Value of IBM Cloud Paks



Our customers have declared three core imperatives

Resiliently
Respond To Change

1 - IT will become decentralized, open, secure



Flexibly
Optimize Productivity

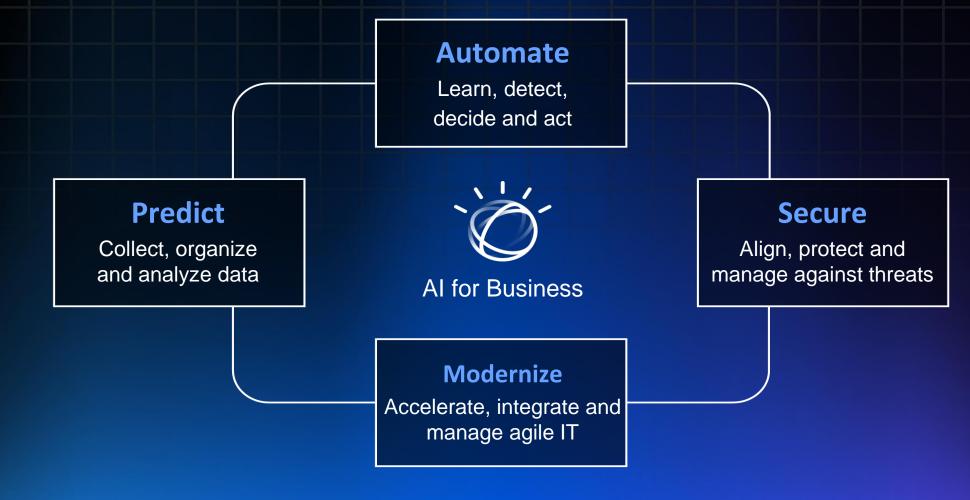
2 - Automation will fuel the future of work



Intelligently
Operate & Engage

3 - Winners will scale the value of data with Al

By unlocking the intelligence of AI and the agility of hybrid cloud



Hybrid cloud platform

IBM Hybrid Cloud and Al Solutions IBM Cloud Paks are central to our software strategy

Business Transformation and Hybrid Cloud Services	IBM Services	Digital Transf Intelligent Wo	ormation • Application Model rkflows	rnization •	System In Partners	tegrator
	ហំ					
Hybrid Cloud Software	IBM Software IBM Cloud Paks		Data and Al • Integration • Security • Industry Capabili		Software SaaS Parti	
Hybrid Cloud Platform	Red Hat Hybrid Cloud	d Platform	Development,	Security and O	perational Ser	vices
			Red Hat OpenShi	ift Ent	d Hat erprise Linux	
Infrastructure	IBM Cloud	Public Clouds	IBM Systems	Enterprise Infrastruct		Edge
		AWS • Azure • Others		IIIII asti uci		

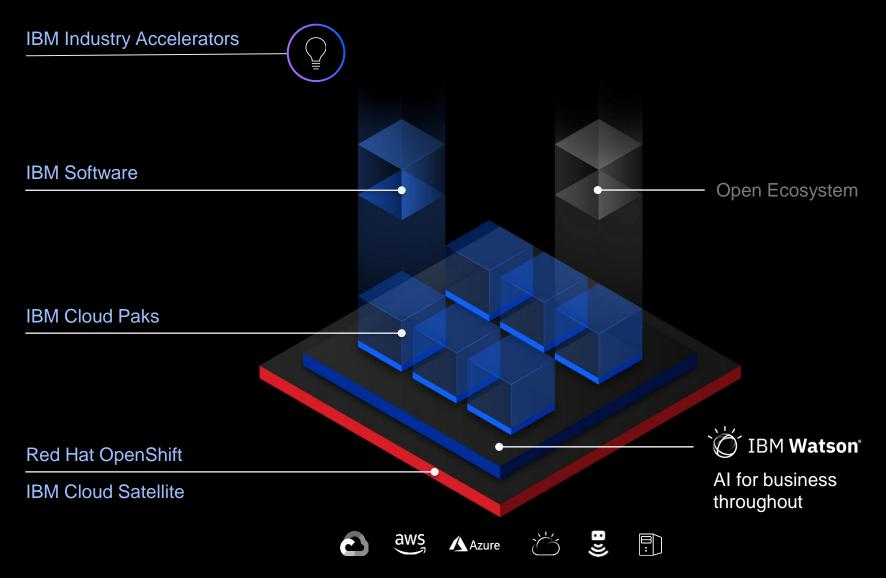
IBM Cloud Paks: Al-powered hybrid cloud software

Speed industry and intelligent workflow deployments

Extend and customize with use cases and persona specific capabilities

Simplify experiences with seamless integration of related capabilities

Deploy anywhere as-a-service from the data center to the edge with enterprise QoS





IBM Cloud Paks: Al-powered hybrid cloud software

Containerized software, foundational services and Red Hat OpenShift

IBM Cloud Pak for Data

Unify and simplify the collection, organization and analysis of data

8X

faster access to data and insights

158%

ROI from infusing AI

IBM Cloud Pak for **Business Automation**

Automate business operations to achieve better performance

6X

faster turnaround time

80%

reduction in manual processes

IBM Cloud Pak for **Watson AlOps**

New

Automate IT operations to deliver actionable insights

25%

more initiatives completed

50%

less labor cost

IBM Cloud Pak for Integration

Automate application and data flows to improve client experiences

300%

faster to integrate

33%

less cost to integrate

IBM Cloud Pak for **Network Automation**

New

Automate networks to deliver zero-touch operations

82%

less cost to onboard new services

6X

reduction in operational expenses

IBM Cloud Pak for **Security**

Generate deeper insights into threats, orchestrate actions and automate responses

