

How do I create Red Hat manifest file and deploy Red Hat Satellite Server 6.7

IBM Cloud Pak System 2.0 and higher

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Red Hat Satellite

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 V6.7 manifest

Step 4b - Create satellite server V6.7 manifest from existing manifest

Step 5 - Deploy satellite server V6.7 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 a “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 # 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	Re 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 the 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/>



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://access.redhat.com) do not require activation. View your active subscriptions in [Red Hat Subscription Management](#).

Subscription Activation Number

5d1b-b611-5fa6-f3b7

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.

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 Applications Smart Management
Service Level:	Layered
Subscription Activation Number :	5d1b-b611-5fa6-f3b7

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 Applications Smart Management
Service Level:	Layered
Start Date:	Monday, January 07, 2019
End Date:	Monday, January 06, 2020
Subscription Activation Number :	5d1b-b611-5fa6-f3b7

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Step 2 – Activate subscriptions (cont.)

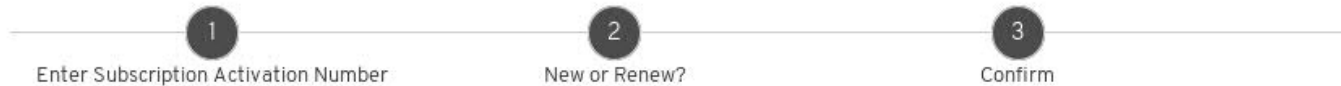
- Congratulations! Subscriptions are successfully added.

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.



Subscription Activating

Your subscription is activating and should be ready in a few minutes. You will receive an email confirmation once your subscription is

Subscription details

Product:	Red Hat Applications Smart Management
Service Level:	Layered
Start Date:	Monday, January 07, 2019
End Date:	Monday, January 06, 2020

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.

SUBSCRIPTIONS DOWNLOADS CONTAINERS SUPPORT CASES

redhat CUSTOMER PORTAL

Products & Services Tools Security Community

Overview **Subscriptions** Systems Subscription Allocations Contracts Errata Manage ▾

[« Return to Subscription Utilization](#)

Inventory

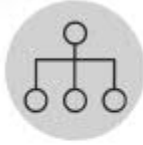
Filter by Subscription (Number, Name, SKU) or Contract Number

Active Ready to Renew Recently Expired Future Dated A

Subscription Number	Subscription Name	Contract Number	Quantity	Start Date	End Date	Status
5238234	Red Hat Satellite Infrastructure Subscription	Not Available	50	2018-03-19	2020-01-06	Active
5865586	Smart Management (Unlimited guests) Embedded Partner Support	11833351	1	2019-01-07	2020-01-06	Active

