



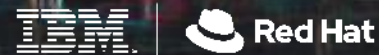
Technologietrends und Innovation für die Praxis @ Vienna

IBM Cloud Paks

Werkzeuge für die Cloud

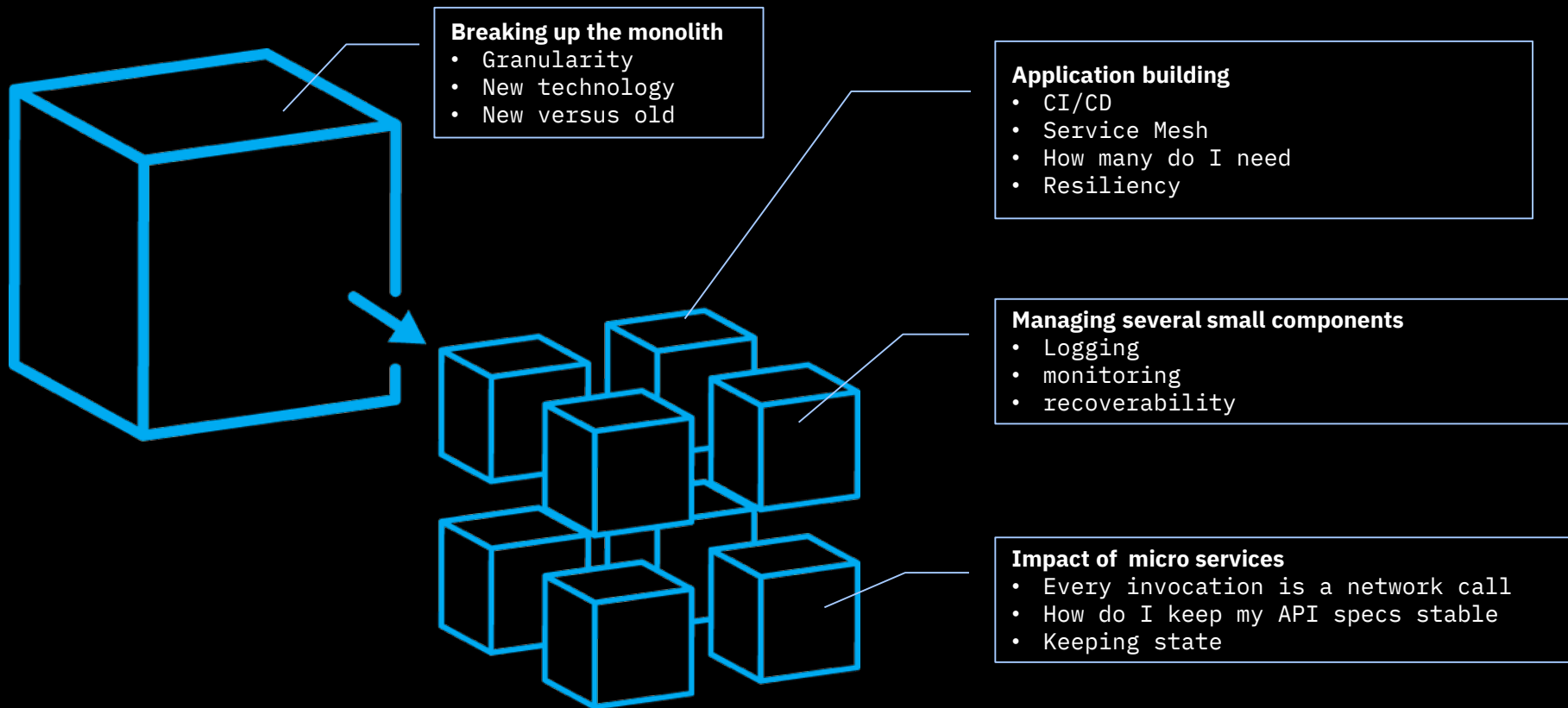
Benedikt Klotz
Senior IT Architect
IBM Cloud & Cognitive Software

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<https://www.ibm.com/cloud/blog>

Cloud native is not easy



Why Containers and Kubernetes?

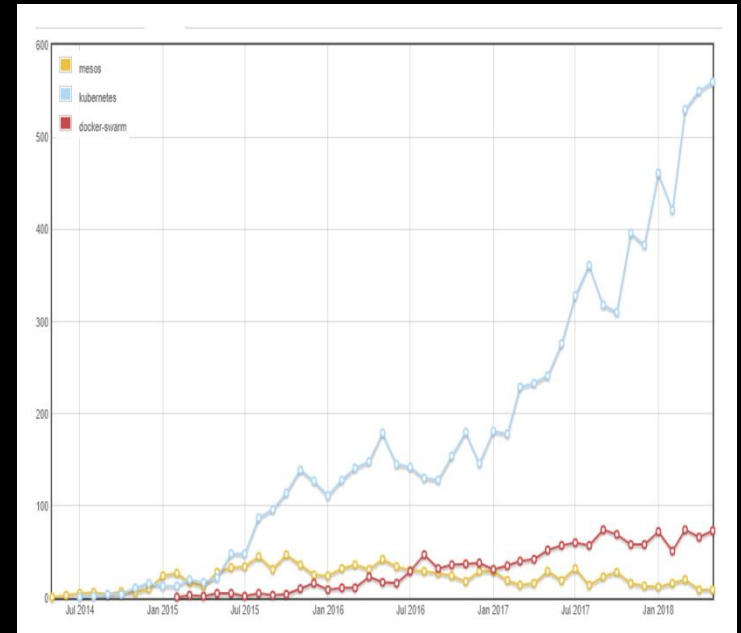
- Makes developers more productive
- Makes systems more resilient
- Makes resource more efficient
- Makes processes more automated

Provides

- Portability
- Scalability
- Modularity
- High Availability
- Open Source, Community
- Eco-system
- Efficient

Enables

- Manageability
- Reproducibility
- Immutability
- Microservices



75% Reduction in operations expense
84% Increase in speed to market
60% Increase in number of projects IT Admins can handle

Catalog

IBM Cloud catalog

Featured

Services

Software

Category

- Compute
- Containers
- Networking
- Storage
- AI
- Analytics
- Databases
- Developer Tools
- Integration
- Internet of Things
- Security and Identity
- Web and Mobile
- Web and Application

Provider

- IBM
- Third party

Pricing plan

- Lite
- Free

Compliance

- IAM-enabled
- Service Endpoint Supported

Release

- Beta

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Search the catalog...

https://cloud.ibm.com/catalog

Services

Explore our broad portfolio of managed services for infrastructure, developer tools, and more to build your apps on the public cloud.

