## ANSIBLE

## **Montreal Ansible Meetup**

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24 Octobre, 2018



#### **AGENDA**

18:00 - 18:30

Bienvenue et nouvelles Ansible par Michael Lessard, Red Hat Mot du commanditaire de la soirée - Guavus



18:30 - 19:00

Ansible, comment bien recycler votre code par Sébastien Perreault, Red Hat

19:15 :::::::: PAUSE ::::::::

19:15 - 19:45

Comment piloter des microservice depuis Ansible, par Gonéri Le Bouder, Red Hat

19:45 -20:15

Comment déployer et configurer AWX et Tower automatiquement sur Kubernetes et OpenShift, par David Moreau Simard,

Red Hat



#### **ANSIBLE MEETUP**

#### Cherche présentateurs :

- Bonne histoire autour d'Ansible
- Ce que vous faites avec Ansible
- Vos trouvailles, etc...

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WHY ANSIBLE?



#### **SIMPLE**

Human readable automation

No special coding skills needed

Tasks executed in order

Usable by every team

**Get productive quickly** 



#### **POWERFUL**

App deployment

Configuration management

Workflow orchestration

Network automation

Orchestrate the app lifecycle



#### **AGENTLESS**

Agentless architecture

Uses OpenSSH & WinRM

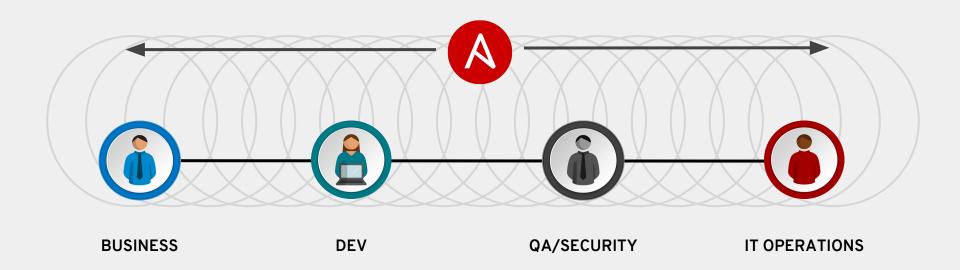
No agents to exploit or update

Get started immediately

More efficient & more secure



#### ANSIBLE IS THE UNIVERSAL LANGUAGE



Ansible is the first **automation language** that can be read and written across IT.

Ansible is the only **automation engine** that can automate the entire application lifecycle and continuous delivery pipeline.



# GitHub

STARS	TECHNO	CONTRIBUTEURS
33,365	Ansible	3,901
17,537	Vagrant	859
14,074	Terraform	1,230
9,324	Salt	2,171
5,521	Chef	564
5,107	Puppet	502

Mise à jour : 24 Octobre 2018



# SOMMES-NOUS À LA BONNE PLACE?



**GA:: OCTOBER 9th 2018** 

#### **ANSIBLE 2.7**

MODERNIZE. ORGANIZE. EXTEND.

#### **MODERNIZE**

Python 2.7 (Ansible engine) we still support python 2.6 for targeted hosts Python 3.5

#### **OPTIMIZE**

Running modules: invoking a module only needs to invoke python once instead of twice

#### **EXTEND**

ignore\_unreachable, allow for skipping tasks on hosts that are unreachable, instead of aborting the play altogether.



#### **ANSIBLE 2.7**

#### MODULE ADDITIONS AND UPDATES

#### LINUX

yum and dnf modules now at feature parity new reboot module

#### **CLOUD**

AWS (manage\_eks\_cluster, rds\_instance)

Azure (21 new modules : azure\_rm\_autoscale, azure\_rm\_route, azure\_rm\_webapp, ...) GCP (40 new modules : many new module that collect different facts, vpn\_tunnel, ....)

#### **WINDOWS**

More Chocolatey modules win\_wait\_for\_process

#### **MORE MODULES FOR:**

NetAPP (42 new modules) F5 (19 new modules)

MERAKI (7 new modules)

VMware (12 new modules)



### **ANSIBLE NETWORK AUTOMATION**

Use Ansible to manage, validate, and continuously track heterogeneous network device configurations and deployments.

Network modules are included as part of the Ansible distribution.

**40**Networking platforms

570+
Networking Modules

ansible.com/networking



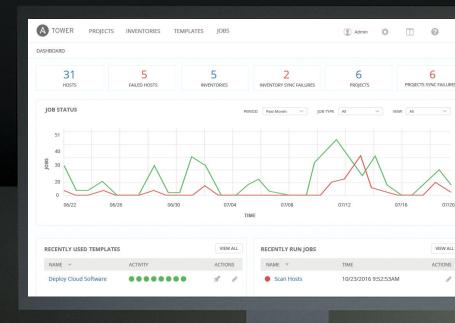


**GA:: SEPTEMBER 12th 2018** 

**SCALE** 

**MANAGE** 

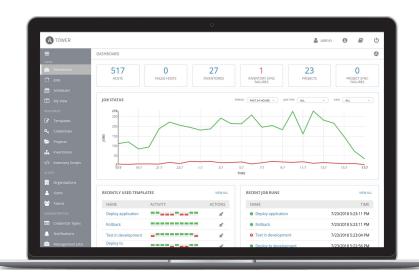
**CONNECT** 



#### WHAT IS ANSIBLE TOWER?

Ansible Tower is an **enterprise framework** for controlling, securing
and managing your Ansible automation
— with a **UI and RESTful API**.

