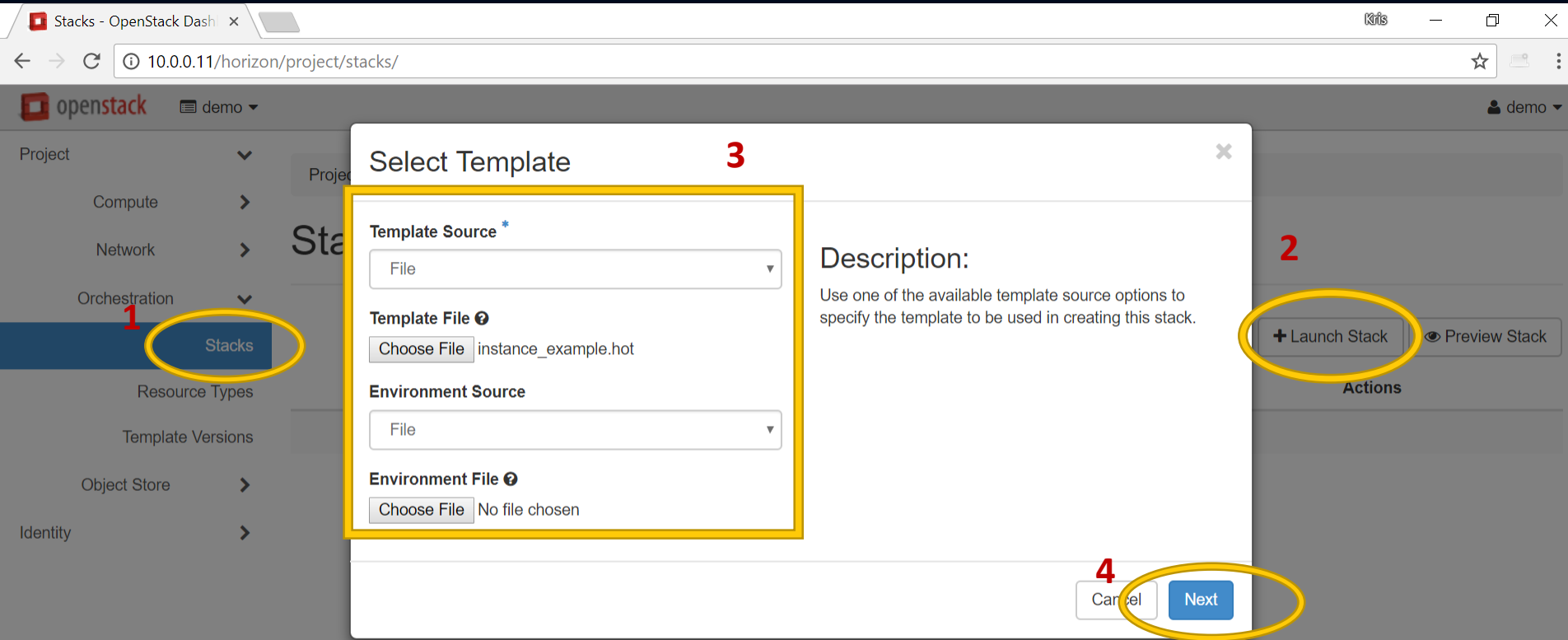


Preparing to **Certified OpenStack Administrator** Exam

Section 10 – Heat Orchestration

Lecture 43. Heat Summary and Review

Create a Stack with HOT File



Stacks - OpenStack Dash x

10.0.0.11/horizon/project/stacks/

openstack demo

Project

Compute

Network

Orchestration

Stacks

Resource Types

Template Versions

Object Store

Identity

Select Template

3

Template Source *

File

Template File ?

Choose File instance_example.hot

Environment Source

File

Environment File ?

Choose File No file chosen

Description:

Use one of the available template source options to specify the template to be used in creating this stack.

2

+ Launch Stack Preview Stack

Actions

4

Cancel Next

Create a Stack from HOT File

Stacks - OpenStack Dash x

← → ↻ ① Not secure | 10.0.0.11/horizon/project/stacks/

openstack demo

Project

- Compute
- Network
- Orchestration
- Stacks**
- Resource Types
- Template Versions
- Object Store
- Identity

Launch Stack 5

Stack Name * ⓘ
stack-name

Creation Timeout (minutes) * ⓘ
60

☒ Rollback On Failure ⓘ

Password for user "demo" * ⓘ
.....

