Cloud Paks

Licensing IBM
Cloud Paks

Licensing Guide

Effective: January 2022

Last update: January 2022

IBM
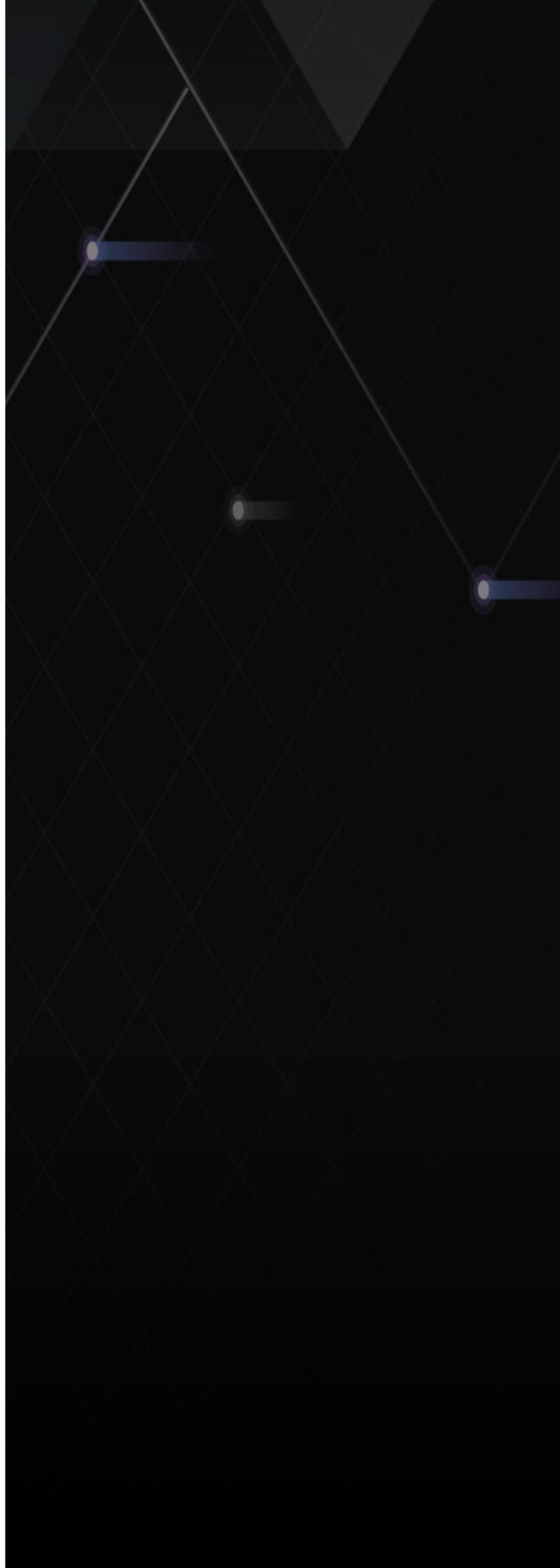
Version History

Version	Updates
January 2022	– Initial version

Contents

Overview

IBM Cloud Paks are suites of IBM programs that provide solutions to solve client needs. Cloud Paks are primarily intended to be deployed on Kubernetes-orchestrated container platforms. However, Cloud Pakscan also be deployed on traditional virtualization environments or as a hybrid deployment that spans both environments.

Each product in the Cloud Pak is licensed individually at separate licensing rates. A ratio determines how many Cloud Pak licenses are needed for deployments of each product. The license requirement for the Cloud Pak is the total of all the (converted) license requirements for each deployed component product.

This licensing guide will help you better understand how IBM Cloud Paks are licensed, including the relationship between Cloud Paks and IBM Virtualization Capacity policies (both Sub-Capacity and Container Licensing).

This guide is intended as a general licensing knowledge resource. While it may explore scenarios and discuss the licensing implications of IBM programs, it is not intended to provide advice for all circumstances. Always consult your IBM representative if you have any questions or concerns about IBM Cloud Paks and their licensing requirements.

Key Terms

The following terms are used throughout this document and are fundamental to understanding its contents. This is not an exhaustive list, and some concepts may be discussed in other licensing guides or rely on assumed knowledge.

Activated Processor Core

A processor core that is made available to an IBM program, either in a physical or virtual machine, regardless of whether the capacity of the processor core can be (or is) limited through virtualization technologies, operating system commands, BIOS settings or similar restrictions.

Container

A lightweight and portable executable image that contains software and all its dependencies.

CPU Limit

A setting which constrains the processing capacity consumed by containers in a Kubernetes Namespace.

Full-Capacity

The licensing of all the activated processor cores installed on the physical machine. In other words, the licensing of the full processing capacity of the physical machine.

IBM License Metric Tool ("ILMT")

An IBM tool used to measure consumption of certain IBM software metrics. Use of ILMT or HCL BigFix Inventory is one of the eligibility requirements for Sub-Capacity licensing.