60x

faster threat investigation

8x

faster response to cybersecurity incidents





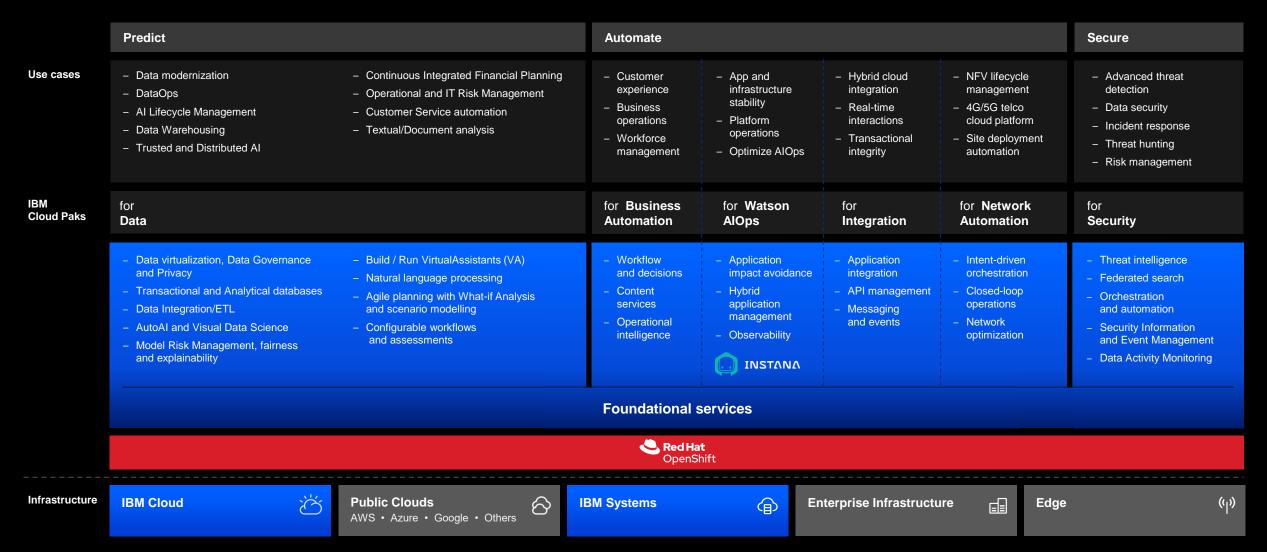




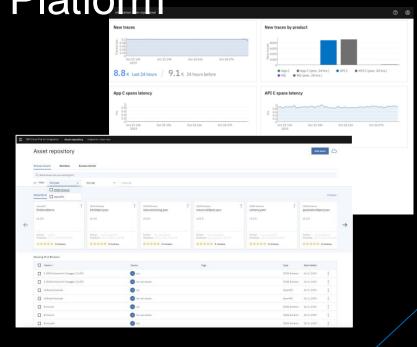


IBM Cloud Paks: Al-powered hybrid cloud software

Modernize with ease with IBM hybrid cloud software and solutions for specific use cases to predict, automate, and secure a smarter business. They are packaged as IBM Cloud Paks that include containerized software, foundational services and Red Hat OpenShift.

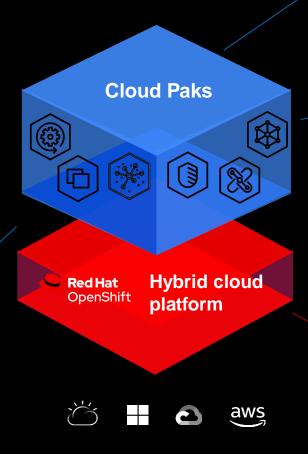


IBM Cloud Paks: Delivering value on an integrated Hybrid Cloud Platform



Common operational services for lower TCO

- Consistent operator install & upgrades
- Common configuration for ramping container resource usage up and down
- Integrated logging, monitoring, metering, security, identity and access management
- Optimized costs for compute and human resources



Unified navigation and experience for quick onboarding

- Single UI framework and consistent navigation across features and capabilities
- Operations dashboards for monitoring & reporting

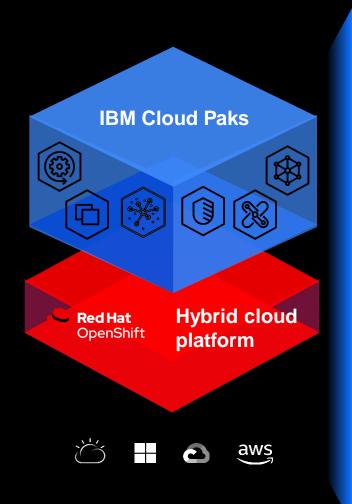
Integrated capabilities for improved productivity

- Rapid experimentation and innovation guided by business metrics
- Build and deploy solutions that capitalize on access to elastic compute power
- Common asset repository for reuse of components
- Portability enables flexible movement between locations and cloud providers

Containerized software running on OpenShift Container Platform (OCP)

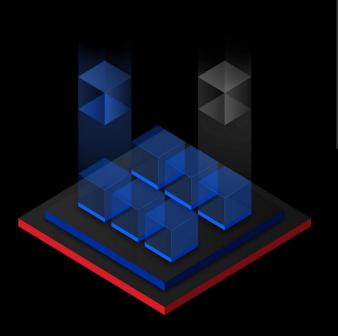
- Simplified container management across IT infrastructure
- Portability between different hybrid clouds
- Service isolation for improved security, resiliency and recovery
- Auto scale up and out to support dynamic demand
- Continuous deployment using pipelines