Flavor * ⓘ
m1.tiny

Image * ⓘ
cirros (12.7 MB)

Keypair Name * ⓘ

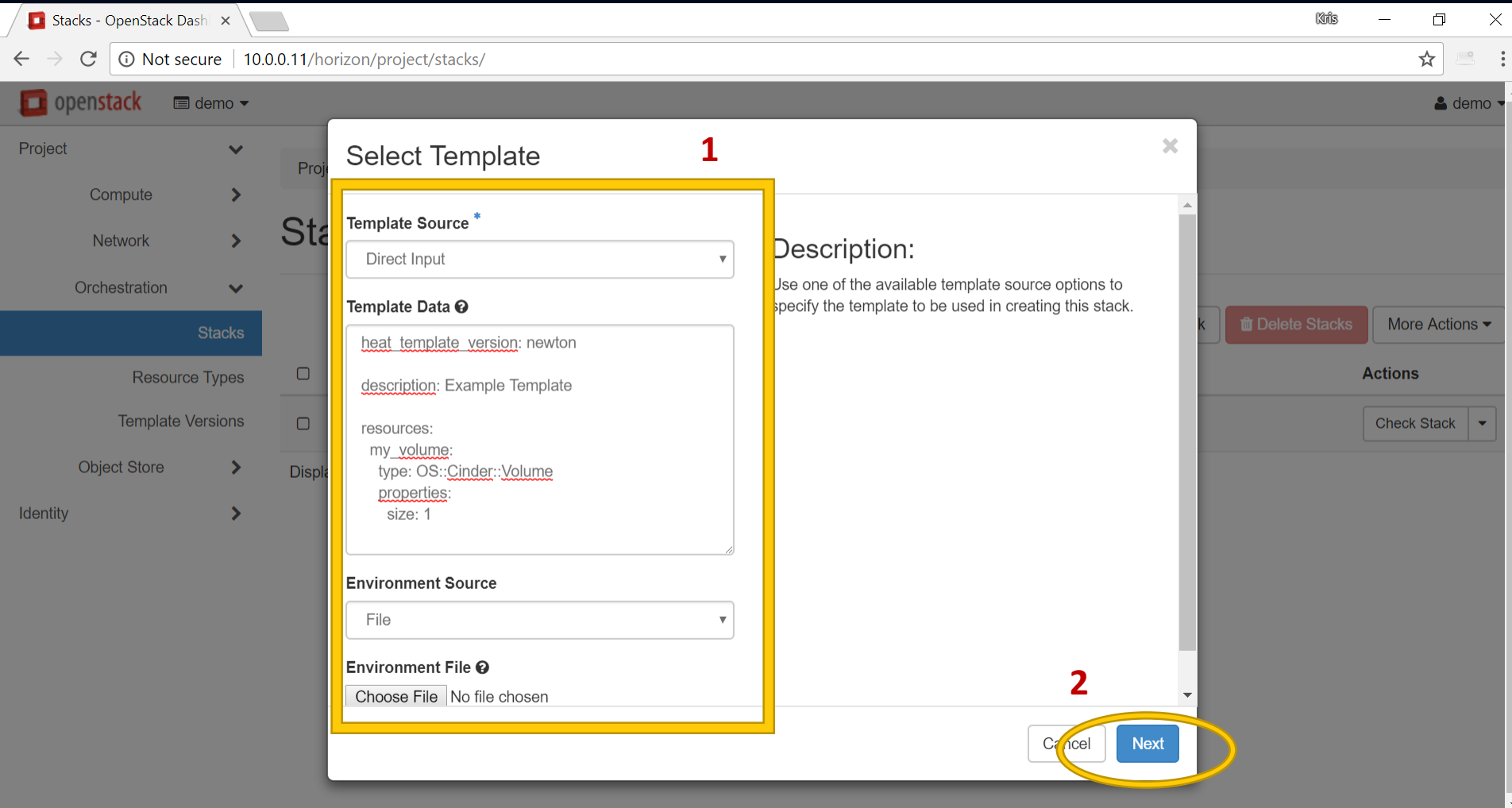
Description:
Create a new stack with the provided values.

