



# Red Hat Satellite Overview & Roadmap

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# Agenda: Red Hat Satellite Overview & Product Roadmap

## Satellite Product Overview

- *RHEL Lifecycle Management*
- *Satellite Features & Functions*
- **The Future of Red Hat Satellite... Is Bright!**
  - *Version 5: What to expect in 2013*
  - *Version 6: What to expect in 2014 & beyond*
  - *More Information & Next Steps*



# Satellite makes Red Hat Enterprise Linux...

## **Deployable**

- Easier to define and provision new systems

## **Scalable**

- Datacenters can add more systems without adding extra admins
- Built to handle thousands of managed systems

## **Manageable**

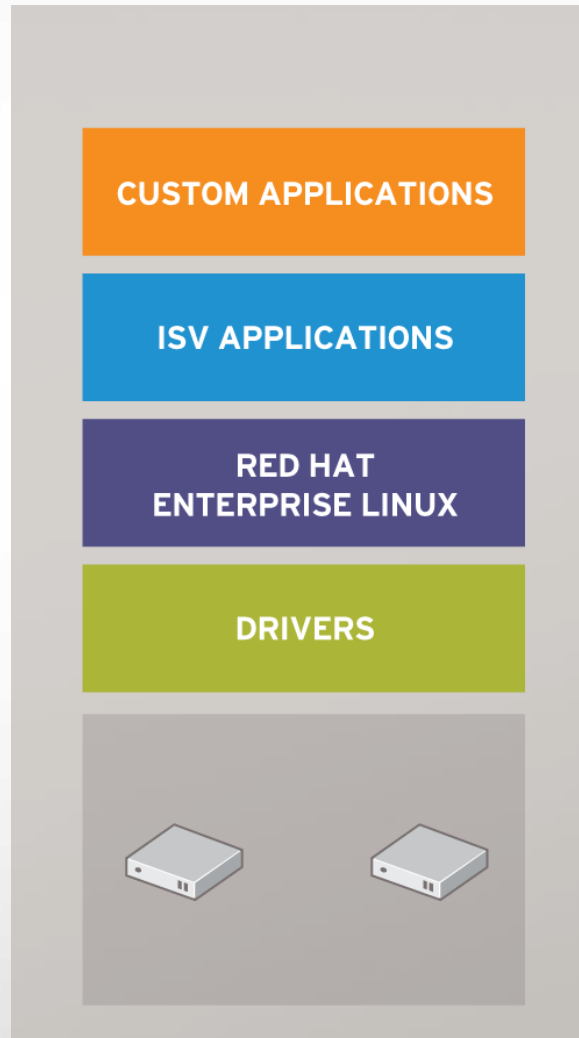
- Intuitive web-based GUI, making it easy to work with groups of systems
- Extremely rich API for integration and automation

## **Consistent**

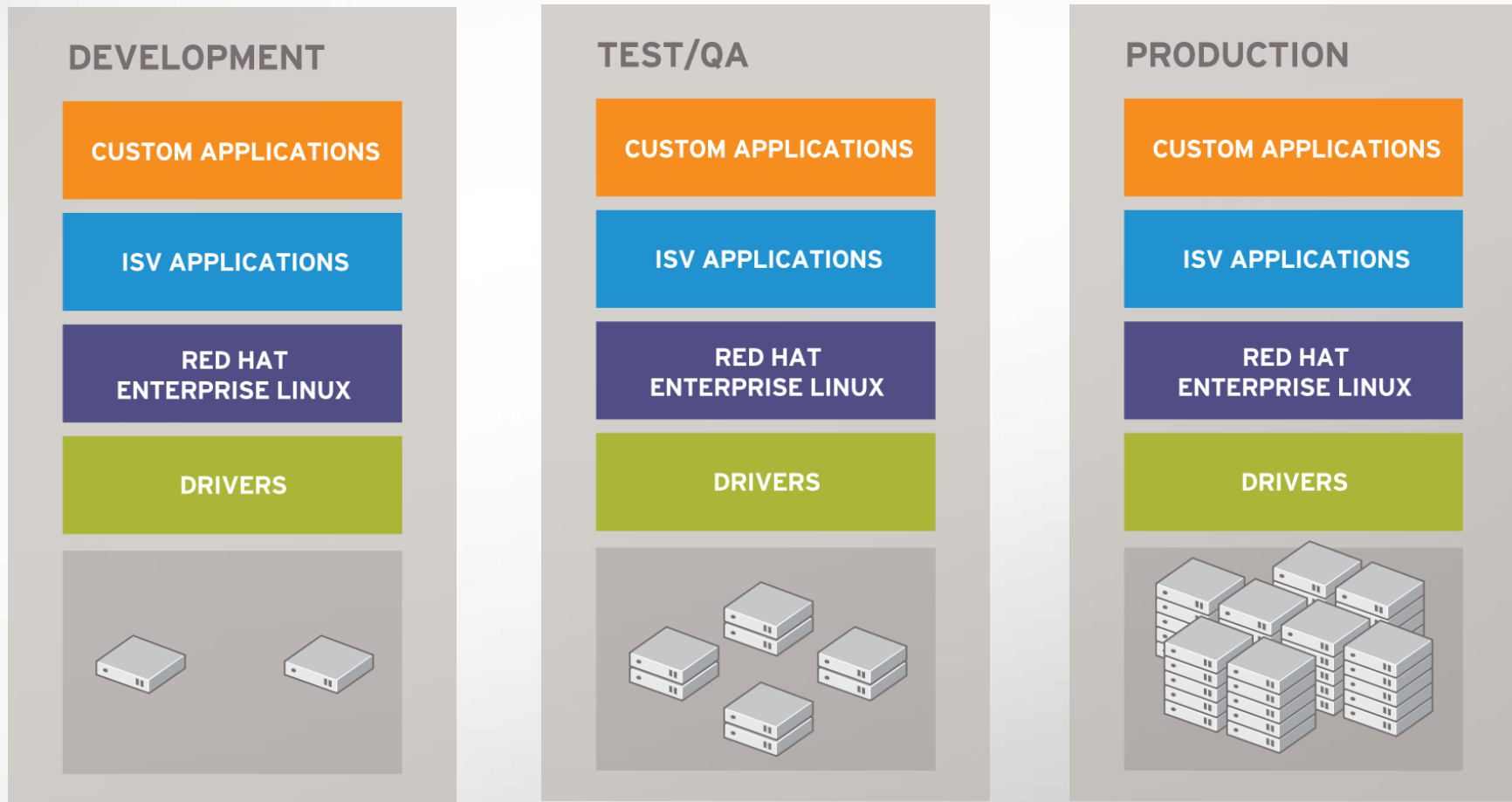
- Use profiles to maintain a master image definition for systems
- Centralized configuration file management reduces errors and inconsistencies



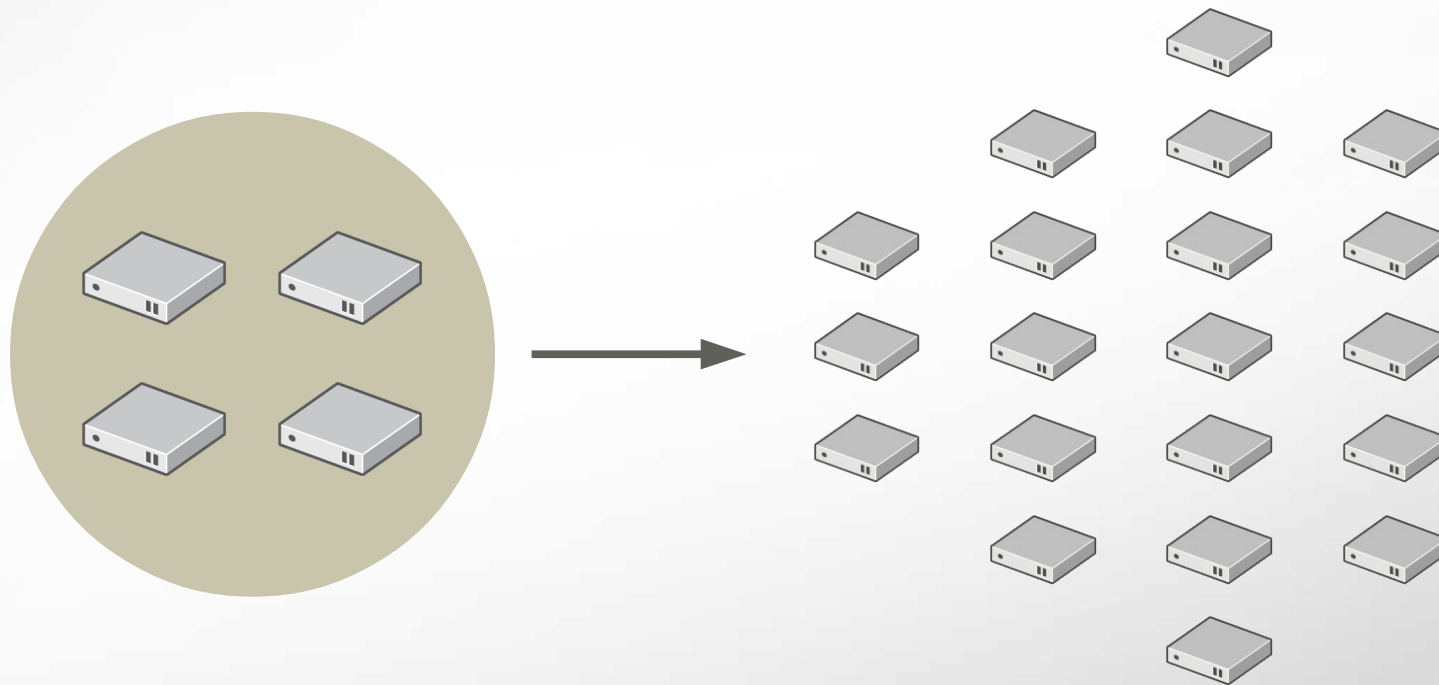
# A parable in reality: Building the ideal Standard Operating Environment (SOE)