Processor Value Unit ("PVU")

A unit of measure by which IBM programs can be licensed, based on the processing capacity made available to the program. The number of activated processor cores are counted and then converted to PVUs by reference to a "PVU per core" rating which depends upon the characteristics of the processor and machine.

vCPU

Virtual Central Processing Unit. In IBM licensing, a vCPU is also referred to as a Virtual Processor Core (VPC). For those processors where hyperthreading or simultaneous multithreading (SMT) is enabled, a vCPU represents an available thread of the physical processor core.

Virtual Processor Core (VPC)

A unit of measure by which IBM programs can be licensed, based on the processing capacity made available to the program. Virtual CPUs (vCPUs), or physical cores, are counted and in some cases adjusted for hyperthreading or SMT. These counted vCPUs or physical cores are then converted to VPCs.

Virtualization Capacity

Methodology to measure consumption of licenses only for the CPU cores consumed by the virtual environment(s) where the IBM program is installed. The alternative is Full-Capacity, in which license consumption is calculated based on the full processing capacity of the physical machine or infrastructure.

Assumed Knowledge

This licensing guide assumes that you have read and understood the licensing guides concerning [Virtualization Capacity](#) and [Container Licensing](#).

It also assumes that you are familiar with terms relating to Kubernetes architecture and Red Hat OpenShift Container Platform. See the Container Licensing guide for a basic explanation of these concepts as well as links to further reading.

Introduction

IBM Cloud Paks are bundles of IBM products that together provide integrated solutions to clients. Rather than buying separate licenses for individual IBM programs and designing the solution independently, a single entitlement for an IBM Cloud Pak provides licenses for a set of preconfigured, containerized applications (or Bundled Programs) that work together seamlessly and can be deployed on any Kubernetes-orchestrated container environment that uses the Red Hat OpenShift Container Platform.

You can change the level of use of each Bundled Program, as long as you have sufficient Cloud Pak licenses to cover your use of the Bundled Programs collectively.

The License Information document for each Cloud Pak sets out the terms applicable to the use of each component program and its license ratio.

Learn more about the available Cloud Paks [here](#). In addition, product documentation for Cloud Paks is available [here](#).

IBM Cloud Paks

An IBM Cloud Pak is delivered as a set of container images that can be run in one or more Pods. Each Cloud Pak will generally include the following:

Red Hat OpenShift Container Platform	**Foundational Services**
And entitlements to other Red Hat products	A common set of services that can be shared across multiple IBM Cloud Paks, which includes IBM License Service
Bundled Programs	**Supporting Programs**
A set of IBM programs which provide capabilities, and which must be licensed when used as part of the Cloud Pak	A set of programs which provide underlying functionalities that enable the Bundled Programs to perform their role

The License Information document for each Cloud Pak has dedicated sections relating to each of these areas:

Bundled Programs	Provides the list of bundled programs included in the IBM Cloud Pak and related license terms that might apply, such as the license ratios.
Supporting Programs	Lists the programs and components which provide underlying functionalities and capabilities to the Bundled Programs and related license terms that apply to their use.
Red Hat Products	Lists the Red Hat products for which license entitlements are granted with the Cloud Pak and any related license terms that apply such as license ratios.

License Metrics

While the Cloud Pak itself is licensed under a single metric, the Bundled Programs within it may be licensed under separate metrics with associated conversion ratios to allow you to understand how many licenses of the Cloud Pak are needed for a particular level of use. The most common license metrics used for Cloud Paks are Virtual Processor Core (VPC) and Resource Unit (RU).

A VPC is either a physical or virtual processor core made available to an IBM program. If the IBM program is running on a virtual environment and qualifies for Virtualization Capacity licensing, it is the virtual CPUs (vCPUs) that are counted; if the IBM program is running on a physical environment or if the IBM program is licensed on a Full-Capacity basis, it is the physical processor cores of the physical infrastructure that are counted.

A Resource Unit is a way of putting different types of licenses onto a common license metric required by the Cloud Pak. The ratios by which the licenses are converted to Resource Units are specified in the License Information document.

Entitlement Conversion Ratios

One of the key benefits of buying Cloud Pak licenses is the flexibility it gives you regarding how you use the individual Bundled Programs. License ratios help you understand how the use of each Bundled Program affects the number of licenses for the Cloud Pak that you need.

The Bundled Programs section of the License Information document lists the products or capabilities that are bundled in the Cloud Pak and that you can use under the purchased IBM Cloud Pak license entitlements.

In most Cloud Paks, each Bundled Program is assigned a ratio which must be used to convert the number of licenses required for the Bundled Program to the number of licenses required for the Cloud Pak. The ratio for each Bundled Program may differ.

The license ratio takes the format "n/m", which means for 'n' licenses of the Bundled Program you need to have 'm' licenses to the Cloud Pak.

