



IBM Cloud Pak for Integration

Modernization of IBM Integration portfolio

March 31st , 2026

Cloud Pak for Integration Package

Entitled through CP4I VPCs
(OpenShift uses 3:1 ratio per CP4I VPC)

IBM Cloud Pak for Integration

Capabilities:

Paid (CP4I VPCs use ratio to deploy components)
*Run on **entitled** OpenShift cores or standalone*

API Connect

App Connect

MQ/MQ Advanced

Event Streams

Aspera

DataPower

Event Endpoint Mgmt

RPA

Process Mining

Unpaid (no CP4I VPCs consumed if used).
Value-add features for CP4I

Platform UI

Asset Repository

Integration Assemblies

Integration Assistant

Upgrade Checklist

Declarative deployment

Foundation:

Red Hat OpenShift

Unpaid (no CP4I VPCs consumed)
Value-add features for Cloud Paks

Foundation Services

Monitoring,
Access Control, Metering,
Licensing

Storage Fusion

12TB per cluster

- All components are deployed on OpenShift cores.
- All OpenShift worker node cores need entitlement.
- CP4I provides entitlement to 3 cores of OpenShift for each 1 VPC of CP4I

CP4I Add-on components:

API Calls

Aspera Enterprise

Event Processing

webMethods

Selling/Licensing CP4I | Trade-up/upgrade from Existing Software

- Existing perpetual integration software can have perpetual entitlement traded-up to CP4I perpetual entitlement (trade-up from prior parts)
- Existing perpetual integration software can have perpetual entitlement upgraded to CP4I subscription upgrade (subscription license upgrade)

License type	License type	Part Number
CP4I from prior programs trade-up license	Perpetual	D20ZFLL
CP4I for IBM Z from prior programs trade-up license	Perpetual	D20ZKLL
CP4I Subscription License Upgrade	Subscription	D268ALL
CP4I for IBM Z Subscription License Upgrade	Subscription	D268CLL

- Perpetual customers upgrading to subscription licenses retain the right to revert to perpetual licenses

- Trade-up process uses modernization engine
 - <https://w3.ibm.com/w3publisher/flexofferings/modernization-engine>
 - Email Cloud Trade-Up Project Office tradeup@us.ibm.com

Cloud Pak for Integration | Value-Add Components

- Cloud Pak for Integration provides value-add components
 - **Platform UI**
 - User interface to access the features of the Cloud Pak for Integration
 - **Asset Repository (Automation Assets)**
 - Store, manage and share integration assets, using them across the capabilities.
 - **Inclusion of IBM Storage Fusion Essentials**
 - Up to 12TB of software defined storage per cluster.
 - **Entitlement to Red Hat OpenShift Container Platform**
 - 3 cores of Red Hat OpenShift for each 1 VPC of Cloud Pak for Integration
 - **6 months of self-hosted Instana**
 - Free entitlement on request to 6 months of Instana for monitoring and tracing integration components.

License Ratios for CP4I and Trade-ups

- CP4I VPCs entitlement from trade-ups works the same as entitlement from buying new CP4I VPCs
 - A customer has 1400 PVUs of App Connect Enterprise, and 2100 PVUs of MQ Advanced
 - 1400 PVUs ACE divided by 70 (PVU to VPC ratio) times 3 (license ratio) = 60 CP4I VPCs
 - 2100 PVUs of MQ Advanced divided by 70 (PVU ratio) divided by 2 (license ratio) = 15 CP4I VPCs
 - 75 CP4I VPCs total
- The customer can then use those 75 VPCs of CP4I on any of the products and change at any time.
 - Must continue to apply the license ratio
 - Can deploy as containers within CP4I or standalone outside CP4I either as containers or in VMs
 - VPC entitlement will be tracked using ILMT if deployed in VMs (on premises or in cloud)
 - Container deployments will be tracked using License Service
 - Deployment at non-production ratios can lead to a trade-up being financially beneficial as prior licenses were all ‘production’

