

RED HAT
SUMMIT

10 YEARS *and counting*
SAN FRANCISCO | APRIL 14-17, 2014

Red Hat Satellite 6 Overview, Demo and Roadmap

IT Efficiency

David Caplan

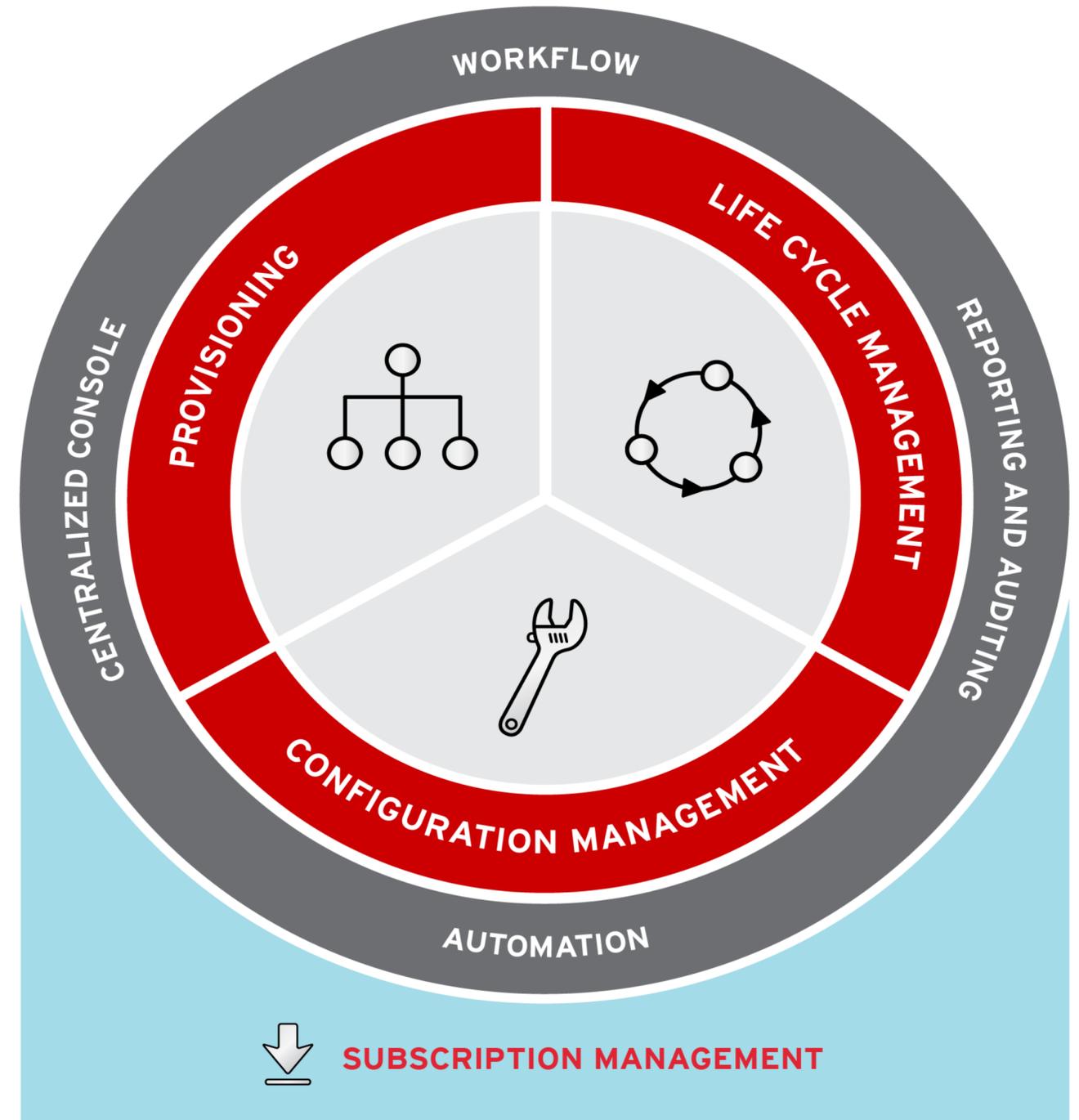
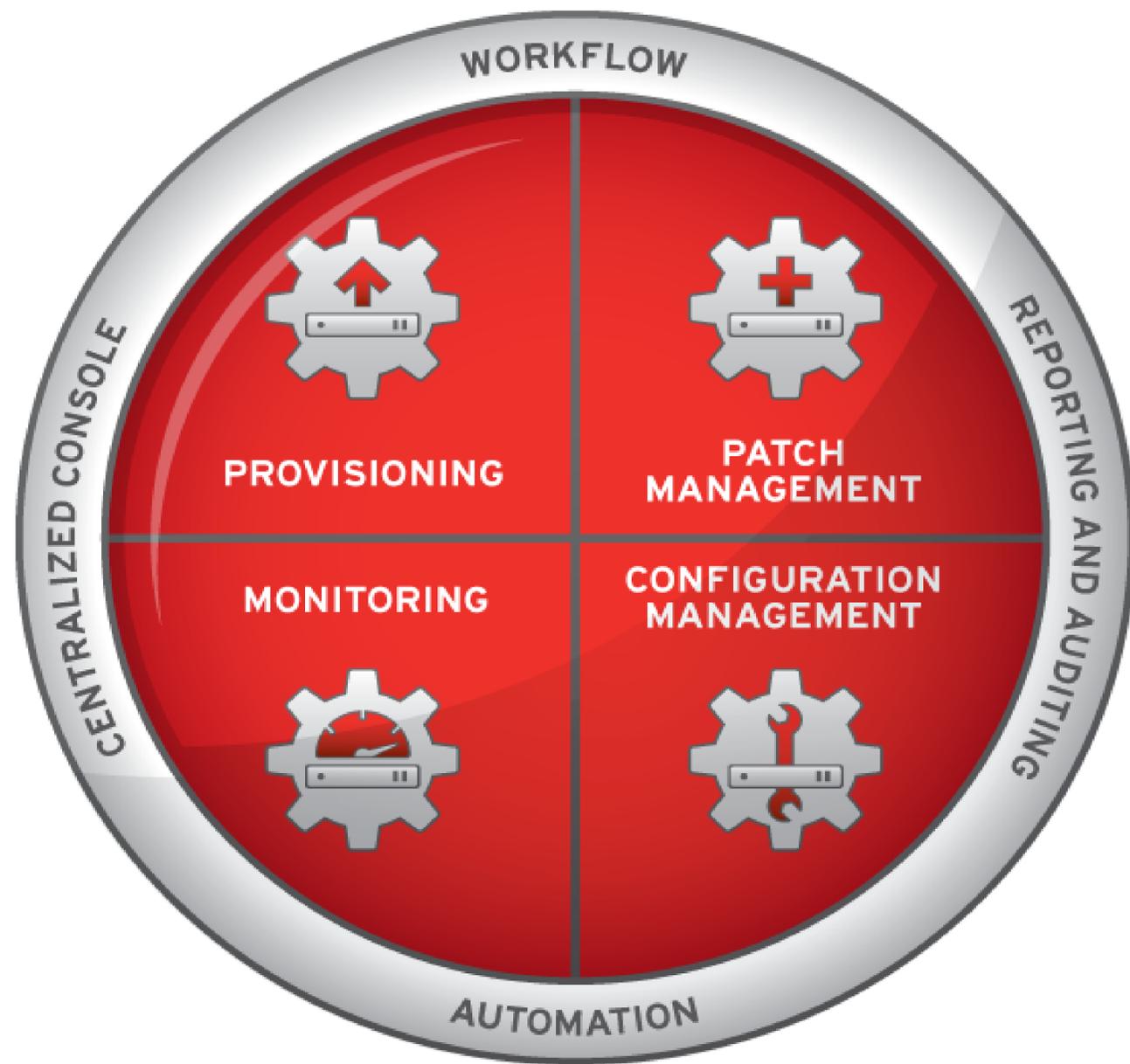
Principal Product Manager for Satellite 6

Erik Jacobs

Senior Cloud Solutions Architect

Next Gen Red Hat Enterprise Linux Management

Red Hat Satellite 6



Red Hat Satellite 5 & 6 Core Capabilities

RED HAT SATELLITE 5



- Provision systems
- Configuration Management
- Automated Software Distribution
- Lifecycle Management
- Administrator Dashboard

RED HAT SATELLITE 6



- Provision bare metal, private and public clouds
- Recipe-Style Configuration Management
- Automated Software Distribution
- Refined Lifecycle Management
- Modern Administrator Dashboards
- Simplified Content Management
- Drift Management
- Federated Services & Management

What is Satellite 6

- Totally new design for Red Hat Enterprise Linux systems management
- Built on cutting edge open source technologies
- Unsurpassed for bare metal, VM and Cloud deployments
- Designed for Enterprise Scale
- Derived from Satellite 5 use cases, but enhanced with Puppet Ecosystem



