RED HAT SUMMIT

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Transitioning from Red Hat Satellite 5 to Red Hat Satellite 6

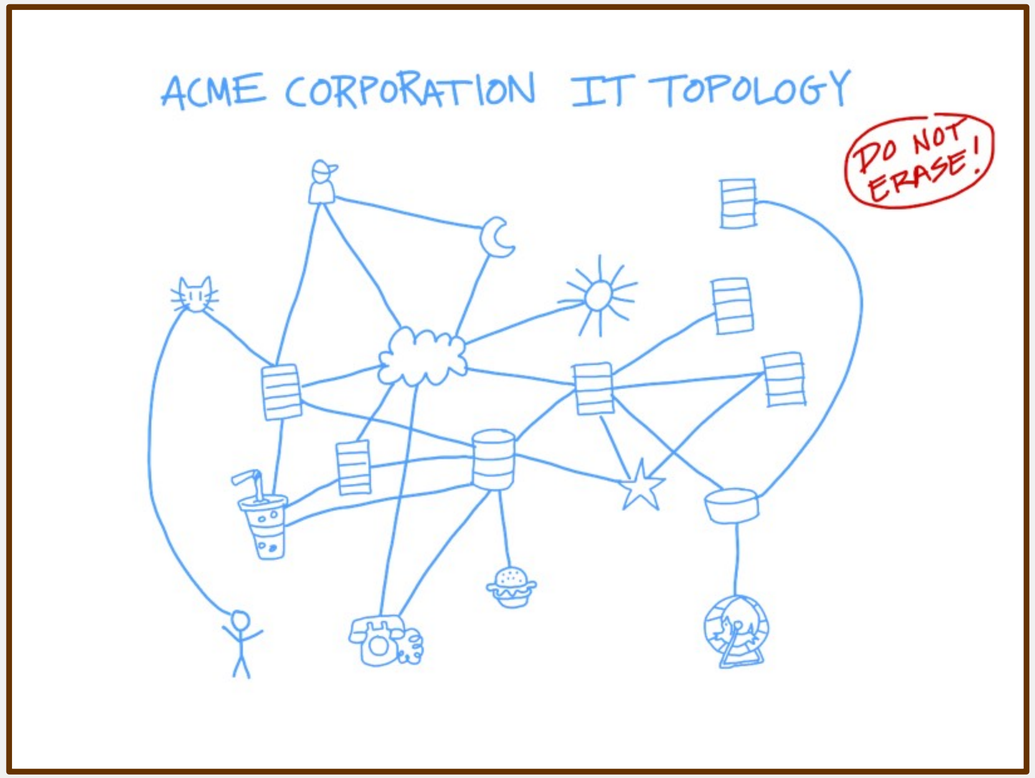
Rich Jerrido
Principal Technical Product Marketing Manager

Cliff Perry
Senior Engineering Manager

redhat.

MACRO TRENDS DRIVING NEW SOLUTIONS

- Datacenters are rapidly trending towards hyperscale
- Transition to hybrid cloud is forcing legacy approaches into obsolescence
- DevOps model mandates agile deployment and configuration of application stacks
- Complexity is on the rise while governance, security, and cost control remain top of mind
- Onslaught of open source innovation has outpaced commercial solutions, but adds risk & complexity for IT



RED HAT® SATELLITE 5 & 6 CORE CAPABILITIES

RED HAT SATELLITE 5

SPACEWALK

- Provision systems
- Configuration management
- Automated software distribution
- Life cycle management*
- Drift reporting

* Satellite 5 provided life cycle management via channel-cloning.

RED HAT SATELLITE 6

Puppet | FOREMAN | pulp | KATELLO | CANDLEPIN

- Provision to bare metal, private, and public clouds
- Declarative configuration management
- Automated software distribution
- Life cycle management
- Drift remediation
- Simplified content management
- Federated services and management
- Red Hat® subscription management
- Localization

WHAT IS RED HAT® SATELLITE 6?

