

RED HAT  
**SUMMIT**

# RHUG NJ July 2017

## Button Push Deployments With Integrated Red Hat Open Management

The power of automation

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# About Me



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RHCA VI

Red Hat

# One Button Push Away From Red Hat Management

# Red Hat Management Automated

From start to finish in less than 3 hours with these ingredients

Satellite 6



CloudForms



Ansible Tower



Insights



# Red Hat Management Automated

## Prerequisites

- <https://github.com/ldomb/rhsummit2017>
- Minimum requirement ansible 2.2.1
- Ansible vault file with your passwords, private keys ...
- Ansible Tower License can be requested here:
  - <https://www.ansible.com/license>
- Satellite 6 Manifest
- An AWS account (AWS Cli )
- Private key for AWS instances
- CloudForms image in AWS ( uploadcfme.yaml )

# Ansible Vault

The Power of Ansible

---

```
##### THIS IS A DEMO VAULT FILE AND IS USUALLY ENCRYPTED #####  
vault_ec2_keypair: "YOURKEYPAIR"  
vault_ec2_security_group: "YOURSECURITYGROUP"  
vault_ec2_subnet_ids: ['YOURSUBNETID']  
vault_ec2_access: ACCESSKEY  
vault_ec2_secret: AWSSECRET  
vault_tower_pass: RedhatIsCool  
vault_sat6_pass: RedhatIsCool  
vault_cfme_pass: RedhatIsCool  
vault_gitlab_pass: pushthelinimit  
vault_rhn_pass: pushthelinimit
```

[https://raw.githubusercontent.com/ldomb/rhsummit2017/master/group\\_vars/all/vault](https://raw.githubusercontent.com/ldomb/rhsummit2017/master/group_vars/all/vault)

# Red Hat Management Automated

From start to finish in less than 3 hours with these ingredients

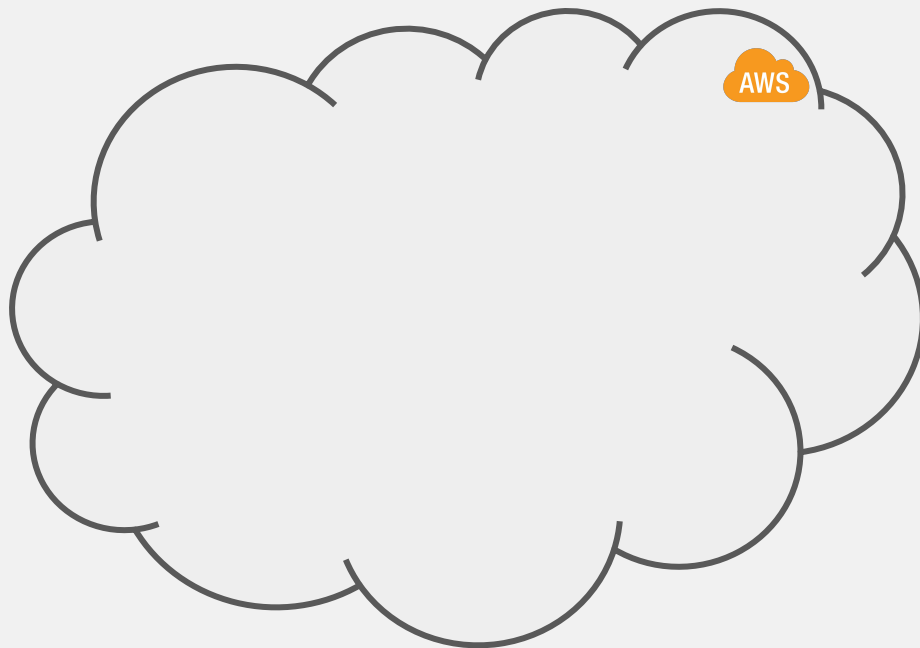
```
summit2017$ ansible-playbook buildrhmgmt.yaml --private-key=ldomb.pem  
--vault-password-file=../vaultpass -vv
```



