



SPACEWALK

Spacewalk + Fedora = 42

# What is Spacewalk?

**A systems management platform designed to provide complete lifecycle management of the operating system and applications.**

- Inventory your systems (hardware & software information)
- Install and update software on your systems
- Manage and deploy configuration files
- Collect and distribute custom software packages
- Provision (Kickstart) your systems
- Monitor your systems
- Provision/Manage virtual guests





Systems [dropdown] [input] Search

No SYSTEMS SELECTED [MANAGE] [CLEAR]

- Overview
- Systems
- System Groups**
- System Set Manager
- Advanced Search
- Activation Keys
- Stored Profiles
- Custom System Info
- Kickstart

**System Group Legend**

- OK
- Warning
- Critical

## System Groups ?

[+ create new group](#)

0 1 2 3 4 5 6 7 8 9 A B C **D** E F G H I J K L M N O P Q R S T U V **W** X Y Z

Filter by System Group Name: [input] Display [20] items per page 1 - 4 of 4 (0 selected) [Go]

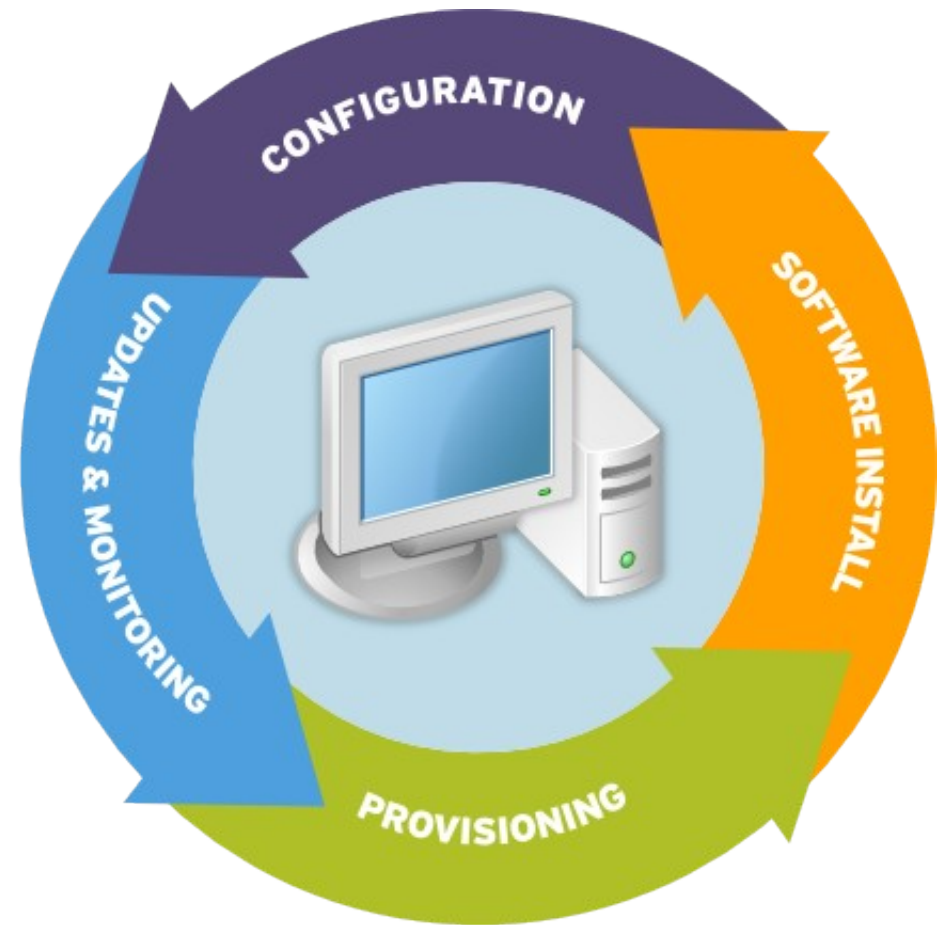
<input type="checkbox"/>	Updates	Group Name	Systems	Use in SSM
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<a href="#">Desktop Systems</a>		<a href="#">Use in SSM</a>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<a href="#">Fedora 8 Systems</a>		<a href="#">Use in SSM</a>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<a href="#">Fedora 9 Systems</a>		<a href="#">Use in SSM</a>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<a href="#">Web Servers</a>		<a href="#">Use in SSM</a>