+ Launch Stack Preview Stack

Actions

Cancel Launch 6

Create a Stack with Direct Input



Stacks - OpenStack Dash x

Not secure | 10.0.0.11/horizon/project/stacks/

openstack demo

Project

- Compute
- Network
- Orchestration
- Stacks
- Resource Types
- Template Versions
- Object Store
- Identity

Stacks

Stack Description:

Use one of the available template source options to specify the template to be used in creating this stack.

Delete Stacks More Actions

Actions

Check Stack

Select Template 1

Template Source *

Direct Input

Template Data ?

```
heat_template_version: newton

description: Example Template

resources:
  my_volume:
    type: OS::Cinder::Volume
    properties:
      size: 1
```

Environment Source

File

Environment File ?


Choose File No file chosen

Cancel Next 2

Heat Orchestration Template Guide

Template Guide — heat 7 x

Secure | https://docs.openstack.org/heat/newton/template_guide/index.html

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Previous topic

Creating your first stack

Next topic

Heat Orchestration Template (HOT) Guide

Project Source

Project Source

This Page

Show Source

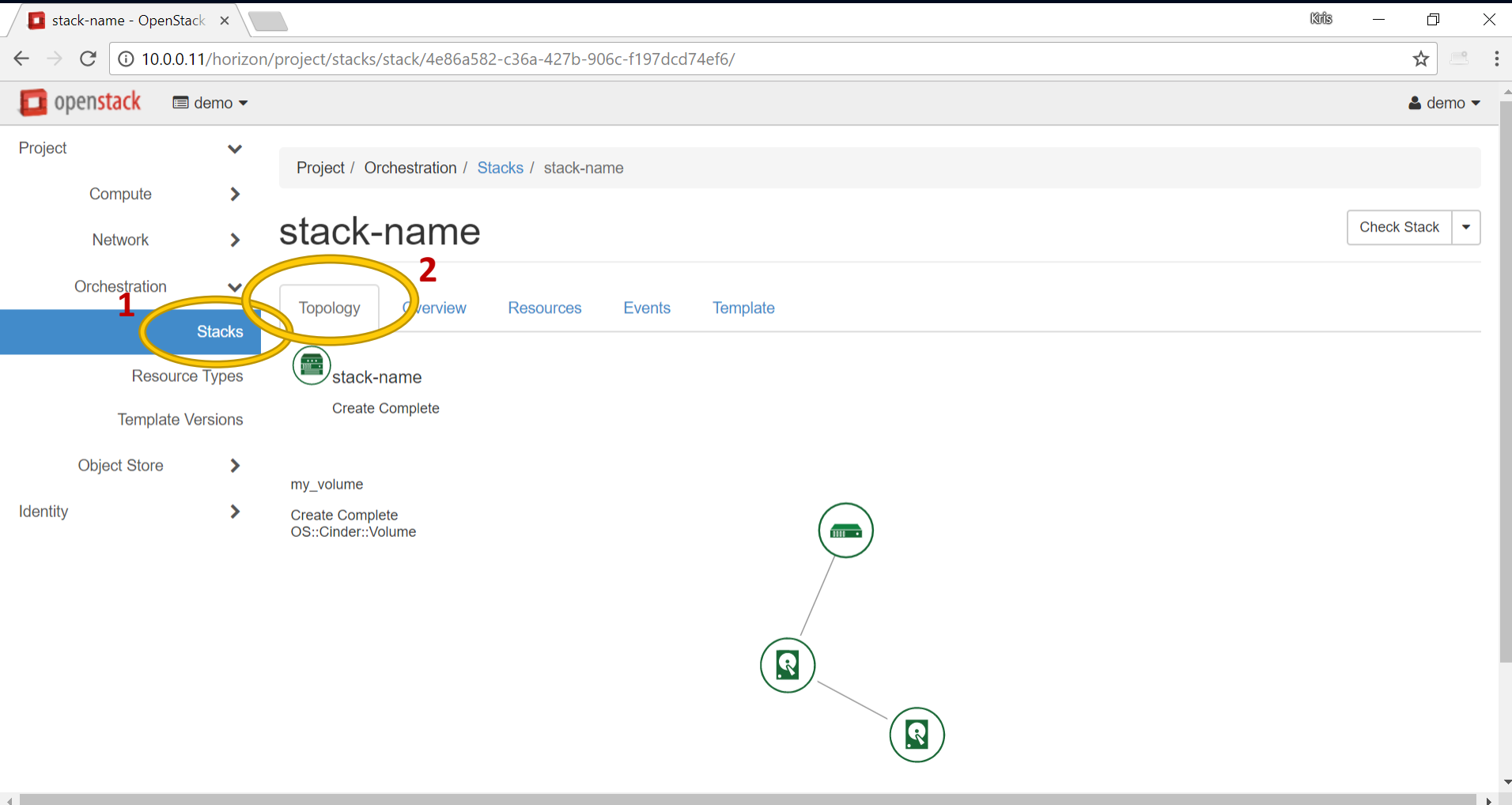
Quick search

Enter search terms or a module, class or function name.

Template Guide

- Heat Orchestration Template (HOT) Guide
 - Status
 - Writing a hello world HOT template
- Writing a hello world HOT template
 - A most basic template
 - Input parameters
 - Template outputs
- Heat Orchestration Template (HOT) specification
 - Status
 - Template structure
 - Heat template version
 - Parameter groups section
 - Parameters section
 - Resources section
 - Outputs section
 - Conditions section
 - Intrinsic functions
- Instances
 - Manage instances
 - Manage networks
 - Manage volumes
- Software configuration