Production Ratios

Capability	Product VPC to CP4I License Ratio
App Connect Enterprise	1 : 3
API Connect	1 : 1
DataPower	1 : 1
MQ base	4 : 1
MQ Advanced	2 : 1
Event Streams	1 : 1
Event Endpoint Mgmt	1 : 1
Aspera HSTS 1Gbps	1 : 4

Non-Production Ratios

Capability	Product VPC to CP4I License Ratio
App Connect Enterprise	2 : 3
API Connect	2 : 1
DataPower	2 : 1
MQ base	8 : 1
MQ Advanced	4 : 1
Event Streams	2 : 1
Event Endpoint Mgmt	2 : 1
Aspera HSTS 1Gbps	1 : 2

Red Hat OpenShift entitlement in CP4I – 3:1 ratio

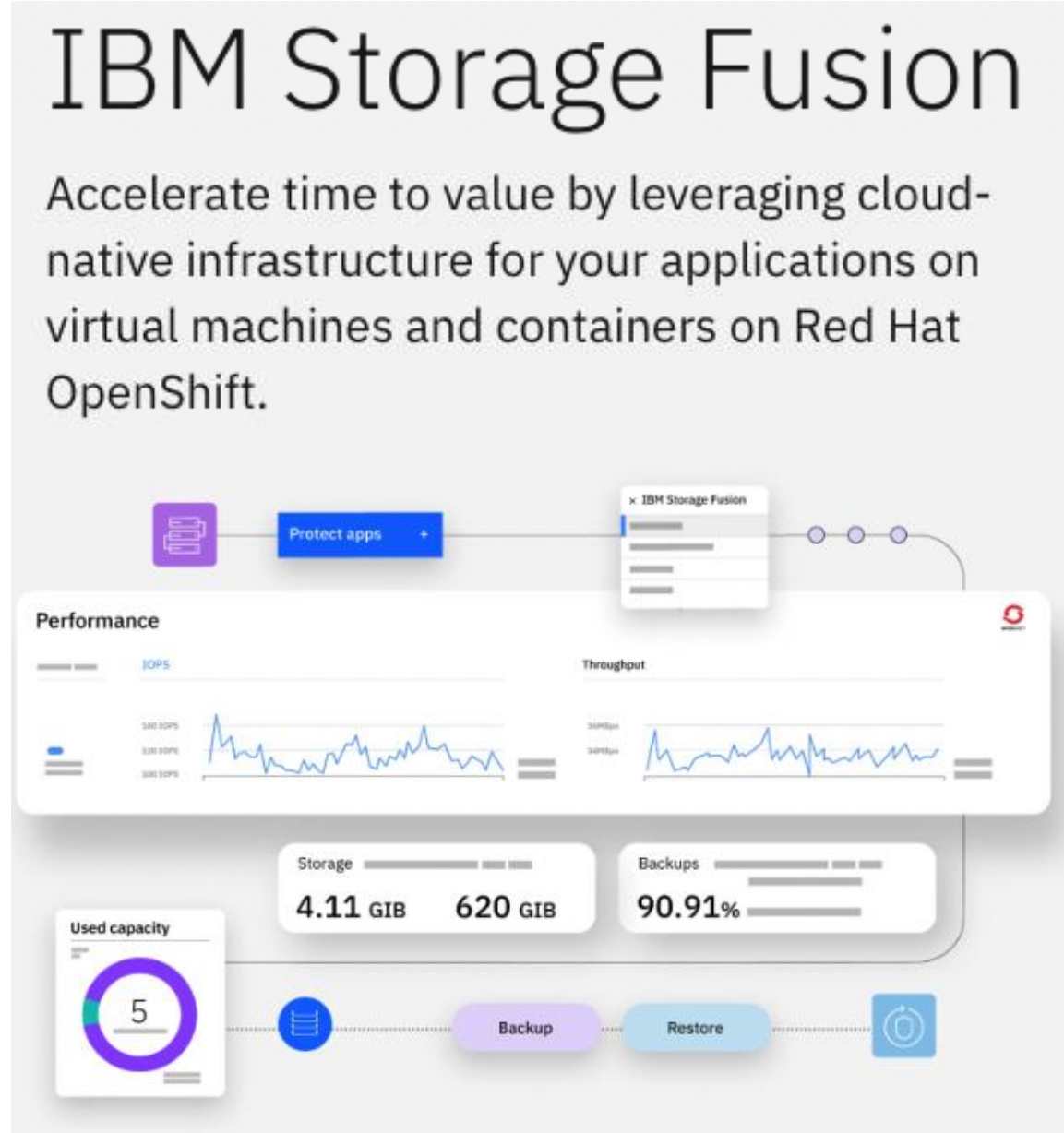
- How does a customer get OpenShift
 - CP4I entitlement created in IBM entitlement systems drives an update across to Red Hat who then update their entitlement systems – RH will email the RH account owner at the customer with details
- Who supports OpenShift if provided through CP4I entitlement?
 - PMRs on OpenShift are handled initially by IBM who work with Red Hat if needed
- How much OpenShift does CP4I entitlement provide
 - CP4I provides 3:1 ratio entitlement for OpenShift cores (and RHEL) for each CP4I VPC entitlement
 - Entitlement in Red Hat provisioning system should show up as restricted entitlement from CP4I, and only CP4I components can be deployed on these OpenShift cores under this restricted entitlement
 - All chargeable components plus Foundation Services and other free components like Asset Repo must have entitled OpenShift cores to deploy on – they must be included when sizing the deployment
 - Components such as Instana Agents and Turbonomic agents are included in CP4I so can be deployed on CP4I OpenShift
 - Some CP4I add-ons include their own OCP entitlement – this is the same CP4I restricted entitlement and can be used in a deployment along with CP4I OpenShift entitlement
- Additional OpenShift entitlement needed
 - In certain deployment scenarios with many different small clusters or large MQ deployments, or large non-prod deployments, there might be a need for additional OpenShift entitlement
 - Customers can get additional OpenShift entitlement either from buying additional Cloud Pak for Integration entitlement or directly from Red Hat.

