

# CATALYST

## - USER GUIDE





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## 1. Introduction

Catalyst is a Cloud Provisioning and Management Self servicing portal.

## 2. Purpose of this document

This document provides the step-by-step details to use Catalyst in a demo environment

## 3. Login Page

1. Access catalyst at **catalyst1.relevancelab.com**

**DevOps-Catalyst**

DevOps is a new discipline that complements the Agile Delivery models for software engineering by bringing in Automation and Monitoring on the IT side and leverages Cloud computing concepts. DevOps leverages collaboration, tool-chain pipelines, automation and Cloud adoption. The immediate benefits can be observed as improved processes, more standardizations and building trust and improve productivity across development, QA and IT operations teams

**Login**

Username  
sd1

Password  
.....

Login

2. Use the credentials sd1/sd1-phoenix to login to catalyst

## 4. Settings

### 4.1 Organization Setup

#### 4.1.1 Creating the Organization

Settings > Organization Setup > Organizations

Create Organization

Name \*

Default Organization

Domain Name

Default Domain

Logo

Browse

Costcode (Type and enter to add Costcode)

Add

✓ Save

↶ Cancel

1. Enter an Organization Name
2. Logo, Domain Name are not mandatory
3. Costcode feature will be added in the next release only

#### 4.1.2 Creating Environments

Settings > Organization Setup > Environments

Create Environment

Environment Name \*

Default Environment

Organization \*

Select an Organization

✓ Save

↶ Cancel

1. Enter an environment name
2. Choose the organization to which the environment is to be attached



### 4.1.3 Create Business Groups

Business Groups can be departments, applications, Project groups or Teams. This represents logical grouping and can be highly customizable based on the requirements.

Settings > Organization Setup > Business Groups

#### Create Business Group

Business Group Name \*

Default Group

Organization \*

Select an Organization

+ Select Cost Codes

✓ Save

↺ Cancel

1. Enter a Group Name
2. Choose the organization to which the business group is tied up

### 4.1.2 Creating Projects

Settings > Organization Setup > Projects

#### Create Project

Name \*

Default Project

Description

Default Description

Organization \*

Select Organization

Business Group \*

Select Business Group

+ Select Cost Codes

Environments

✓ Save

↺ Cancel

1. Enter Project Name
2. Choose the Organization and Business Group
3. Choose the environments. By default all the environments tied up to the organization will be listed

## 4.2 Devops Setup

### 4.2.1 Config Management

Configure your Chef Server and you may configure multiple Chef Servers and associate with various Organizations.

Settings > DevOps Setup > Config Management

New Configuration Management

Configuration Name \*

User Name \*

URL

Organization \*

Select an Organization

▼

User Pem File

Browse

Validator Pem File

Browse

Knife.rb File

Browse

Save

Cancel

tttings/ProvidersList.html




1. Enter a name to identify the chef server
2. Enter the chef user name
3. Enter the chef organization URL
4. Choose the organization
5. Upload the User Pem File, Knife.rb and the Validator pem file

## 4.2.2 Import nodes from chef server

Existing nodes from the configured chef server can be imported into catalyst by selecting the required Business Groups and Projects. These imported nodes can be operated from the Workzone

Settings > DevOps Setup > Config Management

**Chef Server Management** + New

Chef Server Name	User Name	URL	Organization	Action
kanachefserver	pcjoshi9	https://api.opscode.com/organizations/cat1	Kana	  

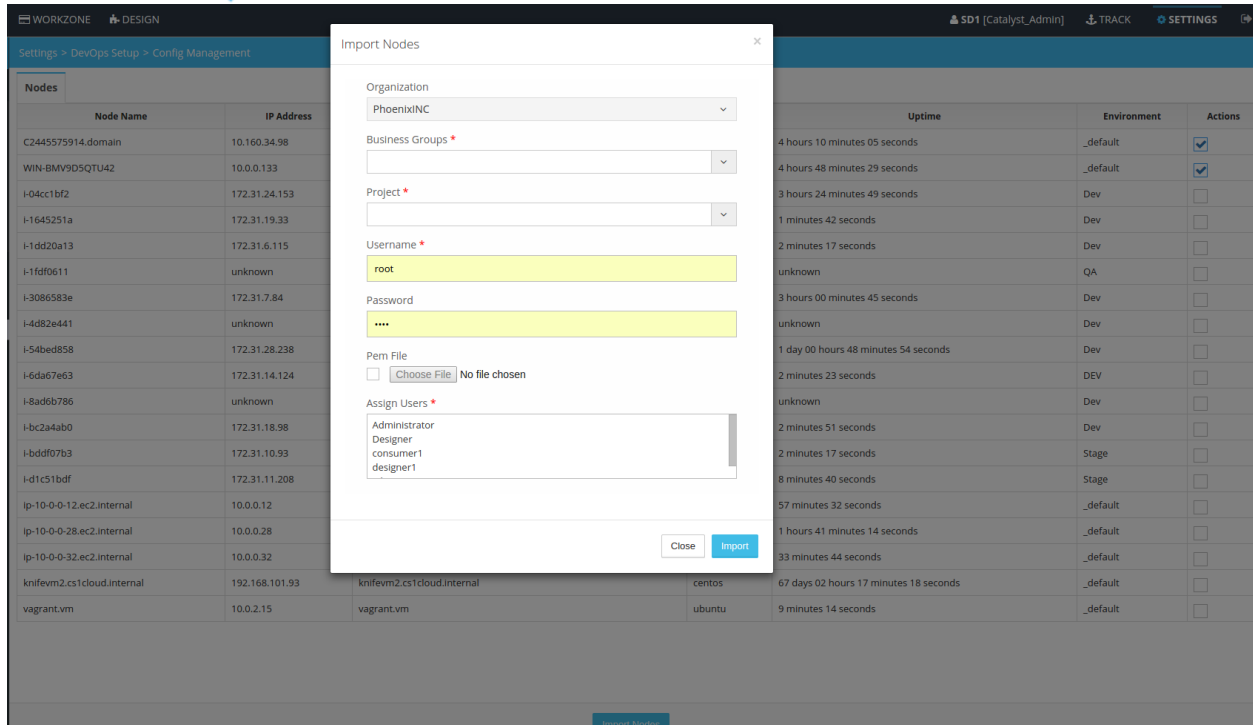
Settings > DevOps Setup > Config Management