For example, a Cloud Pak LI document may say the following for "Bundled Program A":

Bundled Program A: Conversion Entitlement Ratio: 1 VPC/5 VPCs

This means that every 1 VPC of use of IBM Program A requires 5 VPC licenses of the Cloud Pak. It is highly likely that such a Bundled Program contributes a significant amount of the functionality of the Cloud Pak.

The conversion ratio can also be cross-metric. For example:

IBM Program B: 1 VPC/100 Resource Units

This means that every 1 VPC of license used for IBM Program B requires 100 Resource Unit licenses of the Cloud Pak.

Finally, the conversion ratio may set out additional limitations such as only permitting use in non-production environments.

Worked Example

The example below demonstrates the flexibility the ratio affords. A client may choose to initially deploy a subset of the Bundled Programs and purchase the Cloud Pak licenses to cover this use. If over time the client's needs change and it becomes necessary to deploy the additional Bundled Program, the client can do so by deploying the additional Bundled Program and either:

Keep the level of use of the other Bundled Programs the same, in which case additional Cloud Pak entitlements would be needed.	**OR**	Rebalance its use of the other Bundled Programs so that the overall license requirement remains the same. No additional licenses are required to be purchased.

If these IBM programs were licensed individually, the addition of a new IBM program would cause an increase to the license requirement.

Buy Cloud Pak VPC licenses		Deploy programs at VPCs ratio
Cloud Pak for Integration Sub-set of bundled Products		**Program to Cloud Pak VPC Ratio**
MQ Advanced		2:1
App Connect Enterprise		1:3
API Connect		1:1
Datapower Gateway		1:1

Sample deployments

100 VPC licenses of Cloud Pak for Integration
can be deployed as

Program VPCs	Ratio	Cloud Pak VPCs
60 VPCs for MQ Advanced	2:1	30 VPCs (60/2)
15 VPCs for App Connect Enterprise	1:3	45 VPCs (15*3)
25 VPCs for Datapower Gateway	1:1	25 VPCs (25*1)
		Total = 100 VPCs

↓ Rebalance over time to ↓

Program VPCs	Ratio	Cloud Pak VPCs
40 VPCs for MQ Advanced	2:1	20 VPCs (40/2)
20 VPCs for App Connect Enterprise	1:3	60VPCs (20*3)
10 VPCs for Datapower Gateway	1:1	10 VPCs (10*1)
10 VPCs for API Connect	1:1	10 VPCs (10*1)
		Total = 100 VPCs

Measuring Peak Use

You are not required to license the peak use of each individual Bundled Program but the peak use of the IBM Cloud Pak as a whole. To do so, there is a three step process:

1	Count the license use of each Bundled Program
2	Apply the license conversion ratio to each Bundled Program to calculate the number of IBM Cloud Pak licenses
3	Add the converted license requirements together to determine your entitlement

If the combined use of the Bundled Programs does not exceed the number of Cloud Pak licenses you are entitled to, the level of use of individual Bundled Programs can be adjusted provided the combined use does not exceed the number of Cloud Pak licenses you are entitled to.

Hybrid Environments: Containers and Virtual Machines

Almost all Cloud Paks permit you to deploy the Bundled Programs on container platforms and traditional virtual machines. Installation images for Windows, Unix and Linux operating systems are also available.

Even if you are not yet ready to deploy on a Kubernetes-orchestrated environment, you can still benefit from the flexibility of Cloud Pak licensing on your existing virtualization platforms that are compliant with IBM's Virtualization Capacity licensing policy. As you start to roll out container technologies, you can gradually move your Cloud Pak workloads over.

To enable this gradual migration, Cloud Pak entitlements can be used for "dual deployment". This means that the licenses can be deployed wholly on Windows, Unix, or Linux, wholly on a Kubernetes environment, or a mixture as long as your overall use does not exceed your license entitlement.

IBM License Service Reporter may be used to consolidate the license measurements from IBM License Service and IBM License Metric Tool (or BigFix Inventory) across hybrid environments. The alternative to IBM License Service Reporter is to do this manually.

In ILMT, the software classification report will list the chargeable components utilized. You should ensure that the Cloud Pak Bundled Program installation is being measured by the correct metric (normally VPC). Then the installation must be assigned to the correct Cloud Pak. ILMT will automatically apply the correct license ratio.

Red Hat Products

All IBM Cloud Paks include license entitlements to Red Hat OpenShift Container Platform. They might also include entitlements to other Red Hat products. Every License Information document for Cloud Paks has a dedicated section for Red Hat Products where the following items are outlined:

– The list of Red Hat products for which license entitlements are provided

– License terms relating to those Red Hat products

– The license ratios for each Red Hat product

The Red Hat Products provided with IBM Cloud Paks are licensed separately and are supported by IBM only when:

(a) The Red Hat product is used to support the IBM Cloud Pak; and

(b) You have active maintenance (subscription and support, or S&S) for the IBM Cloud Pak.

