

How do I create Red Hat manifest file and deploy Red Hat Satellite Server 6.10

IBM Cloud Pak System

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Authors: Prasad Ganiga, Anilkumar Hegde



Steps to be followed:

Step 1 – Procure subscriptions

Step 2 – Activate subscriptions

Step 3 – Verify subscriptions in your account

Step 4a – Create new Satellite Server V6.10 manifest

Step 4b – Create Satellite Server V6.10 manifest from existing manifest

Step 5 – Deploy Satellite Server V6.10 pattern

Step 1 – Procure subscriptions

- 1a) Do you have a Satellite Server and want to add entitlements to existing Red Hat account?
 - If “Yes” – Skip this step and go to 1b directly.
 - If “No” – Create an “Enterprise” Red Hat account at <https://access.redhat.com>.
- 1b) Call IBM Support, or open a case to request Satellite Server subscription codes
 - Entitlements depend on number of compute nodes in the rack. **For detailed requirements, please see next page.**

Satellite subscription codes	Entitlement	Explanation
MCT0370	Red Hat Enterprise Server	Satellite subscription
RH00032	Smart Management for unlimited guests	

RHEL subscription codes (one for 1 compute node, min 1)	Entitlement	Explanation
RH0105260	Red Hat Enterprise Server, Premium (8 sockets) (Unlimited guests)	Entitlements for RHEL guests
RH1500861	Smart Management (Unlimited guests) Embedded Partner Support	Smart management for RHEL guests
RH1767396	Extended Update Support for Red Hat Enterprise Linux Server (8 sockets)	L3 support for RHEL guests

Step 1 – Procure subscriptions (cont.)

- **Product: Red Hat Satellite (MCT0370)**
 - Number required: One subscription for one Satellite Server.
 - Note: Mandatory to have.

- **Product: Red Hat Enterprise Linux Server, Premium (8 sockets) (Unlimited guests) (RH0105260)**
 - Number required: The total number of compute nodes in the rack. For example, if the rack has 6 compute nodes, meaning it has 6 hypervisors, then user needs to add 6 above subscriptions to the “Satellite Organization”.
 - Note: Mandatory to have.

- **Product: Smart Management for (Unlimited guests) Embedded Partner Support (RH1500861)**
 - Number required: Total number of compute nodes in the rack.

- **Product: Extended Update Support for Red Hat Enterprise Linux Server (8 sockets) (RH1767396)**
 - Number required: Total number of compute nodes in the rack.
 - Note: Not mandatory to have. Only if customer needs extended support.

- **Product: Smart Management for unlimited guests (RH00032)**
 - Number required: One subscription for one Satellite Server.

Step 1 – Procure subscriptions (cont.)

Using the provided Red Hat subscription codes from IBM L2, each ending with a ".csv" extension, **within the ".csv" subscription files, the second parameter (column B) in each file contains the subscription numbers** (example only: "c0fb-4eeb-c0ff-4b4e") that you will use as part of the subscription activation process.

The subscription numbers you receive is based on the number of compute nodes on IBM Cloud Pak System within each of the .csv files. If you have one compute node, then enter one subscription. Enter the number of subscription that you have based on the number of compute nodes.

This is an example of a Cloud Pak System with 10 compute nodes. So, 10 subscriptions are available.

RH1767396_20190421_0.csv

RH1767396	1298-		XI453214fc0e
RH1767396	a97a-		XIb46634fa6b
RH1767396	6350-		XI8ef2a21e3e
RH1767396	g3b1-		XI5478egd45
RH1767396	0c0b-		XI53df46128c
RH1767396	42d5-		XIkj76e74573
RH1767396	e64d-		XI56fedd33sc
RH1767396	0ccf-		XIa43tgrs859
RH1767396	4ef3-		XIb777tge495
RH1767396	54cb-		X259fg1a47fb

Step 2 – Activate subscriptions

- Activate all subscription codes here:
<https://access.redhat.com/subscriptions/activate/>

Red Hat
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Subscription Activation

Activate your subscription to gain access to updates and support.