**CONFIGURATION
MANAGEMENT**



PROVISIONING



**REPOSITORY
MANAGEMENT**



**CONTENT/LIFE CYCLE
MANAGEMENT**

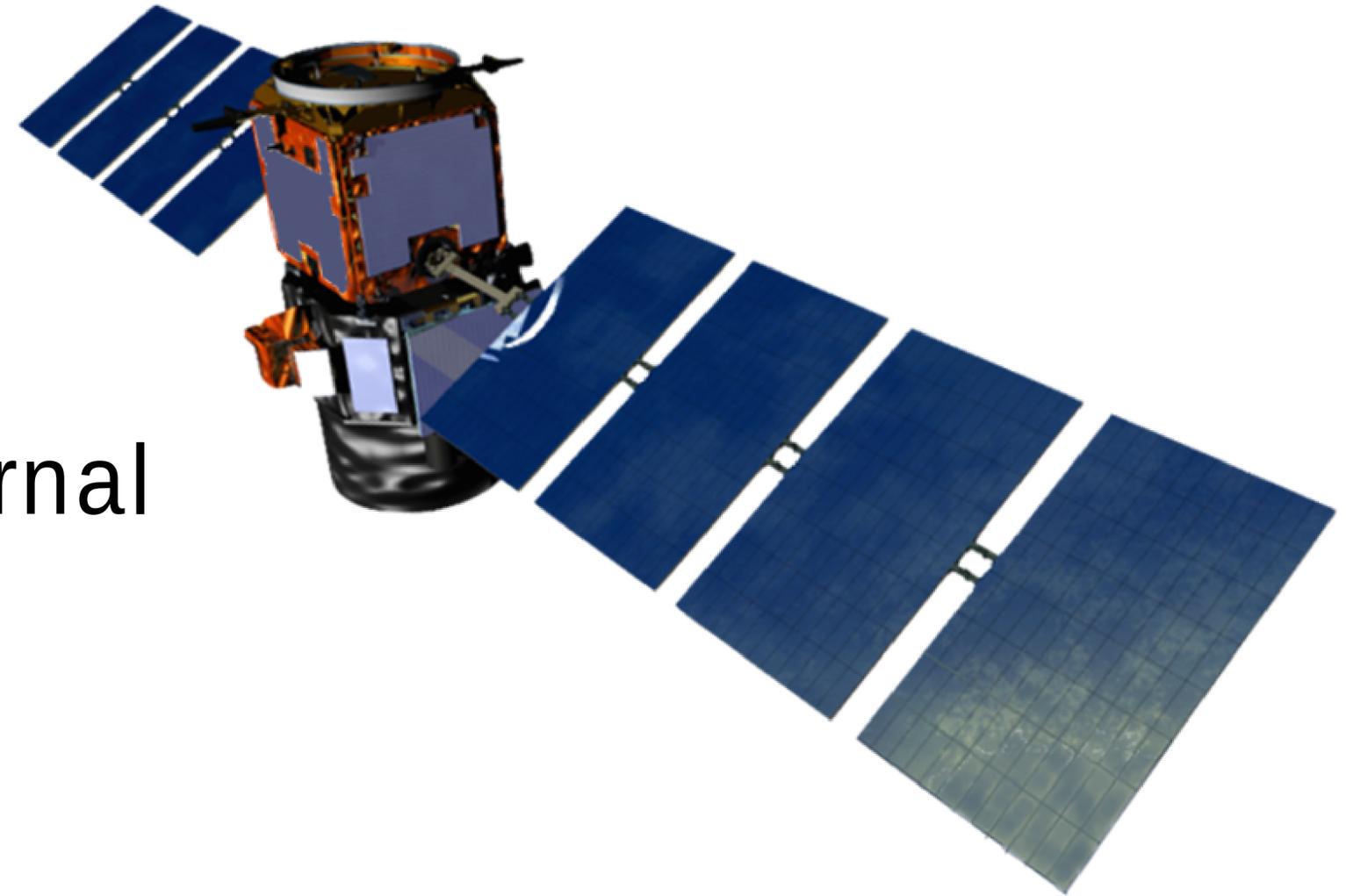


**SUBSCRIPTION
MANAGEMENT**

What comes in the box?

Red Hat Satellite 6 Server

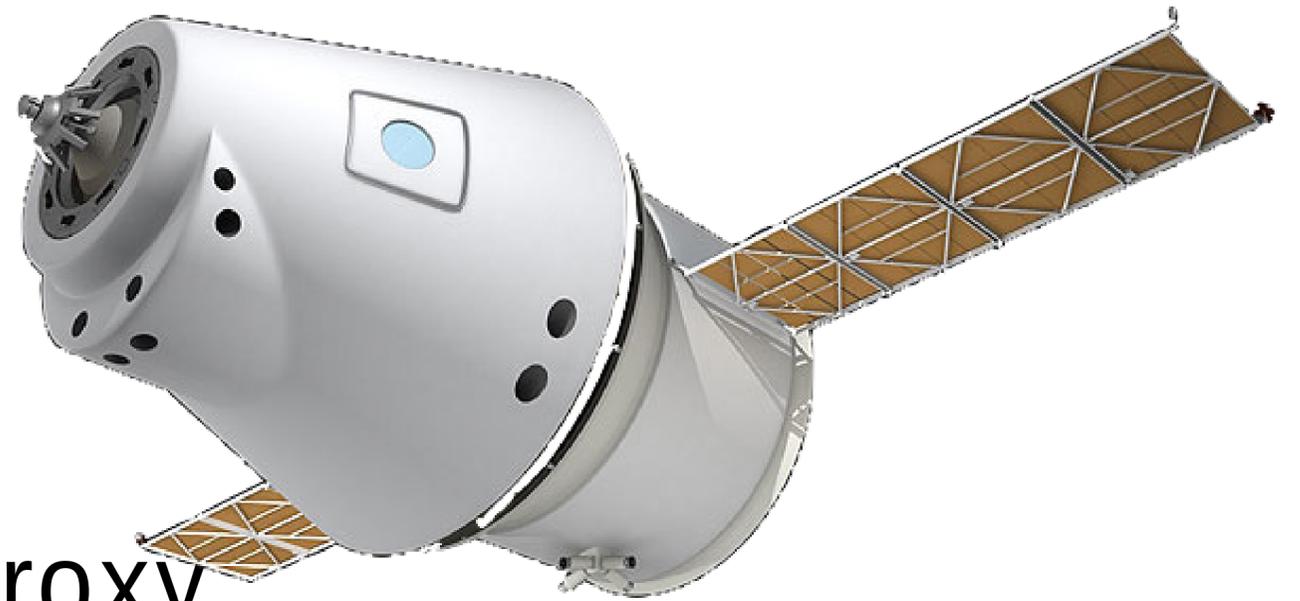
- Multi-tenant
- Content lifecycle for Puppet Modules & RPM Products
- User & Group RBAC with external directories
- Powerful GUI, CLI, & API
- Advanced subscription management



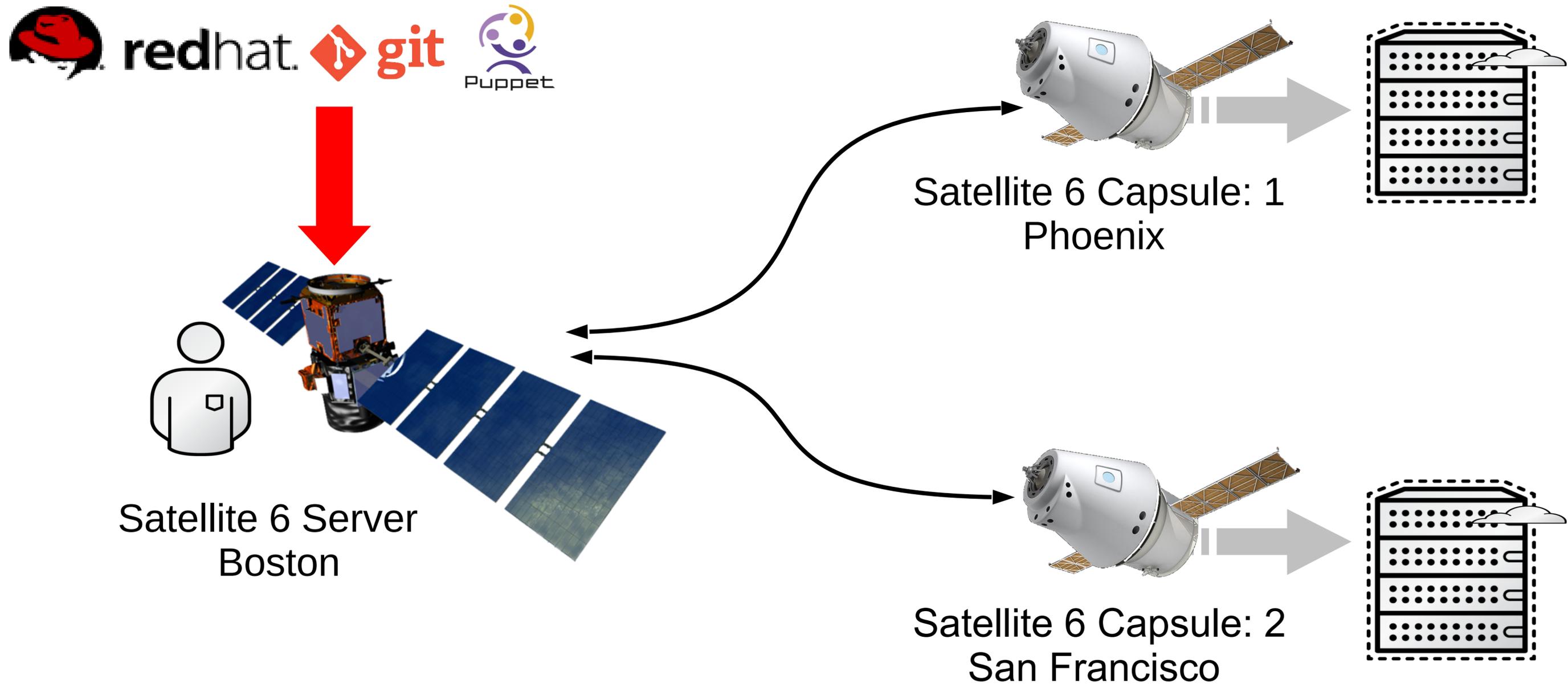
What comes in the box?