Licensing Terms

The Red Hat licensing terms apply to the Red Hat products licensed with the IBM Cloud Paks. The only exception is for the backup and temporary use policies as referenced in Section 11 ("Compliance Verification") of the IBM International Program License Agreement ("IPLA"):

> *Licensee agrees that its use of and support for the Red Hat Products are subject to the following terms (https://www.RedHat.com/en/about/agreements), with the exception of the IBM backup policy and temporary use policy as referenced in Section 11 Compliance Verification of the International Program License Agreement, which govern backups and temporary use for Red Hat Products included in the Program.*

Entitlement Ratios and Restrictions

Like Bundled Programs, each Red Hat product has a license ratio associated with it. The ratio can be expressed as:

Additional Flat Entitlement	The number of licenses granted to the Red Hat product is fixed, regardless of the number of Cloud Pak licenses.
Additional Entitlement Ratio n/m	This operates in the same manner as the license ratio described for Bundled Programs. For 'n' licenses of the Red Hat program you need 'm' Cloud Pak licenses.

When you purchase Cloud Pak licenses from IBM, Red Hat is informed about the purchase so that it can allocate the necessary number of entitlement subscriptions to relevant Red Hat products.

Red Hat OpenShift Container Platform ("RHOCP")

RHOCP is included as a 'restricted' entitlement in all Cloud Paks except Cloud Pak for Applications (where it is included as an 'unrestricted' entitlement). A restricted entitlement means that the platform can only be used to support the running of that specific Cloud Pak and its Bundled Programs and components. You are not permitted to use the platform for any other use without additional licenses being required. See the documentation here which discusses restricted RHOCP in more detail.

It is possible to mix entitlements of both restricted and unrestricted RHOCP within the same cluster as shown in the scenarios below.

Cartridge Licenses

Cartridge licenses are a means of adding additional services to Cloud Pak for Data on an à la carte basis. They are unique to Cloud Pak for Data.

A simplified visualization of the relationship between Cloud Pak services and cartridges is shown in Figure 1.
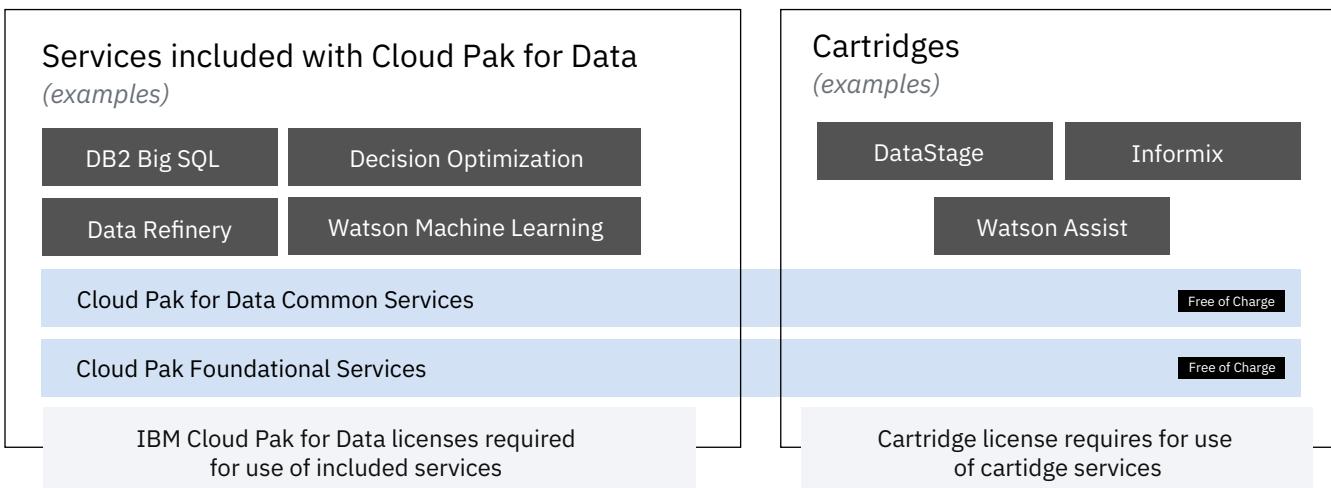
Cartridge licenses convey dual entitlements: the programs may be run in a containerized environment or as "standalone" applications (that is, on a traditional virtual or physical environment). You must choose between the two methods of deployments on a per-unit basis.

Having entitlement to cartridges is therefore a manner of "future-proofing" programs which are currently deployed on traditional environments at present but carry the option to move to a containerized solution in the future.