**Nodes**

Node Name	IP Address	FQDN	Platform	Uptime	Environment	Actions
C2445575914.domain	10.160.34.98	C2445575914.domain	centos	4 hours 10 minutes 05 seconds	_default	<input type="checkbox"/>
WIN-BMV9D5QTU42	10.0.0.133	WIN-BMV9D5QTU42	windows	4 hours 48 minutes 29 seconds	_default	<input type="checkbox"/>
i-04cc1bf2	172.31.24.153	ip-172-31-24-153.us-west-2.compute.internal	ubuntu	3 hours 24 minutes 49 seconds	Dev	<input type="checkbox"/>
i-1645251a	172.31.19.33	ip-172-31-19-33.us-west-2.compute.internal	centos	1 minutes 42 seconds	Dev	<input type="checkbox"/>
i-1dd20a13	172.31.6.115	ip-172-31-6-115.us-west-2.compute.internal	ubuntu	2 minutes 17 seconds	Dev	<input type="checkbox"/>
i-1fd0611	unknown	unknown	unknown	unknown	QA	<input type="checkbox"/>
i-3086583e	172.31.7.84	ip-172-31-7-84.us-west-2.compute.internal	ubuntu	3 hours 00 minutes 45 seconds	Dev	<input type="checkbox"/>
i-4d82e441	unknown	unknown	unknown	unknown	Dev	<input type="checkbox"/>
i-54bed858	172.31.28.238	ip-172-31-28-238.us-west-2.compute.internal	centos	1 day 00 hours 48 minutes 54 seconds	Dev	<input type="checkbox"/>
i-6da67e63	172.31.14.124	ip-172-31-14-124.us-west-2.compute.internal	ubuntu	2 minutes 23 seconds	DEV	<input type="checkbox"/>
i-8ad6b786	unknown	unknown	unknown	unknown	Dev	<input type="checkbox"/>
i-bc2a4ab0	172.31.18.98	ip-172-31-18-98.us-west-2.compute.internal	ubuntu	2 minutes 51 seconds	Dev	<input type="checkbox"/>
i-bddf07b3	172.31.10.93	ip-172-31-10-93.us-west-2.compute.internal	ubuntu	2 minutes 17 seconds	Stage	<input type="checkbox"/>

Import Nodes
































Node Name	IP Address	Uptime	Environment	Actions
C2445575914.domain	10.160.34.98	4 hours 10 minutes 05 seconds	_default	<input checked="" type="checkbox"/>
WIN-BMV9D5QTU42	10.0.0.133	4 hours 48 minutes 29 seconds	_default	<input checked="" type="checkbox"/>
I-04cc1bf2	172.31.24.153	3 hours 24 minutes 49 seconds	Dev	<input type="checkbox"/>
I-1645251a	172.31.19.33	1 minutes 42 seconds	Dev	<input type="checkbox"/>
I-1dd20a13	172.31.6.115	2 minutes 17 seconds	Dev	<input type="checkbox"/>
I-1fd0611	unknown	unknown	QA	<input type="checkbox"/>
I-3086583e	172.31.7.84	3 hours 00 minutes 45 seconds	Dev	<input type="checkbox"/>
I-4d82e441	unknown	unknown	Dev	<input type="checkbox"/>
I-54bed858	172.31.28.238	1 day 00 hours 48 minutes 54 seconds	Dev	<input type="checkbox"/>
I-6da67e63	172.31.14.124	2 minutes 23 seconds	DEV	<input type="checkbox"/>
I-8ad6b786	unknown	unknown	Dev	<input type="checkbox"/>
I-bc2a4ab0	172.31.18.98	2 minutes 51 seconds	Dev	<input type="checkbox"/>
I-bddf07b3	172.31.10.93	2 minutes 17 seconds	Stage	<input type="checkbox"/>
I-d1c51bdf	172.31.11.208	8 minutes 40 seconds	Stage	<input type="checkbox"/>
ip-10-0-0-12.ec2.internal	10.0.0.12	57 minutes 32 seconds	_default	<input type="checkbox"/>
ip-10-0-0-28.ec2.internal	10.0.0.28	1 hours 41 minutes 14 seconds	_default	<input type="checkbox"/>
ip-10-0-0-32.ec2.internal	10.0.0.32	33 minutes 44 seconds	_default	<input type="checkbox"/>
knifevm2.cs1cloud.internal	192.168.101.93	67 days 02 hours 17 minutes 18 seconds	_default	<input type="checkbox"/>
vagrant.vm	10.0.2.15	9 minutes 14 seconds	_default	<input type="checkbox"/>

1. Select the Import Nodes icon from the configuration management
2. Select the required instances
3. Click on Import Nodes
4. Select the Business groups, projects
5. Enter the Username/Password or the pem file to authenticate the connection to the node
6. Click on Import
7. The imported nodes can be visible under Workzone->Chosen Env

## 4.2 Gallery

### 4.2.1 Template Types and Templates

Template Types and Templates are loaded into catalyst for all supported cookbooks . New templates can be added for newly added cookbooks

Templates <span>+ New</span>				
Template Name ▲	Icon ◇	Template Type ◇	Cookbooks ◇	Action ◇
Apache		AppFactory	recipe[apache2]	 
Apache Windows		AppFactory	recipe[apache2-windows]	 
CentOSDC		Docker		 
CouchDB		AppFactory	role[CouchDB]	 
CustomCard		AppFactory		 
Drupal		Docker		 
Hadoop		AppFactory	role[Hadoop]	 
Java		AppFactory	recipe[java]	 
Jboss		AppFactory	recipe[jboss7]	 

## 4.2.2 Services

Services can be added from Settings->Gallery Setup->Service Command . User has the option to choose between Chef cookbased based services and System service based commands.