Filters: AI X Analytics X Clear all

IBM Public Cloud – Cloud Native Services

AI 18 items

Watson Assistant
IBM • AI

Watson Assistant lets you build conversational interfaces into any application, device, or channel.

Lite • Free • IAM-enabled

Watson Studio
IBM • AI

Embed AI and machine learning into your business. Create custom models using your own data.

Lite • Free • IAM-enabled

Annotator for Clinical Data
IBM • AI

Analyze text to extract medical codes and concepts such as diseases, lab values, medications, procedures and more.

Lite • Free • IAM-enabled

Compare and Comply
IBM • AI

Process governing documents to convert, identify, classify, and compare important elements

Lite • Free • IAM-enabled

Discovery
IBM • AI

Add a cognitive search and content analytics engine to applications.

Lite • Free • IAM-enabled

Insights for Medical Literature
IBM • AI

Search a medical literature corpus and discover insights.

Lite • Free • IAM-enabled

Knowledge Catalog
IBM • AI

Discover, catalog, and securely share enterprise data.

Lite • Free • IAM-enabled

Knowledge Studio
IBM • AI

Teach Watson the language of your domain.

Lite • Free • IAM-enabled

Language Translator
IBM • AI

Translate text, documents, and websites from one language to another. Create industry or region-specific translations via the service's...

Lite • Free • IAM-enabled

Machine Learning
IBM • AI

IBM Watson Machine Learning - make smarter decisions, solve tough problems, and improve user outcomes.

Lite • Free • IAM-enabled

Natural Language Classifier
IBM • AI

Natural Language Classifier uses advanced natural language processing and machine learning techniques to create custom...

Free • IAM-enabled

Natural Language Understanding
IBM • AI

Analyze text to extract meta-data from content such as concepts, entities, emotion, relations, sentiment and more.

Lite • Free • IAM-enabled

Personality Insights
IBM • AI

The Watson Personality Insights derives insights from transactional and social media data to identify psychological traits.

Lite • Free • IAM-enabled

Speech to Text
IBM • AI

Low-latency, streaming transcription

Lite • Free • IAM-enabled

Text to Speech
IBM • AI

Synthesizes natural-sounding speech from text.

Lite • Free • IAM-enabled

Tone Analyzer
IBM • AI

Tone Analyzer uses linguistic analysis to detect three types of tones from communications: emotion, social, and language. This insight ca...

Lite • Free • IAM-enabled

Visual Recognition
IBM • AI

Find meaning in visual content! Analyze images for scenes, objects, and other content. Choose a default model off the shelf, or create your...

Lite • Free • IAM-enabled

Watson OpenScale
IBM • AI

IBM Watson OpenScale is an enterprise-grade environment for AI infused applications that provides enterprises with visibility into how A...

Lite • Free • IAM-enabled

Analytics 24 items

Databases for PostgreSQL
IBM • Analytics • Databases

PostgreSQL is a powerful, open source object-relational database that is highly customizable.

IAM-enabled

Databases for Redis
IBM • Analytics • Databases

Redis is a blazingly fast, in-memory data structure store.

IAM-enabled

Databases for Elasticsearch
IBM • Analytics • Databases

Elasticsearch combines the power of a full text search engine with the indexing strengths of a JSON document database.

IAM-enabled

Databases for MongoDB
IBM • Analytics • Databases

MongoDB is a JSON document store with a rich query and aggregation framework.

IAM-enabled

Messages for RabbitMQ
IBM • Analytics • Databases

RabbitMQ is an open source multi-protocol messaging broker.

IAM-enabled

Databases for etcd
IBM • Analytics • Databases

etcd is a distributed reliable key-value store for the most critical data of a distributed system

FEEDBACK



IBM Cloud is the most secure public cloud for business!

IBM Public Cloud

Guarantee that your data is not used to fine tune vendor's AI models (Privacy & Security).

Highest level of Isolation for Enterprise workloads behind the firewall. Customers have full stack control. Transparency for Audit purpose right down to the serial number of the Server (Cost, Control & Compliance).

Highest level of security with KYOK and crypto service encryption with FIPS 140-2 level 4. (Security)
 Bewahren Sie Ihre eigenen Schlüssel (KYOK) zur Cloud-Datenverschlüsselung durch ein dediziertes Cloud-HSM (Hardwaresicherheitsmodul)* geschützt auf. * Industry's only **FIPS 140-2 level 4** certified HSM

Security Leadership



Highest industry compliance for data encryption.

Configurable so that not even IBMers can see your data.

Threat management with IBM Security integration.

IBM Cloud Management unter Berücksichtigung von:



IBM Cloud Security Policy Based on ISO27001



IBM Cloud Zertifikate:



IBM ISO Management System Certification:



IBM Cloud – High Customer Satisfaction



Open Innovation



Security Leadership



Enterprise Grade

IBM Cloud Named 2019 Gartner Peer Insights Customers' Choice for Cloud Infrastructure

Cloud

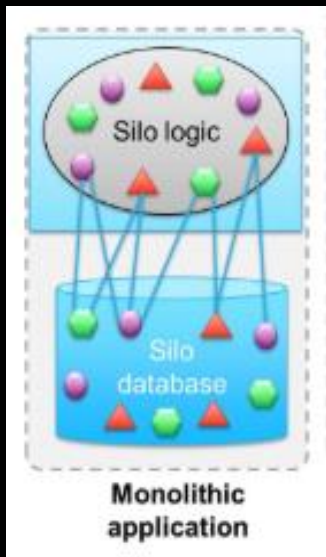
28 October 2019 2 min read

By: David Lapp, Vice President, Marketing - IBM Cloud Platform

<https://www.ibm.com/cloud/blog/announcements/2019-gartner-peer-insights-customers-choice-for-cloud-infrastructure>