Review a Stack



stack-name - OpenStack x

10.0.0.11/horizon/project/stacks/stack/4e86a582-c36a-427b-906c-f197dcd74ef6/

openstack demo

Project / Orchestration / Stacks / stack-name

stack-name

Check Stack

1 Stacks 2 Overview

Topology Resources Events Template

stack-name

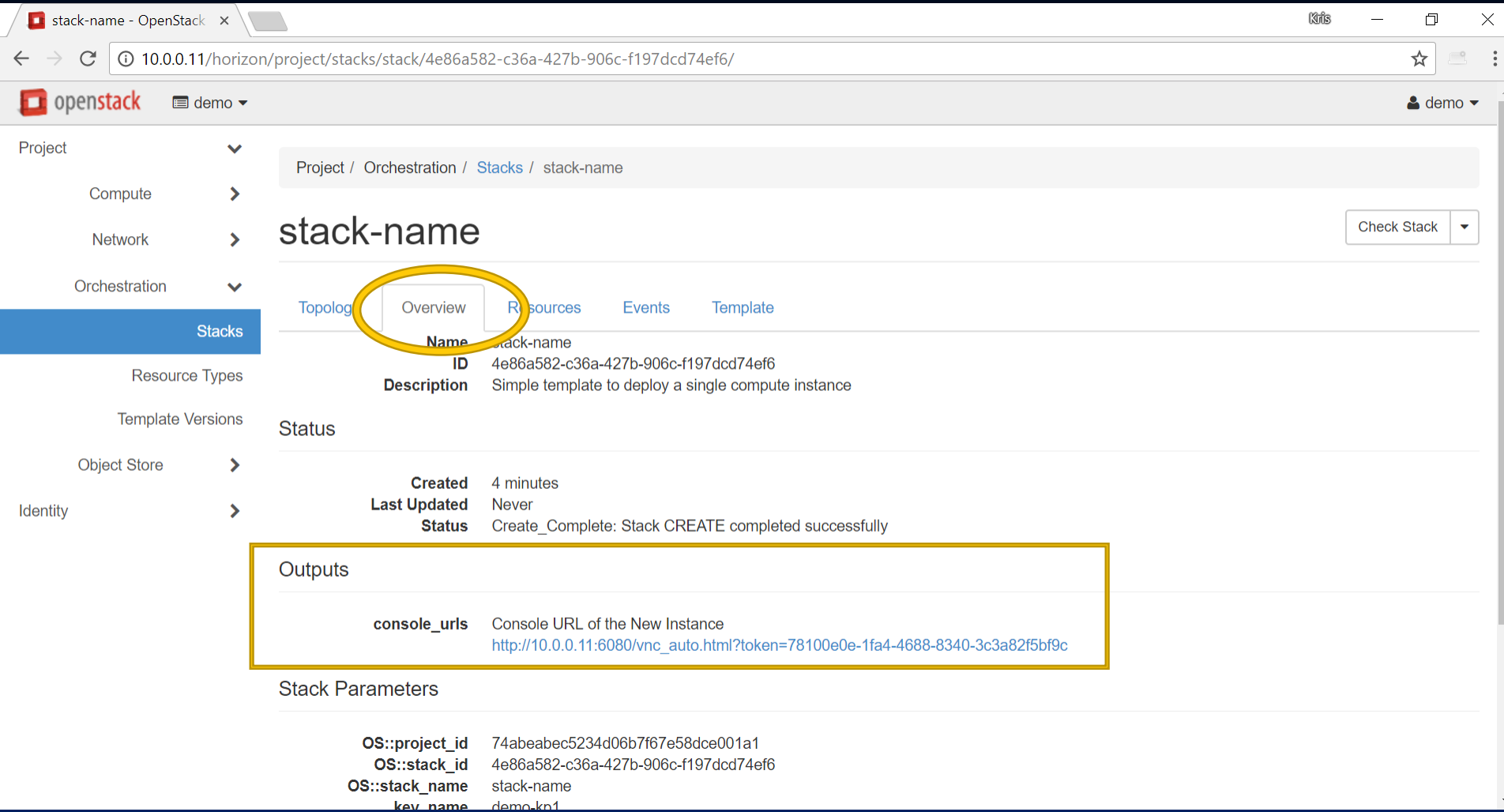
Create Complete

my_volume

Create Complete OS::Cinder::Volume

Topology diagram showing three nodes connected in a V-shape.

Review a Stack



stack-name - OpenStack x

10.0.0.11/horizon/project/stacks/stack/4e86a582-c36a-427b-906c-f197dcd74ef6/

openstack demo

Project / Orchestration / Stacks / stack-name

stack-name

Check Stack

Topology Overview Resources Events Template

Name	stack-name
ID	4e86a582-c36a-427b-906c-f197dcd74ef6
Description	Simple template to deploy a single compute instance

Status

Created	4 minutes
Last Updated	Never
Status	Create_Complete: Stack CREATE completed successfully

