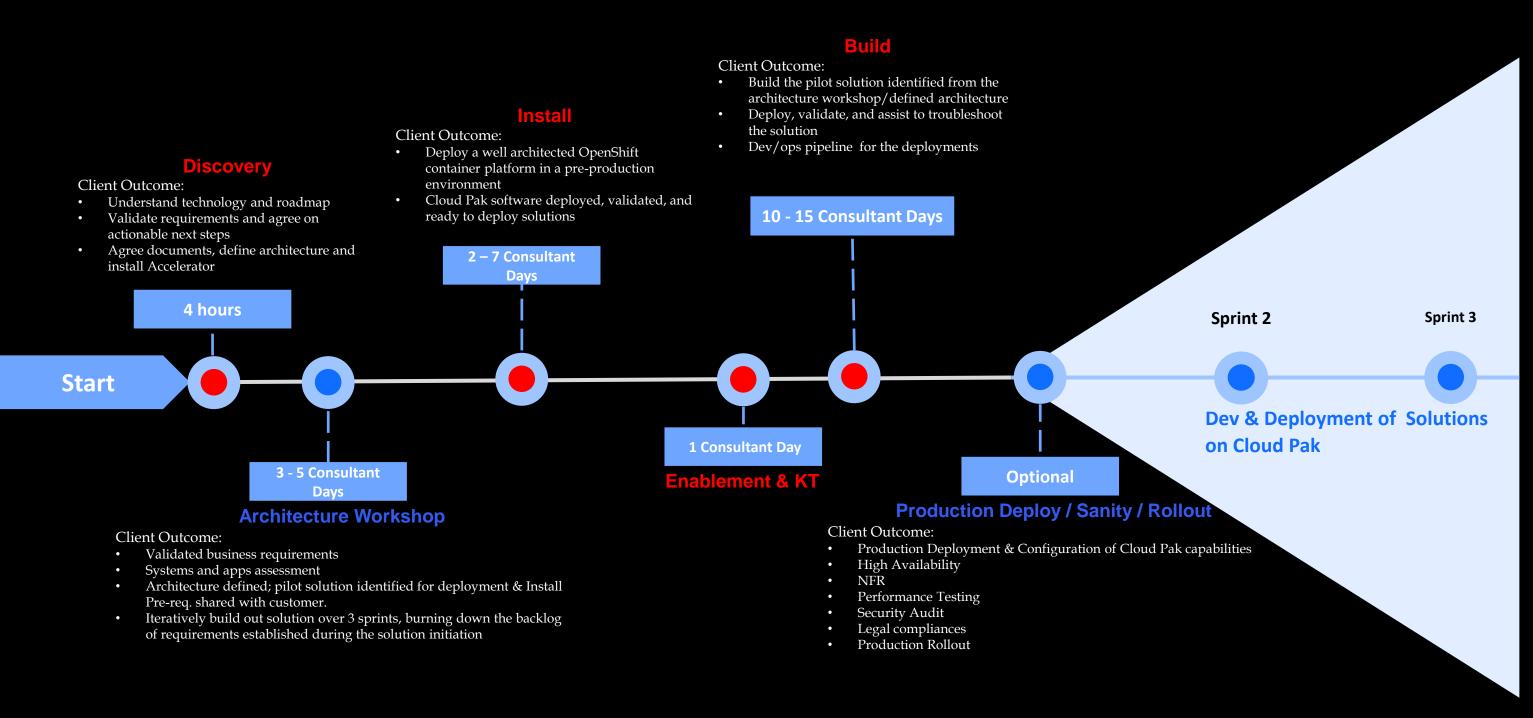


Enablement

- Introduction to OpenShift Infrastructure Components, Persistent Storage.
- Demonstration of OpenShift console, CLI and troubleshooting.
- Introduction to Cloud Pak for deployed, Architecture and Components.
- Demonstration of deployed Cloud Pak capabilities.
- Demonstration of Logging & Monitoring, on OpenShift Container Platform