Red Hat Satellite 6 Capsule

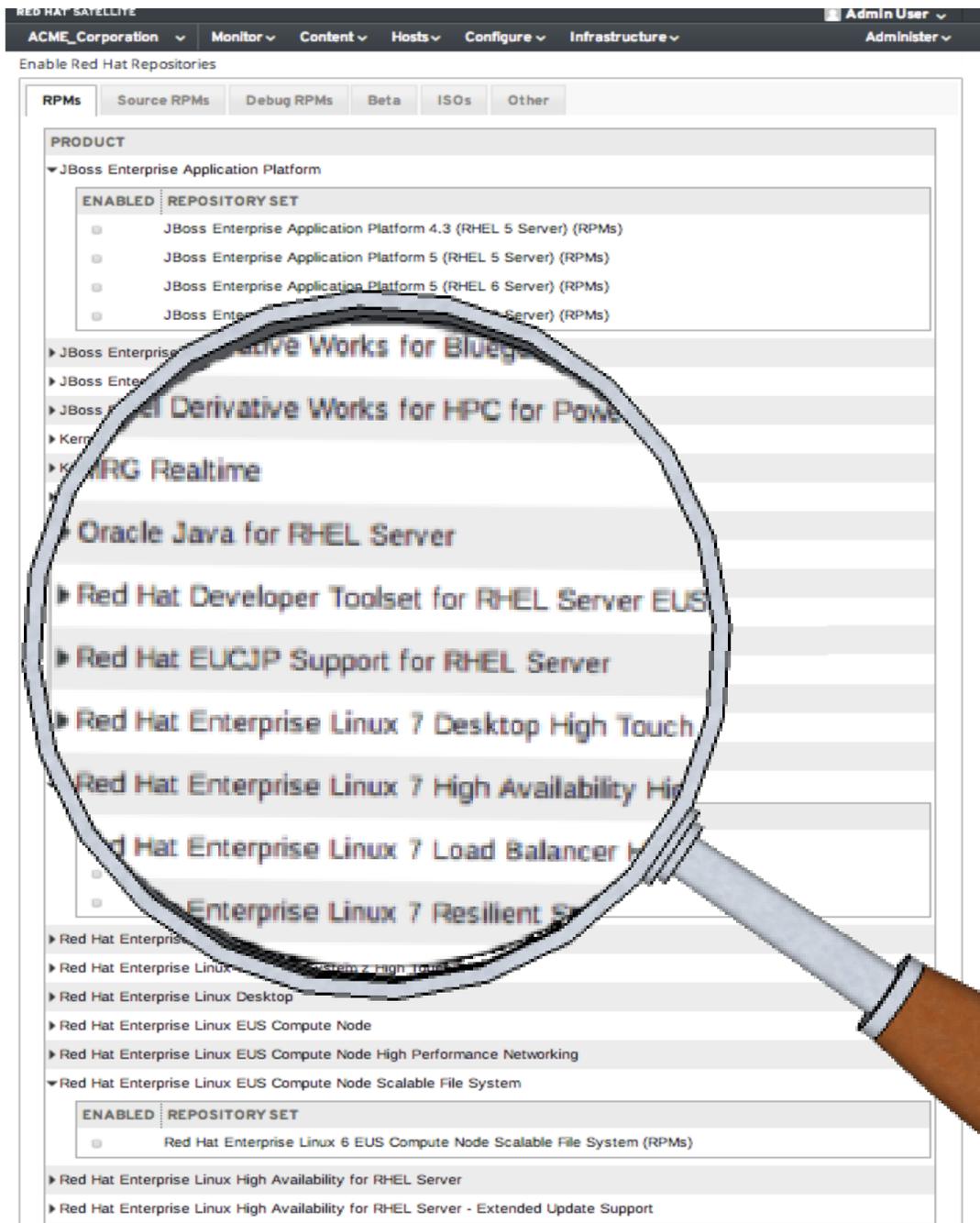
- Federated Services
- Automates provisioning
- Localizes Content
- Centrally Managed
- Evolution for Red Hat Satellite Proxy



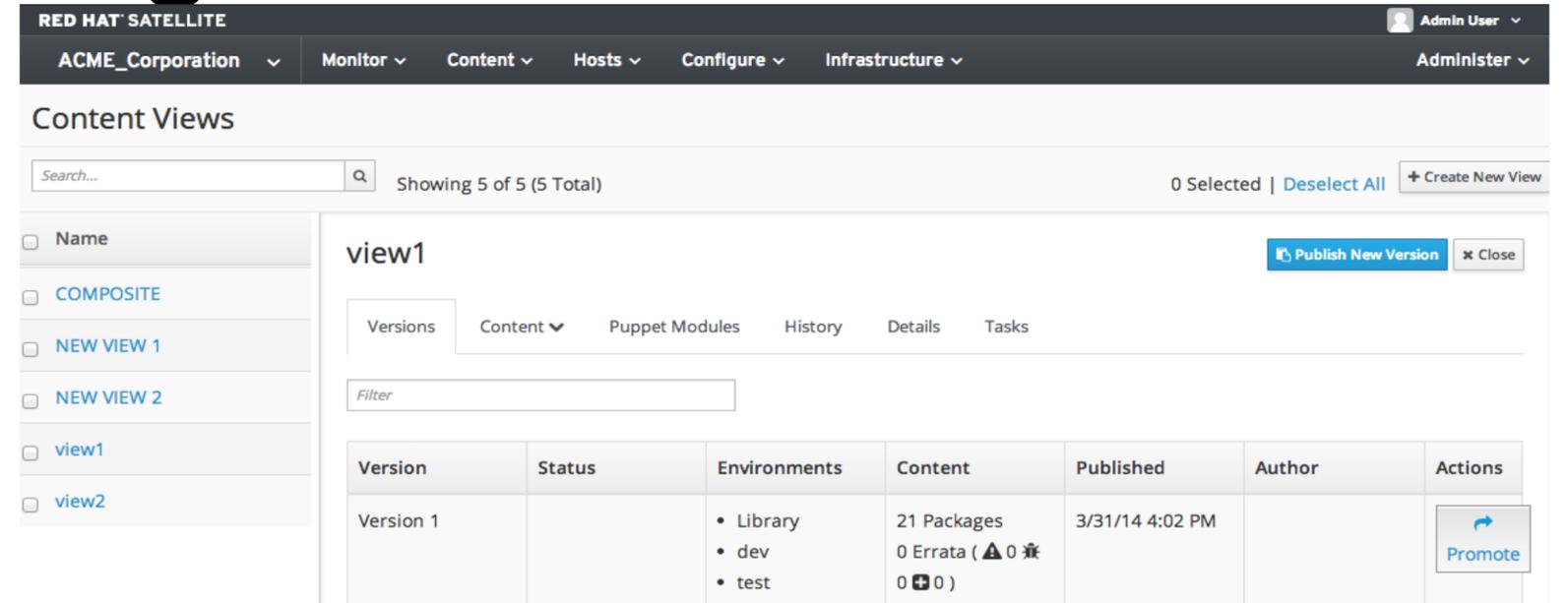
Red Hat Satellite 6 High Level Topology



Efficient RHEL Build Management



Library populated with Products & Packages



- White Lists
- Black Lists
- Errata Rules
- Date Ranges

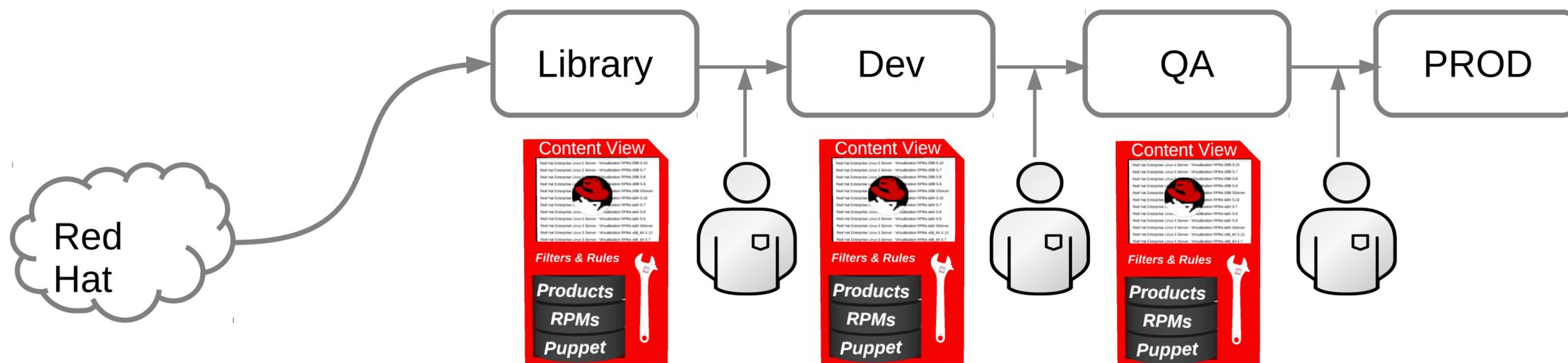
Content View “Selected Products”

Content Lifecycle

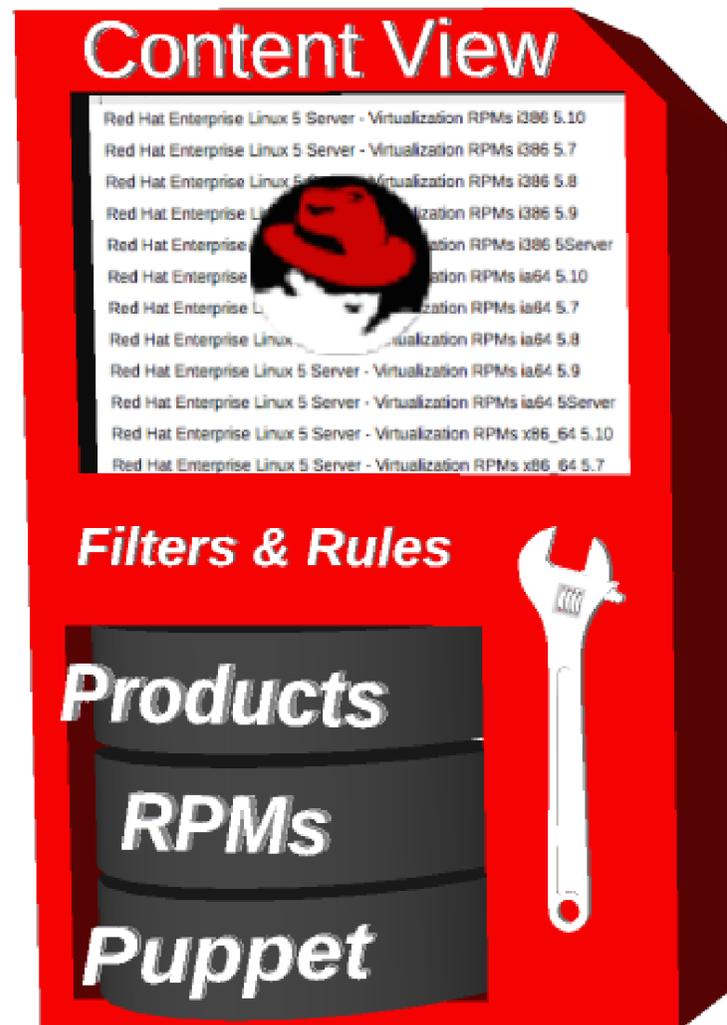
- From native repository, to build, to updating
- Red Hat CDN, Puppet Forge, GIT, Yum repo
- Easy control of Errata, products & packages