- 1 Enter Subscription Activation Number
- 2 New or Renew?
- 3 Select Renewal
- 4 Confirm
- 5 Activate

Activate your subscription

Subscriptions purchased directly from Red Hat in North America or via redhat.com do not require activation. View your active subscriptions in [Red Hat Subscription Management](#).

Subscription Activation Number

Your subscription activation number can be found in your email receipt from Red Hat Customer Support or on the Red Hat Installation Card accompanying your software. Contact your reseller if you have questions regarding your subscription purchase.

[Red Hat Customer Service](#)

[Activate a Dell Service Tag](#) ▶

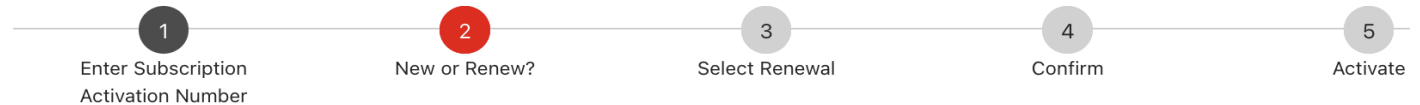
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Step 2 – Activate subscriptions (cont.)

- Select **Start a new subscription** and click **Next**.

Subscription Activation

Activate your subscription to gain access to updates and support.



Review your subscription details

Product: Red Hat Enterprise Linux Server, Premium (8 sockets) (Unlimited guests)

Service Level: Premium

Subscription Activation Number : b12d-

Select how to use your subscription

Start a new subscription

Renew an existing subscription

This will extend your existing subscription automatically after your previous subscription ends.

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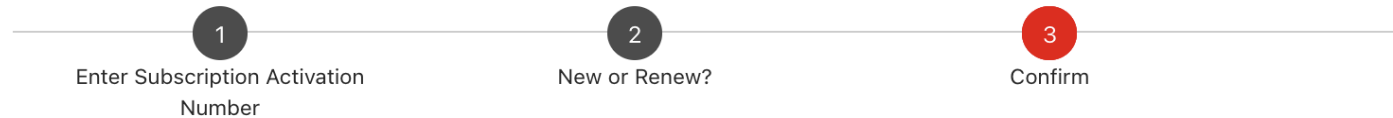
[Next >](#)

Step 2 – Activate subscriptions (cont.)

- Review the subscription details and click **Next**.

Subscription Activation

Activate your subscription to gain access to updates and support.



Review your subscription details

Product:	Red Hat Enterprise Linux Server, Premium (8 sockets) (Unlimited guests)
Service Level:	Premium
Start Date:	Tuesday, November 09, 2021
End Date:	Tuesday, November 08, 2022
Subscription Activation Number :	b12d

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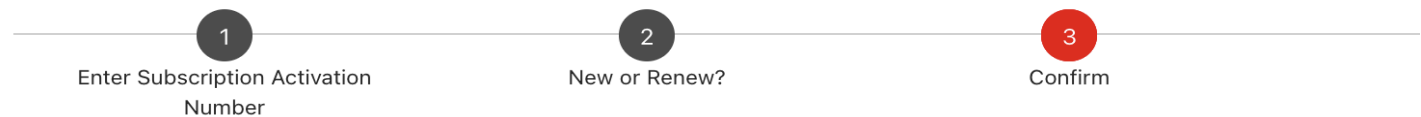
Step 2 – Activate subscriptions (cont.)

- Congratulations! Subscriptions are successfully added.

Note: Activation may take 30 minutes to 48 hours. Please contact support if subscriptions are not activated after 48 hours.

Subscription Activation

Activate your subscription to gain access to updates and support.



Review your subscription details

Product:	Red Hat Enterprise Linux Server, Premium (8 sockets) (Unlimited guests)
Service Level:	Premium
Start Date:	Tuesday, November 09, 2021
End Date:	Tuesday, November 08, 2022
Subscription Activation Number :	b12d [redacted]

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Step 3 – Verify subscriptions in your account

- Go to <https://access.redhat.com/management/> and click **Subscriptions**.
 - Click **Active** (under **Subscription Utilization**) and confirm that subscriptions are added to your account.

