

# PackOne Developer and User Manual

## Introduction

Each module consists of several CRUD functions for a corresponding type of cloud resources. Each CRUD function can either be played via Web UI or API calls in the form of *curl CMD Line*:

```
curl http://api-url -D <form>
```

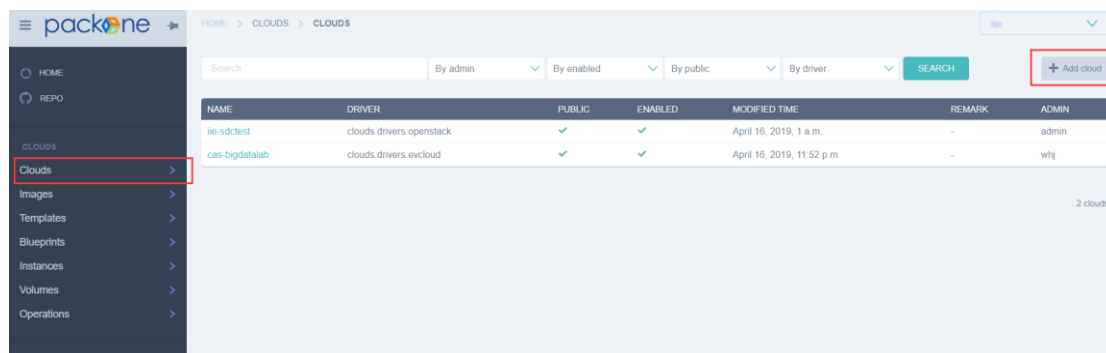
Such commands send the CRUD operation of the relevant cloud resources to the PackOne server.

## Cloud management

### 1. Cloud platform (Cloud)

Click the "Clouds" option in the list on the left to enter the cloud platform access management page;

Click "Add Cloud" button in the upper right corner of the cloud platform list on the right to add a cloud platform.



The screenshot shows the 'Add Cloud' form in the PackOne web interface. It contains several input fields for cloud configuration. At the bottom, there are checkboxes for 'Public' and 'Enabled', and a 'Remark' field. Three buttons are at the bottom: 'SAVE', 'Save and add another', and 'Save and continue editing'.

Form fields:

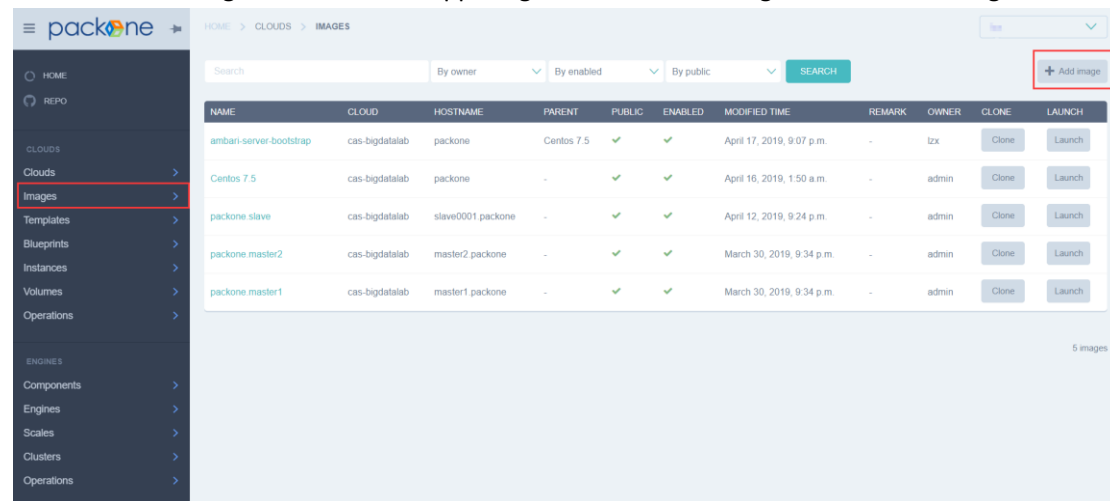
- Name: \*
- driver: \*
- platform credential:
- instance credential:
- Hosts:
- remedy script:
- ☐ Public
- ☒ Enabled
- Remark:

RESTFul API: " http://106.74.18.46/api/clouds/clouds/ "

### 2. Image

Click "Images" option in the list on the left to enter the image management page;

Click the "Add Image " button in the upper right corner of the image list to add an image.