### a) Cookbook based commands

Create Services

Name \*

Service Command Type

Chef Cookbook/Recepie

Select Chefserver \*

kanachefserver

Service Cookbooks \*

service\_mysql

Select Actions

☒ Start

start

☐ Restart

restart

☒ Stop

stop

☐ Status

restart

Save

Cancel



1. Enter the name of the service
2. Choose the service Type
3. Select the Chefserver
4. Select the Cookbook
5. Choose the actions needed to be run on the service and choose the respective recipe from the dropdown

## b) System Service Commands

Settings > Gallery Setup > Service Command

Create Services

Name \*

Service Command Type

Service Command

▼

Choose Operating System

Linux

▼

Command \*

Apache

Select Action

☒ Start ☒ Stop ☐ Restart ☐ Status

✓ Save

↺ Cancel

1. Enter the name for the service
2. Choose the service Type as 'Service Command'
3. Choose the Operating System
4. Enter the command
5. Choose the actions needed

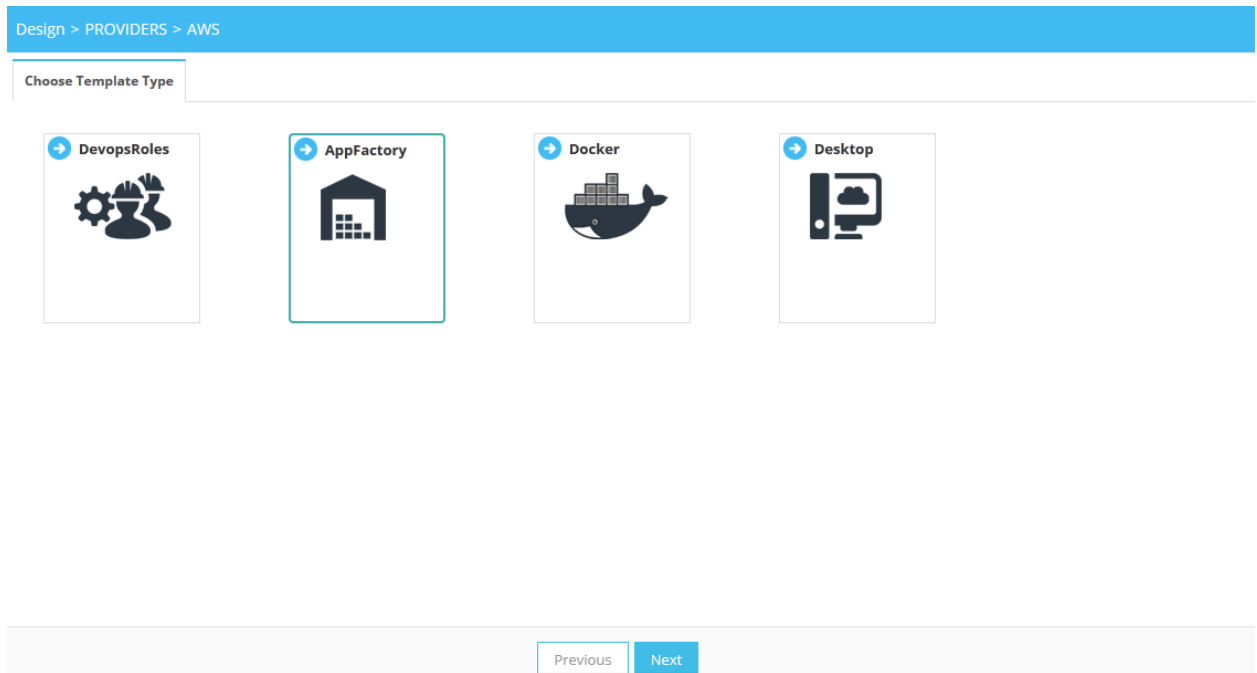
## 5 Design

### 5.1 Creating BluePrints

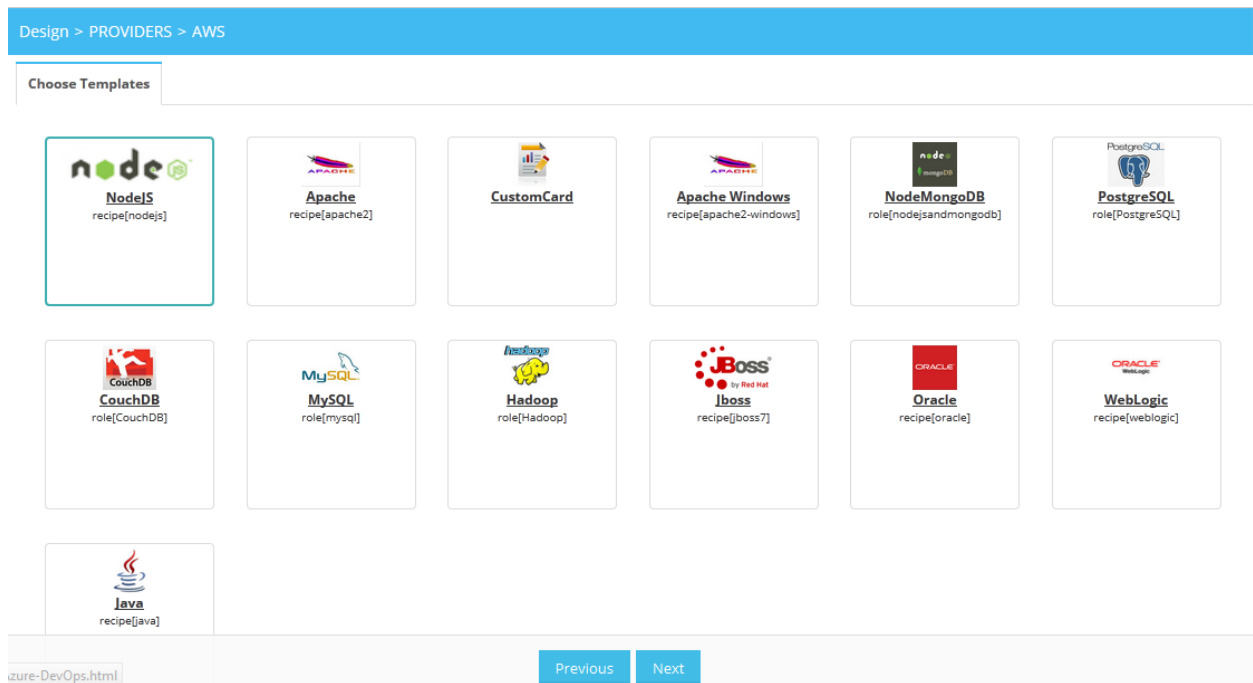
Blueprints are predefined templates which can be used by service consumers to Launch the instances. Blueprints are designed by Service Designers. Each blueprint stores the metadata of the instance, variables, actions and activity.



1. From the cards, choose a Template Type(DevopsRoles/AppFactory are enabled now) and Click on Next



2. From the cards, choose the Template(Templates are created in Settings) and click on Next






### 3. Enter the Blueprint details

Design > PROVIDERS > AWS

Choose Template



Choose Operating System \*

Cent OS

Choose Security Group \*

default-d4d

Choose Instance Size \*

t1.micro

Choose Organization \*

Kana

Select Runlist

Select Cookbooks

Search Cookbooks

☐ 7-zip

☐ a

☐ apache2

Order Runlist

nodejs

zure-DevOps.html

Previous Next

- Choose the Operating System
- Choose the Security Group
- Choose the Instance size(Always choose t1.micro in the demo setup)
- Choose the Organization
- The cookbooks/roles added in the templates will be listed under Runlist. This is editable
- Clicking on Next will save the Blueprint

