ANSIBLE TOWER OVERVIEW AND ROADMAP

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WHY AUTOMATE?

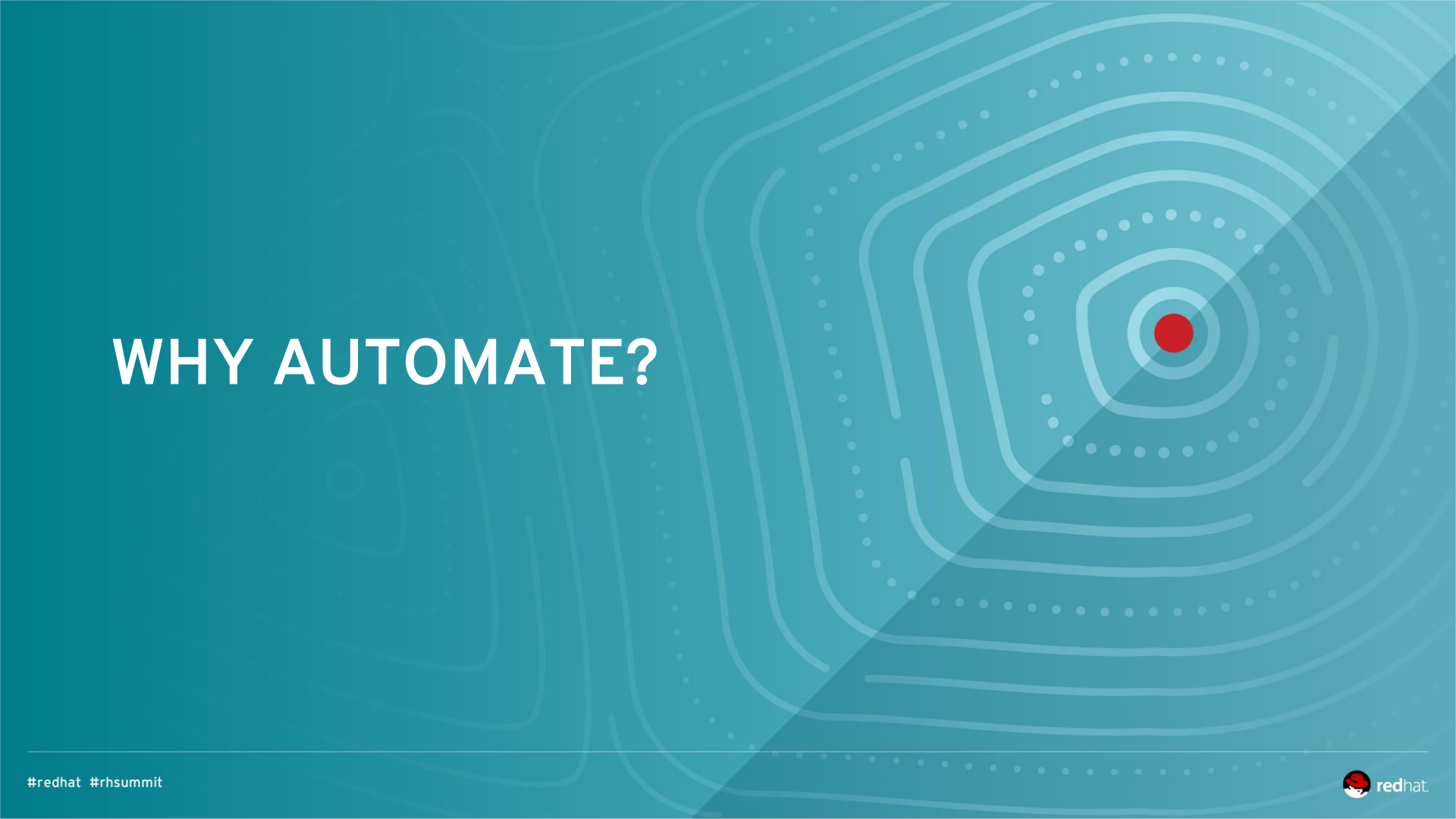

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Photo via Volvo

WHY DO WE WANT AUTOMATION?