The value of IBM Cloud Pak



Capability	Available Standalone	Included in IBM Cloud Paks
Access to New Value-Added Offerings and Containerized IBM Middleware		√
Access to Industry-Leading Red Hat Cloud Platform & Solutions		✓
License Flexibility		√
Cloud Friendly Metrics: Virtual Processor Core (VPC) and MVS metrics		✓
Full Stack Certification including Open Source support		√
Common Services (Logging, Monitoring, Security)		√

IBM hybrid cloud ecosystem







IBM Cloud Pak value Three Complementary Value Statements

1) Core Value of IBM Cloud Paks

2: Sell the Value of the Cloud Pak Model The Building Blocks of Incremental Value

For Internal Use Only Slack: #subscription-license Subscription Seismic

Cloud Pak Benefits

- · Access to New Value-Added Offerings and Containerized IBM Middleware
- · Access to Industry-Leading Red Hat Cloud Platform & Solutions
- License Flexibility
- Price Protection for the Term
- Cloud Friendly Metrics: Virtual Processor Core (VPC) and MVS metrics
- Full Stack Certification including Open Source support

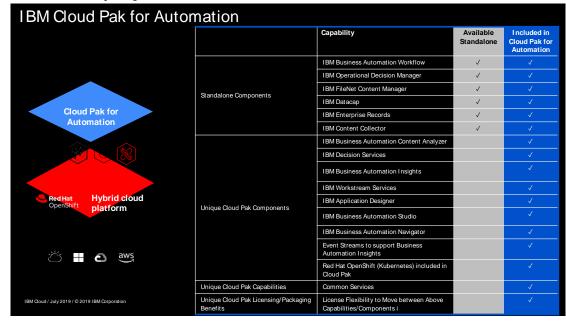


Value Estimates vary by Pak and are based upon historic and competitive pricing analysis.

Cloud Pak Benefits – the Industry's Leading Platform for Modernization and Building Cloud Native Applications!

9 22 October 2020

2) Specific Value of an IBM Cloud Pak



3) Value of Cloud Pak as a Subscription

IBM

Simple & **Cost-Effective**

- Consistent with how you consume other software
- Lower cost of entry
- Predictable and protected pricing during the term
- Potential for different accounting treatment
- Passport Advantage contract familiarity

Flexible & **Future-Proof**

- · Switch between offerings as your needs change – no "product lock-in"
- Flexible terms from 12-60
- Ramp-Up usage as required
- Cloud Friendly license metrics

Investment **Protection**

- · At the end of the term. renew or adjust quantities as your needs evolve
- Available Upgrades from point products to highervalue Subscription offerings



IBM Cloud Pak Core Value

The Building Blocks of Incremental Value

IBM Cloud Pak Benefits

- Access to New Value-Added Offerings and Containerized IBM Middleware
- Additional integrated capabilities addressing the broadest set of value-added use cases
- Access to Industry-Leading Red Hat Cloud Platform & Solutions
- License Flexibility
- Price Protection for the Term
- Cloud Friendly Metrics: Virtual Processor Core (VPC) and MVS metrics
- Full Stack Certification including Open Source support



Cloud Pak Benefits – the Industry's Leading Platform for Modernization and Building Cloud Native Applications!