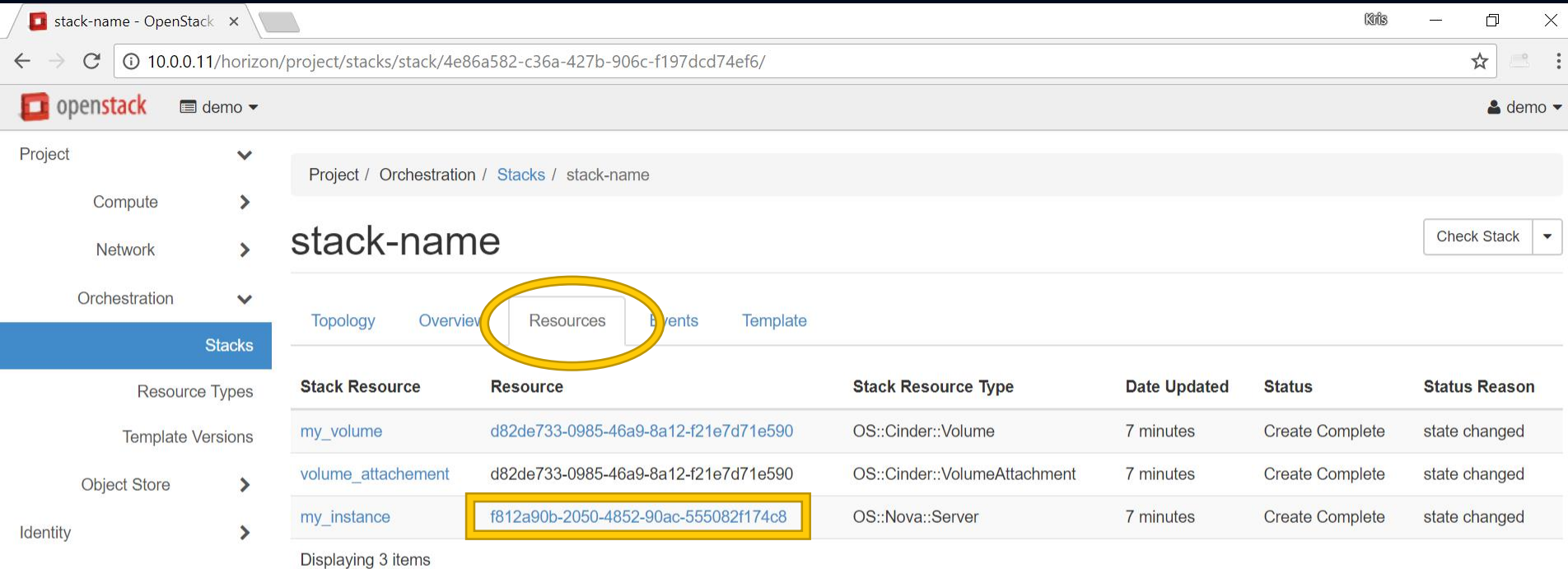
Outputs

console_urls	Console URL of the New Instance http://10.0.0.11:6080/vnc_auto.html?token=78100e0e-1fa4-4688-8340-3c3a82f5bf9c
--------------	--

Stack Parameters

OS::project_id	74abeabec5234d06b7f67e58dce001a1
OS::stack_id	4e86a582-c36a-427b-906c-f197dcd74ef6
OS::stack_name	stack-name
key_name	demo-kp1

