

Atlas Dashboard End User Guide

Cloud Execution Environment

USER GUIDE

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Contents

1	Introduction	1
1.1	Limitations	1
2	Terms	3
3	GUI Description	4
4	Change Password	6
5	Manage Applications in Catalog	7
5.1	Upload Application	7
5.2	Show Application Overview	10
5.3	Show Application Template	11
5.4	Update Application	12
5.5	Edit Application Template	12
5.6	Delete Application	13
5.7	Launch Stack From Catalog Page	13
5.8	Export Application	13
6	Manage Stacks	15
6.1	Launch Stacks	15
6.2	Scale out Stack	18
6.3	Scale in Stack	19
7	Manage Workflow in Mistral	22
7.1	Create Workbook	22
7.2	Create Workflow	23
7.3	Start Execution	24
7.4	Create Cronjob	25
7.5	Task Result	27
7.6	Delete Workflow	27
7.7	Delete Cron Trigger	28
7.8	Delete Execution	28
8	Deployment Wizard from UI	29
9	Stack Topology	37



9.1	Navigation	37
9.2	Icons	37
9.3	Edges and Connections	38
9.4	Hierarchy	39
9.5	Labels	39
9.6	NUMA/CPU Pinning	40
9.7	Topology Search	41
10	Stack Overview	43
10.1	Stack Resource Summary	43
10.2	Stack Information	43
10.3	Stack Parameters	43
10.4	Launch Parameters	44
10.5	Outputs	44
10.6	Activity Summary	44
10.7	Most Recent Events	44
11	Stack Resources	45
12	Stack Events	47
12.1	Event Summary	47
12.2	Events	47
13	Atlas Help Center	49
13.1	Fault Management	49
13.2	User Guides	49
13.3	Atlas Product Information	50
	Reference List	51



1 Introduction

The Ericsson dashboard (Atlas) for the Cloud Execution Environment (CEE) is based on the OpenStack dashboard (Horizon). For more information on the OpenStack dashboard, refer to the community user guide [OpenStack End User Guide](#).

This document describes the additional functions of the Ericsson dashboard, Atlas, as compared to OpenStack Horizon. Refer to [Atlas Overview](#) for more information.

The target group of this document consists of the users operating virtual resources with the Atlas Graphical User Interface (GUI).

1.1 Limitations

The following limitations apply to the Atlas dashboard:

- Atlas is best viewed using Google Chrome™ version 40.0 or later, but it also supports Mozilla Firefox® 40.0+.
- Internet Explorer is not supported.
- Previous login information in the Atlas GUI is not displayed, as the login information for Keystone users is not stored by Keystone.
- Inactivity time for user accounts is not allowed, as Keystone does not provide the option to disable a dormant user.
- In case of an expired certificate, update the certificate. Otherwise, proceed at your own risk.
- The list of supported Atlas features varies depending on the specific Cloud Execution Environment (CEE) configuration used.
- In the **Instances** panel, Firefox does not automatically update the row after **Instance creation**. This is because of a cache issue in Firefox: the browser caches the page, preventing the redirection of the URL.
- If using Firefox, logout is not possible by selecting **Sign Out** from the drop-down menu in **Logged in as**. This is because of a cache issue in Firefox.

Workaround: Do the following:

- 1 Log on to Atlas and switch to root user:

```
<user@laptop>:~# ssh atlasadm@<atlas_ip_address>
atlasadm@atlas:~$ sudo -i
```
- 2 Execute the following commands:

```
sed -i 's/def switch.*@never_cache\n&/' =>
/usr/lib/python2.7/dist-packages/openstack_auth/views.py
```



```
sed -i 's/def logout.*@never_cache\n&/' =>
/usr/lib/python2.7/dist-packages/openstack_auth/views.py
```

- 3 Restart the Apache service:
`sudo service apache2 restart`

- 4 Clear the Firefox browser cache.

- Security groups are only supported on CEE with tightly integrated SDN. For CEE deployments without SDN tight integration, no security groups need to be assigned, and the assigned security groups have no effect on CEE operations.
- The object store, Swift, is disabled by default, because Swift is not available for non-admin tenants.
- The maximum body size for HTTP requests is set to 112 KB in the default settings of the Nova API. Larger environment files cannot be injected, even if the `injected_file_content_bytes` quota value is changed for the specific tenant. To increase the default value, set `quota_injected_file_content_bytes` and `max_request_body_size` in `/etc/nova/nova.conf` on all vCICs, then restart `nova-api`.
- In the **Stack Launch** form, if the HOT template has `custom_constraints`, the default value is not set from the template or environment file, as shown in the below example:

```
...
parameters:
  TEST_IMAGE:
    type: string
    label: TEST Node Image
    description: SW Image to be used for TEST
    default: TEST_IMAGE
    constraints:
      - custom_constraint: glance.image
...
```

- As Keystone allows removing tenants irrespective of any resources still present for the particular tenant, make sure to clean up the resources first, before deleting the tenant to which the resources belong.



2 Terms

This section explains the expressions used with a special meaning in the Atlas context.

Application	Application refers to the OVF package, HOT template, or TOSCA template.
Catalog	Catalog is a user interface for managing the applications.
CSAR	Cloud Service Archive (CSAR) is a package defined by OASIS TOSCA. It is a compressed file that includes a TOSCA template of a network service, and all the scripts or files that are necessary for the Virtual Network Function (VNF) lifecycle time from creation to termination.
HOT	Heat Orchestration Engine (HOT) is the template format used for orchestration of stacks, that is, VMs and related support artifacts, using the OpenStack Heat service.
OVF	The Open Virtualization Format (OVF) provides a platform independent, efficient, extensible, and open packaging distribution format.
OVF package	An OVF package is a single TAR file that contains the OVF descriptor. It is also called Open Virtualization Archive (OVA) package.
Security Group	Security groups are a kind of cloud firewall that define which incoming network traffic is forwarded to the instances. For more information, refer to section Add a rule to the default security group in the OpenStack End User Guide .
Stack	Application developers are allowed to create resources of most of the OpenStack resource types using flexible template languages. Resources include instances, floating IP addresses, volumes, security groups, and users. Once created, the resources are referred to as stacks.
TOSCA	The Topology and Orchestration Specification for Cloud Applications (TOSCA) defines the interoperable description of services and applications hosted on the cloud and elsewhere, including their components, relationships, dependencies, requirements, and capabilities. It enables portability and automated management across cloud providers regardless of the underlying platform or infrastructure.



3 GUI Description

This section describes the Graphical User Interface (GUI) of Atlas used in CEE.

To enter Atlas, the username and password of the user must be typed in at the login screen shown in Figure 1.

Figure 1 Atlas Login Screen

Figure 2 shows the GUI elements used for the operations in Atlas.

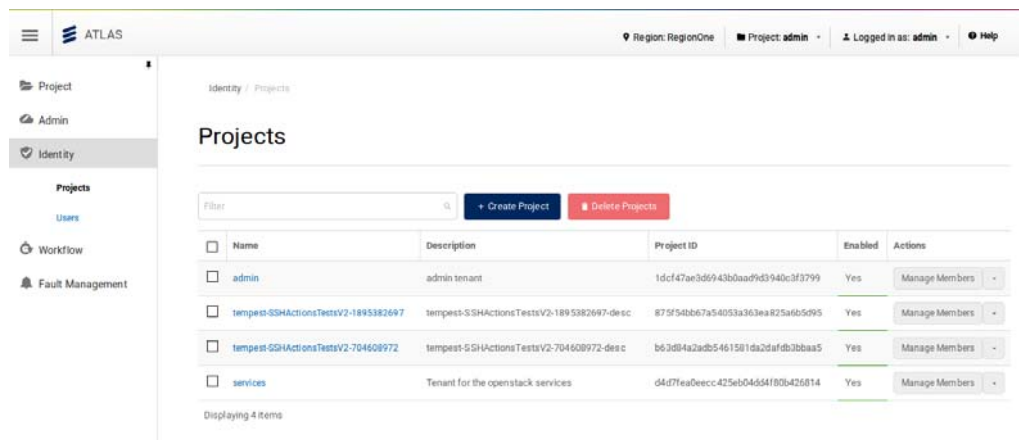


Figure 2 Atlas GUI Elements

The following GUI elements are available in the screen:

Options (≡)	Click on the icon to display the Categories. Categories can be pinned as a sidebar by clicking the pin icon.
Categories	The individual menu items on the left are called categories in the OpenStack terminology.
Tabs	The menu items on the left are referred to as tabs in the OpenStack terminology.
Region	The name of the current region is displayed.
Project	The user must select a tenant from this drop-down menu.
Logged in as	The name of the user logged in is displayed.
Help	Click on the icon to display help for using the Atlas GUI, and for product information.

In Atlas GUI, memory and storage quantities are represented according to the JESD100B.01 standard:

- KB refers to 2^{10} bytes
- MB refers to 2^{20} bytes
- GB refers to 2^{30} bytes



4 Change Password

To change the user or administrator password, use Atlas web UI, as described in the OpenStack Horizon documentation, Reference [1].

The new password must meet the following password criteria:

- The password must be at least 8 characters long.
- The password must contain the following:
 - At least one lower-case alphabetic character
 - At least one upper-case alphabetic character
 - At least one numeric character
 - At least one special character

Note: If the administrator user password is changed through the GUI, refer to [section Changing Password for OpenStack Administrator in the Security User Guide](#).



5 Manage Applications in Catalog

This section describes how to manage applications by using the Catalog. The following procedures are available:

- Upload applications, see Section 5.1 on page 7.
- Show details of applications, see Section 5.2 on page 10.
- Show details of application templates, see Section 5.3 on page 11.
- Update applications, see Section 5.4 on page 11.
- Delete applications, see Section 5.6 on page 13.
- Launch stacks, see Section 5.7 on page 13.
- Export applications uploaded in Catalog to local file system, see Section 5.8 on page 13.

Note: Before initiating the tasks described in this section, make sure that the correct user is logged in.

An overview of the Catalog screen is shown in Figure 3.

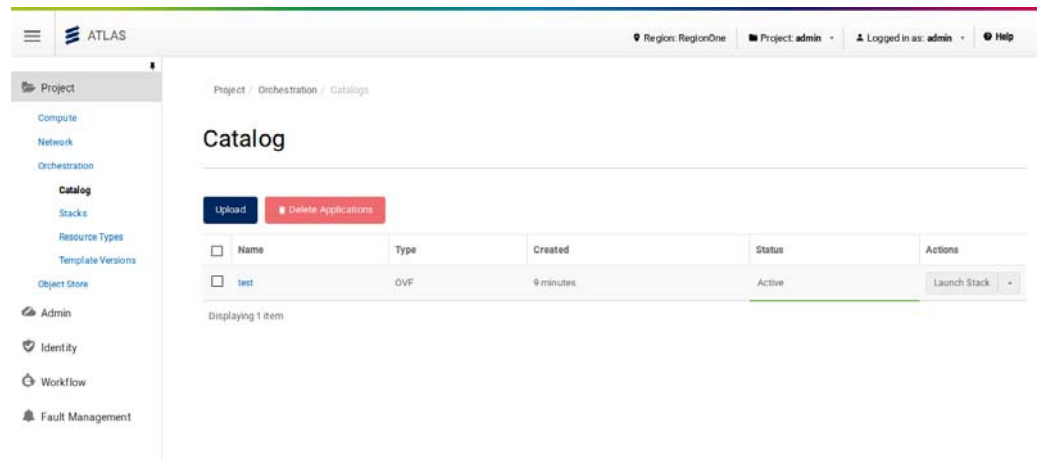


Figure 3 Overview of Catalog Screen

5.1 Upload Application

This section describes how to add the OVF, HOT or TOSCA file to the Atlas catalog.

