

# Configuration management and Puppet

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# How do I make millions !

I wrote a website, 5 of my mates use it.

In 4 years, I will have a 300 million users, 30 employees and a yacht.

I'm going to live the dream.

# This should be easy !

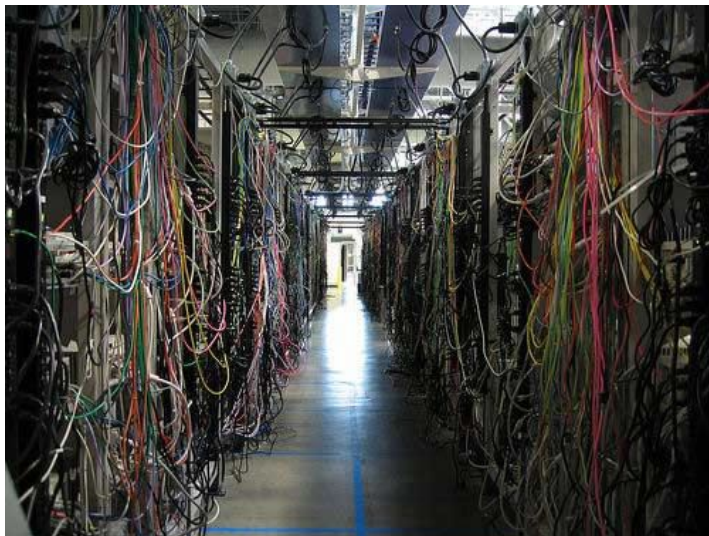
- How the hell do we scale for more users ?
- How the hell do we get 30 people working on it simultaneously ?
- How the hell do we handle failure ?
- How the hell do I know everything is running ok ?

# Provisioning and scale

- A laptop will probably be good for another couple of users ?
- Just buying a bigger machine every time, or buy lots of machines. How many machines do twitter use 10, 100, 1000 ?
- Just pay someone else to run it, Google are good guys ?
- Website hasn't gone down yet, it is bulletproof !

# Configuration and management

Easy to get from my single pet laptop



To Infrastructure that matches facebook, twitter ...

# Deployment and development

- I'll hire smart people to work on the code
- Who needs testing ? My customers do that
- Develop on the live website, that's what everyone does ??

Maybe you should give up, it's just not worth the effort

Is there a tool set out there to help you succeed ?



Configuration management - It can be easy.

# What can Puppet do?

- Install and configure software on multiple servers , all from a centralised location
  - Using Puppet's own language: "The Puppet Language"
- Ensure the desired configuration remains in place
  - If someone or something makes a change, puppet will change it back!

# Modules: Giving Puppet intelligence

- Out of the box, Puppet can “only” modify basic system resources such as files, services and packages
- Addon “Modules” abstract the above basic resources to the user, and gives Puppet the additional intelligence required to configure a specific piece of software
- There are **currently over 3,800 free and open-source modules**, most of which are submitted by the community: E.g: YOU!

# The Puppet Forge

The screenshot shows the Puppet Forge website interface. At the top, there is a navigation bar with links for Open Source Projects, Docs, Support, Ask, Bug Tracker, Security, and Puppet Labs. Below this is the Puppet Forge logo and a search bar containing "Search from 3,917 modules" with a "Find" button. To the right of the search bar are links for "Publish a Module", "Sign Up", and "Log In".

The main content area features the "puppetlabs/apache" module page. It includes the module's logo, a "SUPPORTED" badge, and a description: "Installs, configures, and manages Apache virtual hosts, web services, and modules." Below the description are links for "by: Puppet Labs", "Project URL", and "Report issues".

A section titled "Latest version is compatible with:" lists the following:

- Puppet Enterprise >= 3.7.0 < 2015.4.0
- Puppet >= 3.0.0 < 5.0.0
- RedHat, Ubuntu, Debian, SLES, Scientific, CentOS, OracleLinux

Tags listed include: apache, debian, web, virtualhost, passenger, proxy, ubuntu, ssl, rhel, apache2, httpd, centos, wsgi, virtual-host.

A command box shows: `puppet module install puppetlabs-apache`. To the right of the command box, it displays "1,064,171" downloads and "Latest version: 821". A link "download latest tar.gz" is also present.

On the right side of the module page, there are two metrics:

- Quality Score:** 5.0 (represented by a green bar). Below it, it says "1% decline with last release" and has a "details" link.
- Community Rating:** 4.0 (represented by a green bar). Below it, it says "Based on 113 questions answered" and has a "details" link.

Below these metrics is a section titled "Tell us about this module" with several questions and rating options:

- How helpful are the docs? (not at all, helpful)
- How easy to use? (hard, easy)
- Does what it promises? (Y, N)
- Works without changes? (Y, N)
- Used in production? (Y, N)

At the bottom of the module page, it says "Version 1.8.0 released Jan 26th 2016" and "Select another release: 1.8.0" with a "Download" button.

Below the module page, there are links for "README", "Types", "Changelog", "Dependencies", "Compatibility", "License", and "Scores".

The page title is "apache" and there is a "Table of Contents" section with the following items:

1. Module description - What is the apache module, and what does it do?
2. Setup - The basics of getting started with apache
  - Beginning with Apache - Installation
3. Usage - The classes and defined types available for configuration
  - Configuring virtual hosts - Examples to help get started

Let's configure the Apache Webserver, using the *puppetlabs-apache* module....

Thank you.

[forge.puppetlabs.com](https://forge.puppetlabs.com)  
&  
[learn.puppetlabs.com](https://learn.puppetlabs.com)

# Puppet Labs

The leader in IT Automation

## EXPERIENCE

Founded in 2005

## SCALE

Over 10 million nodes managed

## ECOSYSTEM

Deep partnerships with datacenter titans

## CUSTOMERS

1000+ enterprise customers

## COMMUNITY

3,600+ community-contributed modules

## USERS

30,000+ organizations use Puppet

## BACKING

vmware KPCB  trueventures  Google ventures 