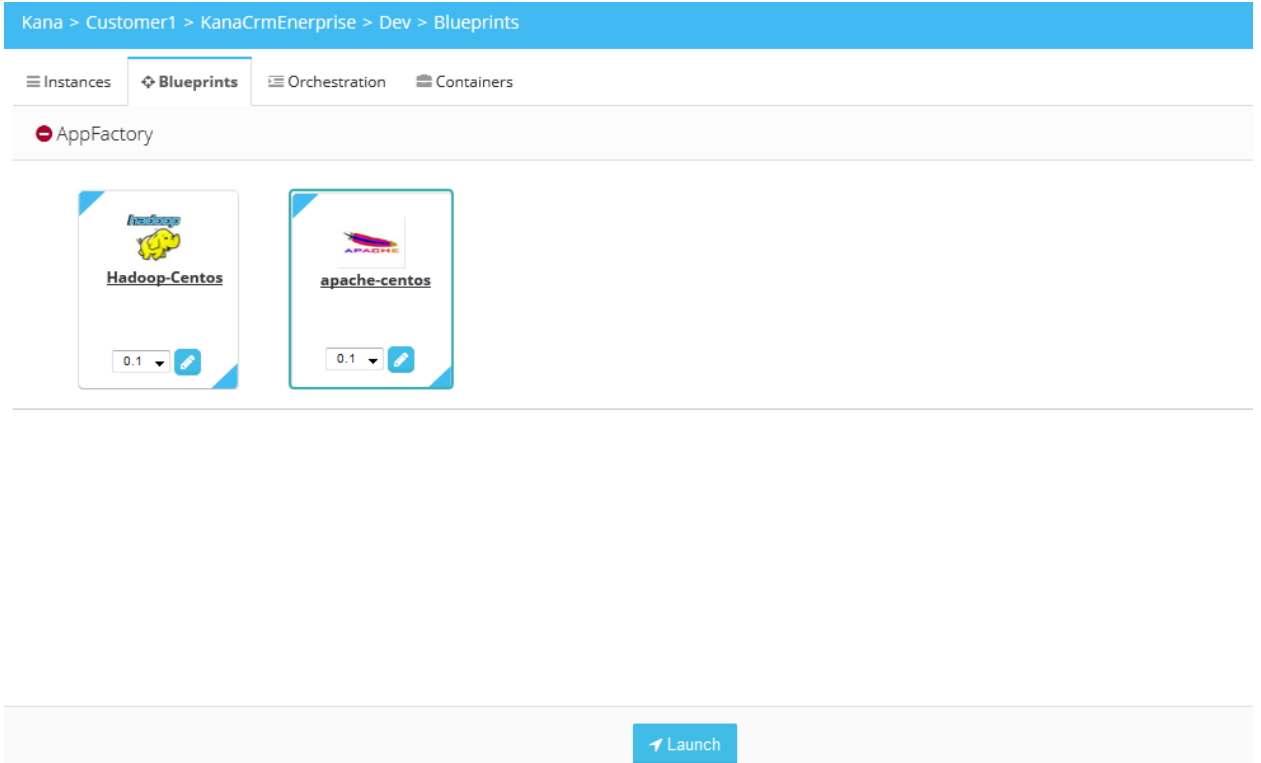
## 6 Workzone

### 6.1 Instances

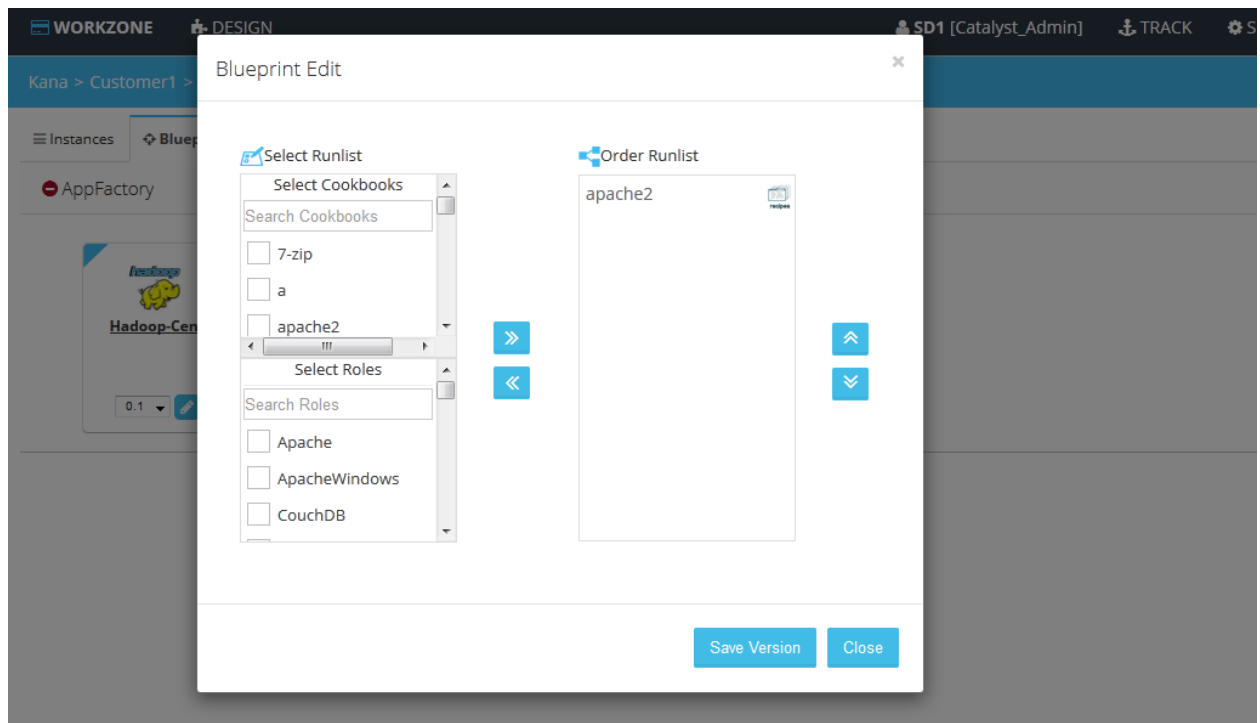
#### 6.1.1 Launching Blueprints

Blueprints can be launched from Workzone->Blueprints .

1. Select the blueprint and Click on 'Launch'

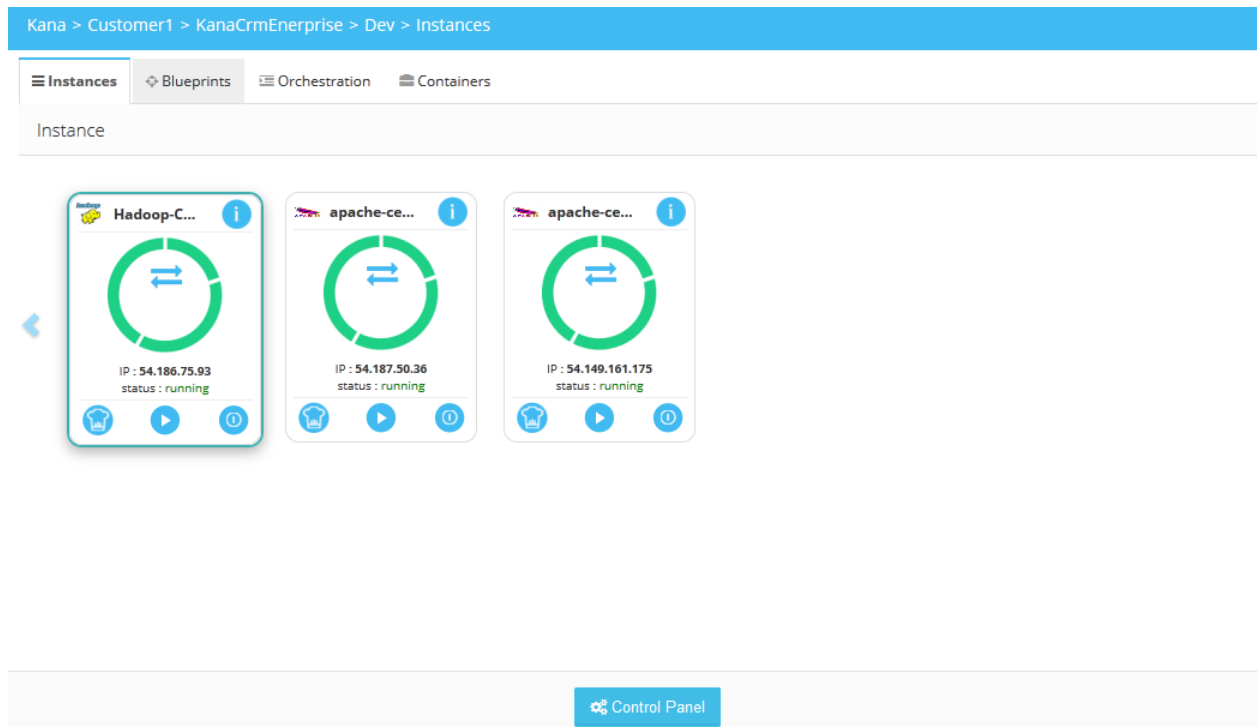


2. User can edit the runlist by clicking on the Edit icon. The edited blueprint will be saved with a new version number



3. User can chose the version of the blueprint before launch

4. Once the 'Launch' button is clicked, the instance will be launched in 5-8 minutes
5. The launched instances can be viewed under Workzone->Instances