# RH-MANAGEMENT CORE

One click to rule them all - Foundation Installation Flow

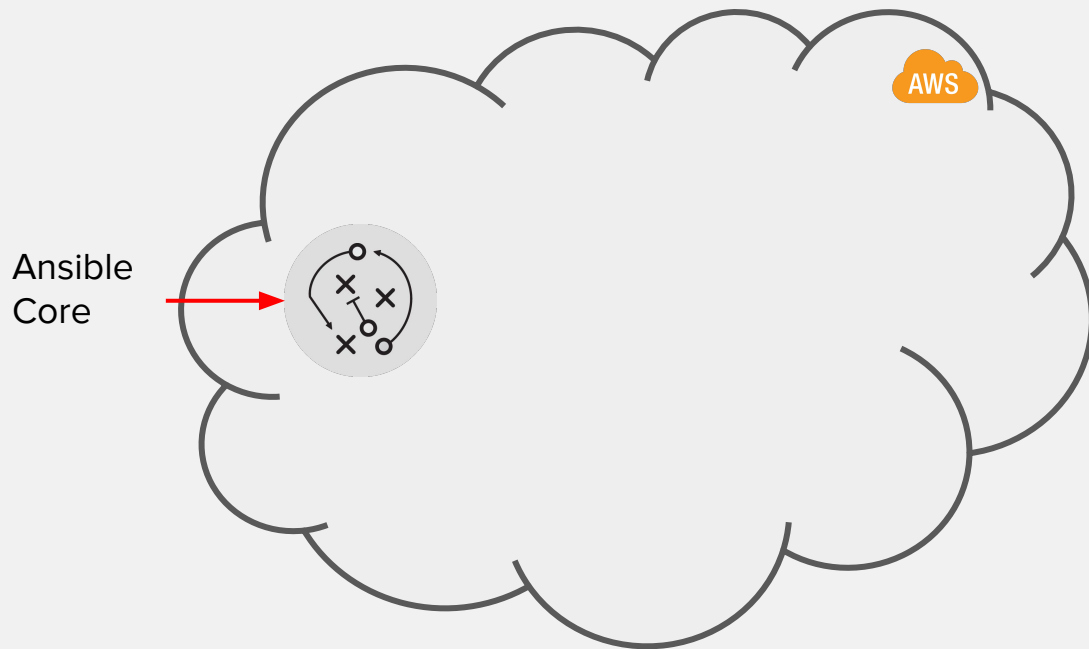
Ansible  
Core





# RH-MANAGEMENT ANSIBLE TOWER

One click to rule them all - Foundation Installation Flow



# ANSIBLE TOWER

## DELEGATION OF CREDENTIALS

Delegate credentials without giving away secrets

## INVENTORY MANAGEMENT

Graphically manage your internal & cloud resources

## AUDITING

See a full Ansible job history with drill-in details

## ACCESS CONTROL

Role-based access control & LDAP integration

## PUSH-BUTTON LAUNCH

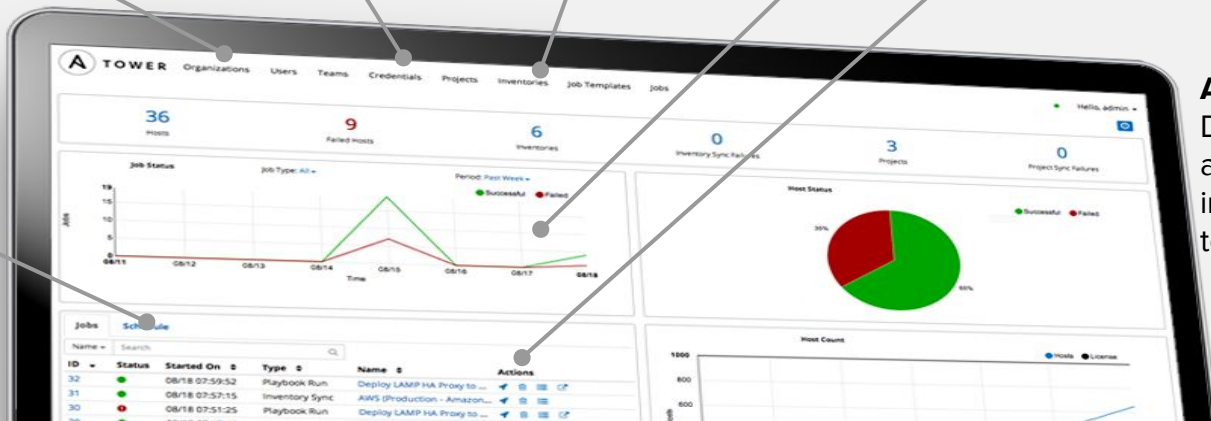
Launch automation jobs with a button

## SCHEDULING

Schedule automation Jobs

## API & CLI

Documented RESTful API and Tower CLI to integrate Tower into your tools



# RH-MANAGEMENT TOOLS

One click to rule them all - Foundation Installation Flow

```
TASK [manage-ec2-instances : add host] *****
changed: [localhost] => (item={u'kernel': None, u'root device type': u'efs', u'private dns name': u'ip-172-31-146-153.ec2.internal', u'public ip':
u'54.144.64.252', u'private ip': u'172.31.146.153', u'id': u'i-0abbae05f7eb328d8', u'efs optimized': False, u'state': u'running', u'virtualizatio
n type': u'hvm', u'root device name': u'/dev/sda1', u'ramdisk': None, u'block device mapping': {u'/dev/sda1': {u'status': u'attached', u'delete on
termination': True, u'volume id': u'vol-0a8b0c5145e4626a0'}}, u'key name': u'ldomb', u'image id': u'ami-b63769a1', u'tenancy': u'default', u'grou
ps': {u'sg-5166b12e': u'rhmgmt'}, u'public dns name': u'ec2-54-144-64-252.compute-1.amazonaws.com', u'state code': 16, u'tags': {u'Environment': u
'production', u'Type': u'towerrhsummit', u'Name': u'towerrhsummit'}, u'placement': u'us-east-1b', u'ami_launch_index': u'0', u'dns name': u'ec2-54
-144-64-252.compute-1.amazonaws.com', u'region': u'us-east-1', u'launch_time': u'2017-04-28T15:43:22.000Z', u'instance_type': u'm3.large', u'archi
tecture': u'x86_64', u'hypervisor': u'xen'})

TASK [manage-ec2-instances : Wait for SSH banners] *****
ok: [localhost -> localhost] => (item={u'kernel': None, u'root device type': u'efs', u'private dns name': u'ip-172-31-146-153.ec2.internal', u'pub
lic ip': u'54.144.64.252', u'private ip': u'172.31.146.153', u'id': u'i-0abbae05f7eb328d8', u'efs optimized': False, u'state': u'running', u'virtu
alization type': u'hvm', u'root device name': u'/dev/sda1', u'ramdisk': None, u'block device mapping': {u'/dev/sda1': {u'status': u'attached', u'd
elete on termination': True, u'volume id': u'vol-0a8b0c5145e4626a0'}}, u'key name': u'ldomb', u'image id': u'ami-b63769a1', u'tenancy': u'default'
, u'groups': {u'sg-5166b12e': u'rhmgmt'}, u'public dns name': u'ec2-54-144-64-252.compute-1.amazonaws.com', u'state code': 16, u'tags': {u'Environ
ment': u'production', u'Type': u'towerrhsummit', u'Name': u'towerrhsummit'}, u'placement': u'us-east-1b', u'ami_launch_index': u'0', u'dns name':
u'ec2-54-144-64-252.compute-1.amazonaws.com', u'region': u'us-east-1', u'launch_time': u'2017-04-28T15:43:22.000Z', u'instance_type': u'm3.large',
u'architecture': u'x86_64', u'hypervisor': u'xen'})

PLAY [create tower] *****

TASK [setup] *****
ok: [54.144.64.252]

TASK [buildansibletower : get tar for ansibletower] *****
changed: [54.144.64.252]

TASK [buildansibletower : untar /tmp/ansible-tower-setup-bundle.tar.gz] *****
changed: [54.144.64.252]

TASK [buildansibletower : replace /tmp/ansible-tower-setup-bundle-3.1.2-1.el7/roles/nginx/tasks/tasks.yml] ***
changed: [54.144.64.252]

TASK [buildansibletower : add /etc/tower path to setting.py] *****
changed: [54.144.64.252]

TASK [buildansibletower : copy inventory to setup folder] *****
changed: [54.144.64.252]

TASK [buildansibletower : execute the tower installation] *****
```

# Ansible Hostvars and add\_host

The Power of Ansible

```
- add_host: name={{ item.public_ip }} >
  groups=tag_Type_{{ec2_tag_Type}},tag_Environment_{{ec2_tag_Environment}}
  ec2_tag_Name={{ec2_tag_Name}}
  ec2_region={{ec2_region}}
  ec2_tag_Type={{ec2_tag_Type}}
  ec2_tag_Environment={{ec2_tag_Environment}}
  ec2_ip_address={{item.public_ip}}
with_items: "{{ ec2.instances }}"
```

# Ansible Regex and Substitutions

The Power of Ansible

- name: replace /tmp/ansible-tower-setup-bundle-{{ tower\_version }}.el7/roles/nginx/tasks/tasks.yml

**replace:**

dest: /tmp/ansible-tower-setup-bundle-{{ tower\_version }}.el7/roles/nginx/tasks/tasks.yml

**regexp:** 'www.ansible.com'

**replace:** "{{ ansible\_nodename }}"

- name: add /etc/tower path to setting.py

**lineinfile:**

dest: /tmp/ansible-tower-setup-bundle-{{ tower\_version }}.el7/roles/awx\_install/templates/settings.py.j2

line: "AWX\_PROOT\_SHOW\_PATHS = ['/etc/tower/']"

# Ansible URI Rest Interaction

The Power of Ansible

- name: add license

uri:

url: https://{{inventory\_hostname}}/api/v1/config/

method: POST

validate\_certs: no

user: admin

password: "{{ tower\_pass }}"

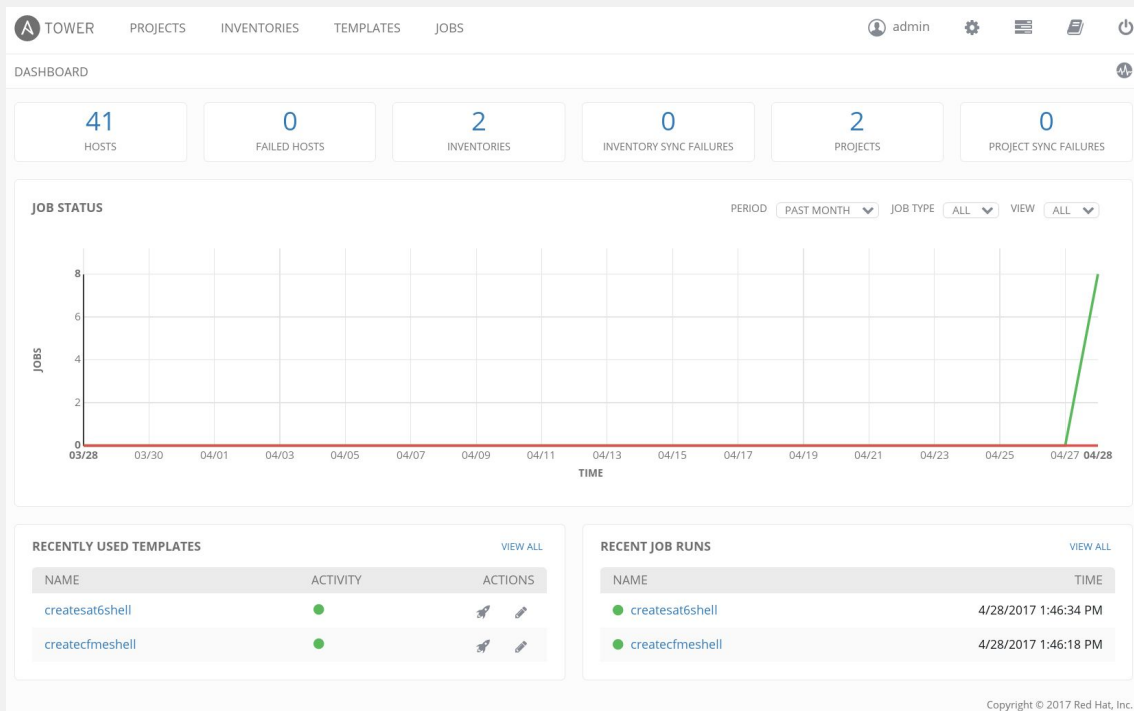
status\_code: 200

body: "{{ tower\_lic }}"