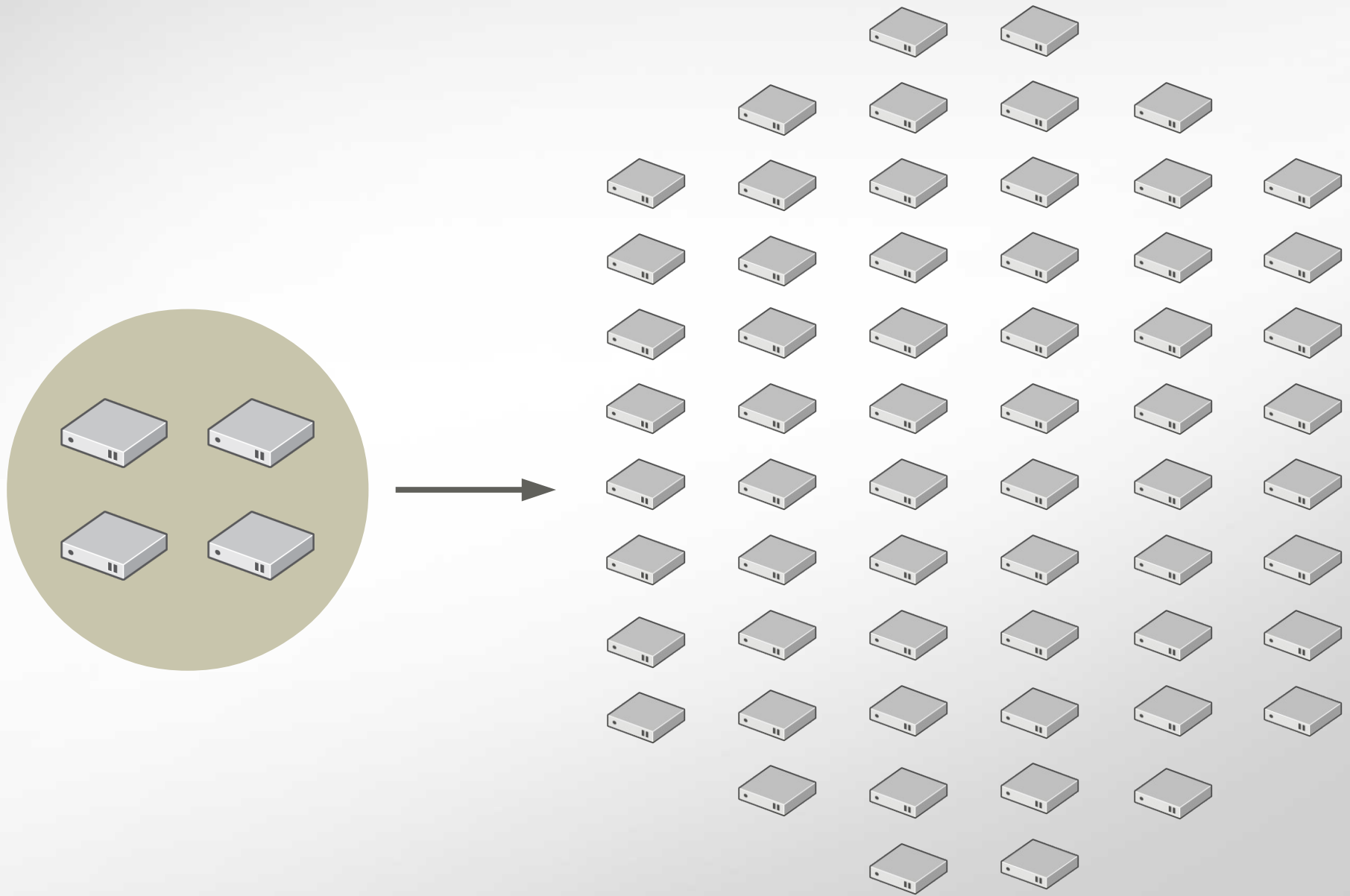
# A parable in reality: Building the ideal Standard Operating Environment (SOE)



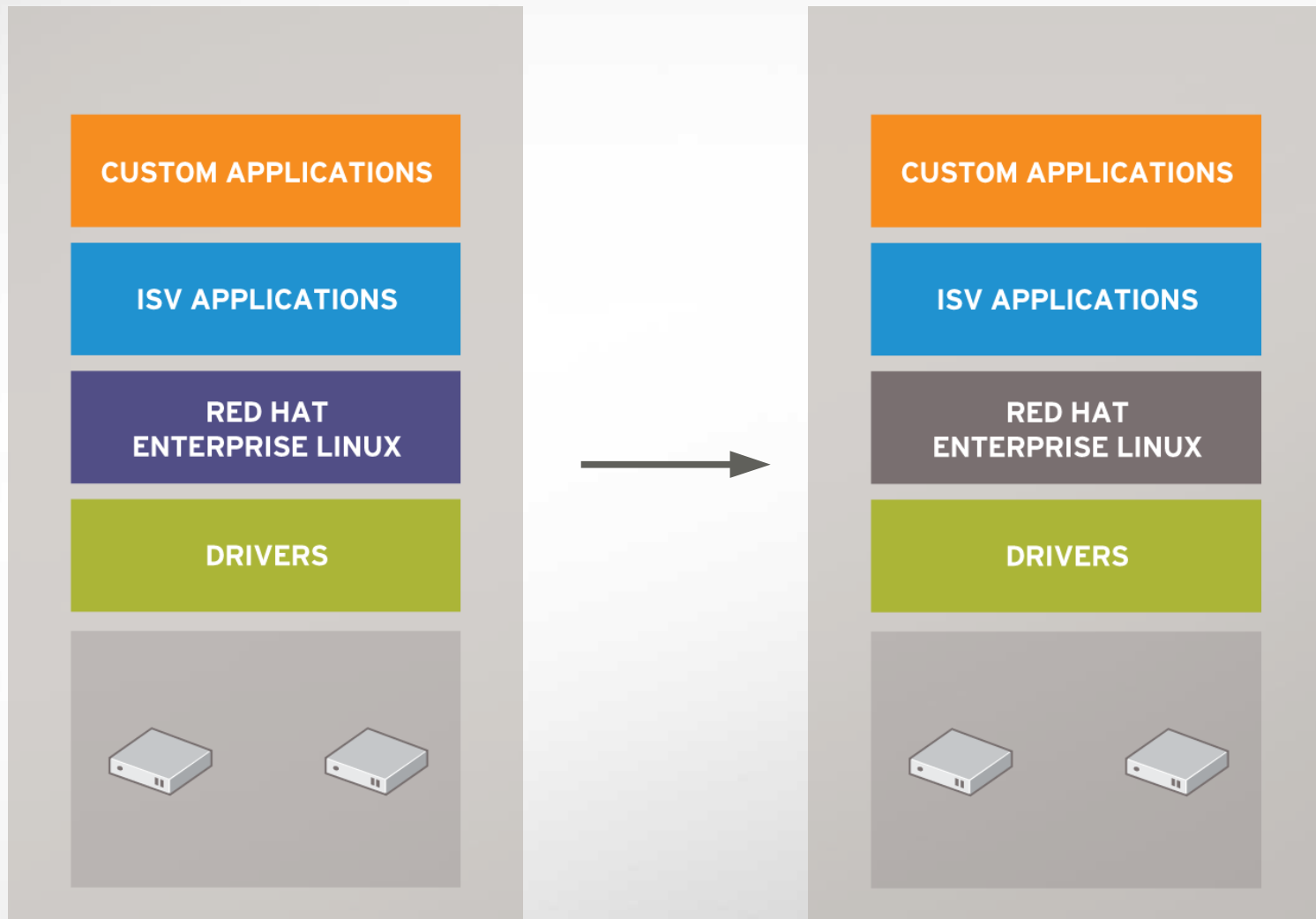
# Given time, your systems increase organically from this



