MANAGING UYUNI

WITH ANSIBLE

WHOAMI

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> Linux, Virtualization, DevOps, Infrastructure as Code

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> Moderating the FOCUS ON: Linux podcast (german)

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> **Automating patch management** is a requirement for a lot of customers
>> e.g. using AWX / Ansible Automation Platform

>> complex workflows for fully-automated system maintenance

* see Forrester reports from 2018 and 2019

PREVIOUSLY: INSTALL UYUNI VIA ANSIBLE

```yaml
---
- hosts: uyuni.giertz.loc
  become: true
  roles:
    - role: stdevel.uyuni
      setup_cefs: true
      setup_cefs_cronjob: true
      channels:
        - {"name": "centos7", "arch": "x86_64"}
        - {"name": "centos7-updates", "arch": "x86_64"}
```

Simple playbook for installing Uyuni and configuring channels:

```
$ ansible-playbook deploy_uyuni.yml
```

Role `stdevel.uyuni` is available on Ansible Galaxy

SUSE MANAGER

Deploying **SUSE Manager 4.x** is also possible:

```yaml
---
- hosts: mgmt.pinkepank.ltd
  remote_user: root
  become: true
  roles:
    - role: stdevel.uyuni
      scc_reg_code: DERP1337LULZ
      scc_mail: bla@foo.bar
```

SUSE Customer Center **registration code** and **mail address**.

```
$ ansible-playbook deploy_suma.yml
```

// SYSTEM MAINTENANCE AUTOMATION

Daily system tasks could also be automated*:

> > installing **patches** and package upgrades

> > rebooting hosts

> > managing host information
> > > **software channels**

> > managing Content Lifecycle Projects

> > applying Salt Highstates

* can already be set via `spacecmd`, but not via Ansible

UYUNI ANSIBLE COLLECTION

> **WIP**: Ansible Collection `stdevel.uyuni`
>> currently only available via GitHub

>> can install patches/upgrades and reboot hosts

>> include/exclude parameters, **idempotence**

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`requirements.yml` definition:

```
---
collections:
  - name: git+http://github.com/stdevel/ansible-collection-uyuni.git
    scm: git
    version: main
```

PLAYBOOK: INSTALLING PATCHES/UPGRADES

```yaml
- name: Install patches
  stdevel.uyuni.install_patches:
    uyuni_host: 192.168.1.100
    uyuni_user: admin
    uyuni_password: admin
    uyuni_verify_ssl: false
    name: uyuni-client.labwi.sva.de
    # include_patches:
    #     - openSUSE-SLE-15.3-2022-2586
    # exclude_patches:
    #   - openSUSE-2022-10013
```

> API endpoint connection details are required (`XMLRPCClient`)

> `include_patches` and `exclude_patches` can be used to limit patch selection

> if both are unspecified, **all** patches are installed

PLAYBOOK: INSTALLING PATCHES/UPGRADES

```
- name: Install upgrades
  stdevel.uyuni.install_upgrades:
    uyuni_host: 192.168.1.100
    uyuni_user: admin
    uyuni_password: admin
    uyuni_verify_ssl: false
    name: uyuni-client.labwi.sva.de
    # include_upgrades:
    #    - foobar
    # exclude_upgrades:
    #    - codium
```

> `include_upgrades` and `exclude_upgrades` can be used to limit patch selection

> if both are unspecified, **all** upgrades are installed

DEMO TIME

FUTURE

> `stdevel.uyuni` role will be part of this collection

> **additional** roles planned:
  > `stdevel.uyuni_upgrade` – Upgrading installations

  > `stdevel.uyuni_proxy` – Proxy installations

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> support for additional **functionality**
>> Content Lifecycle Projects

>> host information

>> …

> Contributions and **feedback** are always welcome!

QUESTIONS?