Red Hat Customer Portal Products & Services Tools Security Community

Overview Subscriptions Systems Cloud Access Subscription Allocations Contracts Errata Manage ▾

Inventory

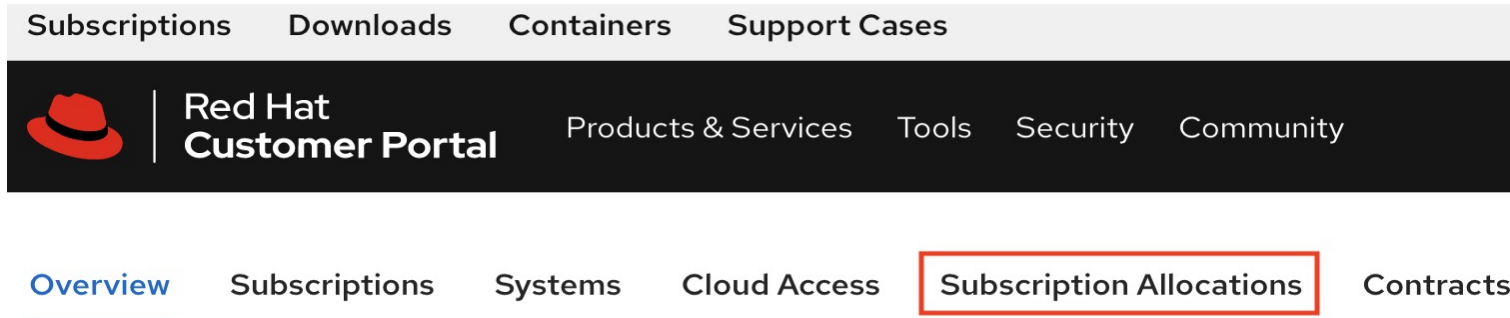
Filter by Subscription (Number, Name, SKU) or Contract Number

Active Ready to Renew Recently Expired Future


Subscription Number	Subscription Name	Contract Number	Quantity	Start Date	End Date
10292038	Red Hat Enterprise Linux Server, Premium (8 sockets) (Unlimited guests)	12830964	1	2021-11-09	2022-11-08

Step 4a – Create Satellite Server V6.10 manifest

- Go to <https://access.redhat.com/management/> and select the **Subscription Allocations** section.

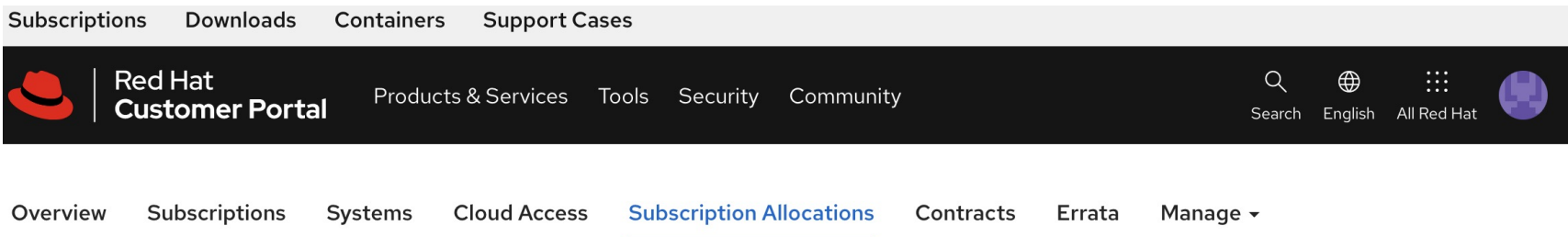


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- Under **Subscription Allocations**, click **New Subscription Allocation**.