People make mistakes

People don't always have the best information

People have to drive with... other people

Photo via Volvo

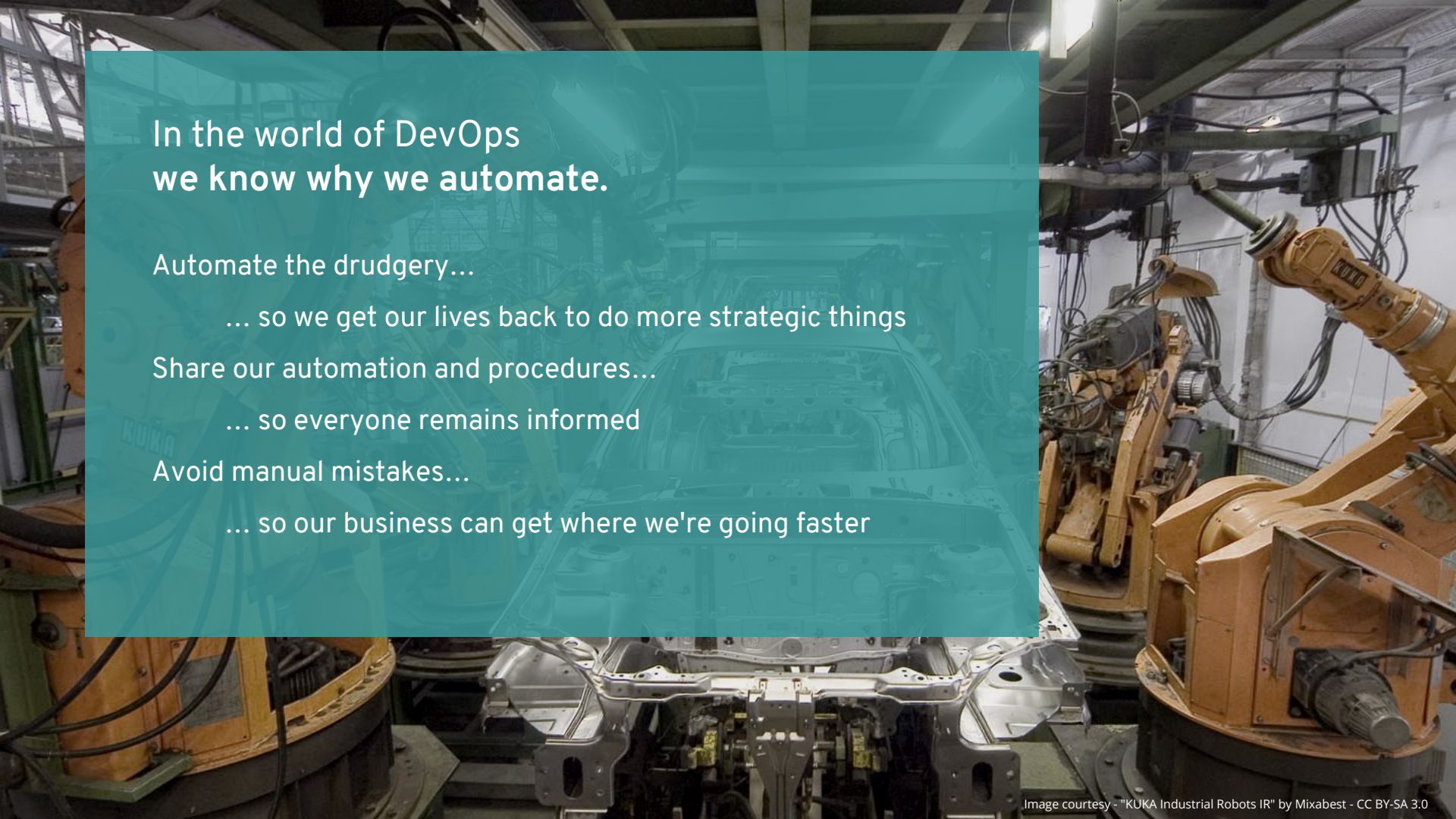
WHY DO WE WANT TO AUTOMATE?

