RED HAT SATELLITE 6
transitioning from 5 to 6

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Red Hat Management...

At Red Hat, "management" is no longer simply Satellite systems management!

Digital Transformation

APPLICATIONS
New architectures
and ways to integrate
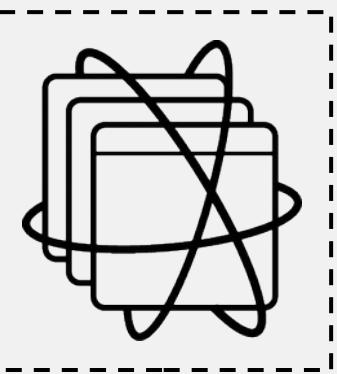
INFRASTRUCTURE
New cloud-based infrastructure
and ways to serve applications
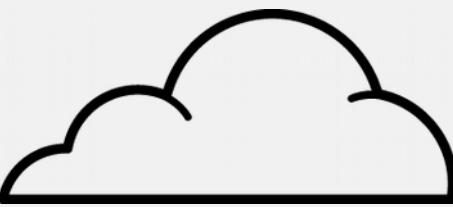
DEV
New ways of developing
and delivering applications
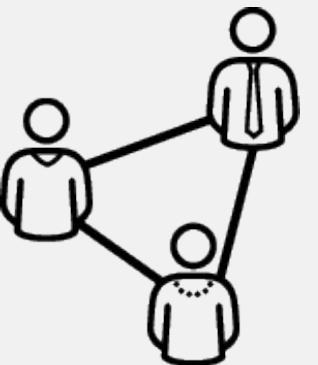
OPS
More agile process to support
both IT and the business
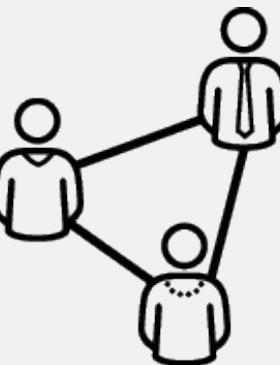
RED HAT MANAGEMENT

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RED HAT MANAGEMENT

SATELLITE
BUILD A TRUSTED & SECURE RED HAT ENVIRONMENT
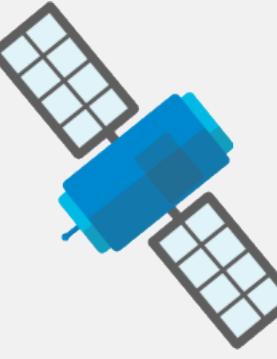
Manage the Red Hat Lifecycle

Provision & Configure at Scale

Standardize Your Environment

CLOUDFORMS
DELIVER SERVICES ACROSS YOUR HYBRID CLOUD

Hybrid Cloud Management

Self-Service Provisioning

Policy-driven Compliance

ANSIBLE
AUTOMATE YOUR IT PROCESSES & DEPLOYMENTS

Simple & powerful language

No agents to install

Scale with Ansible Tower

INSIGHTS
PREVENT CRITICAL ISSUES BEFORE THEY OCCUR

Continuous Insights

Verified Knowledge

Proactive Resolution

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What is Satellite today?