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Subscription Allocations

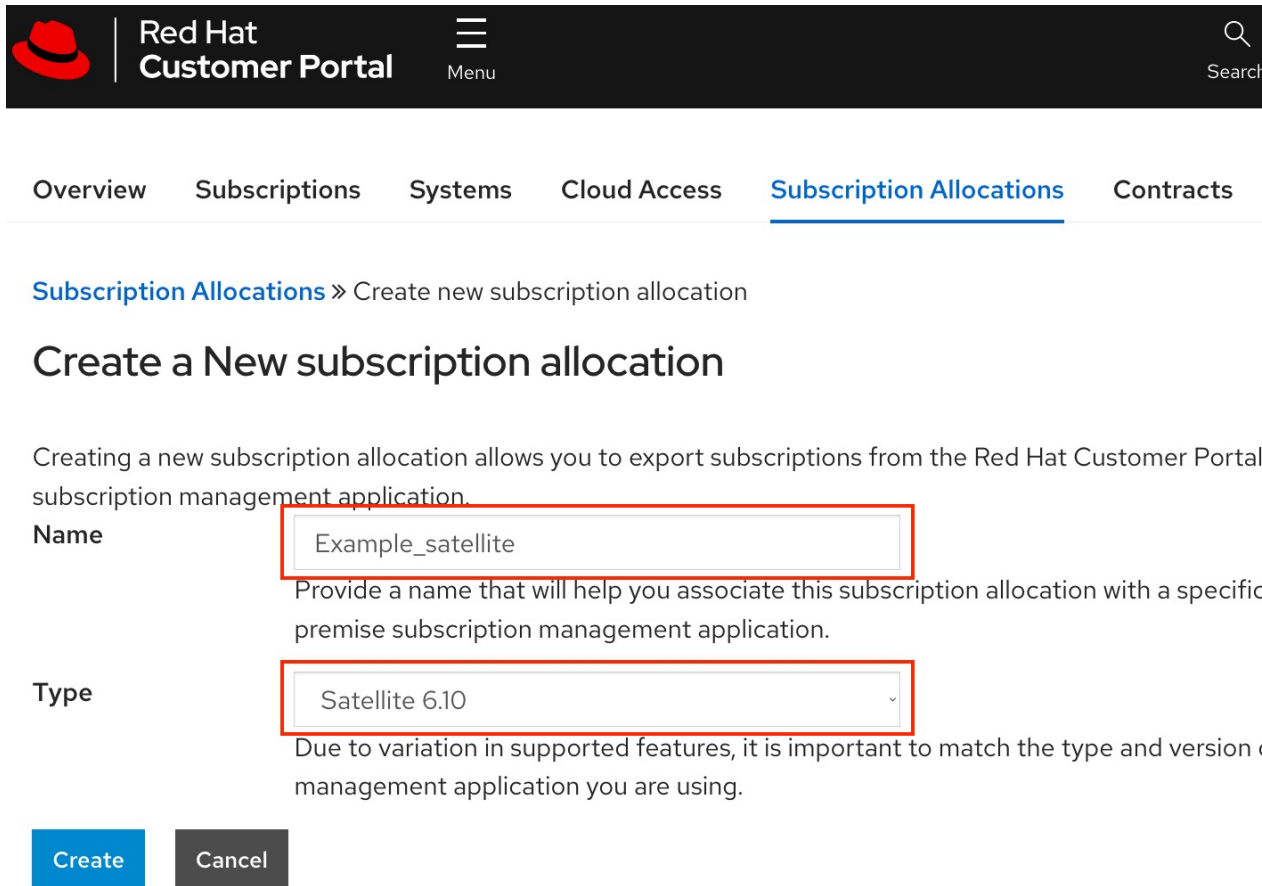


Filter by Name, UUID or Version

[↓ .CSV](#) **[New Subscription Allocation](#)**

Step 4a – Create Satellite Server V6.10 manifest (cont.)

- On the next screen:
 - Assign a name to the Satellite Server subscription allocation.
 - Set **Type** to **Satellite 6.10**.
 - Click **Create**.



