



# What's new in host deploy?

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# Nice to meet you :)



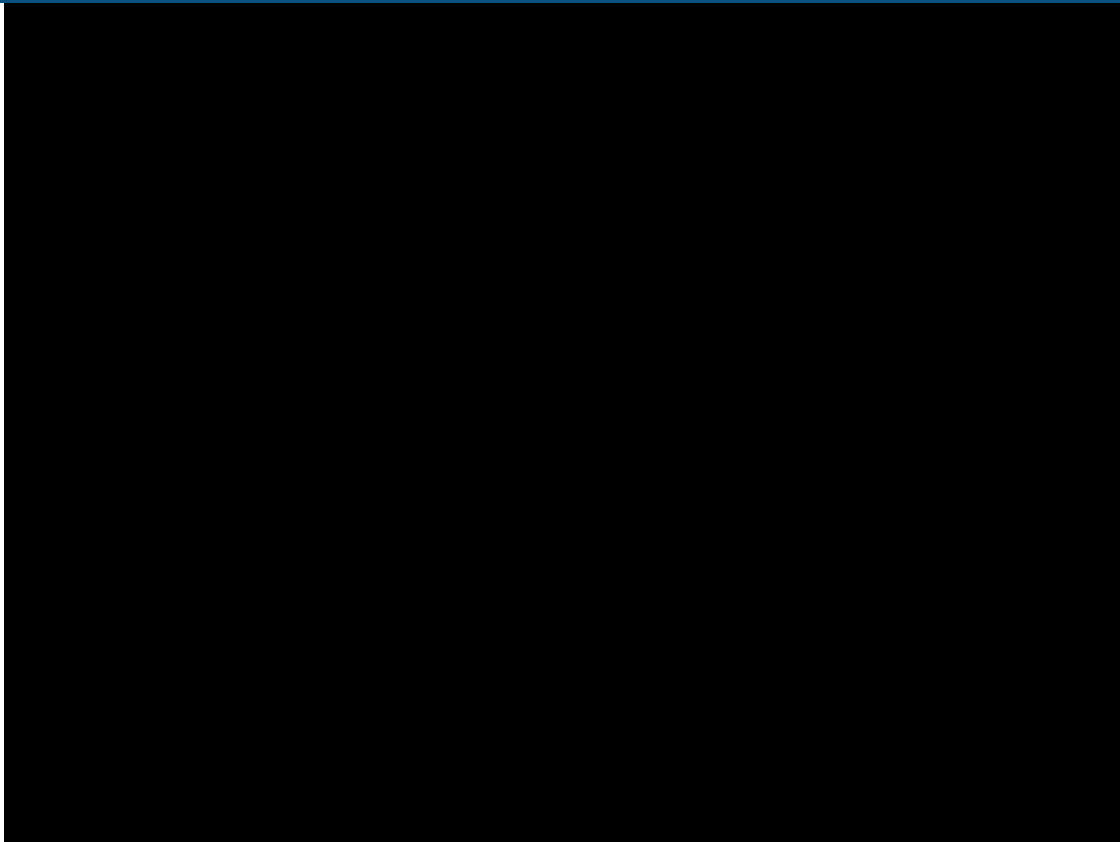
- Backend developer, Infra team
- Maintainer:
  - Host install & upgrade
  - Ansible Runner Service
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# Content

- Host deploy up until 4.4 and the motivation for change
- Background on Ansible & Ansible Runner Service
- Troubleshooting
- Demo
- Summary

