

GET THE SLIDES!



INTRODUCTION TO MISTRAL

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This is not about...

Mistral-class amphibious assault ship



It's about
WORKFLOW AS A SERVICE

WORKFLOW

Set of connected

TASKS

and transition between them

TASK

An abstraction over

WORKFLOW

or

ACTION

ACTION

Simple, atomic

Python class which implements method *run*

WORKBOOK

Namespace for workflows

SUMMING UP

Workbooks consists workflows...

...which consists tasks...

...which consists action or...

...another workflow.

EXAMPLE

GET ME A VM!

Nah, that's easy!

```
$ openstack server create --image IMAGE --flavor FLAVOR INSTANCE_NAME
```

Is it really that simple?

Reality:

```
$ openstack server create --image IMAGE --flavor FLAVOR \
--nic net-id=NET-ID INSTANCE_NAME
$ openstack floating ip create public
$ openstack server add floating ip INSTANCE_NAME FLOATING_IP_ADDRESS

$ ssh user@FLOATING_IP_ADDRESS
```

What if there is a free
FLOATING IP?

What if there is lack of
FLOATING IP?

What if there is no
CONNECTION TO VM?

What if...

Of course, you can write a bash script for it...

...but firstly, you need to know how to...

...and then you need to maintain it.

MISTRAL

- Enables user to create any workflows
- Workflow execution may be triggered by:
 - events from ceilometer
 - at a certain time (cloud cron)
 - on demand (API call)

Can be run

AS OPENSTACK PROJECT

STANDALONE!

Getting back to

GET ME A VM!

Reminder:

```
$ openstack server create --image IMAGE --flavor FLAVOR INSTANCE_NAME
```

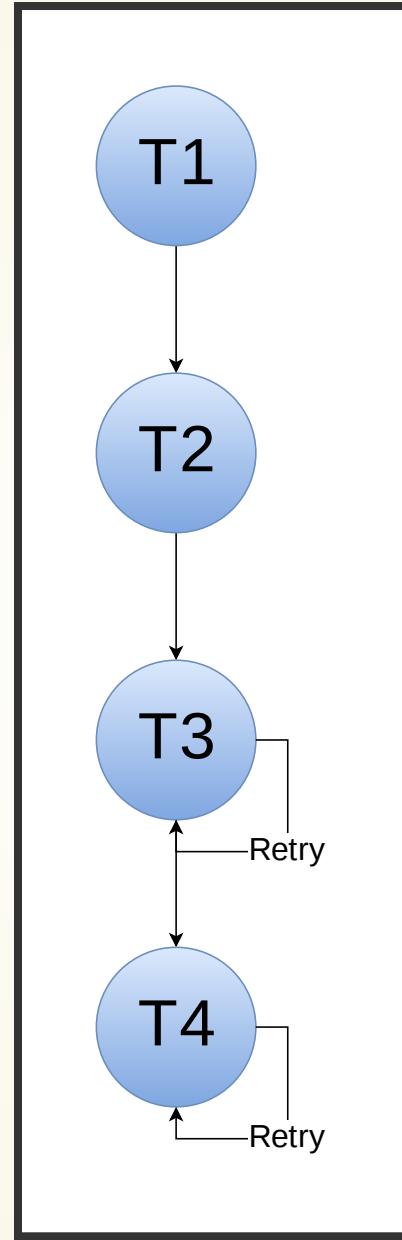
T1

LIVE DEMO

```
$ openstack server create --image IMAGE --flavor FLAVOR \
--nic net-id=NET-ID INSTANCE_NAME
$ openstack floating ip create public
$ openstack server add floating ip INSTANCE_NAME FLOATING_IP_ADDRESS

$ ssh user@FLOATING_IP_ADDRESS
```