Review Stack Resources



stack-name - OpenStack x

10.0.0.11/horizon/project/stacks/stack/4e86a582-c36a-427b-906c-f197dcd74ef6/

openstack demo

Project / Orchestration / **Stacks** / stack-name

stack-name

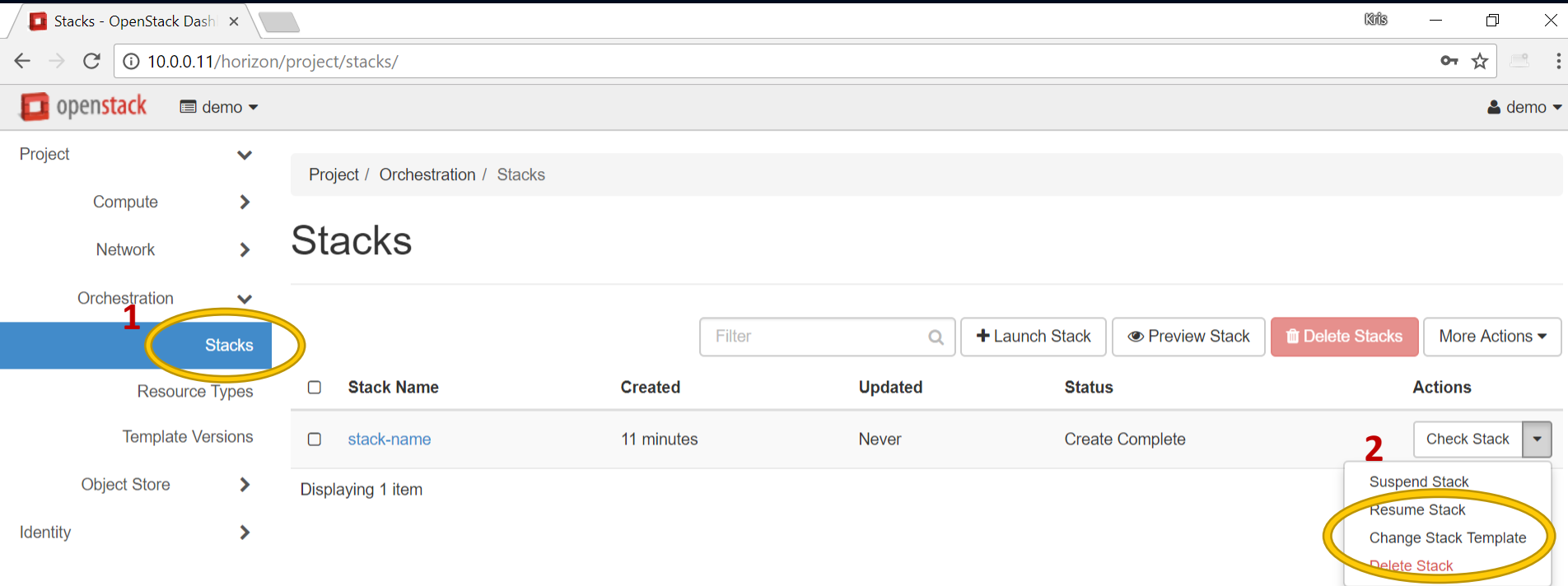
Check Stack

Topology Overview **Resources** Events Template

Stack Resource	Resource	Stack Resource Type	Date Updated	Status	Status Reason
my_volume	d82de733-0985-46a9-8a12-f21e7d71e590	OS::Cinder::Volume	7 minutes	Create Complete	state changed
volume_attachement	d82de733-0985-46a9-8a12-f21e7d71e590	OS::Cinder::VolumeAttachment	7 minutes	Create Complete	state changed
my_instance	f812a90b-2050-4852-90ac-555082f174c8	OS::Nova::Server	7 minutes	Create Complete	state changed

Displaying 3 items

Update a Stack



Stacks - OpenStack Dash x

10.0.0.11/horizon/project/stacks/

openstack demo

Project / Orchestration / Stacks

Stacks

Filter

+ Launch Stack Preview Stack Delete Stacks More Actions

Stack Name	Created	Updated	Status	Actions
<input type="checkbox"/> stack-name	11 minutes	Never	Create Complete	<div>2</div> <div>Check Stack</div> <div>Suspend Stack</div> <div>Resume Stack</div> <div>Change Stack Template</div> <div>Delete Stack</div>

Displaying 1 item

Update a Stack

Stacks - OpenStack Dash x

10.0.0.11/horizon/project/stacks/

openstack demo

Project

- Compute
- Network
- Orchestration
- Stacks**
- Resource Types
- Template Versions
- Object Store
- Identity

Stack

Display

Select Template 3

Template Source *

File

Template File ?

Choose File instance_example.hot

Environment Source

File

Environment File ?

Choose File No file chosen

Stack Name *

stack-name

Description:

Use one of the available template source options to specify the template to be used in creating this stack.