[Update List] [Select All] 1 - 4 of 4 (0 selected) [Download CSV]

[Work With Union] [Work With Intersection]

# Life Cycle of a System

- Provision a new system (on hardware or virt)
- Install software/updates
- Configure software
- Continued management of system
- Re-provision for a new purpose



# How can I manage my custom software?

- Create custom channels
- Allows control over latest software a system can install
- Store custom software within custom channels
- Easily install/update/remove packages from web interface



# How can I configure my software?

- Built in configuration management
- Rank configuration channels based on priority
- Can be deployed at provisioning/registration time
- Local overrides for individual systems
- Supports multiple revisions of files/directories
- Import existing files from systems
- Diff configuration files between actual and stored revisions



# How can I manage these systems across my organizations?

- Completely separate content and systems
- Manage entitlements across organizations
- Restrict entitlement usage
- Upcoming features
  - Custom Channel Sharing between orgs
  - Migrate registered systems between orgs

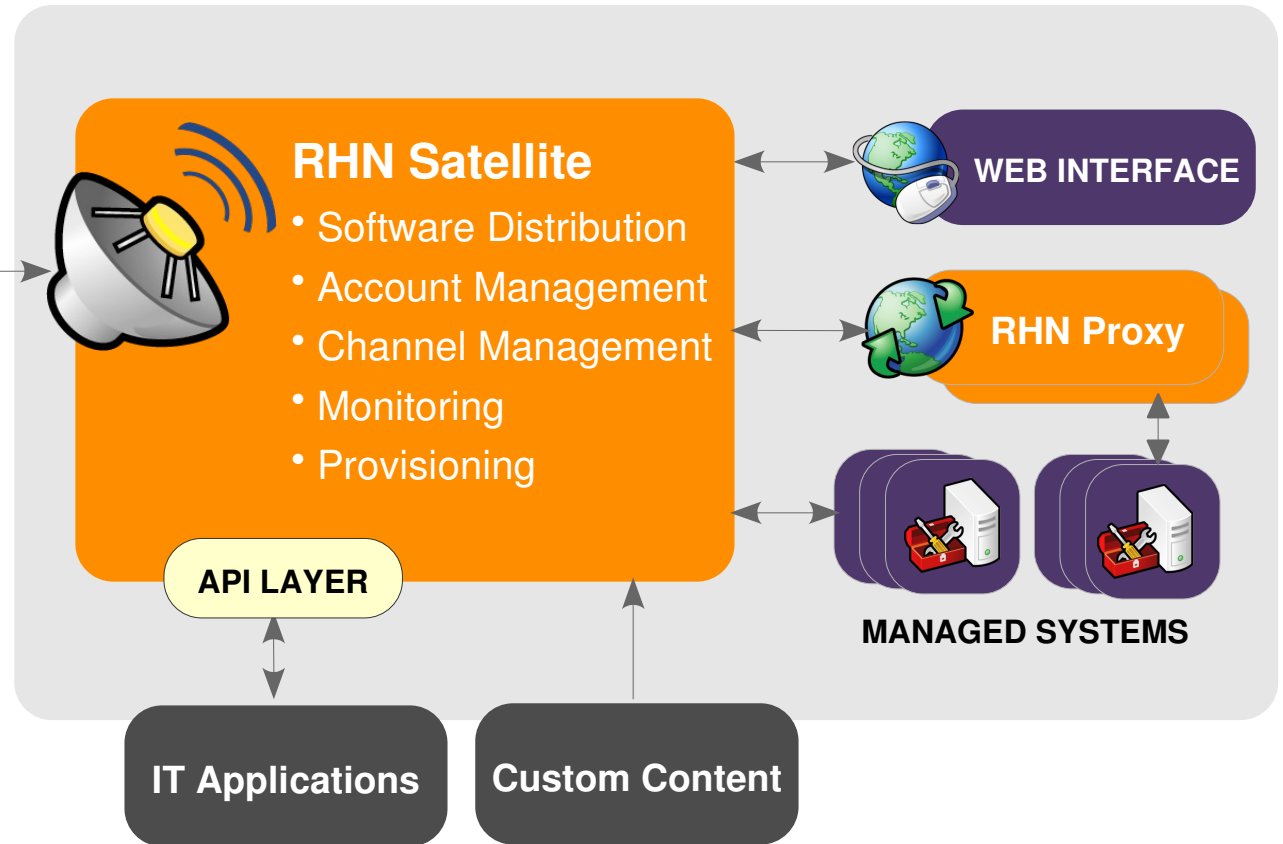
*Check out the MultiOrg Best Practices Whitepaper:*