RETRY

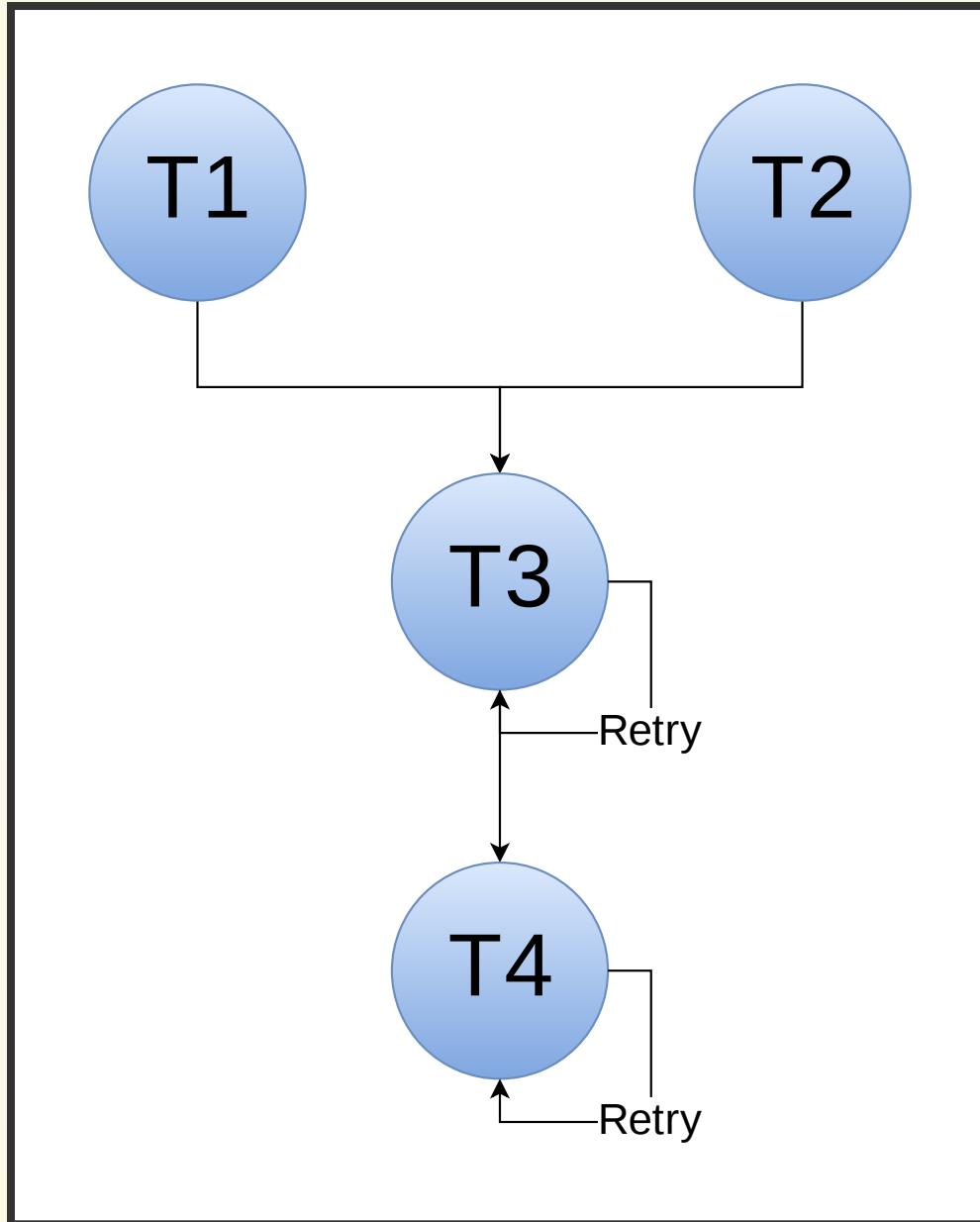


LIVE DEMO

Optimization using
JOIN

```
$ openstack server create --image IMAGE --flavor FLAVOR \
--nic net-id=NET-ID INSTANCE_NAME
$ openstack floating ip create public
$ openstack server add floating ip INSTANCE_NAME FLOATING_IP_ADDRESS

$ ssh user@FLOATING_IP_ADDRESS
```



LIVE DEMO

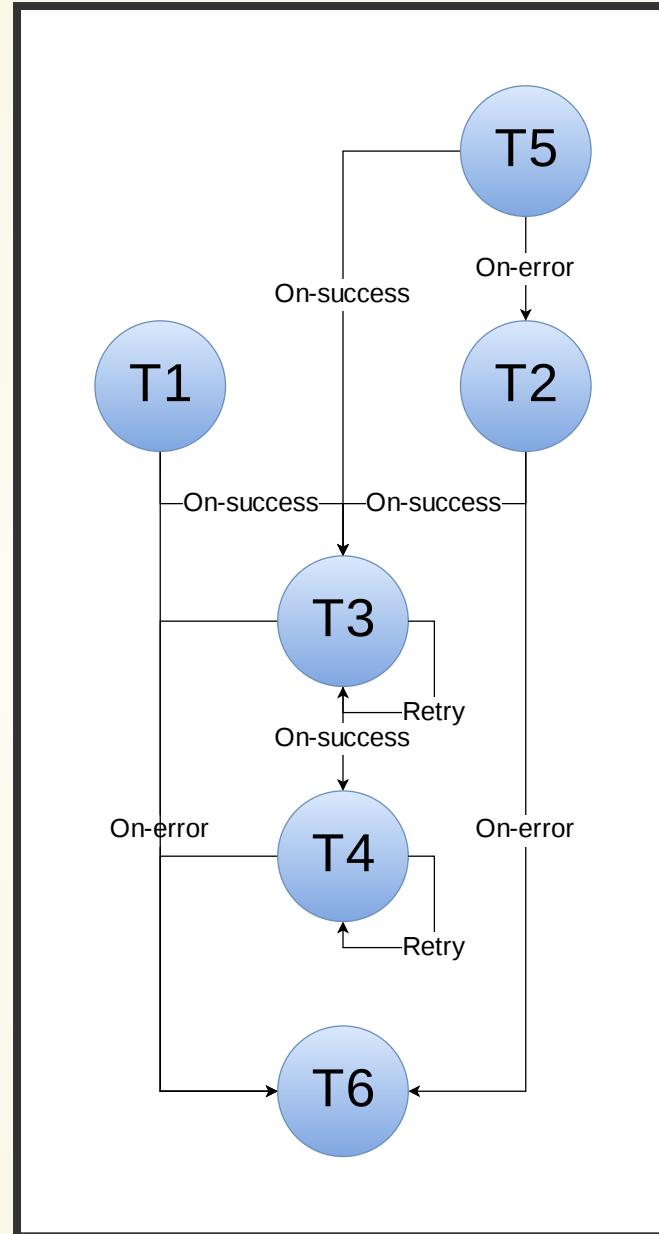
Adding

WHAT IFs

ON-SUCCESS

and

ON-ERROR



CUSTOM ACTIONS

LIVE DEMO

Want to start more instances?

WITH-ITEMS FOR THE RESCUE!

LIVE DEMO

JOIN US!

- Weekly meeting every Monday, 16UTC on IRC
#openstack-meeting
- On IRC #openstack-mistral
- On mailing list, using tag [mistral]

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