The Application Upload screen is shown in Figure 4.



Application Upload

Application Name *

Type

Select Application Type

Application Source

Select Application Source

Description

☐ Public

☐ Protected

Cancel

Submit

Public: the application can be viewed/used from all projects. A non-public application can only be viewed by users of the project it was uploaded in.

Protected: a protected application cannot be deleted.

Figure 4 Application Upload Screen

To upload an application, perform the following steps:

1. Select the appropriate project in the **Project** field.
2. Select the **Project** tab from the categories.
3. Click the **Orchestration** tab to expand it.
4. Click the **Catalog** category.
5. Click **Upload**.



6. In the Application Upload window, specify the following values:

Application Name	A name to identify the application
Type	<p>The type can be one of the following:</p> <ul style="list-style-type: none"> • OVF package/OVA • HOT • TOSCA/CSAR
Application Source	<p>A source from which the application can be uploaded. Only visible and applicable if the application type is OVF package/OVA.</p> <p>The source can be one of the following:</p> <ul style="list-style-type: none"> • An application Uniform Resource Locator (URL) • An application file (OVF package, HOT or TOSCA file) • If the file type is nested HOT/CSAR, the application source must be a ZIP file.
Description (Optional)	Description for the application
Public (Optional)	<p>Apply the relevant setting:</p> <ul style="list-style-type: none"> • Tick the checkbox to set the application to public, that is, visible for all projects. • Leave the checkbox empty to only make the application visible for the project that uploads it.
Protected (Optional)	<p>Apply the relevant setting:</p> <ul style="list-style-type: none"> • Tick the checkbox to make the application protected. Protected applications cannot be deleted. • Leave the checkbox empty to make the application deletable.

If the application type is nested HOT, select the main template from the list of files in the uploaded ZIP file, as shown in Figure 5.

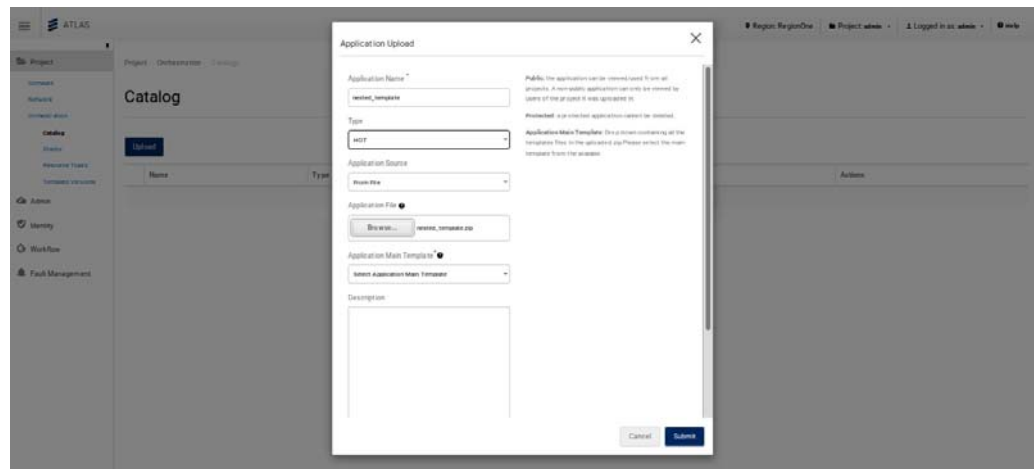


Figure 5 Nested HOT Application Container Upload

7. Click **Submit** to upload an application.

Atlas dashboard shows the uploaded application in the Catalog category.

5.2 Show Application Overview

The Application Details - Application Overview content is shown in Figure 6.

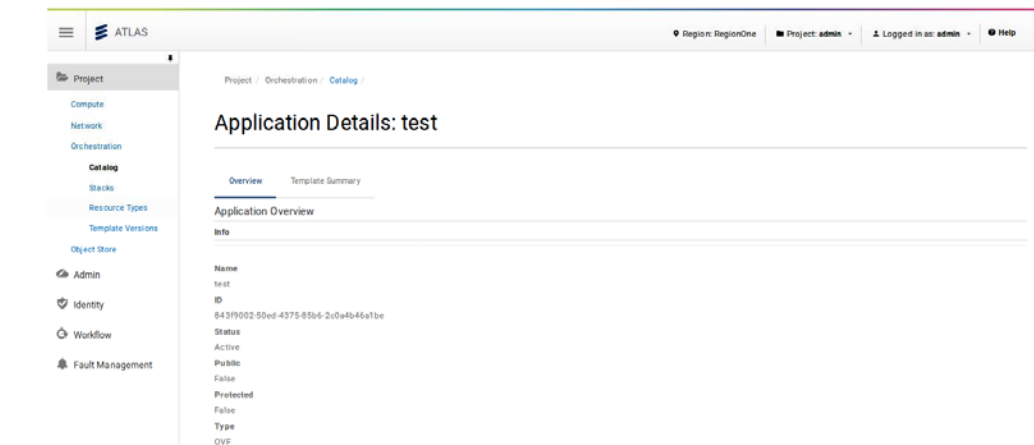


Figure 6 Application Details - Application Overview

To show the application overview, perform the following steps:

1. Select the appropriate project in the **Project** field.
2. Select the **Project** tab from the categories.
3. Click the **Orchestration** tab to expand it.



4. Click on the **Catalog** category.
5. Click on the name of an uploaded application.
6. Click on the **Overview** tab to display the application overview.

5.3 Show Application Template

The Application Details - Application Template content is shown in Figure 7.

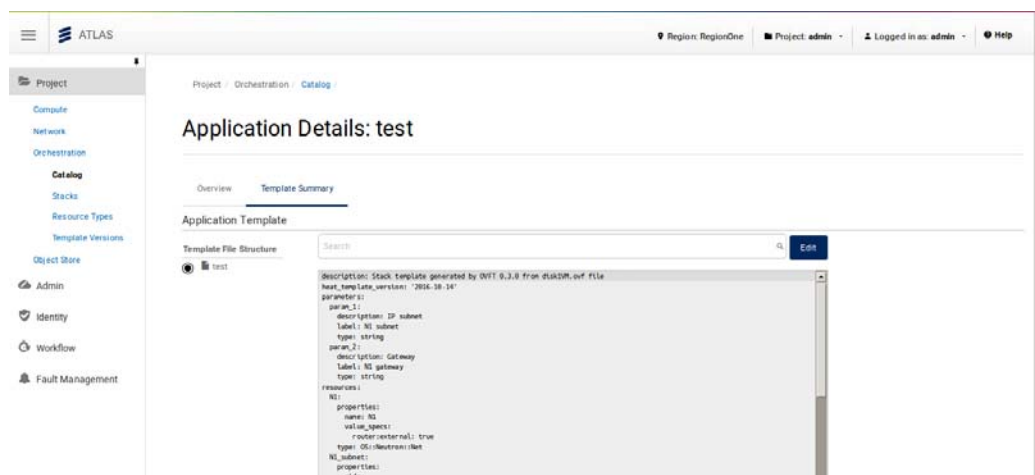


Figure 7 Application Details - Application Template

To show application templates:

1. Select the appropriate project in the **Project** field.
2. Select the **Project** tab from the categories.
3. Click the **Orchestration** tab to expand it.
4. Click the **Catalog** category.
5. Click on the name of an uploaded application.
6. Click the **Template Summary** tab to display the application template.

Keywords can be searched on the template using the search field above the template editor.

Templates can be edited by using the template editor. Enable the editor by clicking the **Edit** button. The changes applied on the template are saved only when the **Save Template** button is clicked.



5.4 Update Application

To update applications, perform the following steps:

1. Select the appropriate project in the **Project** field.
2. Select the **Project** tab from the categories.
3. Click the **Orchestration** tab to expand it.
4. Click on the **Catalog** category.
5. Select **Edit** from the **Launch Stack** drop-down list in the row of the application to be updated.
6. In the **Edit Application** window, specify the new value or values. The following can be updated:

Application Name	The name of the application
Description	A description for the uploaded application
Public	Apply the relevant setting: <ul style="list-style-type: none">• Tick the checkbox to set the application to public, that is, visible for all projects.• Leave the checkbox empty to only make the application visible for the project that uploads it.
Protected	Apply the relevant setting: <ul style="list-style-type: none">• Tick the checkbox to make the application protected. Protected applications cannot be deleted.• Leave the checkbox empty to make the application deletable.

7. Click **Save**.

5.5 Edit Application Template

To update the template, perform the following steps:

1. Select the appropriate project in the **Project** field.
2. Select the **Project** tab from the categories.
3. Click the **Orchestration** tab to expand it.
4. Click on the **Catalog** category.
5. Click on the name of the uploaded application.



6. Click on the **Template Summary** tab to display the application template.
7. Click **Edit**.
8. Make the required changes in the template text box.
9. Click on **Save Template**.

Note: The changes are saved only when **Save Template** is clicked.

10. Click **OK**.

5.6 Delete Application

To delete applications, perform the following steps:

1. Select the appropriate project in the **Project** field.
2. Select the **Project** tab from the categories.
3. Click the **Orchestration** tab to expand it.
4. Click on the **Catalog** category.
5. Tick the checkbox next to the application that is to be deleted.
6. Click **Delete Applications**.

5.7 Launch Stack From Catalog Page

To launch a stack from the **Catalogs** page, perform the steps from Section 8 on page 29.

5.8 Export Application

Applications uploaded in the Catalog can be exported to the local file system.

To export an application, perform the following steps:

1. Select the appropriate project in the **Project** field.
2. Select the **Project** tab from the categories.
3. Click the **Orchestration** tab to expand it.
4. Click on the **Catalog** category.
5. Select **Export Application** from the **Launch Stack** drop-down list in the row of the application to be exported.

Figure 8 shows how to export an application in the **Catalog - Applications** window.

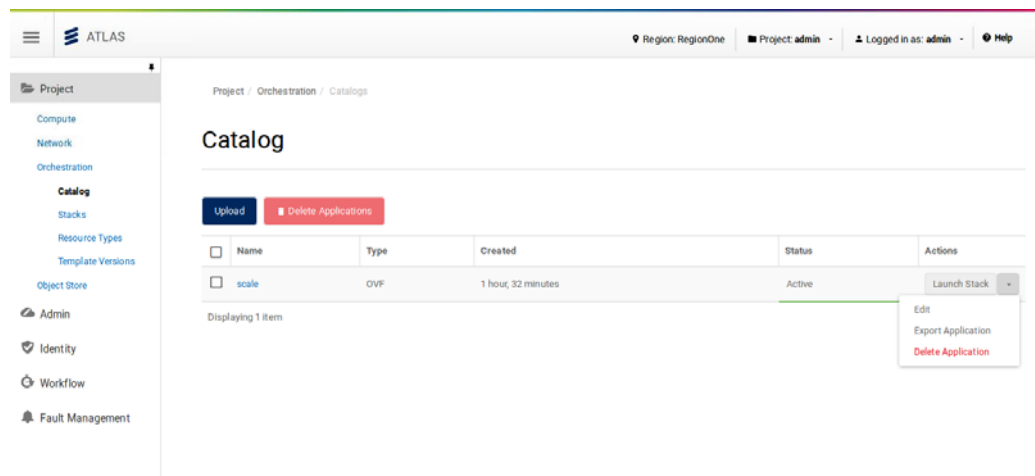


Figure 8 Exporting Application in Catalog - Applications

6Manage Stacks

This section describes how to manage stacks.

The following procedures are available:

- Launch stack, see Section 6.1 on page 15.
- Manually scale out resources by adding resources to a running stack, see Section 6.2 on page 17.
- Manually scale in resources that have been previously scaled out by removing the previously added resources from a running stack, see Section 6.3 on page 19.