*[https://www.redhat.com/f/pdf/rhn/Multiorg-whitepaper\\_final.pdf](https://www.redhat.com/f/pdf/rhn/Multiorg-whitepaper_final.pdf)*

# Satellite Deployment

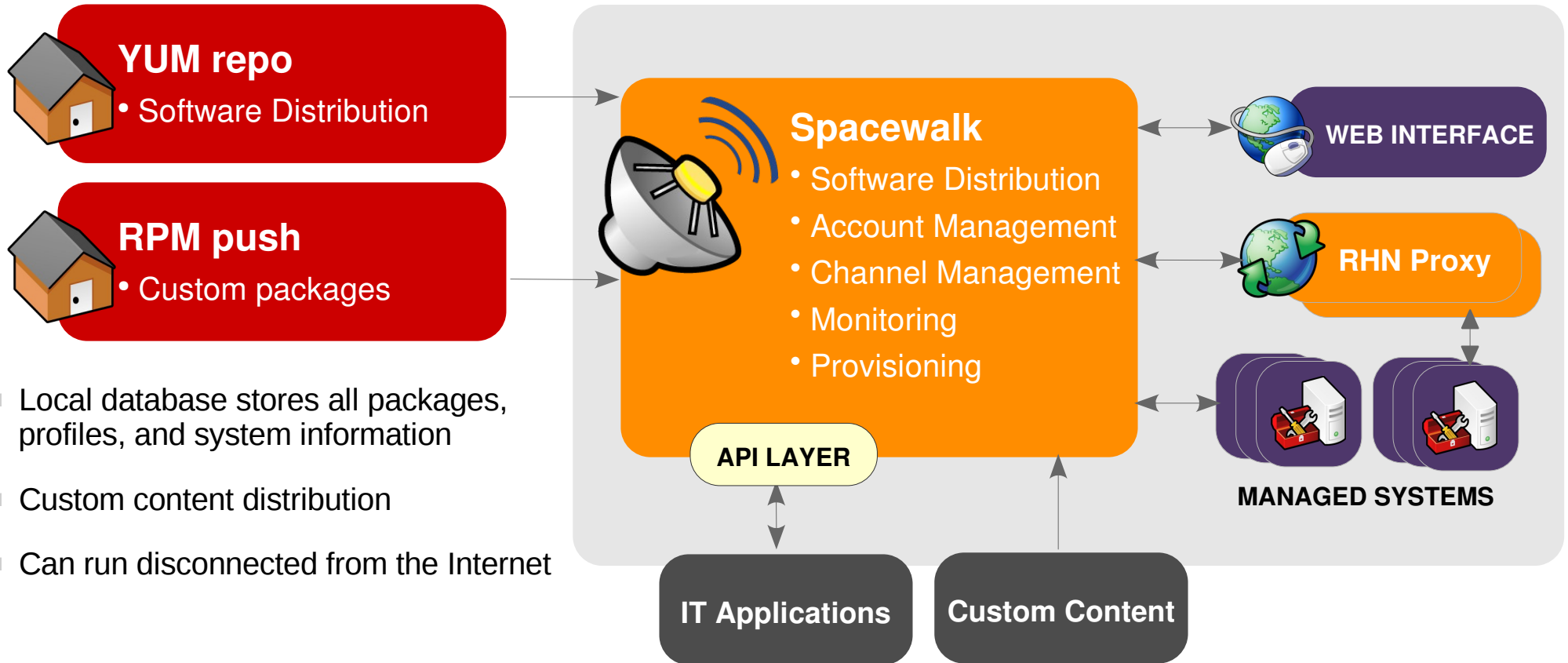


- Local database stores all packages, profiles, and system information
- Syncs content from RHN Hosted
- Custom content distribution
- Can run disconnected from the Internet