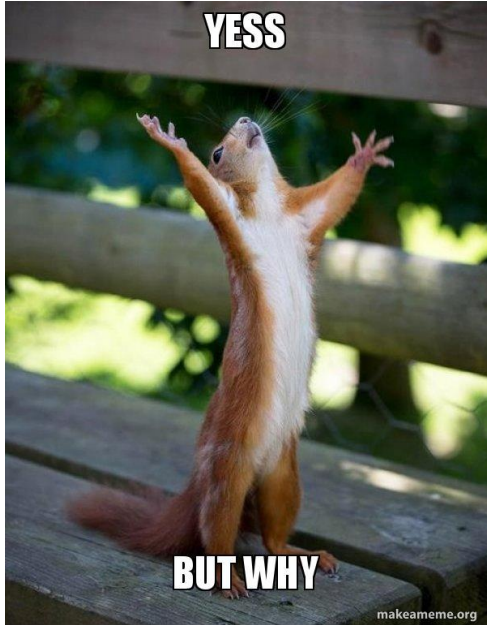
# Old host deploy demo



# Old host deploy log

```
2020-08-21 14:25:10,697+0300 DEBUG otopi.context context.dumpSequence:665 SEQUENCE DUMP - BEGIN
2020-08-21 14:25:10,697+0300 DEBUG otopi.context context.dumpSequence:667 STAGE boot
2020-08-21 14:25:10,697+0300 DEBUG otopi.context context.dumpSequence:672 METHOD otopi.plugins.ovirt_host_deploy.core.misc.Plugin._p
reinit (None)
2020-08-21 14:25:10,697+0300 DEBUG otopi.context context.dumpSequence:672 METHOD otopi.plugins.otopi.core.log.Plugin._init (otopi.co
re.log.init)
2020-08-21 14:25:10,697+0300 DEBUG otopi.context context.dumpSequence:672 METHOD otopi.plugins.otopi.core.misc.Plugin._init (None)
2020-08-21 14:25:10,697+0300 DEBUG otopi.context context.dumpSequence:672 METHOD otopi.plugins.otopi.dialog.misc.Plugin._init (otopi
.dialog.misc.boot)
2020-08-21 14:25:10,697+0300 DEBUG otopi.context context.dumpSequence:672 METHOD otopi.plugins.otopi.system.info.Plugin._init (None)
2020-08-21 14:25:10,698+0300 DEBUG otopi.context context.dumpSequence:672 METHOD otopi.plugins.otopi.dialog.human.Plugin._init (None
)
2020-08-21 14:25:10,698+0300 DEBUG otopi.context context.dumpSequence:672 METHOD otopi.plugins.otopi.dialog.machine.Plugin._init (No
ne)
2020-08-21 14:25:10,698+0300 DEBUG otopi.context context.dumpSequence:672 METHOD otopi.plugins.otopi.dialog.misc.Plugin._boot_misc_d
one (otopi.dialog.boot.done)
2020-08-21 14:25:10,698+0300 DEBUG otopi.context context.dumpSequence:672 METHOD otopi.plugins.otopi.packagers.dnfpackager.Plugin._b
oot (None)
2020-08-21 14:25:10,698+0300 DEBUG otopi.context context.dumpSequence:672 METHOD otopi.plugins.otopi.packagers.yumpackager.Plugin._b
oot (otopi.packagers.yum.boot)
```

# Host deploy - From Otopi to Ansible based process



- Hard versus easy to understand and add new roles
- Already in use (host upgrade)
- The change is transparent

# Ansible properties



- Open source IT configuration management & automation platform
- Simple to setup and use
- Human readable - YAML
- Agentless:
  - Potential failure ❌
  - Security vulnerability ❌
  - Saves system resources ✓
- Idempotent

# Ansible Runner

- Python library that helps interacting with Ansible
- Responsible for running `ansible` & `ansible-playbook` tasks
  - `ansible all -m ping`
  - `ansible-playbook <playbook-name>`
- Connect over SSH by default



# Ansible tasks - code snippet

## ovirt-host-deploy-vdsm:

- **name:** Install dmidecode package
  - yum:**
    - name:** dmidecode
    - state:** present
- **name:** Detect vdsmd id for x86\_64 or i686
  - shell:** dmidecode -s system-uuid
  - register:** vdsmd\_id\_res
  - tags:**
    - skip\_ansible\_lint # E305

# Playbook results

```
    },  
    "_ansible_no_log" : false,  
    "_ansible_delegated_vars" : { }  
  },  
  "start" : "2020-06-30T11:07:47.711493",  
  "end" : "2020-06-30T11:07:48.276494",  
  "duration" : 0.565001,  
  "event_loop" : null,  
  "uuid" : "5bf0a383-0bad-488b-be97-f39091baf917"
```

```
  }
```

```
}
```

```
}
```

```
2020-06-30 14:07:50 IDT - TASK [Executing post tasks defined by user] *****
```

```
2020-06-30 14:07:50 IDT - PLAY RECAP *****
```

```
192.168.100.191      : ok=90   changed=27   unreachable=0   failed=0   skipped=50   rescued=0   ignored=1
```

```
(END)
```

# Config file


/etc/ansible-runner-service/config.yaml

```
---  
playbooks_root_dir: '/home/delfassy/ovirt-engine-master/share/ovirt-engine/ansible-runner-service-project'  
ssh_private_key: '/home/delfassy/ovirt-engine-master/etc/pki/ovirt-engine/keys/engine_id_rsa'  
port: 50001  
target_user: root
```