Get your life back

Do more important things

Get where you're going faster

Photo via Volvo



In the world of DevOps
we know why we automate.

Automate the drudgery...

... so we get our lives back to do more strategic things

Share our automation and procedures...

... so everyone remains informed

Avoid manual mistakes...

... so our business can get where we're going faster

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RED HAT MANAGEMENT AND AUTOMATION BUILT FOR IT OPERATORS

ANSIBLE TOWER by Red Hat®

CENTRALIZE AUTOMATION GOVERNANCE

RED HAT® CLOUDFORMS

DELIVER SERVICES ACROSS YOUR HYBRID CLOUD

RED HAT® INSIGHTS

PREVENT CRITICAL ISSUES BEFORE THEY OCCUR

RED HAT® SATELLITE

BUILD A TRUSTED & SECURE RED HAT ENVIRONMENT

ANSIBLE

AUTOMATE YOUR SYSTEMS, PROCESSES, & DEPLOYMENTS

WHY ANSIBLE?

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WHAT IS ANSIBLE?

It's a **simple automation language** that can perfectly describe IT application environments and processes in Ansible Playbooks.

```
---
- name: install and start apache
  hosts: all
  vars:
    http_port: 80
    max_clients: 200
  remote_user: root

  tasks:
  - name: install httpd
    yum: pkg=httpd state=latest

  - name: write the apache config file
    template: src=/srv/httpd.j2 dest=/etc/httpd.conf

  - name: start httpd
    service: name=httpd state=started
```


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WHAT IS ANSIBLE?

It's the open source **automation engine** that runs Ansible Playbooks.

```
[user@hostname: $] ansible-playbook -i inventory playbook.yml

PLAY [install and start apache] ************************************

TASK [Gathering Facts] *********************************************
ok: [webserver.local]

TASK [install httpd] ***********************************************
changed: [webserver.local]

TASK [write the apache config file] ********************************
changed: [webserver.local]

TASK [start httpd] *************************************************
changed: [webserver.local]

PLAY RECAP *********************************************************
webserver.local       : ok=4   changed=3   unreachable=0   failed=0
```


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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

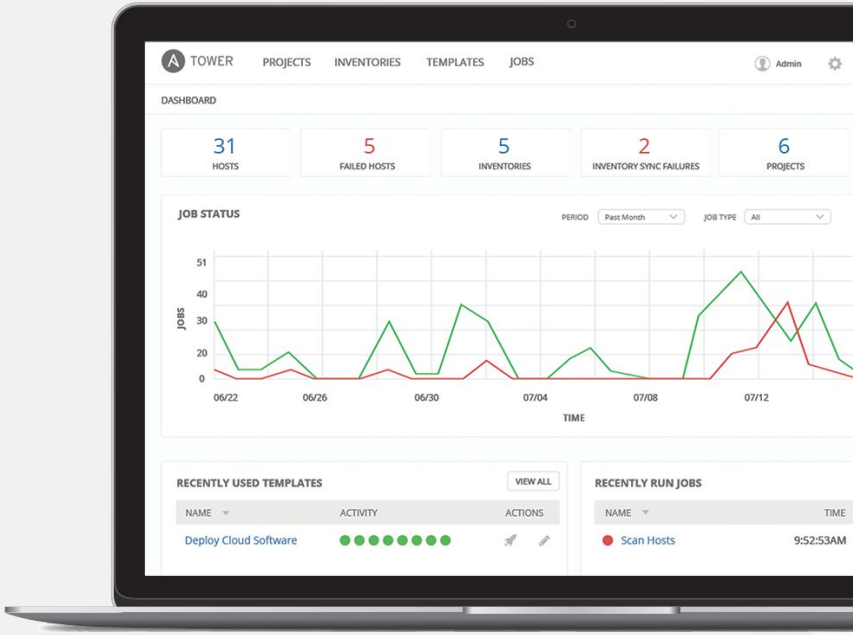
No agents to exploit or update

Get started immediately

More efficient & more secure

WHAT IS ANSIBLE TOWER?