If the cartridges are run in a containerized environment, they consume VPCs of Cloud Pak for Data to provide their services because the cartridges sit atop the Cloud Pak for Data platform. However, the cartridges typically include Cloud Pak Foundational Services and the Red Hat solutions required to run on the platform as Supporting Programs. In this case, no additional IBM Cloud Pak for Data licenses need to be purchased due to the cartridges' incremental use of the platform. However, for provisioning and operational reasons, it is important to know how many additional resources need to be made available to support the functioning of the cartridge. This amount will vary depending upon your intended use case.

To provide clients with maximum flexibility, cartridge licenses can be purchased to "top up" an existing pot of licenses to the same program. For example, if you have an existing licensed deployment of IBM DataStage, you may opt to purchase cartridge licenses for additional growth or net new requirements.

Figure 1: Cloud Pak Services and Cartridges

Underlying IBM Cloud Pak for Data licenses included free of charge as a supporting program

Modernization Licenses

Cartridge licenses are only available for newly purchased licenses; it is not possible to convert existing "legacy" licenses via cartridges to "modern" entitlements which bring with them the optional flexibility of deployment on the Cloud Pak platform. Like cartridge licenses, modernization licenses are unique to IBM Cloud Pak for Data.

Modernization licenses allow you to harmonize your entitlement so that all licenses are "modern" and can be run in containers on the Cloud Pak platform in the future. Trading your entitlement up through a modernization license does not require you to move to a containerized environment; you may continue to run the program as a standalone deployment. However, you retain the option to later move onto the Cloud Pak for Data platform.

A modernization license is a bundle of a cartridge license and a "bonus core" of Cloud Pak for Data Enterprise Edition. This additional entitlement to Cloud Pak for Data Enterprise Edition is typically granted pro-rata against the number of entitlements to the modernization license you purchase. Some modernization licenses carry a 1:1 entitlement of Cloud Pak for Data; others may carry 2:1, 4:1, and so on.

This additional entitlement to Cloud Pak for Data offers even more flexibility for clients. It means that the modernization license has value even if the cartridge license is never used. The Cloud Pak for Data licenses can be used to license the Cloud Pak for Data platform for other uses.

Scenarios

Scenario 1: Cloud Paks and Virtualization Capacity

If the Bundled Programs are licensed by VPC or PVU metrics, they can be deployed on traditional virtual environments and take advantage of IBM's Virtualization Capacity licensing policy as long as you meet the eligibility requirements.

There are three steps to calculating the Cloud Pak licenses required in this scenario:

Step 1	**Count the license requirement for each Bundled Program across all machines** For each machine where Cloud Pak software is deployed, count the number of licenses required according to the metric specified in the conversion ratio. This is set out in the LI document. – Note that the use of eligible virtualization technologies and the use of an approved license metering tool are prerequisites for using virtualization capacity counting rules, otherwise each Bundled Program must be licensed on a Full-Capacity basis. See the licensing guide for more information. – **Each Bundled Program must be counted separately.** If multiple Bundled Programs reside on the same machine, they must each be counted fully. – Aggregate the license requirements counted for each machine to determine the number of licenses required for each Bundled Program.
Step 2	**Apply the Cloud Pak conversion ratio to each Bundled Program** Apply the conversion ratio to calculate the number of Cloud Pak licenses required for each Bundled Program.
Step 3	**Calculate the Cloud Pak licenses required for all Bundled Programs** Aggregate the converted license requirements from step 2 to arrive at the number of Cloud Pak licenses required.

Scenario 2: Cloud Paks and Container Licensing

If the Bundled Programs are deployed on a Kubernetes-orchestrated container environment, then the Container Licensing policy must be followed. Each Bundled Program must be fully licensed on the Kubernetes or Red Hat OpenShift cluster and then the total license requirements aggregated for the IBM Cloud Pak.

The steps required are as follows:

Step 1	**Count the licenses required for each Bundled Program across the Cluster** For each worker node where Cloud Pak software is deployed, count the number of licenses required according to the metric specified in the conversion ratio. This is set out in the LI document. – It is the vCPU Limit setting which must be counted for each Pod. IBM License Service will automatically calculate the number of licenses you require across an individual cluster. If you are using multiple clusters the count for each cluster must be manually aggregated, alternatively IBM License Service Reporter can automate this. – Note: The use of IBM License Service is required to be eligible for Container Licensing, otherwise all worker nodes in each cluster must be counted where each Bundled Program is running. See the licensing guide for more information. – **Each Bundled Program must be counted separately.** If multiple Bundled Programs reside on the same machine, they must each be counted fully. – Aggregate the license requirements counted for each machine to determine the number of licenses required for each Bundled Program.
Step 2	**Apply the Cloud Pak conversion ratio to each Bundled Program** Apply the conversion ratio to calculate the number of Cloud Pak licenses required for each Bundled Program.
Step 3	**Calculate the Cloud Pak licenses required for all Bundled Programs** Aggregate the converted license requirements from step 2 to arrive at the number of Cloud Pak licenses required.

