

# How do I create Red Hat manifest file and deploy Red Hat Satellite Server 6.11

## IBM Cloud Pak System

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# Steps to be followed:

Step 1 – Procure subscriptions

Step 2 – Activate subscriptions

Step 3 – Verify subscriptions in your account

Step 4a – Create Red Hat Satellite Server V6.11 manifest

Step 4b – Create Red Hat Satellite Server V6.11 manifest from existing manifest

Step 5 – Deploy Red Hat Satellite Server V6.11 pattern

## Step 1 – Procure subscriptions

- 1a) Do you have a Red Hat 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 Red Hat 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 Red Hat 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- |  | XIb46634fa6t |
| RH1767396 | 6350- |  | XI8ef2a21e3e |
| RH1767396 | g3b1- |  | XI5478egd45  |
| RH1767396 | 0c0b- |  | XI53df46128c |
| RH1767396 | 42d5- |  | XIkj76e7457ε |
| RH1767396 | e64d- |  | XI56fedd33sc |
| RH1767396 | 0ccf- |  | XIa43tgrs859 |
| RH1767396 | 4ef3- |  | XIb777tge49ε |
| RH1767396 | 54cb- |  | X259fg1a47ft |

# 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.



### Activate your subscription

Subscriptions purchased directly from Red Hat in North America or via [redhat.com](https://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](#) ▶

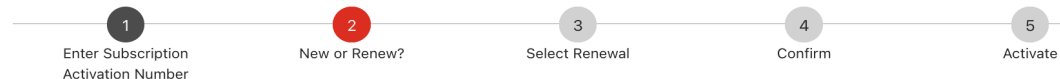
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# Step 2 – Activate subscriptions (cont.)

- 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: <span style="background-color: yellow;">                    </span> |

## 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.

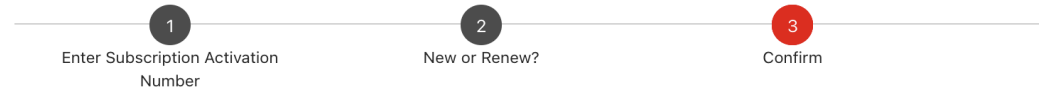
[< Back](#) [Next >](#)

# Step 2 – Activate subscriptions (cont.)

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

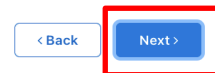
## Subscription Activation

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:                      | [Redacted]                                                              |
| End Date:                        | [Redacted]                                                              |
| Subscription Activation Number : | b12d [Redacted]                                                         |





# Step 2 – Activate subscriptions (cont.)

- Congratulations! Subscriptions are successfully added.

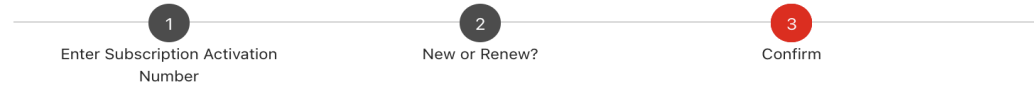
**Note: Activation may take 30 minutes to 48 hours. Please contact support if subscriptions are not activated after 48 hours.**

Red Hat  
Customer Portal

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## 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:                      | [Redacted]                                                              |
| End Date:                        | [Redacted]                                                              |
| 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

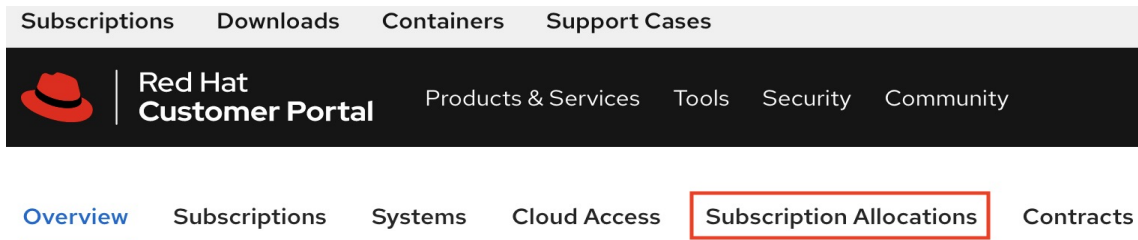
Filter by Subscription (Number, Name, SKU) or Contract Number