- New modern design, cutting-edge open source software
- Designed for software life cycle (SLC) management
- Bare metal, virtual machine (VM), and cloud deployment

Configuration management

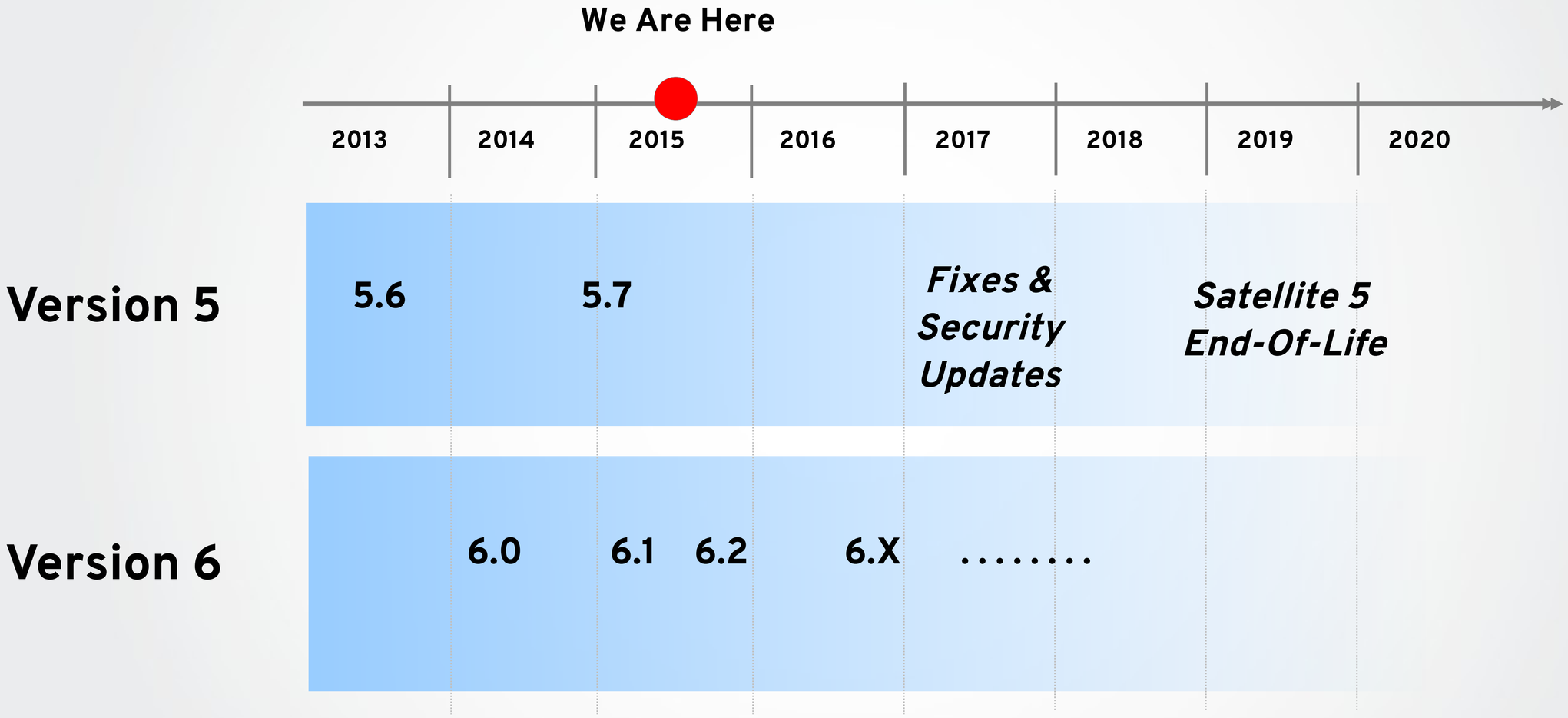
Provisioning

Repository management

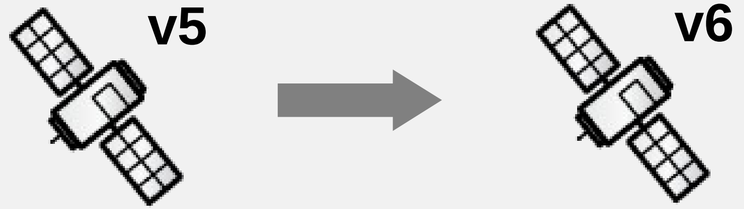
Content/life cycle management

Subscription management

Red Hat Satellite Roadmap & Timeline

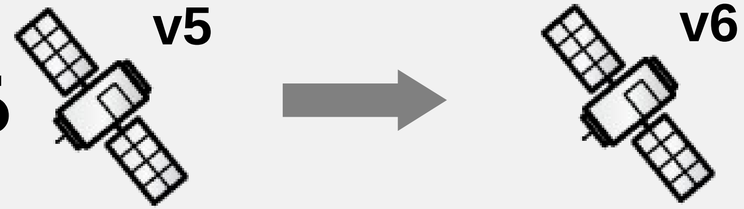


Extended Lifecycle Support (ELS) for Satellite 5



- Satellite 5 will have an Extended Life Cycle Program
  - Begins at the end of Production Phase 3 (March 31, 2017)
  - Will be an additional subscription
  - Pricing and Availability TBD
  - Will provide support from 2017 to 2019
- More Details - https://access.redhat.com/support/policy/updates/satellite/

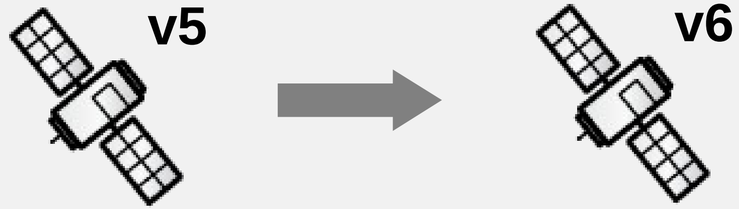
Transitioning to Satellite 6