The screenshot shows the Red Hat Satellite web interface. At the top, there is a navigation bar with the following items: "RED HAT SATELLITE", "ACME_Corporation" (with a dropdown arrow), "Monitor" (with a dropdown arrow), "Content" (with a dropdown arrow), "Hosts" (with a dropdown arrow), "Configure" (with a dropdown arrow), and "Infrastructure" (with a dropdown arrow). Below the navigation bar, the page title is "Lifecycle Environment Paths". Underneath, there is a section titled "Environment Path" which contains three horizontal breadcrumb-style paths:

- Path 1: Library > DEV_2 > QE_3 > Production_3 > +
- Path 2: Library > Dev5 > Staging5 > QE5 > Prod5 > +
- Path 3: Library > Dev_1 > QE_1 > QE_2 > Staging_1 > Private_Cloud > Public_Cloud > +



Satellite 6 Content Views and Environments



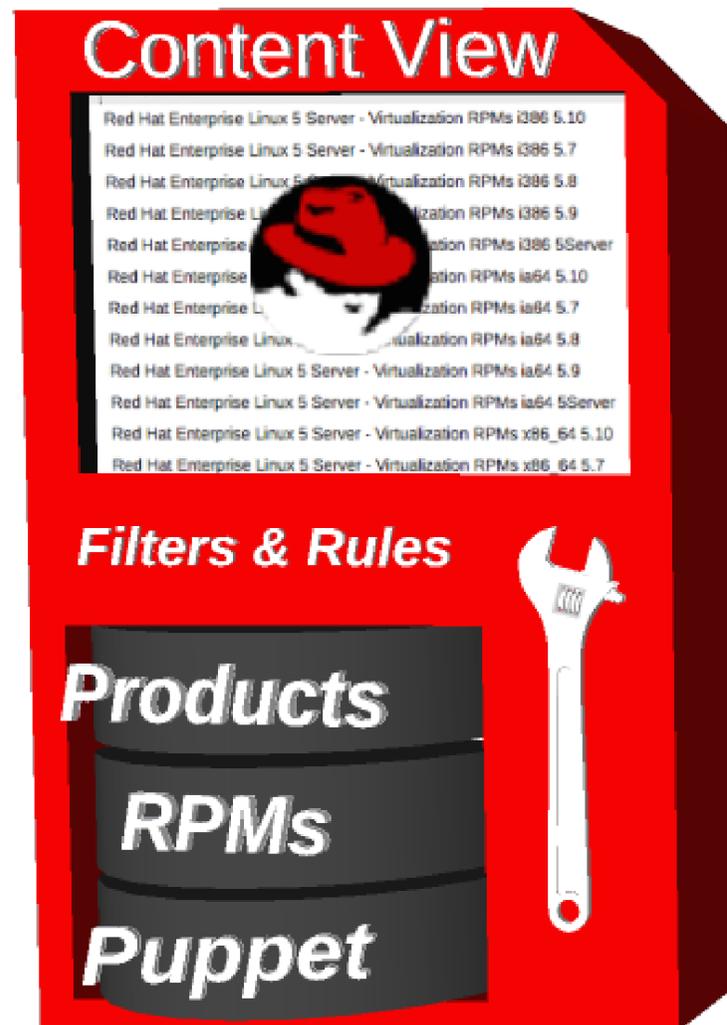
Content View

e.g. RHE7

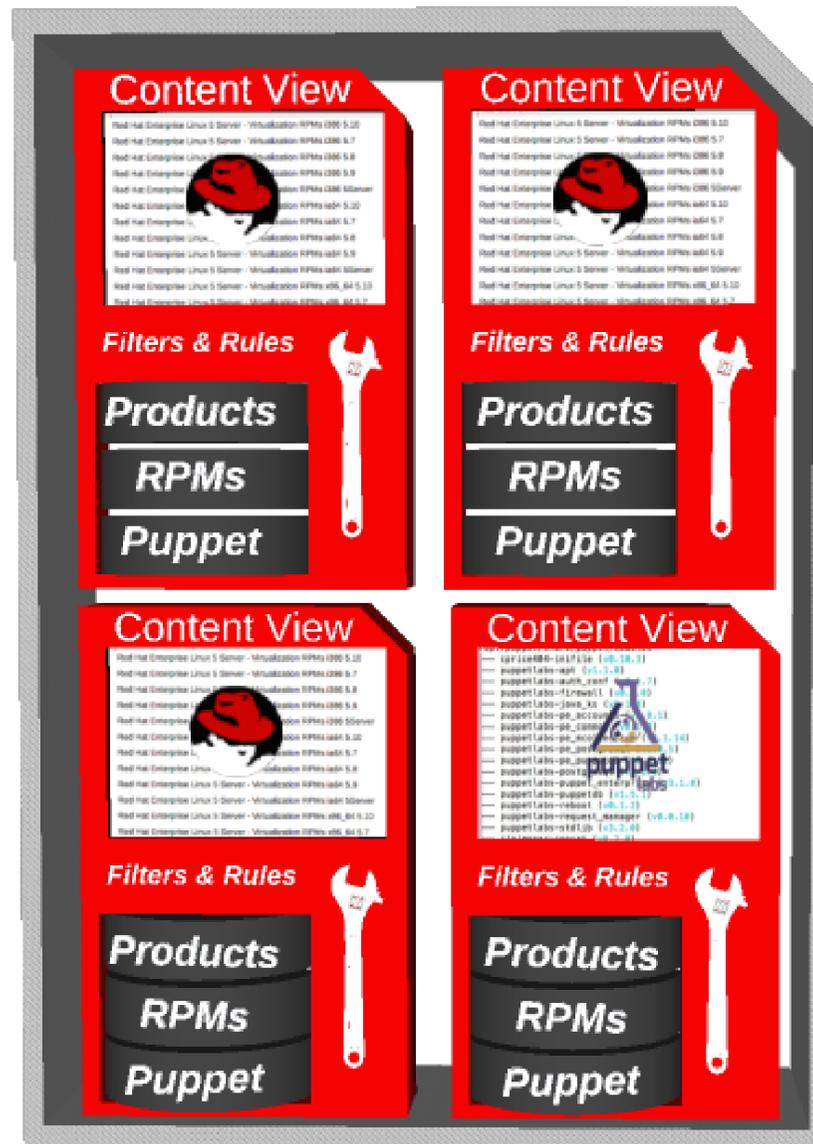
e.g. Web Srv

e.g. JBOSS

Satellite 6 Content Views and Environments