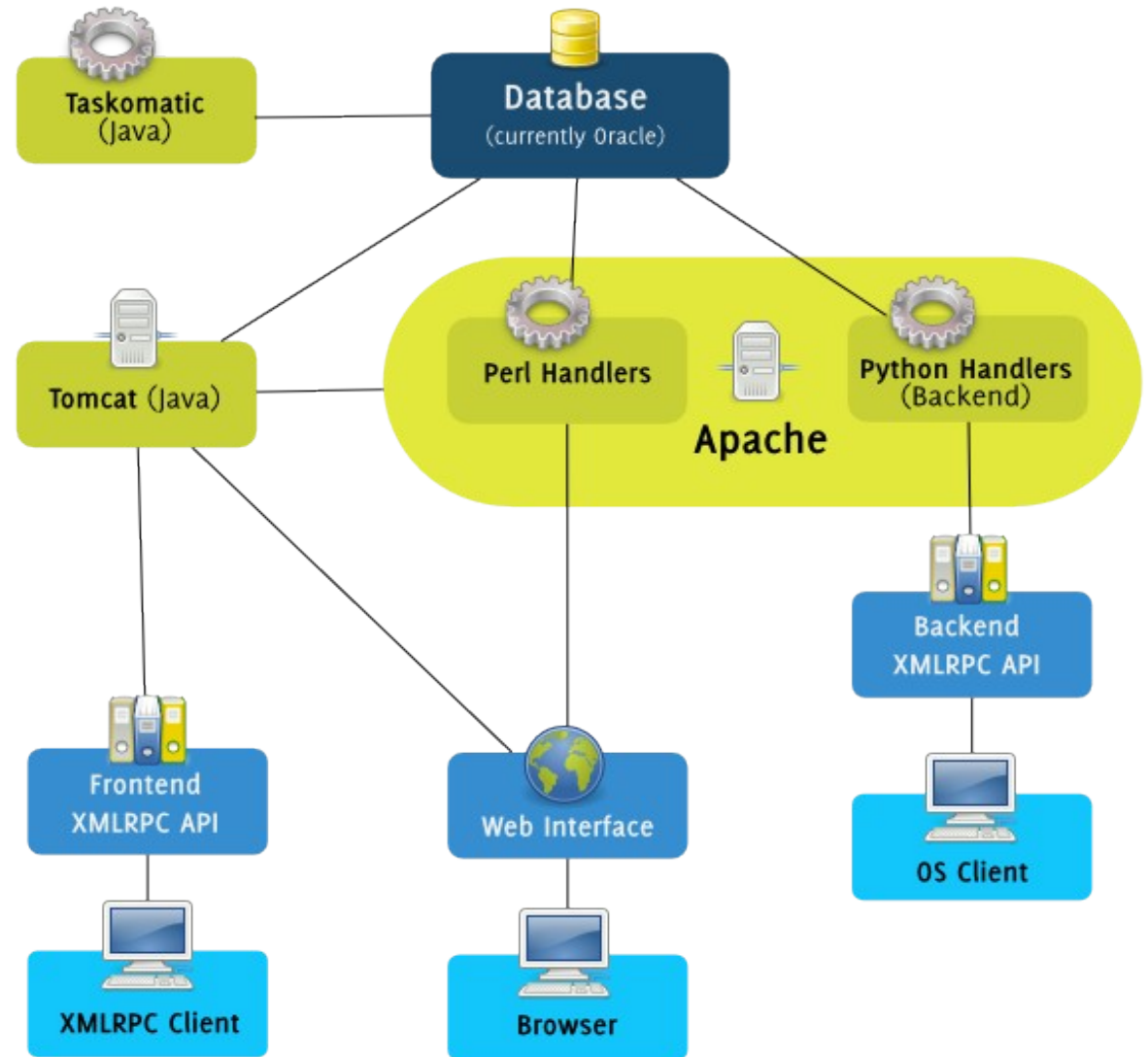


# Spacewalk Deployment



# Architecture Overview

- Frontend Web Interface
- Backend Api
  - for client utilities
- Taskomatic
  - for scheduled tasks
- Frontend API
  - for scripting and integration
- All connect to an Oracle DB
  - Embedded
  - External



# Road Map

- v0.2
  - Cleanly build all packages
  - Fully support multiple distributions within a single org
- v0.3
  - Inter Spacewalk Server sync
  - SELinux
  - Starting working on PostgreSQL
- V0.4
  - Cobbler/Koan Integration
  - Supporting tools for Multi Org

Continuously: more API, perl pages to Java migration

# Becoming part of Fedora

- Spacewalk = 185 packages
- 1-2 package become part of Fedora every week
- Dependency on Oracle
- PostgreSQL is on the way