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



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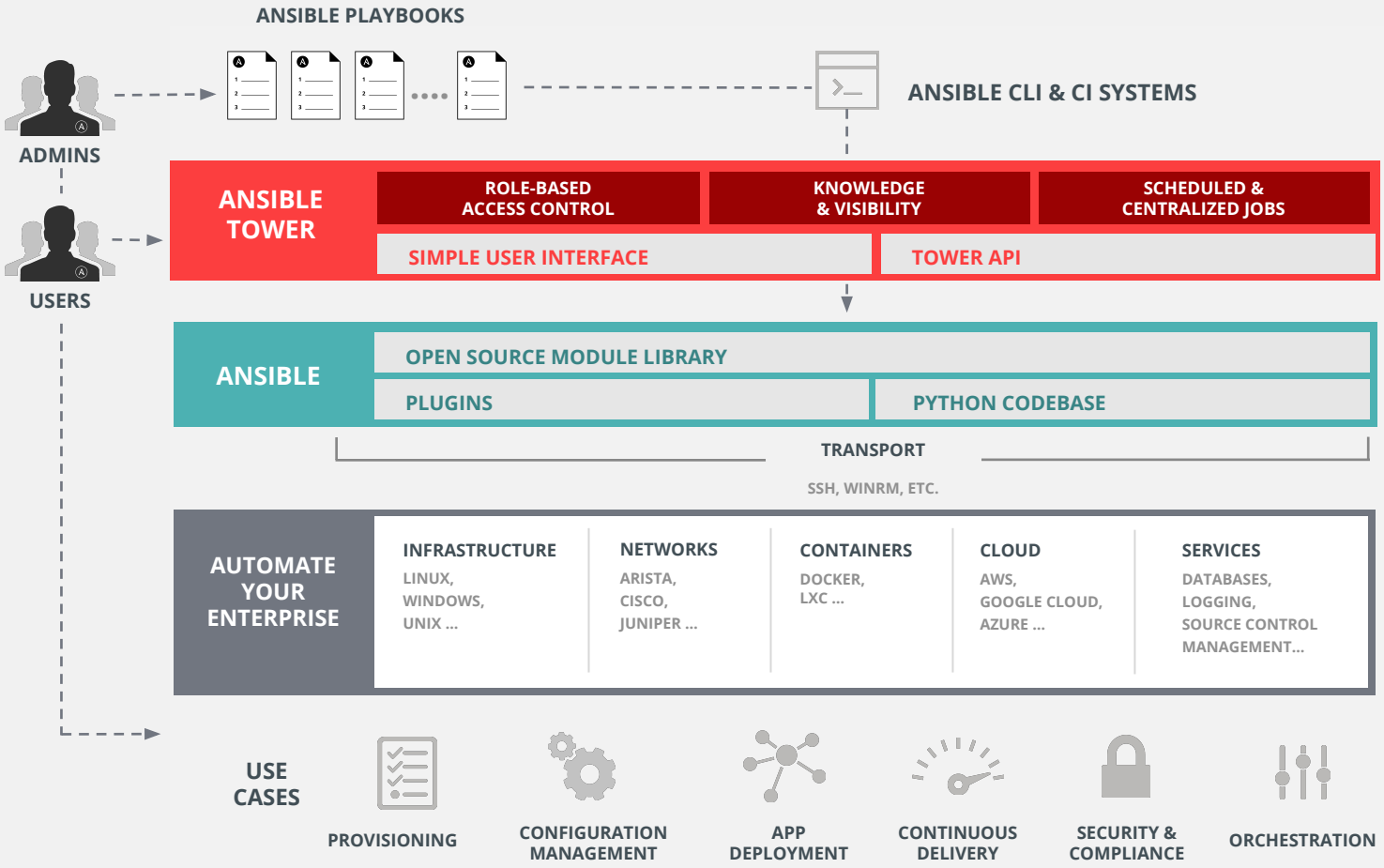
TOWER EMPOWERS TEAMS TO AUTOMATE