# ...to this



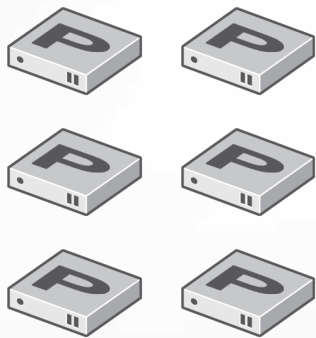
# ...so your SOE changes a bit



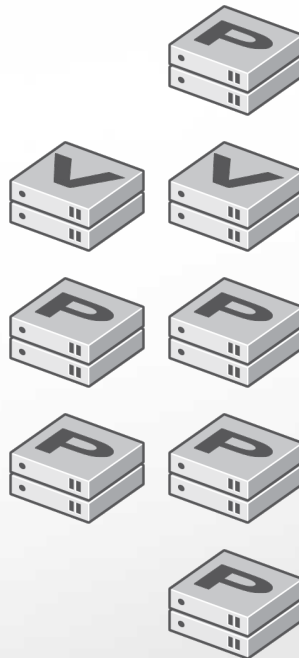


# ... and complexity has grown over the years with the advent of virtualization

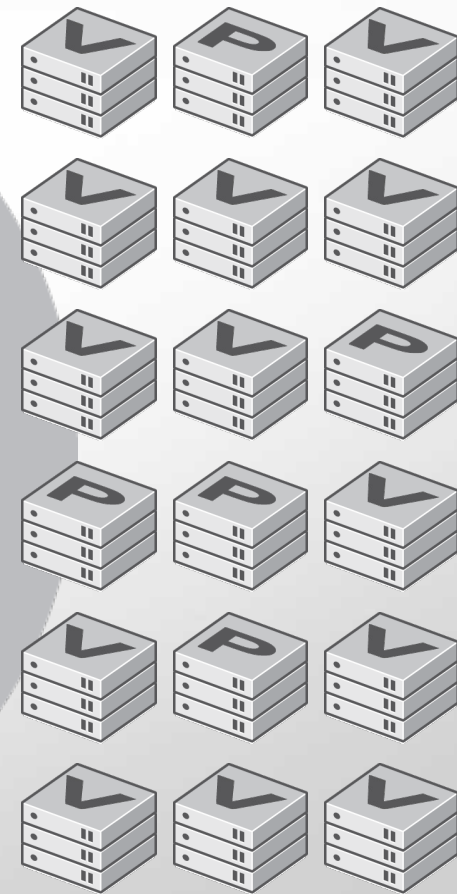
10 Years Ago



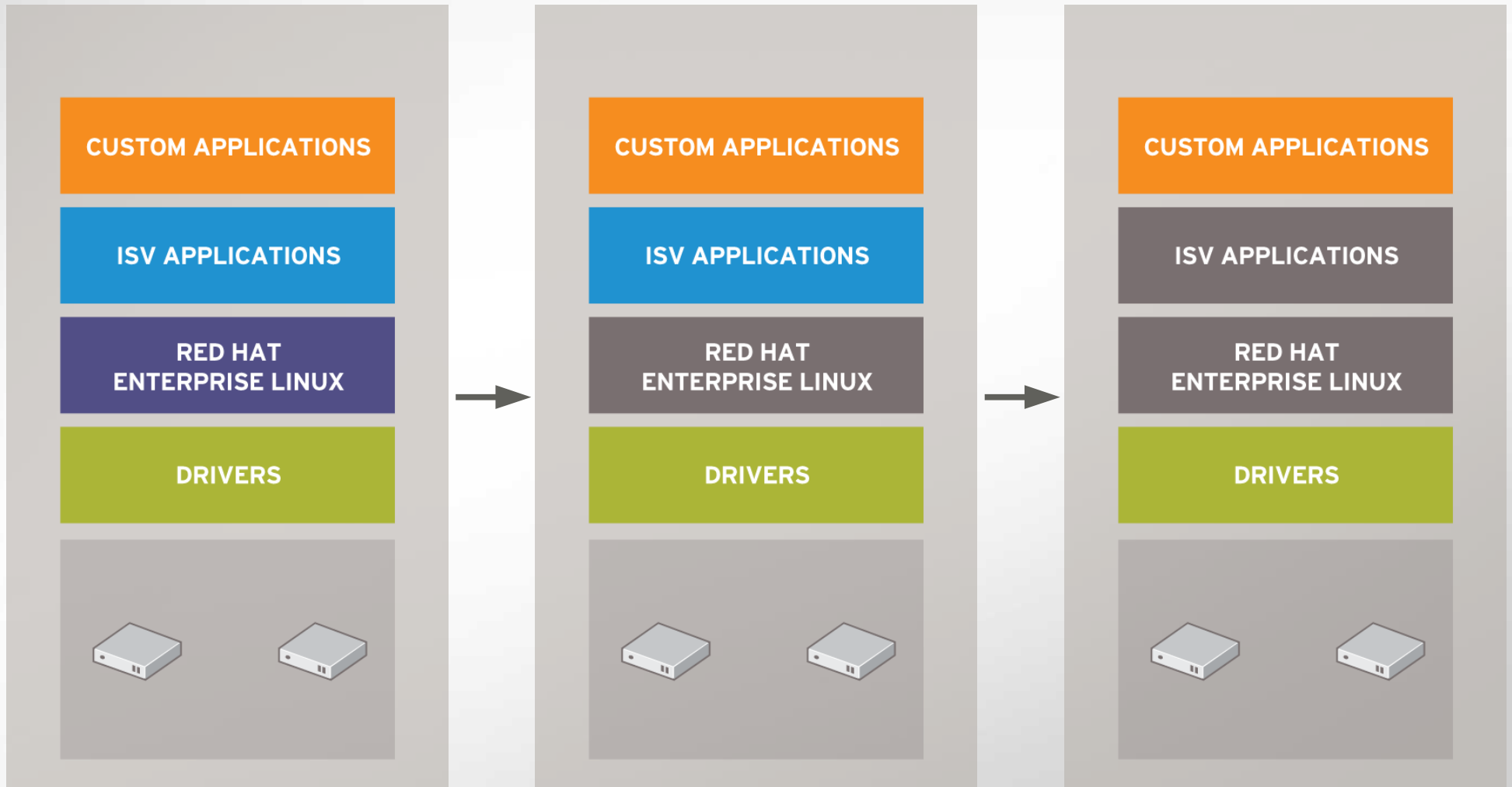
5 Years Ago



Today

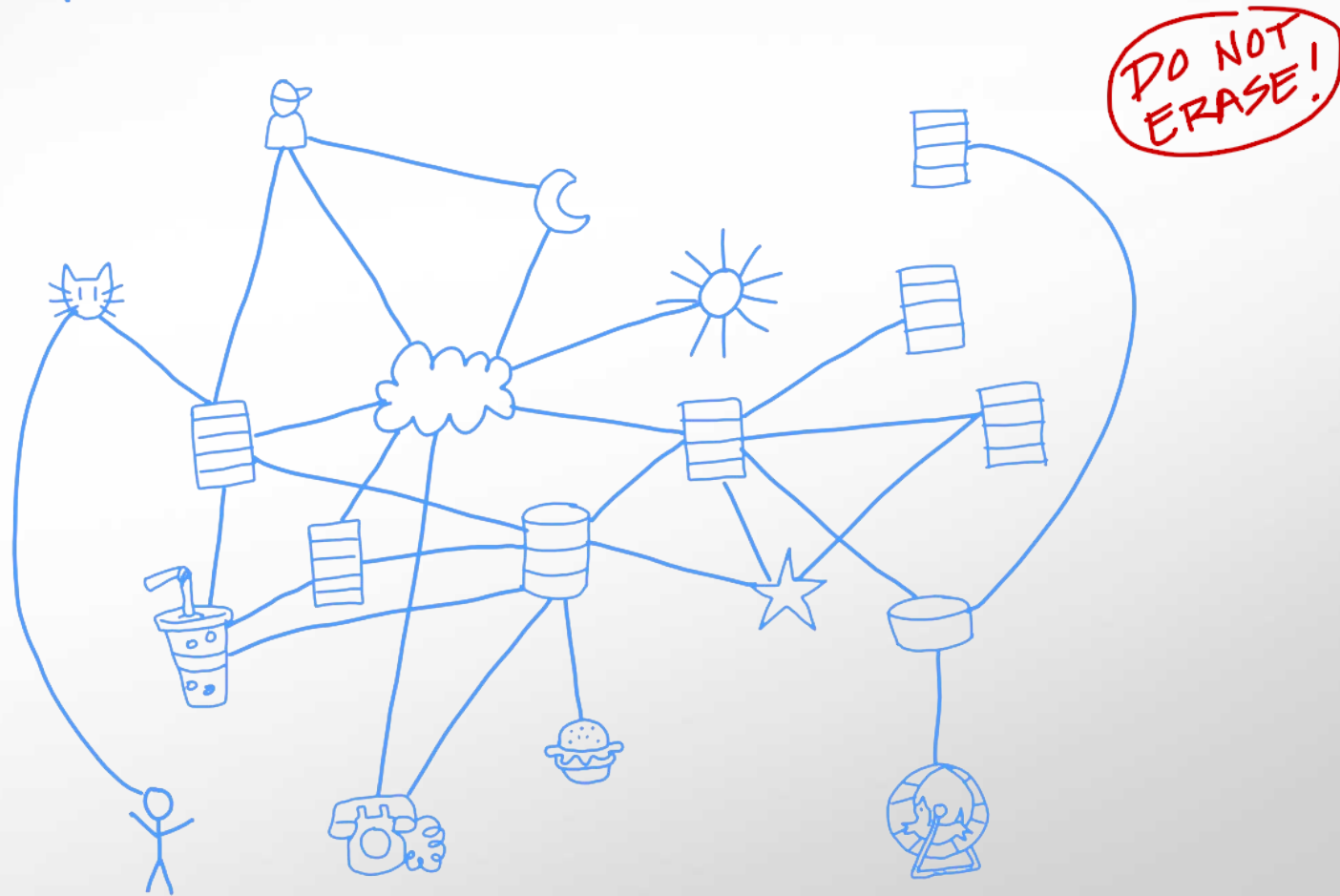


# And your SOE changes a bit more



# Your processes become increasingly complex

ACME CORPORATION IT TOPOLOGY



# Before you know it, you're left with this: *A NON* Standard Operating Environment

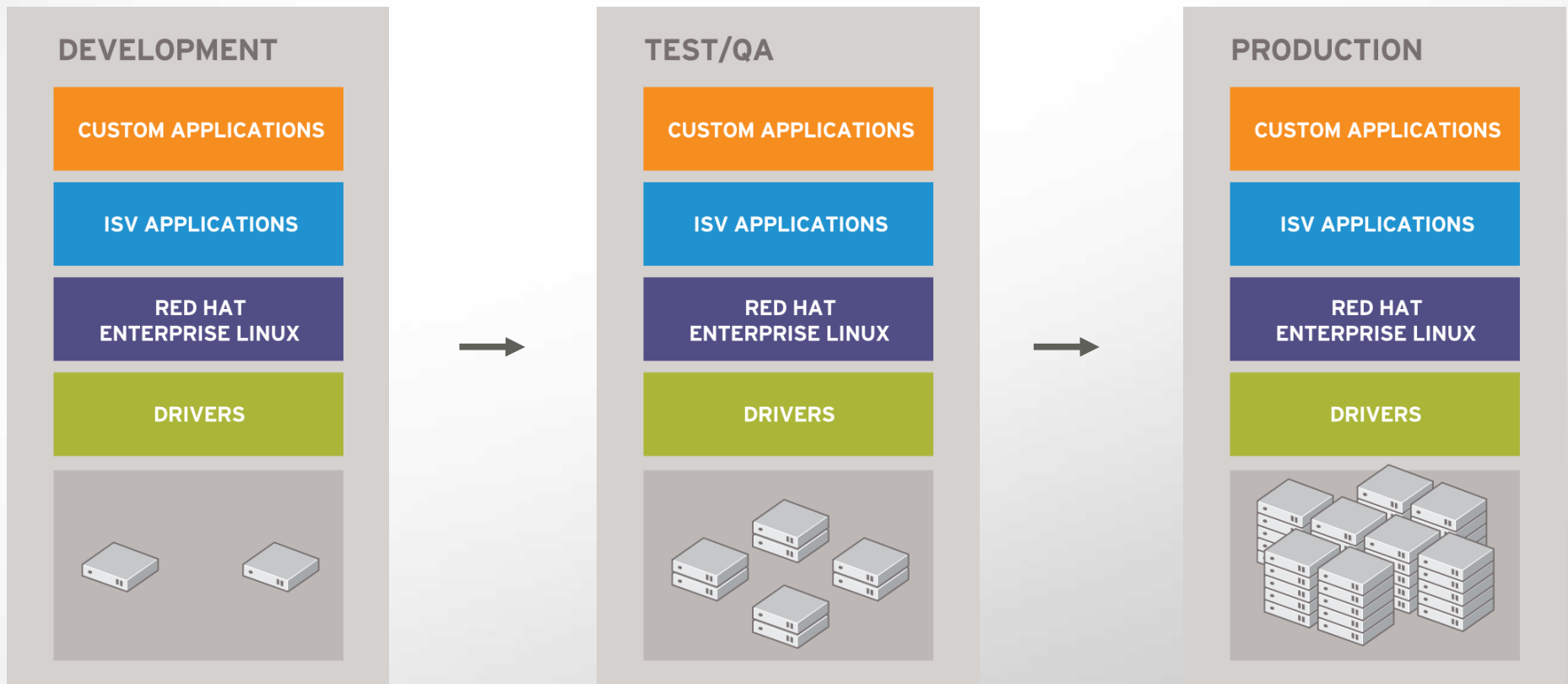


# So how do we go from a non-SOE to this?

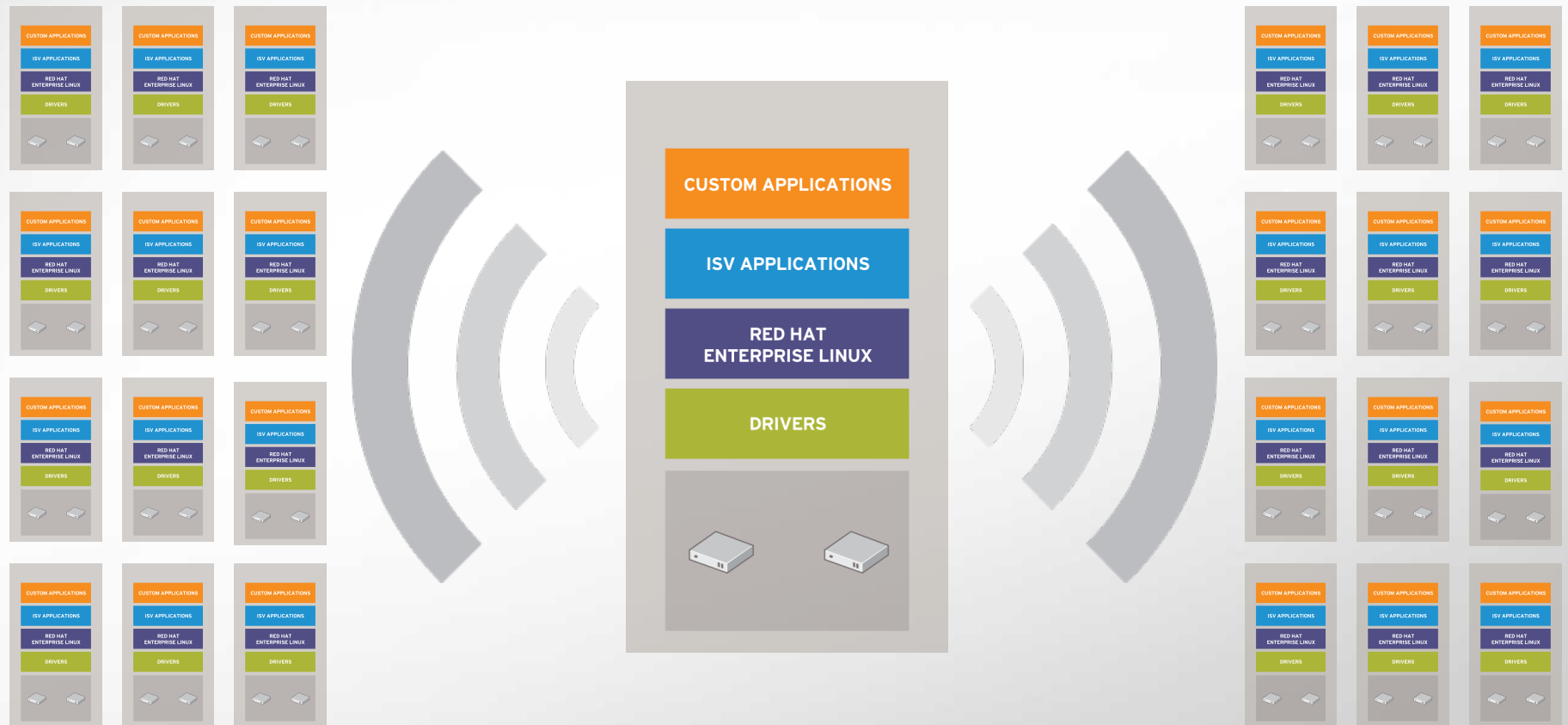


# Lifecycle management enables you to build a set of core SOEs that enable...

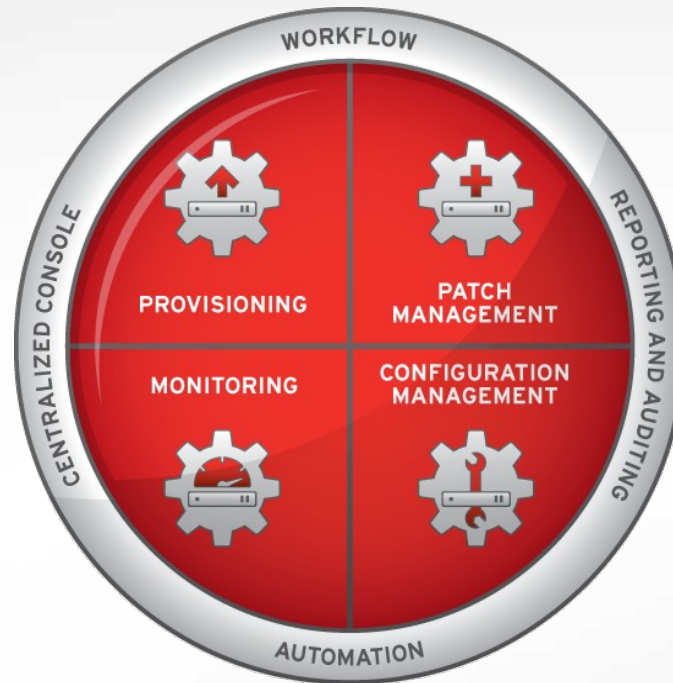