Active Ready to Renew Recently Expired Future

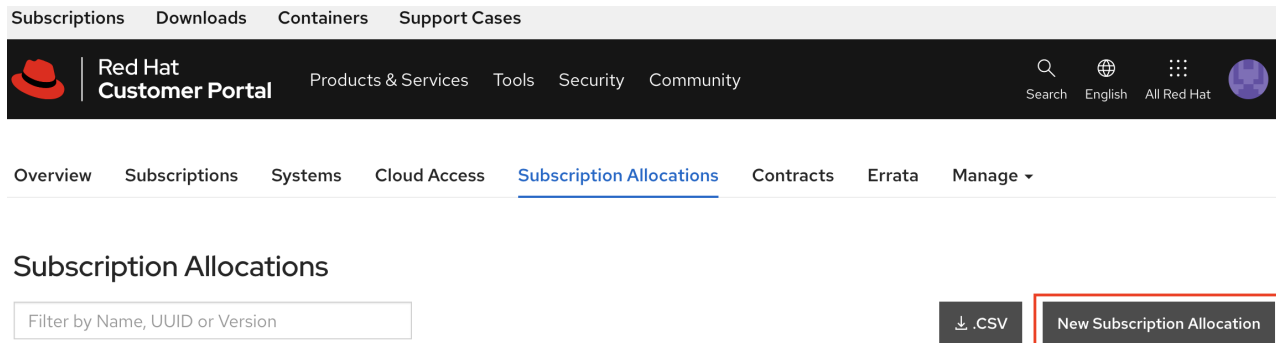
| Subscription Number | Subscription Name                                                       | Contract Number | Quantity | Start Date | End Date |
|---------------------|-------------------------------------------------------------------------|-----------------|----------|------------|----------|
|                     | Red Hat Enterprise Linux Server, Premium (8 sockets) (Unlimited guests) |                 | 1        |            |          |

# Step 4a – Create Red Hat Satellite Server V6.11 manifest

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



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



# Step 4a – Create Red Hat Satellite Server V6.11 manifest (cont.)

- On the next screen:
  - Assign a name to the Red Hat Satellite Server subscription allocation.
  - Set **Type** to **Satellite 6.11**.
  - Click **Create**.

The screenshot shows the 'Create a New subscription allocation' page in the Red Hat Customer Portal. The page has a dark header with the Red Hat logo and navigation links for Products & Services, Tools, Security, and Community. Below the header is a breadcrumb trail: Overview > Subscriptions > Systems > Cloud Access > Subscription Allocations > Contracts > Errata > Manage. The main heading is 'Create a New subscription allocation'. Below this is a descriptive paragraph: 'Creating a new subscription allocation allows you to export subscriptions from the Red Hat Customer Portal to your on-premise subscription management application.' There are two form fields: 'Name' with the value 'Example\_satellite\_611' and a note 'Provide a name that will help you associate this subscription allocation with a specific organization or on-premise subscription management application.'; and 'Type' with a dropdown menu set to 'Satellite 6.11' and a note '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' (highlighted with a red box) and 'Cancel'.

# Step 4a – Create Red Hat Satellite Server V6.11 manifest (cont.)

- Satellite subscription allocation named “*Example\_satellite\_611*” is now created.
- Next, click the “**Subscriptions**” tab.

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[Overview](#) [Subscriptions](#) [Systems](#) [Cloud Access](#) [Subscription Allocations](#) [Contracts](#) [Errata](#) [Manage](#) ▾

[Subscription Allocations](#) » rhelsatellite

## rhelsatellite

Details **Subscriptions**

---

### Basic Information

|      |                                                                                   |                   |
|------|-----------------------------------------------------------------------------------|-------------------|
| Name | rhelsatellite                                                                     | <a href="#">✎</a> |
| UUID | <input type="text"/>                                                              |                   |
| Type | <input type="text" value="Satellite 6.11"/> <input type="button" value="Update"/> |                   |


### History

|                    |                      |
|--------------------|----------------------|
| Created            | <input type="text"/> |
| Created by         | <input type="text"/> |
| Last Modified Date | <input type="text"/> |

---

### Subscriptions

|                         |         |
|-------------------------|---------|
| Simple content access ⓘ | Enabled |
| Entitlements            | 21      |