- Role-based access control keeps environments secure, and teams efficient.
- Non-privileged users can safely deploy entire applications with push-button deployment access.
- All Ansible automations are centrally logged, ensuring complete auditability and compliance.





#### WHAT'S NEW IN ANSIBLE TOWER 3.3?

Tower is now deployable as a containerized service in OCP

Improved scaling

**UX** enhancements

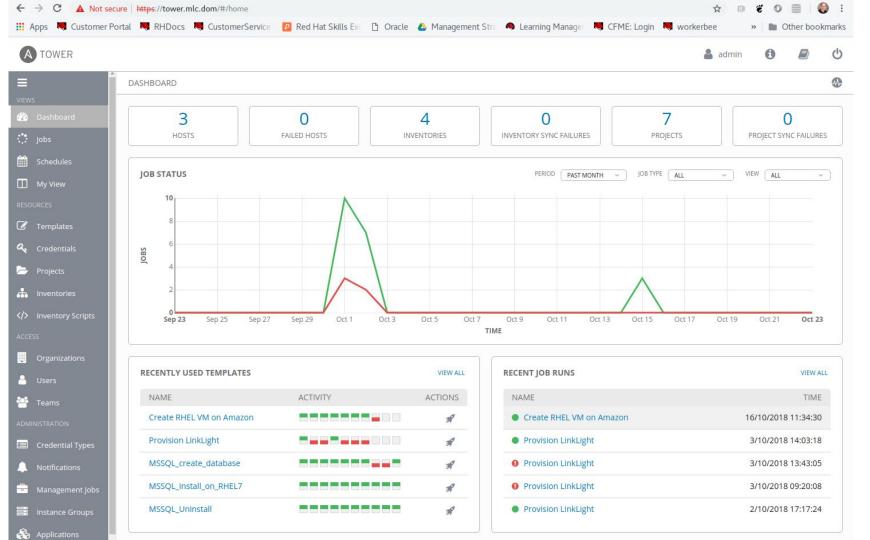
More granular role-based permissions

Run multiple versions of Ansible Engine in parallel

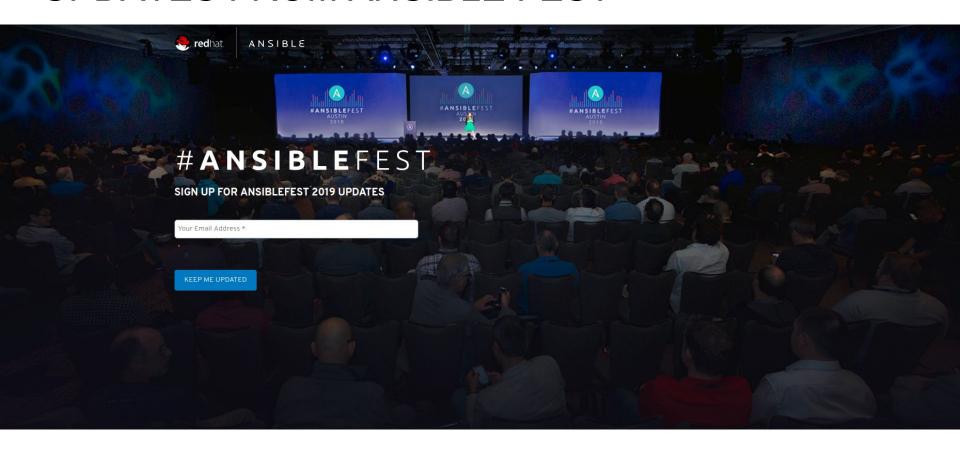
Improvements to authorization and authentication

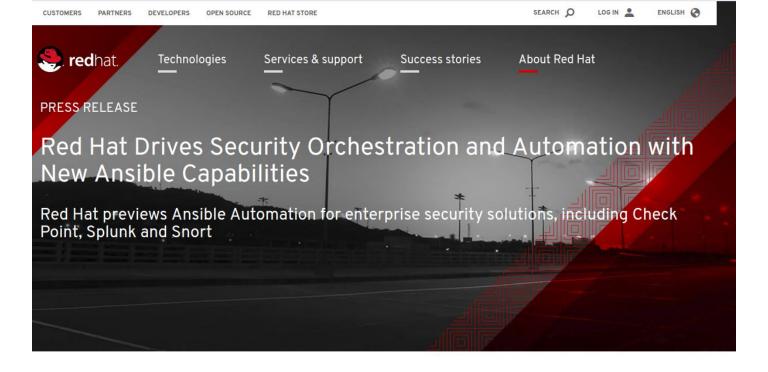
Tower 3.3 is now an OAuth2 provider





## UPDATES FROM ANSIBLE FEST





#### IN SHORT

Red Hat Ansible security automation will offer new modules to integrate and orchestrate security tasks and processes.

