



# Testing of Fedora

Making sure Fedora is not  
(utterly) broken

Presented by  
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What is Fedora

# Fedora

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- Community-driven Linux distribution
- New release every 6 months (usually:))
- Focus on latest bits of free software world
- Used as a basis for Red Hat Enterprise Linux
- “Independent” on Red Hat, but Red Hat supports it heavily (development, infrastructure, etc)



# Fedora

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- Consists of many teams and projects – developers, package maintainers, testers, translators, designers, sysadmins, documentation creators, ambassadors, ... and project leaders (Fedora Board, FESCo)
- Everything is based on voluntary activity, meritocracy, consensus. Important posts are elected.

# 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+2), China (1), India (1M)
  - 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

# How to fill a bug

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- Where: Upstream (e. g. Gnome BZ) x Downstream (e. g. Red Hat BZ)
- What's wrong
- How to reproduce
- Provide some logs
- Use abrt for easy report



# Bugzilla



**Red Hat Bugzilla - Bug 691139** NetworkManager 0.8.997 doesn't connect to hidden wireless network Last modified: 2011-04-05 23:32:47 EDT

Home | New | Search | Browse | Front Page | My Bugs |  Search [?] | Reports | My Requests | Preferences | Administration  
| Help | Log out kparal@redhat.com

**Bug List:** (This bug is not in your last search results) [Show last search results](#) [New Bug For 'Fedora'](#) - [Last Comment](#) - [Format For Printing](#) - [XML](#) - [Clone This Bug](#)

**Bug 691139 - NetworkManager 0.8.997 doesn't connect to hidden wireless network (edit)**

<b>Status:</b> NEW (edit)	<b>Fixed In Version:</b> <input type="text"/>
<b>Aliases:</b> None (edit)	<b>Customer Facing:</b> --- ▾
<b>Product:</b> Fedora ▾	<b>Issue Trackers:</b> <input type="text"/>
<b>Component:</b> NetworkManager (edit) ( <a href="#">Show Fedora/NetworkManager bugs</a> )	<b>Internal Whiteboard:</b> <input type="text"/>
<b>Version:</b> 15 ▾	<b>Devel Whiteboard:</b> <input type="text"/>
<b>Platform:</b> Unspecified ▾ Unspecified ▾	<b>QA Whiteboard:</b> <input type="text"/>
<b>Priority:</b> unspecified ▾ <b>Severity:</b> unspecified ▾	<b>Technical Notes:</b> <input type="text"/>
<b>Target Release:</b> --- <b>Target Milestone:</b> ---	<b>PM Score:</b>
<b>Assigned To:</b> Dan Williams (edit) (take)	
<b>QA Contact:</b> <a href="#">Fedora Extras Quality Assurance</a> (edit) (take)	

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**Michael Young** 2011-03-26 20:43:10 EDT **Description**  Private [reply] [-]

My wireless connection died when I updated to the latest F15 NetworkManager, and I can't get it working again with that version. I connect to a hidden wireless network using wpa-psk.

This is with NetworkManager-0.8.997-4.git20110325.fc15.x86\_64  
I have forced a downgrade to NetworkManager-0.8.2-8.git20101117.fc15.x86\_64 (which I fortunately still had RPMs for) and wireless works again for that version.

**Adam Williamson** 2011-03-28 11:52:26 **Comment 1**  Private [reply] [-]  
EDT

For Beta blocker consideration: Relevant criterion are Alpha "It must be possible to run the default web browser and a terminal application from the default desktop environment. The web browser must be able to download files, load extensions, and log into FAS" and "The installed system must be able to download and install updates with yum and PackageKit" - both imply a functional network connection. Question here is does this affect all hidden networks, and if so, is that enough configurations for us to consider it a blocker.

**James Laska** 2011-03-31 07:40:52 EDT **Comment 2**  Private [reply] [-]

I'm not seeing my hidden wireless network either.

NetworkManager-0.8.997-7.git20110330.fc15.x86\_64

Collapse All  
 Red Hat Sustaining Engineering (internal)  
 Red Hat Technical Support (internal)  
 Security Sensitive Bug (Check if this is a security related issue and should not be public)  
 Sun Confidential Group

*Only members of a group can change the visibility of a bug for that group.*



# Software updates testing

- Only in stable releases
- The path of update to Fedora distribution
  - Update is built → proposed for testing → Waiting for karma → Pushed to stable
- Fedora Gooney Karma
- Feeling geeky? Try [fedora-easy-karma](#)

# Software updates testing



Package | Bug # | CVE



- Login
- Home
- Fedora 19
  - Metrics
  - Pending (28)
  - Testing (598)
  - Stable (10)
  - Security (8)
- Fedora 18
  - Metrics
  - Pending (50)
  - Testing (384)
  - Stable (6857)
  - Security (333)
- Fedora 17
  - Metrics
  - Pending (38)
  - Testing (275)
  - Stable (9328)
  - Security (539)
- Fedora EPEL 6
  - Metrics
  - Pending (33)
  - Testing (206)