IBM Cloud Pak for Data

Modernize and Run Applications Anywhere

Standalone IBM Offerings

Db2 Standard and Advanced

Informix

DataStage

Information Server

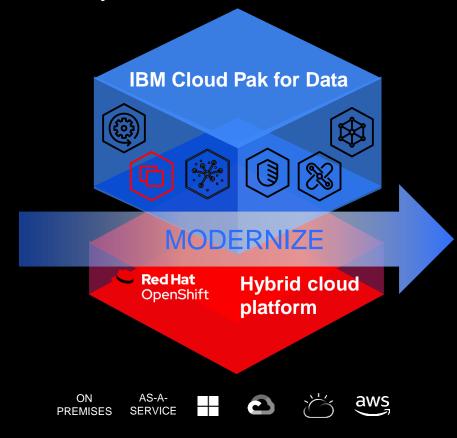
SPSS, Decision Optimization

Cognos Analytics

Planning Analytics

Master Data Management

OpenPages



50% productivity improvement in the data lifecycle

40X greater speed of trusted data to business users

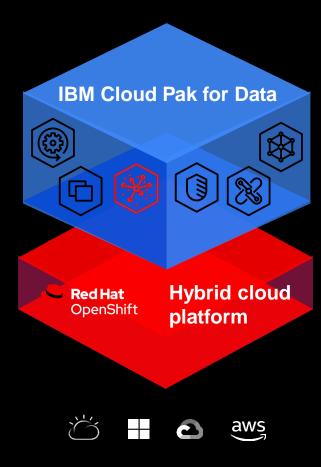
Business Value of Upgrading

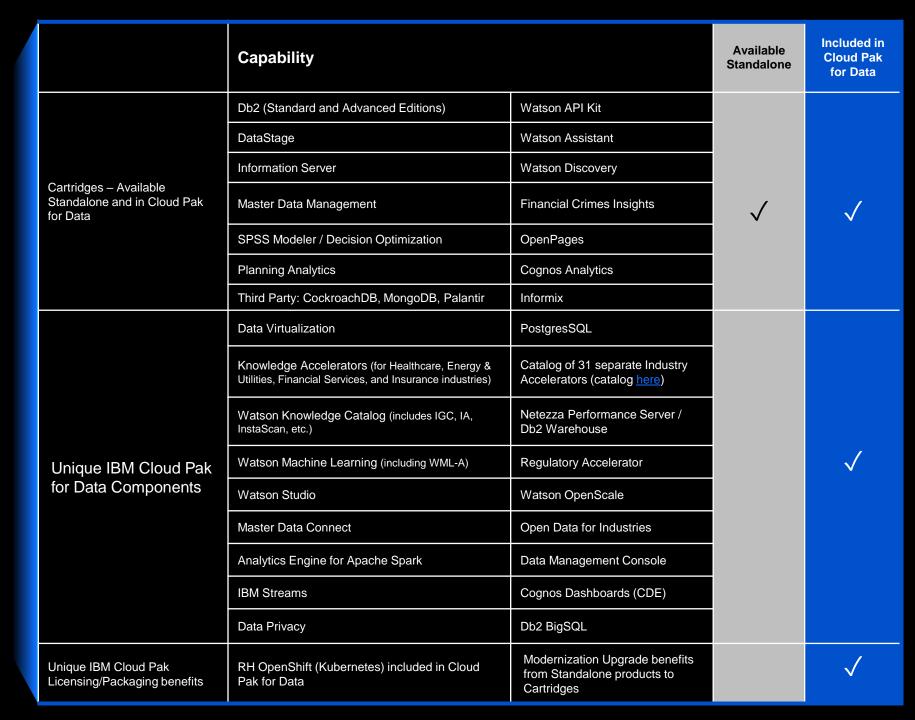
- 1. Modernize and refactor existing applications to containers on Red Hat OpenShift
- 2. Reduction in Application Management costs with 65% to 85% improvement in application management efficiency
- **3. Migrate to Cloud** at your own pace, as workloads are ready
- **4. Protect your Investment** with the flexibility and entitlement to run existing applications
- **5. Flexible licensing** with incentives for existing customers of standalone products through the Modernization Upgrade Program

IBM Cloud Pak for Data Benefits

- Unified platform experience simplifies data delivery, improves end user self-service and reduces IT support
- Modular, open source, and best of breed platform supports the ever-changing business environment
- Single platform solution supports all clouds and tools, reducing data and technology lock-in and dependencies
 - Upgrade at your own pace with IBM Cloud Pak for Data while keeping existing Standalone entitlements

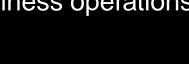
IBM Cloud Pak for Data





IBM Cloud Pak for Business Automation

Automate all your business operations





WDG RPA

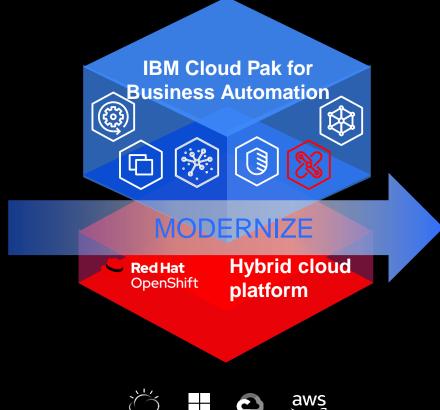
ODM

BPM/Case Manager/BAW

FileNet

Datacap

IER/ICC



up to 80% reduction in manual processes

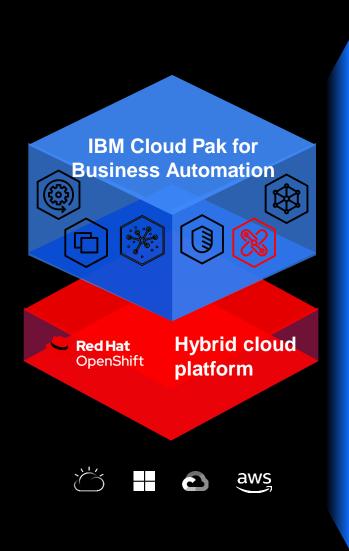
Business Value of Upgrading

- Increase employee productivity by automating repetitive and mundane human tasks
- **2. Reduce Costs** by leveraging AI to streamline processes and minimize business risk
- 3. Increase revenue by delivering customized and automated client experiences at scale
- **4. Modernize automation applications** using containers to support multi cloud deployments
- **5. Flexible licensing:** Mix and match capabilities on demand

IBM Cloud Pak Benefits

- Access to New Value-Added Offerings and Containerized IBM Middleware
- Access to Industry-Leading Red Hat Cloud Platform & Solutions
- License Flexibility
 - Cloud Friendly Metrics: Virtual Processor Core (VPC) and MVS metrics
- Full Stack Certification including Open Source support

IBM Cloud Pak for Business Automation



	Capability	Available Standalone	Included in Cloud Pak for Automation
	IBM WDG Automation	✓	✓
	IBM Business Automation Workflow	✓	✓
Standalone Components	IBM Operational Decision Manager	✓	✓
	IBM FileNet Content Manager	✓	✓
	IBM Datacap	✓	✓
	IBM Enterprise Records	✓	✓
	IBM Content Collector	✓	✓
	IBM Business Automation Content Analyzer		✓
	IBM Decision Services		✓
	IBM Business Automation Insights		✓
	IBM Workstream Services		✓
Unique IBM Cloud Pak Components	IBM Application Designer		✓
	IBM Business Automation Studio		✓
	IBM Business Automation Navigator		✓
	Event Streams to support Business Automation Insights		✓
	Red Hat OpenShift (Kubernetes) included in Cloud Pak		✓
Unique IBM Cloud Pak Capabilities	Common Services		✓
Unique IBM Cloud Pak	License Flexibility to Move between Above		✓

IT Ops / Management Needs

- Manage the volume of incidents and identify insights on how to fix critical issues quickly
- Minimize the risk of security breaches and non-compliance issues
- Manage complex application environments and an explosion of heterogeneous IT data
- Track and manage across multiple cloud and hybrid environments