Note: Before initiating the tasks described in this section, make sure that the correct user is logged in.

An overview of the Stacks screen is shown in Figure 9.

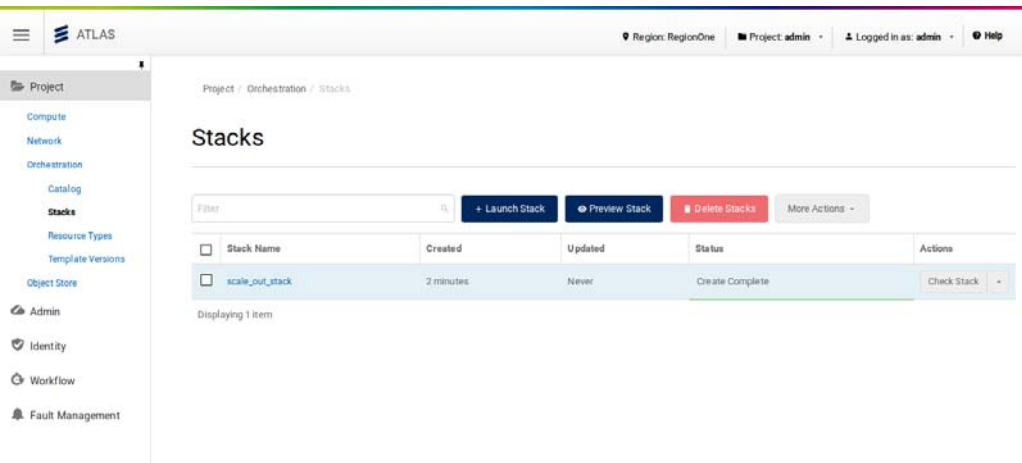


Figure 9 Overview of Stacks Screen

The status of the stack is highlighted with the appropriate color:

- Completed actions: green
- Failed actions: red

6.1Launch Stacks

The Launch Stack screen is shown in Figure 10.



Launch Stack (step 1 of 2)

Template Source

URL

Template URL ⓘ

Environment Source

URL

Template Source: Select the type of source you will use for launching the new stack. Supported file formats are OVA and Yaml.

Environment Source: The environment files contain additional settings for the stack.

File injection (available when 'Catalog' has been chosen as template source): Select the personality (additional user data) file/s you need to inject in order to configure your application. Then enter an absolute target path (i.e. "/temp") for each file. This is where the file/s will be injected into the selected server.
Tip: the config drive is always used with personality files.

Cancel

Next

Figure 10 Launch Stack

To launch a stack, perform the following steps:

1. Select the appropriate project in the **Project** field.
2. Select the **Project** tab from the categories.
3. Click the **Orchestration** tab to expand it.
4. Click on the **Stacks** category.
5. Click **Launch Stack**.
6. In the **Select Template** window, specify the following fields:



Template Source	<p>A source from which environment files can be added. The following template sources are available:</p> <ul style="list-style-type: none"> • URL • File • Direct Input
Environment Source (Optional)	<p>A source from which environment files can be added. The following environment sources are available:</p> <ul style="list-style-type: none"> • URL • File • Direct Input

- Click on **Next**.
- In the **Launch Stack** window, specify the following fields:

Stack Name	Enter a name to identify the stack.
Creation Timeout (minutes)	Specify the time-out interval for launching the stack. If the task times out, the stack is not launched.
Rollback on Failure (Optional)	Select this checkbox if you want the service to roll back changes in case the stack fails to launch.
Password	Specify the password to be used by the default user for creating the stack.
Additional Fields	Additional fields generated by the application template.

- Click **Launch**.

The Atlas dashboard shows the launched stack and its status in the **Stacks** category.

- Verify that the status of the stack is **CREATE COMPLETE**. If the status is **CREATE FAILED**, check the logs in `/var/log/heat` in Atlas or check the stack details for debugging.

For more information on how to provide customized resources while launching a stack from a catalog application, see Section 8 on page 29.



6.2 Scale out Stack

The scaling feature makes it possible to manually scale resources that belong to a running stack. Use **Scale Out** to add resources to a running stack.

To scale out a stack, perform the following steps:

1. Go to the **Stacks** page.
2. In the **Actions** column, select the **Scale Out Stack** option from the drop down menu for the stack that is to be scaled out, as shown in Figure 11.

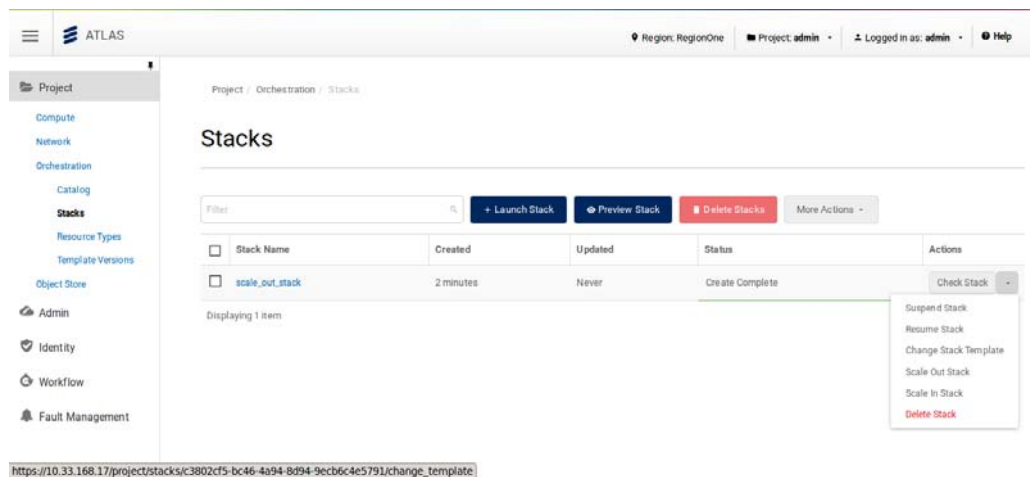


Figure 11 Scale out Stack Option

3. Fill in all the scale out data for the new instance like **Target Name**, and optionally **IP Address** and **MAC Address**. If there are files to inject, select them. Click on the **Submit** button when ready. Figure 12 shows the data fields.

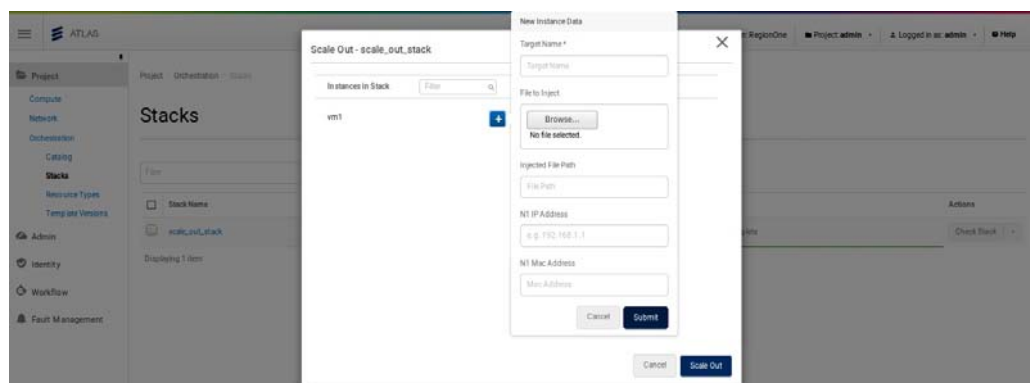


Figure 12 Scale out Data

4. Click the **Scale Out** button as shown in Figure 13.

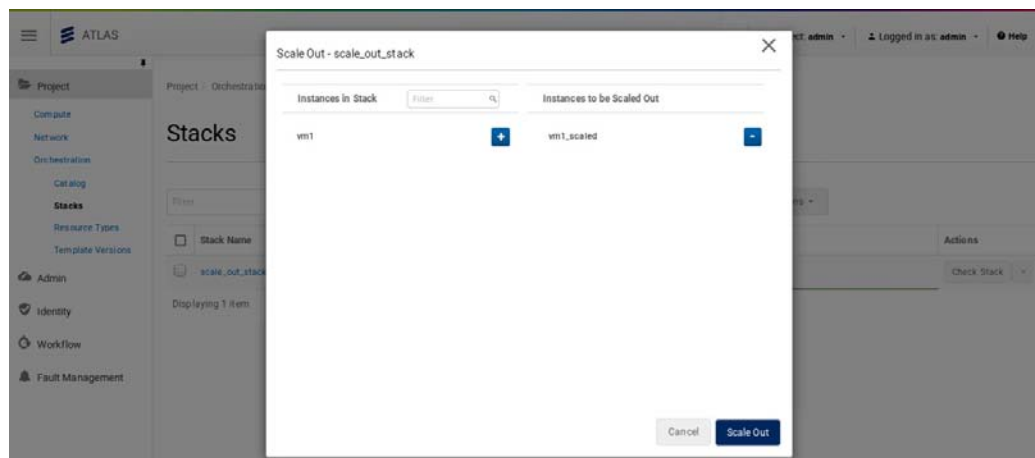


Figure 13 Start Scale Out

- After a successful scale out, the resources scaled out are listed among the resources of the stack, as shown in Figure 14.

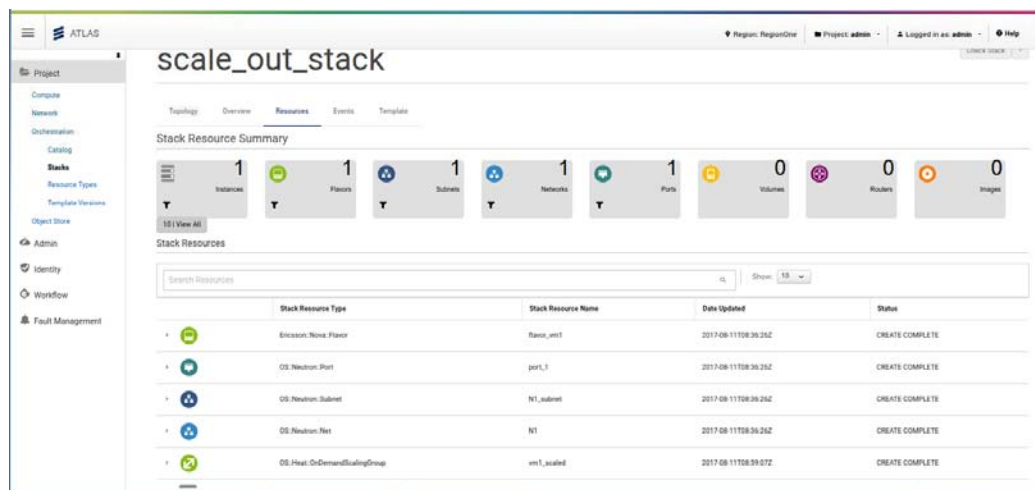


Figure 14 Stack Resource Summary

6.3 Scale in Stack

The scaling feature makes it possible to manually scale resources that belong to a running stack. Use **Scale In** to remove scaled resources from a running stack.

To scale in a scaled out stack, perform the following steps:

- Go to the Stacks page.
- In the **Actions** column, select the **Scale In Stack** option from the drop down menu for the scaled out stack that is to be scaled in as shown in Figure 15.