Satellite 5 to Satellite 6

- Dramatic update of technologies requires more care upon upgrade
- ./install.pl –upgrade will not take you there. .
- The process is more of transition than a traditional upgrade
  1. **Stand up**
  2. **Duplicate**
  3. **Migrate**
  4. **Decommission and Archive**
- Relaxed pace: Process may take days, weeks, or even months
-

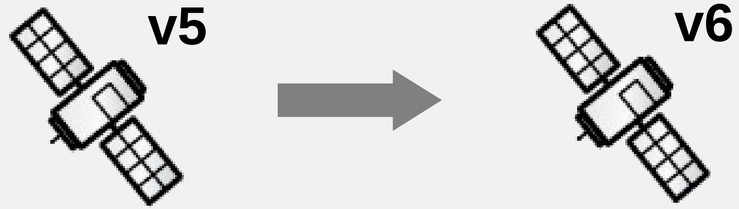
Things we must consider



Architecture

- Satellite & Satellite Proxy servers
  - Satellite Capsules do more than Satellite Proxies did. Let's whiteboard this.
  - Just because you had 1 Satellite 5.x and 4 Proxies doesn't mean that you should deploy 1 Satellite 6.x and 4 Capsules
    - You may need more
    - You may need less
  - Let's discuss

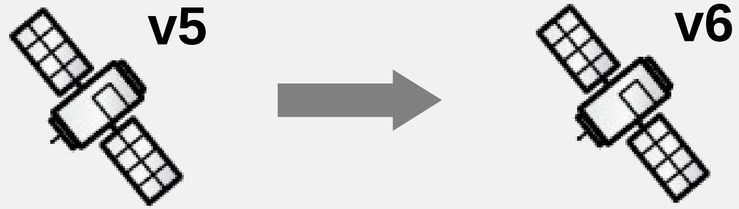
Things we must consider



Your Satellite Components (what's in your Satellite?)