IBM Cloud Pak for MCM is being transitioned and consolidated into IBM Cloud Pak for Watson AlOps. Learn

IBM Capabilities



Cost & Asset
Management
Drive total control and automation of IT operations and provisioning

Application & Infrastructure
Monitoring
Define applications to drive business continuity and application resiliency

Governance & Risk
Management
Enforce and manage
security and
compliance criteria at
scale

Remediation
Automate management
of incidents and events
that are associated
with resources and
applications

Event Management &

IBM Cloud Pak for Watson AlOps

Automate IT Operations

\$420K saved by reducing per outage cost

Standalone Offerings

Watson AlOps

IBM Operations Analytics Predictive Insights

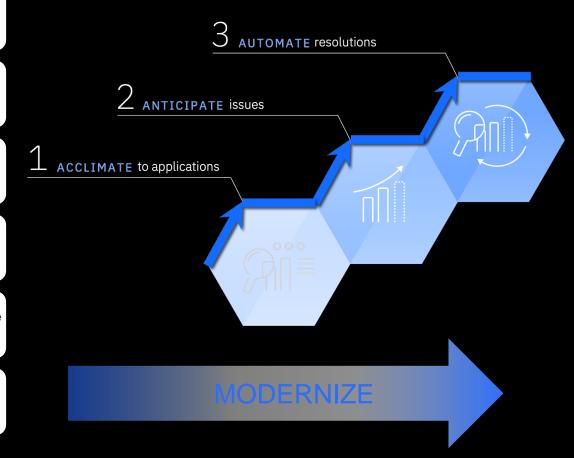
IBM Netcool Operations Insight
Operations Management
IBM Netcool Operations Insight
Connection

IBM Netcool/OMNIbus IBM Netcool/Impact

IBM Netcool Operations Insight Agile Service Manager

IBM Netcool Operations Insight Network
Management
IBM Netcool Operations Insight
Performance Management

PATH TO AUTOMATION



Business Value of Upgrading

Ladder to Automation

- ACCLIMATE to applications: Understand business applications and what "good looks like" across the entire application lifecycle from DevOps to IT Ops to Cost Optimization
- 2. ANTICIPATE issues Increase application availability and reduce security risks by detecting vulnerabilities and predicting operational & compliance issues before they occur
- 3. AUTOMATE resolutions: Reduce costs and invest more in new projects by automatically remediating incidents, decreasing troubleshooting time, and reducing time spent on auditing processes

50%

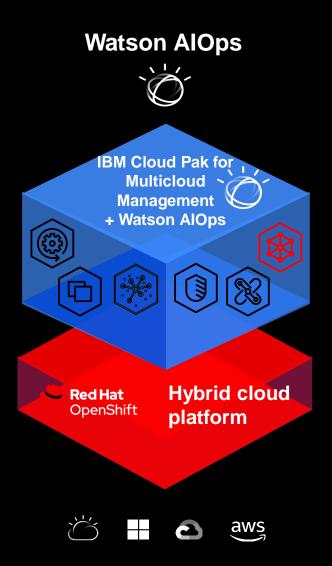
REDUCTION OF
MAINTENANCE COSTS

25%
INCREASE IN TIME

PROJECTS

AVAILABLE TO NEW

IBM Cloud Pak for Watson AlOps



	Capability	Available Standalone	Included in Watson AlOps
Unique Watson AIOps Components	Watson AlOps: The Al Model		✓
	IBM Operations Analytics Predictive Insights	✓	✓
	IBM Netcool Operations Insight Operations Management	✓	✓
	IBM Netcool Operations Insight Connection		
	IBM Netcool/OMNIbus		✓
	IBM Netcool/Impact		
	IBM Netcool Operations Insight Agile Service Manager		√
Watson AlOps add-on	IBM Netcool Operations Insight Network Management		√
Watson Alops add-on	IBM Netcool Operations Insight Performance Management		
Unique Watson AlOps Licensing/Packaging Benefits	Price Reduction for Netcool (avg 20% for NOI & 50% NOM)		√
	ASM included for free in the event & AI		✓
	Flexible and pay for what you use : AI; Metrics and Events ratios		√
	Adopt at your own pace (licensing and technically)		✓

IBM Cloud Pak for Integration

Integrate Anything, Anywhere



MQ & MQ Advanced

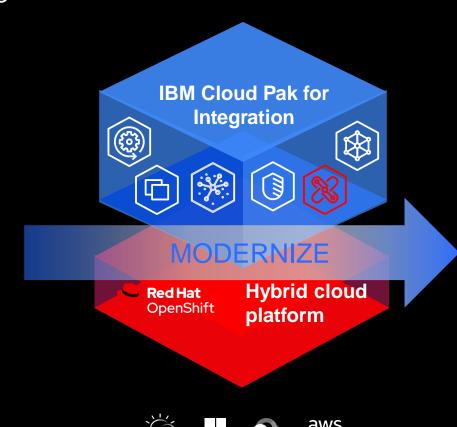
App Connect Enterprise

API Connect

DataPower Virtual

Aspera

Event Streams (Kafka)





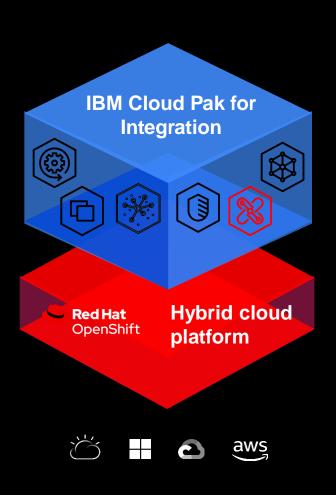
Business Value of Upgrading

- 1. Create integrations 3x faster at 1/3 lower cost
- **2. Most comprehensive integration platform** on the market, fully interoperable with stand-alone
- 3. Increased productivity and governance from Cloud Pak exclusive features: Share and re-use integration assets, unified UX and identity, end to end tracing and monitoring
- 4. Modernized integration architecture built on Containers and Deployable Anywhere
- **5. Flexible licensing:** Mix and match capabilities on demand