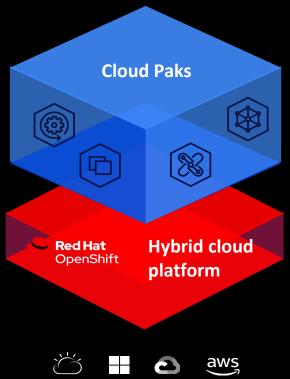
Cloud Pak CoE – Deployment Journey

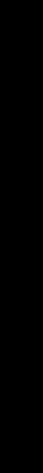






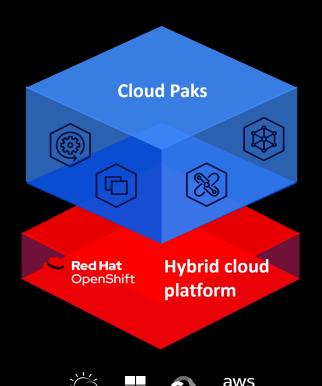
IBM Cloud © 2020 IBM Corporation





Cloud Pak for Cloud Pak for Integration **Applications** ■ Modernize traditional applications ■ Application and data integration ☐ Build Cloud Native applications ■ Enterprise Messaging ☐ A unified solution for all your applications – J2EE, Mobile Apps etc. □ Secure Gateway **IBM Cloud** Integration **Expert Labs Cloud Pak** CoE **Cloud Pak for Cloud Pak for Automation Management** ☐ 360-Degree of your operations ☐ Event Management, app & infra management ☐ Pre-integrated workflow, content, decisioning and capture capabilities ☐ Visibility, Governance & Automation ☐ Enhance customer experience ■ Increase Operational Efficiency

Client Stories





Business Challenge:

A large automotive manufacturer in India needed to revamp its IT architecture, which had security concerns as well as high operational overhead and management costs. Any application upgrade, launch of new services, or integration with applications was very time consuming and costly.

Solution:

The company can now innovate much faster using components from the IBM® Cloud Pak™ for Integration solution. IBM App Connect & MQ software helps integrate and efficiently transfer data between applications within the enterprise; the IBM API Connect® and IBM DataPower® Gateway solutions facilitate integration with external entities.

Solution Components:

Cloud Pak for Integration with

- IBM App Connect
- IBM MQ
- IBM API Connect
- IBM DataPower® Gateway

Outcome:

A Modern Robust Integration Platform:

- Creating all types of APIs and Integrations rapidly
- Supports in fast tracking development and time-tomarket maintaining the right governance



Business Challenge:

An Insurance company was looking forward to accelerate the agent on-boarding process and thereby enhances its visibility in the crowded marketplace.

Solution:

The company can now innovate much faster using components from the IBM® Cloud Pak™ for Integration solution. IBM App Connect & MQ software helps integrate and efficiently transfer data between applications within the enterprise; the IBM API Connect® and IBM DataPower® Gateway solutions facilitate integration with external entities.

Solution Components:

Cloud Pak for Application with

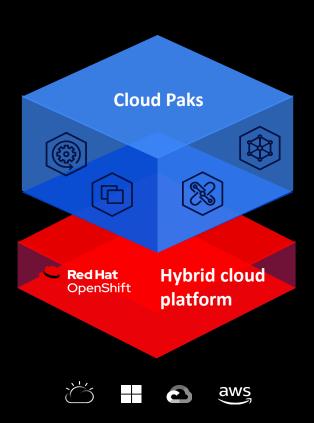
- IBM WebSphere Liberty
- IBM MobileFirst Platform
- DevOps for Ci/CD

On Azure Platform

Outcome:

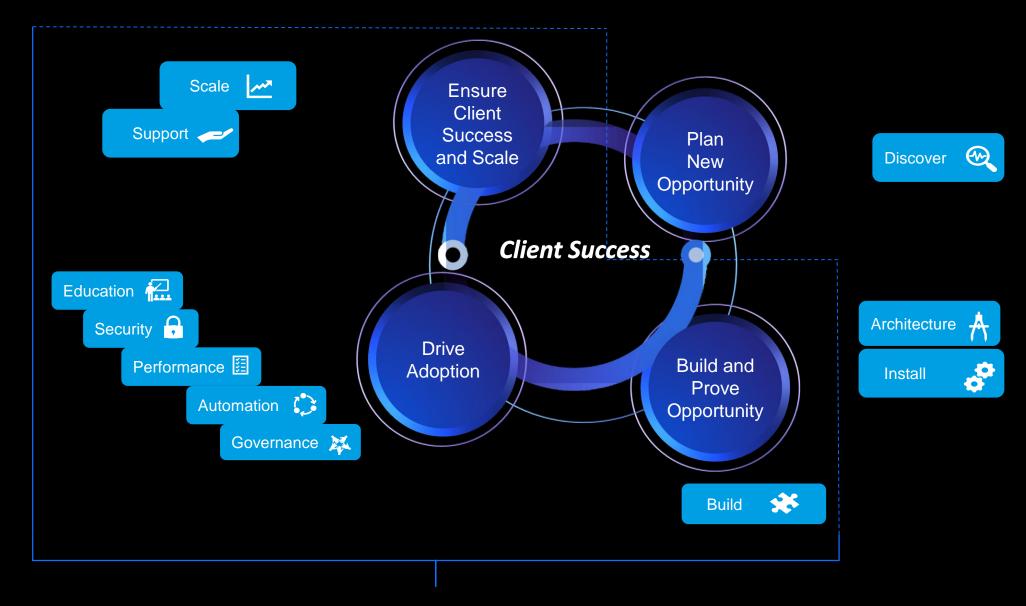
- cuts agent recruitment times from weeks to days
- automates time-consuming processes
- ensures seamless exchange of data across environments and increases visibility







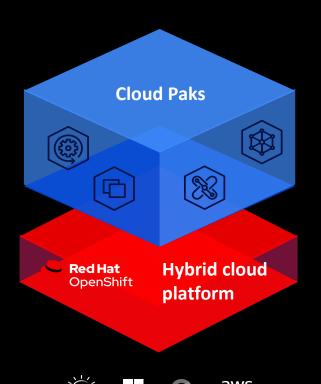
Fast Lane Acceleration – Cloud Pak Adoption







References





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IBM Cloud Pak's Help and Guidance from IBM Cloud Integration Expert Labs Asia Pacific



IBM APIConnect v2018/v10 on K8s/OCP — **Capacity Planning and** Monitoring.

Co-author : Deepak Khandelwal



Jagdish Komakula Sep 28 · 5 min read



Production Readiness Checklist and Best Practices for Kubernetes Environments

Kubernetes is a stepping stone for the organization's Cloud Native journey. Building a highly available, scalable, resilient, and secured...

Deenak Khandelwal

Sen 26 · 2 min read



Optimize Docker Private Registry storage by removing unused docker tags.

Co-Author: Jagdish Komakula



Deepak Khandelwal Sep 7 · 5 min read



IBM Cloud Paks installation -Issue in installing Red Hat **OpenShift Container Platform**

By this time, IBM Cloud Paks popularity speaks volumes across enterprises. So thought of cutting short on introducing what are IBM Cloud...



Sundaragopal Venkatraman

Cloud Pak Central

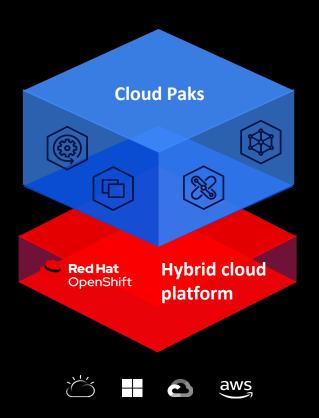
https://www.ibm.com/in-en/cloud/paks

Cloud Integration Expert Labs

https://www.ibm.com/cloud/integration-expert-labs



Q&A







Why IBM Cloud Integration Expert Labs?

Our purpose

How we drive success

How you benefit

Expedite the successful deployment of IBM's Cloud Integration Solutions

Through our deep technical expertise, methodology, repeatable patterns, learning services and mentoring

Faster time to value from your IBM Cloud Integration Solutions



Contact us through email: labs@us.ibm.com