P → R → O → C → E → S → S



# This empowers you to scale your environment indefinitely



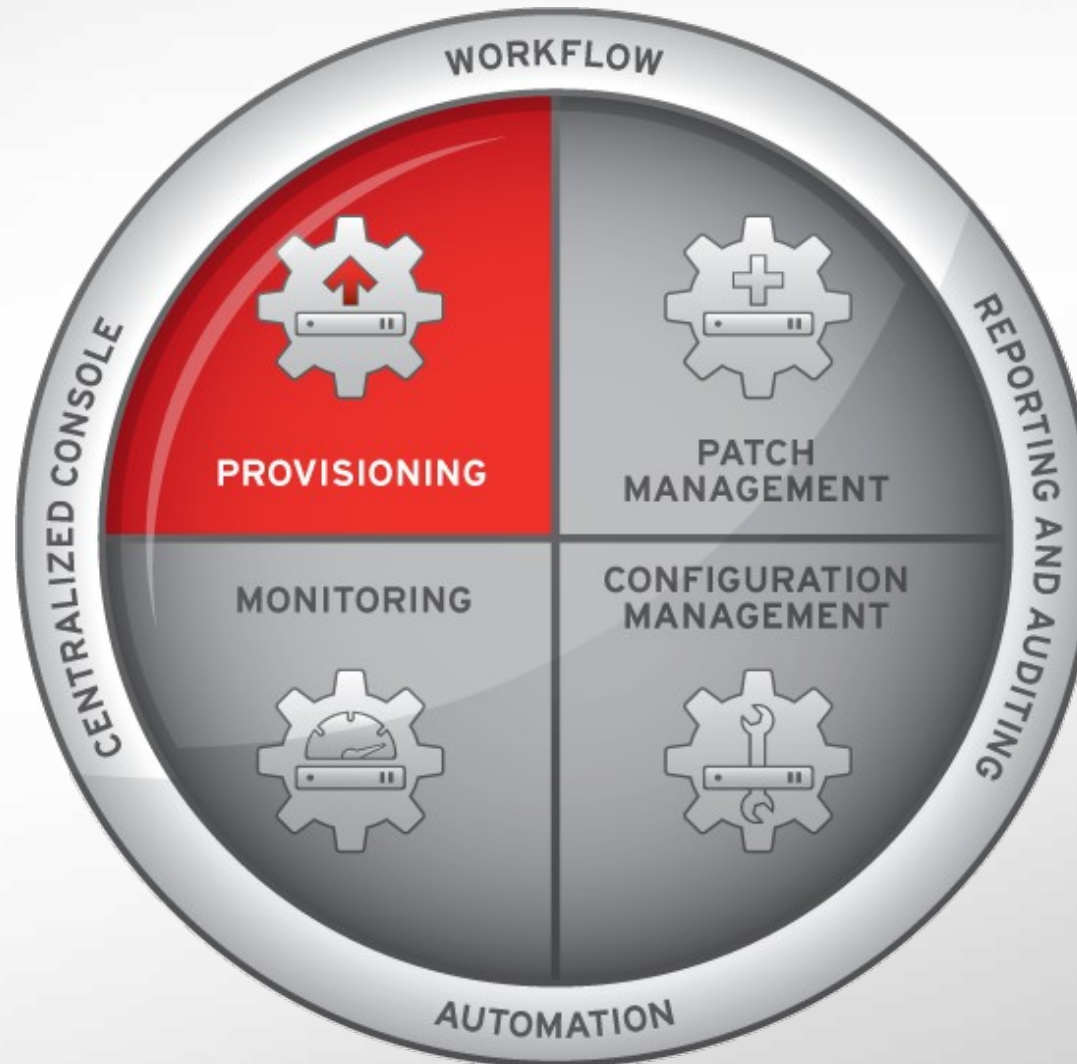
# Red Hat Satellite can make it happen





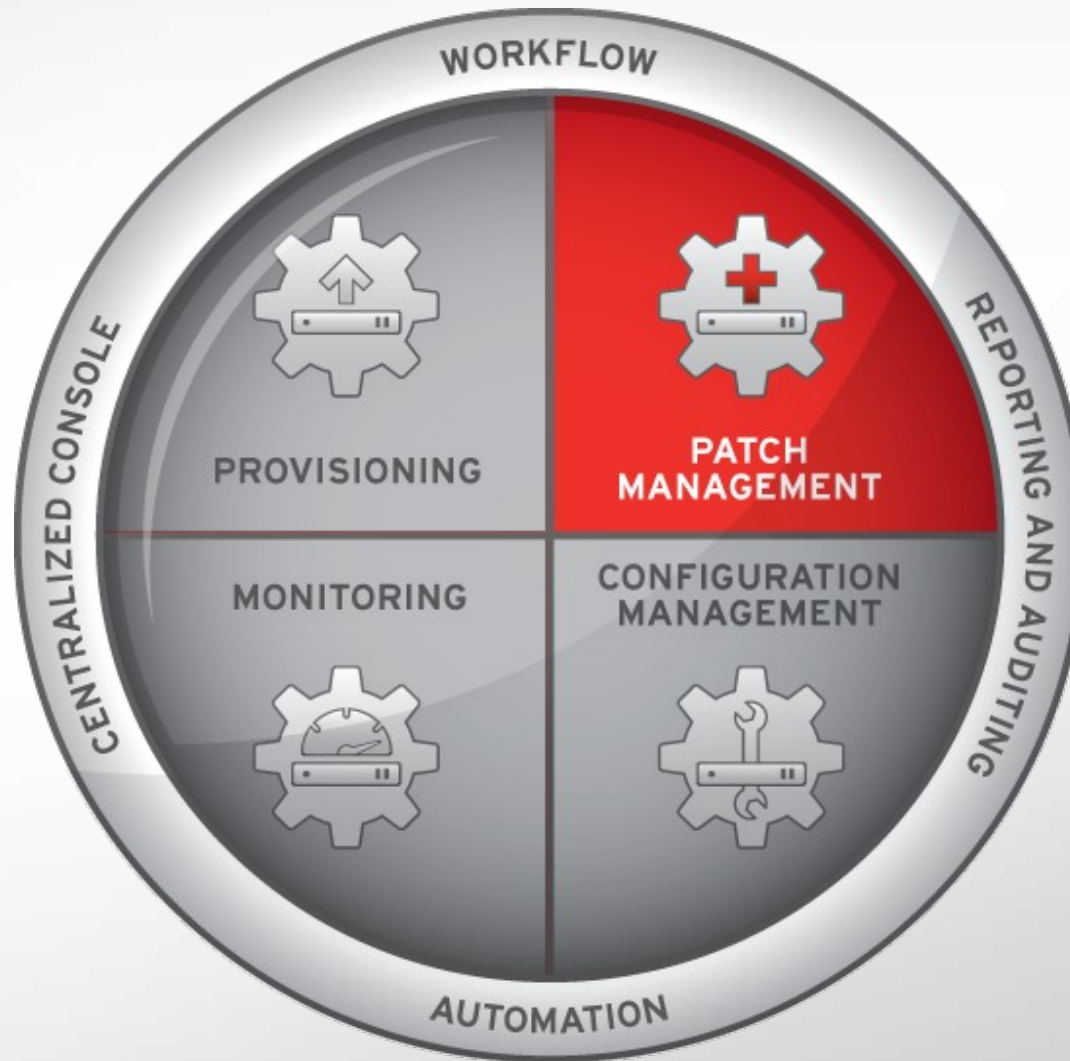
# Red Hat Satellite Capabilities

## *Provisioning*



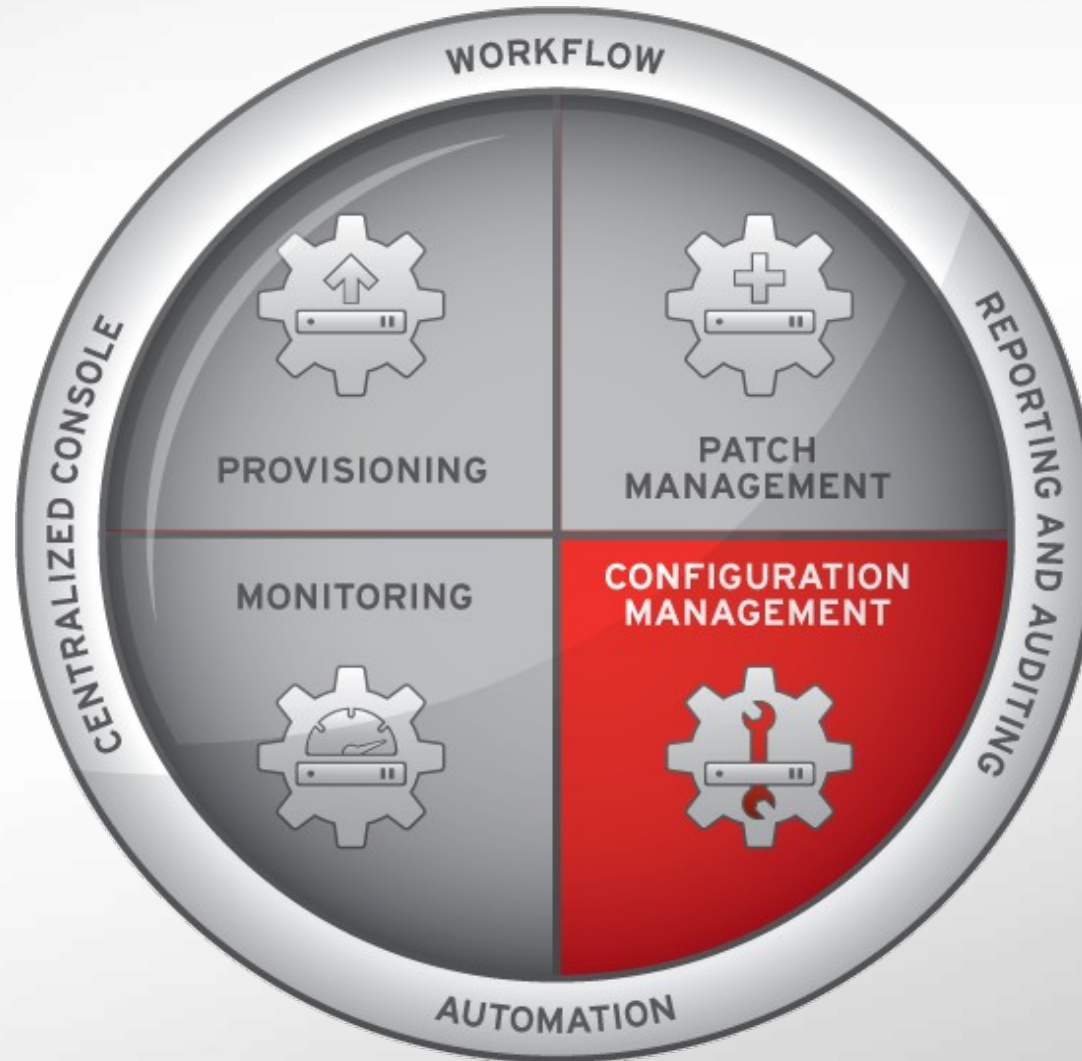
# Red Hat Satellite Capabilities

## *Patch Management*



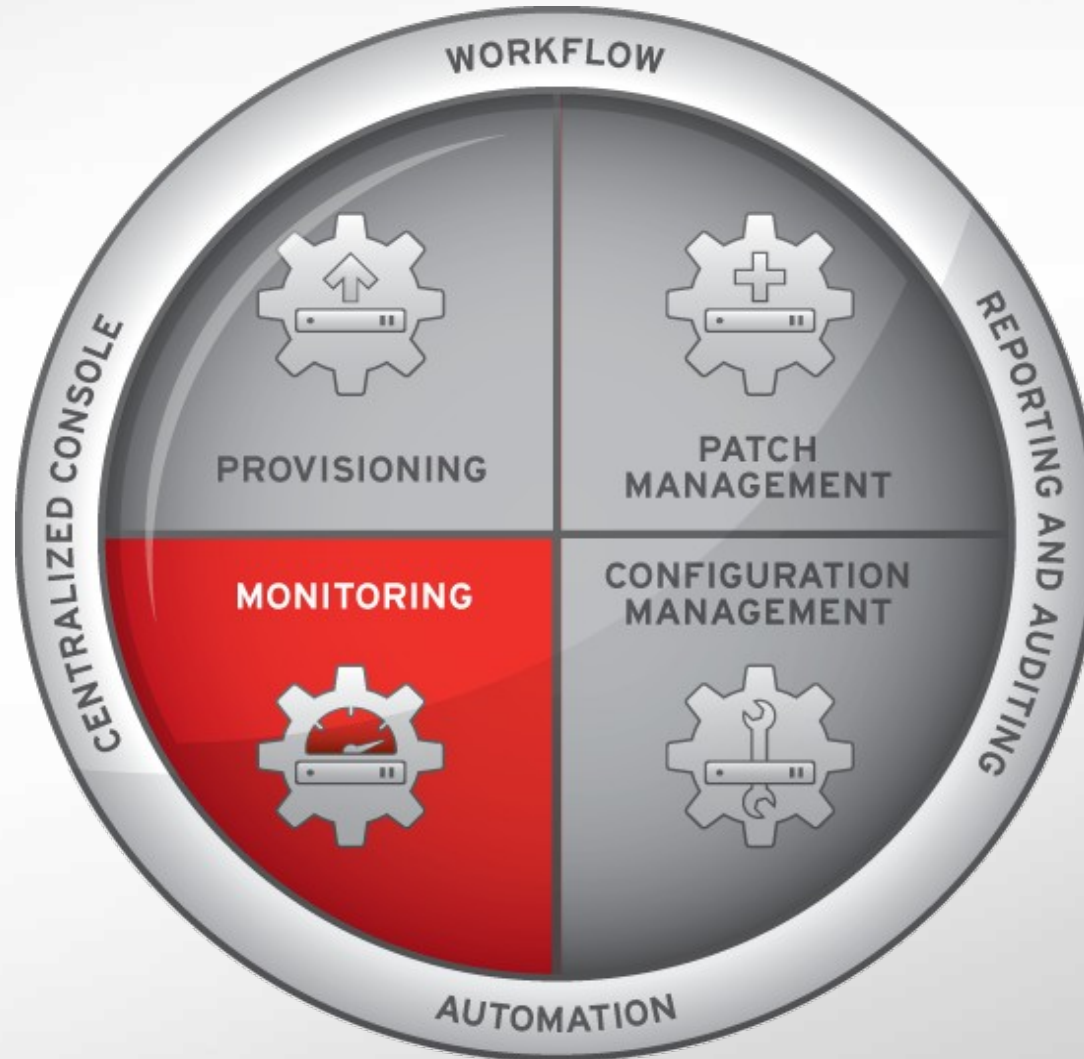
# Red Hat Satellite Capabilities

## *Configuration Management*

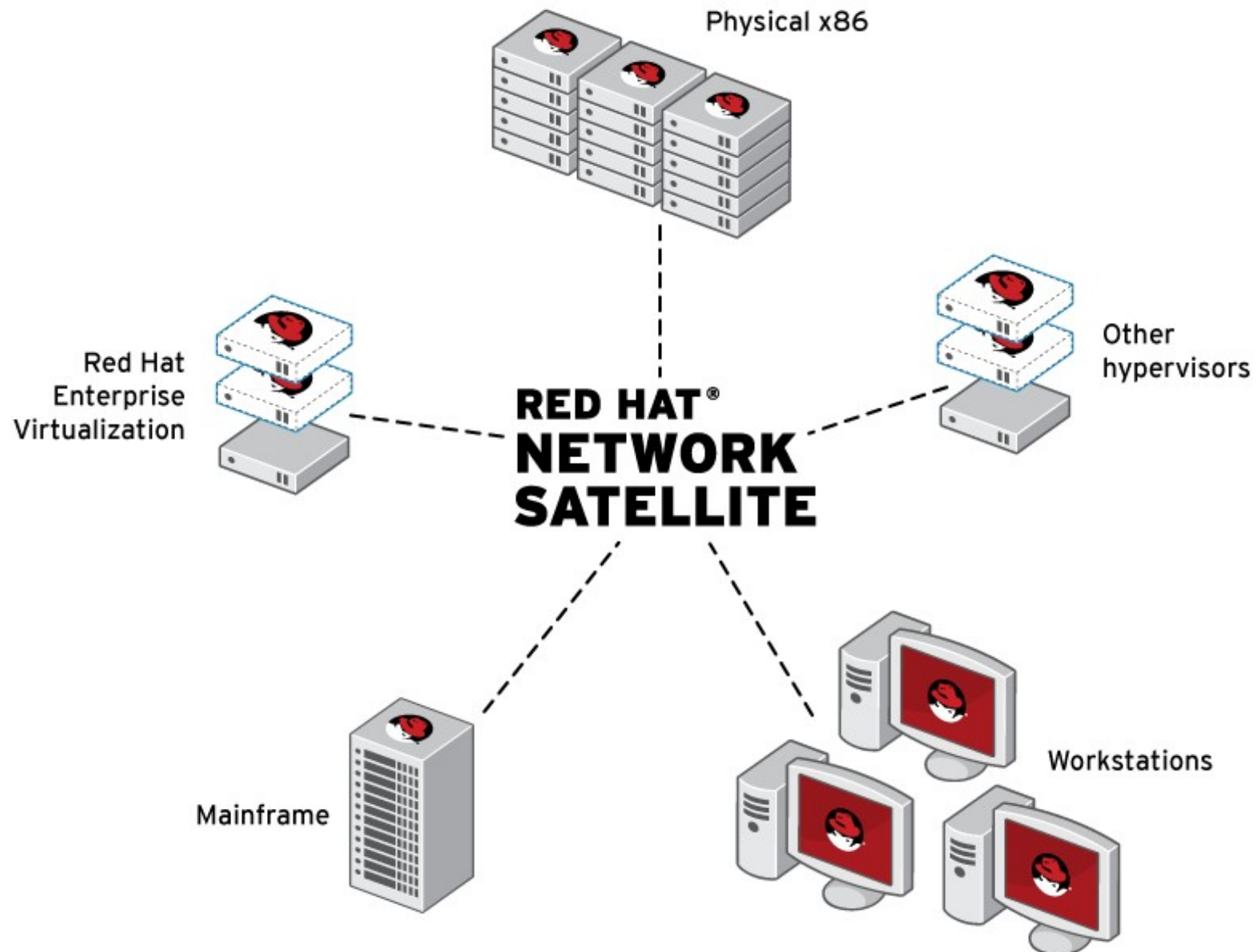


# Red Hat Satellite Capabilities

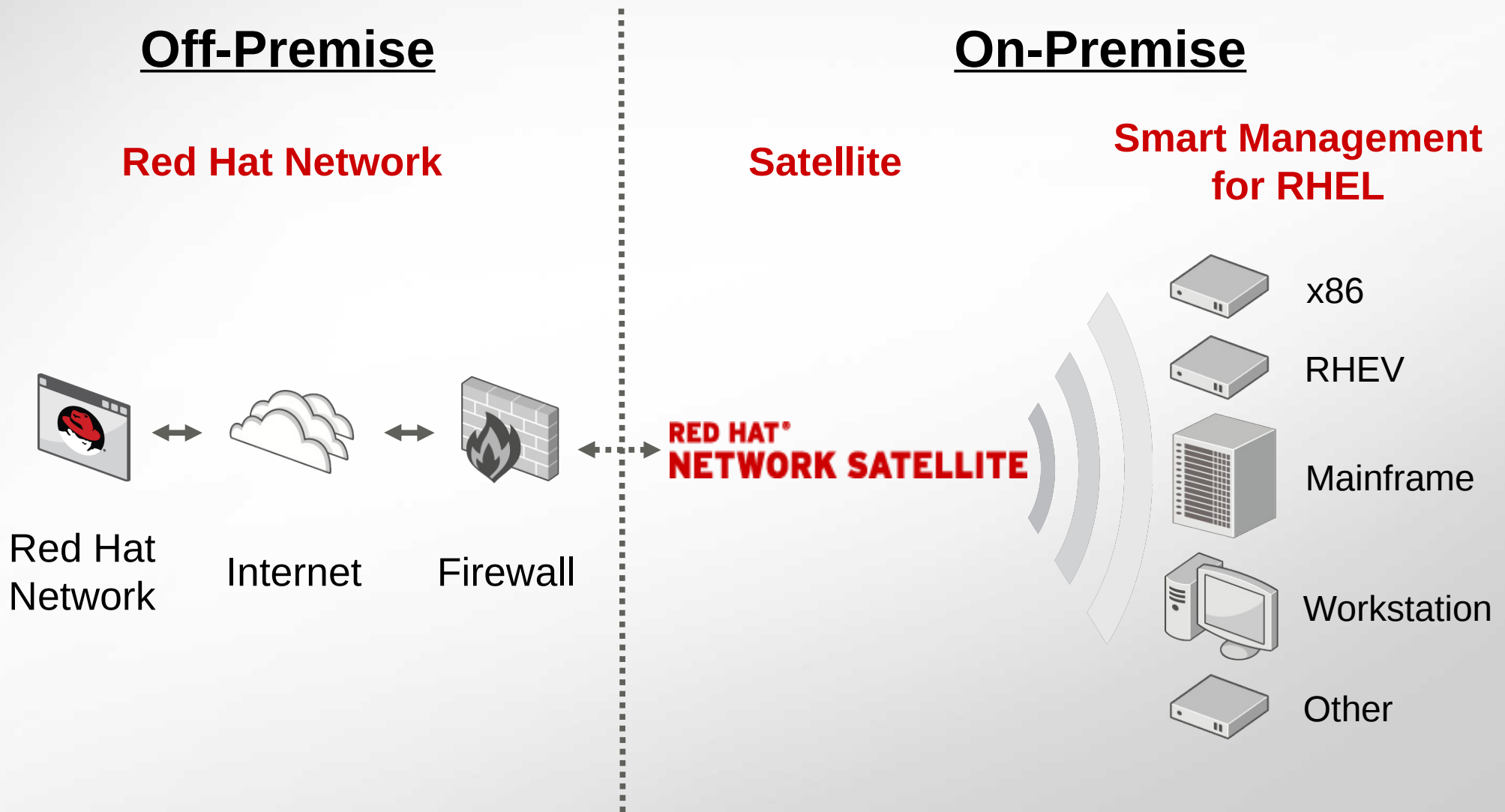
## *Monitoring*



# Management for Red Hat Enterprise Linux



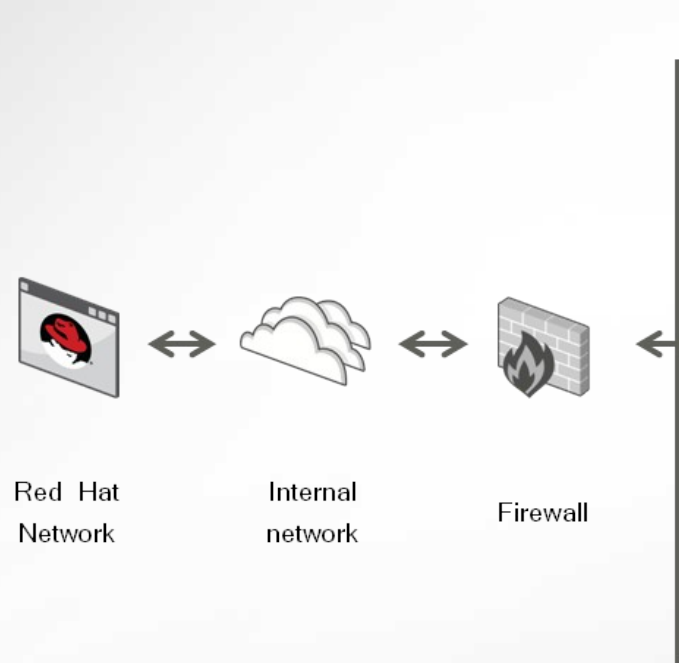