IBM Cloud Pak Benefits

- Access to New Value-Added Offerings and Containerized IBM Middleware
- Access to Industry-Leading Red Hat Cloud Platform & Solutions
- License Flexibility
 - Cloud Friendly Metrics: Virtual Processor Core (VPC) metric
- Full Stack Certification including Open Source support

IBM Cloud Pak for Integration



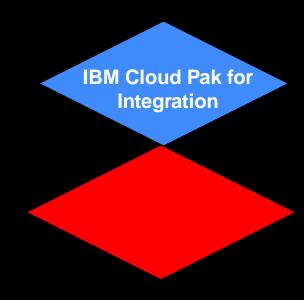
	Capability	Available Standalone	Included in Cloud Pak for Integration
	App Connect	✓	√
	API Connect	✓	✓
Standalone	MQ, MQ Advanced	✓	✓
Components	DataPower	✓	√
	Aspera	✓	✓
	Transformation Advisor	✓	✓
	Navigator		√
Unique IBM Cloud Pak	Asset Repository		√
Capabilities	Operations Dashboard		✓
	Al Powered Mapping Assist		✓
	Moving from PVU to VPC and gain between 40%-70% in additional entitlement		√
Unique IBM Cloud Pak Licensing/Packaging	Availability of non-production parts delivers additional value of 25%-50% when trading in Standalone entitlement to Cloud Pak entitlement		√
Benefits	Embedded OpenShift entitlement included in license		√
	License Flexibility to Move between Above Capabilities/Components including container-based sub-capacity License Service		√

Drive secure and timely access to data and applications



Utilizing a modern, agile approach to integration

- Speed integration development with templates, pre-built connectors and low-code tools
- Reduce the cost of integration by unlocking the value of existing data
- Increase operational agility with a common repository, autoscaling and self-healing







Releases features in 1/3 the previous time to delivery



Creates self-service, API-driven business models

IBM Cloud Pak for Integration



Unified User Experience



API Lifecycle

API Connect



Application & Data Integration

App Connect



Enterprise Messaging

• MQ



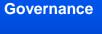
Events

Event Streams



High Speed Transfer

Aspera





Integration Security

DataPower

IBM containerized software



Container platform and operational services



IBM public cloud

Microsoft







IBM **Z** Endpoints IBM LinuxOne IBM Power Systems IBM Storage



Asset Sharing

Integration Needs

- Create and manage APIs
- Respond to events in real-time
- Access data in a fast, secure and reusable way
- Accelerate delivery
- Build and deploy new, re-usable integrations in minutes
- Reduce cost and increase reuse and interoperability
- Secure your business while delivering new engaging services
- Protect transaction integrity
- Balance workload demands to optimize resiliency and scalability

IBM Capabilities



API Lifecycle
Management
Unlock business data
and assets as APIs

Event Streaming
Deliver real-time Kafka
event interaction

Application
Integration
Connect your cloud
and on-prem
applications

High Speed Data
Transfer
Drive fast & secure
data transport across
any cloud

Enterprise Messaging
Deliver messages
reliably with enterprisegrade messaging

Secure Gateway
Control access to vital
resources wherever
they are

IBM Cloud Pak for Security

Gain complete insights and unify workflows



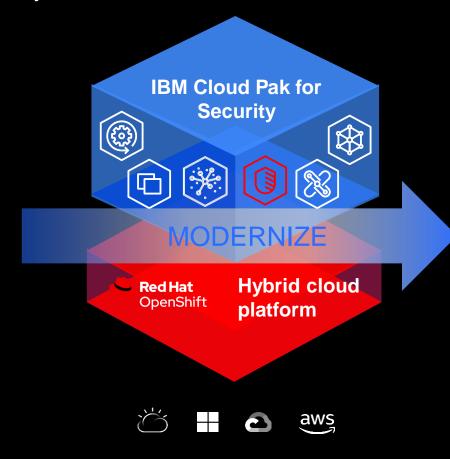
IBM Security QRadar SIEM

IBM Security QRadar Flows

IBM Security QRadar Data Store

IBM Security SOAR

IBM Security SOAR with Privacy



IBM Cloud Pak Benefits

- Access to New Value-Added Offerings and Containerized IBM Middleware
- Access to Industry-Leading Red Hat Cloud Platform & Solutions
- License Flexibility
- Cloud Friendly Metrics: Managed Virtual Server (MVS) & RVU metrics
- Full Stack Certification including Open Source support

600+

validated integrations to reduce risk and MTTD

51%

increase in ability to detect attacks

60x

improvement in investigation time

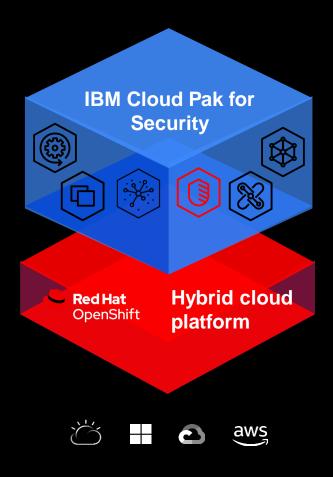
8x

increase in speed to respond to security incidents

Business Value of Upgrading

- 1. Non-data volume-based pricing with unlimited data, users and actions
- 2. Unified/streamlined workflow and insights against existing and future security tooling
- License Flexibility to Move between Capabilities/Components with unlimited data consumption
- 4. Migrate from Stand alone offerings to Cloud Pak capabilities at your own pace
- 5. Deploy on premise or in the cloud
- Realize the value of a cloud native architecture with improve resiliency and scalability

