Check_MK Conference
Check_MK & Ansible

A step towards self healing IT systems
A bit about us

IT Service Provider
- Full stack monitoring
- Cloud
- HPC
- Security
- Training & Coaching
A bit about us

Check_MK initiatives
- Some checks
- Romanian translation

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- https://github.com/spearheadsys
- https://github.com/orgs/spearheadsys/people/mariuspana
- https://www.youtube.com/user/spearheadsystems
- https://www.youtube.com/channel/UCJW5NSgY-G99Czbu4FJzVQG
A bit about this presentation

IT is a tool
IT should make life easier
Self configuration
Self healing
Caveats

Some things may not work properly
Some things are a bit ugly
Security should be thought out
Feedback Loop
A bit about Ansible

Ansible is an IT automation tool. It can configure systems, deploy software, and orchestrate more advanced IT tasks such as continuous deployments or zero downtime rolling updates.
A bit about Ansible

Configuration Management
Continuous Delivery
Application Deployment
Provisioning
Security & Compliance
We model our IT infrastructures using Ansible.

We define what our servers should look like and what their state should be.

Check_MK ensures that services and states match our desired model.
Ansible & Check_MK

- Deploy
- Monitor
- Enforce
A bit more about Ansible

Inventory
- simple text file
- inventory plugin

Playbooks
- simple, elegant orchestration

Ad hoc parallel task execution
- ansible all -m ping
Ansible inventory example

192.168.0.1

[test]
10.88.88.192
our.internal.host.com

[webservers]
www[01:50].example.com
jumper ansible_port=5555 ansible_host=192.168.1.50

[atlanta]
host1 http_port=80 maxRequestsPerChild=808

[southeast:children]
atlanta
Ansible playbook example

```yaml
---
- hosts: loadbalancers
  roles:
    - common
    - loadbalancer

- hosts: webservers
  roles:
    - common
    - content
```
Ansible playbook example (cont.)

---

- yum: name=ntp state=installed
  tags:
    - packages

- service: name=ntpd state=running enabled=yes
  tags:
    - ntpd

- template: src/opt/tpl/ntp.j2 dest=/etc/ntp.conf
  notify:
    - restart ntpd
Ansible playbook example (cont.)

---

- name: restart ntpd
  service: name=ntpd state=restarted
  tags:
    - ntpd

- name: restart ssh
  service: name=sshd state=restarted
  tags:
    - sshd
Deploy phase
Deploy phase (cont.)

- *check_mk_agent* (inc. plugins, local checks, etc.)
- *add host to check_mk server (WATO webapi)*
Monitoring phase

- Deploy
- Monitor
- Enforce
Enforce phase

- Deploy
- Monitor
- Enforce
Enforce phase - autoscaling

- Scale up or down based on metrics
- Scaling pushes back into deploy
- Use with cluster mgmt tools

Deploy | Monitor

Enforce
Demo
Danke schön