# Red Hat Satellite Topology





# Red Hat Satellite Topology – Adding Proxy Server

## Off-Premise

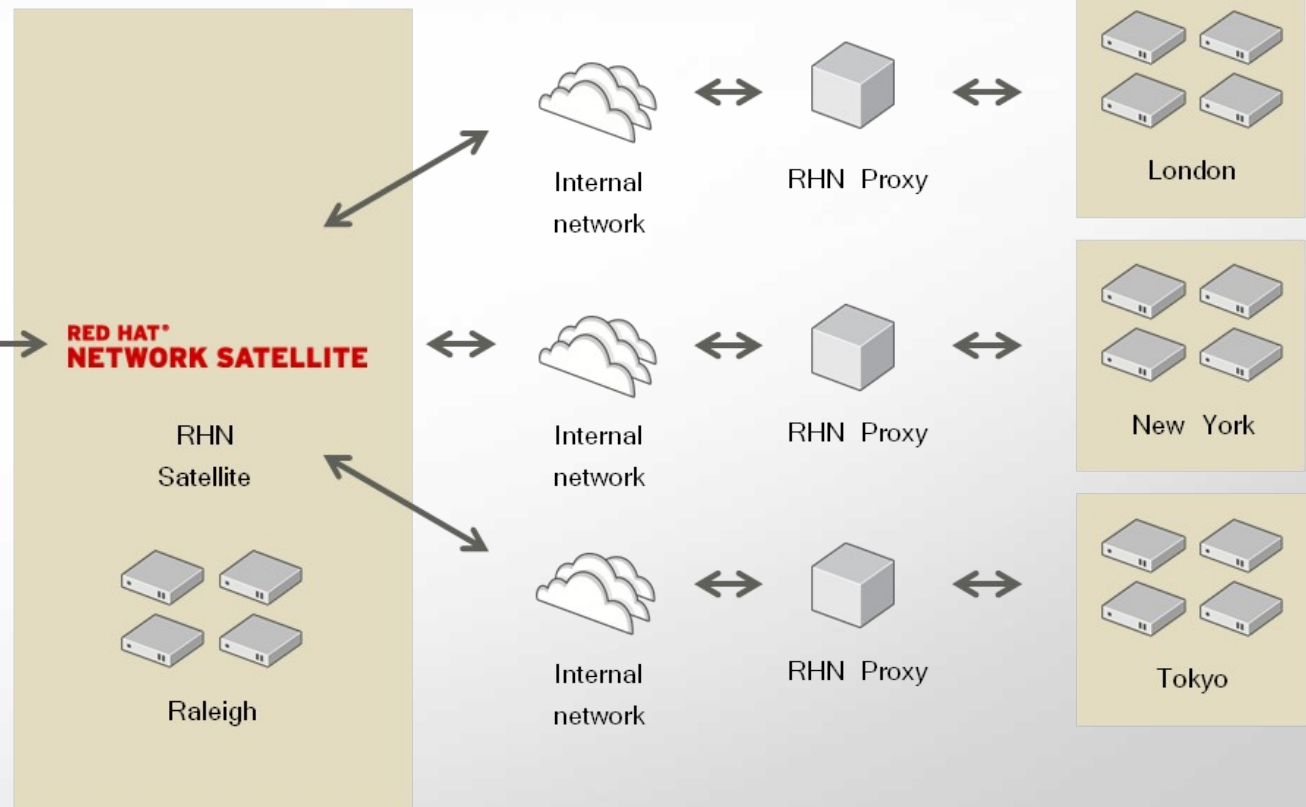


Red Hat  
Network

Internal  
network

Firewall

## On-Premise



**RED HAT  
NETWORK SATELLITE**

RHN  
Satellite

Raleigh

Internal  
network

RHN Proxy

London

Internal  
network

RHN Proxy

New York

Internal  
network

RHN Proxy

Tokyo



**"If we didn't have the tool [RHN Satellite], we would either hire more people, or have diminished capability."**

**"...with Satellite, once things are set up and it is in place, managing 200 servers is as easy as managing one."**







# IDC ROI Study\* of Red Hat Satellite

IDC conducted in-depth interviews with staff members of 10 IT organizations that have deployed RHN Satellite Server.

