SUSE Cloud Orchestration

Turn up the Heat...

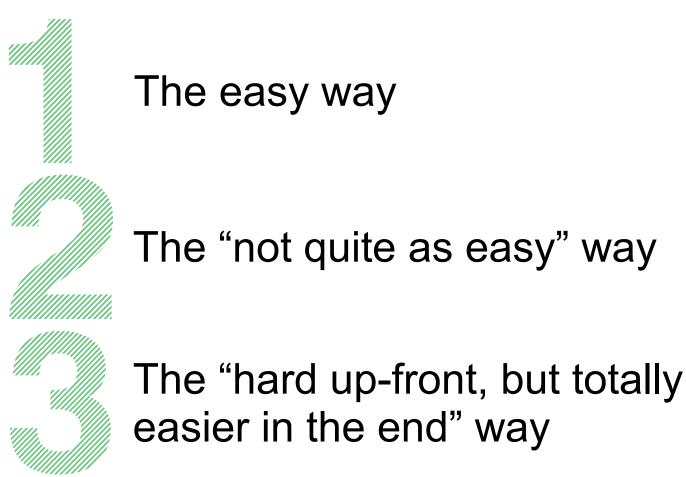
Rick Ashford

Senior Sales Engineer rashford@suse.com



Service Deployment

There are 3 ways to deploy services in the cloud:



The easy way ...

Manual deployment process

- Log into the dashboard
- Go to the images section
- Select your image(s) and launch it
- Configure networking and storage as necessary



Very quick and easy...
If you're doing it once

The "not quite as easy" way ...

Use the API

- Python libraries
- Script out the manipulation of compute, network, and storage



Labor intensive up front, but scales easily to large deployments



Not terribly friendly to all potential cloud users

The "hard up-front, but totally easier in the end" way

OpenStack Heat Project

- Incubated project for Grizzly
- Fully supported as of SUSE Cloud 3.0 (Havana)



openstack CLOUD SOFTWARE

Heat is a service to orchestrate multiple composite cloud applications

The "hard up-front, but totally easier in the end" way

"Heat is a service to orchestrate multiple composite cloud applications using the AWS Cloud Formation template format, through both an OpenStack-native ReST API and a CloudFormation-compatible Query API."



The "hard up-front, but totally easier in the end" way

"Heat is a service to orchestrate multiple composite cloud applications using the AWS Cloud Formation template format, through both an OpenStack-native ReST API and a CloudFormation-compatible Query API."



The "hard up-front, but totally easier in the end" way

Heat allows you to pre-define a set of compute, network, and storage requirements to provide a specific service, and deploy the whole thing *automagically*.

It's demo time!

Thank you.



How can I do this?

URL's for demo materials:

https://www.dropbox.com/s/wk9mmczqw2ybmys/heat-template-wordpress.json

https://www.dropbox.com/s/7334ic3d86aypsq/MySQL.x86_64-0.0.3.qcow2

https://www.dropbox.com/s/xtsk9lbcqludu72/Wordpress.x86_64-0.0.8.qcow2

Things you MUST change

```
"Parameters" : {
  "FloatingNetwork" : {
   "Description": "ID of the Nova floating network",
   "Type": "String",
   "Default": "b826047a-9364-4b66-b1f2-398202ff6907"
  "FixedNetwork" : {
   "Description": "ID of the Nova fixed network",
   "Type": "String",
   "Default": "e6c13332-3479-4be0-92a4-ffe8157836e0"
  "KeyName" : {
   "Description": "Name of an existing EC2 KeyPair to enable SSH
access to the instances",
   "Type": "String",
   "Default": "rashford"
```

Things you MUST change

```
"WWWSecGroup": {
 "Description": "UUID of project www security group",
 "Type": "String",
 "Default": "2833ce99-6027-483e-9b53-fd9b5df4345c"
"MySQLSecGroup": {
 "Description": "UUID of project mysql security group",
 "Type": "String",
 "Default": "554540ec-7fc8-4927-ac51-3a6bffa17372"
"DefaultSecGroup": {
 "Description": "UUID of project default security group",
 "Type": "String",
 "Default": "86942181-25a5-4c19-939d-08f33c64ef61"
```

Things to try...

(I haven't tried these yet, so I don't know how well they work)

Autoscaling

Load Balancing

Auto-Restart

Alternative applications

- Your favorite web application
- WSO2 application servers
- SAP application server(s) + database server

Check out the documentation:

http://docs.openstack.org/developer/heat/template_guide/index.html

Thank you.







Corporate Headquarters
Maxfeldstrasse 5

90409 Nuremberg Germany

+49 911 740 53 0 (Worldwide)

www.suse.com

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