- Is it worth transitioning in full or in part?
- How do you like the setup of your:
  - Orgs
  - Users,
  - Content,
  - Kickstarts
  - System groups, etc.
- This is a great time to revisit that.

Things we must consider

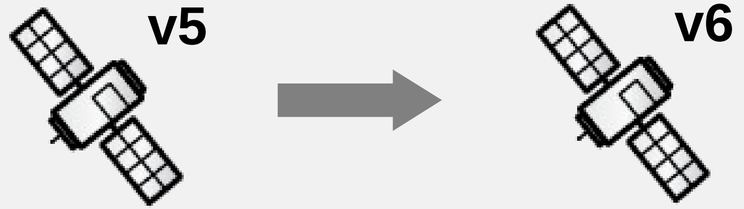


The Managed Systems

- Can they make the jump to Satellite 6? (e.g. RHEL <= 4 is unsupported on Sat 6)
- Does your organization's change management allow you to migrate those systems?
  - Will existing systems 'die on the vine' or will we actively migrate them?

How Can We Help?

Enabling Resources



Documentation

- Traditional Documentation
- Knowledgebase Articles
- Recommended practice documentation

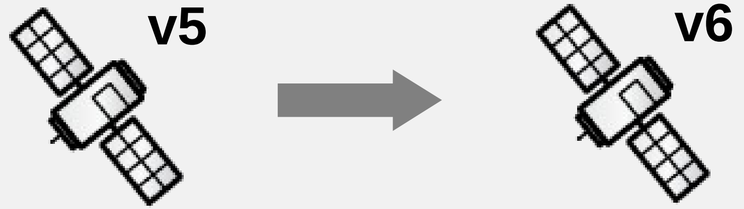
People

- Support and Consulting services
- Red Hat Training

Tooling

- Modeling your Satellite 6 instance with minimal errors
- Migrating systems from Satellite 5 to Satellite 6

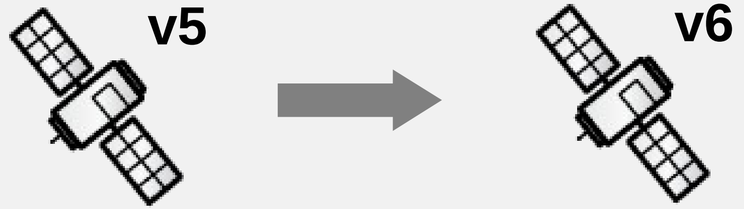
Prerequisites



Business

- Visit the Transition Landing page linked off of https://access.redhat.com/products/red-hat-satellite/
- An Organizational Admin can request transition subscriptions to help facilitate the migration:
- Upon selecting [Request Transition Subscriptions], we
  - Validates the account has valid Satellite & Proxy subscriptions
  - For each valid Satellite & Proxy subscription, we grant a Satellite and Capsule Transition subscription for a period of time of 1 year from the initial request.
-

Prerequisites

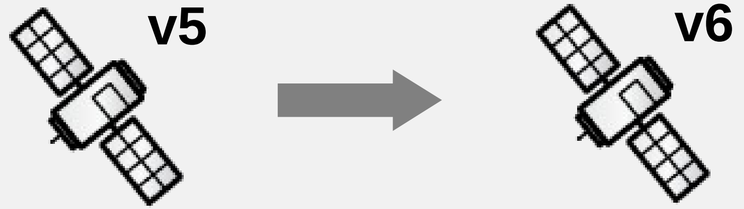


Business

- These transition subscriptions have a 1 year expiration (from date the [Request Transition Subscription] link is selected)
  - This allows enough time to evaluate Satellite 6, architect a solution, deploy into production and migrate systems.
- Account now has twice the subscriptions for Satellites and Proxies. Customers are to use these "free" subs to transition and transition only.
- Customer can now continue our transition instruction without being blocked by lack of Satellite and Proxy subs.
- Want to evaluate Satellite 6 before committing? Reach out to your Account Team.