Transition to Cloud Platform and Operations

EXISTING APPS (Monolith)



- 20% Rationalize and decommission
- 10% Replace with "as a service" solution
- 50% Modernise and Migrate to Cloud
 - 10% Re-Host (lift & shift)
 - 10% Re-Platform
 - 15% Refactor
 - 15% Re-Architect (Microservices / APIs)
- 20% Retain on Traditional

NEW & TRANSFORMED APPS



- IBM public cloud
- AWS
- Azure
- Google Cloud
- Edge
- Private
- Systems

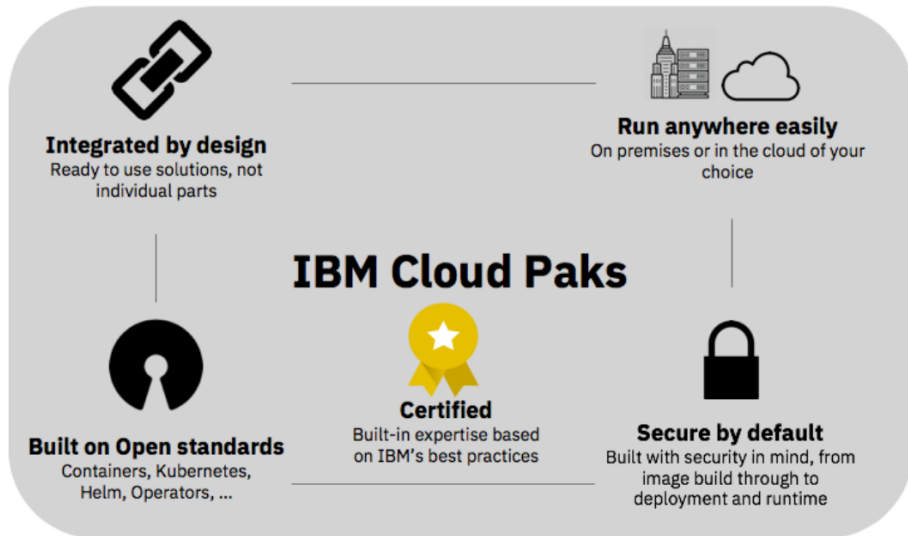
Application Modernization Journey

IBM leads the industry in containerization of enterprise software, and simplifies the journey to cloud with automated tools and expert services

IBM Cloud Paks

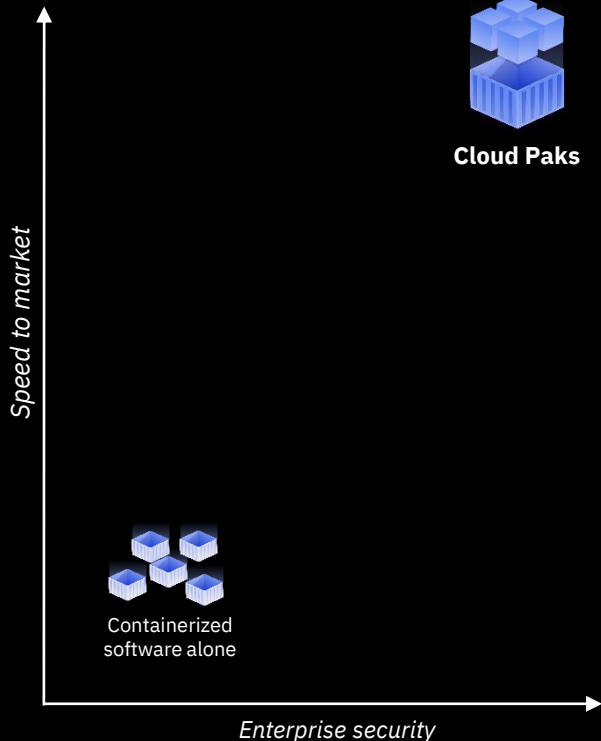
An open, faster, more reliable way to modernize and move to cloud

Containers and Kubernetes have quickly become the open technologies of choice for enterprises journey to cloud. That journey leads to modernizing their applications, data, and business processes along with how they integrate and manage in a multicloud world. Yet 80% of workloads have not moved to cloud.



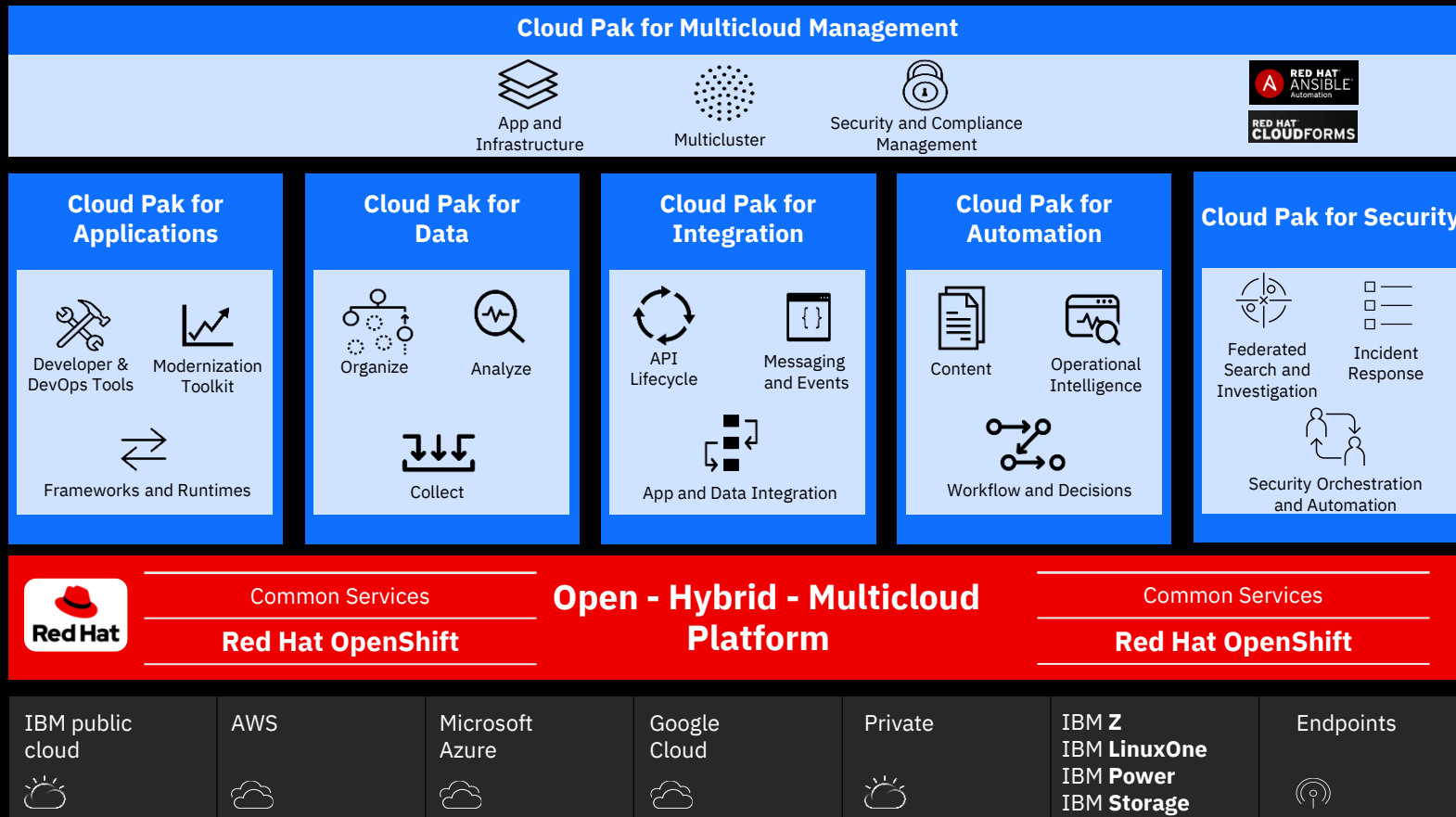
IBM Cloud Paks speed transformation of your enterprise and bring modern cloud capabilities to your workloads through pre-packaged, integrated solutions based on open technologies.