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

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# Step 4a – Create Red Hat Satellite Server V6.11 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 links for 'Products & Services', 'Tools', 'Security', and 'Community'. On the right side of the navigation bar, there are icons for 'Search', 'English', and 'All Red Hat'. Below the navigation bar, there is a secondary navigation bar with links for 'Overview', 'Subscriptions', 'Systems', 'Cloud Access', 'Subscription Allocations' (which is underlined), 'Contracts', 'Errata', and 'Manage'. Below the secondary navigation bar, there is a green notification banner with 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.' Below the notification banner, there is a breadcrumb link: 'Subscription Allocations » Example\_satellite\_611'. Below the breadcrumb link, there is a heading: 'Example\_satellite\_611'. Below the heading, there are two tabs: 'Details' and 'Subscriptions' (which is selected). Below the tabs, there is a search filter box with the text: 'Filter by Subscription Name, SKU, or Contract Number'. Below the search filter box, there are three buttons: '↓ .CSV', 'Export Manifest', and 'Add Subscriptions' (which is highlighted with a red box).

## Step 4a – Create Satellite Server V6.11 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 client needs extended support.

\*\*Refer screenshot of this step on the next page.

# Step 4a – Create Satellite Server V6.11 manifest (cont.)

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

Red Hat Customer Portal | Products & Services | Tools | Security | Community

Search | English | All Red Hat

Overview | Subscriptions | Systems | Cloud Access | Subscription Allocations | Contracts | Errata | Manage ▾

### Add Subscriptions to Example\_satellite\_611

Red Hat Enterprise Linux Server, Premium (8 sockets)

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) |          |            |          |                        |              |



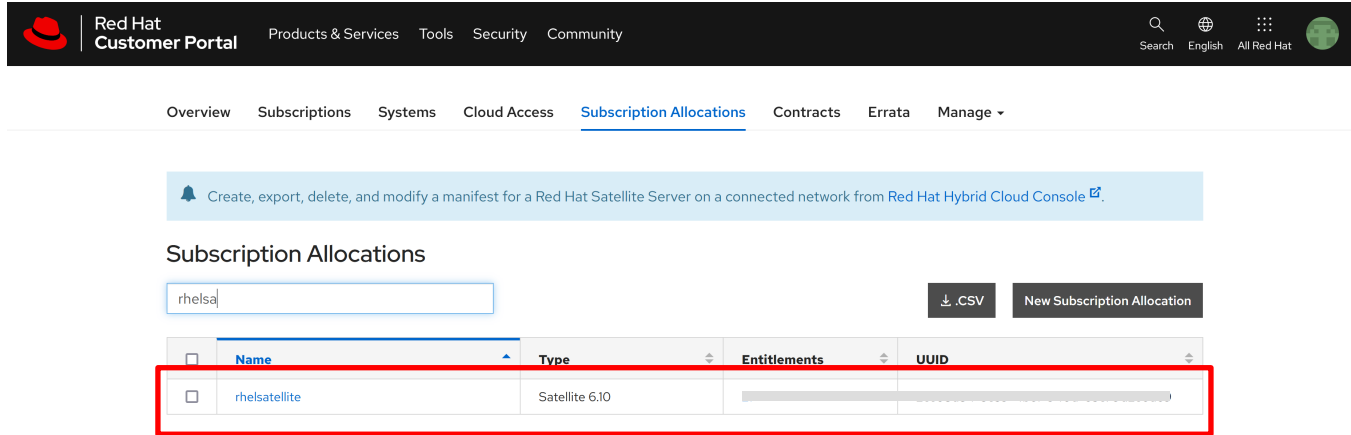
# Step 4a – Create Satellite Server V6.11 manifest (cont.)

- 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, the navigation bar includes the Red Hat logo, 'Red Hat Customer Portal', and links for 'Products & Services', 'Tools', 'Security', and 'Community'. On the right side of the navigation bar are search, language (English), and user profile icons. Below the navigation bar, a breadcrumb trail shows 'Overview', 'Subscriptions', 'Systems', 'Cloud Access', 'Subscription Allocations' (highlighted), 'Contracts', 'Errata', and 'Manage'. A green success message states: 'The allocation was successfully updated. Apply these changes to the on-premise application using its refresh or import feature.' Below this, the breadcrumb 'Subscription Allocations » Example\_satellite\_611' is shown, followed by the title 'Example\_satellite\_611'. Two tabs are visible: 'Details' and 'Subscriptions' (selected). A search filter box contains the text 'Filter by Subscription Name, SKU, or Contract Number'. In the bottom right corner, three buttons are present: '↓ .CSV', 'Export Manifest' (highlighted with a red box), and 'Add Subscriptions'.