body\_format: json

# Red Hat Management Automated

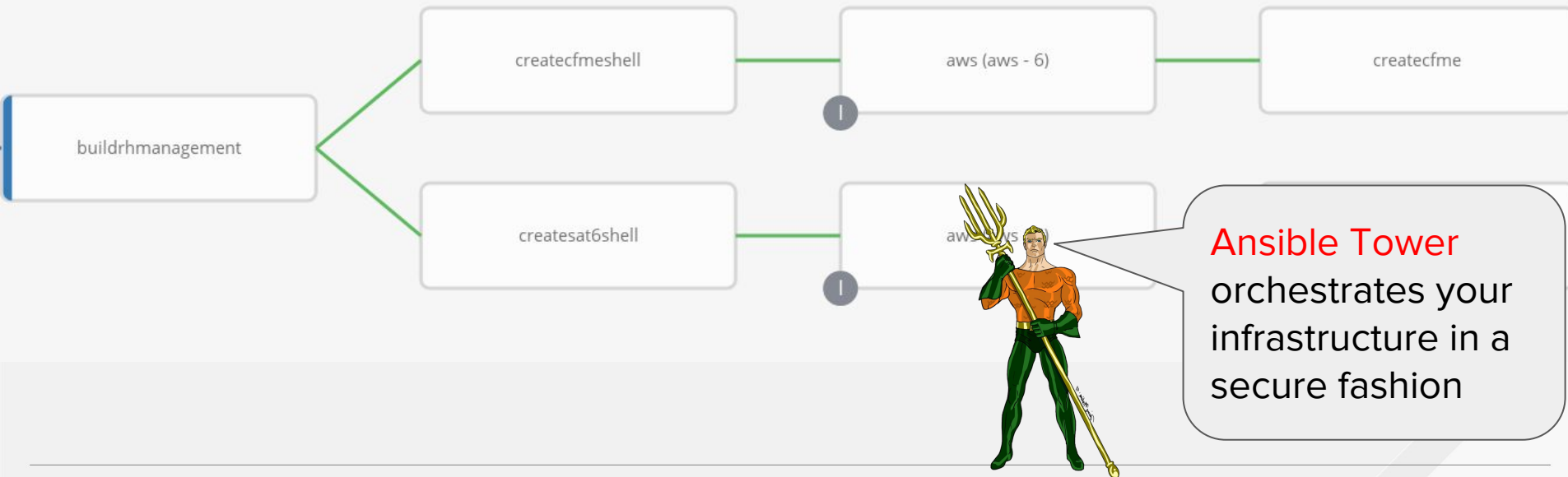
## Building Ansible Tower - Gains



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# Red Hat Management Automated

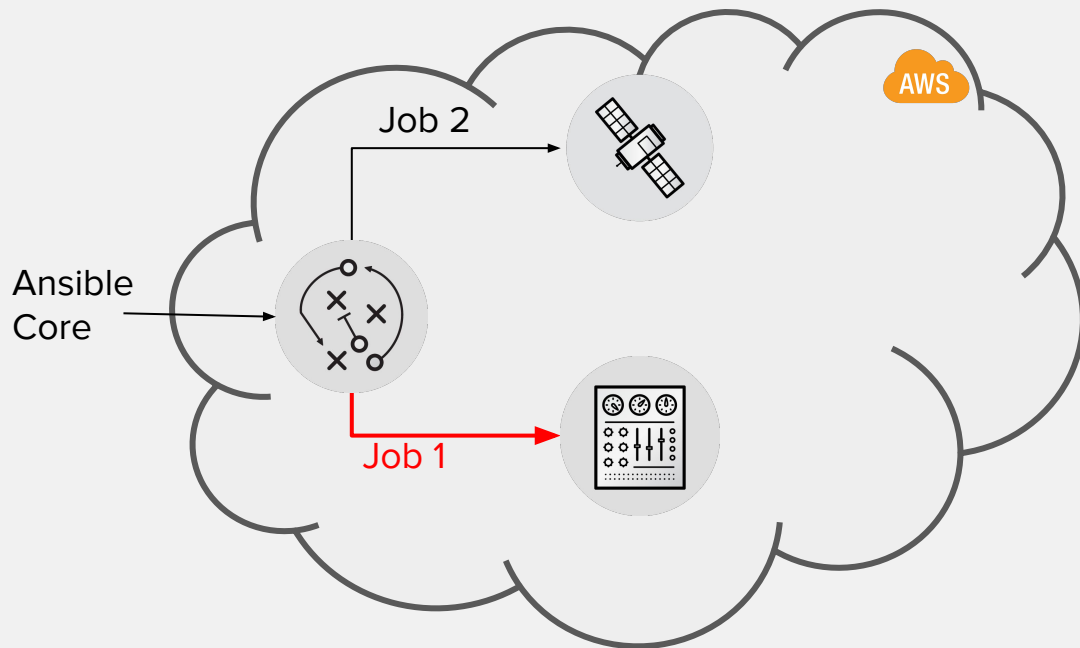
Building Ansible Tower - Gains - Workflow Editor





# RH-MANAGEMENT SATELLITE 6 / CLOUDFORMS

One click to rule them all - Foundation Installation Flow



# What Is CloudForms?

CloudForms - Overview

## Infrastructure Providers



## Cloud Providers



## Containers



## Block Storage Managers

		Name
<input type="checkbox"/>		AWS East NV EBS Storage Manager
<input type="checkbox"/>		osembu Cinder Manager

## Network Managers

		Name
<input type="checkbox"/>		AWS East NV Network Manager
<input type="checkbox"/>		Azure US East Network Manager
<input type="checkbox"/>		GCP Network Manager

# CloudForms Ansible Automation Inside






## CloudForms - Overview

- Manage ansible git projects
- Store credentials for some providers
- Execute a playbook from a service catalog
- Execute a playbooks via Rest API
- Execute a playbook from an alert
- Execute a playbook from a control policy
- Execute a playbook through automation

# CloudForms Ansible Automation Inside

CloudForms - gains

## Credentials

		Name ▲	Type	User	Created On	Updated On
<input type="checkbox"/>		AWS	Credential (Machine)		05/29/17 19:01:22 UTC	05/29/17 19:01:22 UTC
<input type="checkbox"/>		Azure	Credential (Machine)		05/29/17 19:00:05 UTC	05/29/17 19:00:05 UTC
<input type="checkbox"/>		CFME Default Credential	Credential (Machine)		05/28/17 16:04:56 UTC	05/28/17 16:04:56 UTC
<input type="checkbox"/>		GCP	Credential (Machine)	GCP-Project-128	05/29/17 18:59:12 UTC	05/29/17 18:59:12 UTC
<input type="checkbox"/>		ovirt	Credential (Machine)	root	05/28/17 16:29:15 UTC	05/28/17 16:29:15 UTC

# CloudForms Ansible Automation Inside

CloudForms - gains





















## Repositories

		Name ▲	Description	Playbooks	Created On	Updated On
<input type="checkbox"/>		AWS	Amazon Web Services	64	05/29/17 18:38:03 UTC	05/29/17 18:38:03 UTC
<input type="checkbox"/>		Azure	Microsoft Azure	2	05/29/17 18:40:37 UTC	05/29/17 18:40:37 UTC
<input type="checkbox"/>		GCP	Google Compute Platform	5	05/29/17 18:35:57 UTC	05/29/17 18:36:40 UTC
<input type="checkbox"/>		RHV	Red Hat Virtualization	6	05/28/17 16:08:19 UTC	05/30/17 15:19:24 UTC

# CloudForms Ansible Automation Inside

CloudForms - gains

## Playbooks (Embedded Ansible)

	Name	Description	Repository	Created On	Updated On
<input type="checkbox"/>	 ami_create.yml		AWS	05/29/17 18:38:03 UTC	05/29/17 18:38:03 UTC
<input checked="" type="checkbox"/>	 ami_delete.yml		AWS	05/29/17 18:38:03 UTC	05/29/17 18:38:03 UTC
<input type="checkbox"/>	 azure_rm_inventory.yml		Azure	05/29/17 18:40:37 UTC	05/29/17 18:40:37 UTC
<input type="checkbox"/>	 azure_rm.yml		Azure	05/29/17 18:40:37 UTC	05/29/17 18:40:37 UTC
<input type="checkbox"/>	 cleanup.yml		GCP	05/29/17 18:35:57 UTC	05/29/17 18:35:57 UTC
<input type="checkbox"/>	 dbsg_create.yml		AWS	05/29/17 18:38:03 UTC	05/29/17 18:38:03 UTC
<input type="checkbox"/>	 dbsg_delete.yml		AWS	05/29/17 18:38:03 UTC	05/29/17 18:38:03 UTC
<input type="checkbox"/>	 dhcp_options.yml		AWS	05/29/17 18:38:03 UTC	05/29/17 18:38:03 UTC
<input type="checkbox"/>	 ec2_check_name.yml		AWS	05/29/17 18:38:03 UTC	05/29/17 18:38:03 UTC
<input type="checkbox"/>	 ec2_profile.yml		AWS	05/29/17 18:38:03 UTC	05/29/17 18:38:03 UTC
<input type="checkbox"/>	 ec2_start_1.yml		AWS	05/29/17 18:38:03 UTC	05/29/17 18:38:03 UTC
<input type="checkbox"/>	 ec2_start.yml		AWS	05/29/17 18:38:03 UTC	05/29/17 18:38:03 UTC
<input type="checkbox"/>	 ec2_stop.yml		AWS	05/29/17 18:38:03 UTC	05/29/17 18:38:03 UTC
<input type="checkbox"/>	 ec2_vol_1.yml		AWS	05/29/17 18:38:03 UTC	05/29/17 18:38:03 UTC
<input type="checkbox"/>	 ec2_vol_2.yml		AWS	05/29/17 18:38:03 UTC	05/29/17 18:38:03 UTC
<input type="checkbox"/>	 ec2_vpc_db_create.yml		AWS	05/29/17 18:38:03 UTC	05/29/17 18:38:03 UTC
<input type="checkbox"/>	 ec2_vpc_jumpbox.yml		AWS	05/29/17 18:38:03 UTC	05/29/17 18:38:03 UTC
<input type="checkbox"/>	 ec2_vpc_openvpn.yml		AWS	05/29/17 18:38:03 UTC	05/29/17 18:38:03 UTC
<input type="checkbox"/>	 ec2_vpc_web_create.yml		AWS	05/29/17 18:38:03 UTC	05/29/17 18:38:03 UTC
<input type="checkbox"/>	 gce-instances.yml		GCP	05/29/17 18:35:57 UTC	05/29/17 18:35:57 UTC