4

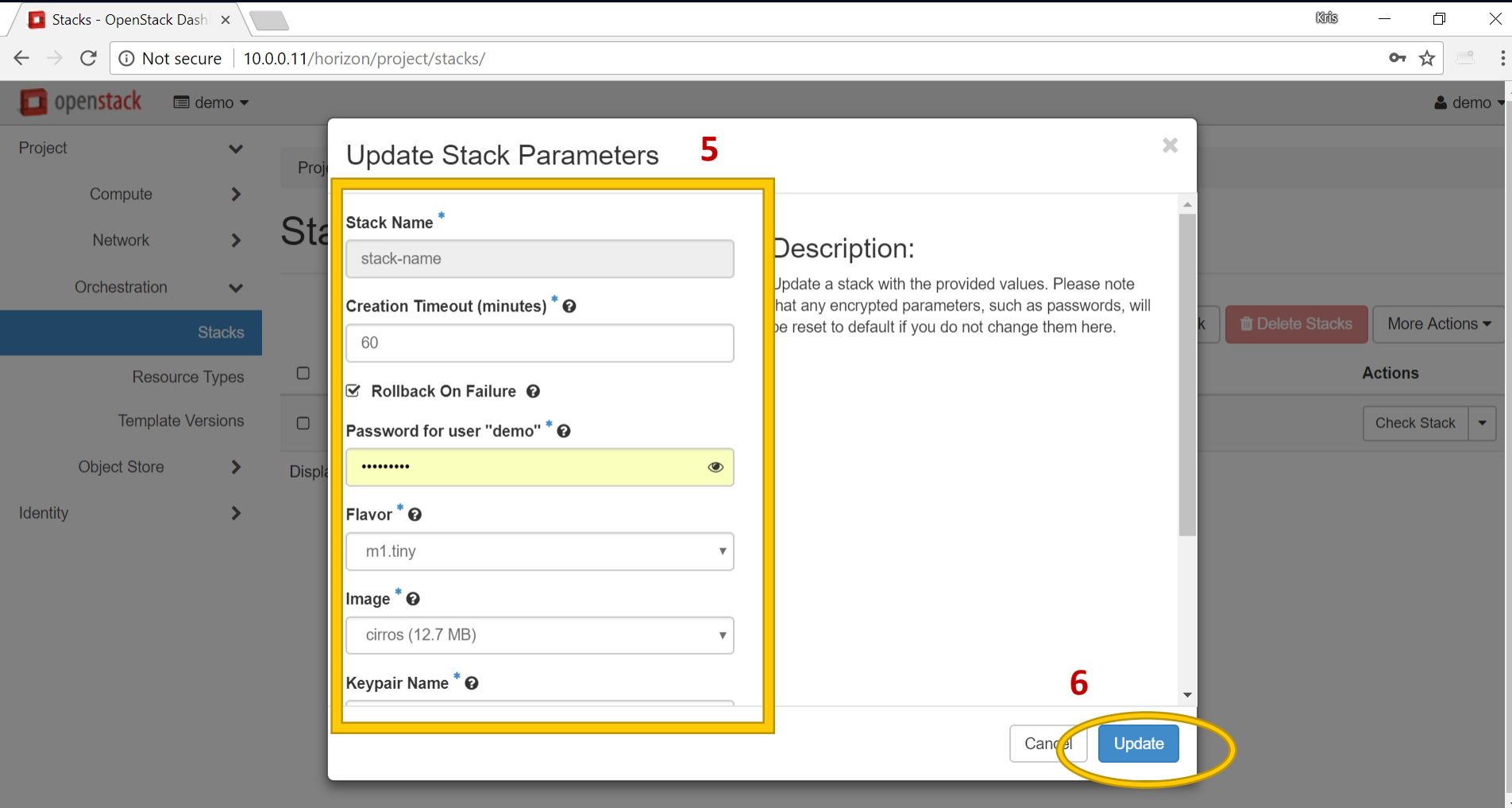
Cancel Next

Delete Stacks More Actions

Actions

Check Stack

Update a Stack



Stacks - OpenStack Dash x

Not secure | 10.0.0.11/horizon/project/stacks/

openstack demo

Project

- Compute
- Network
- Orchestration
- Stacks
- Resource Types
- Template Versions
- Object Store
- Identity

Update Stack Parameters 5

Stack Name *

stack-name

Creation Timeout (minutes) * ?

60

☒ Rollback On Failure ?

Password for user "demo" * ?

.....

Flavor * ?

m1.tiny

Image * ?

cirros (12.7 MB)

Keypair Name * ?

Description:

Update a stack with the provided values. Please note that any encrypted parameters, such as passwords, will be reset to default if you do not change them here.

Delete Stacks More Actions

Actions

Check Stack

Cancel Update 6

CLI Review

```
$ openstack stack create --enable-rollback \  
  --parameter <key=value> --parameter <key-value> \  
  --timeout <timeout> \  
  -t <template-file> <stack-name>
```

```
$ openstack stack list
```

```
$ openstack stack show <stack>
```

```
$ openstack stack output show --all <stack>
```

```
$ openstack stack resource list <stack>
```

```
$ openstack stack resource show <stack> <resource>
```

```
$ openstack stack event list <stack>
```

CLI Review

```
$ openstack stack update --timeout <timeout> \  
  --parameter <key=value> --parameter <key=value> \  
  -t <template-file> <stack-name>
```

```
$ openstack stack update --timeout <timeout> \  
  --existing --parameter <key=value> <stack-name>
```

```
$ openstack orchestration service list
```

Preparing to **Certified OpenStack Administrator** Exam

Section 10 – Heat Orchestration

Lecture 43. Heat Summary and Review

Thank you!