



# Testing of Fedora

Making sure Fedora is not  
(utterly) broken

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# Fedora QA

# Fedora Quality Assurance

- <https://fedoraproject.org/wiki/QA>
- Primary objective is to ensure project quality, i.e. the most important pieces must work correctly
- Main focus:
  - testing of development milestones of upcoming Fedora releases
  - development of automation and support tools
  - testing of important software updates
  - communication with testers community

# Small team, important tasks

- A lot of tasks for a very small team
  - people from Red Hat – USA (2), Canada (1), Czech Republic (4), China (1), India (1+interns)
  - of course, community helps tremendously
- Some manual testing (general Linux knowledge), some coding (Python, Bash, Perl)
- A lot of communication with the community using mailing lists and IRC
- Community is the key - encouraging people to participate

# Automation tools

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- Taskotron
- openQA
- Koschei

# Taskotron

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- Automated task execution framework
- Listen to fedmsg, run tasks, store results
- Rpmlint, rpmgrill, upgradepath, depcheck
- Talk on Friday: “Taskotron: Create automated, package-specific test”

# openQA

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- Tool made by openSUSE
- OpenCV to match patterns on screen
- Mouse movement and keyboard input – VNC
- Graphical frontend for creating images for recognition
- Today's talk: OS-level testing with openQA

# Other responsibilities

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- Testing of composes, release testing
  - Blocker bugs
  - Test days
- Updates testing



# Test matrices

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- Nightly compose testing, release composes
- Release testing: Alpha → Beta → Final
- Both on hardware and on virtual machine
- Blocker bugs
- OpenQA

# Test matrices







## Installation repositories

[\[edit\]](#)

Milestone <a href="#">[hide]</a>	Test Case	Result
Alpha	<a href="#">QA:Testcase_install_repository_Mirrorlist_graphical</a>	  coconut
Alpha	<a href="#">QA:Testcase_install_repository_HTTP/FTP_graphical</a>	  coconut
Alpha	<a href="#">QA:Testcase_install_repository_HTTP/FTP_variation</a>	 pschindl
Beta	<a href="#">QA:Testcase_install_repository_NFS_graphical</a>	  coconut
Beta	<a href="#">QA:Testcase_install_repository_NFS_variation</a>	  coconut
Final	<a href="#">QA:Testcase_install_repository_NFSISO_variation</a>	 Inie
Final	<a href="#">QA:Testcase_install_repository_Hard_drive_variation</a>	 Inie

## Package sets

[\[edit\]](#)

Milestone <a href="#">[hide]</a>	Test Case	Result
Beta	<a href="#">QA:Testcase_Package_Sets_Minimal_Package_Install</a>	  coconut
Optional	<a href="#">QA:Testcase_Package_Sets_KDE_Package_Install</a>	  coconut

# Fedora Test Days

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- Testing is focused on one feature
- Developers and testers are actively present on irc
- Problems get debugged and solved quicker
- Good opportunity to try new features

# Fedora Test Days

## F24 Workstation Graphical Upgrade

More information about the event can be found here: [http://fedoraproject.org/wiki/Test\\_Day:2016-05-16\\_Workstation\\_Graphical\\_Upgrade](http://fedoraproject.org/wiki/Test_Day:2016-05-16_Workstation_Graphical_Upgrade)

Go back to [List of Events](#).

### Results

Clicking on the testcase name will show you the appropriate "how to test" page.

Click on the  button, to enter result.

**Note:** results are cached and reloaded from the database each 10 seconds.

### Tests

Username	Profile	Testcase Workstation Graphical Upgrade	Comments
		<input type="button" value="Enter result"/>	
Akashray	Fedora 23	✓ <sup>[1]</sup>	1. Thanks Sumanthro for mentoring
Akshitlinux	Fedora 23	✓ <sup>[1]</sup>	1. Took more time than usual to update
AmySt.	Fedora 23	✓	

# Blocker Bugs

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- Anyone can propose a specific bug as a blocker for the next Fedora release (“blocker bug”)
- We have predefined criteria for which bugs are blockers and which bugs are not
- Blocker bugs have highest priority, we help developers find the problem and test the fix

# Blocker Bugs App

## 1 Proposed Blocker

Bug ID	Component	Status	Title	Updates
<a href="#">1361338</a>	systemd	NEW	Connecting to /dev/log gets Connection Refused	

## 3 Accepted Blockers

Bug ID	Component	Status	Title	Updates
<a href="#">1358416</a>	anaconda	NEW	"Error setting up software source" when attempting a Network installation	
<a href="#">1352680</a>	efibootmgr	NEW	efibootmgr calls in anaconda crashing since efivar-0.24-1.fc25 landed	
<a href="#">1353054</a>	pki-core	NEW	FreeIPA server deployment fails due to pki-core dangling symlinks (one from non-installed 'scannotation' package, one formerly in resteasy-jaxrs-api but now lost)	