Transition Strategies

Transition Strategy

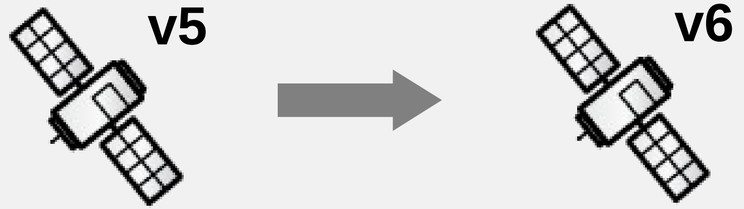


Three Methodologies

- Passive
- Active (with Server Side Components)
- Active (without Server Side Components)

More in 'Planning Your Satellite 5 to Satellite 6 Migration' -
https://access.redhat.com/articles/1482733

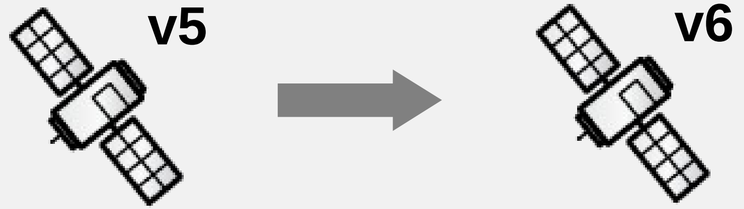
Transition Strategy



Passive

- The goal is to leave existing systems on Satellite 5 until they are retired and deploy new systems on Satellite 6 with the understanding that there are two Satellites for the foreseeable future
  - Either they can't be transitioned (RHEL <= 4) or
  - They are known good (If it isn't broke, don't fix it)
- New systems are deployed on Satellite 6
- Systems aren't migrated from Satellite 5 to 6.