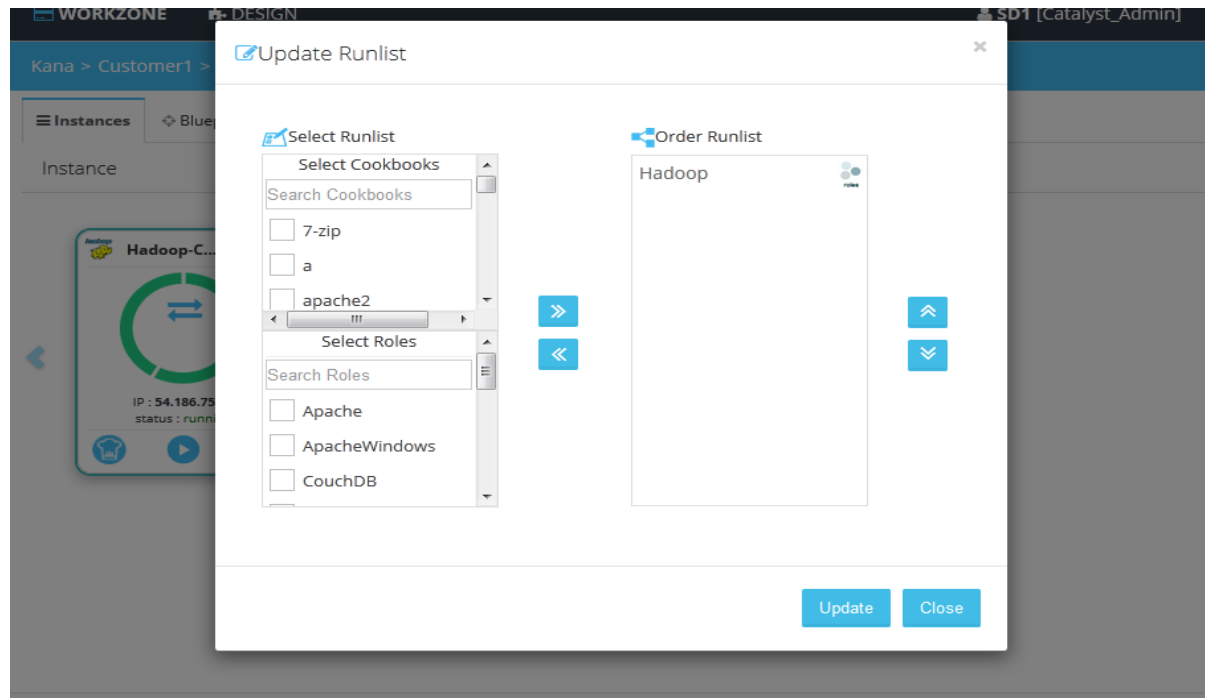
## 6.1.2 Blueprint Actions

### 1. Info

The Info icon on the top right corner of each instance card, will give the logs associated with the instance

### 2. Chef Run

Any extra action on the running instance can be performed via the ChefRun button, which is displayed at the bottom left corner. Installing new software, upgrading a software etc can be performed using this icon. Clicking on the icon will open a popup and the runlist can be updated. Upon clicking 'Update', the updated runlist will be executed on the instance



### 3. Start

An imported node can be started by using the icon 'Start'

### 4. Stop

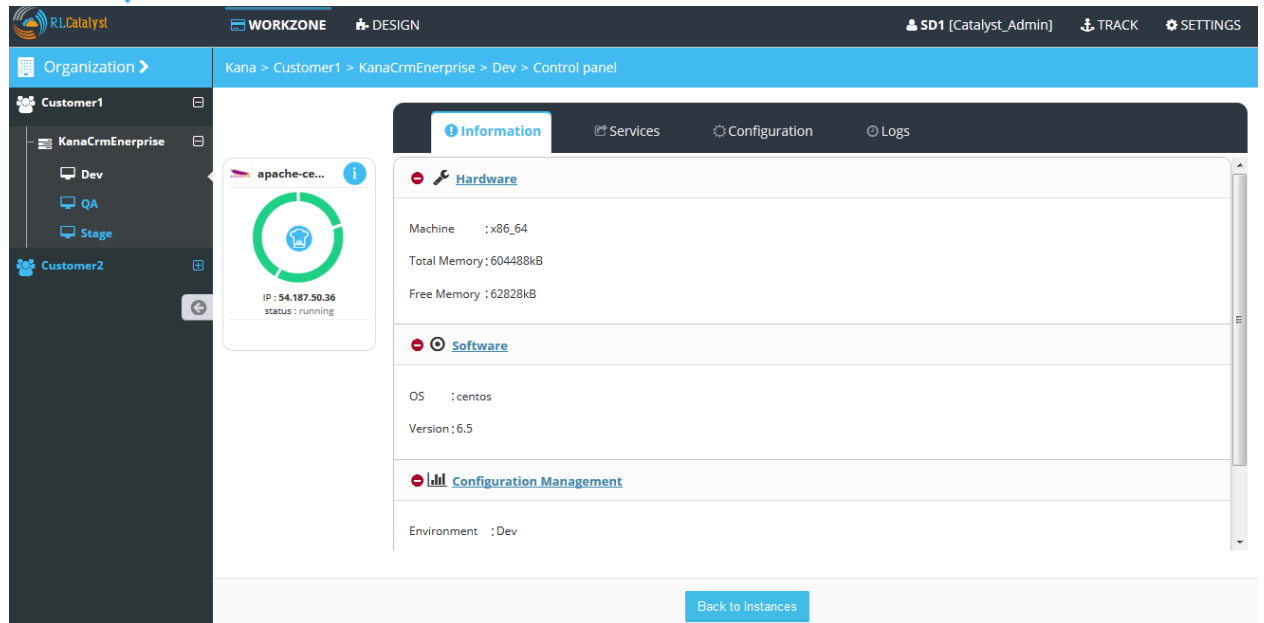
An instance can be stopped by clicking on the 'Stop' icon at the bottom right corner of each instance card. The status will be changed to Red, once stopped