Deploying CP4I on OpenShift – Storage Options

- Traditionally the choice of storage has been up to the customer
 - Choices have been between local native file storage, or SAN, or NAS
 - Products have typically either been neutral to these storage options or have developed to support or exploit the different types.
- Container deployments are at a different lifecycle in storage options
 - ‘Cloud-native’ storage that supports container deployments is typically required
 - Fewer options in market today that support this storage model “software-defined storage”
- Customers deploying into containers are no longer able to make storage decisions separate from the deployment choice
- Customers need to be made aware of this storage requirement and include budget to pay for their chosen storage option. See free entitlement to Storage Fusion (next chart)
- Storage choices currently are available from Red Hat, IBM and Portworx
 - See the File Systems and Storage section of this link
 - <https://www.ibm.com/docs/en/cloud-paks/cp-integration/2023.4?topic=requirements-storage-considerations>

CP4I now includes IBM Storage Fusion Essentials (only with 2023.4.1 or later)

- Storage Fusion Essentials includes
 - 12TB (usable) per cluster
 - Compression
 - Cluster-wide encryption
 - Cross availability-zone HA
 - No time limit to entitlement
- Upgrade to IBM Storage Fusion Advanced for additional functionality
 - Capacity above 12TB per cluster
 - External mode deployment
 - Backup, Disaster Recovery
 - Global Data Platform (Storage Scale)
 - Data Catalog
 - Advanced encryption with external key management



Consuming CP4I and OpenShift entitlements

	Consumes CP4I entitlement (uses ratios – prod and non-prod)	Doesn't consume CP4I entitlement
Consumes OpenShift entitlement	MQ Queue Managers App Connect Server Aspera HSTS API Connect DataPower Virtual Server Event Streams (Kafka Brokers, Geo Replicator nodes, MirrorMaker 2.0 nodes, Kafka Connect nodes hosted by Event Streams) Event Endpoint Management Chargeable HA deployments of above capabilities	Cloud Pak Foundational Services <i>CP4I</i> Asset Repo, Platform Navigator, Optional <i>App Connect components</i> (Designer build-time, Dashboard, connectors) <i>MQ components</i> (MFT Agent, IPT, Explorer) Instana Agents Kube Turbo Agents
Doesn't consume OpenShift entitlement	Deployments of integration components outside of CP4I OpenShift as Standalone deployments – uses same VPC/License ratio as CP4I container deployments	Master nodes, Controller nodes and Infrastructure nodes (that only run OpenShift functions) 'cold' DR deployments