Define → Deploy → Manage
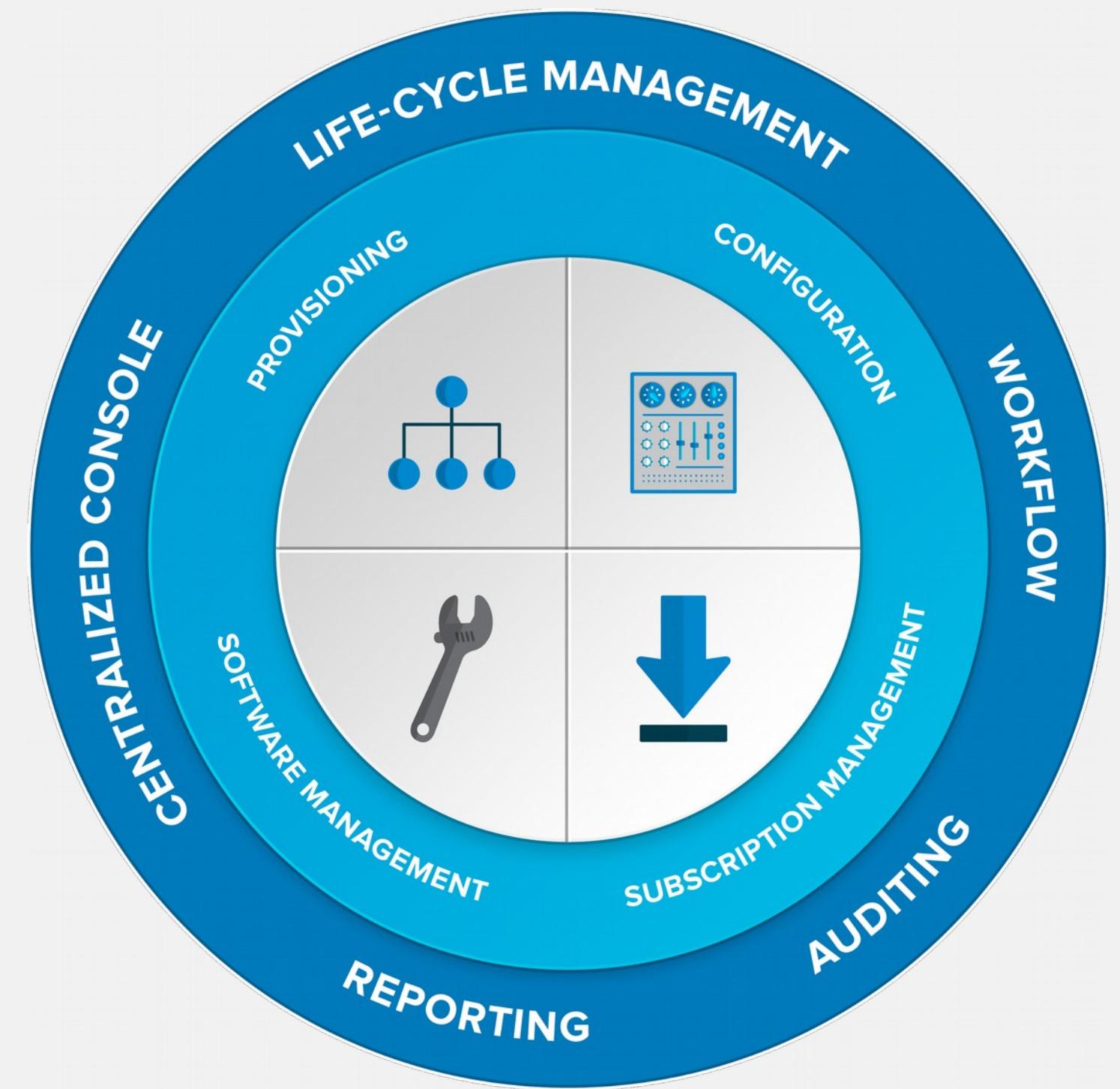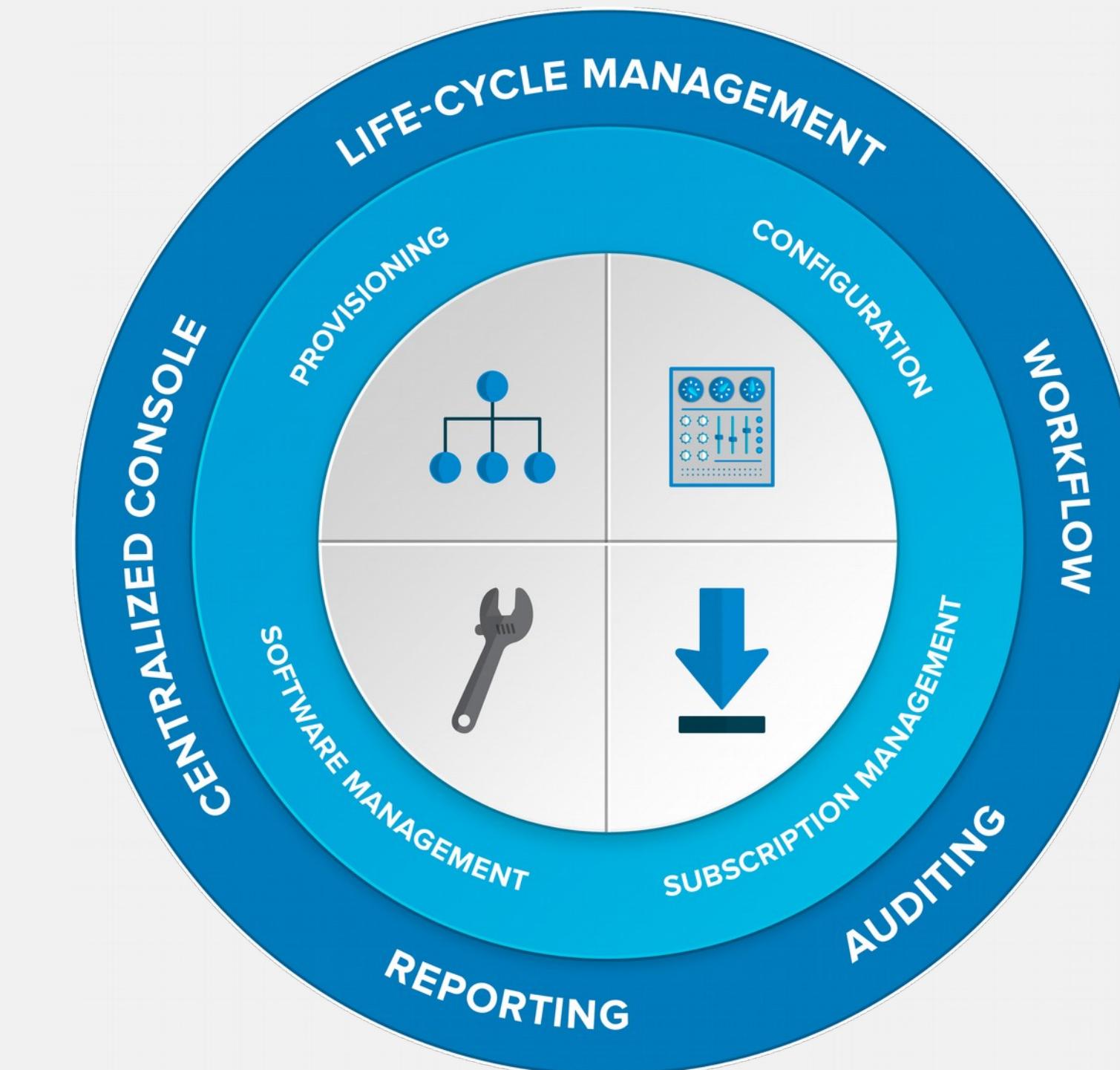
MANAGE RED HAT INFRASTRUCTURE