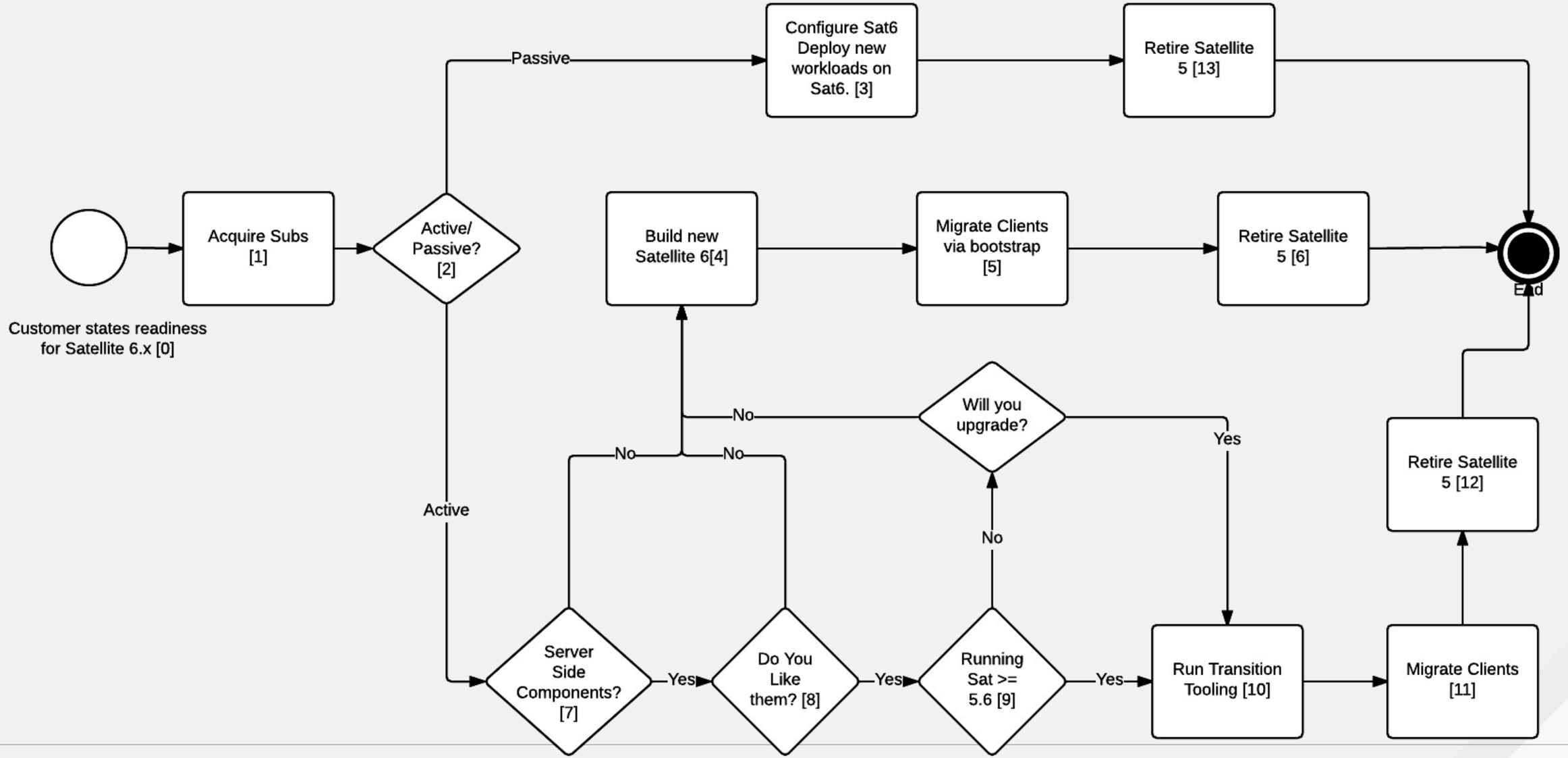
Transition Strategy



Active

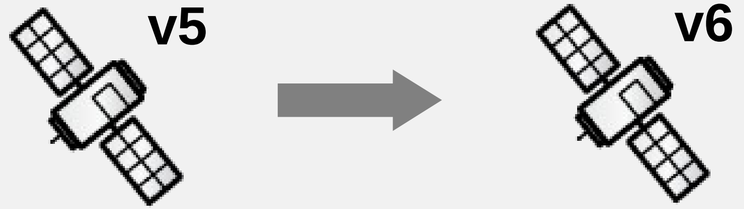
- The goal is to actively move workloads from Satellite 5 to Satellite 6, with the goal of keeping a single Satellite.
- With Server Side Components
  - I like what's in Satellite 5 and I wish to model my Satellite 6 based upon it and move my systems to it.
- Without Server Side Components
  - Satellite 6 is new tech, so I'll build new and move just the systems from Satellite 5 to 6

Transition Flowchart



Transition Tools

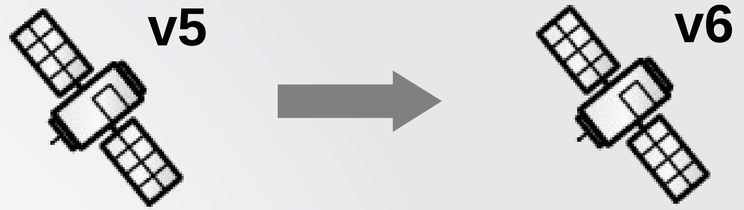
Transition Tools



Minimal Requirements

- Satellite 5.6 + RHEA-2014:0822-1 (on your existing Satellite)
- Satellite >= 6.0
- Completion of the transition SKU process

