Python.... via Ansible

John Navitsky

Look, if he was dying, he wouldn't bother to carve "Aaargh."













A problem

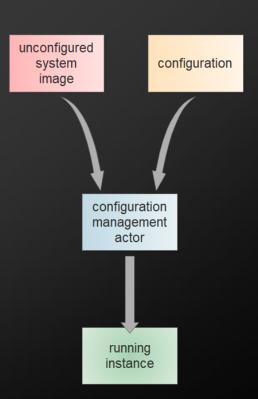
- Say you had 20-50K "computers" (nodes) to configure
- Say they (mostly) didn't have persistent storage
- Say they don't have a uniform configuration
- Say you needed to get all these nodes booted and configured relatively quickly... at the same time

Tenants

- Separation of configuration, content
- Configuration and content shall be managed

An approach

- Application of configuration to unmanaged image at boot time
- "Pull" model to facilitate scalability



An actor

Ansible

- Simple
- Modular/Extensible
- YAML/JSON variables
- On-demand execution
- Written in Python

Some Ansible

- http://docs.ansible.com/ansible/latest/modules by category.html
- http://docs.ansible.com/ansible/latest/playbooks_variables.html
- http://docs.ansible.com/ansible/latest/playbooks_loops.html

Demo time!

- Anatomy of an Ansible play
- Example simple 1: ntp servers
- Example simple 2: group data
- Example simple3: things that make you go "hmmmm..."
- Example less_simple: ouch

Takeaways

- Data-structures
- Python methods
- The line between Ansible and Python is "wafer-thin"
- Writing modules, filters