BUILT TO SCALE

STREAMLINED CONTENT MANAGEMENT

LIFE-CYCLE MANAGEMENT

CENTRALIZED CONSOLE

PROVISIONING

CONFIGURATION

WORKFLOW

SOFTWARE MANAGEMENT

SUBSCRIPTION MANAGEMENT

AUDITING

REPORTING
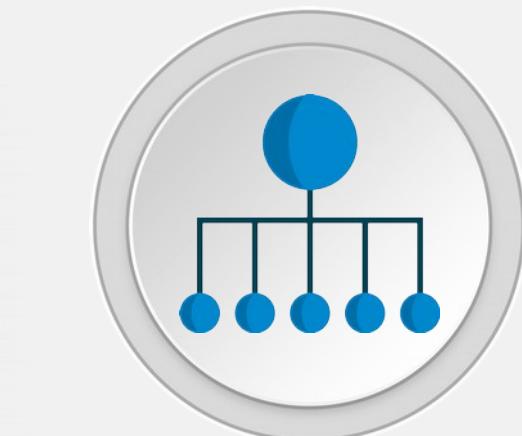
MANAGE MULTIPLE RED HAT ACCOUNTS

ENHANCED DRIFT & CONFIGURATION MANAGEMENT

SIMPLIFIED SYSTEM INTEGRATION

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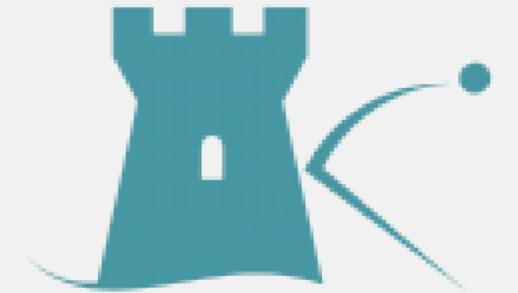
...upstream