CONTROL	KNOWLEDGE	DELEGATION
Scheduled and centralized jobs	Visibility and compliance	Role-based access and self-service

SIMPLE	POWERFUL	AGENTLESS
Everyone speaks the same language	Designed for multi-tier deployments	Predictable, reliable, and secure

AT ANSIBLE'S CORE IS AN **OPEN-SOURCE** AUTOMATION ENGINE


ANSIBLE PLAYBOOKS
ADMINS
USERS
ANSIBLE CLI & CI SYSTEMS
ANSIBLE TOWER
ROLE-BASED ACCESS CONTROL
KNOWLEDGE & VISIBILITY
SCHEDULED & CENTRALIZED JOBS
SIMPLE USER INTERFACE
TOWER API
ANSIBLE
OPEN SOURCE MODULE LIBRARY
PLUGINS
PYTHON CODEBASE
TRANSPORT
SSH, WINRM, ETC.
AUTOMATE YOUR ENTERPRISE
INFRASTRUCTURE
LINUX, WINDOWS, UNIX ...
NETWORKS
ARISTA, CISCO, JUNIPER ...
CONTAINERS
DOCKER, LXC ...
CLOUD
AWS, GOOGLE CLOUD, AZURE ...
SERVICES
DATABASES, LOGGING, SOURCE CONTROL MANAGEMENT...
USE CASES
PROVISIONING
CONFIGURATION MANAGEMENT
APP DEPLOYMENT
CONTINUOUS DELIVERY
SECURITY & COMPLIANCE
ORCHESTRATION

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ANSIBLE TOWER OVERVIEW

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WHY ANSIBLE TOWER?

CONTROL

Avoid the wild west

At-a-glance dashboard

Pull playbooks from SCM

Schedule jobs at any time

Easily connect to inventory sources

Model complex processes with new **Workflows**

KNOWLEDGE

Ensure environment consistency

Log all automation securely

Audit all Tower activity

Notifications inform users

Use new **Enterprise Logging** for analysis

SCALE

Empower Teams to Automate

Users from LDAP/SAML and more

Role-based access control

Simple self-service surveys

Full REST API for all features

Expand capacity with new **Tower clusters**

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CONTROL WITH TOWER WORKFLOWS