## RED HAT NETWORK SATELLITE SERVER ROI ANALYSIS

CATEGORY	VALUE
Three-year cost of investment	\$274,410
Annual cost savings	\$500,905
Net present value (NPV of three-year savings)	\$927,778
Payback period	4.8 months
Three-year ROI	338%

\* IDC White Paper sponsored by Red Hat, Linux Management with Red Hat Network Satellite Server: Measuring Business Impact and ROI, Doc # 220346, October 2009 <https://inquiries.redhat.com/go/redhat/idc-rhn-satellite>



# Agenda: Red Hat Satellite Overview & Product Roadmap

- **Satellite Product Overview**

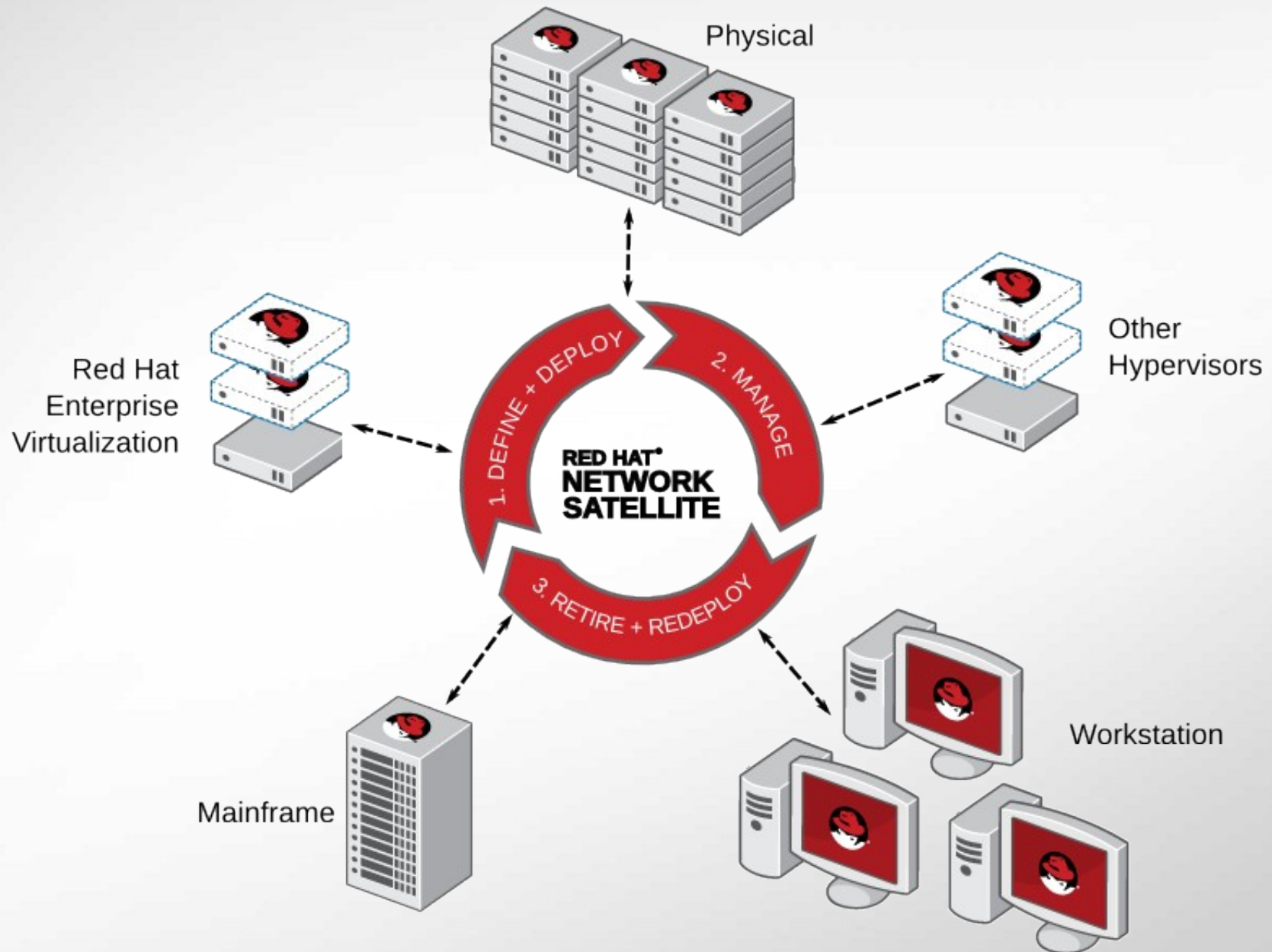
- *RHEL Lifecycle Management*
- *Satellite Features & Functions*

## **The Future of Red Hat Satellite... Is Bright!**

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# Red Hat Satellite v5



# Red Hat Satellite v5.5

*Available now*

Themes	Features	Benefits
Modernization / Compliance	IPv6 Enablement  OpenSCAP support	Better positioning to manage large datacenters  Ensure those systems adhere to internal & external compliance reqs
Content Management Refinement	Clone-By-Date	IT Admins can control precisely by datestamp and content streams (channels) to adhere to application support requirements
Infrastructure Complexity Management	Provisioning over Bonded Network Interfaces  Support for Multi-NIC RHN Proxies	We now address high-bandwidth systems more completely and can more readily manage multi-network IT deployments
IT Ecosystem (APIs)	API Expansion	Continuing to expand the ability for Satellite to integrate into 3 <sup>rd</sup> party and automation tooling