Start with Sat 5

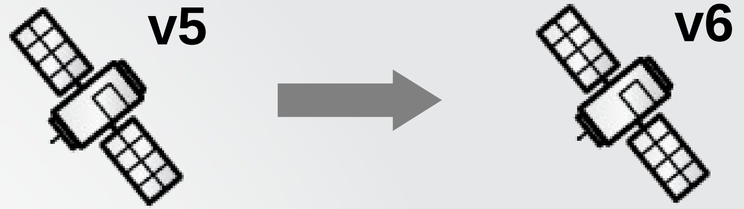


What can we export?

```
spacewalk-export --list-entities
INFO: Currently-supported entities include:
INFO:              channels : Custom/cloned channels and repositories for all organizations
INFO:      activation-keys : Activation keys
INFO:    kickstart-scripts : Kickstart scripts for all organizations [CAVEATS]
INFO:                users : Users and Organizations
INFO:         system-groups : System-groups for all organizations
INFO:  config-files-latest : Latest revision of all configuration files
INFO:          repositories : Defined repositories
INFO:      system-profiles : System profiles for all organizations
```

- The Satellite transition tools do not migrate entire kickstart profiles. Due to significant differences between the Satellite 5 and Satellite 6 infrastructures, there is no suitable migration path between the two versions.
- The transition tools can migrate kickstart scripts, and these can be used in Satellite 6 Provisioning Templates, which are an approximation of kickstart profiles.

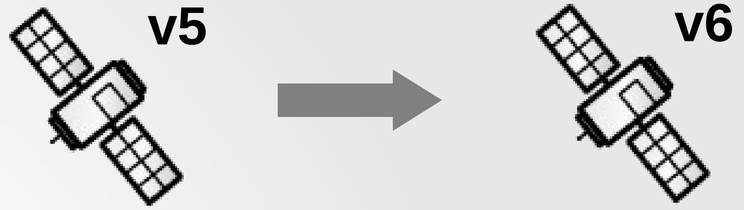
Start with Sat 5



What can't we export

- Activation-keys that use "Red Hat default"
- Anything history- or audit-related (events, oscap runs, and so on)
- Anything monitoring-related
- Configuration-channel ordering
- Distribution-channel mapping
- Kickstart data (other than snippets)
- Organization entitlement-distribution (users need to create their own manifests)
- Organization-trusts settings
- Snapshots
- Stored package-profiles
- Custom system information, such as key/value pairs, system notes, and system properties in general.
- User preferences

Move on to Satellite 6



Importing

- Import organizations. This includes importing a manifest if one exists.
- Import users.
- Import system groups as host collections.
- Enable and synchronize repositories.
- Import repositories.
- Import custom channels and cloned channels as content views.
- Import activation keys.
- Import kickstart snippets as template snippets.
- Import configuration files to puppet modules.
- Import system profiles as content hosts.

Satellite-Related Sessions

Wednesday

1:20pm – 2:20pm

Satellite 6 Roadmap

2:30pm – 3:30pm

IKEA vs Shellshock: 1-0

3:40pm – 4:40pm

Real-World Perspectives: Managing Infrastructures with Satellite (Panel)

4:50pm – 5:50pm

Transitioning From Satellite 5 to 6

Thursday

10:40am – 11:40am

Security Compliance Made Easy(er): Entering SCAP Renaissance

Thursday (continued)

1:20pm – 2:20pm

Shellshock, Heartbleed -- What's The Next Headache for Compliance

1:20pm – 2:20pm

CloudForms, Satellite 6 and Puppet for Automating JBoss EAP 6

3:40pm – 4:40pm

10 Steps To Build A Standard Operating Environment

4:50pm – 5:50pm

Puppet Enterprise and Satellite 6

Friday

9:45am – 10:45am

Satellite 6 Power User Tips and Tricks

Satellite Labs, Training and More

Labs

Thursday

3:30pm-5:30pm

Security Compliance Made Easy With OpenSCAP

Friday

9am-11am

Migrate From Red Hat Satellite 5 To Satellite 6

11:30am-1:30pm

Hands-On With Satellite 6.1

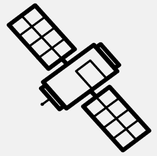
Taste Of Training

Wednesday

3:40pm – 4:40pm

Managing Software & Errata Deployment With Satellite 6

Come See Us!



Visit the Satellite team in the Infrastructure Booth (306)!

Visit the Foreman team in the Community Booth!

LEARN. NETWORK.
EXPERIENCE OPEN SOURCE.