Step 4a – Create satellite server V6.7 manifest

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



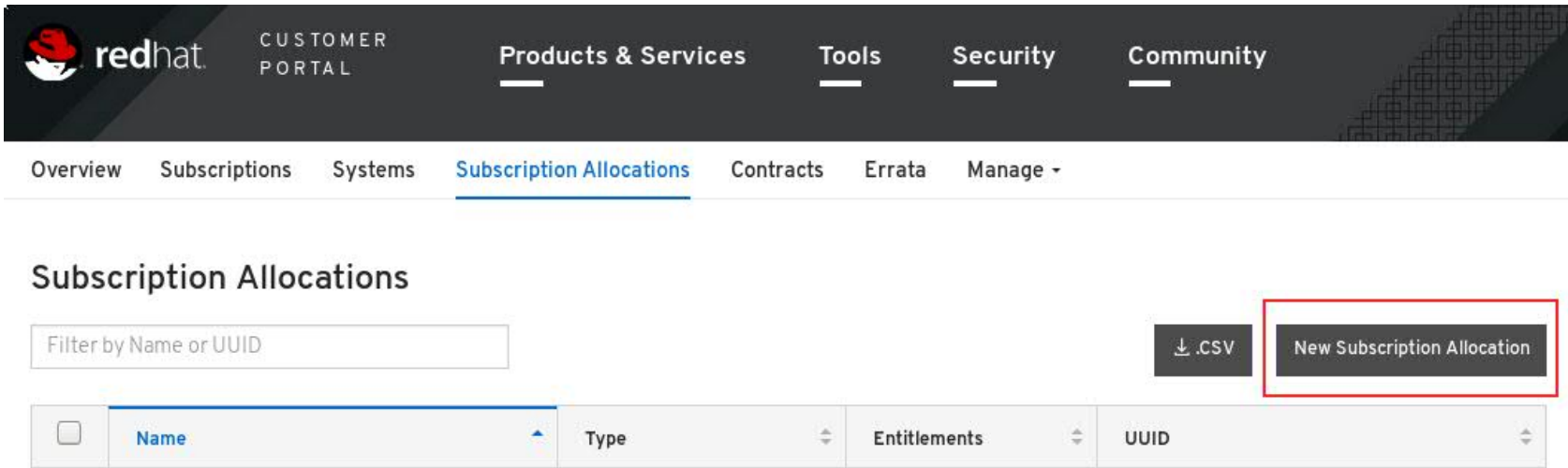
Subscription Allocations
Allocate subscriptions for export to an on-premise management application such as Red Hat Satellite

Red Hat Satellite

Subscription Asset Manager

- Subscription Allocations

-> Click **“New Subscription Allocation”**.



The screenshot shows the Red Hat Customer Portal interface. The top navigation bar includes the Red Hat logo, 'CUSTOMER PORTAL', and menu items: 'Products & Services', 'Tools', 'Security', and 'Community'. Below this is a secondary navigation bar with 'Overview', 'Subscriptions', 'Systems', 'Subscription Allocations' (highlighted), 'Contracts', 'Errata', and 'Manage -'. The main content area is titled 'Subscription Allocations' and features a search box labeled 'Filter by Name or UUID'. To the right of the search box are two buttons: a dark button with a download icon and '.CSV' text, and a light button with a red border labeled 'New Subscription Allocation'. Below these elements is a table with columns: 'Name', 'Type', 'Entitlements', and 'UUID'. Each column has a small dropdown arrow next to it.

Step 4a – Create satellite server V6.7 manifest (cont.)

•On the next screen:

- Assign a name to the satellite server subscription allocation.
- Set **Type** to **Satellite 6.7**.
- Click **Create**.

Overview Subscriptions Systems Cloud Access Subscription Allocations Contracts Errata Manage ▾

[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 to your on-premise subscription application.

Name

Example_satellite

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

Type

Satellite 6.7

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

Create

Cancel

Step 4a – Create satellite server V6.7 manifest (cont.)

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

✓ Example_satellite has been successfully created

[Subscription Allocations](#) » Example_satellite

Example_satellite

Details

Subscriptions

Basic Information

Name	Example_satellite	
UUID	e41fb9ac-c0e8-428b-89ec-f127a885bb29	
Type	<input type="text" value="Satellite 6.7"/>	<input type="button" value="Update"/>