IBM Cloud Pak for Security



	Capability	Available Standalone	Included in Cloud Pak for Security	Included in Guardium Insights for Cloud Pak for Security
	IBM Security QRadar SIEM	✓	✓	
Available Standalone and	IBM Security QRadar Flows	√	✓	
Included in Cloud Pak for	IBM Security QRadar Data Store	√	✓	
Security	IBM Security SOAR	√	✓	
	IBM Security SOAR with Privacy	√	✓	
	IBM Security Threat Intelligence Insights		✓	
	IBM Security Data Explorer		√	✓ * Restricted Use
Unique IBM Cloud Pak	IBM Security Advanced Threat Feed*		✓ * Optional Add On	
Components	IBM Security Guardium Insights			✓
	Red Hat OpenShift (Kubernetes) included in Cloud Pak		√	✓
	Red Hat Runtimes		√	✓
Unique Cloud Pak Capabilities	Common services		√	✓
Unique IBM Cloud Pak Licensing/Packaging	License Flexibility to Move between Above Capabilities/Components		✓	
Benefits	Unlimited data ingestion		√	

Storage Suite Starter for IBM Cloud Paks

Introduced with IBM Cloud Pak for Integration in December 2020

Software-defined storage for IBM Cloud Pak deployments



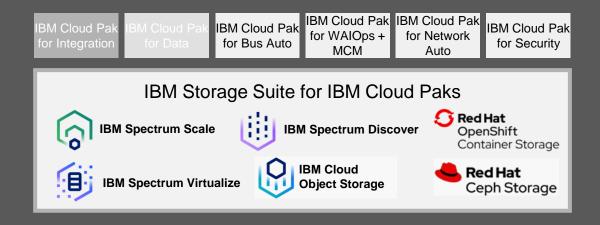
Simplify IBM Cloud Pak deployments by including Storage and documentation so customers are ready for production



Strengthen IBM's positioning as a one-stopshop, offering end-to-end solution from IBM Cloud Paks to Storage



Position the full Storage Suite for IBM Cloud Paks as the preferred and validated storage option in upsell opportunities



What's included?

- Included <u>free-of-charge</u> software-defined storage for IBM Cloud Pak deployments
 - Up to 36TB (12TB usable) of Red Hat OpenShift Container Storage
 - Up to 12TB of IBM Spectrum Scale, IBM Spectrum Virtualize for Public Cloud, and/or IBM Spectrum Discover
 - Note that IBM Cloud Object Storage and Red Hat Ceph Storage are NOT included
 - Fully supported by IBM in production environments (Level 1 and Level 2)
 - Time limit 36-months for new and existing customers

IBM hybrid cloud delivers a generational leap in value



- Digital acceleration
- Productivity
- **Cost efficiency**
- (A) Compliance & Security
- Strategic optionality

Only **20%** of value is captured from traditional cloud approaches

The remaining 80% is captured by a hybrid cloud approach

100%

Captured Cloud Value →

20%



Hybrid cloud platform

Traditional clouds

IBM: The leader in application modernization and management

of the top 25 US Retailers

of top 20 global 20 communication service providers

of the top 25 insurance companies

of the top 50 global banks

90% of global credit card transactions

for ease of data integration

Get started with IBM

Bring the value of Al-powered software to your business

A few ways to get started:

- 01 <u>Explore</u> a free consultation with an expert
- 02 Try one of the Cloud Paks at no cost
- 03 <u>Buy</u> certified Cloud Paks on Red Hat Marketplace



Predict and shape future outcomes and better decisions

With Cloud Pak for **Data**, you can accelerate your journey to Al to transform how your business operates with open, extensible data and Al capabilities that run on any cloud.



Automate workflows to improve experiences, productivity, and operational efficiency

With Cloud Paks for Business Automation, Watson AlOps, Integration, and Network Automation, you can build highly scalable workflow capabilities running anywhere.



Protects to reduce risk and shields against threats

With Cloud Pak for **Security**, you can integrate security tools to gain insights into threats across hybrid, multicloud environments.

Client References

IBM Internal: For an up-to-date set of client reference slides, please see Seismic

Business Partners: For an up-to-date set of client reference slides, please see Seismic

Backup

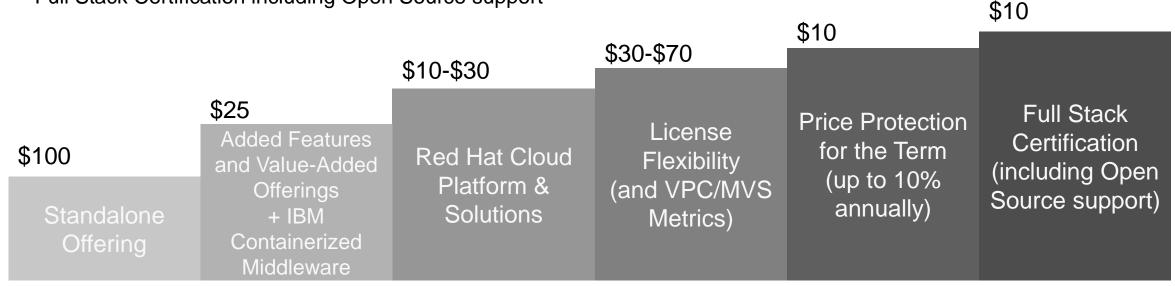


2: Sell the Value of the Cloud Pak Model

The Building Blocks of Incremental Value

Cloud Pak Benefits

- Access to New Value-Added Offerings and Containerized IBM Middleware
- Access to Industry-Leading Red Hat Cloud Platform & Solutions
- License Flexibility
- Price Protection for the Term
- Cloud Friendly Metrics: Virtual Processor Core (VPC) and MVS metrics
- Full Stack Certification including Open Source support



Value Estimates vary by Pak and are based upon historic and competitive pricing analysis.