# Troubleshooting

- Host deploy & upgrade
  - `/var/log/ovirt-engine/host-deploy/ovirt-host-deploy-ansible-20200604152720-192.168.100.249-3c4043cf-7edc-4d67-be45-9f5b14741533.log`
  - `/var/log/ovirt-engine/host-deploy/ovirt-host-mgmt-ansible-check-20200604153101-192.168.100.249-7d324986-f09b-4518-92fb-34088af8a1ff.log`
- Ansible Runner Service
  - `/var/log/ovirt-engine/ansible-runner-service.log`

# Troubleshooting

	Time	Message
	Jun 28, 2020, 12:36:33 PM	Host centos8 installation failed. Task Start and enable services failed to execute. Please check logs for more details: /home/delfassy/ovirt-engine-master/var/log/ovi...

# Host upgrade log

```
2020-06-04 15:37:43 IDT - TASK [ovirt-host-upgrade : Upgrade packages] *****
*****
2020-06-04 16:08:23 IDT - failed: [192.168.100.249] (item=vdsm-python.noarch) => {"ansible_loop_var": "item", "changed": false, "item": "vdsm-python.noarch", "msg": "Failed to download metadata for repo 'ovirt-master-epel'", "rc": 1, "results": []}
2020-06-04 16:08:23 IDT - ok: [192.168.100.249] => (item=vdsm-yajsonrpc.noarch)
2020-06-04 16:08:23 IDT - failed: [192.168.100.249] (item=virglrenderer.x86_64) => {"ansible_loop_var": "item", "changed": false, "item": "virglrenderer.x86_64", "msg": "Failed to download metadata for repo 'ovirt-master-epel'", "rc": 1, "results": []}
2020-06-04 16:08:23 IDT - ok: [192.168.100.249] => (item=virt-v2v.x86_64)
2020-06-04 16:08:23 IDT - skipping: [192.168.100.249] => (item=)
2020-06-04 16:08:23 IDT -
2020-06-04 16:08:23 IDT - {
  "status" : "OK",
  "msg" : "",
  "data" : {


```

# Ansible runner service log

The screenshot shows the oVirt Open Virtualization Manager interface. The top navigation bar includes the oVirt logo and the text 'OPEN VIRTUALIZATION MANAGER'. On the right side of the top bar, there are several icons: a bookmark, a document, a list with a '1' notification, a bell with a '42' notification, a help icon, and a user profile icon.

The main content area is titled 'Compute > Hosts > centos8'. Below the title, there are several buttons: 'Edit', 'Remove', 'Management', 'Installation', and 'Host Console'. Below these buttons, there is a horizontal menu with the following items: 'General', 'Virtual Machines', 'Network Interfaces', 'Host Devices', 'Host Hooks', 'Permissions', 'Affinity Labels', 'Errata', and 'Events'. The 'Events' item is currently selected and highlighted in blue.

The main content area displays a table with two columns: 'Time' and 'Message'. The table contains one row of data:

Time	Message
 Jul 1, 2020, 2:44:24 PM	Host centos8 installation failed. Failed to execute Ansible host-deploy role: Internal server error. Please check logs for more details: /var/log/ovirt-engine/ansible-runner-service.log.