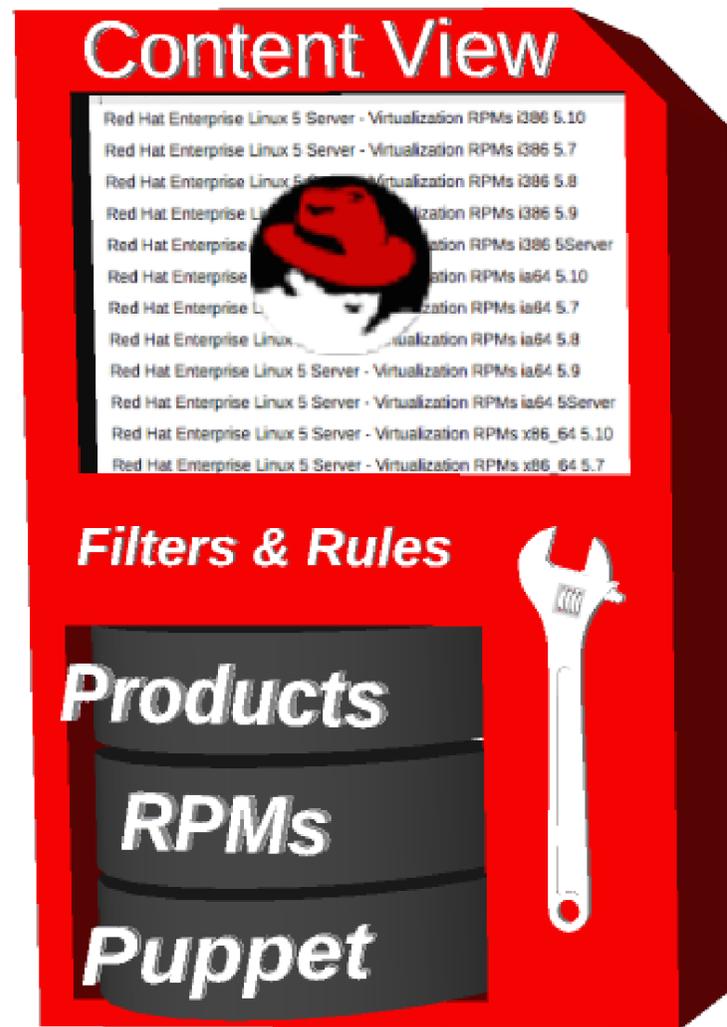


Content View
e.g. RHEL7
e.g. Web Srv
e.g. JBOSS



Composite Content View
e.g. SOE for WEB

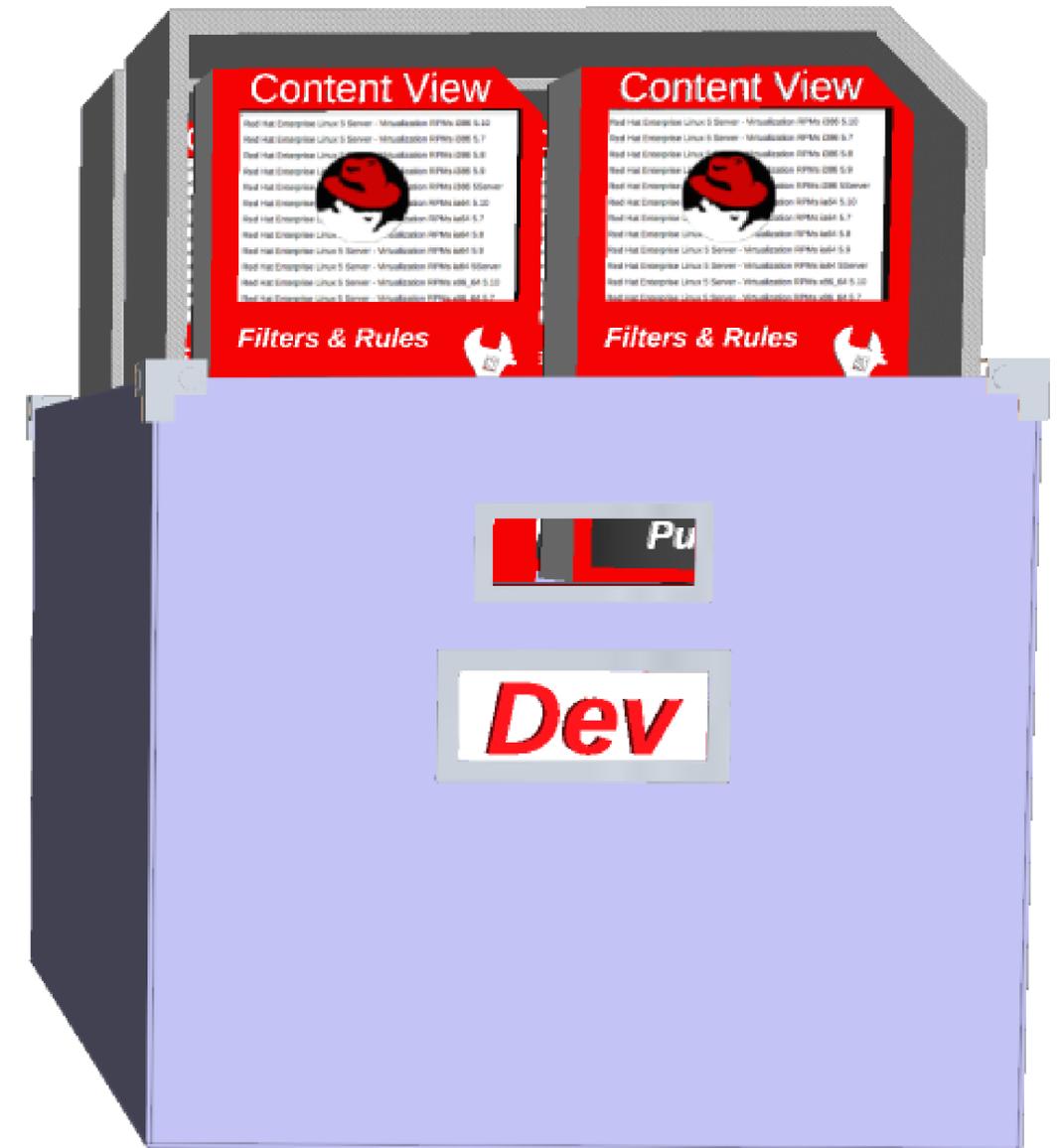
Satellite 6 Content Views and Environments



Content View
e.g. RHEL7
e.g. Web Srv
e.g. JBOSS

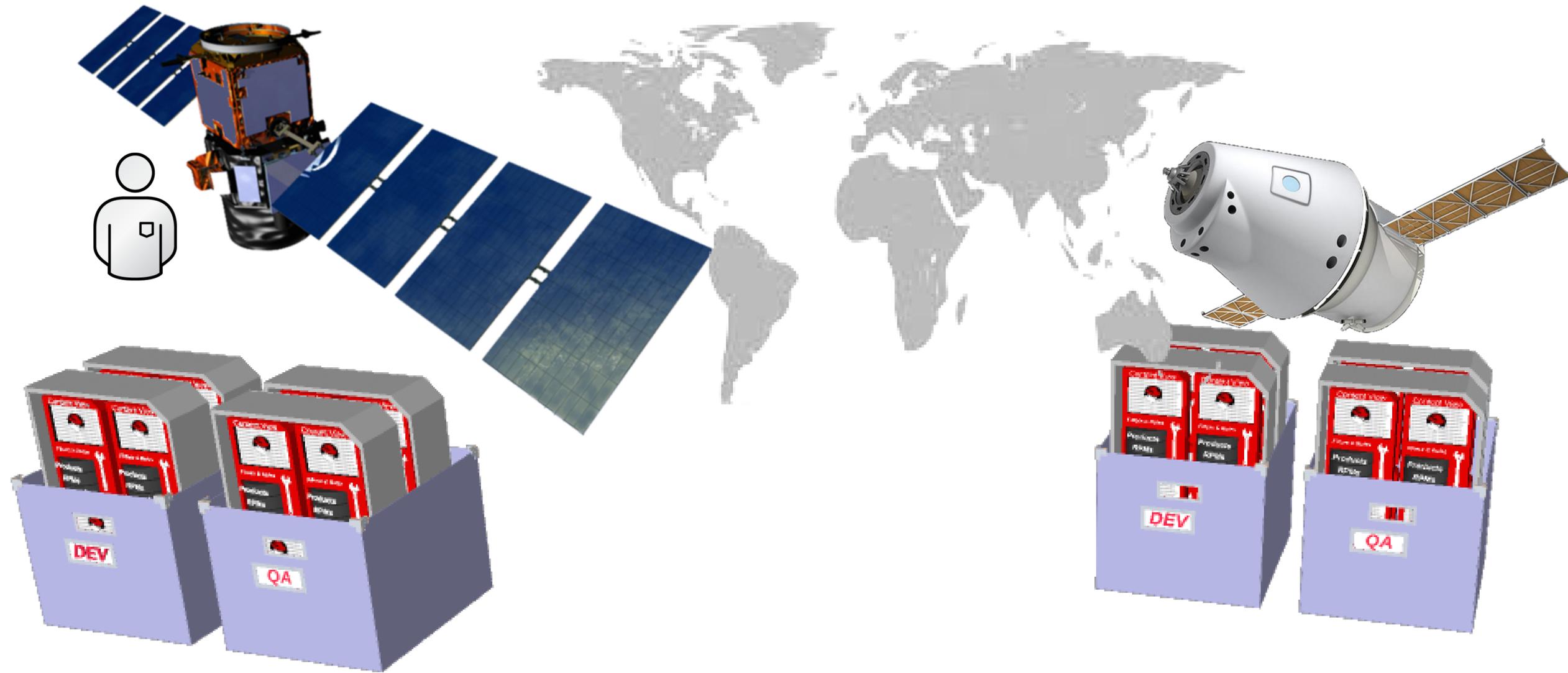


Composite Content View
e.g. SOE for WEB



Environment
e.g. PROD
e.g. DEV

Satellite 6 Federated Content



Satellite 6 Server

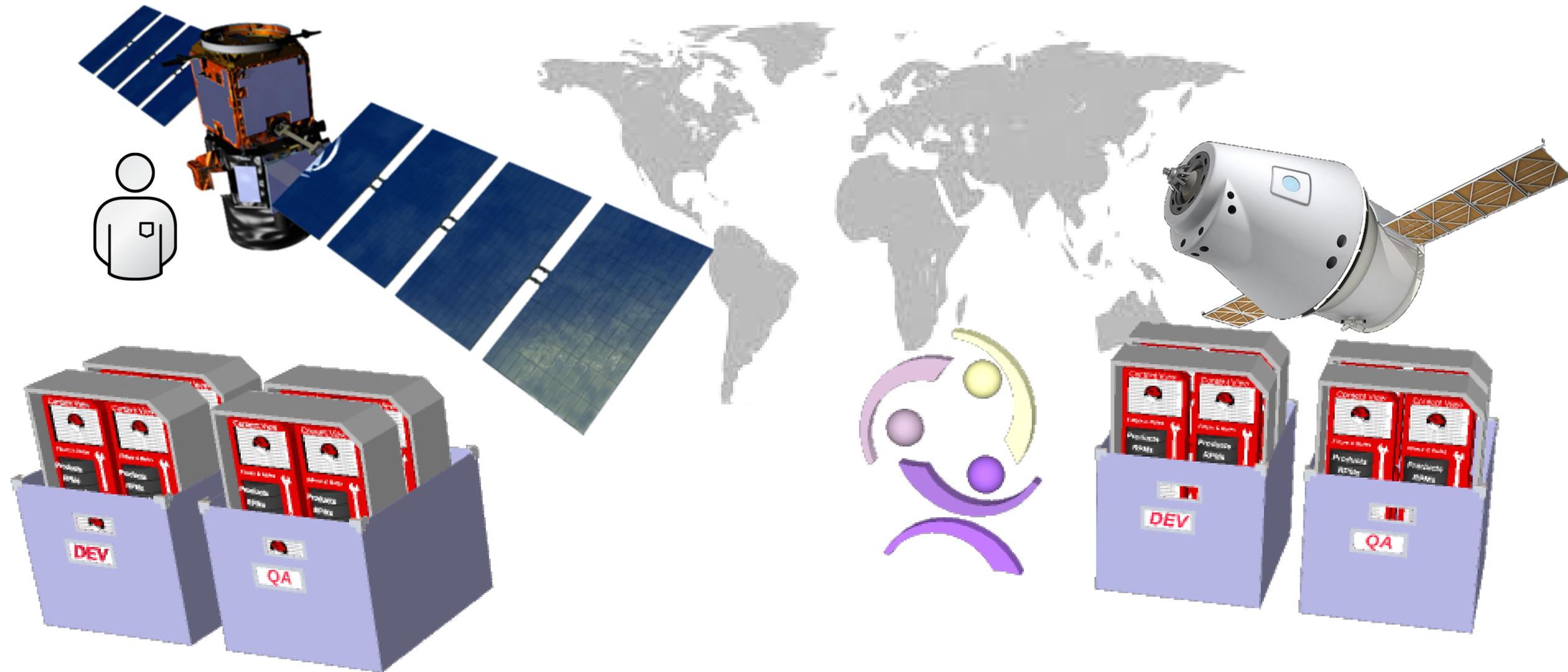
e.g. ENV_QA

e.g. ENV_DEV

Satellite 6 Capsule

Mirrored Environments

Satellite 6 Federated Content



Satellite 6 Server

e.g. ENV_QA
e.g. ENV_DEV

Satellite 6 Capsule

Mirrored Environments
Puppet Master

Provisioning with Host Groups

RED HAT SATELLITE Admin User

ACME_Corporation Monitor Content Hosts Configure Infrastructure Administer

New Host Group

Host Group Puppet Classes Network Operating System Parameters Locations Organizations Activation Keys