FOREMAN

KATELLO™

Puppet

Pulp

CANDLEPIN

#redhat #rhsummit

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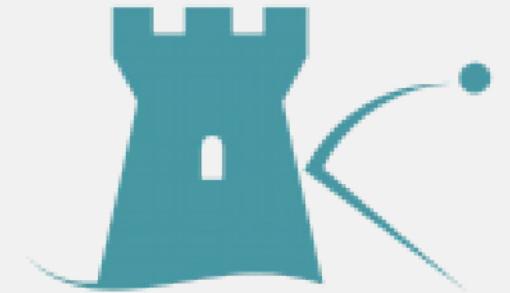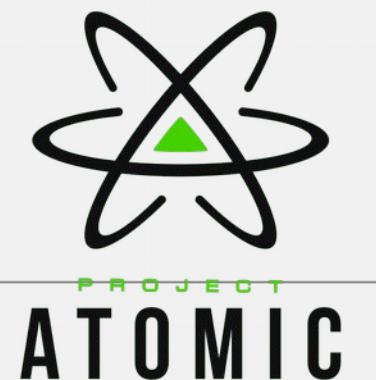
COMING IN SATELLITE 6.2
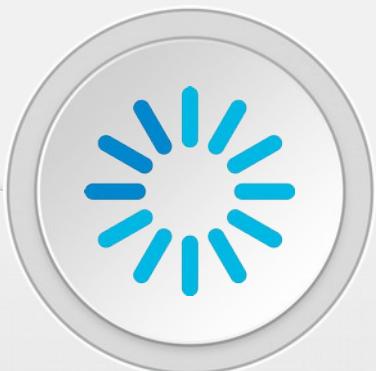
GENERAL IMPROVEMENTS

Remote execution

Scheduling

Inter-Satellite Sync

Unified hosts

Discovery w/o PXE

ATOMIC HOSTS AND CONTAINERS

Complete management of RHEL Atomic hosts

Mirror container repositories

SOFTWARE MANAGEMENT IMPROVEMENTS

Streamlined content synchronization

Simplified Puppet smart variable management
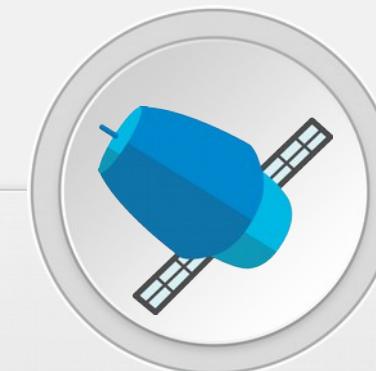
CAPSULE IMPROVEMENTS