# CloudForms Ansible Automation Inside

CloudForms - gains

Editing Service Catalog Item "AWS - mysql\_rds\_create"

Name

Description

Display in Catalog  Yes

Catalog

**Provisioning** Retirement

Repository

Playbook

Machine Credential

Cloud Type

Hosts

Escalate Privilege  No

Variables & Default Values

Variable	Default value	Actions
instance_name	changeme	
db_engine	MariaDB	
engine_version	10	

Dialog  Use Existing

Create New

# CloudForms Ansible Automation Inside

## CloudForms - gains

Editing Service Catalog Item "AWS - mysql\_rds\_create"

Name

Description

Display in Catalog  Yes

Catalog

Provisioning Retirement

Copy from Provisioning

Repository

Playbook

Machine Credential

Cloud Type

Hosts

Escalate Privilege  No

Remove resources?

Variables & Default Values


Variable	Default value	Actions
instance_name	changeme	 



# CloudForms Ansible Automation Inside

## CloudForms - gains

Service Catalogs > AWS - RDS



AWS - RDS  
mysql\_rds\_create

[Add to Shopping Cart](#)

### Mysql\_rds

Basic Information

**Options**

Machine Credential	<input type="text" value="AWS"/>
Hosts	<input type="text" value="localhost"/>

**Variables**

instance_name	<input type="text" value="changeme"/>
db_engine	<input type="text" value="MariaDB"/>
engine_version	<input type="text" value="10"/>

# RH-MANAGEMENT TOOLS

One click to rule them all - Foundation Installation Flow

Job 1

The screenshot displays the Tower web interface. At the top, there is a navigation bar with 'TOWER' and several menu items: 'PROJECTS', 'INVENTORIES', 'TEMPLATES', and 'JOBS'. On the right side of the navigation bar, there is a user profile 'admin', a settings gear icon, a hamburger menu icon, a document icon, and a power icon. Below the navigation bar, the breadcrumb 'JOBS / 7 - createcfme' is visible. The main content area shows a job execution log with the following entries:

- 7 PLAY [create cfme] \*\*\*\*\* 13:47:12
- 8
- 9
- 10 TASK [Gathering Facts] \*\*\*\*\* 13:47:12
- 11 `ok: [52.23.172.218]`
- 12 `META: ran handlers`
- 13
- 14 TASK [buildcfme : copy chrony configuration for RHEL7] \*\*\*\*\* 13:47:16
- 15 `changed: [52.23.172.218]`
- 16
- 17 TASK [buildcfme : ensure chrony service is started and enabled] \*\*\*\*\* 13:47:19
- 18 `ok: [52.23.172.218]`
- 19
- 20 TASK [buildcfme : ensure chrony is getting restarted if necessary] \*\*\*\*\* 13:47:20
- 21 `changed: [52.23.172.218]`
- 22
- 23 TASK [buildcfme : perform appliance basic configuration] \*\*\*\*\* 13:47:21
- 24 `changed: [52.23.172.218]`
- 25
- 26 TASK [buildcfme : wait for cfme ui] \*\*\*\*\* 13:49:11

At the bottom right of the log area, there is a link that says '^ TOP'.

# Ansible Hostvars and wait\_for

The Power of Ansible

- name: wait for cfme ui

**wait\_for:**

host: {{ inventory\_hostname }}

port: 443

timeout: 600

- name: add tower to /etc/hosts on cfme

lineinfile:

dest: /etc/hosts

line: "{{ hostvars[groups['tag\_Name\_' + tower\_tag\_Name][0]]['ec2\_private\_ip\_address'] }}"  
**hostvars[groups['tag\_Name\_' + tower\_tag\_Name][0]]['ec2\_private\_dns\_name'] } tower"**

# Ansible delegate\_to

The Power of Ansible

- name: get cert  
command: cat /etc/tower/tower.cert  
**register**: towercert  
**delegate\_to**: "localhost"  
become: false
- name: towercert  
lineinfile:  
  dest: /etc/pki/ca-trust/source/anchors/tower.crt  
  line: "{{ towercert.stdout }}"  
**create**: yes
- name: update certs  
shell: update-ca-trust

# Ansible manageiq\_provider

The Power of Ansible

- name: Add Amazon EC2 Provider to ManageIQ

**manageiq\_provider:**

name: 'AWS01'

provider\_type: 'amazon'

state: 'present'

provider\_region: 'us-east-1'

access\_key\_id: "{{ ec2\_access }}"

secret\_access\_key: "{{ ec2\_secret }}"

miq\_url: 'https://{{ inventory\_hostname }}'

miq\_username: 'admin'

miq\_password: "{{ cfme\_pass }}"

miq\_verify\_ssl: false

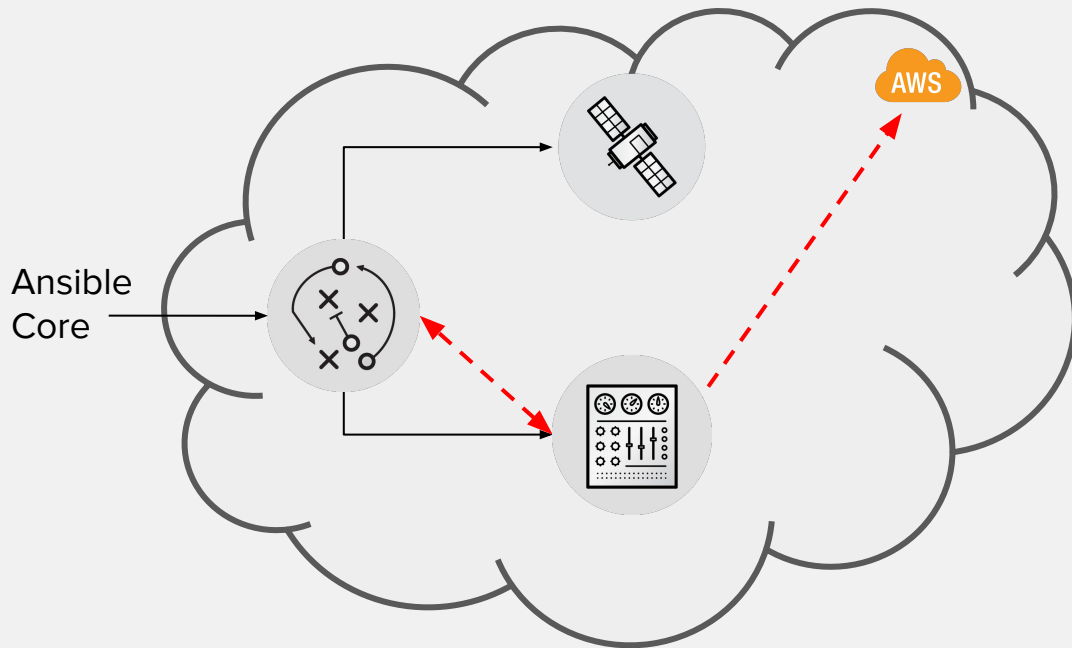
become: false

delegate\_to: localhost

register: result

# RH-MANAGEMENT CLOUDFORMS

One click to rule them all - Foundation Installation Flow



# Red Hat Management Automated

CloudForms - Ansible Tower integration gains

## AWS01 (Summary)

Properties	
Region	US East (Northern Virginia)
Type	Amazon EC2
Management Engine GUID	a9ebf7b6-1ecd-11e7-83c8-12119dd96408
Region	us-east-1

Status	
Default Credentials	Valid
Last Refresh	Success - 17 Minutes Ago

Configuration	
Arbitration Profiles	0

Relationships	
Network Manager	AWS01 Network Manager
Availability zones	5
Host aggregates	0
Cloud tenants	0
Flavors	76
Security Groups	25
Instances	12

## INVENTORIES 3

SEARCH	Q	KEY
NAME ▲		ORGANIZATION ▼
aws		Default
cloudforms		Default

# Red Hat Management Automated

CloudForms - Ansible Tower integration gains

## All Configuration Management Providers



		Provider Name <sup>▲</sup>	URL	Type	Zone	Last Refresh Date	Region Description	Status	Total Configured Systems
<input type="checkbox"/>		Ansible Tower Configuration Manager	https://ip-172-31-226-121.ec2.internal/api/v1	Configuration Manager (Ansible Tower)	default	04/24/17 15:32:22 UTC	Region 99	Valid	51



# Red Hat Management Automated

CloudForms - Ansible Tower integration gains

Providers

- All Configuration Manage...
  - Red Hat Satellite Provi...
  - Ansible Tower Provide...
  - Ansible Tower Con... >**
    - aws
    - cloudforms
    - Demo Inventory
    - satellite6

Inventory Groups under Ansible Tower Provider "Ansible Tower Configuration Manager"

Search

	Name	Total Configured Systems
	aws	34
	cloudforms	7
	Demo Inventory	1
	satellite6	9

# Red Hat Management Automated

CloudForms - Ansible Tower integration gains

> Providers

> Configured Systems

▼ Ansible Tower Job Templates

▼ All Ansible Tower Job Tem...