Scenario 3: Hybrid Deployments – Mixing PVU and VPC Licenses

This scenario assumes that you have existing PVU licenses for an IBM program which is also included in an IBM Cloud Pak under the VPC metric.

Traditional Deployments

In a traditional deployment you can mix license entitlements within an IT estate but cannot apply both PVU and Cloud Pak VPC licenses at the same time to cover a single instance. An instance could be a virtual machine, an LPAR, or a physical server measured at Full-Capacity.

Existing PVU licenses could be traded up or upgraded to Cloud Pak VPC licenses to license the installation wholly on a Cloud Pak basis.

Kubernetes/Red Hat OpenShift Deployments

In a Kubernetes or Red Hat OpenShift deployment the IBM License Service can identify which Pods relate to Cloud Paks and licenses them accordingly.

Scenario 4: Sharing the Red Hat OpenShift Container Platform across multiple Cloud Paks
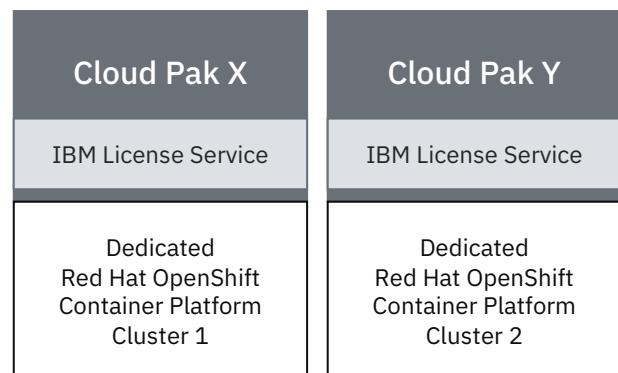
RHOCP is included as a 'restricted' entitlement in all Cloud Paks except Cloud Pak for Applications (where it is included as an unrestricted entitlement). This means that the platform can only be used to support the running of a specific Cloud Pak and its Bundled Programs and components. You are not permitted to use these RHOCP entitlements for any other use without additional RHOCP licenses being required.

If you need to deploy multiple IBM Cloud Paks and you also wish to use the granted RHOCP license entitlements for your clusters, you must configure your environment in line with one of the following options to ensure that you remain compliant with your 'restricted' RHOCP entitlement:

Option 1: Run multiple Cloud Paks in dedicated clusters with restricted RHOCP
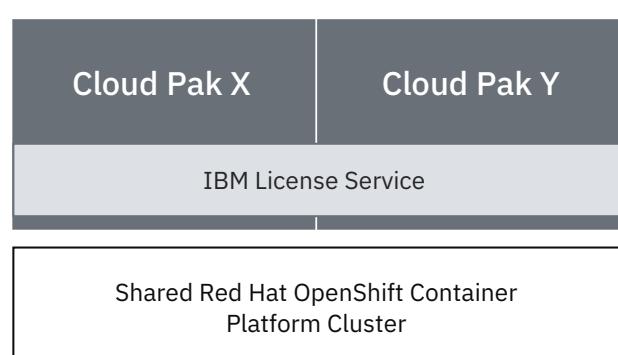
Each Cloud Pak is licensed on a per-cluster basis. Therefore, if Cloud Paks are run on separate clusters with their own dedicated RHOCP, this is compliant with the restricted use of the platform so long as only Cloud Pak workload runs on each cluster.

| Cloud Pak X	Cloud Pak Y
IBM License Service	IBM License Service
Dedicated Red Hat OpenShift Container Platform Cluster 1	Dedicated Red Hat OpenShift Container Platform Cluster 2
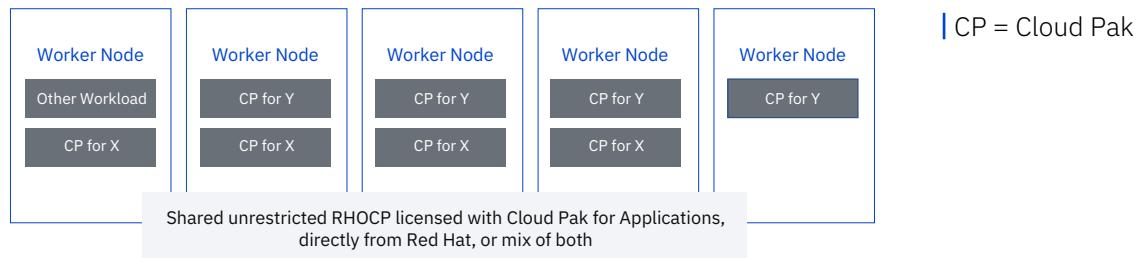
Option 2: Mixed environment of restricted and unrestricted RHOCP

IBM License Service can be used to manage this type of environment. The diagram below explains the topology of the configuration, and various use cases describe the licensing considerations that apply to this shared RHOCP cluster.