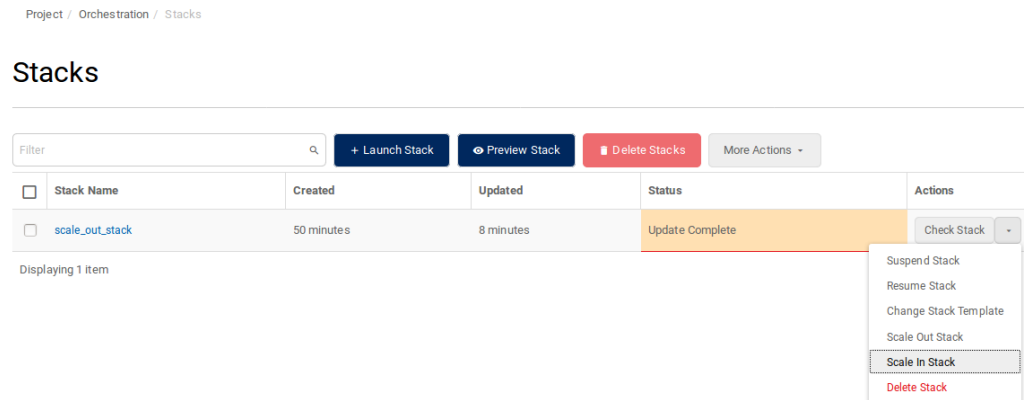


Figure 15 Scale in Stack Option

3. On the Scale In page, select the scaling group (scaled resource) you want to scale in, and click the **Scale In** button as shown in Figure 16.

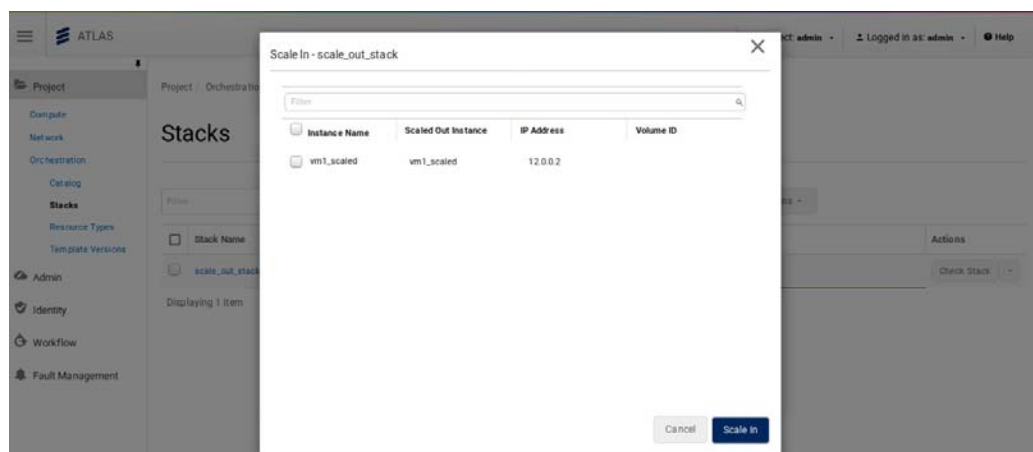


Figure 16 Start Scale In

4. After a successful scale-in, the scaling group (scaled resource) is removed from the stacks resource list, as shown in Figure 17.

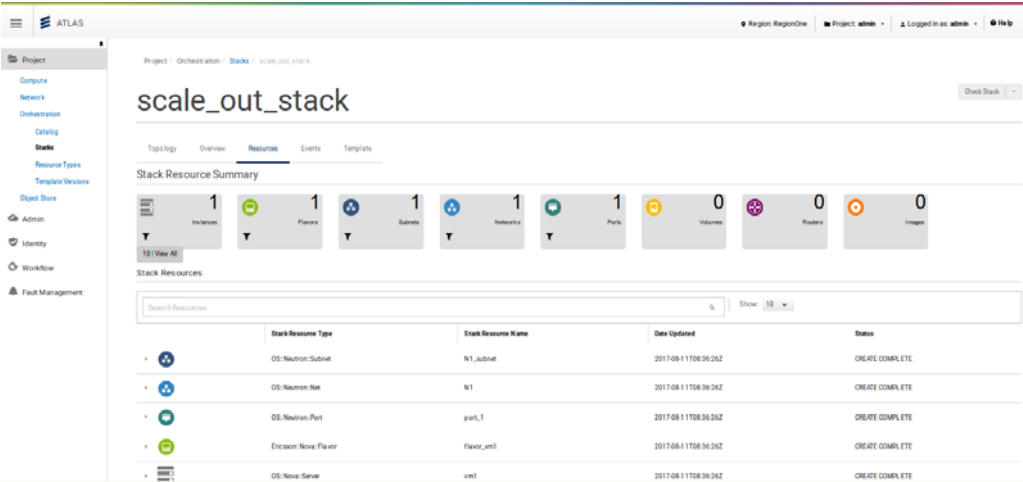


Figure 17 Stack Resource Summary



7 Manage Workflow in Mistral

This section describes how to manage the workflow in Mistral.

Note: Before initiating the tasks described in this section, make sure that the correct user is logged in.

7.1 Create Workbook

To create a workbook, perform the following steps:

1. Select the appropriate project with **Workflow** view as shown in Figure 18.

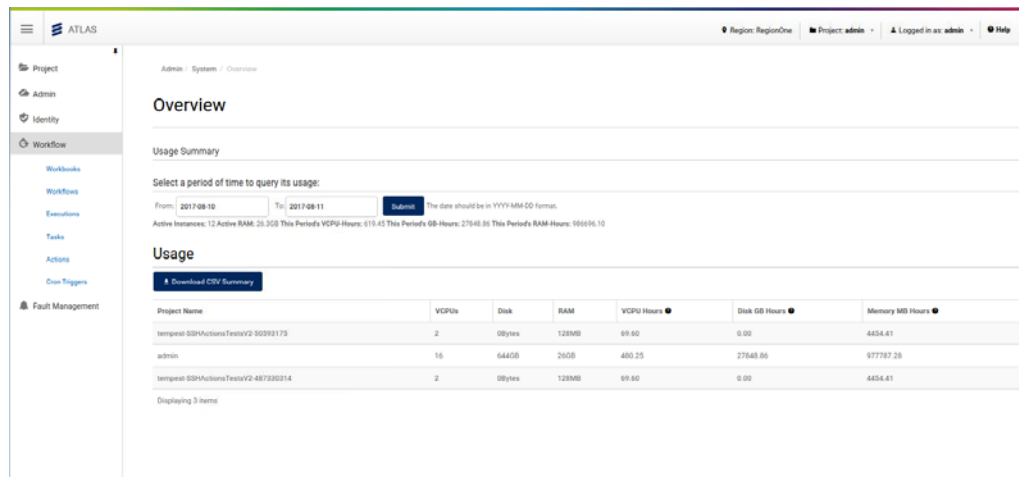


Figure 18 Workflow View Selection

2. Select the **Workbooks** category under the **Workflow** panel.

3. Click on **Create Workbook** and specify the following fields:

Name	Action
Definition Source	File
Definition File	Select the required template

4. Click **Next** to see the template description.

5. Click **Create Workbook**.

Result:
Workbook is created.

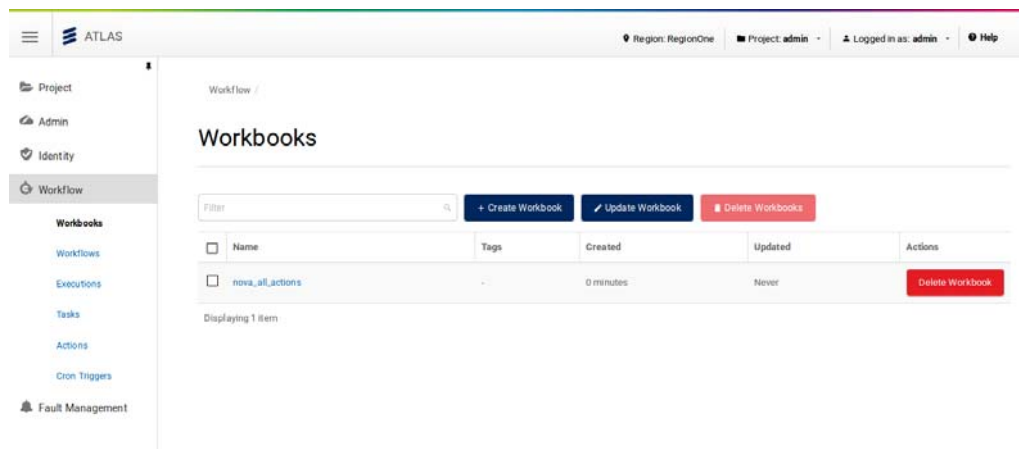


Figure 19 Workbook Overview

7.2 Create Workflow

To create a workflow, perform the following steps:

1. Select the **Workflow** tab in the categories, and click the **Workflows** sub-category.
2. Click **Create Workflow**.
3. Click **Create Workflow** and specify the following fields:

Name	Action
Definition Source	File
Definition File	Select the required template.

4. Click **Next** to see the template description.
5. Click **Create Workflow**.

Result:
Workflow is created.

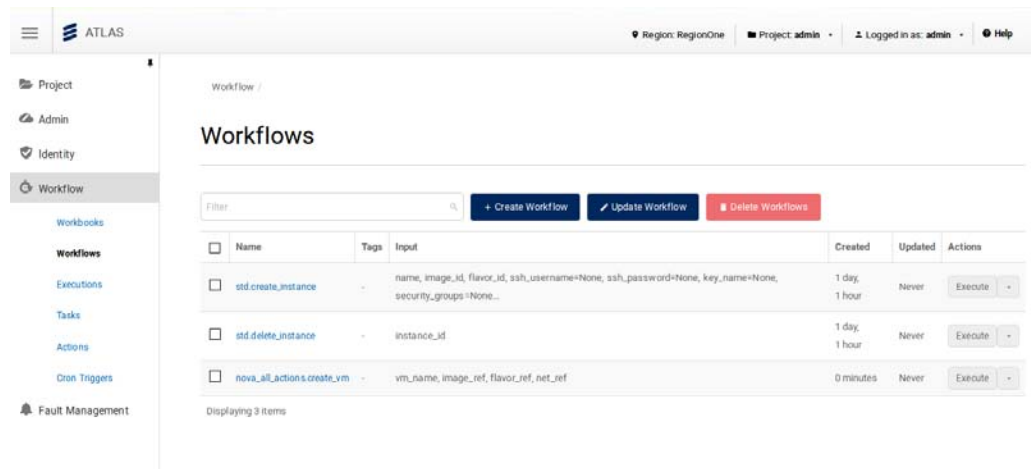


Figure 20 Workflow Overview

7.3 Start Execution

To start an execution:

1. Select the **Workflow** tab in the categories, and click the **Workflows** sub-category.
2. Select **Execute** for the respective workflow.
3. In the window specify the following fields:

Name

Input

Task name

Action

Enter the input file in json format.

Enter a name for a specific task to be executed. If not specified, the tasks are executed.

Examples of the Input in json format are the following:

Example input for the predefined workflow `std.create_instance`:

```
{
  "name": "test-workflow",
  "image_id": "8417c3bb-787e-4986-a1ff-5df8c1b3c66d",
  "flavor_id": "2",
  "nics": [
    {
      "net-id": "27aa8c1c-d6b8-4474-b7f7-6cdcf63ac856"
    }
  ]
}
```



Example input for the predefined workflow `std.create_delete`:

```
{
  "instance_id": "51ff4c97-bed6-46d9-b17d-27fc274d7bf8"
}
```

4. Click on **Execute**

Execution can be seen in the execution page as shown in Figure 21.