▼ Ansible Tower Configu... >

- T buildrhmanageme...
- T cis-compliance-test
- T createcfme
- T createcfmeshell
- T createsat6
- T createsat6shell
- T Demo Job Template
- T Load balanced Wo...

Job Templates under "Ansible Tower Configuration Manager"

Search

		Name ^	Type	Description	Created On	Updated On
<input type="checkbox"/>	T	buildrhmanagement	Job Template (Ansible Tower)	Build RH Management	04/17/17 12:29:01 UTC	04/17/17 12:29:01 UTC
<input type="checkbox"/>	T	cis-compliance-test	Job Template (Ansible Tower)		04/13/17 07:43:07 UTC	04/13/17 07:43:07 UTC
<input type="checkbox"/>	T	createcfme	Job Template (Ansible Tower)		04/11/17 15:44:26 UTC	04/11/17 15:44:26 UTC
<input type="checkbox"/>	T	createcfmeshell	Job Template (Ansible Tower)		04/11/17 15:44:26 UTC	04/11/17 15:44:26 UTC
<input type="checkbox"/>	T	createsat6	Job Template (Ansible Tower)		04/11/17 15:44:27 UTC	04/11/17 15:44:27 UTC
<input type="checkbox"/>	T	createsat6shell	Job Template (Ansible Tower)		04/11/17 15:44:27 UTC	04/11/17 15:44:27 UTC

# Red Hat Management Automated

CloudForms - Ansible Tower integration gains

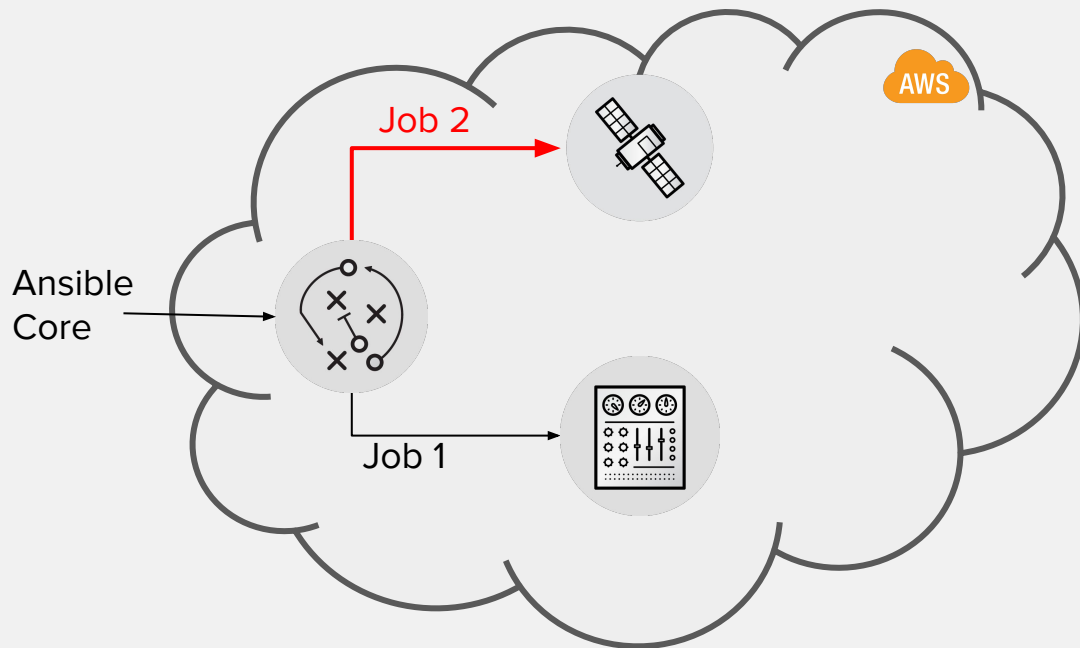
The screenshot shows the Red Hat CloudForms Management Engine interface. The top navigation bar includes the Red Hat logo and the text "RED HAT® CLOUDFORMS MANAGEMENT ENGINE". The left sidebar contains navigation options: Dashboard, My Services (5), My Requests (>), and Service Catalog (3). The main content area displays a list of services with search filters and sorting options. Three service cards are visible:

- BuildRHMGMT**: Red Hat Summit 2017 RHMGMT. Features a red circular icon with the word "easy".
- Complete Wordpress cluster setup**: Red Hat Summit 2017. Features an illustration of Spider-Man standing next to a box labeled "WORDPRESS Install" with gears.
- Load Balanced Wordpress Cluster**: Red Hat Summit 2017.

CloudForms + Ansible Tower = Build anything anywhere, any time

# RH-MANAGEMENT SATELLITE 6 / CLOUDFORMS

One click to rule them all - Foundation Installation Flow



# RH-MANAGEMENT TOOLS

One click to rule them all - Foundation Installation Flow

The screenshot displays the Tower web interface. At the top, there is a navigation bar with tabs for 'TOWER', 'PROJECTS', 'INVENTORIES', 'TEMPLATES', and 'JOBS'. A user profile for 'admin' is visible on the right. Below the navigation bar, the breadcrumb 'JOBS / 9 - createsat6' is shown. The main content area contains a list of job tasks with their IDs, descriptions, and completion times. The tasks are as follows:

Task ID	Task Description	Completion Time
104	TASK [satellite-deployment : Set network interface autoconnect] *****	13:48:12
109		
110	TASK [satellite-deployment : Set network interface UP] *****	13:48:12
115		
116	TASK [satellite-deployment : Include firewall.yml] *****	13:48:12
118		
119	TASK [satellite-deployment : Install firewalld] *****	13:48:12
124		
125	TASK [satellite-deployment : Set hostname with hostnamectl] *****	13:48:30
127		
128	TASK [satellite-deployment : Update /etc/hosts with satellite hostname] *****	13:48:31
130		
131	TASK [satellite-deployment : Enable Firewalld] *****	13:48:31
133		
134	TASK [satellite-deployment : Firewall and hostname   Opening Firewalld ports] ***	13:48:32
149		
150	TASK [satellite-deployment : Include install vars] *****	13:48:41
152		
153	TASK [satellite-deployment : Install software] *****	13:48:41

An '^ TOP' link is located at the bottom right of the task list.

Job 2

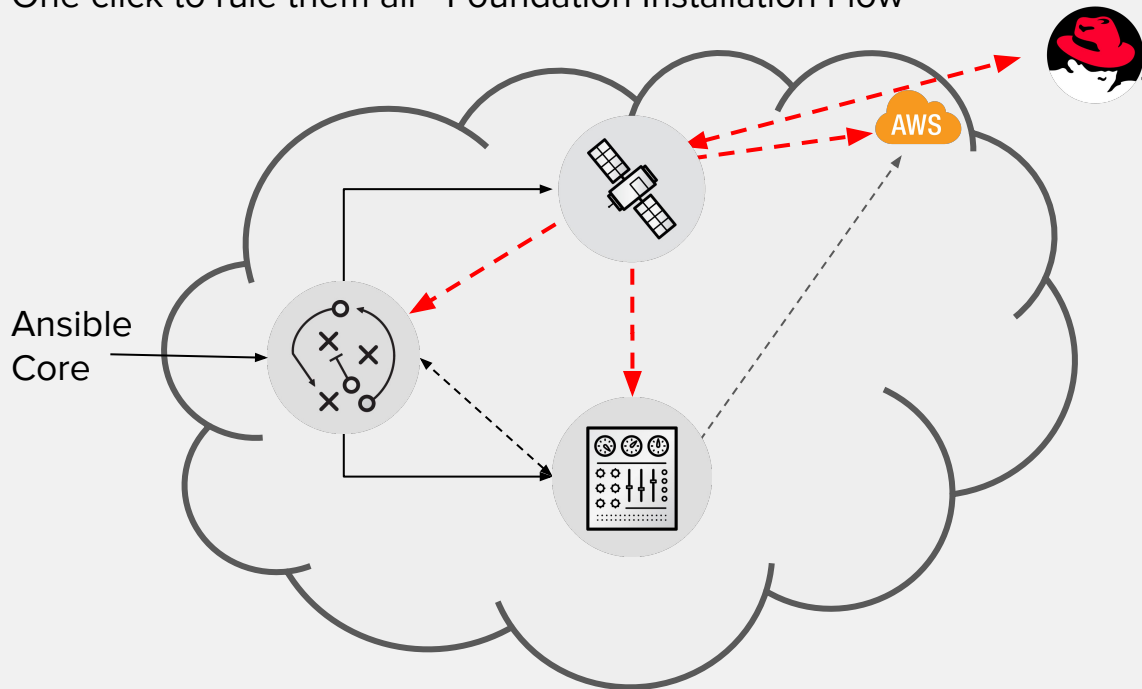
# Ansible register and delegate\_to

The Power of Ansible

- name: get sat6 cert  
command: cat /root/ssl-build/katello-server-ca.crt  
**register**: sat6cert
  