## No Proposed Freeze Exceptions

Bug ID	Component	Status	Title	Updates
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# Software updates testing

- Bodhi
- Only in stable and soon-to-be-stable releases
- The path of update to Fedora distribution
  - Update is built → Proposed for testing → Waiting for karma → Pushed to stable


# Software updates testing

Fedora Update System  [Releases](#) [Login](#)


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 jchaloup submitted 3 overrides for golang-github-golang-sys on el6, el7, and fc23 seconds ago


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 jchaloup submitted 4 golang-github-golang-sys testing updates for EL-6, EPEL-7, and 2 others 2 minutes ago


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 rdieter submitted libkmahjongg-16.04.3-1.fc24.1 to testing 5 minutes ago


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 jplesnik submitted 2 perl-Digest testing updates for F23 and F24 27 minutes ago


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 mstevens submitted http-2.0.2-1.fc23 to stable 36 minutes ago


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 corsepiu submitted 2 perl-Test-WWW-Mechanize testing updates for F23 and F24 an hour ago


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 fale submitted 2 feh testing updates for F23 and F24 an hour ago


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 remi submitted php-pecl-xdebug-2.4.1-1.fc24 to testing 2 hours ago


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 wis775 commented on bodhi update gnome-maps-3.20.2-1.fc24 (karma: 1) 2 hours ago


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 gnome-maps-3.20.2-1.fc24 reached the stable karma threshold 2 hours ago






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 dutchy commented on bodhi update firefox-48.0-5.fc23 (karma: 1) 2 hours ago


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 fale submitted 2 wlc testing updates for F23 and F24 2 hours ago

### This week's top testers


#1	 cserpentis	(1897)
#2	 filiperosset	(1254)
#3	 hreindl	(1242)
#4	 yuwata	(1145)
#5	 pnemade	(1039)



### Latest Critical Path Updates in Need of Testing

[RSS](#) [View all](#) 

Update	Age	Submitter
<a href="#">libdv-1.0.0-22.fc24</a>	2 days	 sagitter
<a href="#">libdv-1.0.0-22.fc23</a>	2 days	 sagitter
<a href="#">nautilus-3.20.2-1.fc24</a>	2 days	 kalev
<a href="#">json-glib-1.2.2-1.fc24</a>	2 days	 kalev
<a href="#">json-glib-1.2.2-1.fc23</a>	2 days	 kalev

### Latest Security Updates in Need of Testing

[RSS](#) [View all](#) 

Update	Age	Submitter
<a href="#">drupal7-crumbs-2.5-1.el5</a>	2 days	 siwinski
<a href="#">nodejs-0.10.46-1.el6</a>	3 days	 pnemade



# Plans for future

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- Automate desktop testing (behave+dogtail, openQA?)
- Beaker
- Better coverage of tests

# How to help with testing

- <https://fedoraproject.org/wiki/QA/Join>
- #fedora-qa on irc.freenode.net
- Test mailing list  
<https://admin.fedoraproject.org/mailman/listinfo/test>
- Add QA calendar
- Join some test day:  
<https://apps.fedoraproject.org/calendar/QA/>
- Use ABRT
- Provide karma

# Try Rawhide

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- <https://fedoraproject.org/wiki/Releases/Rawhide>
- For those who likes new technologies
- This is where new Fedora is born

# Links

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- QA: <https://fedoraproject.org/wiki/QA>
- BZ: <https://bugzilla.redhat.com/>
- Bodhi: <https://admin.fedoraproject.org/updates/>
- Test days:  
<https://apps.fedoraproject.org/calendar/list/QA/?subject=Test+Day>
- Blocker bug app:  
<https://qa.fedoraproject.org/blockerbugs>
- Rawhide:  
<https://fedoraproject.org/wiki/Releases/Rawhide>

# Links to testing matrices

- Installation:  
[https://fedoraproject.org/wiki/Test\\_Results:Current\\_Installation\\_Test](https://fedoraproject.org/wiki/Test_Results:Current_Installation_Test)
- Base:  
[https://fedoraproject.org/wiki/Test\\_Results:Current\\_Base\\_Test](https://fedoraproject.org/wiki/Test_Results:Current_Base_Test)
- Desktop:  
[https://fedoraproject.org/wiki/Test\\_Results:Current\\_Desktop\\_Test](https://fedoraproject.org/wiki/Test_Results:Current_Desktop_Test)
- Server:  
[https://fedoraproject.org/wiki/Test\\_Results:Current\\_Server\\_Test](https://fedoraproject.org/wiki/Test_Results:Current_Server_Test)
- Cloud:  
[https://fedoraproject.org/wiki/Test\\_Results:Current\\_Cloud\\_Test](https://fedoraproject.org/wiki/Test_Results:Current_Cloud_Test)

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# Questions?

Contact: [pschindl@redhat.com](mailto:pschindl@redhat.com)

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