ubuntu
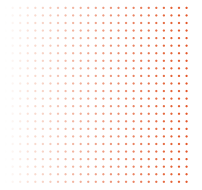
The top 12 questions about Juju
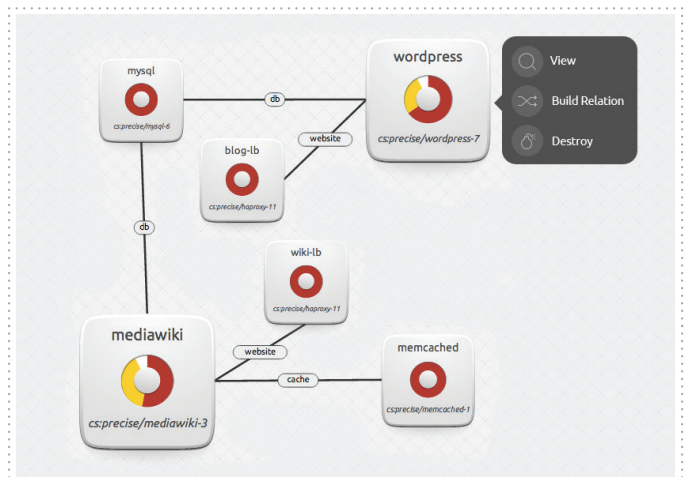
1 What is Juju?

Juju is the state of the art service orchestration tool from Canonical. It is part of Ubuntu's cloud suite, together with Ubuntu Server, OpenStack, MAAS for bare-metal provisioning, and Landscape for systems management and monitoring.

2 What is service orchestration?

There are several definitions of the term, but we see service orchestration as the ability to quickly and easily deploy and manage services (whether it's a cloud infrastructure like OpenStack, or a workload such as Hadoop), create relationships between them, and quickly adapt to changes in demand, all without disruption to your cloud environment. The detailed knowledge about the services, including configuration, dependencies, etc. is encapsulated in service definition files called 'charms'. All you have to do is call an available charm (or write your own), and the corresponding service will be deployed in seconds.

3 Is Juju similar to Puppet or Chef?

In some ways. Puppet and Chef are great tools for configuring servers and keeping them consistent across a network. Juju works a layer above that by focusing on the service the application delivers, regardless of the machine on which it runs. One of the main advantages of Juju is its dynamic configuration ability, which allows you to re-configure services on the fly, add, remove, or change relationships between services, and scale in or out with ease.
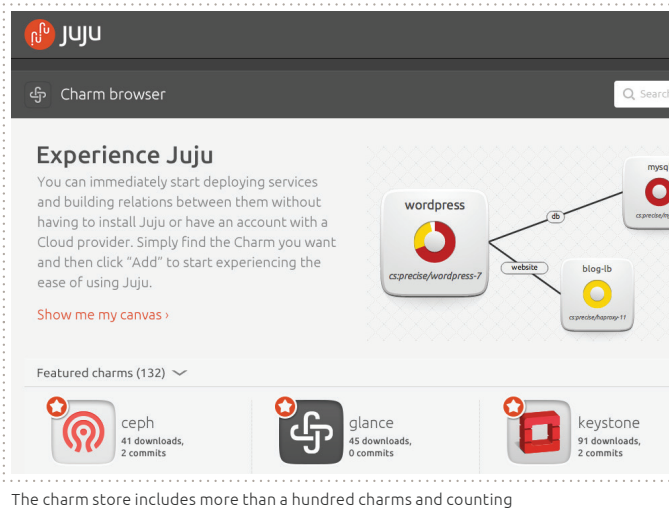
Visualise your cloud environment with the Juju GUI

4 How can I use Juju with Puppet or Chef?

If you are using a configuration management tool to get your machines up and running, Juju can complement it with the service orchestration layer which performs all the tasks described above. Integration is quite straightforward. Because Juju charms can be written in any language, you can include your existing Puppet or Chef code in a Juju charm. No need to write new code.

5 Can I use Juju in a non-Ubuntu environment?

Not yet, but we are working on broadening the number of operating systems that Juju is able to work with. The client however can run on Linux or OSX, with Windows support coming soon.

CANONICAL

The charm store includes more than a hundred charms and counting

6 ⋮ Can I use Juju to move services across clouds?

You can use Juju to copy application architectures and recreate them on a wide number of clouds and deployment platforms. Right now you cannot have services spanning different clouds but this is something we hope to add in an upcoming release.

7 ⋮ What language are charms written in?

Charms are typically written in bash script, perl, php, or python, but can actually be written in any language that runs on Ubuntu.

8 ⋮ What charms are currently available?

Charms are available for hundreds of common open source applications such as MySQL, MongoDB and others, with new ones being added every day. Check out our charms store for an up to the minute list of charms: **jujucharms.com**

9 ⋮ Can I write my own charms? How?

Absolutely. Using the language of your choice, and for the application you need, whether it's off-the-shelf or custom. If you want, you can also share your charm with the world and gain lots of brownie points! As always, there is a whole host of tools to help you get started: **juju.ubuntu.com/resources**

And if you get stuck, our vast developer community is only a click away.

10 ⋮ OK, so in summary, why should I use Juju?

• Juju is the fastest way to quickly deploy an OpenStack cloud – reduce the time from days to minutes

• Works with your existing configuration management tool

• Scale your big data cluster up or down very easily

• No prior knowledge needed of the application stack (contrary to other tools)

• GUI and command line tool – allows you to experiment and visualise what you're doing

• Includes providers for all major public clouds

• Offers you a quick and easy environment to test deployments on a local machine

• Charm Store: download optimised charms, each written and continually enhanced by experts in that service

• Environment portability: deploy the same charms to EC2, OpenStack, your data center and your laptop

11 ⋮ I need enterprise-grade support. Is that available?

Absolutely. Canonical, the company behind Ubuntu, provides professional, commercial support for the entire Ubuntu cloud suite. Even better, Landscape, our enterprise systems management tool, is included in all of our support packages. Check out Ubuntu Advantage, Canonical's support programme, and choose the level of service you need: **ubuntu.com/cloud/management**

12 ⋮ Where can I learn more?

The Ubuntu Cloud pages give you an overview of our cloud suite and how Juju fits in: **ubuntu.com/cloud**

The Juju community pages include information on charms, getting started, and lots more: **juju.ubuntu.com**

Ready to speak to us? Get in touch with Canonical now: **ubuntu.com/management/contact-us**

Ask about our other publications

• OpenStack Primer
• Top questions about MAAS
• Ubuntu Cloud
• Landscape for Cloud

CANONICAL