## Step 4b – Create Satellite Server V6.11 manifest from existing 6.x

- Go to [https://access.redhat.com/management/subscription\\_allocations](https://access.redhat.com/management/subscription_allocations).
- Search for the existing Red Hat Satellite Server manifest name and click to select it.



Red Hat Customer Portal | Products & Services | Tools | Security | Community

Search | English | All Red Hat

Overview | Subscriptions | Systems | Cloud Access | Subscription Allocations | Contracts | Errata | Manage ▾

🔔 Create, export, delete, and modify a manifest for a Red Hat Satellite Server on a connected network from Red Hat Hybrid Cloud Console [↗](#)

### Subscription Allocations

rhelsa ↓ .CSV New Subscription Allocation

| <input type="checkbox"/> | Name          | Type           | Entitlements | UUID |
|--------------------------|---------------|----------------|--------------|------|
| <input type="checkbox"/> | rhelsatellite | Satellite 6.10 |              |      |

## Step 4b - Create Red Hat Satellite Server V6.11 manifest from existing 6.x (cont.)

- In the **Details** tab under “Basic Information”, you see that **Type** is set to **Satellite 6.10**.
- Expand the **Type** list to select **Satellite 6.11** and click **Update**.

The screenshot displays the Red Hat Customer Portal interface for a Satellite instance. The top navigation bar includes "Customer Portal" and "Tools Security Community". The main navigation menu shows "Overview", "Subscriptions", "Cloud Access", "Subscription Allocations", "Contracts", "Errata", and "Manage". The left sidebar contains "rhelsatellite" and "Details". The "Basic Information" section is active, showing fields for "Name", "UUID", and "Type". The "Type" dropdown menu is expanded, listing options from "Satellite 5.6" to "Satellite 6.11". The current selection is "Satellite 6.10". An "Update" button is located next to the dropdown. The "History" section is visible, showing columns for "Created", "Created by", and "Last Modified Date".

## Step 4b - Create Satellite Server V6.11 manifest from existing 6.x (cont.)

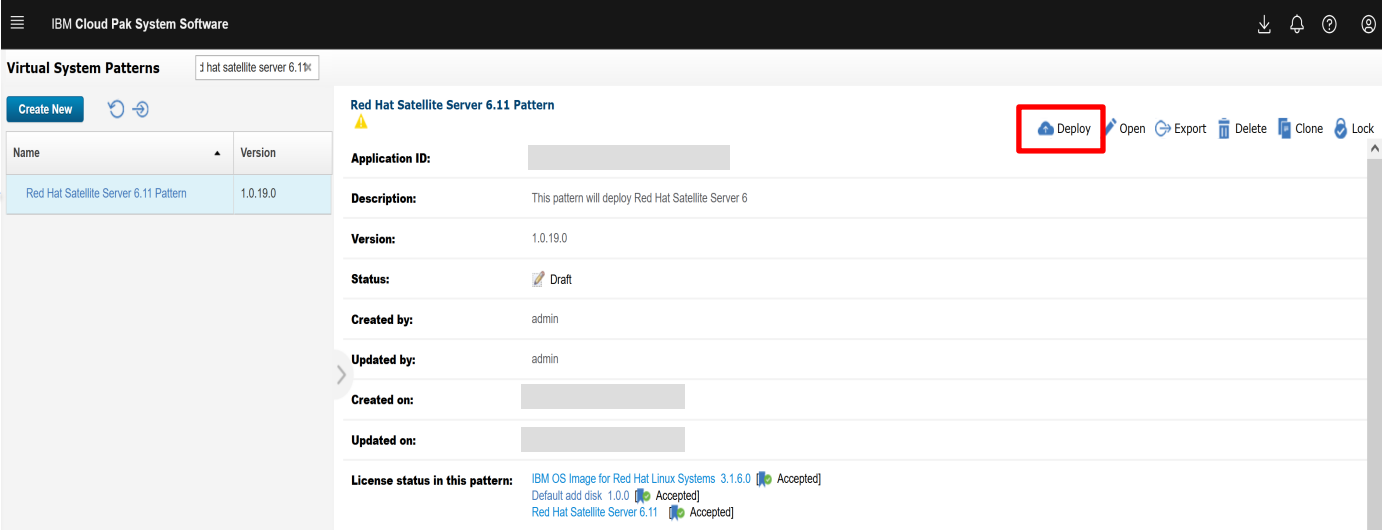
- When **Type** is set to **Satellite 6.11** successfully, click **Export manifest** to download.