Observability

Greater resiliency

Improved command and control

ENHANCED DOCUMENTATION

New Documentation Guides Available

More User-Friendly documentation

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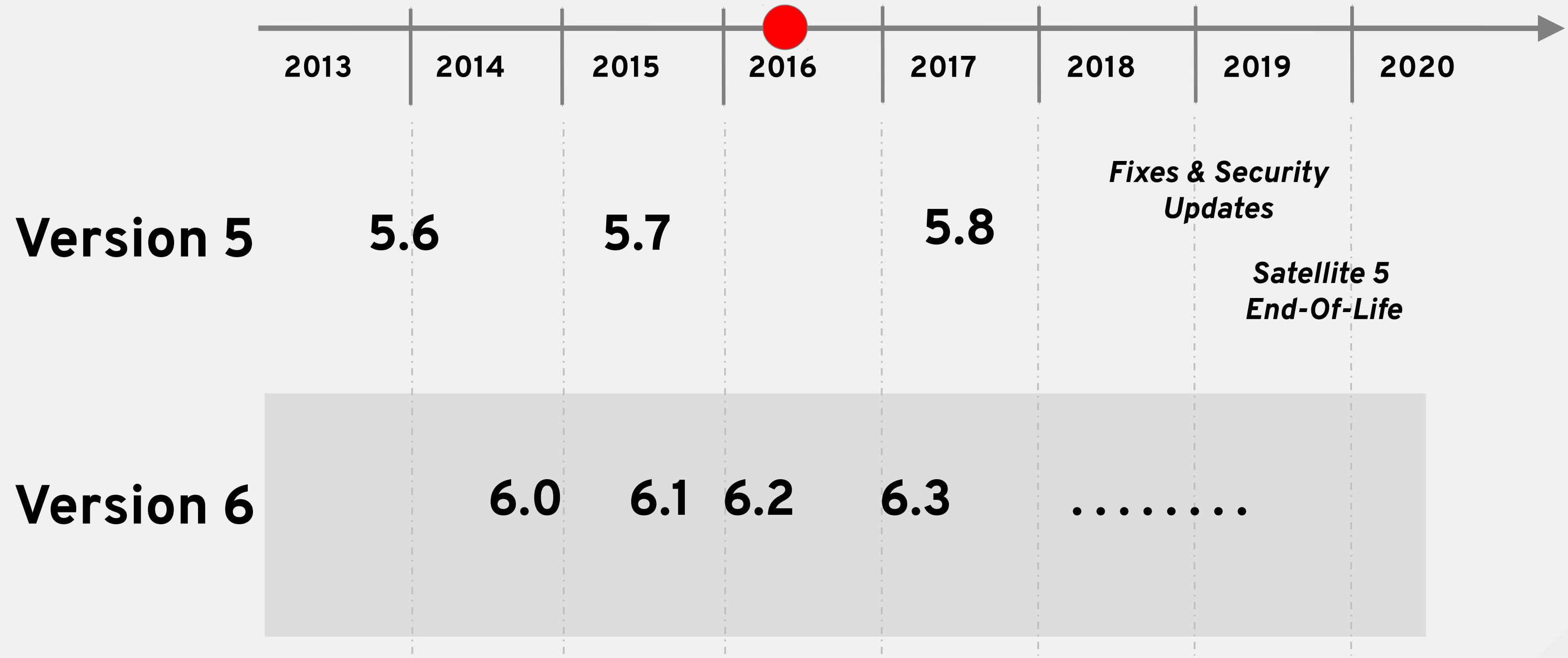
Migration Strategies
Two Methodologies

Methodology 1:
Migrate both clients and content

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Methodology 1:
Migrate both clients and content

Why maybe this method?

- Quickest and most familiar mapping of what you have from Satellite 5

Why maybe not?

- Forces Satellite 6 to look and act like legacy Satellite 5
- Still not really an in-place upgrade
- Ignores best practices around Content Views and Lifecycle Environments
- Obfuscates some of the benefits of Satellite 6
- Requires more admin time to "make things work the way they used to"

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Methodology 2:
Migrate clients + build new content and workflow

Methodology 2:
Migrate clients + build new content and workflow

Why maybe this method?

- Migrate clients + build new content and workflow

- Improved workflow paradigm

- Allows full use of Satellite 6

Why maybe not?

- More time to implement

- More planning

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Transition Flowchart
Planning your Satellite

```
                          ┌─────────────────────┐
                          │  Build new Satellite 6 │
                          └─────────────────────┘
                                     │
                                     ▼
                          ┌─────────────────────┐
              ┌───────────│    Active / Passive   │───────────┐
              │           └─────────────────────┘             │
              ▼                                                ▼
   ┌─────────────────────┐                        ┌─────────────────────┐
   │  Identify workload    │                        │   Deploy new          │
   │  order to transition  │                        │   workloads registered │
   └─────────────────────┘                        │   to Satellite 6      │
              │                                     └─────────────────────┘
              │           ┌─────────────────────┐
              │           │  Verify that the      │
              │           │  migration was        │
              ▼           │  successful           │
   ┌─────────────────────┐└─────────────────────┘
   │  Run bootstrap to     │──────▲         │
   │  migrate              │       │         │
   └─────────────────────┘        │         ▼
                          ┌─────────────────────┐      ┌─────────────────────┐
                          │   Retire Satellite 5  │─────▶│     Celebrate!        │
                          └─────────────────────┘      └─────────────────────┘
```