Cloud Pak X	Cloud Pak Y
IBM License Service	
Shared Red Hat OpenShift Container Platform Cluster	

**Use Case A**   **The shared RHOCP cluster is fully licensed with an unrestricted RHOCP license**

Unrestricted RHOCP licenses permit any workload to run on the platform. There are no restrictions on mixing RHOCP entitlements obtained via Cloud Paks and those licensed directly from Red Hat in the same cluster.

Worker Node	Worker Node	Worker Node	Worker Node	Worker Node	CP = Cloud Pak
Other Workload	CP for Y	CP for Y	CP for Y	CP for Y	
CP for X	CP for X	CP for X	CP for X		

Shared unrestricted RHOCP licensed with Cloud Pak for Applications, directly from Red Hat, or mix of both
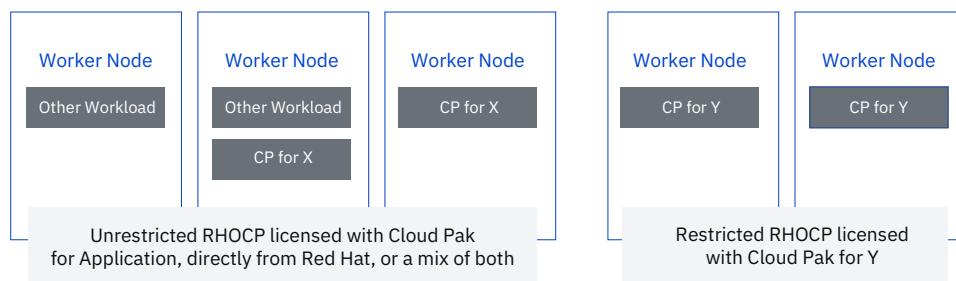
Use Case B   **The shared RHOCP cluster is licensed with a mix of unrestricted and restricted licenses**

Restricted RHOCP licenses do not permit any non-Cloud Pak workloads to run on the platform. If you wish to mix restricted and unrestricted RHOCP licenses, you must take care to separate the workloads so that only the permitted workloads run on each platform.
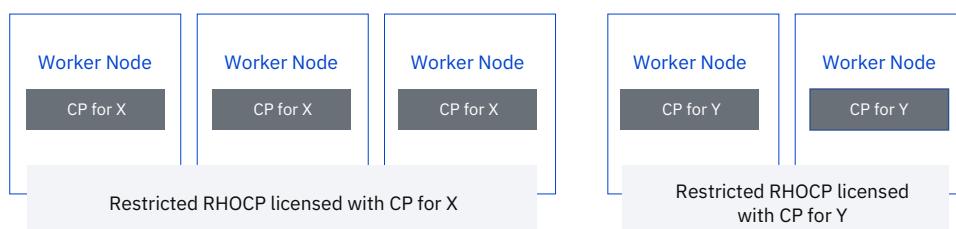
There are two ways to do this:

1. Label the worker nodes and use the Pod selector rules to set restrictions which ensure that only the identified Cloud Pak workload runs on dedicated nodes. Ensure that the sum of the worker node VPCs does not exceed your Cloud Pak license entitlement.

2. Segment the cluster into namespaces and assign the Cloud Pak workload to one of these namespaces. You can also set a CPU quota limit for the namespaces equal to the number of VPCs you have entitlements for, to prevent you from exceeding your license entitlement.

Worker Node	Worker Node	Worker Node		Worker Node	Worker Node
Other Workload	Other Workload	CP for X		CP for Y	CP for Y
	CP for X				

Unrestricted RHOCP licensed with Cloud Pak for Application, directly from Red Hat, or a mix of both   Restricted RHOCP licensed with Cloud Pak for Y

Use Case C   **The shared RHOCP cluster is licensed with a mix of restricted RHOCP entitlements from more than one Cloud Pak**

Even though all workloads relate to Cloud Paks, each restricted RHOCP license only permits you to run that specific Cloud Pak workload. If you want to run workloads from multiple Cloud Paks on the same cluster with restricted RHOCP licenses, you must segment the cluster to ensure that each Cloud Pak is running on its own designated RHOCP. The ways to do this are the same as detailed in Use Case B.

Worker Node	Worker Node	Worker Node		Worker Node	Worker Node
CP for X	CP for X	CP for X		CP for Y	CP for Y

Restricted RHOCP licensed with CP for X   Restricted RHOCP licensed with CP for Y

FAQs

Can I run IBM Cloud Paks without using Red Hat OpenShift?

No. IBM Cloud Paks require Red Hat OpenShift. However, there are a set of Bundled Programs using Cloud Pak entitlements that can be deployed as containers without Red Hat OpenShift. This is described as "standalone" deployments within the related documentation of the Cloud Pak or Bundled Program.

How do I access Red Hat entitlements from IBM Cloud Paks?