- name: sat6cert  
lineinfile:  
  dest: /etc/pki/ca-trust/source/anchors/sat6.crt  
  line: "{{ sat6cert.stdout }}"  
  create: yes  
**delegate\_to**: "{{ cloudformsip }}"
  
- name: update certs  
shell: update-ca-trust  
**delegate\_to**: "{{ cloudformsip }}"

# RH-MANAGEMENT SATELLITE 6

One click to rule them all - Foundation Installation Flow



# Red Hat Management Automated

Satellite 6 - CloudForms - Ansible Tower - Integration Gains

## All Configuration Management Providers



		Provider Name <sup>▲</sup>	URL	Type	Zone	Last Refresh Date	Region Description	Status	Total Configured Systems
<input type="checkbox"/>		Ansible Tower Configuration Manager	https://ip-172-31-226-121.ec2.internal/api/v1	Configuration Manager (Ansible Tower)	default	04/24/17 15:32:22 UTC	Region 99	Valid	51
<input type="checkbox"/>		Satellite 6 Configuration Manager	https://ip-172-31-57-253.ec2.internal	Configuration Manager (Red Hat Satellite)	default	04/24/17 15:32:21 UTC	Region 99	Valid	9



# Red Hat Management Automated

Satellite 6 - CloudForms - Ansible Tower - Integration Gains

[Red Hat Satellite Provider](#) » Add ConfiguredSystem

Request Purpose **Catalog** Customize Schedule

## Configured Systems

Configured Systems

Hostname	Configuration Location	Configuration Organization	Operating System	Provider
host79.rdu.salab.redhat.com	nyc	redhat		sat6ldo

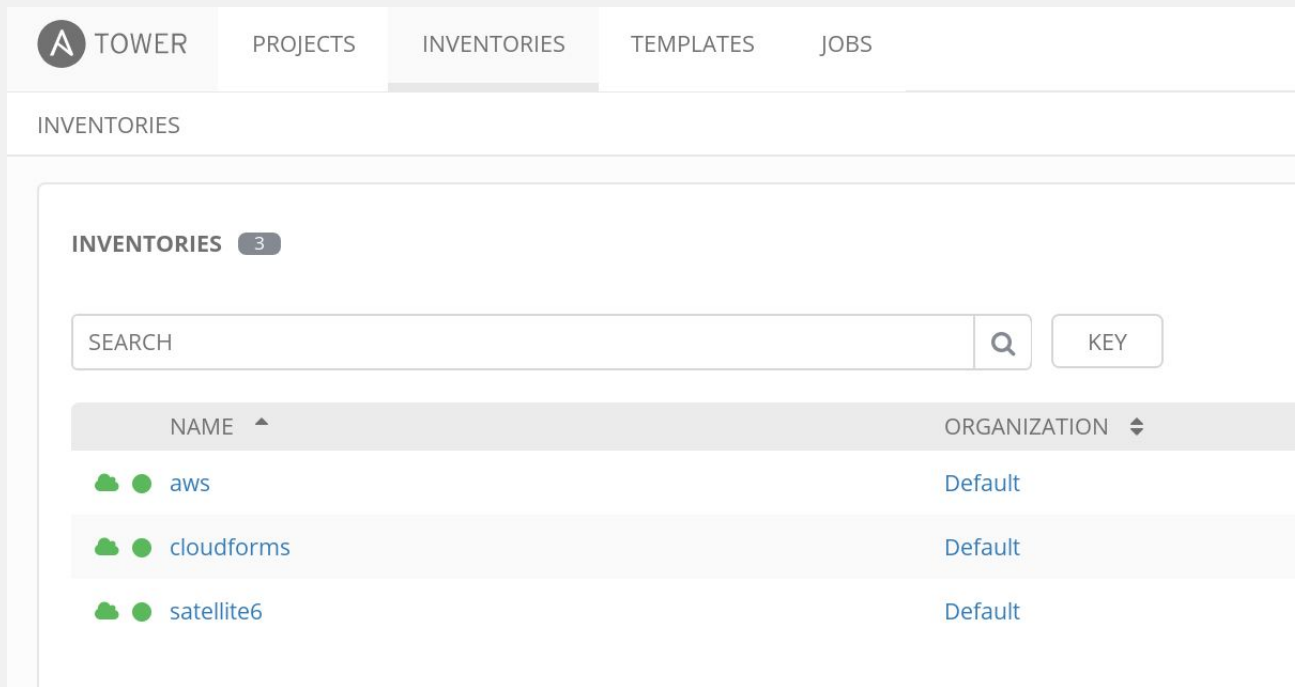
Configuration Profile \*

RHEL7\_Crash\_Base

Note: Fields marked with \* are required.

# Red Hat Management Automated

Satellite 6 - CloudForms - Ansible Tower - Integration Gains



The screenshot displays the Ansible Tower web interface. At the top, there is a navigation bar with tabs for TOWER, PROJECTS, INVENTORIES (which is selected), TEMPLATES, and JOBS. Below the navigation bar, the page title is "INVENTORIES". The main content area shows a section titled "INVENTORIES" with a count of 3. There is a search bar with the placeholder text "SEARCH" and a magnifying glass icon, followed by a "KEY" button. Below the search bar is a table with two columns: "NAME" and "ORGANIZATION". The table contains three rows of inventory data.

NAME	ORGANIZATION
aws	Default
cloudforms	Default
satellite6	Default

















# Red Hat Management Automated

Satellite 6 - CloudForms - Ansible Tower - Integration Gains

Satellite 6

Hosts

Filter ... x Search

<input type="checkbox"/>	Name	Operating system
<input type="checkbox"/>	 ip-172-31-159-178.ec2.internal	 RedHat 7.3
<input type="checkbox"/>	 ip-172-31-165-67.ec2.internal	 RedHat 7.3
<input type="checkbox"/>	 ip-172-31-177-77.ec2.internal	 RedHat 7.3
<input type="checkbox"/>	 ip-172-31-238-93.ec2.internal	 RedHat 7.3
<input type="checkbox"/>	 ip-172-31-45-59.ec2.internal	 RedHat 7.3
<input type="checkbox"/>	 ip-172-31-47-45.ec2.internal	 RedHat 7.3
<input type="checkbox"/>	 ip-172-31-54-120.ec2.internal	 RedHat 7.3
<input type="checkbox"/>	 ip-172-31-96-218.ec2.internal	 RedHat 7.3

Displaying all 8 entries - 0 selected

CloudForms

- Compliance: OpenSSL Security
  - VM and Instance Compliance: DROWN OpenSSL Vulnerability
    - Vulnerable DROWN openssl packages (RHEL5/6/7)
      - VM Compliance Check
        - Generate log message
        - Mark as Non-Compliant

- Compliance Check on: 03/01/16 13:35:07 AEST
  - Policy: DROWN OpenSSL Vulnerability
    - Condition: Vulnerable DROWN openssl packages (RHEL5/6/7)
- Compliance Check on: 03/01/16 12:58:47 AEST
  - Policy: DROWN OpenSSL Vulnerability
    - Condition: Vulnerable DROWN openssl packages (RHEL5/6/7)
- Compliance Check on: 03/01/16 12:50:58 AEST

# Red Hat Management Automated

Satellite 6 - CloudForms - Ansible Tower - Integration Gains

Satellite 6

Installable Errata

Show from: Current Environment (Dev/Ct)

Search... Showing 20 of 51 (51 Total) 20 Selected

Type	Id	Title
Product Enhancement	RHEA-2017:0460	nspr, nss-util, and nss

Apply Selected

- via Katello agent
- via remote execution
- via remote execution - customize first