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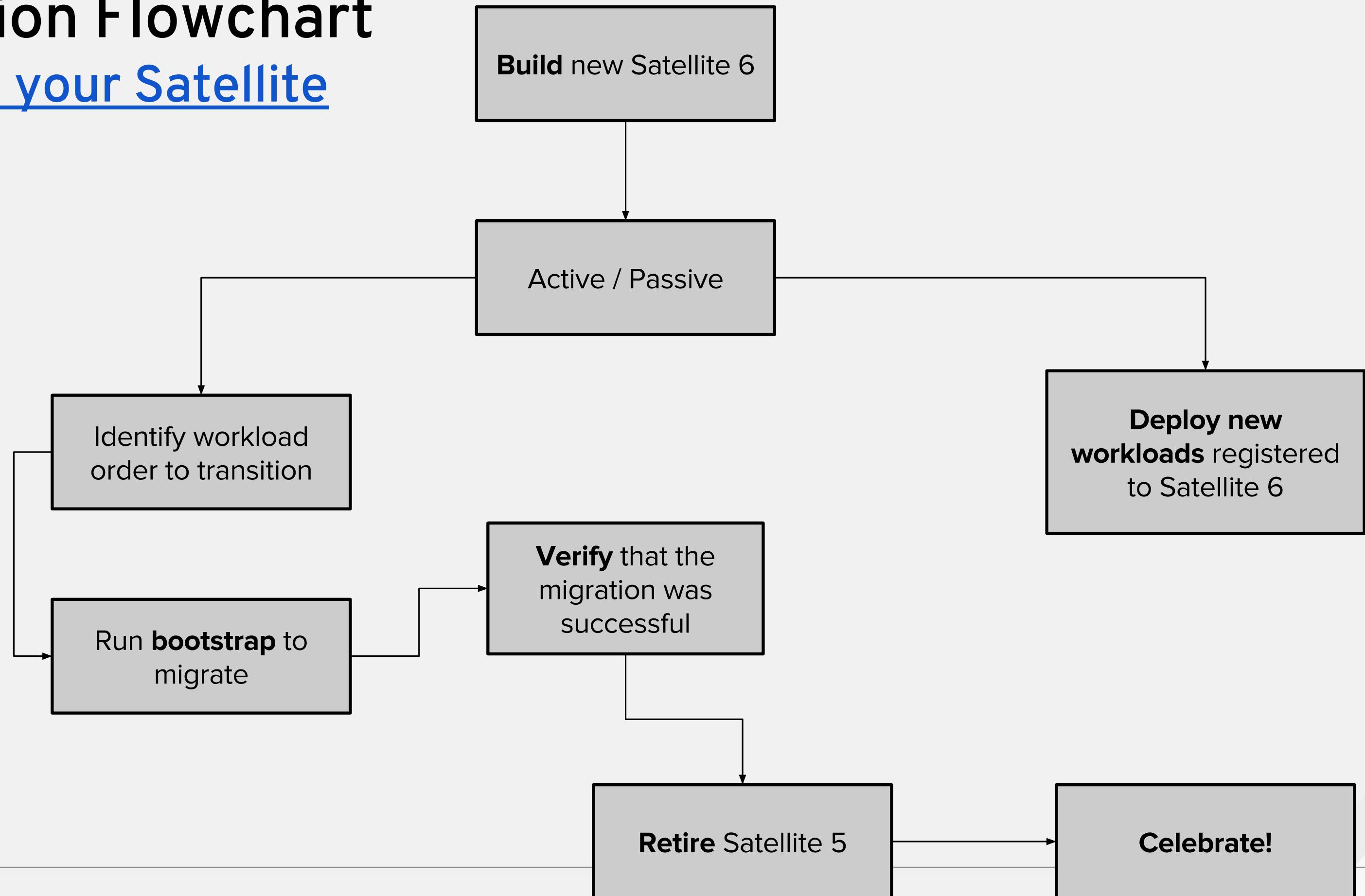
Content Views and Promotions

Content Views and Promotions

Content Views are the new "cloned channel"

Lifecycle Environments are promoted through a Content View to change what products can be seen

Are you confused? Demo time!

Migrating Clients with bootstrap

Migrating Clients with bootstrap
What does it do?

- Installing subscription-manager and its pre-reqs

- Make an API to Satellite to create the Host associated with the user specified Org/Location

- Install the candlepin consumer RPM

- Running rhn-migrate-classic-to-rhsm (with the user provided activation key) to get product certs on a system

- Registering the system to Satellite 6 using a Satellite Capsule if needed.

- Configuring the system with a proper puppet configuration.

- Removing/disabling old RHN Classic packages/daemons (rhnsd, osad, etc)

- ...and a whole bunch of other tasks, which I'll show you

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Migrating Clients with bootstrap
Where can I find it?

