ANSIBLE

AND WHY IT WORKS FOR ME

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DESCRIPTION

A 25 minute overview of the what, where, how, and why of using Ansible. Covers alternatives, what Ansible is, what Ansible's dependencies are, jargon pertaining to Ansible, and what it can do to make your life easier. Also includes some tips and tricks for everyday use.

SPEAKER BIO

Charles Yost is currently a Security Developer at Binary Defense Systems. He has worked in the IT industry for over 10 years in a wide variety of roles including: Printer Technician, VoIP Systems Administrator, .Net Developer, and Web Developer. Throughout life his number one passion has been learning new skills. He can often be found researching a topic, attempting to keep up with the quickly evolving field of technology. Charles enjoys teaching and talking to others about technology. He is a member of NEOISF, and attends as many InfoSec conferences as he can justify with his wife.

CONTACT

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This Talk:

https://github.com/Yoshi325/talks-ansible

SHOWTIME

SOME ALTERNATIVES

Here are some alternatives:

- Chef
- Puppet
- Salt (a.k.a. SaltStack)
- and **Many Others**

Many differences exist between
these alternatives and Ansible.
We will review those differences later.

WHAT IS ANSIBLE?

A way to maintain sanity in the complex and ever-changing world of system configuration.

Me

WHAT'S IN A NAME

It was named "Ansible" after the fictional instantaneous hyperspace communication system featured in Orson Scott Card's Ender's Game, and originally invented by Ursula K. Le Guin for her 1966 novel Rocannon's World."

Ansible (software) | Wikipedia

Also, Releases are named after Van Halen songs.

SERVER

(CONTROL MACHINE)

Linux or Mac

SSH

Python (2.6 or later)

CLIENT

(MANAGED NODE)

Linux, Mac, or Windows

SSH or PowerShell

Python (2.4 or later)

Thats it.

LEARN THE LINGO

BONUS LINGO

Galaxy

Tower (Optional!)

OTHER DETAILS

PUTTING IT ALL TOGETHER

- Create your inventory
- Create your playbook
  - Create tasks for your playbook or role; utilizing modules
  - Use variables in your tasks
  - Use handlers to chain dependent actions

TIPS, TRICKS, & PITFALLS

How-To iterate over a list from a shell command:

```
shell: /command/which/generates/lines
register: output

...

when: item not in output.stdout_lines
```

TIPS, TRICKS, & PITFALLS

Store host specific variables in a host_vars folder.

TIPS, TRICKS, & PITFALLS

To only run a task when a list is **NOT** empty.

when: list|length > 0

TIPS, TRICKS, & PITFALLS

If your task hangs forever and is using sudo, confirm that you passed the:

--ask-sudo-pass

comand line option when you ran ansible.

TIPS, TRICKS, & PITFALLS

There are two ways to structure variables:

1. **Dictionary:**
   networking.interface.ip
2. **Scalar:**
   networking_interface_ip

The drawback to dictionaries is:
   when you set a value somewhere else, it will replace the **whole** dictionary. It does not merge it.

BACK TO THOSE ALTERNATIVES

THE END

RESOURCES AND CREDITS

Insanely complete Ansible playbook, showing off all the options

Insanely complete Ansible playbook, showing off all the options | marktheunissen's fork

Install Ansible, Create Your Inventory File, and Run an Ansible Playbook and Some Ansible Commands

Ansible (Real Life) Good Practices

USING ANSIBLE TO RESTORE DEVELOPER SANITY

https://wikpedia.org

http://www.ansible.com/home