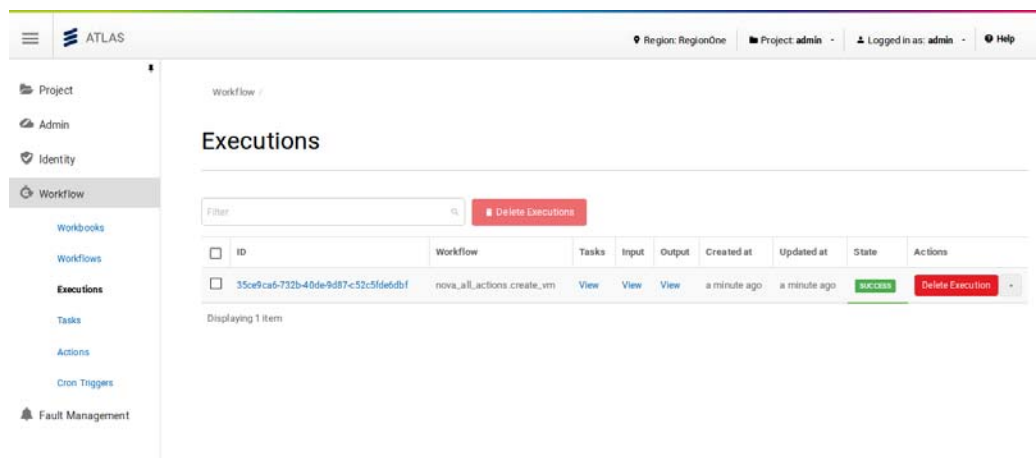


Figure 21 Execution Overview

5. Click on **View** in the **Tasks** column to see result of an execution, as shown in Figure 22.

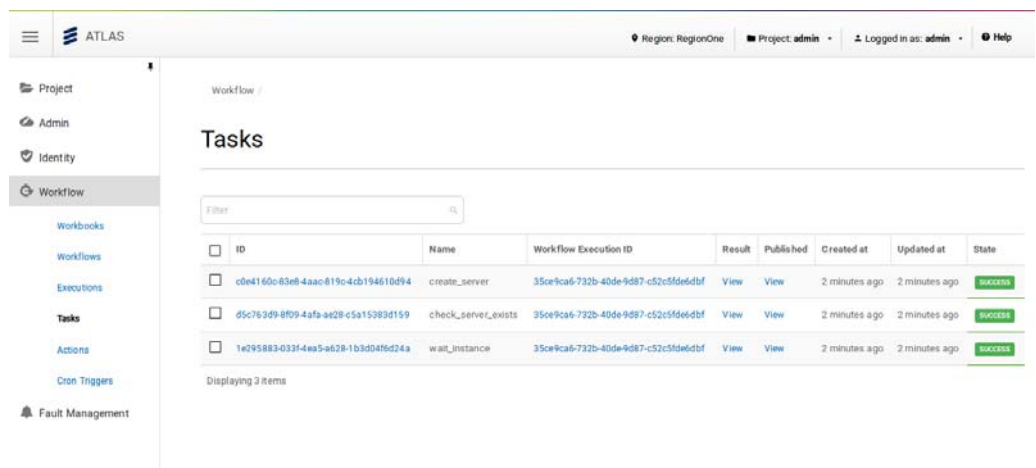


Figure 22 Tasks of Workflow Overview

7.4 Create Cronjob

To create a Cronjob:



1. Select the **Workflow** tab in the categories, and select the **Cron Triggers** category.
2. Click **Create Cron Trigger**.
3. In the **Create Cron Trigger** window specify the following fields:

Name	Action
Name	A name to identify the cronjob
Workflow ID	The workflow ID
Input	Select an option between Direct Input or File .
Input Data	If the option selected for input is Direct Input , enter the data in json format.
File	If the option selected for Input is File , upload the required json file.
Params	Select an option between Direct Input or File .
Params File	If the option selected for Params is File , upload the required json file.
Params Direct Input	If the option selected for Params is Direct Input , enter the data in json format.
First Time	Specify the first scheduling time for the cronjob.
Count	Specify the frequency for the cronjob.
Pattern	Specify the cronjob pattern to run periodically.

4. Click **Create Cron Trigger**.

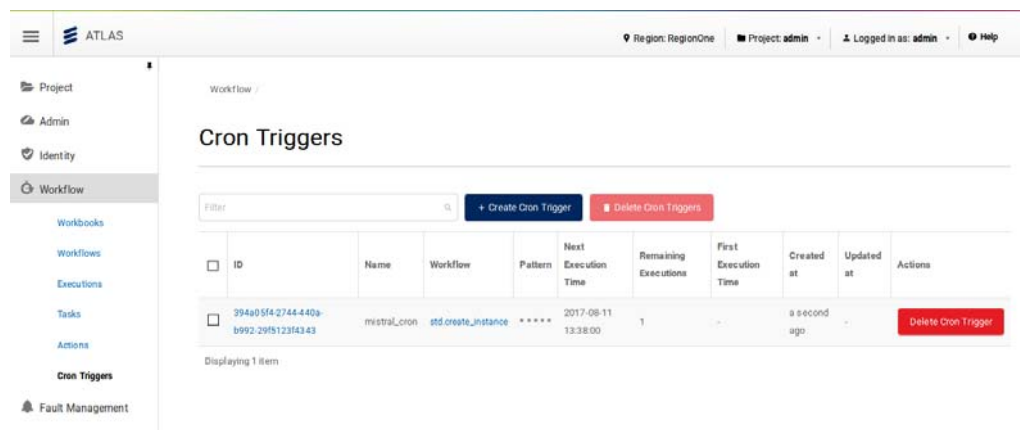


Figure 23 Cron Triggers



7.5 Task Result

To get the result of a particular task, perform the following steps:

1. Select the **Workflow** tab in the categories, and select the **Tasks** category.
2. Click on **View** in the **Result** column for the selected task.

ID	Name	Workflow Execution ID	Result	Published	Created at	Updated at	State
c0e4160c-62e8-4aac-619c-4eb194610d94	create_server	35ce9ca6-732b-40de-9d87-c52c5fde6dbf	View	View	2 minutes ago	2 minutes ago	SUCCESS
d5c763d9-8f09-4afa-a828-c5a15383d159	check_server_exists	35ce9ca6-732b-40de-9d87-c52c5fde6dbf	View	View	2 minutes ago	2 minutes ago	SUCCESS
1e295883-033f-4aea-a82b-1b3d04f6d24a	wait_instance	35ce9ca6-732b-40de-9d87-c52c5fde6dbf	View	View	2 minutes ago	2 minutes ago	SUCCESS

Displaying 3 items

Figure 24 Tasks Overview

7.6 Delete Workflow

To delete a workflow:

1. Select the **Workflow** tab in the categories, and select the **Workflows** sub-category.
2. Tick the checkbox next to the workflow to be deleted as shown in Figure 25.
3. Select **Delete Workflows**.

Name	Tags	Input	Created	Updated	Actions
std_create_instance	-	name, image_id, flavor_id, ssh_username=None, ssh_password=None, key_name=None, security_groups=None...	1 day, 1 hour	Never	Execute
std_delete_instance	-	instance_id	1 day, 1 hour	Never	Execute
<input checked="" type="checkbox"/> nova_all_actions.create_vm	-	vm_name, image_ref, flavor_ref, net_ref	38 minutes	Never	Execute

Displaying 3 items

Figure 25 Delete Workflows



7.7 Delete Cron Trigger

To delete a Cron Trigger:

1. Select the **Workflow** tab in the categories, and select the **Cron Triggers** sub-category.
2. Tick the checkbox next to the Cron Trigger to be deleted.
3. Click **Delete Cron Triggers**.
4. Confirm deletion by clicking **Delete Cron Triggers** as shown in Figure 26.

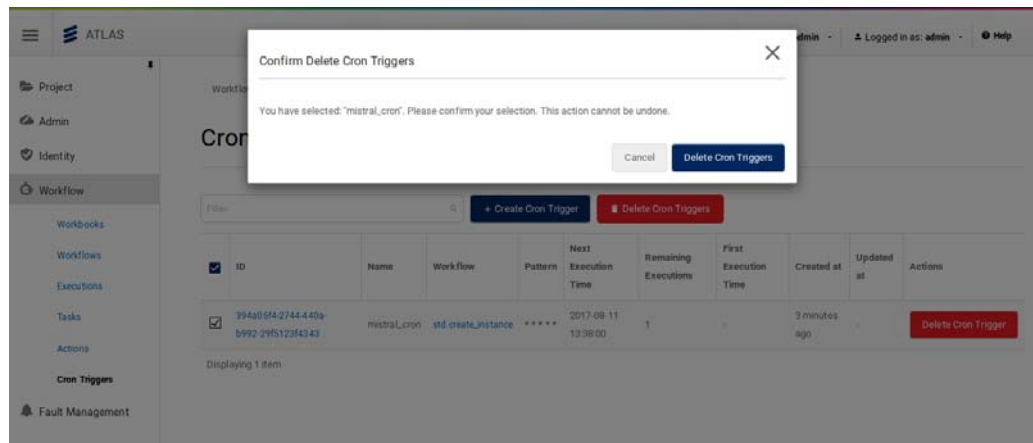


Figure 26 Delete Cron Trigger

7.8 Delete Execution

To delete an execution:

1. Select the appropriate project with **Workflow** view, and click the **Executions** category.
2. Tick the checkbox next to the execution to be deleted.
3. Click **Delete Executions**.
4. Confirm deletion by clicking **Delete Executions** as shown in Figure 27.

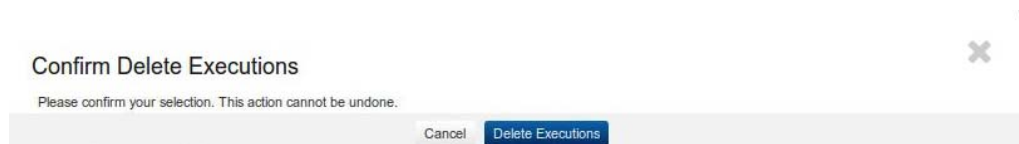


Figure 27 Delete Execution



8 Deployment Wizard from UI

The Deployment wizard allows the user to provide customized resources while launching a stack from a catalog application. It also allows the user to provide extra properties for the resources existing in the application.

The deployment wizard window has help content available for each tab. The help content can be accessed by clicking the ? symbol, as shown in Figure 28.

Note: Before initiating the tasks described in this section, make sure that the correct user is logged in.

To launch a stack using the deployment wizard from the Catalog panel:

1. Select the appropriate project in the project field and select **Project** in the **View** field.
2. Click the **Orchestration** tab to expand it.
3. Select the **Catalog** category.
4. Click on **Launch** in the row of the application that is to be used for launching the stack.
5. In the **Environment** window, click on the **Load environment variables from a file** button, and select the file with environment variables to upload.



The screenshot shows a 'Launch Stack' dialog box with a close button (X) in the top right corner. On the left is a vertical list of seven steps, each with a numbered circle and a green checkmark: 1 Environment, 2 Availability Zones, 3 Flavors, 4 Security Groups, 5 Configuration for Instance, 6 Metadata, and 7 Launch Stack. The 'Environment' step is highlighted with a blue background. To the right of this list is the 'Environment' configuration area, which has a title bar with a question mark icon. Below the title bar, it says 'Set stack environment' and 'Custom environment variables'. A text area for entering variables is shown, with a status 'Script size: 0 bytes (Max: 16Kb)'. At the bottom of this area is a button that says 'Load Environment Variables From A File'. At the bottom of the dialog box are three buttons: 'Cancel' (with an X icon), 'Next' (with a right arrow icon), and 'Launch Stack' (with a cloud icon).

Figure 28 Environment Window

6. Click **Next**.

7. In the **Availability zone** window, specify the following fields:

Instances

The names of instances in the application

Zones (Optional)

Select the zone in the row of an instance to which zone has to be changed.