## 6.1.3 Control Panel

Control Panel will give the details about the running instance .

1.Information tab gives hardware and software information about the instance





Organization > Kana > Customer1 > KanaCrmEnterprise > Dev > Control panel

Customer1

- KanaCrmEnterprise
  - Dev
  - QA
  - Stage

Customer2

apache-ce...  
IP: 54.187.50.36  
status: running

Information Services Configuration Logs

**Hardware**

Machine : x86\_64  
Total Memory: 604488kB  
Free Memory : 62828kB

**Software**

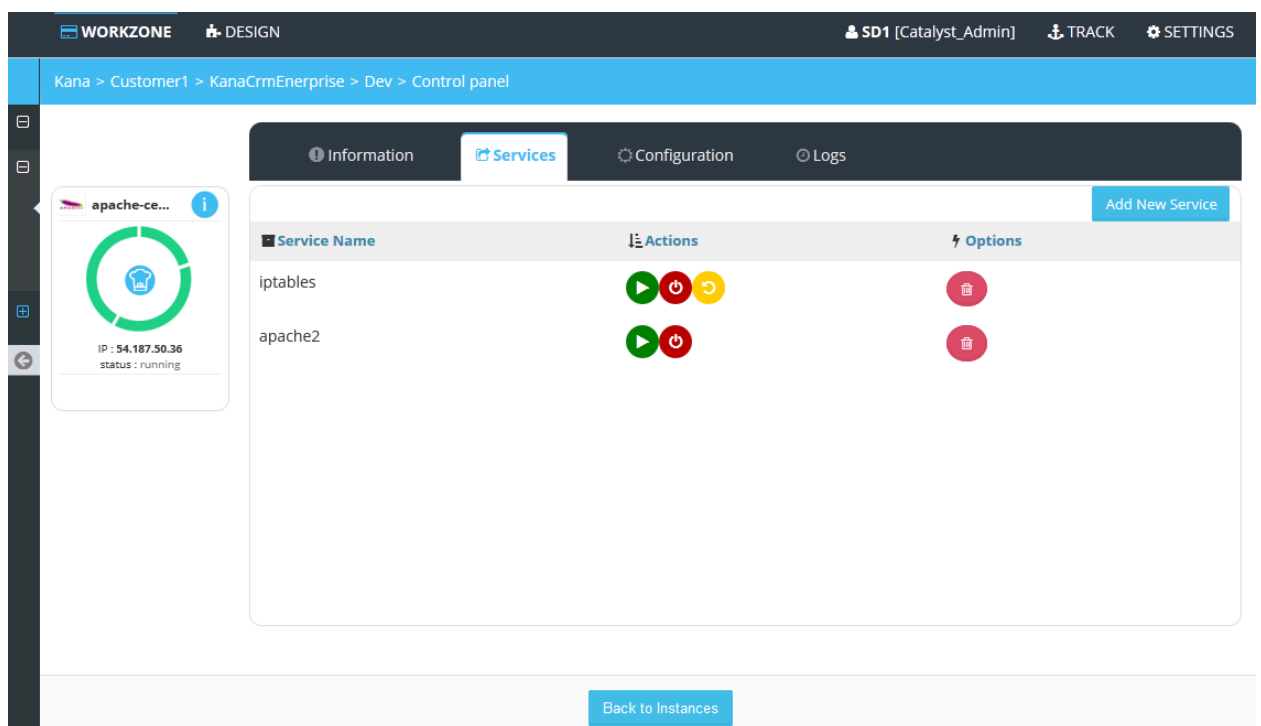
OS : centos  
Version : 6.5

**Configuration Management**

Environment : Dev

Back to Instances

- Services can be assigned to an instance from the Services tab . User can attach new services to the instance by clicking on the 'Add New Service' button