Cloud Paks: IBM Certified and Production-Ready



	Containers Alone Client creates containers or receives software as standalone container(s)	IBM Cloud Paks Complete solutions certified for enterprise use cases
Runs anywhere	Yes	Yes
Vulnerability scanned	Yes	Yes
Red Hat container certification	Depends on product	Yes
Complete solution w/ container platform	No	Yes
Flexible & modular	No	Yes
IBM certified/orchestrated for production <small>(Built for Kubernetes by experts; certified against 250+ criteria)</small>	No	Yes
Multicloud validation	No	Yes
Integrated deployment experience	No	Yes
Full stack support by IBM <small>(Base OS, software, and container platform)</small>	No	Yes
License metering integration	No	Yes
Scalable and resilient	No	Yes
Encrypted secrets / limited privileges	Do it yourself	Yes
Management and operations	Build your own	Yes
Lifecycle Management	Manage it yourself	Yes

Cloud Paks – Pre-integrated for cloud use cases



IBM Cloud Paks - IBM Enterprise Ready Software



Built on Open Standard & Integrated by Design

based on Open Software and Standards
Pre-Integrated Containerized Solution - Ready to Use
Consistent User Experience

Operations

Upgrade & Rollback

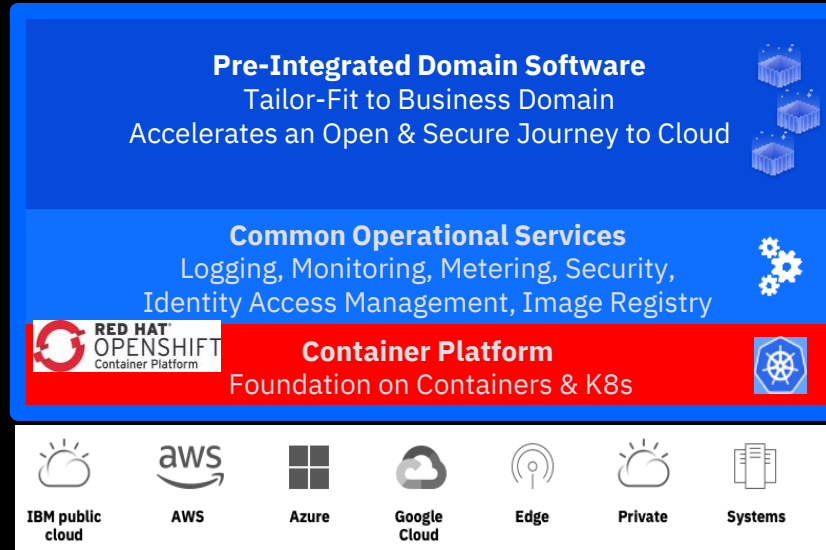
- Consistent across all IBM Software built for Kubernetes



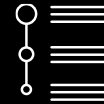
Packaging

Enterprise Ready & Simple to Deploy

- Standardized License and Support
- Integrated catalog experience
- Pre-Orchestrated by product experts



Management



Pre-integrated

- Logging (Debug)
- Monitoring (Alerting)
- Usage Metering
- License Management

Security



Secure by Design

- Secured by IAM
- Scanned for Vulnerabilities
- Extendable to Redhat Certified with RHEL/UBI base image

Build Once - Run Anywhere
On-premise, Private or Public Clouds or
Pre-Integrated Systems



Red Hat OpenShift on IBM Cloud

Red Hat OpenShift provides a highly portable cloud-in-a-box with built-in security hardening and multicloud support.

IBM Demos and Digital Trials Experience →



Cloud Pak for Data

Cloud Pak for Data is a data platform that unifies and simplifies the collection, organization and analysis of data and infuses AI throughout an organization.