OpenShift entitlement and deployment example

Examples are for illustration only and should not be used as actual suggested deployment examples

Customer buys 110 VPC of CP4I for MQ, ACE, API Connect, Asset Repo,
Gets entitlement to 330 VPC of OpenShift

50 VPCs of CP4I allocated as follows

2 prod clusters, 1 non-prod cluster

Prod cluster 1

42 cores API Connect prod (42 VPC CP4I)

2 VPC ACE prod (6 VPC CP4I)

4 VPC MQ Adv prod (2 VPC CP4I)

Prod cluster 2

42 VPCs API Connect prod (42VPC CP4I)

2 VPC ACE prod (6 VPC CP4I)

4 VPC MQ Adv prod (2 VPC CP4I)

Non-prod cluster

12 VPCs API Connect non-prod (6 VPC CP4I)

2 VPC ACE non-prod (3 VPC CP4I)

4 VPC MQ Adv non-prod (1 VPC CP4I)

114 cores of chargeable components deployed with 110 VPCs of CP4I

Non-chargeable components deployed on OpenShift cores

3 cores of Foundation Services in each cluster 9 cores total)

0.7 cores for Asset Repo in non-prod cluster (0.7 cores total)

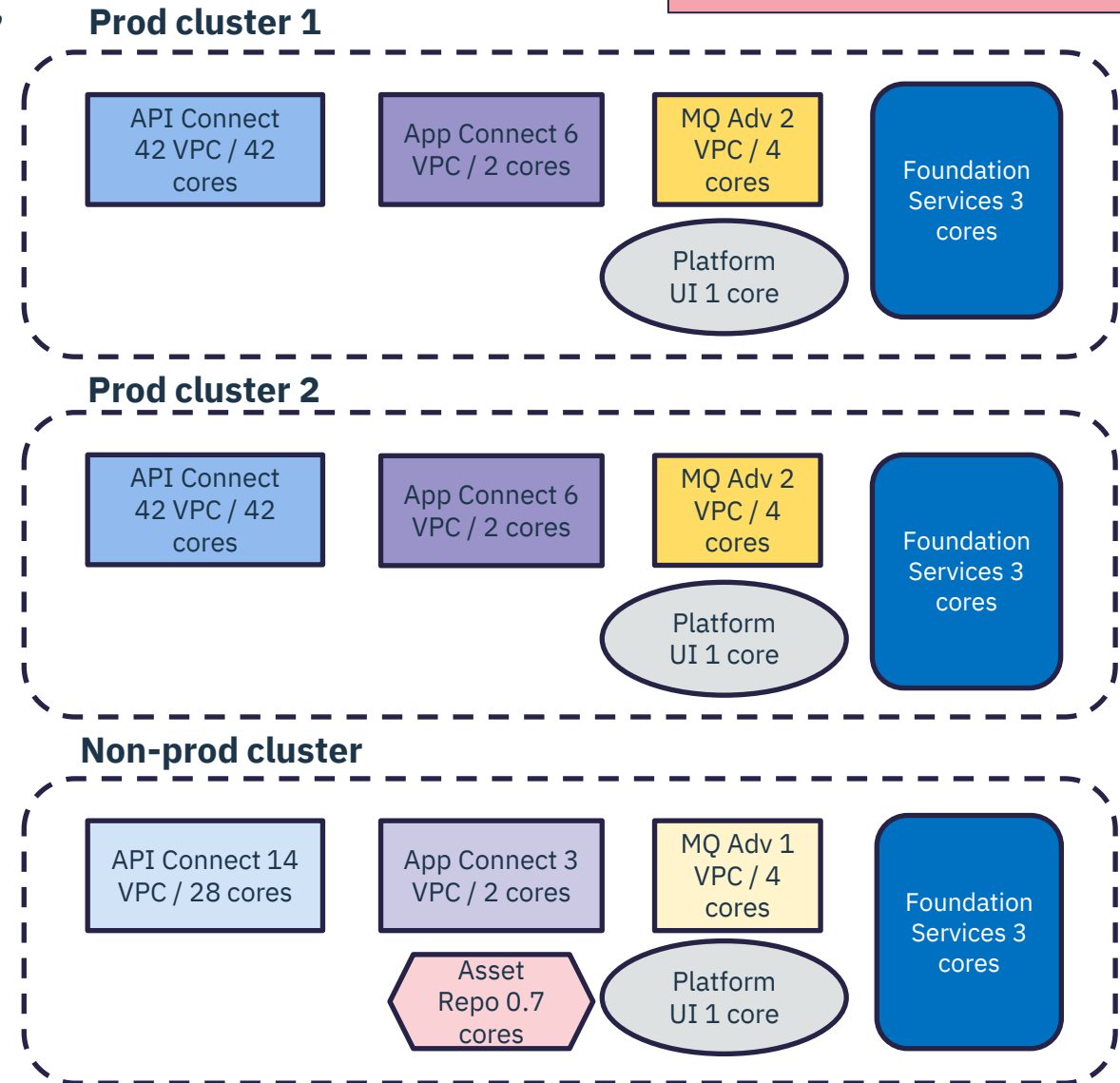
1 core for Platform UI in each cluster (3 cores total)