History

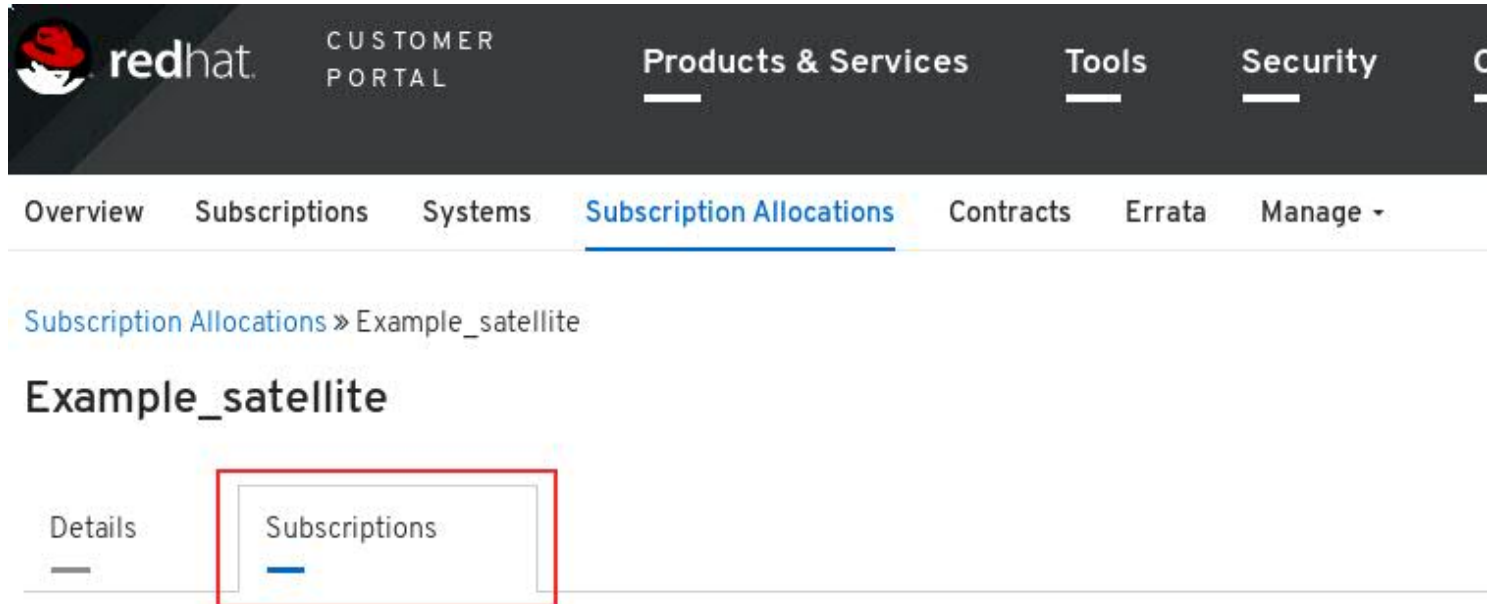
Created
Created by
Last Modified Date

Subscriptions

Entitlements 0

Step 4a – Create satellite server V6.7 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 'CUSTOMER PORTAL'. Below this, there are several menu items: 'Products & Services', 'Tools', 'Security', and 'C'. A secondary navigation bar contains 'Overview', 'Subscriptions', 'Systems', 'Subscription Allocations', 'Contracts', 'Errata', and 'Manage -'. The 'Subscription Allocations' menu item is highlighted with a blue underline. Below the navigation, the breadcrumb 'Subscription Allocations » Example_satellite' is visible. The main heading is 'Example_satellite'. Underneath, there are two tabs: 'Details' and 'Subscriptions'. The 'Subscriptions' tab is selected and highlighted with a blue underline. A red rectangular box is drawn around the 'Subscriptions' tab.

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

Add Subscriptions

Step 4a – Create satellite server V6.7 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 V6.7 manifest (cont.)

- Screenshot of adding subscriptions to the satellite organization.

Subscription Name	Contract	Start Date	End Date	Available Entitlements	Entitlements
Extended Update Support (1-2 sockets) - Embedded Partner Support	10538814	2014-08-24	2019-08-24	986	<input type="text"/>
Extended Update Support for Red Hat Enterprise Linux Server (8 sockets) (L3-only)	10538814	2014-08-24	2019-08-24	917	<input type="text" value="4"/>
Red Hat Enterprise Linux Developer Support, Enterprise	11610099	2014-08-24	2019-08-24	25	<input type="text"/>
Red Hat Enterprise Linux Server (1-2 sockets) (Up to 4 guests) - Embedded Partner Support	10538814	2014-08-24	2019-08-24	936	<input type="text"/>
Red Hat Enterprise Linux Server, Premium (8 sockets) (Unlimited guests)	10538814	2014-08-24	2019-08-24	153	<input type="text" value="4"/>
Red Hat Satellite	10538814	2014-08-24	2019-08-24	15	<input type="text"/>
Red Hat Virtualization (2-sockets), Premium	11348419	2015-06-08	2019-08-24	1000	<input type="text"/>
Red Hat Virtualization Manager	Not Available	2018-05-03	2019-08-23	4	<input type="text"/>
Smart Management (Unlimited guests) Embedded Partner Support	10538814	2014-08-24	2019-08-24	Unlimited	<input type="text" value="4"/>
Smart Management for Unlimited Guests	10538814	2014-08-24	2019-08-24	932	<input type="text"/>