The screenshot shows the Red Hat Customer Portal interface. The top navigation bar includes the Red Hat logo, the text 'Red Hat Customer Portal', a menu icon, and a search icon. Below the navigation bar, there are tabs for 'Overview', 'Subscriptions', 'Systems', 'Cloud Access', 'Subscription Allocations' (which is selected and underlined), and 'Contracts'. The main content area is titled 'Subscription Allocations » Create new subscription allocation' and 'Create a New subscription allocation'. A descriptive paragraph explains that creating a new subscription allocation allows exporting subscriptions from the Red Hat Customer Portal subscription management application. The form has two fields: 'Name' with the value 'Example_satellite' and a description 'Provide a name that will help you associate this subscription allocation with a specific premise subscription management application.'; and 'Type' with the value 'Satellite 6.10' and a description 'Due to variation in supported features, it is important to match the type and version of the subscription management application you are using.' At the bottom of the form are two buttons: 'Create' (blue) and 'Cancel' (grey).

Red Hat Customer Portal

Menu Search

Overview Subscriptions Systems Cloud Access **Subscription Allocations** Contracts

[Subscription Allocations](#) » Create new subscription allocation

Create a New subscription allocation

Creating a new subscription allocation allows you to export subscriptions from the Red Hat Customer Portal subscription management application.

Name

Provide a name that will help you associate this subscription allocation with a specific premise subscription management application.

Type

Due to variation in supported features, it is important to match the type and version of the subscription management application you are using.

Create **Cancel**

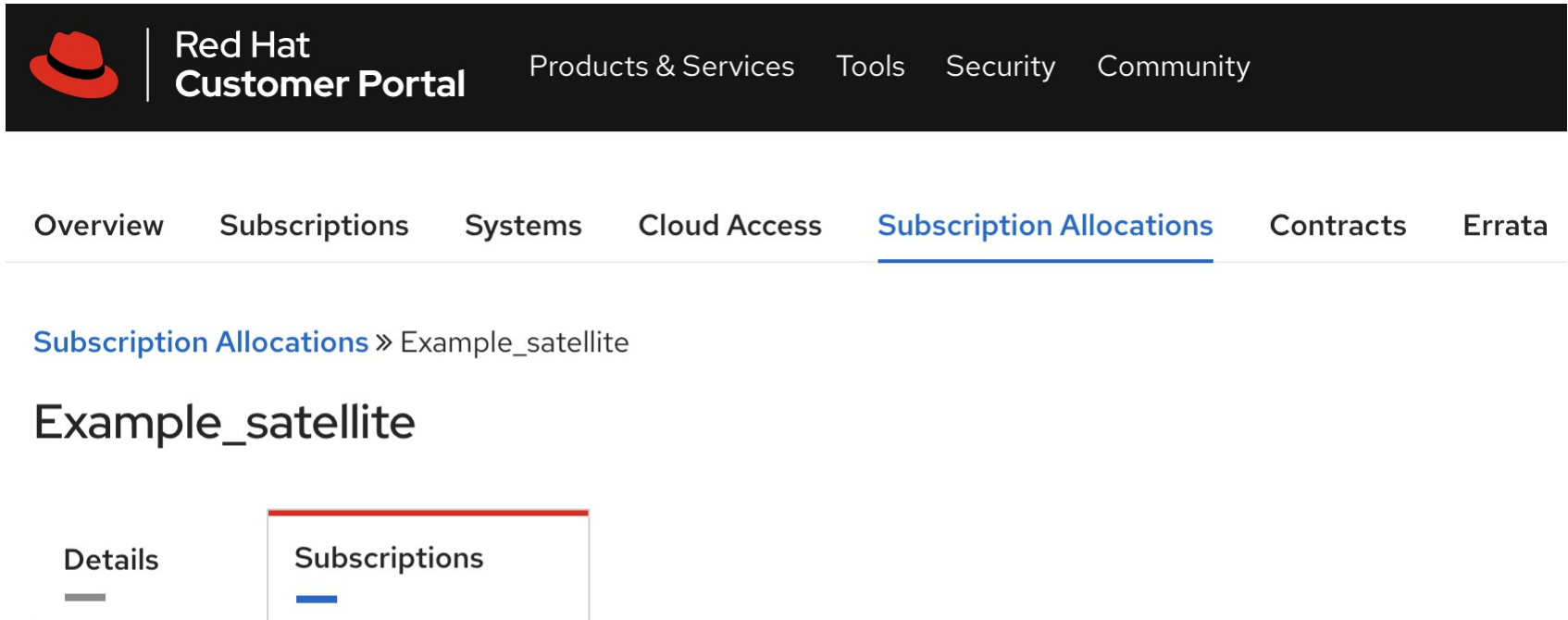
Step 4a – Create Satellite Server V6.10 manifest (cont.)