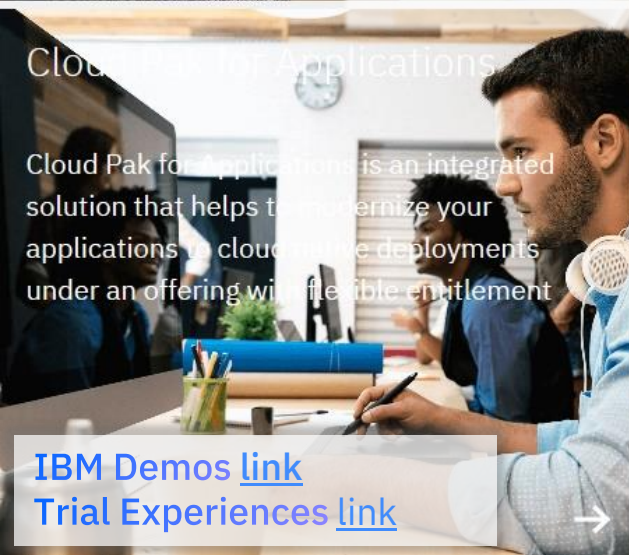
Try Cloud Pak for Data yourself →



Cloud Pak for Integration

Cloud Pak for Integration helps enable organizations to power digital transformation with a simple, complete solution to support a modern, multi-cloud capable approach to integration.

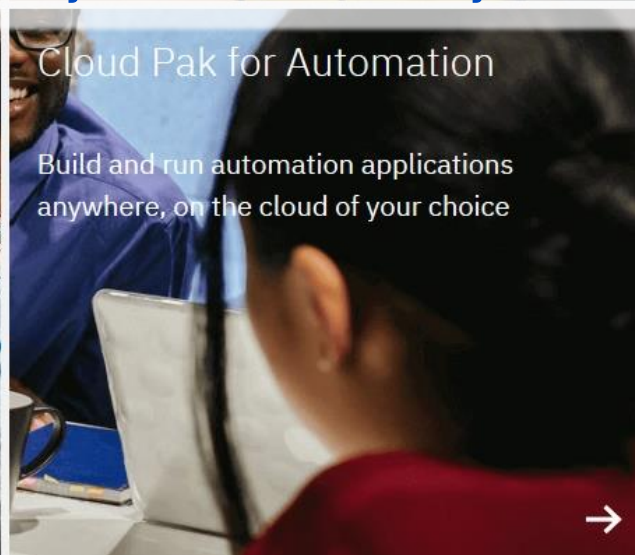
→



Cloud Pak for Applications

Cloud Pak for Applications is an integrated solution that helps to modernize your applications to cloud-native deployments under an offering with flexible entitlement.

**IBM Demos [link](#)
Trial Experiences [link](#)** →



Cloud Pak for Automation

Build and run automation applications anywhere, on the cloud of your choice.

→



Cloud Pak for Multicloud Management

The enterprise-grade multicloud management solution for Kubernetes.

→

Cloud Pak for Applications: what you need today, what you need tomorrow



Run existing apps

WebSphere Application Server

WebSphere ND | WebSphere Base | Liberty Core
Mobile Foundation

JBoss Enterprise Application Server



Modernize existing apps

IBM Modernization & Developer Tools

Included with all components

- Transformation Advisor
- WebSphere Migration Toolkit
- Enterprise Dev tools & extensions
for local IDE's

Supported when used with Cloud Pak for Applications, no charge

Build new Cloud Native apps



Red Hat Runtimes

- JBoss® EAP
- JBoss® Web Server
- Eclipse Vert.x
- Spring Boot
- Tomcat Support
- Open Liberty
- Thorntail
- OpenJDK
- Node.js

IBM Runtimes

- WebSphere® (traditional)
- WebSphere Liberty
- Mobile Foundation
- Loopback & Express (Node.js)

Accelerators for Teams

Derived from kabanero.io open source

Equipping teams with content, tools, architectures and methods so they can focus on business problems from day 1