- In Satellite 6.2 Beta (or GA)

- Installed via the **katello-client-bootstrap** package

- Installed by default on Satellites and Capsules

- Found in `/var/www/html/pub/bootstrap.py`

- Download → make executable → run

NFCU's Red Hat Environment

Bigger than a bread box but smaller than a Prime Pantry box

Explosive growth

Largely homogeneous

Applications are Operating System agnostic

Transition Strategy

Active approach (moving all systems),
but without server side components

Extensive testing

- Functionality

- API

- Feature

Cultural Shift

- New Tools (git, dedicated config management)

- New Processes

What we've learned....

Red Hat Satellite 6 is a whole
new animal

The documentation is actually
pretty good

Take you're time

      Thanks, Doc folks!

Learn something new!

Have fun with it!

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Resources

Resources

All things transition: https://access.redhat.com/articles/1187643

Satellite 6.2 Overview: https://access.redhat.com/articles/2280691
Importing Existing Hosts via the Bootstrap Script

Planning your Satellite: https://access.redhat.com/articles/1482733

10 Steps to Build an SOE: https://access.redhat.com/articles/1585273
How Red Hat Satellite 6 Supports Setting up a Standard Operating Environment

More Satellite Knowledge Content:
https://access.redhat.com/products/red-hat-satellite/#knowledge

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SATELLITE-RELATED SESSIONS/LABS

TUESDAY

10:15 am SS45625 **Enabling Digital Transformation via the Red Hat Management Portfolio** | Joe Fitzgerald, Chris Wells, William Nix

10:15 am SL42712 **Hands on with Satellite 6.2 (LAB)** | Bryan Kearney, Ohad Levy, Mike Mccune

11:30 am SS45594 **Red Hat Satellite, Ansible Tower and CloudForms: Doing more together** | Justin Nemmers, Chris Wells

4:45 pm SS43270 **Migrating an existing Puppet deployment into Satellite 6** | Maxim Burgerhout, Rich Jerrido, Chris Milsted

4:45 pm SS44330 **Bringing host lifecycle and content management into RHEV** | Yaniv Kaul, Simon Alcott

WEDNESDAY

10:15 am SL42712 **Hands on with Satellite 6.2** (LAB) | Bryan Kearney, Ohad Levy, Mike Mccune

11:30 am SS44800 **Practical Satellite deployments: from box to orbit in 60 minutes** | David Caplan, Rich Jerrido

3:30 pm SS44812 **Transitioning from Red Hat Satellite 5 to 6** | Todd Warner, Rich Jerrido, Will Darton (Navy Federal CU)

THURSDAY

10:15 am SS45622 **Satellite 6 Power User tips and tricks** | Thomas Cameron

11:30 am SS42713 **Red Hat Satellite 6 roadmap & demonstration** | Todd Warner, Bryan Kearney, Rich Jerrido

3:30 pm SS42731 **Achieving compliance, security automation & remediation with Red Hat CloudForms, Satellite & Ansible** | Lucy Kerner, Matthew Micene (DLT)