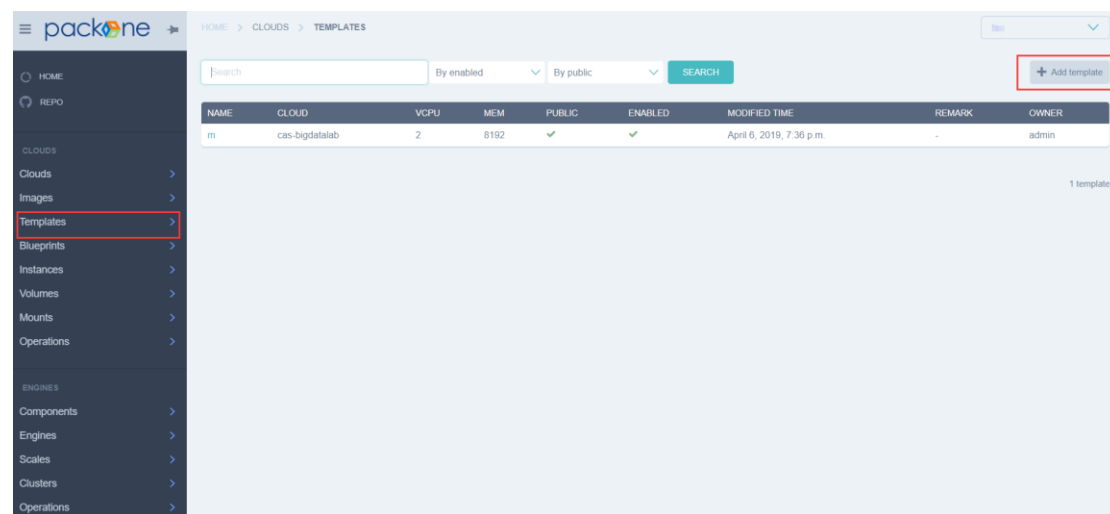
Form field description:

Name	Image name
Cloud	Cloud platform (the content is the cloud platform list in the clouds management list)
Actual ID on the cloud	The actual ID of the image in the cloud platform
Hostname	Host Name of the instance to be created
Parent	Parent image (if this image is created based on other images, you need to select the image to be based on here)
remedy script	sh script to be executed on the instance after the instance is created with this image )
Public	Is it for public use?
Enabled	Is it effective?
Remark	Remarks

RESTFul API: " http://106.74.18.46/api/clouds/images/ "

### 3. Template

Click "Templates" option in the list on the left to enter the template management page;  
Click "Add" in the upper right corner of the template list template" button to add resource configuration templates for your own Cloud.



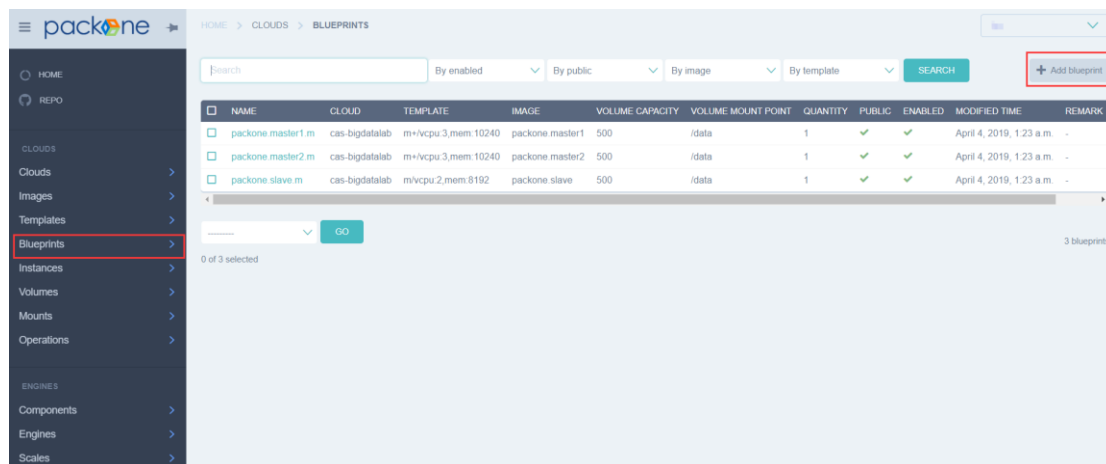
Form field description:

Name	Template name
Cloud	Cloud platform (*Note: Templates can only be added to cloud platforms with administrative rights)
Actual ID on the cloud	Template identification on the corresponding cloud platform
Vcpu	cpu cores
Mem	Memory size (unit: MB)
remedy script	fix script
Public	Is it for public use?
Enabled	Is it effective?
Remark	Remark

RESTFul API: " http://106.74.18.46/api/clouds/instancetemplates/ "

#### 4. Blueprint

Click the "Blueprints" option in the list on the left to enter the blueprint management page;  
Click "Add" in the upper right corner of the instance list blueprint" button to add a blueprint.



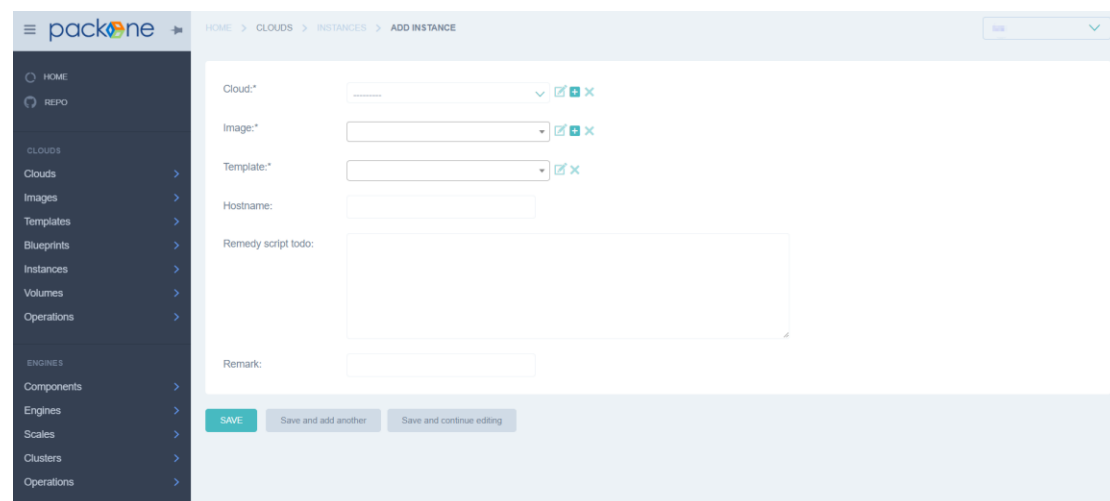
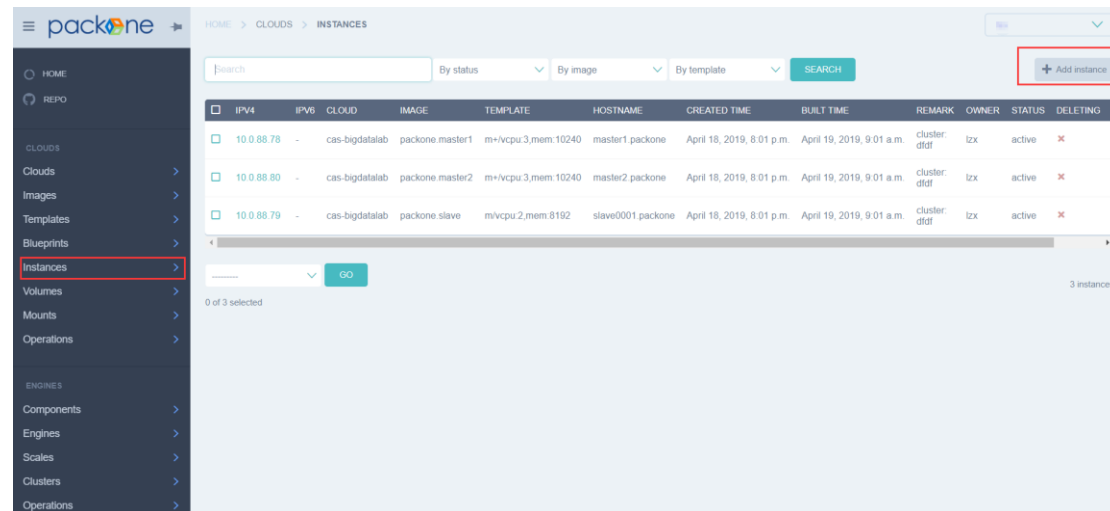
Form field description:

Name _	name
Cloud	cloud platform
Template	template
Image	mirror
Volume capacity	Cloud disk capacity
Volume mount point	The mount point of the cloud disk in the system (default / data path)
Quantity	Number of instances included
remedy script	fix script
Public _	Is it public?
Enabled	Is it effective?
Remark	Remark

RESTFul API: " http://106.74.18.46/api/clouds/instanceblueprints/ "

## 5. Cloud VM (Instance)

Click the "Instances" option in the list on the left to enter the instance management page;  
Click "Add" in the upper right corner of the instance list instance" button to add an instance.



Form field description:

Cloud	cloud platform
Image	Create the image used by the instance
Template	Templates used to create instances (configuration information for computing and storage resources)
Hostname	Specify HostName for the instance
Remedy script todo	sh script to be executed on this instance
Remark	Remarks

RESTFul API: " http://106.74.18.46/api/clouds/instances/ "

## 6. Cloud disk (Volume)

Click the "Volumes" option in the list on the left to enter the cloud disk management page;  
Click "Add" in the upper right corner of the cloud disk list volume" button to add a cloud disk.

HOME > CLOUDS > VOLUMES

Search By status SEARCH + Add volume

CLOUD	CAPACITY	CREATED TIME	BUILT TIME	REMARK	OWNER	STATUS	DELETING	MOUNTED TO	ACTION
cas-bigdatalab	500	April 18, 2019, 8:01 p.m.	April 19, 2019, 9:01 a.m.	cluster: dtdf	lzx	mounted	✗	10.0.88.78, /data	-
cas-bigdatalab	500	April 18, 2019, 8:01 p.m.	April 19, 2019, 9:01 a.m.	cluster: dtdf	lzx	mounted	✗	10.0.88.80, /data	-
cas-bigdatalab	500	April 18, 2019, 8:01 p.m.	April 19, 2019, 9:01 a.m.	cluster: dtdf	lzx	mounted	✗	10.0.88.79, /data	-

0 of 3 selected 3 volumes

HOME > CLOUDS > VOLUMES > ADD VOLUME

Cloud:\* Capacity:\* Remark:

SAVE Save and add another Save and view

Form field description:

Cloud	cloud platform
Capacity	Disk capacity (unit: GB)
Remark	Remark

RESTful API: " http://106.74.18.46/api/clouds/volumes/ "

## 7. Disk mounts (Mounts)

Click the "Mounts" option in the list on the left to enter the cloud disk mounting page;

Click "Add" in the upper right corner of the mount list mount" button to mount the cloud disk.