- Satellite subscription allocation named “*Example_satellite*” is now created.
- Next, click the **Subscriptions** tab.

The screenshot shows the Red Hat Customer Portal interface. At the top, there is a navigation bar with the Red Hat logo and 'Customer Portal' text. Below this is a breadcrumb trail: Overview > Subscriptions > Systems > Cloud Access > Subscription Allocations > Contr. A green notification banner states: '✓ Example_satellite has been successfully created'. Below the notification, there is a link 'Subscription Allocations » Example_satellite' and a large heading 'Example_satellite'. There are two tabs: 'Details' (selected) and 'Subscriptions' (highlighted with a yellow box). The 'Details' tab is divided into two sections: 'Basic Information' and 'History'. Under 'Basic Information', there are three rows: 'Name' with value 'Example_satellite' and an edit icon; 'UUID' with value 'da992892-d3ef-45f2-b350-e6ac84a4ae2a'; and 'Type' with a dropdown menu showing 'Satellite 6.10' and an 'Update' button. The 'Type' row is highlighted with a red box. The 'History' section shows 'Created', 'Created by', and 'Last Modified Date'.

Step 4a – Create Satellite Server V6.10 manifest (cont.)

- Click **Add Subscriptions**.



The screenshot shows the Red Hat Customer Portal interface. At the top, there is a navigation bar with the Red Hat logo and the text 'Red Hat Customer Portal'. Below this, there are several menu items: 'Products & Services', 'Tools', 'Security', and 'Community'. A secondary navigation bar contains 'Overview', 'Subscriptions', 'Systems', 'Cloud Access', 'Subscription Allocations' (which is underlined and highlighted in blue), 'Contracts', and 'Errata'. Below the navigation, the breadcrumb 'Subscription Allocations » Example_satellite' is visible. The main heading is 'Example_satellite'. There are two tabs: 'Details' and 'Subscriptions'. The 'Subscriptions' tab is selected and highlighted with a blue underline. The content area below the tabs is empty, indicating no subscriptions are currently displayed.

There are no subscriptions to display
Add subscriptions to this allocation to manage your entitlements

Add Subscriptions

Step 4a – Create Satellite Server V6.10 manifest (cont.)

- On the next screen, select **Entitlements**. Use the following table to set the **Quantity** column.
- **Add the following subscriptions:**

Important: DO NOT add “*Red Hat Satellite (MCT0370)*” subscription itself here. Otherwise, the pattern will not work.

- **Product: Red Hat Enterprise Linux Server, Premium (8 sockets) (Unlimited guests) (RH0105260)**

- Number required: The total number of compute nodes in the rack. For example, if the rack has 6 compute nodes, meaning it has 6 hypervisors, then user needs to add 6 above subscriptions to the **Satellite Organization**.
- **Note:** Mandatory to have.

- **Product: Smart Management for (Unlimited guests) Embedded Partner Support (RH1500861)**

- Number required: Total number of compute nodes in the rack.

- **Product: Extended Update Support for Red Hat Enterprise Linux Server (8 sockets) (RH1767396)**

- Number required: Total number of compute nodes in the rack.
- **Note:** Not mandatory to have. Only if customer needs extended support.

Screenshot of this step at next page

Step 4a – Create Satellite Server V6.10 manifest (cont.)

- This screenshot indicates about adding subscriptions to the Satellite organization.