#### MENTIONED IN THIS ARTICLE

Red Hat Ansible Automation

AUSTIN – ANSIBLEFEST 2018 – October 2, 2018 – Red Hat, Inc. (NYSE: RHT), the world's leading provider of open source solutions, today previewed new Ansible Automation integrations to help customers automate and orchestrate enterprise security solutions, further extending Red Hat's leadership across the IT security landscape. By automating security capabilities like enterprise firewalls, intrusion detection systems (IDS) and security information and event management (SIEM), organizations can better unify responses to cyberattacks through the coordination of multiple, disparate security solutions, helping these technologies to act as one in the face of an IT security event.

Automation is an important component of digital transformation, helping to drive efficiency, deliver value faster, and solve IT and business workflow challenges. Starting with networks, Red Hat has been driving

## THREAT HUNTING: FIREWALL RULE VIOLATION

A threat intelligence or incident responder could investigate an incident and end up with hundreds of IPs, file hashes, and domains.





A scheduled job runs a script to check CPU, memory, and disk load of the firewall. Over a certain threshold launches an Ansible Playbook to export the log and send it to Splunk.

#### splunk>

An Ansible Playbook creates a new notable event, imports Check Point's log and identifies a policy violated multiple times. Through workflow actions launches another Playbook toward Snort.



An Ansible Playbook creates a new *log tcp* rule using the destination IP in the violated rule. The log created is shipped back to Splunk.

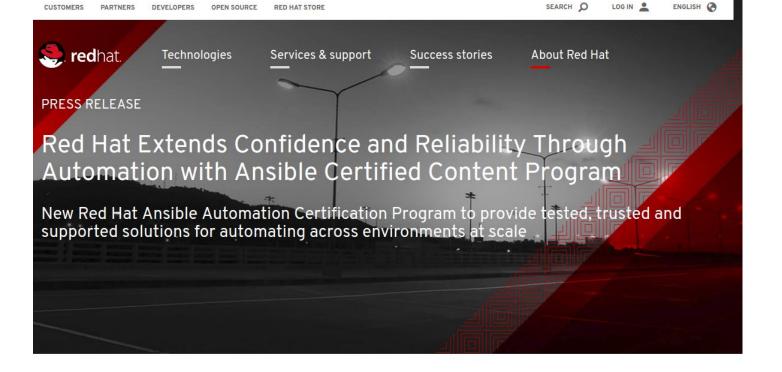
#### splunk>

The notable event becomes *In Progress*. The new piece of information confirms that there is a single IP violating the firewall rule, which is supposed to be authorized. A new Playbook is launched targeting Check Point.



An Ansible Playbook updates the rule adding the IP address in the whitelist.





#### IN SHORT

The new Red Hat Ansible Automation Certification Program to more readily deliver tested, trusted and supported Red Hat Ansible Automation.

MENTIONED IN THIS ARTICLE

AUSTIN - ANSIBLEFEST 2018 - October 2, 2018 - Red Hat, Inc. (NYSE: RHT), the world's leading provider of open source solutions, today announced the Red Hat Ansible Automation Certification Program to more readily deliver tested, trusted and supported Red Hat Ansible Automation. With more than two million customer systems now managed by Red Hat Ansible Tower, the certification program is intended to help further accelerate user deployment times by providing improved security, reliability and consistency of content.

As IT infrastructures grow in complexity, the need for automation becomes more pressing. To help address the challenge, Red Hat is driving Ansible into more domains and expanding the supported use-cases for automation across infrastructure, networks, containers and more, enabling users to more easily automate

## **NEW ANSIBLE PROJECTS**



# pip2 install molecule

## **ANSIBLE-LINT**

# pip2 install ansible-lint



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## Intelligent Automation for the Modern Network

Build, execute and visualize Network Intelligent Workflows the the journey toward modern automated networks.

**GET STARTED >** 

SEE IT IN ACTION :



With Red Hat Ansible Network Automation, Itential to enable network engineering and IT operations teams to create and execute network automation capabilities without writing code

The Mo

AUSTIN – ANSIBLEFEST 2018, OCT 2, 2018 /PRWeb/ — Itential®, the leader in intelligent network automation, today announced at AnsibleFest 2018, its integration with Red Hat Ansible Network Automation. The integration is intended to enable both network engineering and IT operations teams to create and execute network automation capabilities without writing code.





## THANK YOU

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