WORKZONE DESIGN SD1 [Catalyst\_Admin] TRACK SETTINGS

Kana > Customer1 > KanaCrmEnterprise > Dev > Control panel

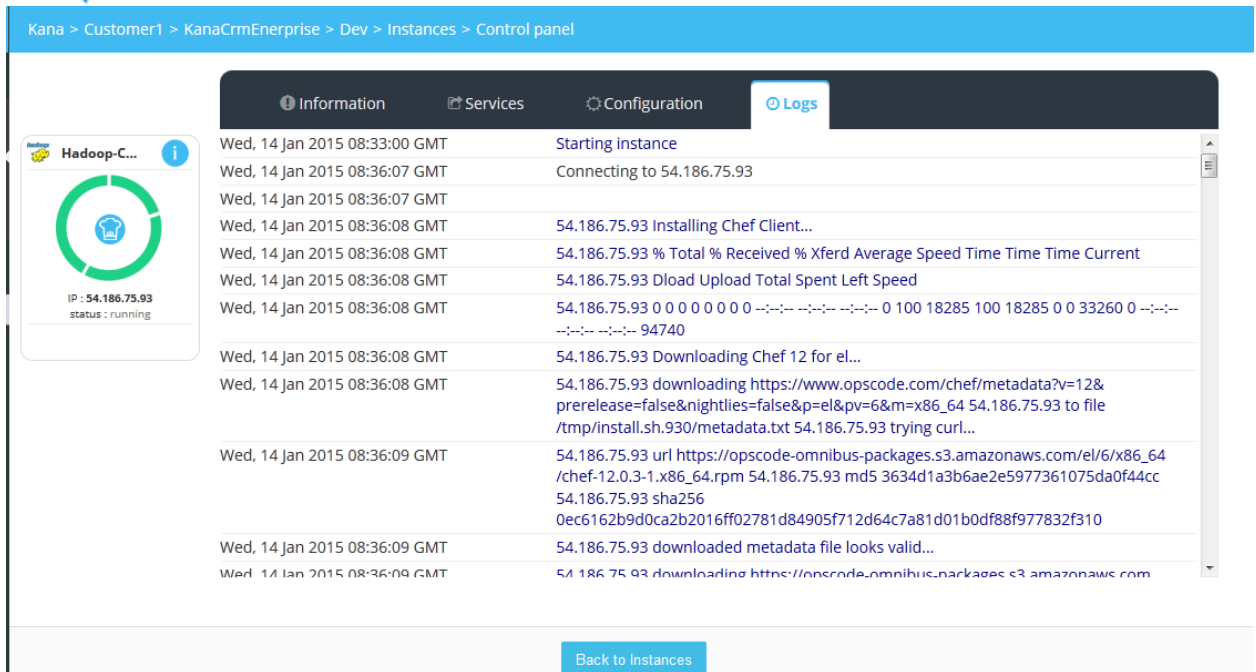
Information Services Configuration Logs

Add New Service

Service Name	Actions	Options
iptables	  	
apache2	 	

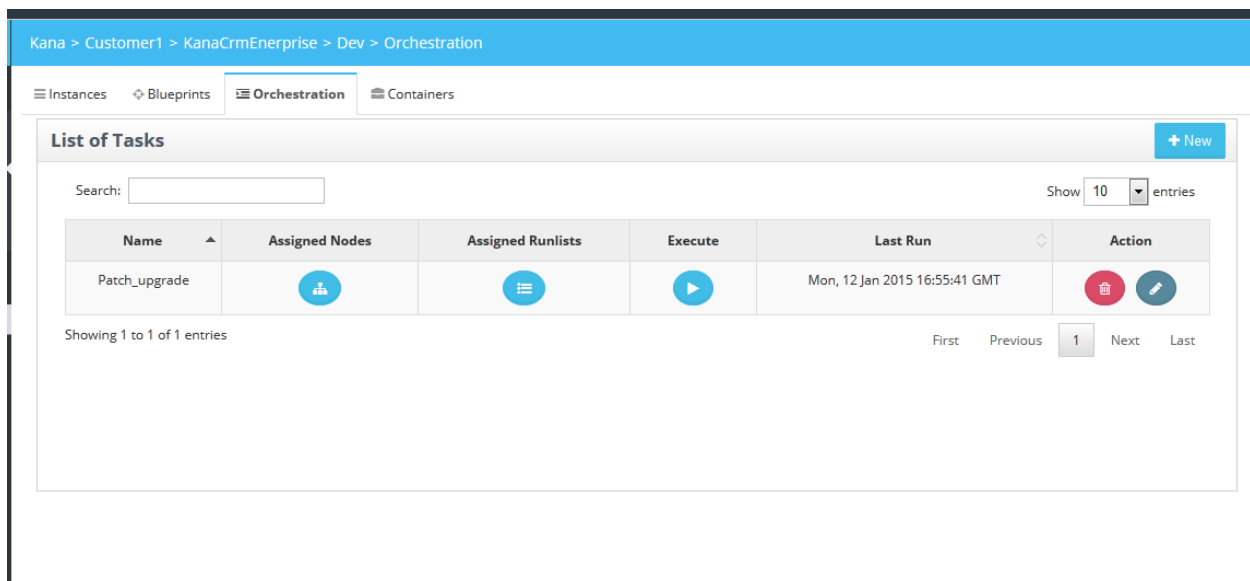
Back to Instances

- Logs can be viewed from the Logs tab



## 6.2 Orchestration

User can execute one or more tasks/actions on multiple nodes at the same time by making use of the orchestration tab . This is accessible at Workzone->Orchestration



New tasks can be added by clicking on the 'New' Button



- a) Select the task type as 'Chef' (Jenkins support will be available from the next release)
- b) Enter a Task name
- c) Choose the nodes from the list of all available nodes
- d) Choose the cookbooks/roles and click on save
- e) Tasks can be executed from Orchestration->Execute button

Kana > Customer1 > KanaCrmEnterprise > Dev > Orchestration

**Select Task Type**

Chef

**Task Name \***

**Chef Server URL**

https://api.opscode.com/organizations

**Select Nodes \***

☒ i-14254718  
☒ i-e62b49ea  
☐ i-b22c4ebe

**Select Runlist**

**Select Cookbooks**

Search Cookbooks

☐ 7-zip  
☐ a  
☐ apache2

**Select Roles**

Search Roles

☐ Apache  
☐ ApacheWindows  
☐ CouchDB

**Order Runlist**

Save Task Cancel

html#ajax/Dev.html?org=Kana&projid=KanaCRMEnterprise&envvid=Dev