The screenshot shows the Red Hat Customer Portal interface. At the top, there are navigation tabs: Subscriptions, Downloads, Containers, and Support Cases. Below this is the Red Hat Customer Portal header with the logo and navigation links: Products & Services, Tools, Security, and Community. On the right side of the header, there are icons for Search, English, All Red Hat, and a user profile icon.

Below the header, there is a secondary navigation bar with links: Overview, Subscriptions, Systems, Cloud Access, Subscription Allocations (highlighted), Contracts, Errata, and Manage.

Add Subscriptions to Example_satellite

Red Hat Enterprise Linux Server, Premium (8 sockets) (Unlim

- Only show subscriptions that match this subscription allocation.
- Include future dated subscriptions.

Subscription Name	Contract	Start Date	End Date	Available Entitlements	Entitlements
Red Hat Enterprise Linux Server, Premium (8 sockets) (Unlimited guests)	12786112	2021-08-24	2022-08-24	1922	4

Step 4a – Create Satellite Server V6.10 manifest (cont.)

- When entitlements are successfully added, click **Export Manifest** and save it for your records.

The screenshot displays the Red Hat Customer Portal interface. At the top, there is a navigation bar with links for Subscriptions, Downloads, Containers, and Support Cases. Below this is the Red Hat logo and the text 'Red Hat Customer Portal', followed by links for Products & Services, Tools, Security, and Community. On the right side of the navigation bar, there are icons for Search, English, All Red Hat, and a user profile icon.

Below the navigation bar, there is a secondary navigation bar with links for Overview, Subscriptions, Systems, Cloud Access, Subscription Allocations, Contracts, Errata, and Manage. The 'Subscription Allocations' link is underlined.

A green notification banner at the top of the main content area contains a checkmark icon and the text: 'The allocation was successfully updated. Apply these changes to the on-premise application using its refresh or import feature.' A close button (X) is located on the right side of the banner.

Below the notification banner, there is a breadcrumb trail: 'Subscription Allocations » Example_satellite'. The main heading is 'Example_satellite'.


Under the heading, there are two tabs: 'Details' and 'Subscriptions'. The 'Subscriptions' tab is selected and highlighted with a blue underline.

Below the tabs, there is a search filter box with the text: 'Filter by Subscription Name, SKU, or Contract Number'. To the right of the filter box, there are three buttons: '↓ .CSV', 'Export Manifest', and 'Add Subscriptions'. The 'Export Manifest' button is highlighted with a red border.

Step 4b – Create Satellite Server V6.10 manifest from existing 6.x

- Go to https://access.redhat.com/management/subscription_allocations.
- Search for the existing Satellite manifest name and click to select it.

Subscriptions Downloads Containers Support Cases

 Red Hat Customer Portal Products & Services Tools Security Community

Overview Subscriptions Systems Cloud Access Subscription Allocations Contracts Errata

Subscription Allocations

Exist

<input type="checkbox"/>	Name ▲	Type ◆	Entitlements ◆
<input type="checkbox"/>	Existing_satellite	Satellite 6.7	16

Show 100 ▼ entries

Showing 1 to 1 of 1 entries (filtered from 91 total entries)

Step 4b - Create Satellite Server V6.10 manifest from existing 6.x (cont.)

- In the **Details** tab under **Basic Information**, you see that **Type** is set to **Satellite 6.7**.
- Expand the **Type** list to select **Satellite 6.10** and click **Update**.




Overview Subscriptions Systems Cloud Access Subscription Allocations Contr

[Subscription Allocations](#) » Example_satellite

Example_satellite



Basic Information

Name	Satellite 6.10	
UUID	Satellite 6.9	15-9c9c-bdb5e8df92e8
Type	Satellite 6.8	
	✓ Satellite 6.7	<input type="button" value="Update"/>
	Satellite 6.6	
	Satellite 6.5	
Subscriptions	Satellite 6.4	
	Satellite 6.3	

History

Created
Created by
Last Modified Date

Step 4b - Create Satellite Server V6.10 manifest from existing 6.x (cont.)

- When **Type** is set to **Satellite 6.10** successfully, click **Export manifest** to download.