Mix and re-use automation as needed without creating new playbooks

Provision ◦ Configure ◦ Deploy ◦ Scale

Build ◦ Test ◦ Promote ◦ Verify ◦ Deploy

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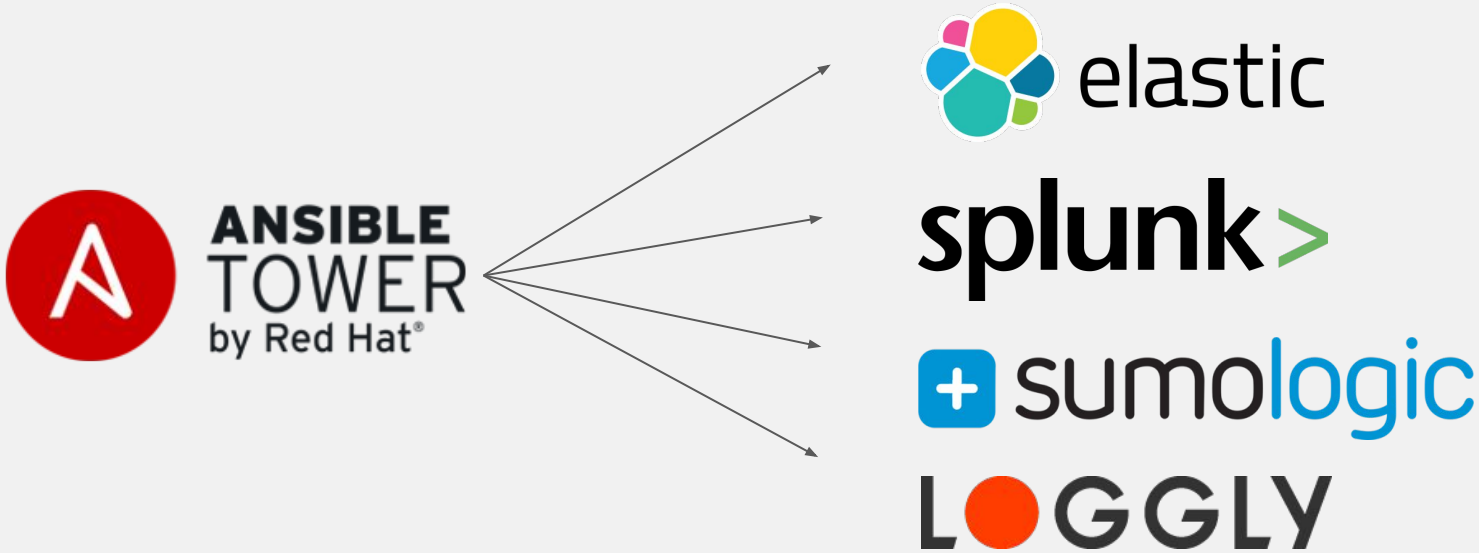
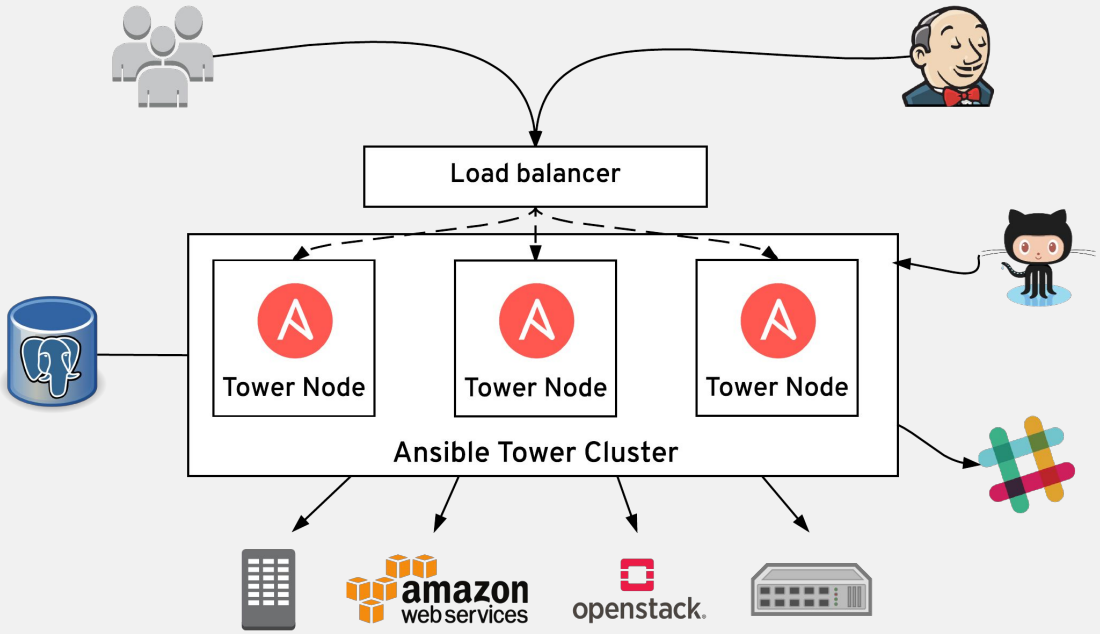
KNOWLEDGE WITH TOWER LOGGING INTEGRATIONS

Integrate your automation with your systems analysis



SCALE WITH TOWER CLUSTERS

Add capacity and redundancy with ease



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ANSIBLE TOWER ROADMAP

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BRING AUTOMATION TO YOUR WHOLE ENTERPRISE

DISCOVER

- Easily inventory whatever you have - systems, VMs, networking, and more

AUTOMATE

- Integrate into the tools and processes you already have
- Easily discover and remediate problems

SCALE

- Build out Tower environments for multiple deployment scenarios
- Build enterprise deployments using multiple clusters