IBM Cloud Pak® solutions can include entitlement to use Red Hat OpenShift Container Platform (RHOCP), Red Hat Enterprise Linux CoreOS (RHCOS), and Red Hat Enterprise Linux (RHEL).

To access these entitlements, you must link your IBM Cloud Paks® to your Red Hat account. You can link your IBM Cloud Pak to its Red Hat entitlement through IBM Passport Advantage. Please refer to the procedure documented here on how to do this.

Here are the documented steps:

1. Go to the IBM Passport Advantage Online tab at IBM Passport Advantage page, click **Sign in now**, and log in with your IBM ID.

2. From the Product list, click the purchased IBM Cloud Pak offering that you would like to access the entitlements from.

3. Click **Red Hat account and Order info** to list your orders that include Red Hat products.

4. Click the **Link with Red Hat account** link that corresponds to the order number that you want to link the entitlement to. This link takes you to a Red Hat login page so that you can map your IBM entitlement to a Red Hat account.

5. On the Red Hat login page, either log in with your existing Red Hat account, or create a new account. You must have a Red Hat account to access the OpenShift Cluster Manager. You do not need a paid Red Hat subscription entitlement to access any IBM® offering.

6. On the Red Hat Review order summary page, verify that the information is correct and click **Next**.

7. On the Red Hat Link your Red Hat Account page, select Assign the Red Hat subscriptions to this Red Hat account and link my IBM order, accept the Enterprise agreement terms, then click **Confirm**.

8. A message appears confirming that your Red Hat account is linked with your IBM Order. Your entitlement is now accessible.

I have licenses to two different IBM Cloud Paks, both with restricted RHOCP. Can I run both Cloud Pak workloads within the same RHOCP cluster?

Yes if the workloads for each Cloud Pak remain on their own dedicated RHOCP. This means the cores assigned to the RHOCP for one Cloud Pak are not used for workloads belonging to the other Cloud Pak.

I have a restricted RHOCP cluster with an IBM Cloud Pak subscription. Can I run non-IBM Cloud Pak workloads on this restricted RHOCP?

No, you may only run workloads relating to the Cloud Pak with which the RHOCP license was obtained.

For Answers to the below questions and more please refer to the IBM Support knowledge page and this Red Hat article.

Where do I go for support for IBM Cloud Paks?

How do I get my Red Hat account ID?

How do I access and download Red Hat entitlements?

How do I add other users to our Red Hat account?

How can I use Red Hat OpenShift with IBM Cloud Paks?

How do I manage my subscriptions for Red Hat OpenShift and IBM Cloud Paks?

How do I move from a Red Hat OpenShift evaluation subscription to a production subscription of IBM Cloud Paks?

How do I move from a Red Hat OpenShift for IBM Cloud Pak evaluation subscription to a

production subscription of Red Hat OpenShift for IBM Cloud Paks?

I have an existing cluster with Red Hat OpenShift subscriptions, as well as a Cloud Pak installation with Red Hat OpenShift for Cloud Pak. Should I contact IBM for all Cloud Pak and OpenShift support cases, or can I still contact Red Hat directly for OpenShift issues?

How do I find out who my Red Hat account organization administrator is?

Further Reading

IBM Cloud Pak Documentation
A page that provides useful documentation relating to the deployment and use of IBM Cloud Paks.
https://www.ibm.com/docs/en/cloud-paks

Red Hat Entitlements on Cloud Paks
A page detailing frequently asked questions relating to Red Hat entitlements on IBM Cloud Paks.
https://www.ibm.com/support/pages/node/1096000

Red Hat License Terms
A page providing links to the country-specific Red Hat Enterprise Agreements, Product Appendices and End User License Agreements.
https://www.redhat.com/en/about/agreements

Accessing Red Hat entitlements from your IBM Cloud Paks
A page setting out the process for accessing your Red Hat entitlements.
https://www.ibm.com/docs/en/cloud-paks/1.0?topic=suocpc-accessing-red-hat-entitlements-from-your-cloud-paks

Restricted Red Hat OpenShift Container Platform
A page setting out information relating to restrictions associated with OpenShift entitlements for IBM Cloud Paks.
https://www.ibm.com/docs/en/cloud-paks/1.0?topic=clusters-restricted-openshift-entitlement

IBM Cloud Paks
A page that provides details and useful resources relating to IBM Cloud Paks.
https://www.ibm.com/cloud/paks

International Passport Advantage Express Agreement ("IPAEA")
The agreement relating to software licensed under Passport Advantage Express.
www.ibm.com/terms?id=Z125-6835

International Passport Advantage Agreement ("IPAA")
The agreement relating to software licensed under Passport Advantage
www.ibm.com/terms?id=Z125-5831

Questions and Comments

If you have questions regarding the content of this licensing guide, or any aspect of IBM's licensing terms and conditions, please contact us at www.ibm.com/about/software-licensing/contact.