Parent

Name

Environment

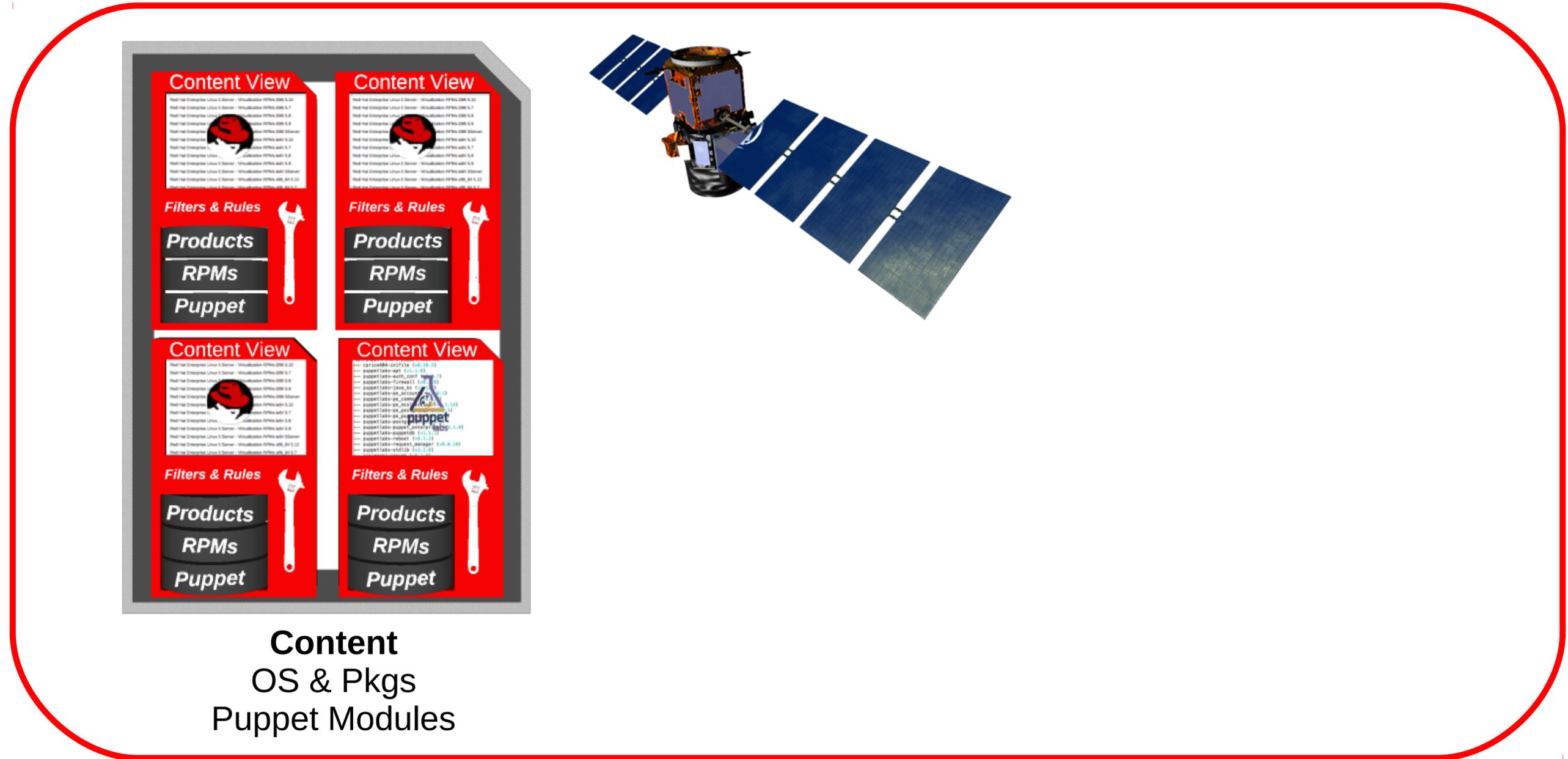
Content view

Puppet CA Use this puppet server as a CA server

Puppet Master Use this puppet server as an initial Puppet Server or to execute puppet runs

- Content View for sourcing OS, layered products, & Puppet Modules
- Activation Keys added to hosts during provisioning process