4:45 pm **Satellite birds of a feather** | Rich Jerrido
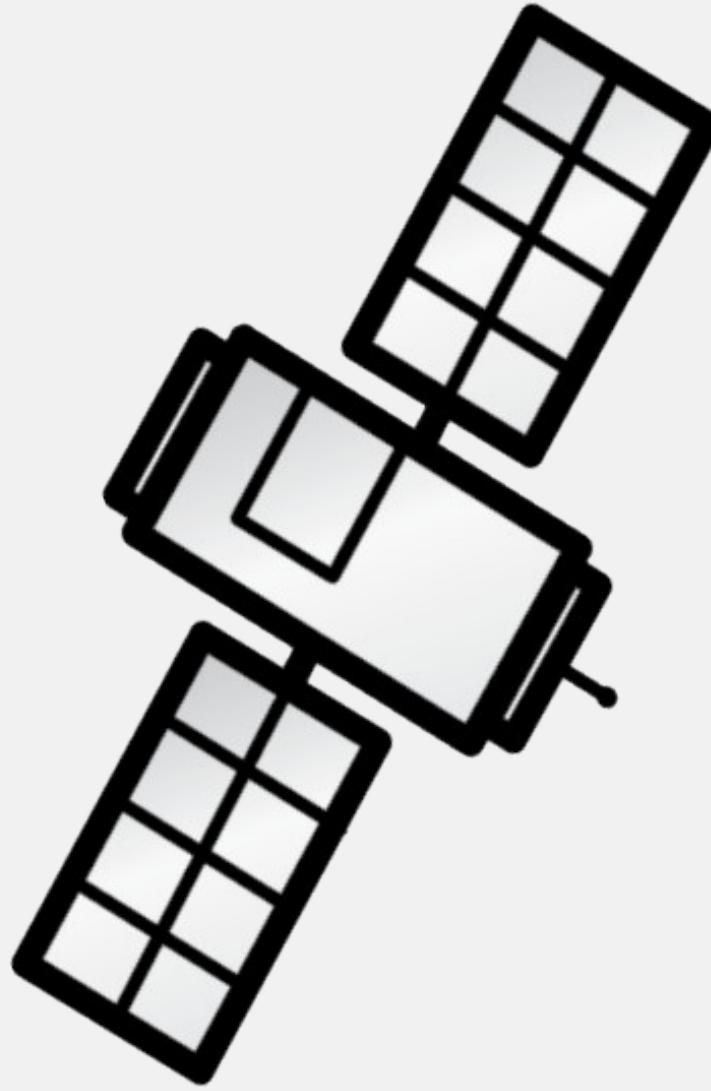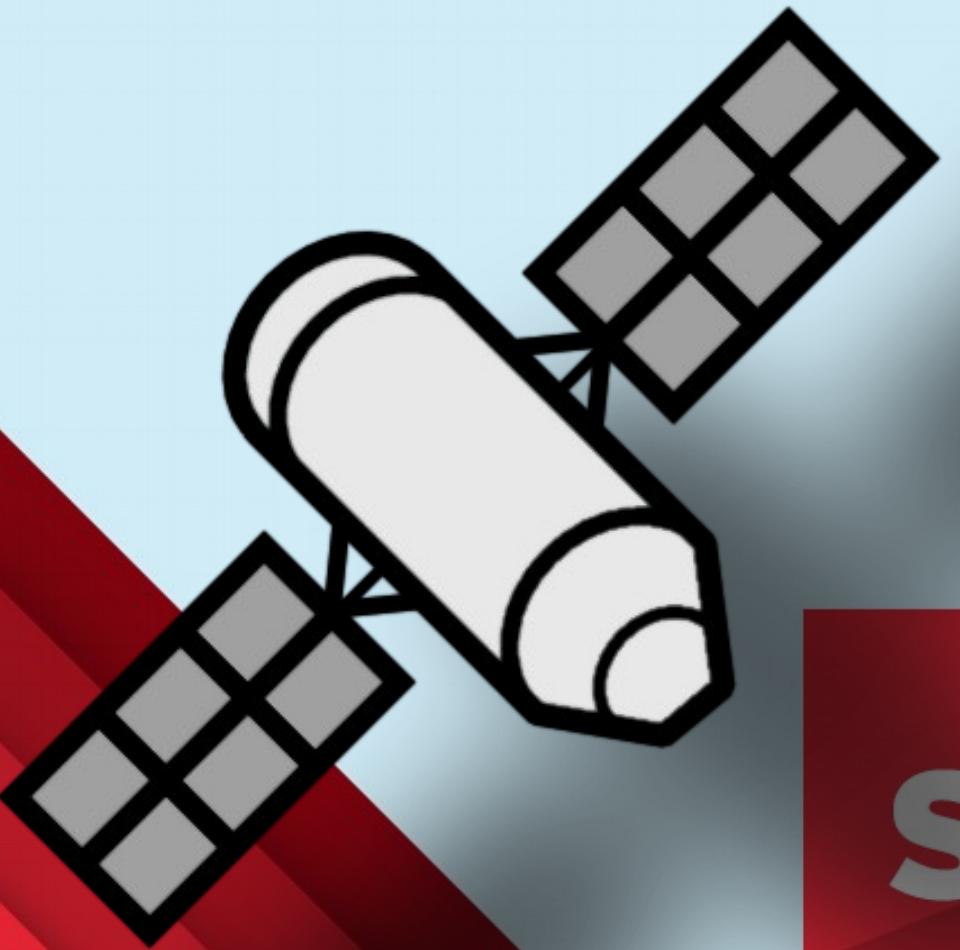
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# RED HAT SUMMIT

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