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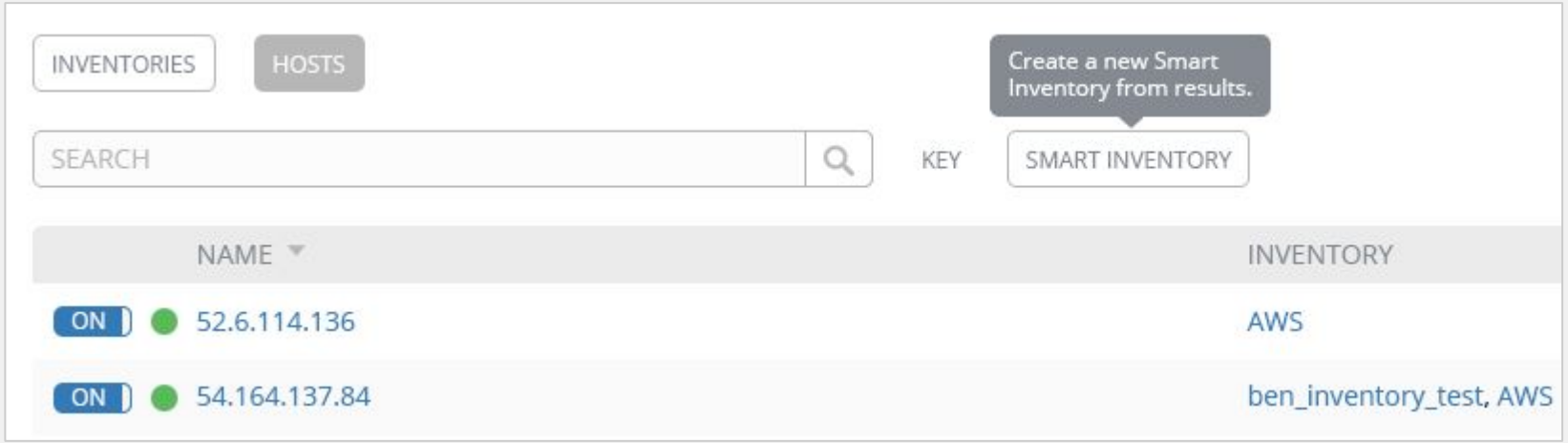
DISCOVER

Easily inventory whatever you have - systems, VMs, networking, and more



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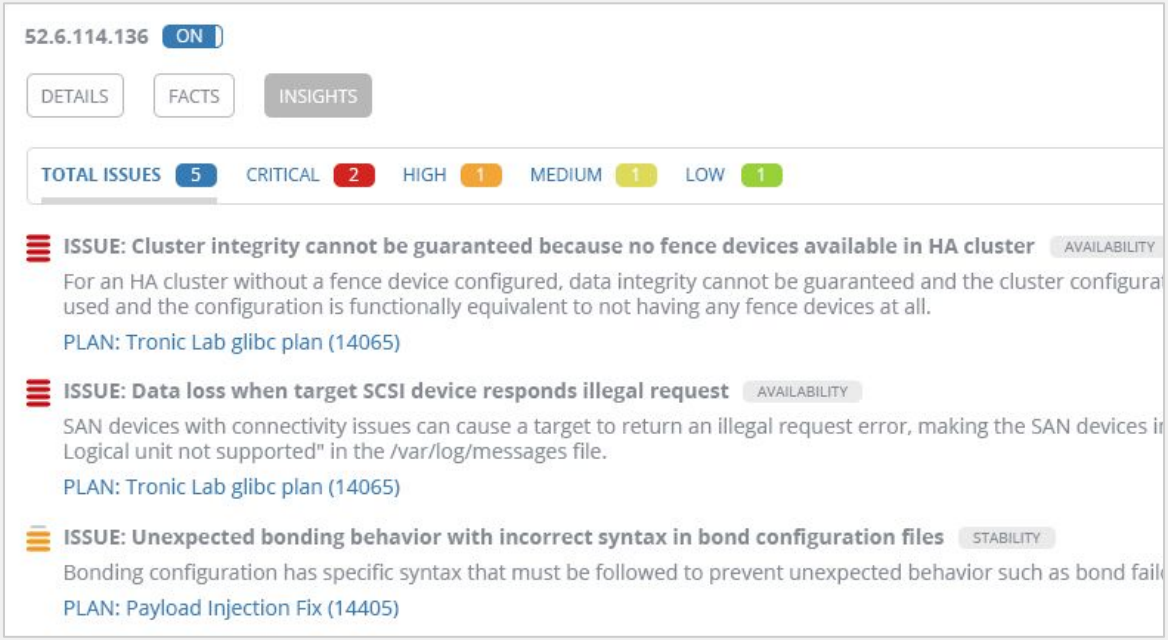
AUTOMATE