Launch Stack

1 Environment ✓

2 Availability Zones ✓

3 Flavors ✓

4 Security Groups ✓

5 Configuration for Instance ✓

6 Metadata ✓

7 Launch Stack

Availability Zones

Select availability zones for instances

Instances	Zones
my_server	Select availability zone

× Cancel

← Back

Next →

Launch Stack

Figure 29 Availability Zone Window

8. Click **Next**.

9. In the **Flavors** window, specify the following fields:

Instances

The names of instances in the application

Extra specs (Optional)

Select **Add Extra Specs**. Specify the extra specs in application key=value, key=value format. Select **Enter**. (Or) Select flavor in the row of an instance to which flavor has to be changed.



Launch Stack

1 Environment ✓

2 Availability Zones ✓

3 Flavors ✓

4 Security Groups ✓

5 Configuration for Instance ✓

6 Metadata ✓

7 Launch Stack

Flavors

Select flavors for instances

Instances

Flavors

"my_server"

m1.medium

Add Extra Specs

× Cancel

← Back

Next →

Launch Stack

Figure 30 Flavors Window

10. Click **Next**.

11. In the **Security Groups** window, specify the following fields:

Instances	The names of instances in the application
Security Groups (Optional)	Click on the Close X. Select Groups in the row of an instance or ports under the instance to which Security Group has to be changed.

Note: Security groups are only supported on CEE with tightly integrated SDN. For CEE deployments without SDN tight integration, no security groups need to be assigned, and the assigned security groups have no effect on CEE operations.



✕

1
Environment
✓

2
Availability Zones
✓

3
Flavors
✓

4
Security Groups
✓

5
Configuration for Instance
✓

6
Metadata
✓

7
Launch Stack

Security Groups

2
Availability Zones
✓

3
Flavors
✓

4
Security Groups
✓

5
Configuration for Instance
✓

6
Metadata
✓

7
Launch Stack

Security Groups

2
Availability Zones
✓

3
Flavors
✓

4
Security Groups
✓

5
Configuration for Instance
✓

6
Metadata
✓

7
Launch Stack

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Flavors
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Security Groups
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Configuration for Instance
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Metadata
✓

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Launch Stack

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Flavors
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Security Groups
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Configuration for Instance
✓

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Metadata
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Launch Stack

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Flavors
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Security Groups
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Configuration for Instance
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Metadata
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Launch Stack

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Flavors
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Security Groups
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Configuration for Instance
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Metadata
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Launch Stack

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Flavors
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Security Groups
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Configuration for Instance
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Metadata
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Launch Stack

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Launch Stack

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Flavors
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Security Groups
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Configuration for Instance
✓

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Metadata
✓

7
Launch Stack

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Availability Zones
✓

3
Flavors
✓

4
Security Groups
✓

5
Configuration for Instance
✓

6
Metadata
✓

7
Launch Stack

2
Availability Zones
✓

3
Flavors
✓

4
Security Groups
✓



Launch Stack

1 Environment ✓

2 Availability Zones ✓

3 Flavors ✓

4 Security Groups ✓

5 Configuration for Instance ✓

6 Metadata ✓

7 Launch Stack

Configuration for Instance

File Injection and User Data

Instances	Files	User Data
"my_server"	Add file	Add Userdata

× Cancel

← Back

Next →

Launch Stack

Figure 32 Configuration for Instance Window

14. Click **Next**.

15. In the **Metadata** window, specify the following fields:

Instances

The names of instances in the application

Metadata (Optional)

Select **Add Metadata**, and specify metadata in the text area in key=value, key=value format. Select **Save**.



Launch Stack

1 Environment ✓

2 Availability Zones ✓

3 Flavors ✓

4 Security Groups ✓

5 Configuration for Instance ✓

6 Metadata ✓

7 Launch Stack

Metadata

Select metadata for instances

Instances	MetaData
*my_server	Add metadata

× Cancel

← Back

Next →

Launch Stack

Figure 33 Metadata Window

16. Click **Next**.

17. In the **Launch Stack** window, specify the following fields:

Stack Name	Enter a name to identify the stack.
Creation Timeout (Minutes)	Specify the time-out interval for launching the stack. If the task times out, the stack is not launched.
Rollback on Failure (Optional)	Select the checkbox if you want the service to roll back changes in case the stack fails to launch.
Password	Specify the password to be used by the default user for creating the stack.
Additional Fields	Additional fields generated by the application template.

Note: Depending on the application template, the number of additional fields vary.



Launch Stack

1 Environment ✓

2 Availability Zones ✓

3 Flavors ✓

4 Security Groups ✓

5 Configuration for Instance ✓

6 Metadata ✓

7 Launch Stack

Launch Stack

Stack Details

Stack Name*

Stack Name

Creation Timeout(mins)*

60

Rollback on failure

Disabled

Password for Admin*

Password

Application specific settings

× Cancel

← Back

Launch Stack

Figure 34 Launch Stack Window

18. Click **Launch Stack**.

Atlas dashboard shows the launched stack in the **Stacks** category.

9

Stack Topology

Stack topology provides an interface to look and analyze resources created by stack, used by stack, or both. Figure 35 shows **Stack Topology** and its controls.

Note: Before initiating the tasks described in this section, make sure that the correct user is logged in.

9.1

Navigation

1.

Select the appropriate project in the **Current Project** field.
2.

Select project in the **View** field.
3.

Click on **Stacks Category**.
4.

Click on **Stack Name** in the row of the application to be used for viewing stack topology.
5.

Click on the **Topology** tab.

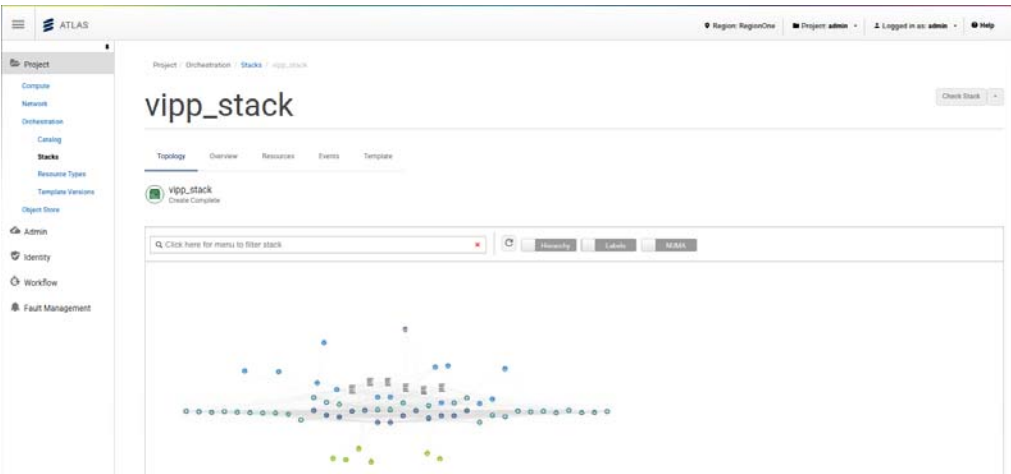



Figure 35 Overview of Stack Topology










9.2

Icons

Table 1 Stack Topology Icons

Resource	Icon
Server	



Resource	Icon
Flavor	
Flavor Pinned	
Network	
Subnet	
Router	
Compute	
Port	
Volume	
Heat Delay	

9.3 Edges and Connections

Edges show the connection between nodes. The connection can be highlighted by hovering on the node, as shown in Figure 36.

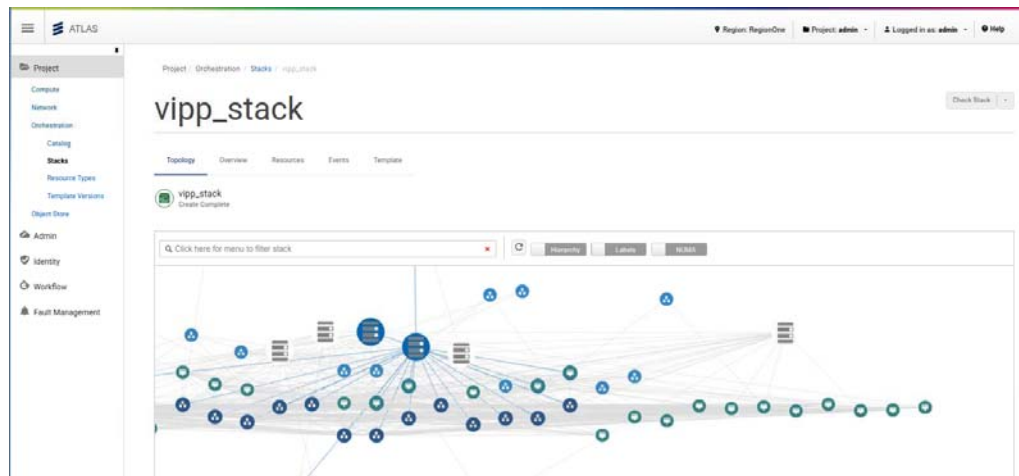


Figure 36 Highlighted Node Connections

9.4 Hierarchy

Use Hierarchy control to switch between “random” and “hierarchy” mode, as shown in Figure 37.

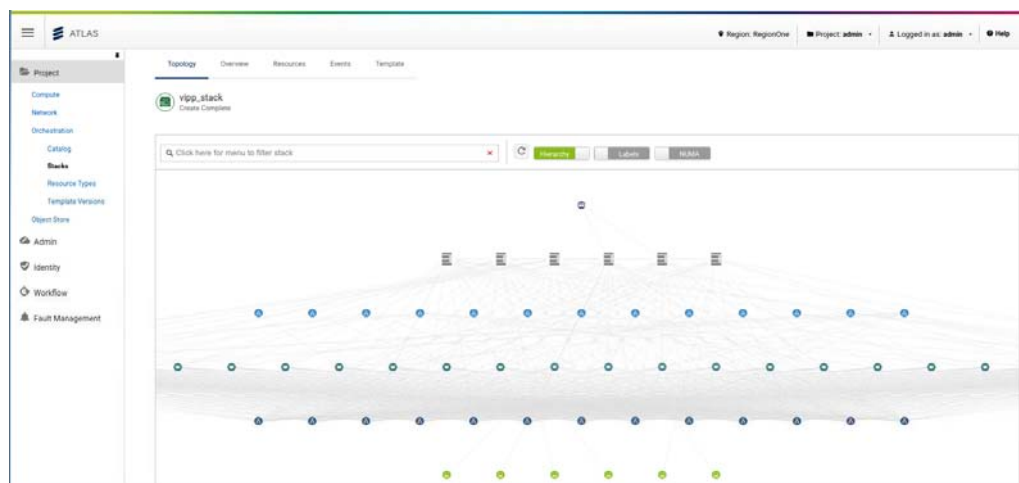


Figure 37 Stack Topology Hierarchy

The reset button changes the topology from “hierarchy” back to “random”.



Figure 38 Reset Button

9.5 Labels

Use **Labels** switch to show and hide names of resources. Click the node for a tooltip with more information on the node.