HOME > CLOUDS > MOUNTS

Search  SEARCH

+ Add mount

<input type="checkbox"/>	VOLUME	INSTANCE	DEV	POINT	CREATED TIME	COMPLETED TIME
<input type="checkbox"/>	cas-bigdatalab/500/3b050aed	packone master1/mv/10.0.88.78	/dev/vdb	/data	April 18, 2019, 8:01 p.m.	April 19, 2019, 9:01 a.m.
<input type="checkbox"/>	cas-bigdatalab/500/35095d2e	packone master2/mv/10.0.88.80	/dev/vdb	/data	April 18, 2019, 8:01 p.m.	April 19, 2019, 9:01 a.m.
<input type="checkbox"/>	cas-bigdatalab/500/46c5c4a3	packone slave/m/10.0.88.79	/dev/vdb	/data	April 18, 2019, 8:01 p.m.	April 19, 2019, 9:01 a.m.

0 of 3 selected

3 mounts

HOME > CLOUDS > MOUNTS > ADD MOUNT

Volume:

Instance:

Point:

SAVE Save and add another Save and view

Form field description:

Volume	Mounted cloud disk
Instance	Instance mounted to
Point	mount point

RESTful API: " http://106.74.18.46/api/clouds/mounts/ "

## 8. Operations

Click the "Operations" option in the list on the left to enter the operation record page;

Click "Add" in the upper right corner of the operation record operation" button to perform the operation.

BATCH	OPERATION	TARGET	SCRIPT	SERIAL	STARTED TIME	COMPLETED TIME
5bc22529	remedy	packone master1/m+10.0.88.78	n=0 until [ \$n -ge 15 ] do curl -4s -u admin:admin -H "X-Requested-By:ambari" -X POST http://master1:8080/api/v1/clusters/emr/hosts/'hostname' 2>/dev/null && break n=\$((n+1)) sleep 5 done	-	-	April 18, 2019, 8:04 p.m.
5bc22529	remedy	packone slave/m+10.0.88.79	n=0 until [ \$n -ge 15 ] do curl -4s -u admin:admin -H "X-Requested-By:ambari" -X POST http://master1:8080/api/v1/clusters/emr/hosts/'hostname' 2>/dev/null && break n=\$((n+1)) sleep 5 done	-	-	April 18, 2019, 8:04 p.m.
e3cftbba	remedy	packone master2/m+10.0.88.80	echo '###group 77### 10.0.88.79 slave0001 packone 10.0.88.80 master2 master2 packone 10.0.88.78 master1 master1 packone1 >>>/etc/hosts ##remedy scale. packone m### m- /f /data/hadoop mkdir -p /data/hadoop in -sf /data/hadoop /hadoop #env echo JAVA_HOME=/usr/jdk64/default->>>/etc/profile d/packone.java sh echo JRE_HOME=/usr/jdk64/default/>>>/etc/profile d/packone.java sh echo 'CLASS_PATH= \$JAVA_HOME/lib \$JRE_HOME/lib>>>/etc/profile d/packone.java sh echo 'PATH=\$JAVA_HOME/bin:\$JRE_HOME/bin:\$PATH>>>/etc/profile d/packone.java sh	-	-	April 18, 2019, 8:02 p.m.
			echo '###group 77### 10.0.88.79 slave0001 slave0001 packone 10.0.88.80 master2 master2 packone 10.0.88.78 master1 master1 packone1 >>>/etc/hosts ##remedy scale. packone m### m- /f /data/hadoop mkdir -p /data/hadoop in -sf /data/hadoop /hadoop #env echo			

Target:

Operation:

Script:

SAVE Save and add another Save and view

Form field description:

Target	Operation target (such as: instance, image, cloud disk, etc.)
Operation	Operations performed (such as booting, shutting down, repairing, mounting, etc.)
Script	sh script to execute

