Solving Problems Fast

- You are planning a resource-demanding experiment
- You want to play around, trying different scenarios for your solution, by pressing a couple of buttons
- You want to get the results fast

Harness the resources

- Typical High-Performance node has 8-16 cores and 8-16-32 GB of RAM
- Those nodes are powerful and easy to allocate
- But they are … empty

Put Node to Life

- Provision a node – install all the packages needed to solve the problem
- Loosing money while do it manually? Potentially repeat many times?
- Use special ‘recipes’, from Puppet:
  - ✔ Install packages you need automatically and remotely
  - ✔ Reuse the same code to provision different systems

The Case: “Bank Client Satisfaction”

Provisioning solution to solve the case:

1) The ready to use environment is being created in 15-20 minutes in a fully automated manner (instead of several hours) and can be recreated in the case of a node failure

2)The environment provides intuitive and user-friendly Web-based interface

3) The solution is hosted by GitHub and can be easy installed on a local machine to steer the remote calculations

4) Having more time the solution would become more versatile to support different OS, like MacOS, Windows, different flavours of Linux