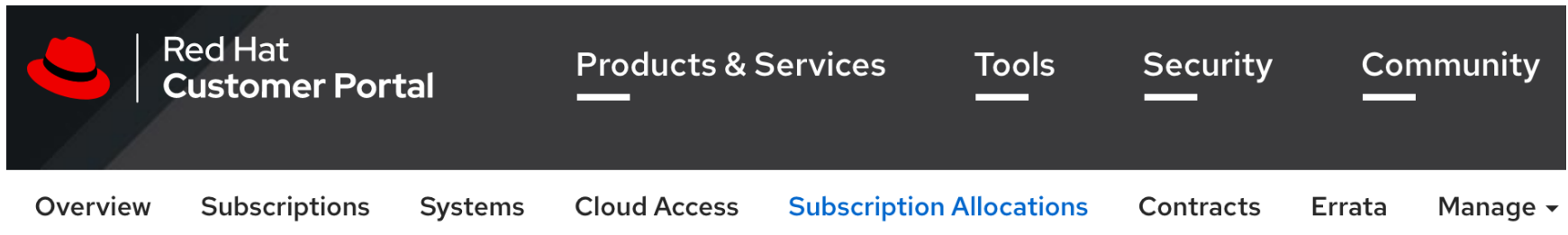
Step 4a - Create satellite server V6.7 manifest (cont.)

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

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 'CUSTOMER PORTAL'. Below this, there are several menu items: 'Products & Services', 'Tools', 'Security', and 'Community'. A secondary navigation bar contains 'Overview', 'Subscriptions', 'Systems', 'Subscription Allocations' (which is highlighted with a blue underline), 'Contracts', 'Errata', and 'Manage'. Below the navigation bars, there is a green success message: '✓ The allocation was successfully updated. Apply these changes to the on-premise application using its refresh or import feature.' Below the message, there is a breadcrumb trail: 'Subscription Allocations » Example_satellite'. The main heading is 'Example_satellite'. Below the heading, there are two tabs: 'Details' and 'Subscriptions' (which is active). Below the tabs, there is a search filter: 'Filter by Subscription Name, SKU, or Contract Number'. To the right of the filter, there are three buttons: '↓ .CSV', 'Export Manifest' (which is highlighted with a red box), and 'Add Subscrip'. Below the buttons, there is a table with the following columns: 'Subscription Name', 'SKU', 'Contract', 'Start Date', 'End Date', and 'Entitlements'. The 'Subscription Name' column is currently selected.

Step 4b - Create satellite server V6.7 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.



Red Hat Customer Portal

Products & Services Tools Security Community

Overview Subscriptions Systems Cloud Access Subscription Allocations Contracts Errata Manage ▾

Subscription Allocations

Existing_satellite ↓ .CSV

<input type="checkbox"/>	Name ▲	Type ◆	Entitlements ◆	UUID
<input type="checkbox"/>	Existing_satellite	Satellite 6.4	18	e41fb9ac-c0e8-

Show 100 ▾ entries Showing 1 to 1 of 1 entries (filtered from 71 total entries) First Page

Step 4b - Create satellite server V6.7 manifest from existing 6.x (cont.)

- In the **Details** tab under “Basic Information”, you see that **Type** is set to **Satellite 6.4**.
- Expand the **Type** list to select **Satellite 6.7** and click **Update**.