The screenshot shows the 'Subscription Allocations' page for 'rhelsatellite'. The navigation bar includes 'Overview', 'Subscriptions', 'Systems', 'Cloud Access', 'Subscription Allocations', 'Contracts', 'Errata', and 'Manage'. The breadcrumb trail is 'Subscription Allocations » rhelsatellite'. The main heading is 'rhelsatellite'. There are two tabs: 'Details' (selected) and 'Subscriptions'. The 'Basic Information' section shows 'Name: rhelsatellite', 'UUID: [redacted]', and 'Type: Satellite 6.11' with an 'Update' button. A blue arrow points to the 'Satellite 6.11' dropdown. The 'History' section shows 'Created', 'Created by', and 'Last Modified Date' with a large grey redaction box. The 'Subscriptions' section shows 'Simple content access' as 'Enabled' and 'Entitlements' as a grey box. A blue notification box states: 'This allocation contains subscriptions that require the use of virt-who. Learn how to configure and use this tool.' At the bottom left, the 'Export Manifest' button is highlighted with a red rectangle.

## Step 5 – Deploy Satellite Server V6.11 pattern

Log in to the IBM Cloud Pak System console.

- Click **Patterns > Virtual System Patterns**.
- Select **Red Hat Satellite Server 6.11 Pattern** (Choose the latest version, e.g.: 1.0.19.0).
- Click **Deploy**.



The screenshot displays the IBM Cloud Pak System Software interface. At the top, the header reads "IBM Cloud Pak System Software". Below the header, the "Virtual System Patterns" section is active, showing a search filter for "hat satellite server 6.11". A table lists the patterns, with "Red Hat Satellite Server 6.11 Pattern" (version 1.0.19.0) selected. A blue arrow points to this row. To the right, the details for the selected pattern are shown, including the "Red Hat Satellite Server 6.11 Pattern" title, a warning icon, and a toolbar with buttons for "Deploy", "Open", "Export", "Delete", "Clone", and "Lock". The "Deploy" button is highlighted with a red box. The details section includes fields for "Application ID", "Description" (This pattern will deploy Red Hat Satellite Server 6), "Version" (1.0.19.0), "Status" (Draft), "Created by" (admin), "Updated by" (admin), "Created on", and "Updated on". At the bottom, the "License status in this pattern" is listed, showing "IBM OS Image for Red Hat Linux Systems 3.1.6.0 [Accepted]", "Default add disk 1.0.0 [Accepted]", and "Red Hat Satellite Server 6.11 [Accepted]".

## Step 5 – Deploy Red Hat Satellite Server V6.11 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.

IBM Cloud Pak System Software

Deploy Pattern: [Red Hat Satellite Server 6.11 Pattern](#)

Configure **Quick Deploy** Prepare to Deploy

Name: Red Hat Satellite Server 6.11 Pattern

Nodes

- Red Hat Satellite Server
  - Red Hat Satellite Server 6\_11
    - Fill in the required values for component Red Hat Satellite Server 6\_11 for this pattern.
    - \* Satellite Server Organization Name:
    - \* Satellite Server Location:
    - \* Manifest to be uploaded to Satellite Server:  [Browse](#)
    - \* Satellite Server admin user name:
    - \* Satellite Server admin password:
    - \* Satellite Server admin email ID:
    - HTTP proxy host:
    - HTTP proxy port:
    - HTTP proxy user:
    - HTTP proxy user password:
    - \* Red Hat Customer Portal Username:
    - \* Red Hat Customer Portal Password:

SSH key

Please generate SSH key pair or provide your public SSH key to access Virtual Machine in future

[Generate](#)

[Schedule Deployment](#)

[Chargeback](#)

Default add disk