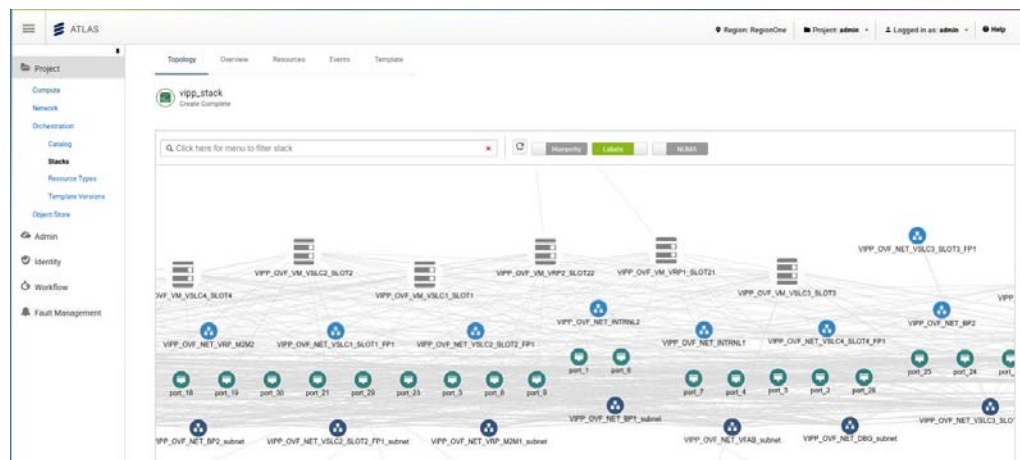


Figure 39 Nodes Labels

9.6 NUMA/CPU Pinning

Click **NUMA** to show the connection of a VM with a compute through VM and the pinning information of the flavor.

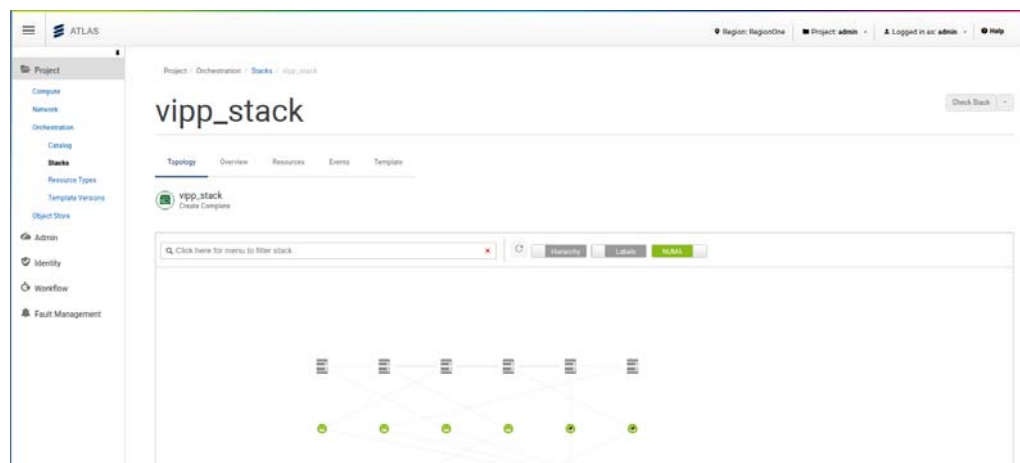


Figure 40 NUMA Topology

The pin symbol on **Flavor** indicates that it is pinned. Pinning information is provided in a tooltip, as shown in Figure 41.

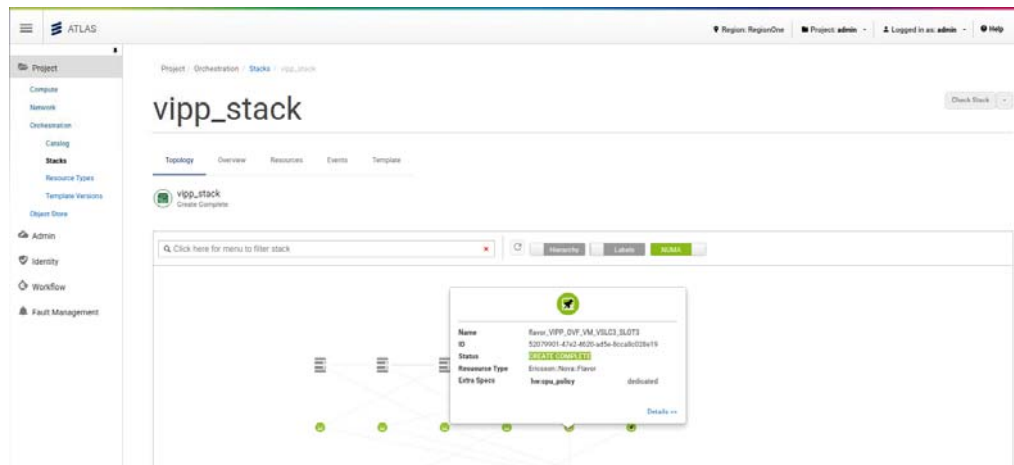


Figure 41 NUMA Topology Popup

Hovering the mouse on Compute shows the VM(s) on the compute host:

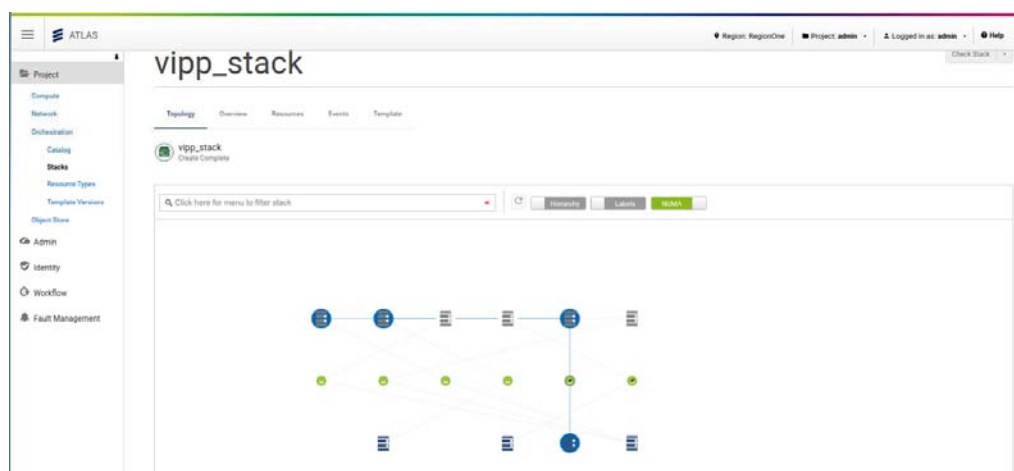


Figure 42 NUMA Topology Compute Link

Note: NUMA check disables Hierarchy and Reset options.

9.7 Topology Search

Search for nodes based on the resource type, name and state of the nodes in the **Search** bar:

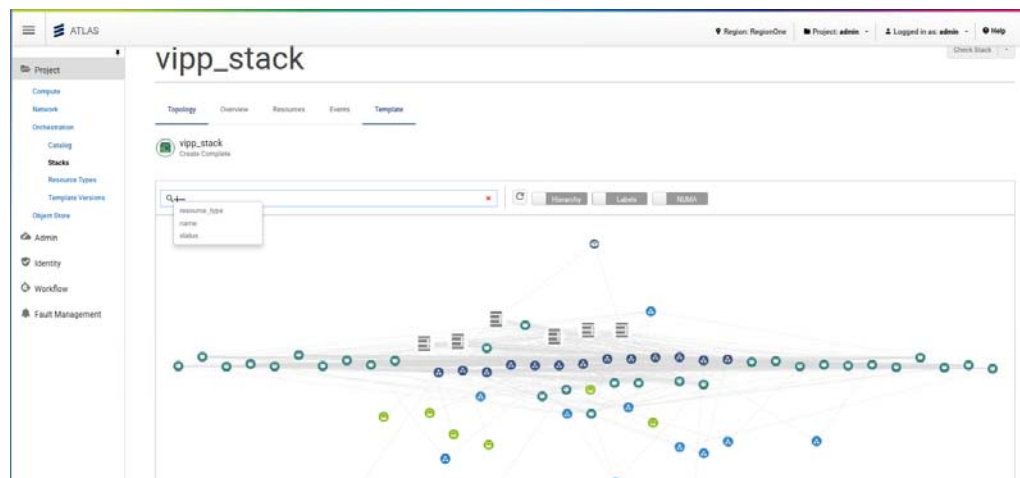


Figure 43 Topology Search Options

You can also search using a combination of filters:

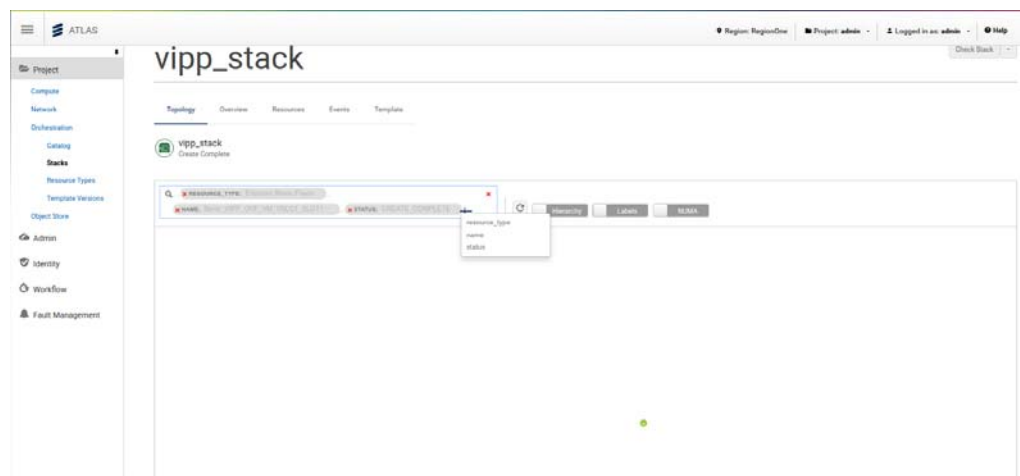


Figure 44 Stack Topology Search by Combining Filters



10 Stack Overview

Stack Overview displays the parameters and details of the stack. The stack resource summary contains the number of each resource type present in the stack. Each resource type is assigned a unique icon for easy identification of the resource type.

The Stack Overview tab is divided into seven sections:

- Stack resource summary
- Stack information
- Stack parameters
- Launch parameters
- Outputs
- Activity summary
- Most recent events

10.1 Stack Resource Summary

Only the first row of resource types is displayed initially. To view the resource types, click **View all** (displaying the total number of resource types available).

10.2 Stack Information

Stack information contains the following information about the stack:

- The description of the stack
- The ID of the stack
- The name of the stack
- The region name

10.3 Stack Parameters

Stack parameters display the following information:

- `project_id`
- `stack_id`



— stack_name

10.4 Launch Parameters

Launch parameters specifies parameters such as timeout and rollback.

10.5 Outputs

Outputs are displayed below the Launch parameters, which typically contains the output of the stack.

10.6 Activity Summary

Activity summary summarizes the total number of events and total number of error events.

10.7 Most Recent Events

This section contains a table with the most recent events. Click the link **Complete event list** for a complete list.

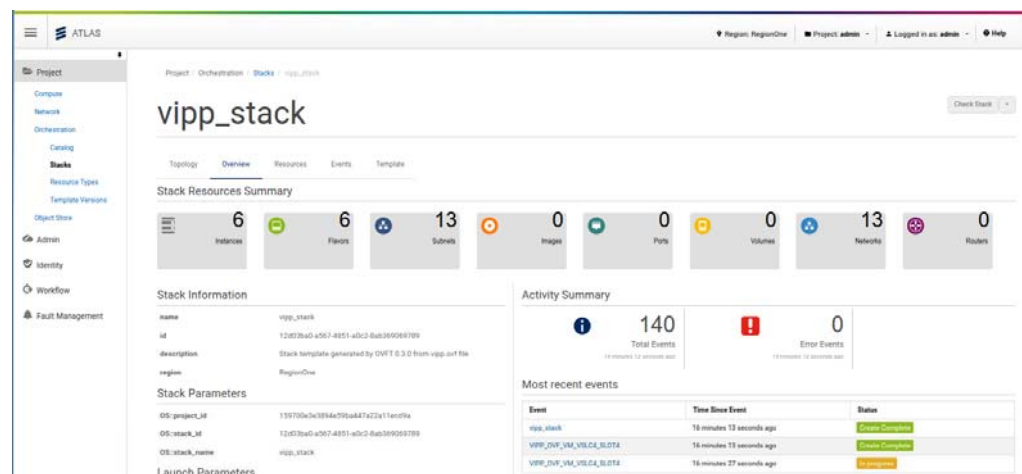


Figure 45 Stack Overview



11 Stack Resources

Stack resources provide a clear view of all the resources in a stack.