Overview Subscriptions Systems Cloud Access Subscription Allocations Contracts Errata

[Subscription Allocations](#) » Existing_satellite

Existing_satellite

Details

Subscriptions

Basic Information

Name	Existing_satellite	
UUID	e41fb9ac-c0e8-428b-89ec-f127a885bb29	
Type	Satellite 6.4	

Update

History

Created
Created by
Last Modified Date

Subscriptions

Entitlements 18

Step 4b - Create satellite server V6.7 manifest from existing 6.x(cont.)

- When **Type** is set to **Satellite 6.7** 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](#) » Existing_satellite

Existing_satellite

Details

Subscriptions

Basic Information

Name Existing_satellite 

UUID e41fb9ac-c0e8-428b-89ec-f127a885bb29

Type

History


Created April

Created by prgar

Last Modified Date April

Subscriptions

Entitlements 18

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

Export Manifest

Step 5 – Deploy satellite server V6.7 pattern

Log in to the Cloud Pak console.

- Click **Patterns > Virtual System Patterns**.
- Select **Red Hat Satellite Server 6.7 Pattern** (Choose the latest version, e.g.: 1.0.14.0).
- Click **Deploy**.

The screenshot shows the IBM Cloud Pak console interface. At the top, there are navigation tabs: "Cloud Paks", "Patterns" (highlighted in green), "Catalog", "Cloud", and "Sys". Below the navigation, there is a search bar with "Virtual System Patterns" and a filter box containing "ellite Server 6.7 Pattern". A "Create New" button is visible. A table lists the patterns, with "Red Hat Satellite Server 6.7 Pattern" and version "1.0.14.0" selected. To the right, the details for this pattern are shown, including a "Deploy" button (highlighted with a red box), Application ID, Description, Version, Status (Draft), Created by, Updated by, Created on, Updated on, License status, and In the cloud now.

Name	Version
Red Hat Satellite Server 6.7 Pattern	1.0.14.0

Red Hat Satellite Server 6.7 Pattern

Application ID: a-591b1698-db43-4f86-824d-1c8f9d1dec33

Description: This pattern will deploy Red Hat Satellite Server 6

Version: 1.0.14.0

Status: Draft

Created by: cpc

Updated by: cpc

Created on: Apr 26, 2020, 2:43:46 PM

Updated on: Apr 26, 2020, 2:43:46 PM

License status in this pattern: IBM OS Image for Red Hat Linux Systems 3.0.15.0 [Accepted]
Default add disk 1.0.0 [Accepted]
Red Hat Satellite Server 6.7 [Accepted]

In the cloud now: Red Hat Satellite Server 6.7 Pattern test

Preview:

Total: 1 Selected:

1

< 1 >

+

Step 5 - Deploy satellite server V6.7 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 3-4 hours depending on network speed.

IBM Cloud Pak System Cloud Paks **Patterns** Catalog Cloud System Hardware

Deploy Pattern: [Red Hat Satellite Server 6.7 Pattern](#)

Configure **Quick Deploy** Prepare to Deploy

***Name**
Red Hat Satellite Server 6.7 Pattern

***Environment Profile**
Shared

***Cloud Group**
Shared

***IP Group**
Shared-XPublic-50

***Priority**
Medium

SSH key

Please generate SSH key pair or provide your public SSH key to access Virtual Machine in future
[Generate](#)

Schedule Deployment

Chargeback

Nodes

- Red Hat Satellite Server

*** Satellite Server Organization Name**

*** Satellite Server Location**

*** Manifest to be uploaded to Satellite Server** [Browse](#)

*** Satellite Server admin user name**

*** Satellite Server admin password**
Password
Verify password

*** Satellite Server admin email ID**

HTTP proxy host

HTTP proxy port

HTTP proxy user

HTTP proxy user password
Password
Verify password

*** Red Hat Customer Portal Username**

*** Red Hat Customer Portal Password**
Password
Verify password