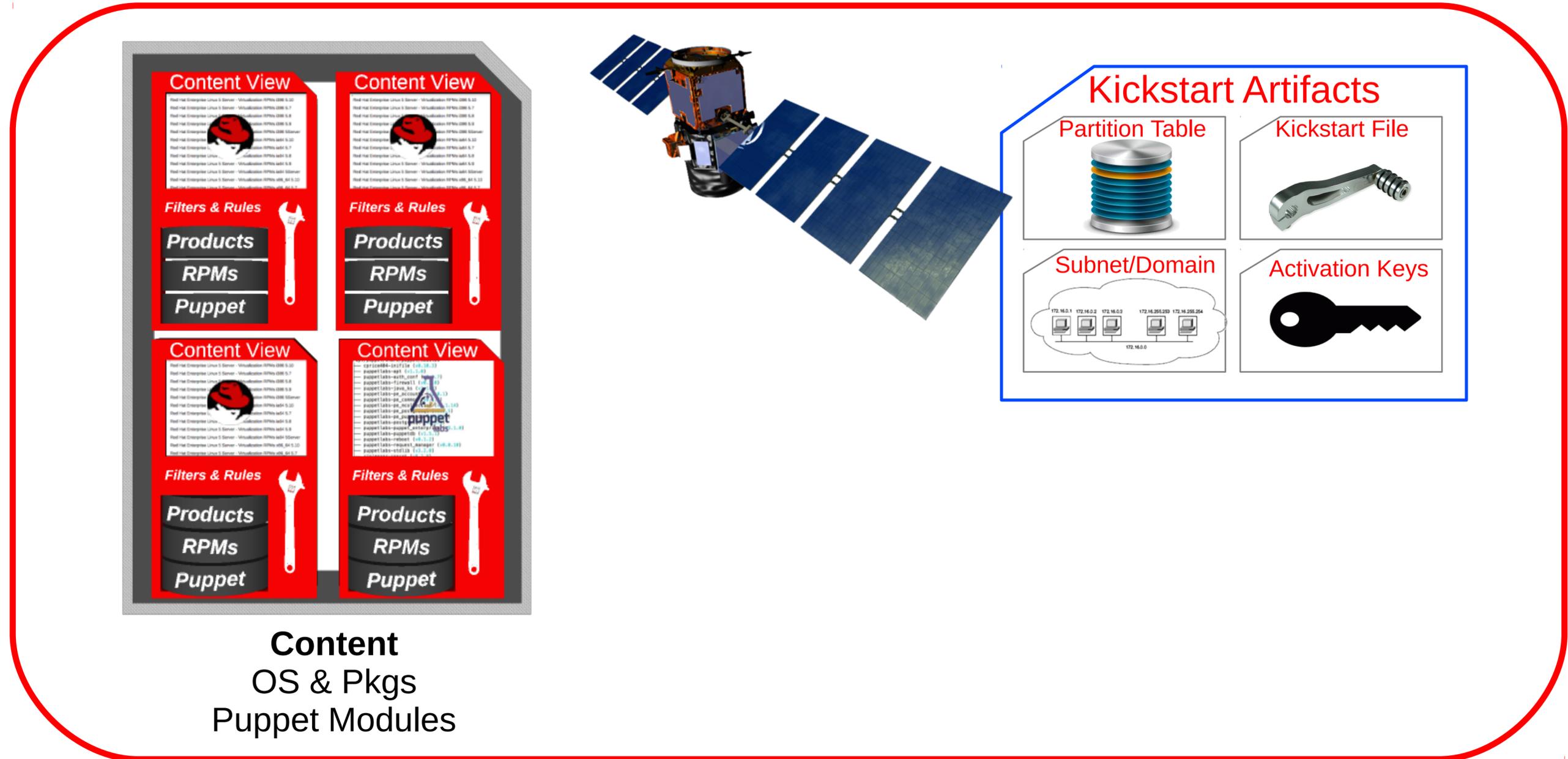
Satellite 6 System Definition



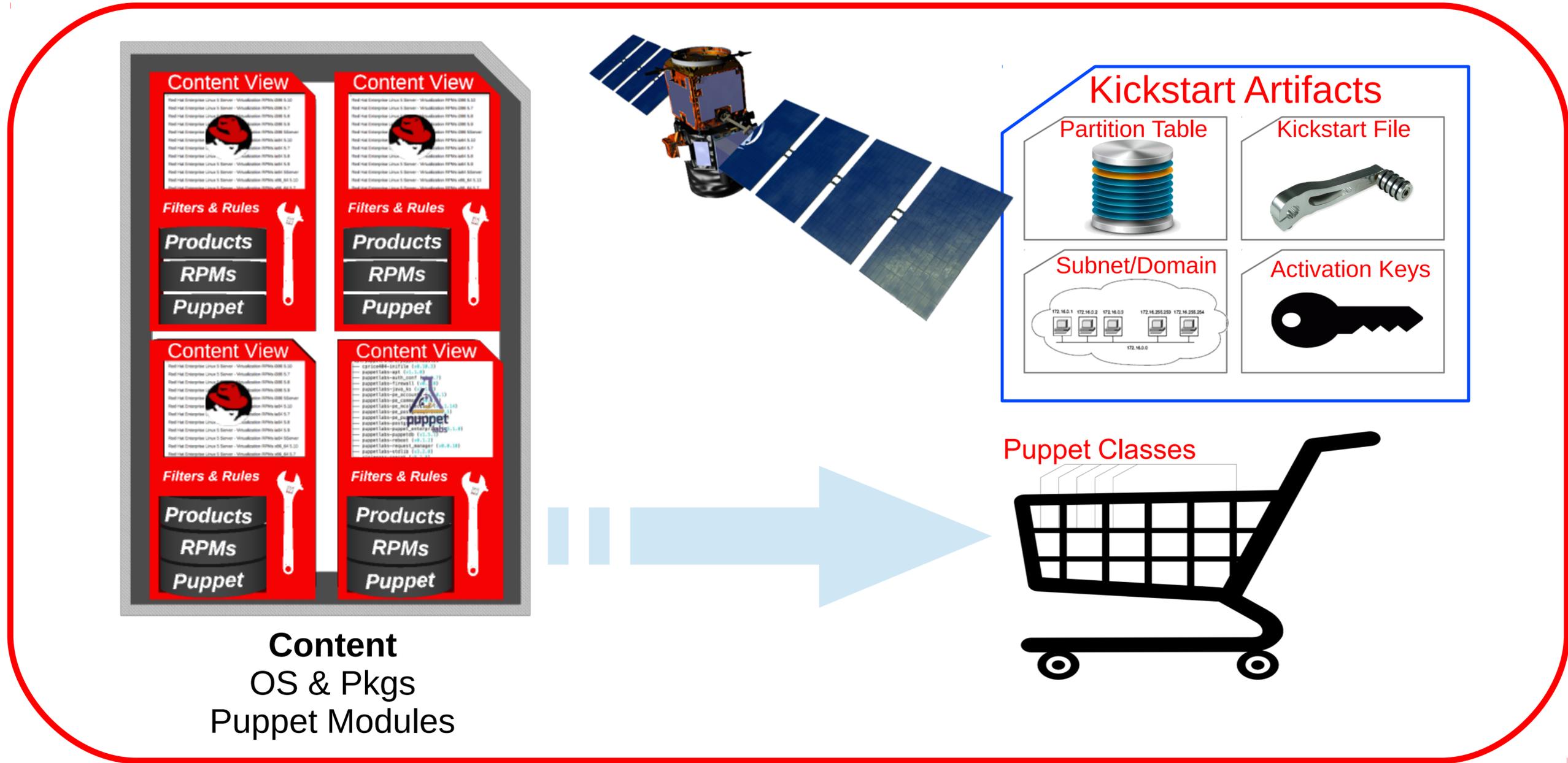
Content
OS & Pkgs
Puppet Modules

Host Group

Satellite 6 System Definition

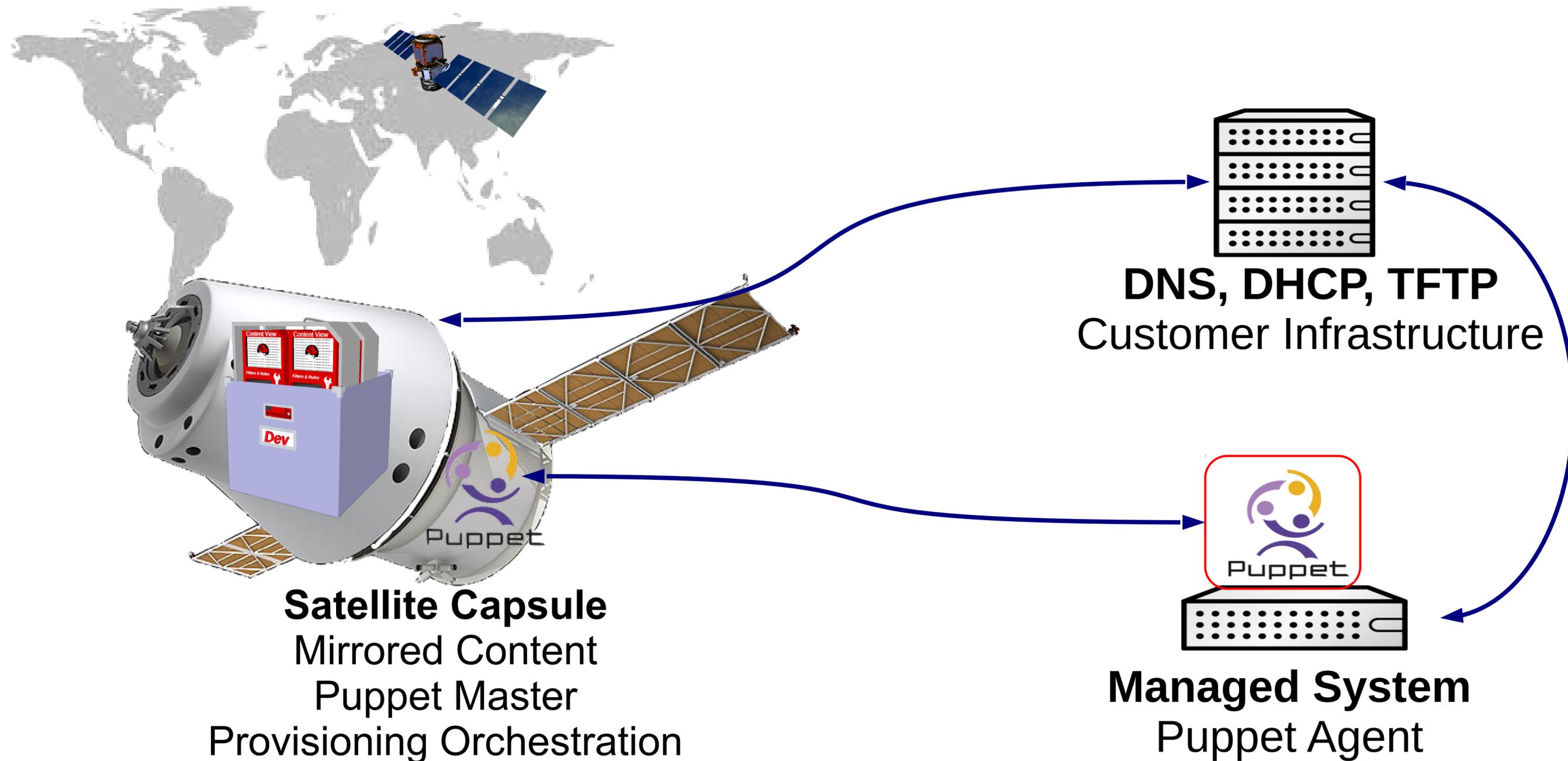


Satellite 6 System Definition

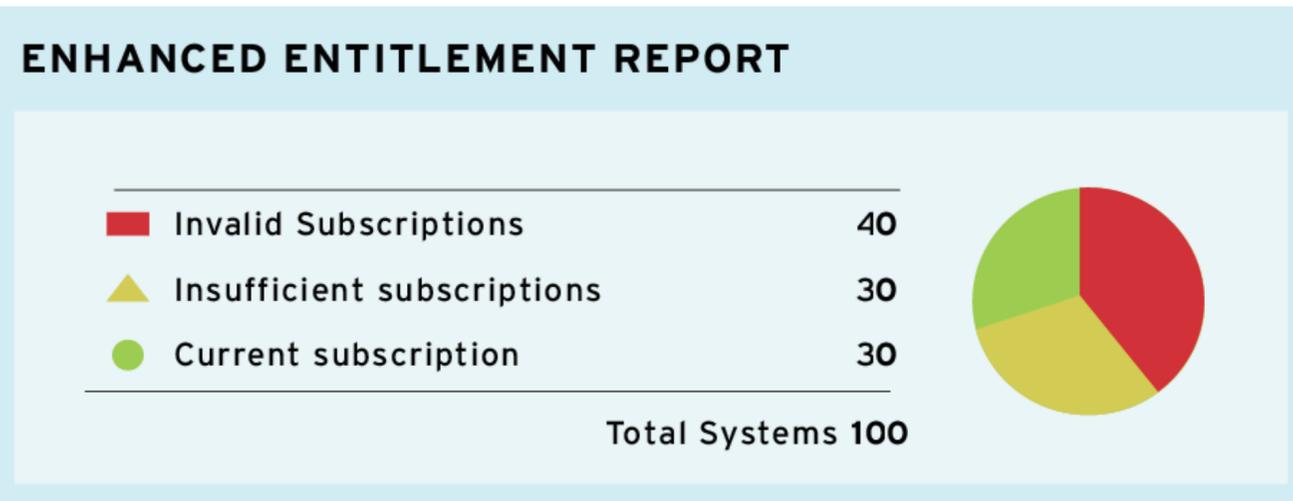


Host Group

Satellite 6 Provisioning/Configuration

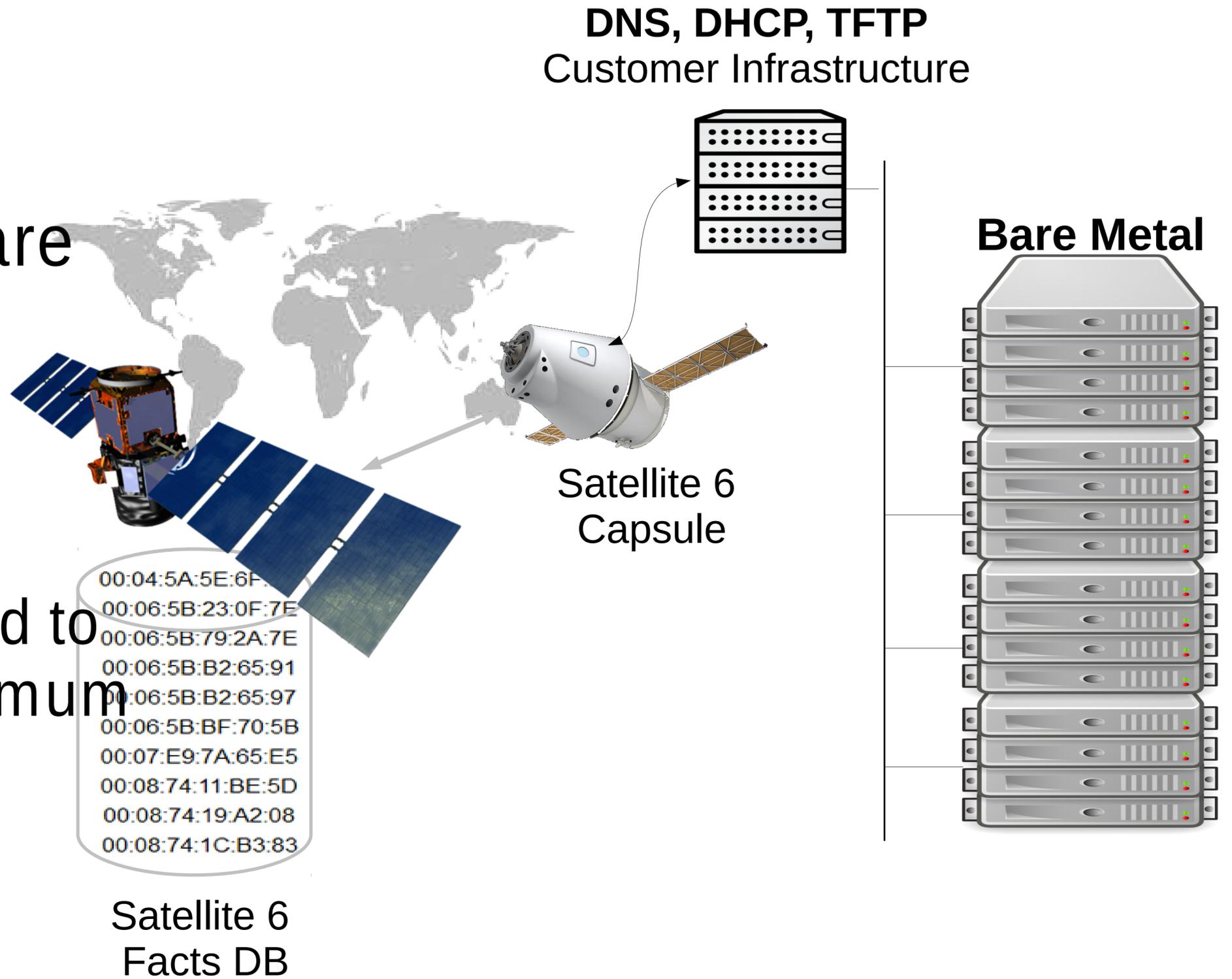


Satellite 6 Subscription & Errata Management



Discovery

- Auto-registration of bare metal hosts & VMs
- Enables Metal-as-a-service
- Host Groups are applied to systems that meet minimum criteria



*Metal as a Service

Configuration Dashboard

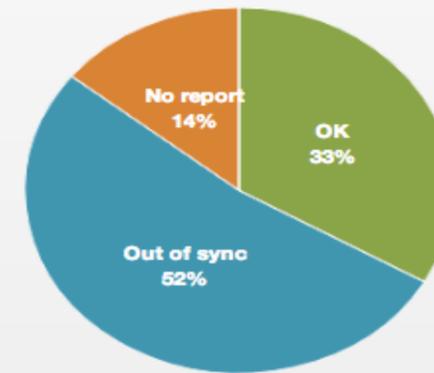
Overview

Filter ... x Q Search ▾

Host Configuration Status

Hosts that had performed modifications without error	0
Hosts in error state	0
Good host reports in the last 35 minutes	7
Hosts that had pending changes	0
Out of sync Hosts	11
Hosts with no reports	3
Hosts with alerts disabled	0

Total Hosts: 21



Host Pool

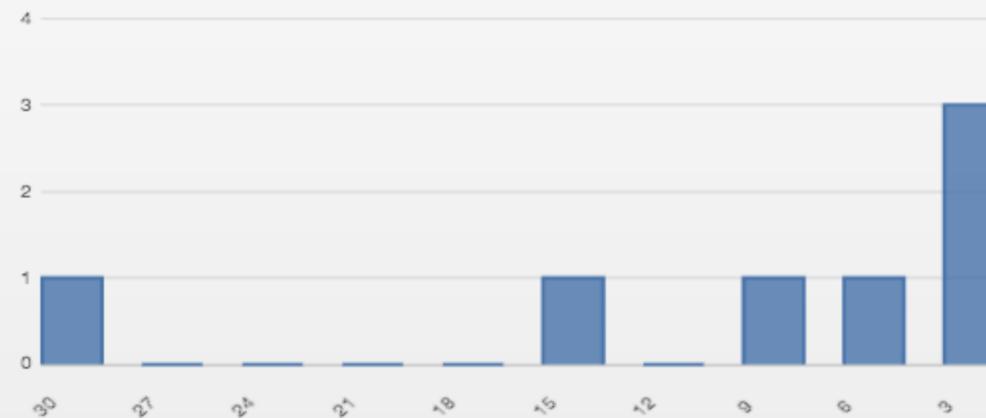
Unassigned hosts

6

Latest Events

Host	A	R	F	FR	S	P
fdev.sat.la...	0	0	0	0	6	0
ganglia.sat...	0	0	0	0	6	0
fdev.sat.la...	0	0	0	0	6	0
ganglia.sat...	0	0	0	0	6	0
dhcp75-118....	0	0	0	0	6	0
fdev.sat.la...	0	0	0	0	6	0

Run distribution in the last 30 minutes



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DEMO

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Life Cycle and Content Management

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Provisioning: System Definition with Host Groups Kickstart, Puppet Classes, etc

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Configuration Management: Puppet Run, Reporting, Drift

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Subscription Management: Content Host Registration

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Subscription Management: Updates and Errata