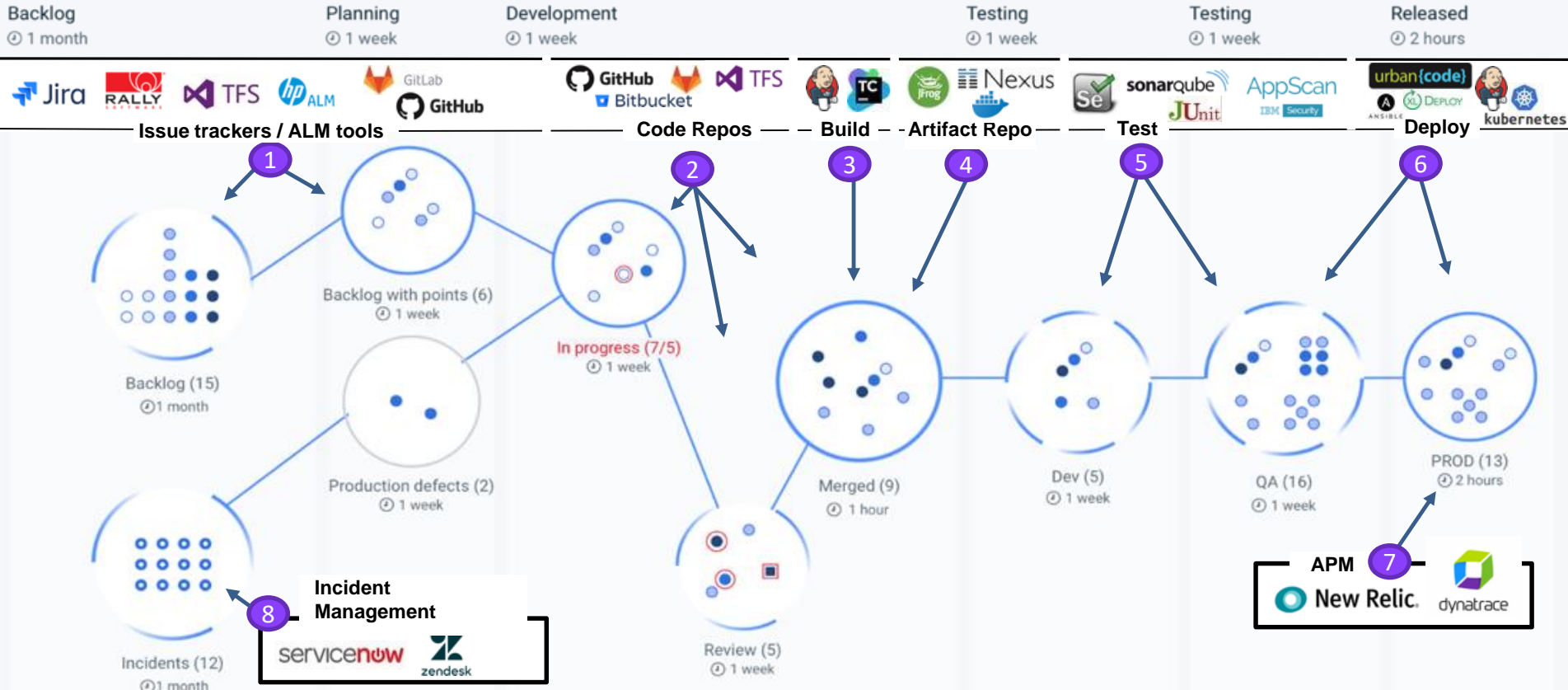
Red Hat OpenShift Container Platform

No functional restrictions

IBM CLOUD DEVOPS FOR CLOUD PAK FOR APPLICATIONS

A DIGITAL VALUE STREAM

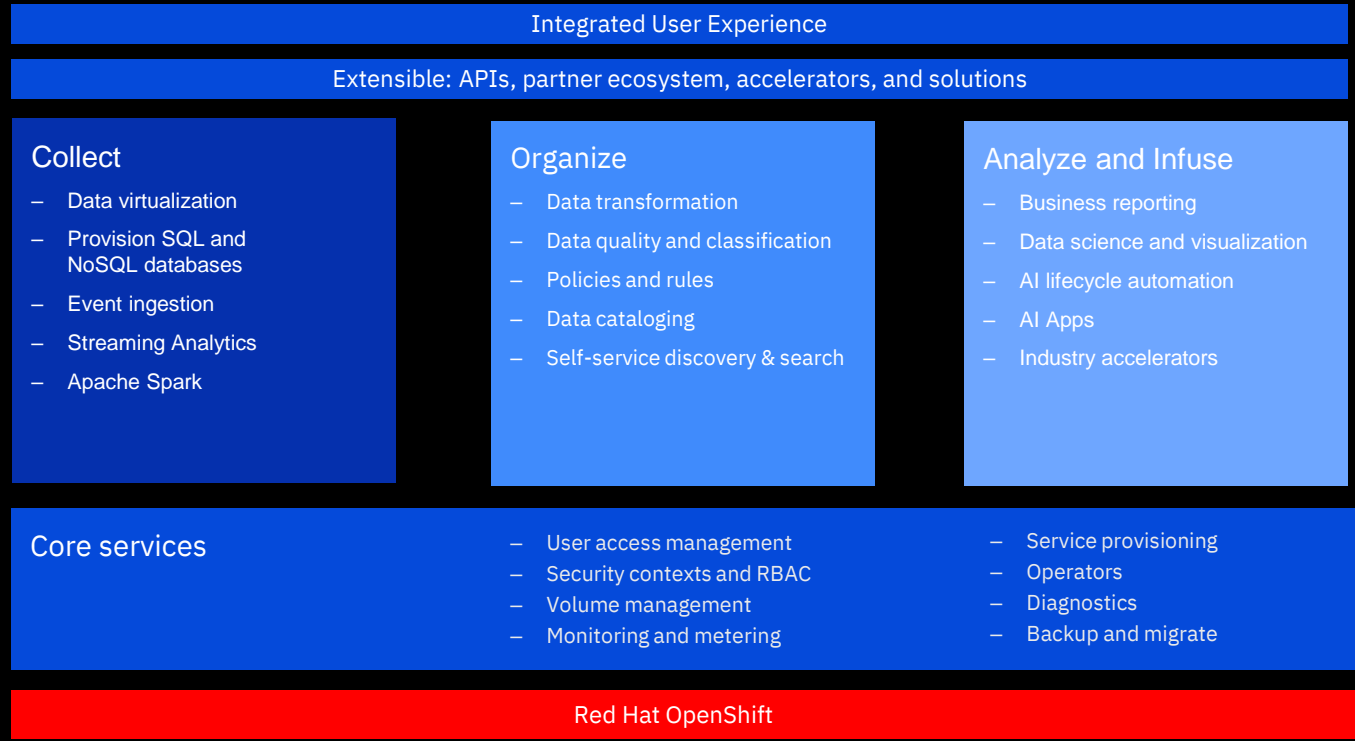
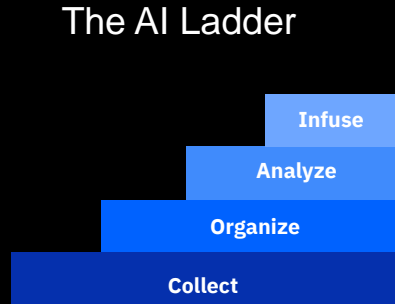
Lead time: 35 days average (±18 days)