# Ansible runner service log

/var/log/ovirt-engine/ansible-runner-service.log

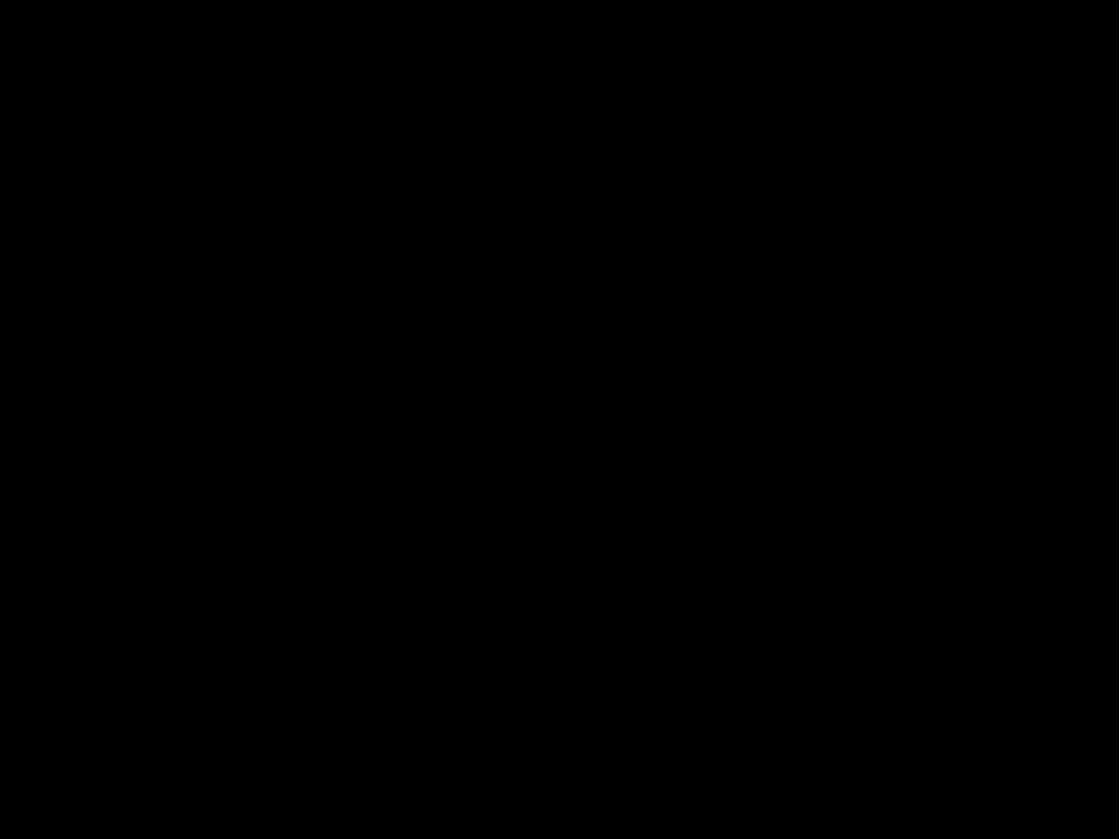
```
2020-07-01 14:44:24,498 - runner_service.inventory - WARNING - Race  
condition hit creating Inventory file: [Errno 2] No such file or dir  
ectory: '/invalid_path/home/delfassy/ovirt-engine-master/share/ovirt  
-engine/ansible-runner-service-project/inventory/hosts'
```

~

(END)



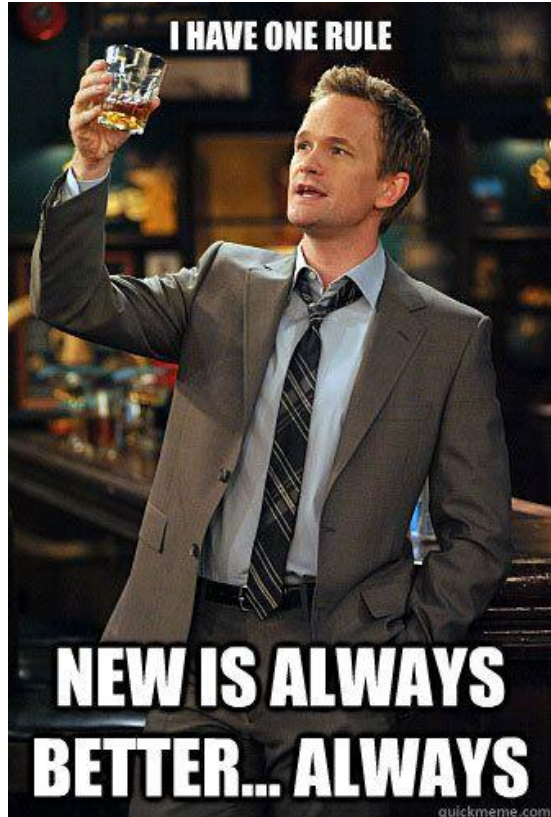
# Demo



# Host deploy log

```
2020-08-21 18:52:10 IDT - TASK [ovirt-host-deploy-kernel : Removing old kernel arguments] *****
2020-08-21 18:52:10 IDT - changed: [10.46.9.175]
2020-08-21 18:52:10 IDT - {
  "status" : "OK",
  "msg" : "",
  "data" : {
    "uuid" : "11800090-a94e-4f45-a653-7428bf8cc9d4",
    "counter" : 360,
    "stdout" : "changed: [10.46.9.175]",
```

# Summary



- Host deploy using Otopi & the motivation for change
- Introduction to Ansible and Ansible Runner Service
- Obstacles down the road
- Troubleshooting

oVirt

# Thank you!

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