Note: Before initiating the task described in this section, make sure that the correct user is logged in.

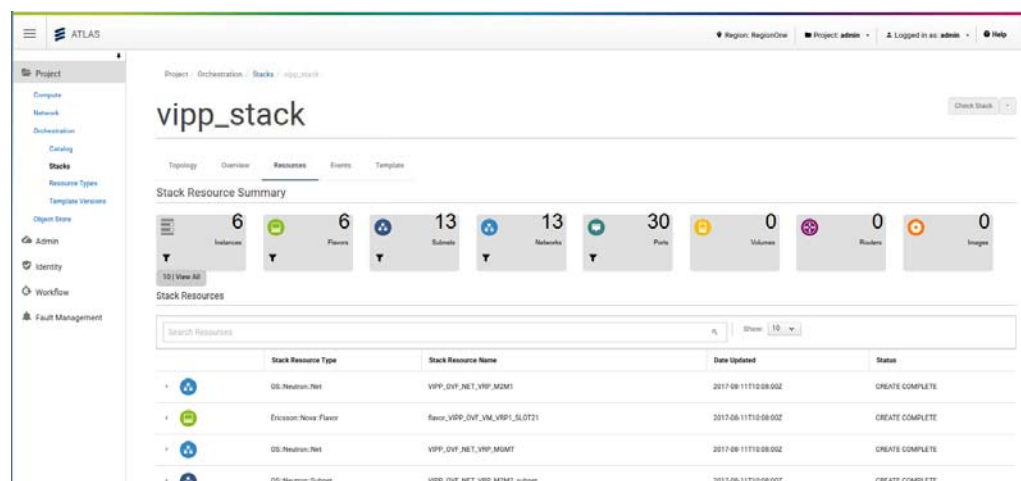


Figure 46 Overview of Stack Resources

To view the Stack resources overview:

1. Select the appropriate project in the **Project** field, and select the **Project** tab in the categories.
2. Click **Stacks Category**.
3. Click on the **Stack Name** of any launched stack.
4. Click on the **Resources** tab to display the resources of the stack.

The Stack resource summary gives the details of number of resources present under each resource type. The count of active and error state resources are showed using valid and invalid icons.

The following Stack resources features are available:

- Resource Search: Enter any word in the search bar and then press **Enter**.
- Accordion (>): Hides extra information and shows it when clicked.
- Pagination: Select number of resources to be shown in the drop down list. Click to select: **First - Go** to first page and **Previous - Go** to previous page. **Number - Go** to particular page. **Next - Go** to next page. **Last - Go** to the last page.



- Pinning: The instance (VM) which is pinned to a particular host is shown with a pin symbol, click **Accordion (>)** to view details.
- Resource Usage Graph: The usage of resources is shown in the form of line graphs.
- vCPU Utilization: The vCPU Utilization of an instance is shown with respect to the time. Click > of any instance to view graph.
- Disk Operations: The Disk Operations taken place in an instance is shown with respect to the time. Click > of any instance to view graph.

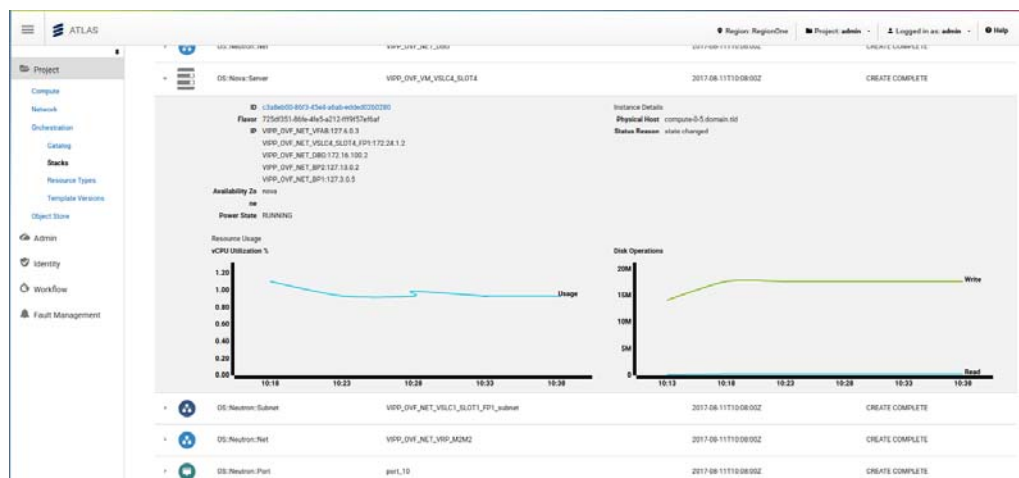


Figure 47 Instance Details

12 Stack Events

A series of events is generated during the lifecycle of a stack. Events can be viewed on clicking the events tab. The page is divided into two sections:

- Event Summary
- Events

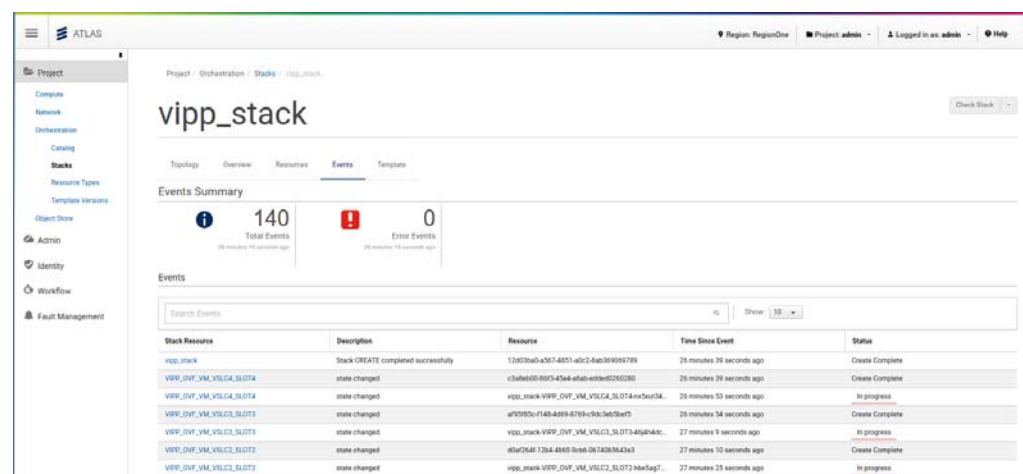


Figure 48 Stack Events

12.1 Event Summary

The first section of the stack events page presents the summary of the stack, displaying the total number of events and number of error events.

12.2 Events

The table with series of events contains the followings:

- Unique icon for each resource
- Name of the stack resource, with link to the detail overview of the stack resource
- Description
- Resource ID
- Time since the event has occurred
- Status: Active: Green. In progress: Yellow. Failed: Red



Events can be filtered based on name of the resource, description, resource ID, time and status. The filter dynamically filters out the contents as the user types in the filter bar. The user can also set the number of events to be displayed (10 or 20).



13 Atlas Help Center

This section describes how to display different types of information, using the Atlas GUI.

The help center is shown in Figure 49.

Note: Before initiating the tasks described in this section, make sure that the correct user is logged in.

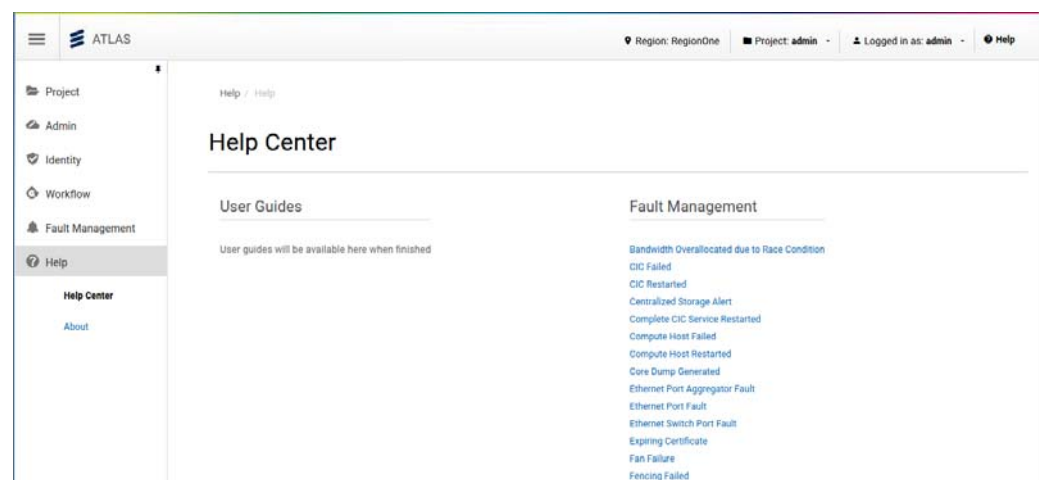


Figure 49 Help Center

13.1 Fault Management

To reach the fault management documentation, perform the following steps:

1. Select the appropriate project in the **Project** field, and select **Project** tab in the categories.
2. Click **Help** in the top bar.
3. Open a specific fault management document by clicking its title under the **Fault Management** heading.

13.2 User Guides

To open user guides:

1. Select the appropriate project in the **Project** field, and select **Project** tab in the categories.
2. Click **Help** in the top bar.
3. Click the title of the specific user guide under the **User Guide** heading.



13.3 Atlas Product Information

This section describes how to display Atlas and CEE product information from the Atlas dashboard. The content of the product information page is shown in Figure 50.

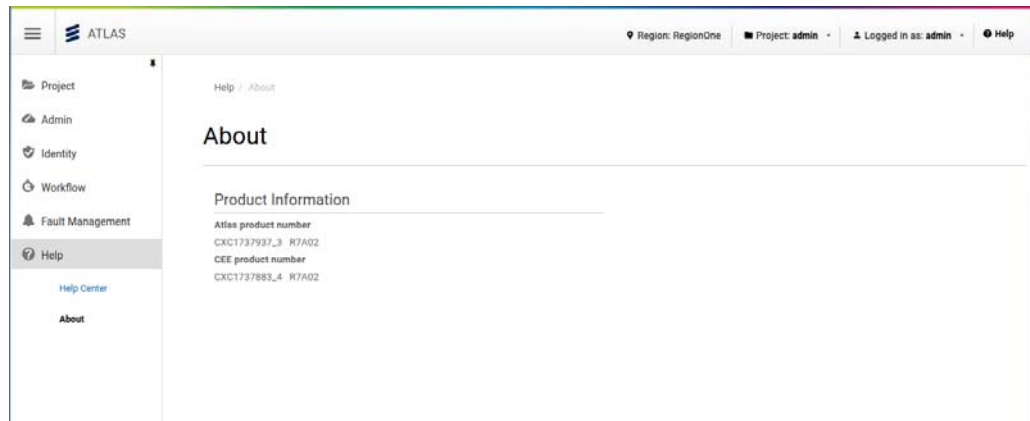


Figure 50 Atlas and CEE Product Number and Revision

To display Atlas and CEE product information:

1. Select the appropriate project in the **Project** field, and select the **Project** tab in the categories.
2. Click **Help** in the top bar.
3. Click **About** on the **Help** page.



Reference List

- [1] OpenStack Horizon documentation, <https://docs.openstack.org/horizon/pike/user/log-in.html#openstack-dashboard-settings-tab>