## Fedora 18 Testing Updates

- [Show unapproved F18 Critical Path updates](#)

[3](#) [4](#) [5](#) [6](#) [7](#)

ID	Package	Type	Karma	Submitter	Date Pushed
FEDORA-2013-5463	rubygem-net-http-digest_auth-1.3-1.fc18		0	<a href="#">mtasaka</a>	2013-04-11 22:57:12
FEDORA-2013-5461	python-genshi-0.7-2.fc18		0	<a href="#">lmacken</a>	2013-04-11 22:57:08
FEDORA-2013-5460	python-txzmq-0.6.2-1.fc18		0	<a href="#">ralph</a>	2013-04-11 22:57:06
FEDORA-2013-5458	shotwell-0.14.1-1.fc18		0	<a href="#">thm</a>	2013-04-11 22:57:02
FEDORA-2013-5457	clipsmm-0.3.3-1.fc18		0	<a href="#">timn</a>	2013-04-11 22:57:00
FEDORA-2013-5456	gogui-1.4.7-1.fc18		0	<a href="#">jouty</a>	2013-04-11 22:56:58
FEDORA-2013-5455	sugar-read-108-1.fc18		0	<a href="#">pbrobinson</a>	2013-04-11 22:56:55
FEDORA-2013-5452	systemd-201-2.fc18.4		6	<a href="#">michich</a>	2013-04-11 22:56:48
FEDORA-2013-5451	perl-WWW-OrangeHRM-Client-0.5.0-1.fc18		0	<a href="#">ppisar</a>	2013-04-11 22:56:44
FEDORA-2013-5450	python-path-3.0.1-2.fc18		0	<a href="#">laxathom</a>	2013-04-11 22:56:42
FEDORA-2013-5449	php-5.4.14-1.fc18		0	<a href="#">remi</a>	2013-04-11 22:56:40
FEDORA-2013-5446	scsi-target-utils-1.0.32-5.fc18		1	<a href="#">grover</a>	2013-04-11 22:56:33
FEDORA-2013-5443	xemacs-packages-extra-20130408-1.fc18, xemacs-packages-base-20130408-1.fc18		0	<a href="#">jjames</a>	2013-04-11 22:56:24





# 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

- [QA:Testcase\\_nouveau\\_3D\\_pymol](#)
- [QA:Testcase\\_nouveau\\_3D\\_avogadro](#)
- [QA:Testcase\\_nouveau\\_3D\\_openarena](#)
- [QA:Testcase\\_nouveau\\_3D\\_tuxracer](#)
- [QA:Testcase\\_nouveau\\_3D\\_mesa-demos](#)

These will provide more detailed testing of 3D functionality. Please file bugs for any failures you find if running these tests.

## Report your results

[\[edit\]](#)

If you have problems with any of the tests, report a bug to [Bugzilla](#) usually for the component [xorg-x11-drv-nouveau](#). If you are unsure about exactly how to file the report, just ask on IRC and we will help you. Follow the instructions on [this page](#) to ensure you include sufficient information in the report. Once you have completed the tests, add your results to the Results table below, following the example results from *Sample user* as a template. The first column should be your name with a link to your User page in the Wiki if you have one, and the second should be a link to your Smolt hardware profile (see above for a link with instructions on submitting your hardware profile to Smolt). For each test case, use the *result* template to enter your result, as shown in the example result line. If you could not perform one test (for example, you cannot perform the more advanced tests because the basic one fails, or you cannot perform the multihead test as you have only one display), enter the word **N/A**. In the comments column, you can enter the model name and PCI device ID (vendor ID is usually 10DE) of your card, if you know it - you can usually find this information in the output of the command `lspci -nn`.

## Results

[\[edit\]](#)

User	Smolt Profile	Basic test	GNOME 3 start	DPMS	XVideo	Rotation	X restart	Render check	GLX	User switch	VT switch	Suspend	Multihead	
<a href="#">Example user</a>	<a href="#">HW</a>	✓	✓	✓	✓	✓	✓	✓	✓	✓	N/A	⊖ [1]	⚠ [2]	<ol style="list-style-type: none"> <li>↑ <a href="#">RHBZ #123456</a></li> <li>↑ <a href="#">RHBZ #234567</a></li> </ol>
<a href="#">Azure</a>	<a href="#">[8]</a>	⚠ [1]	✓ [2]	✓	✓	✓	⚠ [3]	✓ [4]	✓	⊖ [5]	⚠ [6]	⊖ [7]	N/A	<ol style="list-style-type: none"> <li>↑ a)Can't boot from CD in DVD-USB.Ha fedora@conference.jabber.ru by installi</li> <li>↑ Optionally for notebooks the option f</li> <li>↑ Showed error: Segmentation fault at</li> <li>↑ <a href="https://fedoraproject.org/w/uploa">File:https://fedoraproject.org/w/uploa</a></li> <li>↑ Showed error: Unable to start new di</li> <li>↑ other user meet many artefacts on the</li> <li>↑ To return to grafical desktop should</li> <li>↑ Shouting down instead Suspend</li> </ol>
<a href="#">User:Zezinho</a>	HW GF 4 MX	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
<a href="#">User:pfps</a>	<a href="#">HW</a>	✓ [1]	⊖ [2] ⊖ [3]											<ol style="list-style-type: none"> <li>↑ Some artifacts on screen, but nothin</li> <li>↑ <a href="#">RHBZ #671294</a></li> <li>↑ This failure is with a 686 kernel on a</li> </ol>