✓ The allocation was successfully updated. Apply these changes to the on-premise application using its refresh or import feature. ✕


[Subscription Allocations](#) » Example_satellite

Example_satellite

Details

Subscriptions


Basic Information


Name Example_satellite 


UUID a89f8687-f389-4215-9c9c-bdb5e8df92e8

Type


History

Created 


Created by 

Last Modified Date 

Subscriptions

Simple content access Enabled 

Entitlements 16

 This allocation contains subscriptions that require the use of virt-who. [Learn how to configure and use this tool.](#)

Step 5 – Deploy Satellite Server V6.10 pattern

Log in to the IBM Cloud Pak System console.

- Click **Patterns > Virtual System Patterns**.
- Select **Red Hat Satellite Server 6.10 Pattern** (Choose the latest version, e.g.: 1.0.17.0).
- Click **Deploy**.

The screenshot displays the IBM Cloud Pak System console interface. At the top, the header reads "IBM Cloud Pak System". Below this, the "Virtual System Patterns" section is active, with a search filter for "Red Hat Satellite Server". A table lists the patterns, with "Red Hat Satellite Server 6.10 Pattern" and version "1.0.17.0" highlighted. To the right, the details for this pattern are shown, including a "Deploy" button, application ID, description, version, status (Draft), and creation/update information.

Name	Version
Red Hat Satellite Server 6.10 Pattern	1.0.17.0

Red Hat Satellite Server 6.10 Pattern

Application ID: a-4dc150ea-12cb-4654-a87f-d7

Description: This pattern will deploy Red Hat

Version: 1.0.17.0

Status: Draft

Created by: admin

Updated by: admin

Created on: Feb 24, 2022, 11:28:49 PM

Updated on: Feb 24, 2022, 11:28:49 PM

License status in this pattern: IBM OS Image for Red Hat Linux Default add disk 1.0.0 Acc Red Hat Satellite Server 6.10

In the cloud now: No deployment is found

Preview:

Step 5 – Deploy Satellite Server V6.10 pattern (cont.)

Manifest:

Use the one generated in step 4.

Red Hat Customer Portal Username and Passwords:

The credentials used to log in your Red Hat Account.

Organization and Location:

Arbitrary but mandatory fields.

Admin username, password & email:

Admin details to be set.

HTTP proxy details

These proxy details are optional but mandatory when VM can't reach internet

Click **Quick Deploy** and the pattern should complete deploying in 3 - hours depending on network speed.

The screenshot shows the IBM Cloud Pak System deployment interface. At the top, it says "IBM Cloud Pak System" and "Deploy Pattern: Red Hat Satellite Server 6.10 Pattern". There are three tabs: "Configure", "Quick Deploy", and "Prepare to Deploy". The "Configure" tab is active, showing fields for Name, Environment Profile, Priority, and SSH key. The "Nodes" section shows a list of nodes, with "Red Hat Satellite Server" selected. The "Prepare to Deploy" tab is also visible, showing a form for filling in required values for the component "Red Hat Satellite Server 6_10".

Configure Tab:

- Name: Red Hat Satellite Server 6.10 Pattern
- Environment Profile: 1Test
- Priority: Medium
- SSH key: [Empty field]
- Buttons: Schedule Deployment, Chargeback

Nodes Tab:

- Red Hat Satellite Server (Selected)
- Red Hat Satellite Server 6_10

Prepare to Deploy Tab:

Fill in the required values for component Red Hat Satellite Server 6_10 for this pattern.

Required Fields (Red Boxed):

- Satellite Server Organization Name
- Satellite Server Location
- Manifest to be uploaded to Satellite Server (with Browse button)
- Satellite Server admin user name
- Satellite Server admin password (with Password and Verify password fields)
- Satellite Server admin email ID

Optional Fields:

- HTTP proxy host
- HTTP proxy port
- HTTP proxy user
- HTTP proxy user password (with Password and Verify password fields)
- Red Hat Customer Portal Username
- Red Hat Customer Portal Password (with Password and Verify password fields)