



**RIPE NCC**  
RIPE NETWORK COORDINATION CENTRE

# Ansible tricks

Anand Buddhdev | 14/3/2016 | Ansible Meetup

# Ansible at RIPE NCC



- Over 500 servers
  - DNS, BGP route collectors, Hadoop, ELK
- Playbooks in git repo
- Pull-mode
  - Distribution servers does “git pull”
  - Clients rsync from distribution server
  - “./playbook.yml -c local -I \$(hostname)”
- Push mode also possible from git repo checkout



# General tricks

# Executable playbooks



```
#!/usr/bin/env ansible-playbook
```

```
- hosts: myhosts
```

```
tasks:
```

```
- module1: params
```

```
- module2: params
```

```
$ chmod +x playbook.yml
```

```
$ ./playbook.yml ...
```

# Hostnames to IP addresses



```
{% for host in groups['kroot'] %}  
{% set addrs = ( lookup('dig',host), lookup('dig',host+'/aaaa') ) %}  
{% for addr in addrs | ipaddr %}  
{{ addr }};  
{% endfor %}  
{% endfor %}
```

# Assert conditions



- name: is hash merging set

assert:

that: “‘{{ lookup('env','ANSIBLE\_HASH\_BEHAVIOUR') }}’ == ‘merge’”

tags: always



# **Ansible 2 tricks**

# Blocks - grouping conditions



- name: task 1  
  module1: params  
  when: condition
- name: task 2  
  module2: params  
  when: condition



# Blocks - grouping conditions



- block:
  - name: task 1  
module1: params
  - name: task 2  
module2: params
- when: condition

# Blocks - graceful recovery



- block:
  - name: vmtoolsd process
  - command: pgrep vmtoolsd
- rescue:
  - name: restart vmtoolsd
  - service: name=vmtoolsd state=restarted

# Loops with multiple tasks



- name: task 1  
module1: param={{ item }}  
with\_items:
  - a
  - b
- name: task 2  
module2: param={{ item }}  
with\_items:
  - a
  - b



# Loops with includes

role/tasks/block.yml:

- name: task 1  
  module1: param={{ item }}
- name: task 2  
  module2: param={{ item }}

role/tasks/main.yml:

- include: block.yml  
  with\_items:
  - a
  - b