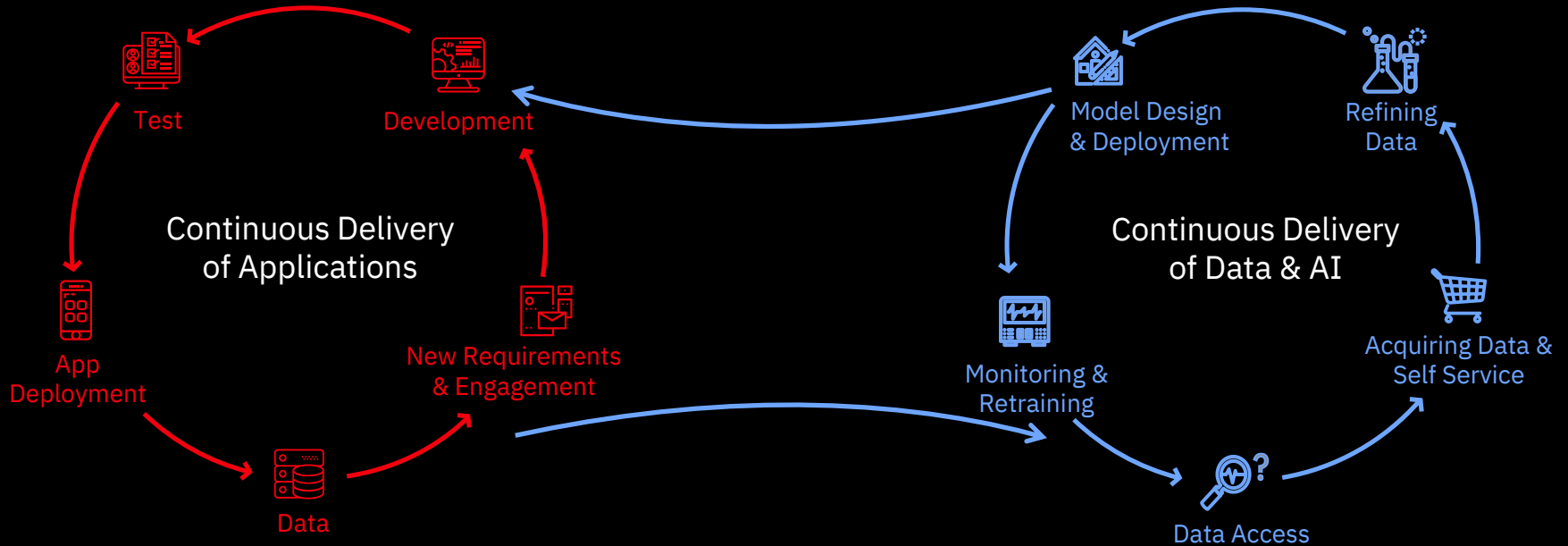
IBM Cloud Pak for Data

Unified, modular, deployable anywhere

App Developers and SREs | Business Partners | Data Engineers | Data Stewards | Data Scientists | Business Users



Transforming the Delivery of Data & AI to the Business



> Hybrid Multicloud

> Security

> Unified User Experience

Cloud Pak for Data

IBM Watson Studio - Data Science and AI Tools and Frameworks

- Create, train and collaborate
- Best of breed open source & IBM tools
- Code (R, Python or Scala) and no-code/visual modeling tools

- Most popular open source frameworks
- IBM best-in-class frameworks

- Fully managed or customer managed service
- Container-based resource management
- Elastic pay as you go cpu/gpu power

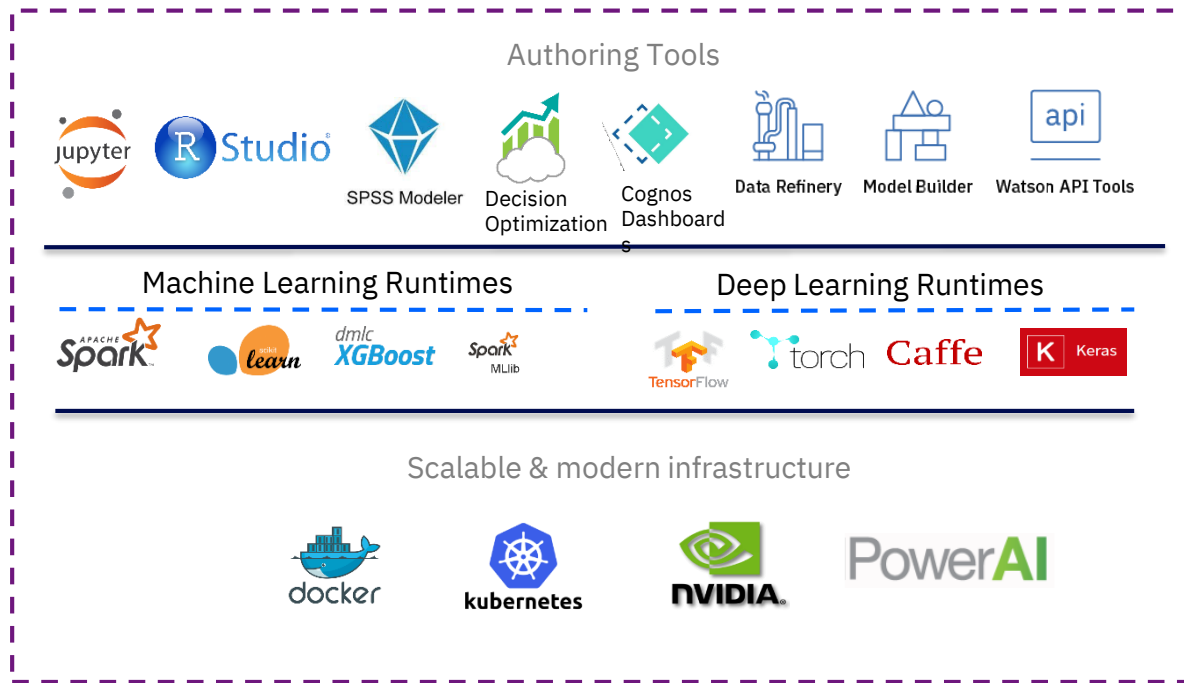
Deployment options:

Desktop - Windows & macOS

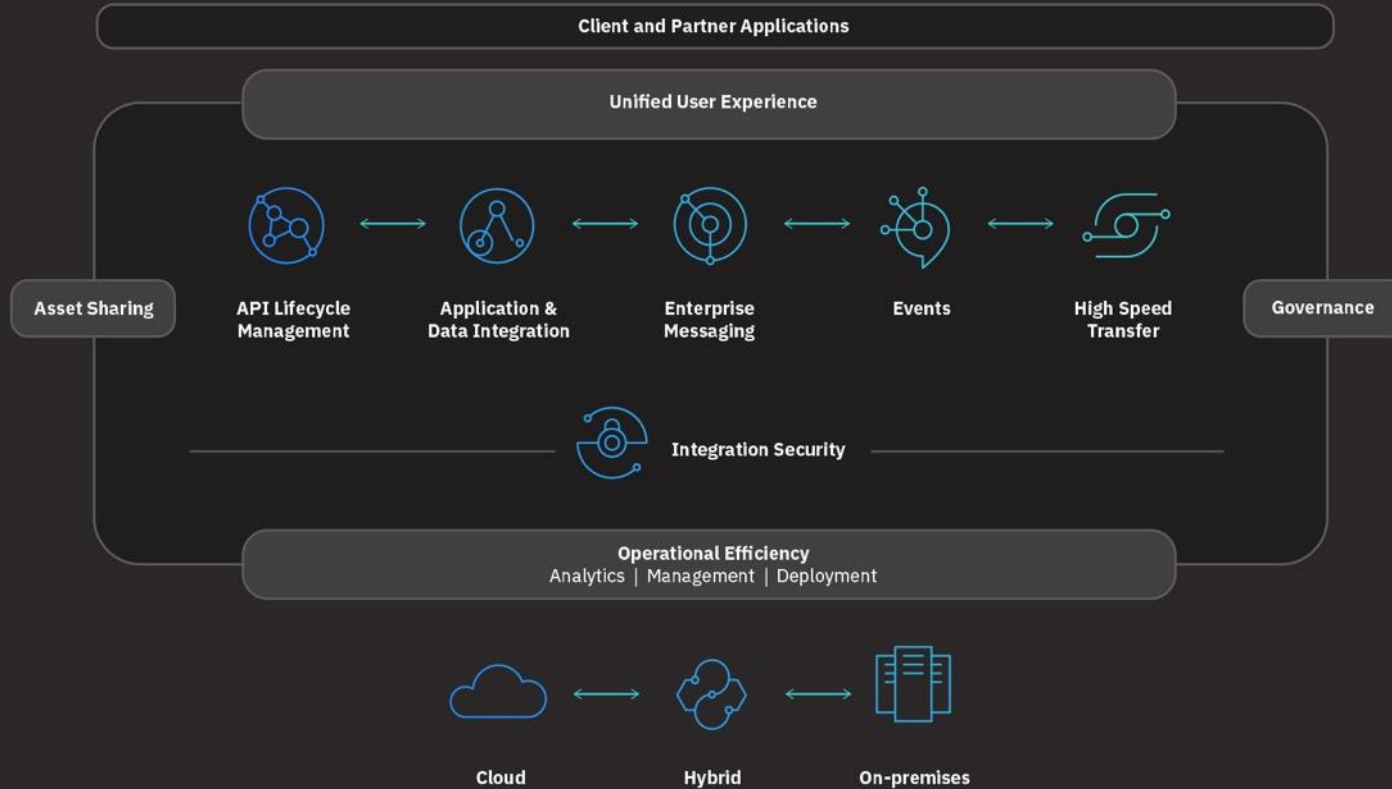
Fully Managed on **IBM Cloud**

Public Cloud e.g. AWS, Azure

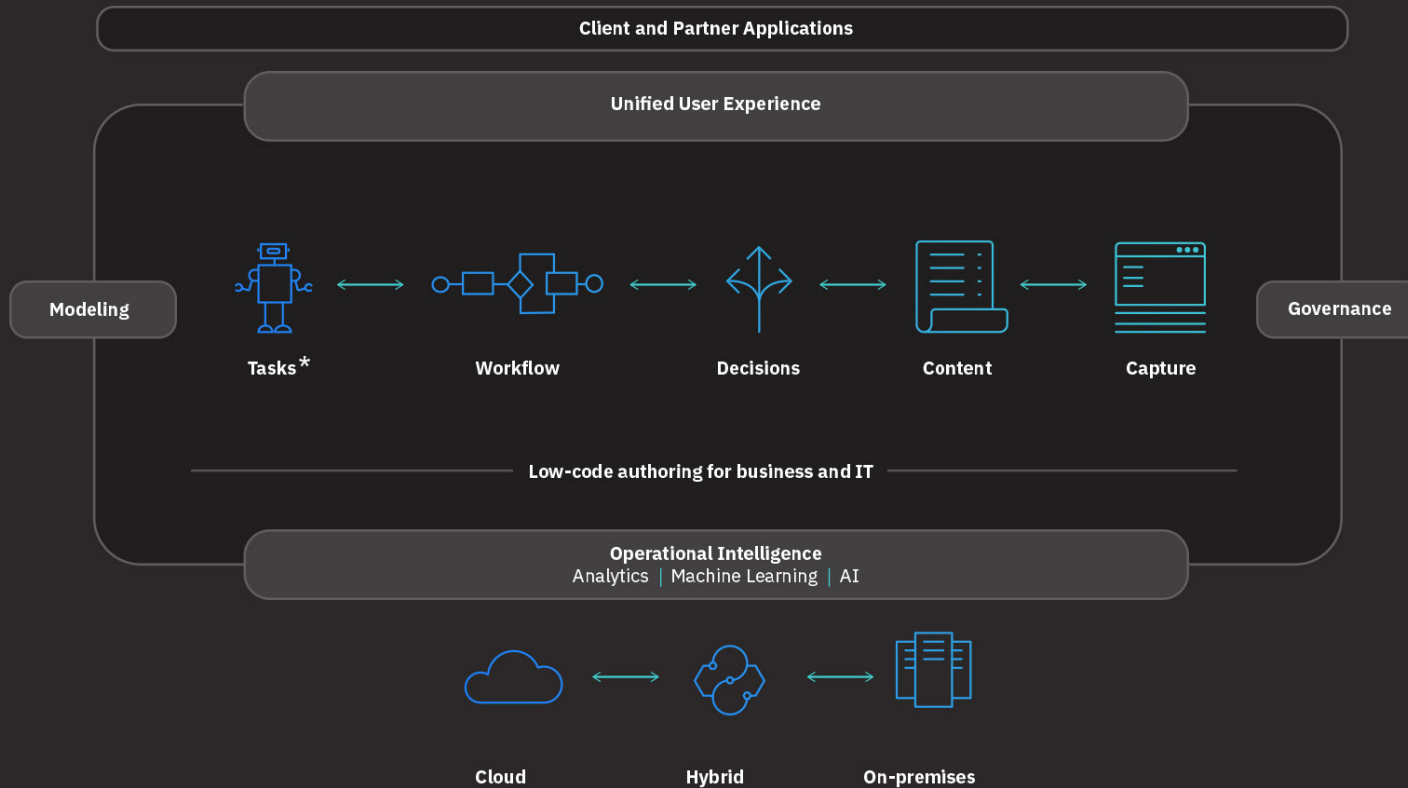
Private Cloud - Embedded in ICP4D



IBM Cloud Pak for Integration



IBM Cloud Pak for Automation



IBM[®]



Red Hat