# Red Hat Satellite v5.6

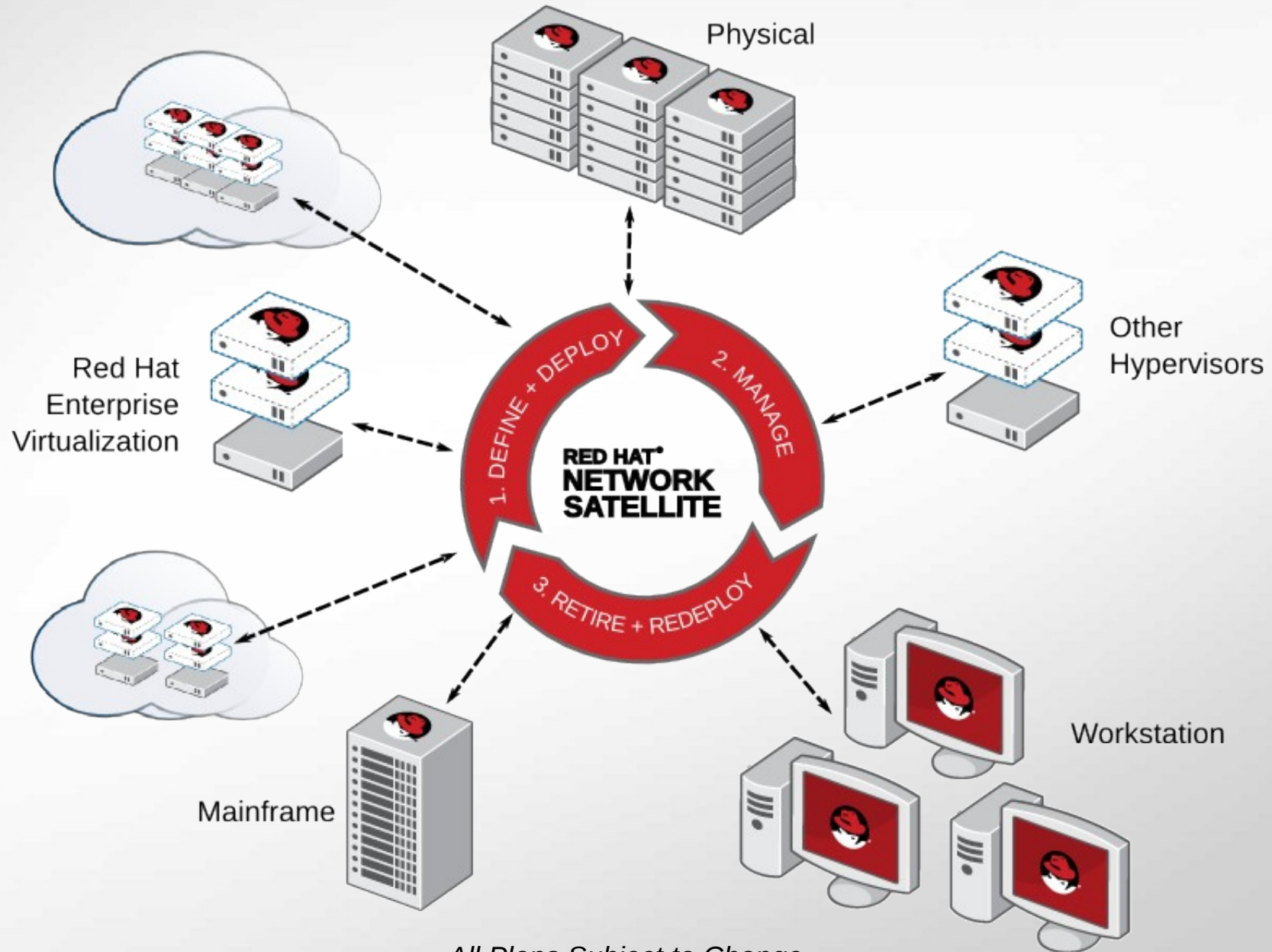
## *Coming soon*

Themes	Features	Benefits
Reporting & Compliance	Granular Customer Usage & Consumption Reporting	Bridges the gap between old & new entitlement and subscription reporting  Report per system expiration, SLA or contract (showing status of R/Y/G)
Uptime & Disaster Recovery	Support for Zero Downtime Hot Backups	Simple backup of the RHN Satellite does not require a scheduled outage window
Choice of External Database Backend	Support for external Oracle database or PostgreSQL	Freedom of choice between Oracle or PostgreSQL databases for those who require an external database for scaling or compliance
Satellite Scaling	Satellite across Two Servers Installation Option	Deploy UI/Biz-Logic & DB across two servers for significant scaling improvement. <i>No DBA required!</i>
Client Troubleshooting	ABRT (Automatic Bug Reporting Tool)	Collect and report on critical crash information via the Satellite UI



# Red Hat Satellite v6

*... rocketing Satellite into a higher orbit*



# Addressing Macro Trends Across Systems Management

Trend	Plans to address with Red Hat Satellite
Hyperscale	<b>Providing Systems management 'at scale':</b> Enabling definition, discovery, deployment, and management of an order of magnitude more systems, clients, cloud nodes, and classes of machines
Cloud	<b>Abstracting resources while maintaining compliance:</b> Including imposing quotas, measuring costs and maintaining governance at any scale, with workloads temporary or persistent with policy governed placement in hybrid clouds
DevOps	<b>Providing IT with the right tools:</b> Meet the growing demands of DevOps, such as self-service, flexible life cycle, service catalogs, and more...
Complexity	<b>Managing complexity across the lifecycle:</b> With refined roles, numerous life cycles, varied permutations of content and system definitions, providing 'as a service' capabilities (e.g. Machine As A Service, Infrastructure As A Service)
Open source solutions	<b>Harnessing open source innovations:</b> Amplifying the value of one-off solutions by creating structure, optimized workflows, and compliance in a modern and scalable framework



# Red Hat Satellite v6

## Redesigned platform for Content & Entitlement Management

- *Intuitive workflows to manage multiple content classes into governed repositories*
- *Observable subscription management from one product on an instance to countless products across hybrid clouds*
- *Content delivery designed for hyperscale with dynamic mirrored node creation across networks and security zones*

## Bare Metal to Cloud Infrastructure in a single workflow

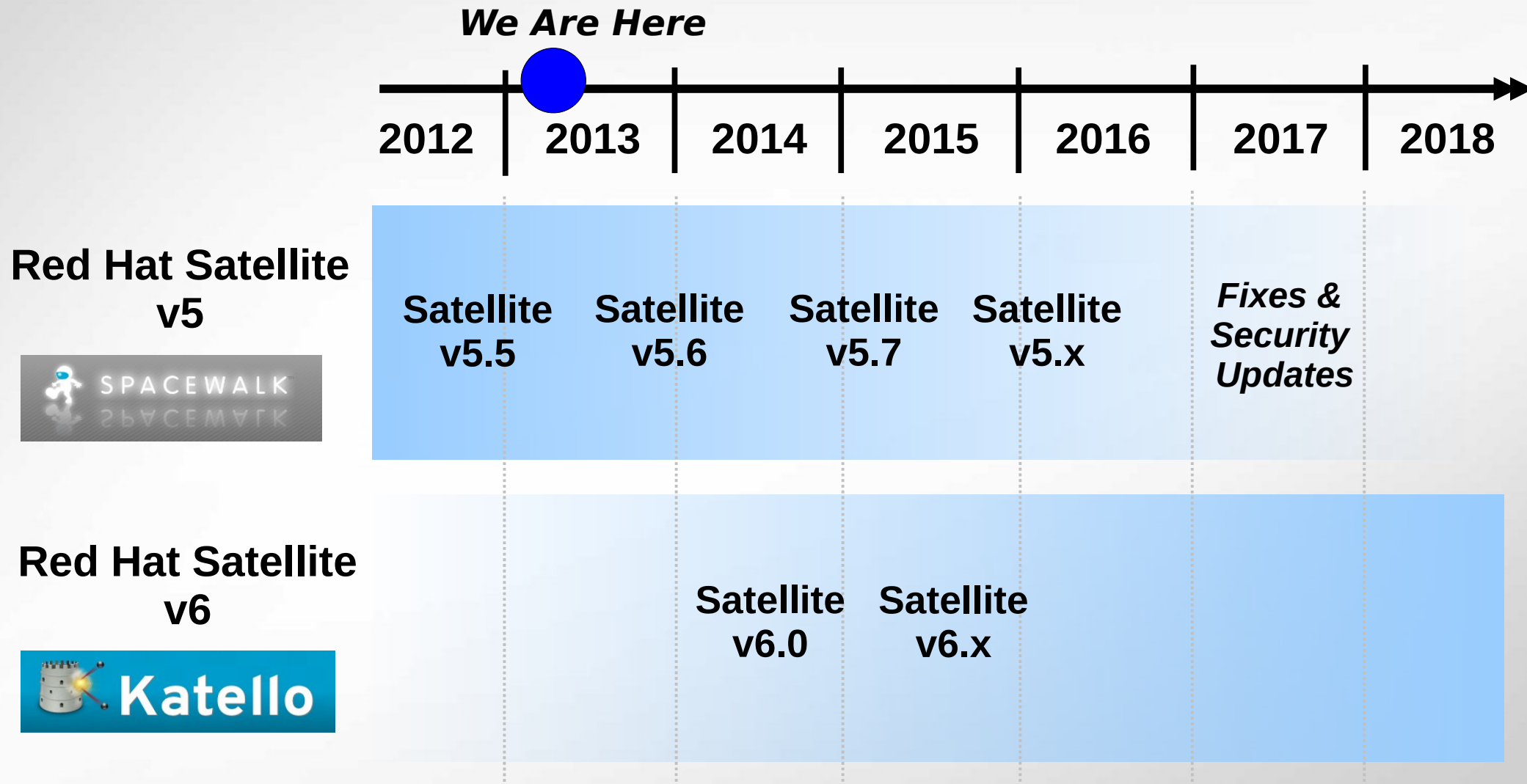
- *SOE definitions for kickstarting & configuring applications on physical & virtual machines*
- *Red Hat supported Puppet enveloped in an intuitive, adaptive, and federated framework*
- *Automate every-step of Server Provisioning for one to an indefinite # of instances*
- *Cloud deployment workflow while maintaining provider level feature fidelity*
- *Reporting expressed with drill-down dashboards for compliance and troubleshooting*

**Superior Systems Management for the traditional datacenter...  
... while positioned to extend that functionality & rule the cloud!**





# Red Hat Satellite Roadmap



# For More Information...

## Red Hat Satellite v5.5 (available now!)

- [Webcast](#) – *Five Reasons to Use Red Hat Satellite 5.5*
- *Video – Red Hat Satellite 5.5 in Four Minutes*
- *IDC ROI Analysis – Red Hat Satellite*

## Red Hat Summit – June 11-14, Boston MA [Register Now!](#)

- *“Using Red Hat Satellite Today & Into the Future”*
- *“Red Hat Satellite Power User Tips & Tricks”*
- *“Building & Managing a Standard Operating Environment”*
- *“Real-world Perspectives: Optimizing Infrastructures with Red Hat Satellite”*
- *Click here to see all Satellite sessions throughout the week*