CloudForms

RED HAT® CLOUDFORMS MANAGEMENT ENGINE

Cloud Intel

Red Hat Insights

Linux Ops

Windows Ops

VMs & Templates

RH Insights

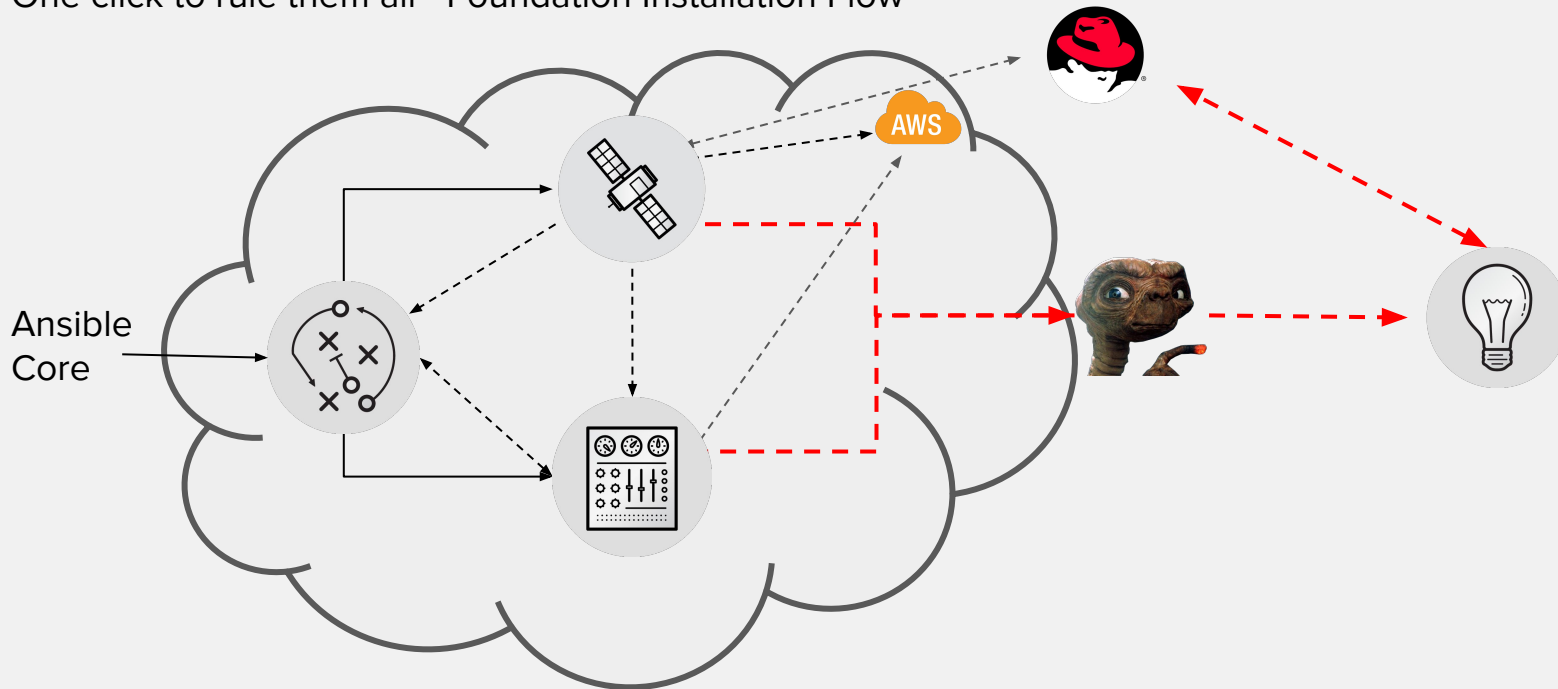
CVE-2016-0800\_DR

CVE\_2016\_5696\_KEN

CloudForms + Ansible Tower  
+ **Satellite** = Build anything  
anywhere anytime and make  
it **secure!**