Total additional deployed OpenShift 12.7 cores

OpenShift cores used: 126.7 cores

Recommended OpenShift deployment buffer 10-15%: 13-20 cores

The 330 OpenShift cores entitlement would be sufficient



License Counting and License Service

- ILMT and VPCs – Customers migrating to CP4I entitlement move to VPC entitlement
 - ILMT must be used for customers deploying VPC entitled products if deploying in VMs (i.e. not in containers)
- Deploying in containers
 - License Service reports on core count of containers where any of CP4I components deployed
 - Produces deployment report for customers to report sub-capacity container deployments
 - Customers must sign new PPA amendment for container licensing
 - Review Slack channel #container-licensing-faq
 - External [container licensing FAQ](#)
 - Option to push License Service reports to ‘IBM Software Central’ – subject to customer agreement
 - Hyperthreading – license per thread but capped at the physical number of cores – not number of threads
- Availability of the License Service
 - License Service can run on any Kubernetes environment to provide metering and reporting, not just OpenShift
 - It only can be used to count and report on deployments of Containers and licensed using VPC metrics. It can measure container deployments running outside of OpenShift as well
- Container Licensing or ILMT
 - Deploying containers in Kubernetes means you must license either with the License Service or license the full-capacity of the deployed systems – no use of ILMT for containers with sub-capacity is supported

Minimum deployment sizes for each integration product in CP4I per Documentation

API Connect

Cores	VPC of CP4I
28	28 (prod)
28	14 (non-prod)

App Connect

Cores	VPC of CP4I
1	3 (prod)
1	2 (non-prod)

Aspera HSTS 1Gbps

Cores*	VPC of CP4I
52	4 (prod)
52	2 (non-prod)

Aspera ratio for CP4I VPCs not related to deployed cores – VPC count determines bandwidth use

DataPower

Cores	VPC of CP4I
1	1 (prod)
1	1 (non-prod)

MQ Advanced

Cores	VPC of CP4I
1	1 (prod)
1	1 (non-prod)

Event Endpoint Mgmt

Cores	VPC of CP4I
19.4	20 (prod)
19.4	10 (non-prod)

Event Streams

Cores	VPC of CP4I
12.2	13 (prod)
12.2	7 (non-prod)

Use this link to access the documentation with the most recent deployment minimum needs

<https://www.ibm.com/docs/en/cloud-paks/cp-integration/16.1.1?topic=requirements-compute-resources-development-environments>

CP4I VPCs gives you 2x entitlement for non-prod deployments in all products