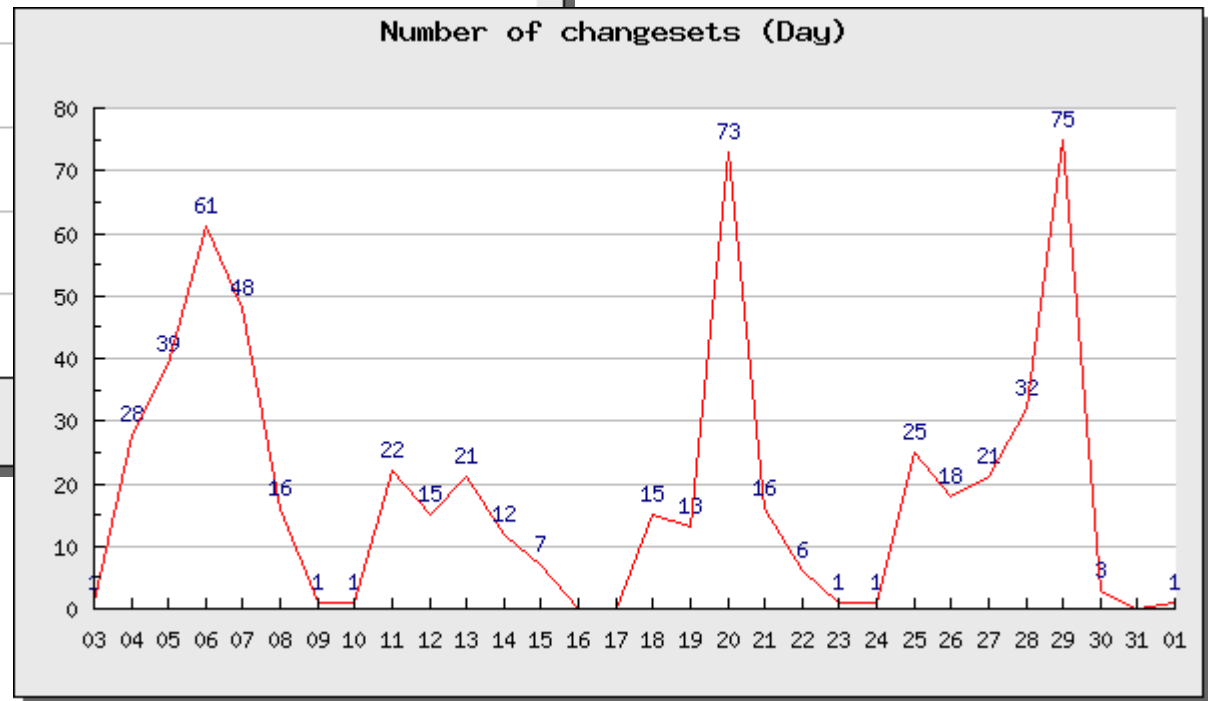
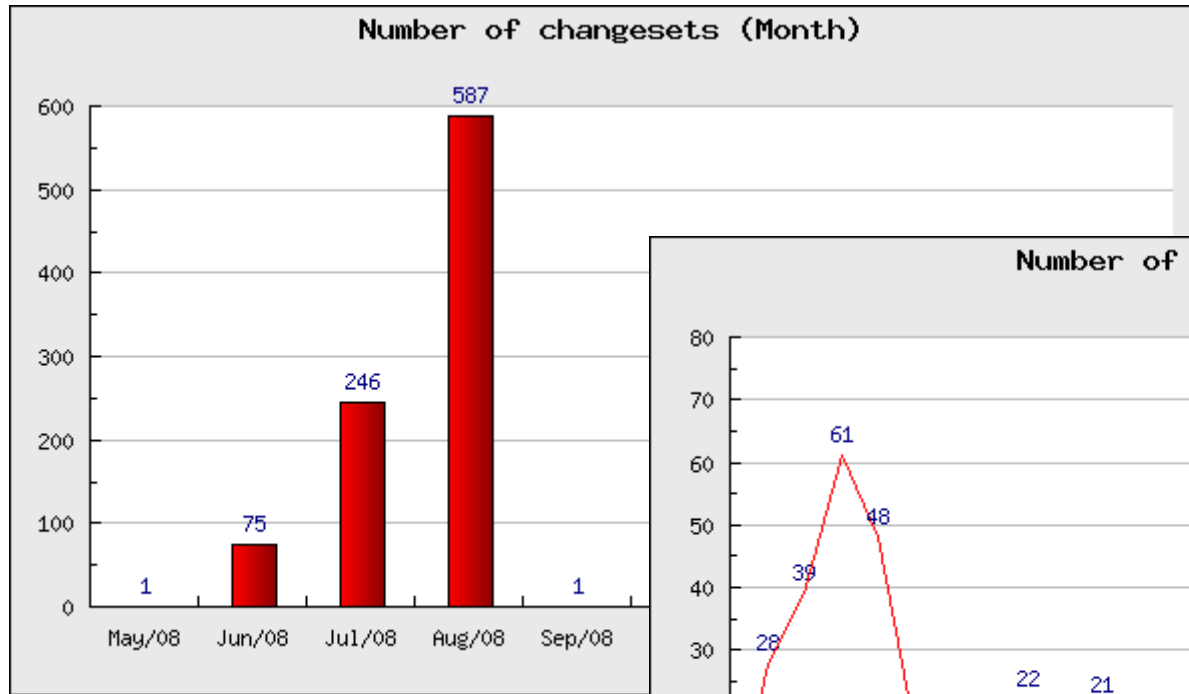


# Size of Spacewalk

- Perl = 150 000 LOC
- Python = 150 000 LOC
- JAVA = 750 000 LOC



# Speed of development



# Questions



# Join us

- Upstream open source project
- Visit website <http://spacewalk.redhat.com>
- Wiki available at <https://fedorahosted.org/spacewalk>
  - #spacewalk on FreeNode



# Backup Slides