



iRODS@RENCI: Red Hat Fedora as a model for iRODS Community Architecture

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Director

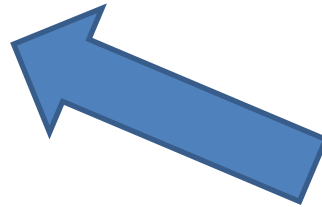
Collaborative Environments

renci

RESEARCH \ ENGAGEMENT \ INNOVATION

Fedora ≠ Fedora

- Fedora Linux (Red Hat)
 - <http://fedoraproject.org/>
- Fedora Digital Repository
 - <http://fedora-commons.org/>



*We're talking about
this one*



Applying Red Hat Fedora Model to iRODS

iRODS
Community
Code

iRODS
Hardened
Code

Today

iRODS
Community
Code



iRODS
Hardened
Code

iRODS Source

FUTURE: Red Hat Fedora Model



Hardened vs. Community Release

- What do we mean by “hardened?”
- What elements differentiate the community release from the hardened release?



For sake of discussion, we'll make an analogy between iRODS "hardened code" and Red Hat Enterprise Linux.

Red Hat Enterprise Linux (RHEL)

iRODS Hardened Code

RENCI



I am a:	Business, government, or other user looking for stable, supported, and certified Linux.	Developer or highly technical enthusiast using Linux in non-critical computing environments.
Recommended operating system	Red Hat Enterprise Linux	Fedora Project
Primary benefits	Stable, reliable, and broadly supported. Easy to deploy and manage. Many certified applications and hardware systems available. Industry-leading combination of server performance/scalability and desktop features.	Bleeding-edge technology released early and often.
Feature selection and integration	Red Hat	Red Hat and developer community.
Development model	Open source	Open source
J2V certifications	More than 1000 supported applications, including BEA, CA, IBM, Oracle, VERITAS	None
Hardware certifications	Over 600 certified systems, including Bull, Dell, HP, Fujitsu, IBM, Hitachi, NEC, Sun	None
Architectures	Intel x86 & Itanium2; AMD64/EM64T; IBM POWER, zSeries, S/390	Intel x86, AMD64/EM64T, PPC (community selected)
Industry benchmarks	Numerous: TPC/C, TPC/H, SPECweb, etc.	None
Red Hat support options	Many, including 24x7 with 1 hour response. Unlimited incidents. Include upgrades	None (community supported)
Red Hat training options	Many, including classroom, on-site, e-learning	None
Training certifications	RHCA (Red Hat Certified Architect) RHCE (Red Hat Certified Engineer) RHCT (Red Hat Certified Technician)	None
Release interval	Approx 18 months	4-6 months
Testers	Red Hat, partners, and extensive beta team	Developer community
Package selection criteria	Best balance of maturity and features selected based on their appropriateness for commercial deployment	Latest open source community packages. Selected to meet the needs of the open source community and drive rapid technology development.
Maintenance and updates	Complete update, management, and monitoring capabilities available via Red Hat Network	Community & 3rd party driven
Update lifetime	Seven years	N/A
Where to buy	Red Hat (1-866-273-3428), www.redhat.com , and partners	Free download or from 3rd party replicators
Price	Annual subscription. Multiple offerings, starting at \$6/month (Red Hat Desktop, 50 units)	Free download

For sake of discussion, we'll make an analogy between iRODS "community code" and Red Hat Fedora community project Linux.

Fedora

iRODS Community Code

DICE



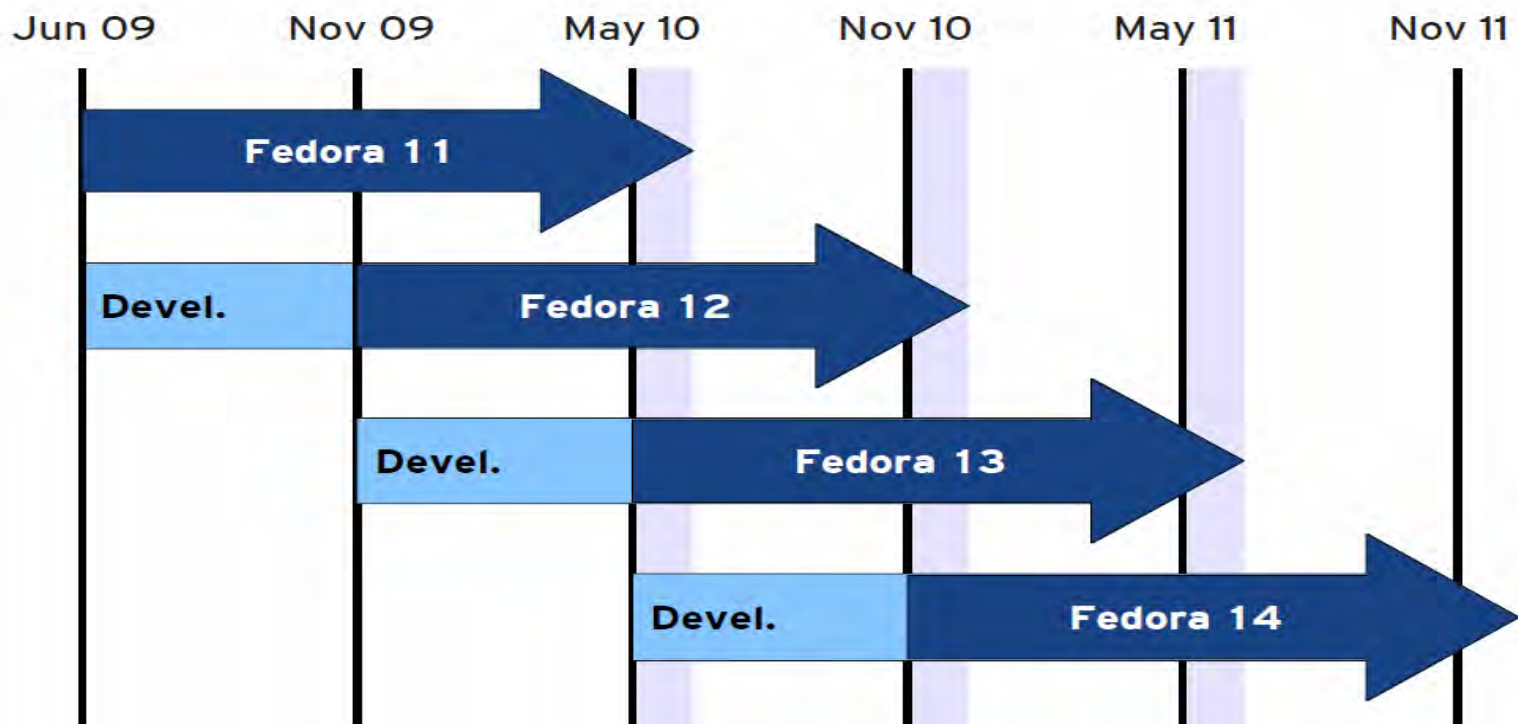
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How does this work?