# Installation tests

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



# Installation tests

**fedora.**

INSTALLATION SUMMARY

FEDORA RAWHIDE INSTALLATION  
**PRE-RELEASE / TESTING**

us

LOCALIZATION

**DATE & TIME**  
*Americas/New York timezone*

**KEYBOARD**  
*English (US)*

**LANGUAGE SUPPORT**  
*English (United States)*

SOFTWARE

**INSTALLATION SOURCE**  
*Closest mirror*

**SOFTWARE SELECTION**  
*GNOME Desktop*

SYSTEM

**INSTALLATION DESTINATION**  
*Automatic partitioning selected*

**NETWORK & HOSTNAME**  
*Wired (ens3) connected*

Quit    Begin Installation

*We won't touch your disks until you click 'Begin Installation'.*

Please complete items marked with this icon before continuing to the next step.

# Installation tests

Alpha	Image Sanity	<a href="#">QA:Testcase_Mediakit_ISO_Checksums</a>	robatino twu	robatino
Alpha	Boot Methods	<a href="#">QA/TestCases/BootMethodsBootIso</a>	twu	rhe
Alpha	Install Source	<a href="#">QA/TestCases/InstallSourceBootIso</a>	twu	rhe
Alpha	Repository	<a href="#">QA:Testcase Http Repository</a>	twu	rhe

## DVD

DVD.iso installation <span style="float: right;">[hide]</span>				
Release Level	Test Area	Test Case	i386	x86_64
Alpha	Image Sanity	<a href="#">QA:Testcase_Mediakit_ISO_Size</a>	robatino twu	robatino
Alpha	Image Sanity	<a href="#">QA:Testcase_Mediakit_ISO_Checksums</a>	robatino [3] [4] twu	robatino
Alpha	Image Sanity	<a href="#">QA:Testcase_Mediakit_Repoclosure</a>	robatino twu	robatino
Alpha	Image Sanity	<a href="#">QA:Testcase_Mediakit_FileConflicts</a>	robatino [5] [6]	robatino [5] [7]
Alpha	Boot Methods	<a href="#">QA/TestCases/BootMethodsDvd</a>	robatino	rhe robatino
Alpha	Install Source	<a href="#">QA/TestCases/InstallSourceDvd</a>	ajwerkman kparal [3]	rhe
Alpha	Repository	<a href="#">QA:Testcase Additional Http Repository</a>	ajwerkman	rhe
Alpha	Repository	<a href="#">QA:Testcase Additional Ftp Repository</a>	twu	rhe
Alpha	Repository	<a href="#">QA:Testcase Additional Mirrorlist Repository</a>	twu	rhe [8]
Beta	Repository	<a href="#">QA:Testcase Additional NFS Repository</a>	twu	rhe

# 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 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



The screenshot displays the Fedora Blocker Bugs App interface. At the top, there is a blue header with the 'fedora blocker bugs' logo. Below the header, there are navigation tabs for 'Home', 'Fedora 19 Alpha', and 'Fedora 19 Beta'. Underneath, there are links for 'Info', 'Bug List', 'Updates', 'Spins', and 'Stats'. The main content is divided into three sections: 'Proposed Blockers', 'Accepted Blockers', and 'Proposed Freeze Exceptions'. Each section contains a table of bug reports with columns for Bug ID, Component, Status, Title, and an Update link.

## Proposed Blockers

Bug ID	Component	Status	Title	Update
 <a href="#">952662</a>	anaconda	ASSIGNED	Traceback when doing custom partitioning: NameError: global name 'fs_type_changed' is not defined	
<a href="#">951761</a>	grub2	NEW	hangs when loading initramfs on EFI	

## Accepted Blockers

Bug ID	Component	Status	Title	Update
<a href="#">949912</a>	anaconda	VERIFIED	ValueError: Cannot remove extended partition sda4. Logical partitions present.	
<a href="#">949761</a>	grub2	NEW	EFI installed system fails to boot (Fedora-19-Alpha-TC5)	
 <a href="#">947142</a>	kernel	ON_QA	write to <code>/sys/firmware/efi/vars/new_var</code> results in ENOSPC	<span>testing</span>

## Proposed Freeze Exceptions

Bug ID	Component	Status	Title	Update
<a href="#">927564</a>	anaconda	NEW	F19 release-name "Schrödinger's Cat" shown as "SchrAldingerâÇÖs Cat" on the linux console	

# Try Rawhide

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

# 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>
- Join some test day
- Use ABRT
- Provide karma



# 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/milestone/22/beta/buglist>
- 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)