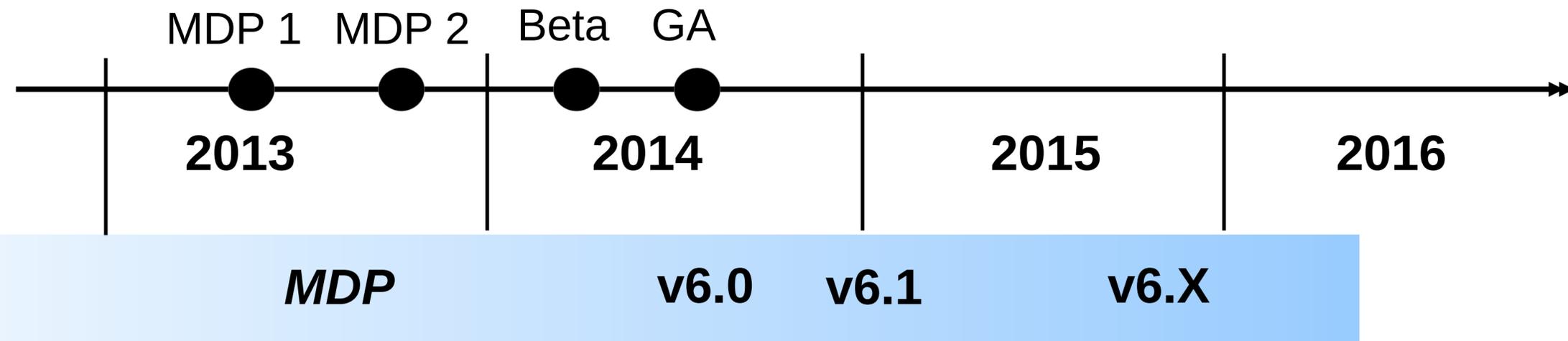
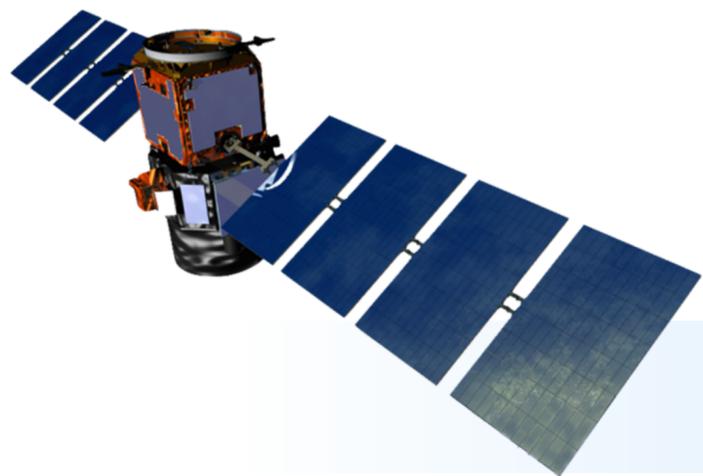
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Roadmap

Satellite 6 Roadmap



- **Managed Design Program ('MDP')** – High-touch, early (alpha) stage customer program
 - MDP1: “First Satellite 6 Experience” - Completed in August 2013
 - MDP2: “Puppet Ecosystem” - Completed in February 2014
- **Beta Program:** Planned for June, 2014
 - Public Beta for all Satellite customers, Closed Beta for a high touch select group
- **General Release of Satellite 6.0:** Planned for September, 2014

6.0 & 6.1 New Features



- Satellite 6.0 – September 2014
 - Content sync from GIT repos
 - Host Group deployable on:
 - Bare metal, RHEV, VMware, KVM, EC2, & OpenStack
 - Nested locations
 - Northeast/Datacenter2/Pod2/Rack3
 - Centralized Capsule management
 - IDM & Active Directory integration
 - Plug-in architecture enables on-site modular customization

- Satellite 6.1 – early 2015
 - Splice Graphical Reporting
 - Consumption Reporting
 - Unified Dashboards
 - Registration + Config State
 - MCollective for remote execution
 - Host group deployable on:
 - Google Compute Engine, Rackspace
 - CloudForms Integration
 - Bare-metal use cases

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What To Do Next

What To Do Next?

Here At Summit

- **Partner Pavilion:**
 - Satellite 5 booth – Infrastructure Pillar
 - Satellite 6 booth – Infrastructure-as-a-Service Pillar
- **Presentations:**
 - Understanding your subscription inventory - Wed, 4:50-5:50pm
- **Lab: Test Drive Satellite 6 - Wed, 1:20-3:20pm, Room 258**

Immediately After Summit:

- Beta launching in mid-June... send email to satellite6preview@redhat.com if interested in participating in the High Touch Beta Program!



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Questions ?