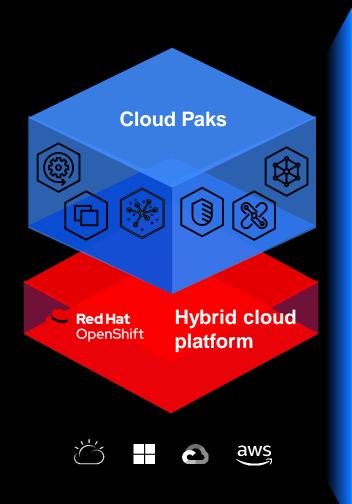
Cloud Pak Benefits – the Industry's Leading Platform for Modernization and Building Cloud Native Applications!



\$100+ of Value

for \$35 Annually!

The Value of the Cloud Pak



Capability	Available Standalone	Included in Cloud Paks
Access to New Value-Added Offerings and Containerized IBM Middleware		✓
Access to Industry-Leading Red Hat Cloud Platform & Solutions		✓
License Flexibility		✓
Cloud Friendly Metrics: Virtual Processor Core (VPC) and MVS metrics		✓
Full Stack Certification including Open Source support		√
Common Services (Logging, Monitoring, Security)		√

WebSphere Hybrid Edition (WSHE)

Modernize and Run Applications Anywhere

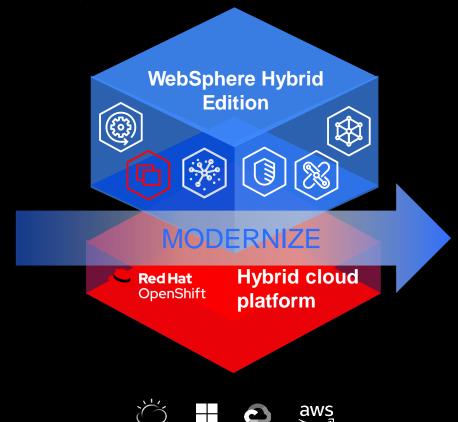
WAS ND

WAS

WAS Liberty Core

WAS Family

Cloud Foundry Migration Runtime



63% improved employee productivity

Business Value of Upgrading

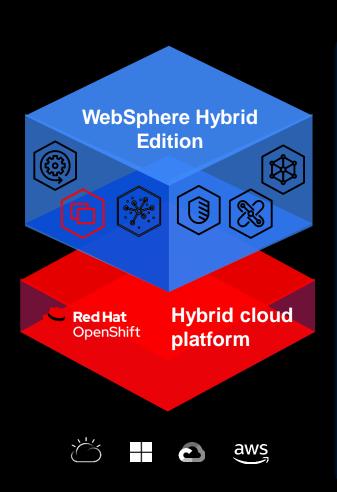
- Modernize and refactor existing applications to containers on Red Hat OpenShift (separately entitled)
- 2. Develop and Deploy new Cloud Applications: 84% delivery improvement from traditional methods
- 3. Migrate to Cloud at your rate and pace
- **4. Protect your Investment:** Continue to run existing apps WebSphere, Cloud Foundry
- **5. Flexible licensing:** Mix and match capabilities on demand, VPC licensing

WSHE Benefits

- Access to New Value-Added Offerings and Containerized IBM Middleware
- Easily paired with Industry-Leading Red Hat Cloud Platform & Solutions
- License Flexibility
- Cloud Friendly Metrics: Virtual Processor Core (VPC) licensing metric



WebSphere Hybrid Edition (WSHE)



	Capability	Available Standalone	Included in WebSphere Hybrid Edition
	IBM WebSphere Application Server Network Deployment	✓	√
Available Standalone and Included in WebSphere Hybrid	IBM WebSphere Application Server (Base)	✓	✓
Edition	IBM Liberty Core	✓	✓
	IBM Cloud Foundry Migration Runtime ¹	✓	✓
	IBM Cloud Transformation Advisor (Supported)		✓
	Mono2Micro (Supported)		✓
Unique Components	Red Hat OpenShift	✓	
	Red Hat CodeReady Workspaces	✓	
	Red Hat Runtimes	✓	
Licensing/Packaging Benefits	License Flexibility to Move between Above Capabilities/Components		√
	Perpetual and Subscription licensing available		✓
	Virtual Processor Core Licensing Metric		✓

Footnotes:

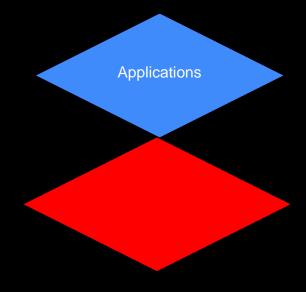
 Cloud Foundry Migration Runtime requires OpenShift, but OpenShift is optional for other components of WSHE. OpenShift entitlement can be obtained from Red Hat.

Ensure continuous application development and delivery



Scaling innovation across your enterprise

- Unleash new cloud-native apps faster with less risk
- Unlock new value in applications through continuous modernization
- Optimize existing applications to lower development and maintenance costs





Develops digital first solutions



Leverages modern runtimes, containerizing key applications