- How to map Fedora model to iRODS
 - How often to release community and hardened releases?
 - How exactly does it work to simultaneously support a community release and hardened release?
 - The Fedora community project model drives RHEL features
 - Community-driven prioritization of features



Six-month release cycle



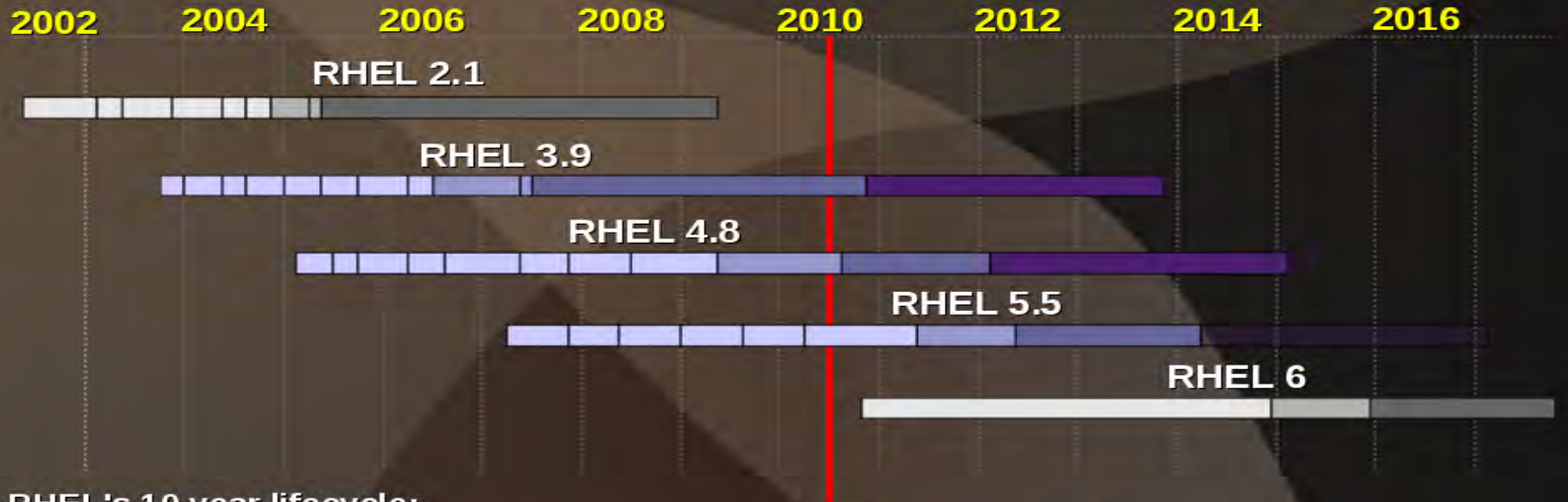
SUMMIT

JBoss
WORLD

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RHEL business continuity



RHEL's 10 year lifecycle:

- Phase 1: full support (new features) 4 years
- Phase 2: deployment (hardware support) 1 year
- Phase 3a: maintenance (security fixes) 2 years
- Phase 3b: extended support (security fixes) 3 years

You are here

RedHat Enterprise Linux (RHEL) vs. Fedora

- Fedora serves as upstream for future versions of RHEL.
 - RHEL trees are forked off the Fedora repository, and released after a substantial stabilization and quality assurance effort.
 - For example, RHEL 6 was forked from Fedora at the end of 2009 (approximately at the time of the Fedora 12 release) and released more or less together with Fedora 14.
 - By the time RHEL 6 was released, many features from Fedora 13 and 14 had already been backported into it.



SOURCE: <http://en.wikipedia.org/wiki/Rhel>