Integrate into the tools and processes you already have

AUTOMATE

Easily discover and remediate problems



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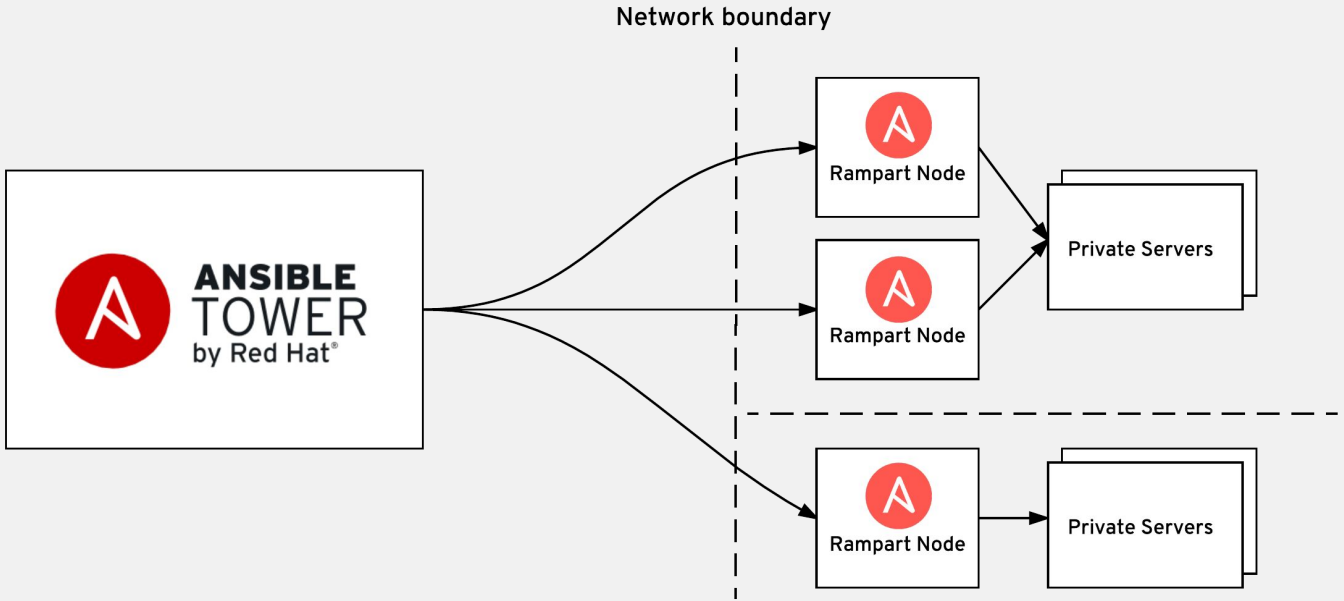
SCALE

Build Tower environments for multiple deployment scenarios - Introducing Tower Ramparts



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SCALE

Build enterprise deployments using multiple clusters

Use consistent API URLs to access the same job on multiple Tower clusters

Build automation definitions with Ansible playbooks and Workflow schemas

Containerized Tower for easier deployments

```
# Workflow schema
- job_template: Provision cloud instances
  success:
  - job_template: Apply standard configuration
      failure:
      - job_template:  Destroy cloud instances
  - job_template: Deploy application
      failure:
      - job_template:  Destroy cloud instances
```


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