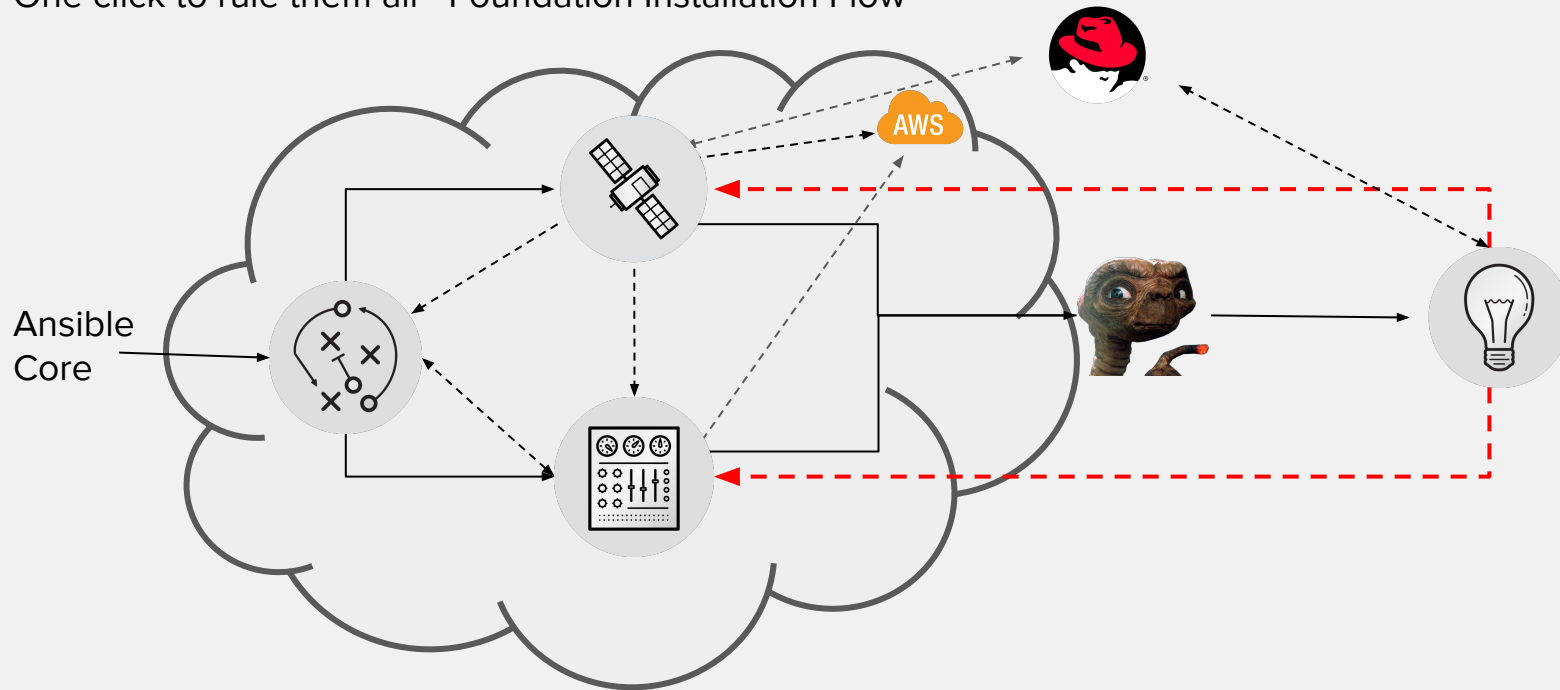
# RH-MANAGEMENT INSIGHTS

One click to rule them all - Foundation Installation Flow



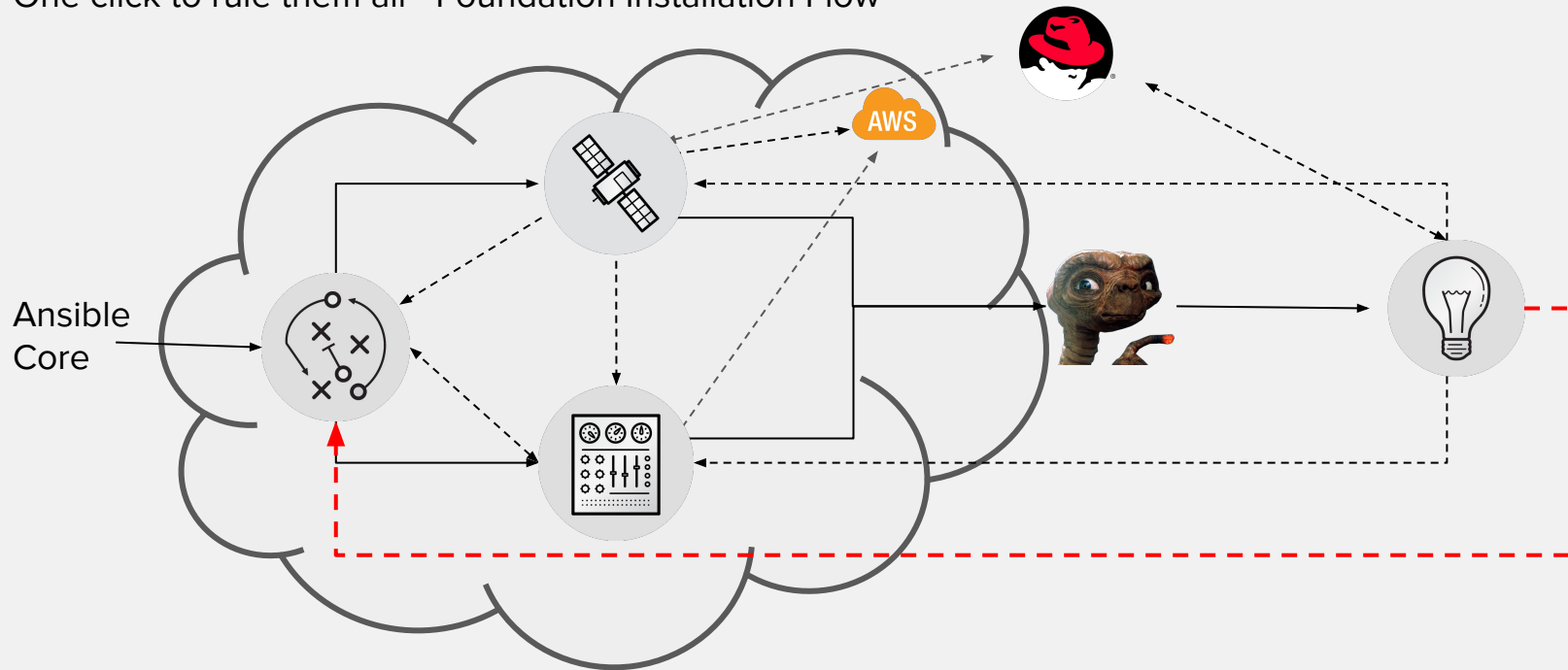
# RH-MANAGEMENT INSIGHTS

One click to rule them all - Foundation Installation Flow



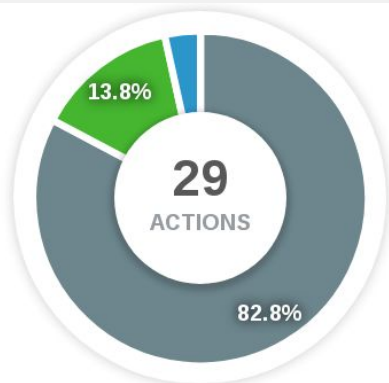
# RH-MANAGEMENT INSIGHTS

One click to rule them all - Foundation Installation Flow



# Red Hat Management Automated

Insights - CloudForms - Ansible Tower - Satellite 6 - integration gains



Use this chart to drill down and discover problems within your organization.

There are **29** actions detected from systems in your organization.

## Overview

Overview

ALL INFO WARN ERROR

Section	Count
Security	24
Stability	4
Performance	1

3 systems are not checking in

[VIEW SYSTEMS AND RESOLVE](#)



# Red Hat Management Automated

Insights - CloudForms - Ansible Tower - Satellite 6 - integration gains

## ⚠️ Kdump crashkernel reservation failed due to improper configuration of crashkernel parameter

Kdump is unable to reserve memory for the kdump kernel. The kdump service has not started and a vmcore will not be captured if the host crashes, which will make it difficult for our support technicians to determine why the machine crashed.

## Impacted Systems

[Overview](#) / [Stability](#)

/ Kdump crashkernel reservation failed due to improper configuration of crashkernel parameter

Hostname ▲	Reported ⇅	
<input type="text" value="Filter"/>		
demo-insights-rhel65	about 9 hours ago	<a href="#">View</a>
demo-insights-rhel70.demo.mbu.redhat.com	about a month ago	<a href="#">View</a>
localhost.localdomain.localdomain	2 months ago	<a href="#">View</a>

# Red Hat Management Automated

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## Performance > NUMA performance regression on specific kernels

### Detected issue

This host is a NUMA system running kernel version **2.6.32-431.el6.x86\_64**.

A change was introduced in Red Hat Enterprise Linux 6.5 to make machines with weird topologies bootable. However, for normal systems this change can lead to a NUMA mapping with incorrect `cpu_power` settings for all domains other than the first. As a result, under some workloads, performance issues can be observed.

### Steps to resolve

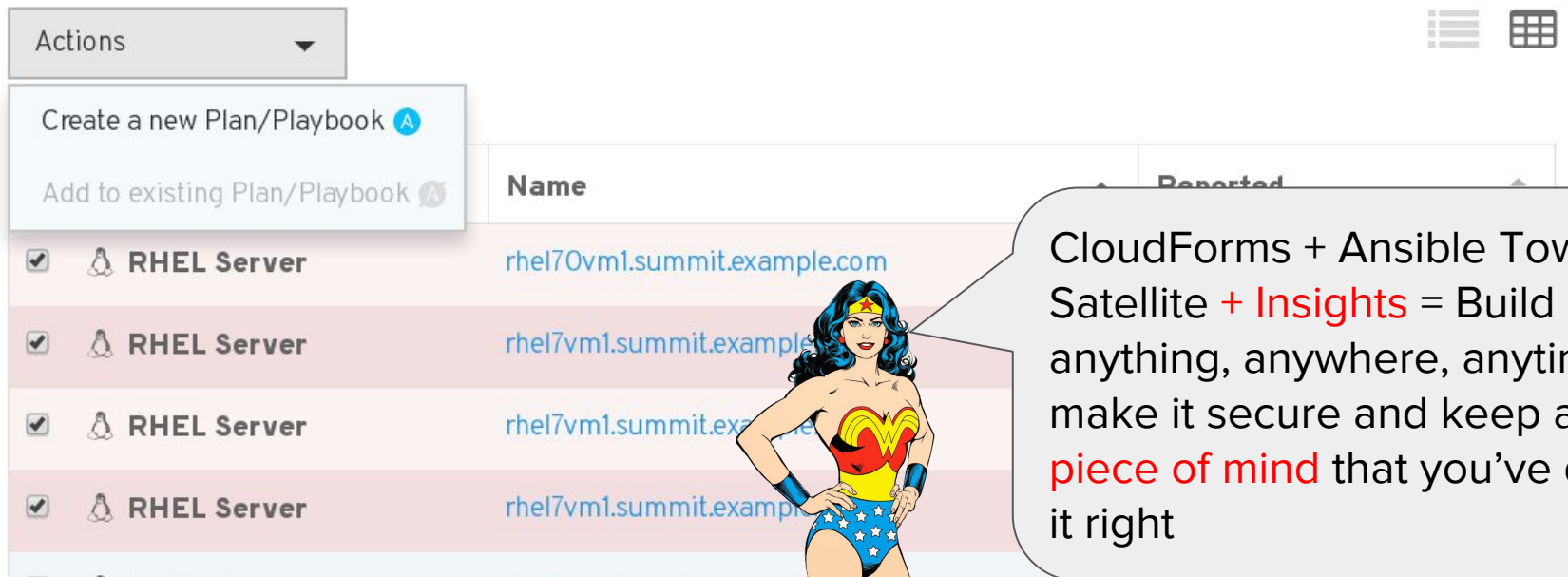
To fix this issue, Red Hat recommends that you update the deployed kernel to version **2.6.32-431.20.3.el6** or later.

```
# yum update kernel
```

If you are unable to update your kernel at this time, an effective workaround is to use the `taskset` command to force a process to run on a specific CPU.

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13 Impacted Systems



The screenshot shows a management interface with a dropdown menu for 'Actions' and a table of systems. The dropdown menu includes options: 'Create a new Plan/Playbook' and 'Add to existing Plan/Playbook'. The table has columns for 'Name' and 'Reported'. The first four rows of the table are highlighted in pink and each contains a checkmark, a penguin icon, and the text 'RHEL Server' followed by a hostname.

	Name	Reported
<input checked="" type="checkbox"/>	RHEL Server	rhel70vm1.summit.example.com
<input checked="" type="checkbox"/>	RHEL Server	rhel7vm1.summit.example.com
<input checked="" type="checkbox"/>	RHEL Server	rhel7vm1.summit.example.com
<input checked="" type="checkbox"/>	RHEL Server	rhel7vm1.summit.example.com



CloudForms + Ansible Tower +  
Satellite + Insights = Build  
anything, anywhere, anytime,  
make it secure and keep a  
piece of mind that you've done  
it right

# RH-MANAGEMENT SUPERPOWERS TEAM

SATELLITE 6



INSIGHTS



ANSIBLE TOWER



CLOUDFORMS



**Provision** and manage **servers** and **networking** anywhere, anytime and be sure it's **secure** and **compliant**. Keep in mind we are **watching** you!

# One Button Push To RH Management Suite



<https://goo.gl/JY7hoa>

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# THANK YOU



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The logo consists of a red speech bubble shape pointing downwards, containing the text "RED HAT" in a smaller font above "SUMMIT" in a larger, bold font.

RED HAT  
**SUMMIT**

LEARN. NETWORK.  
EXPERIENCE  
OPEN SOURCE.

# Resources

Links to resources used in this presentation

Resources used for this presentation

- <https://access.redhat.com/articles/2258471> (hammer cheat sheet)
- <https://github.com/rhtconsulting/cfme-rhconsulting-scripts>
- <https://galaxy.ansible.com/juliovp01/satellite6-install/> (original playbook for sat6)