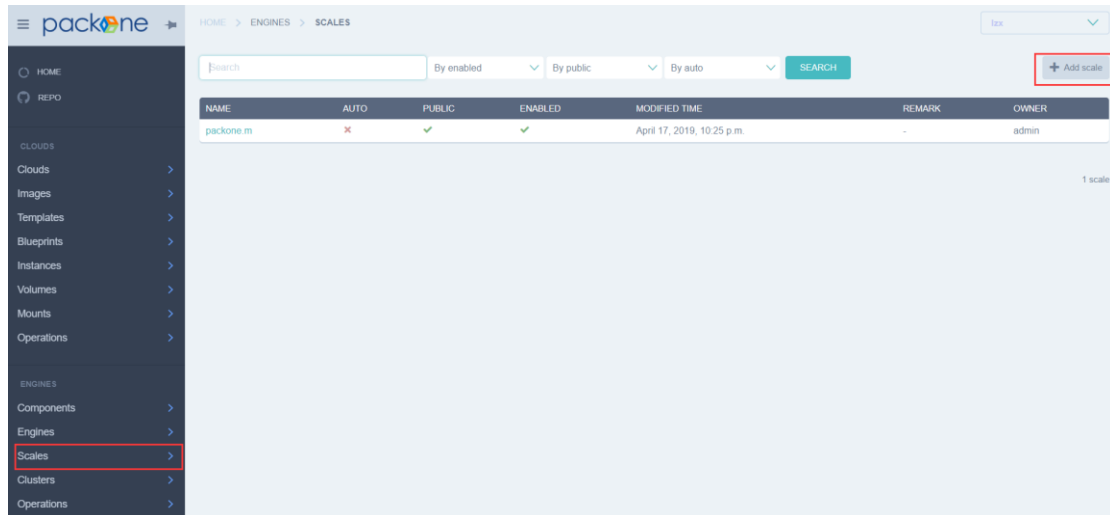
RESTFul API: " <http://106.74.18.46/api/clouds/instanceoperations/> "

## 9. Cluster scaling template (Scale)

Click the "Scales" option in the list on the left to enter the cluster scaling template management page;

Click "Add" in the upper right corner of the operation record scale" button to add a template.





Form field description:

Name	name
Scale-in remedy script	sh script executed when cluster shrinks
Scale- out remedy script	sh script executed during cluster expansion
Auto	Whether to automatically expand (reserved field)
Init blueprints	Blueprint used during cluster initialization
Step blueprints	Blueprint used when scaling the cluster in one step
Public	Is it public?
Enabled	Whether to enable
Remark	Remark

RESTful API: " http://106.74.18.46/api/engines/scales/ "

## 10. Cluster

Click the "Clusters" option in the list on the left to enter the cluster management page;

Click "Add" in the upper right corner of the operation record cluster" button to add a cluster.

packone

HOME > ENGINES > CLUSTERS

SEARCH

By scale

SEARCH

+ Add cluster

	NAME	SCALE	PUBLIC	REMARK	CREATED TIME	BUILT TIME	STATUS	ACCESS	ACTION
<input type="checkbox"/>	cluster1	scale1/manual			April 19, 2019, 2:36 a.m.	April 19, 2019, 2:36 a.m.	active	Manage	poweroff
<input type="checkbox"/>	dtail	packone.m/manual			April 18, 2019, 8:01 p.m.	April 19, 2019, 2:23 a.m.	active	Manage	poweroff

0 of 2 selected

GO

2 clusters

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ENGINES

Components

Engines

Scales

Clusters

Operations

packone

HOME > ENGINES > CLUSTERS > ADD CLUSTER

SEARCH

ADD CLUSTER

Name\*

cluster1

Scale\*

scale1/manual

☐ Public

Remedy script todo:

Remark:

Engines:

Hold down "Control", or "Command" on a Mac, to select more than one.

SAVE

Save and add another

Save and continue editing

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ENGINES

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Engines

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Form field description:

Name _	name
Scale	Create a cluster scaling template for cluster use
Public	Is it public?
Remedy script todo	sh repair script executed after the cluster is created
Engines	engine
Remark	Remark

RESTFul API: " http://106.74.18.46/api/engines/clusters/ "