## SUMMIT JBoss WORLD

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# SESSION TITLE

Jiri Moskovcak Software Engineer, Red Hat





## What is it going to be about?

Nothing!





What is it going to be about?

- Nothing!
- Unless....





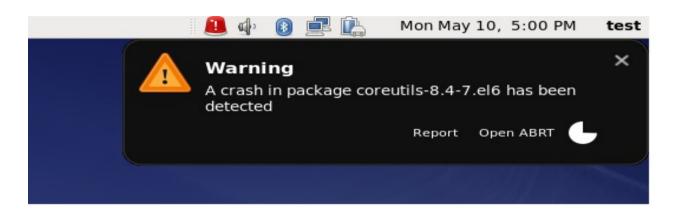
What is it going to be about?

- Nothing!
- Unless....
- ... there is a problem you should know about...





#### What is ABRT?







#### What is ABRT?

Terminal - root@localhost:~ 🔷 🔒	. 🗆 🗙
<u>F</u> ile <u>E</u> dit <u>V</u> iew <u>T</u> erminal <u>G</u> o <u>H</u> elp	
May 13 13:17:00 localhost abrt[32476]: saved core dump of pid 32475 (/bin/sleep) to /var/cache/abrt/ccpp-1273749420-32475.new/coredum	p (3
56352 bytes)	
May 13 13:17:00 localhost abrtd: Directory 'ccpp-1273749420-32475' creation detected	
May 13 13:17:00 localhost abrtd: Crash is in database already (dup of /var/cache/abrt/ccpp-1273659822-13792)	
May 13 13:17:00 localhost abrtd: Deleting crash ccpp-1273749420-32475 (dup of ccpp-1273659822-13792), sending dbus signal	
May 13 13:17:04 localhost abrtd: Getting crash infos	
May 13 13:17:45 localhost abrtd: Getting crash infos	
May 13 13:17:48 localhost abrtd: Getting crash infos	
May 13 13:17:55 localhost abrt[32522]: saved core dump of pid 32521 (/bin/sleep) to /var/cache/abrt/ccpp-1273749475-32521.new/coredum	p (3
56352 bytes)	
May 13 13:17:55 localhost abrtd: Directory 'ccpp-1273749475-32521' creation detected	
May 13 13:17:55 localhost abrtd: New crash /var/cache/abrt/ccpp-1273749475-32521, processing	
May 13 13:17:55 localhost abrtd: Registered Action plugin 'RunApp'	
May 13 13:17:55 localhost abrtd: RunApp('/var/cache/abrt/ccpp-1273749475-32521','test x"`cat component`" = x"xorg-x11-server-Xorg" &&	ср
/var/log/Xorg.0.log .')	
May 13 13:17:57 localhost abrtd: Getting crash infos	
May 13 13:17:59 localhost abrtd: Creating report	
May 13 13:18:08 localhost abrt[32567]: not dumping repeating crash in '/bin/sleep'	
(END)	$\sim$





## OK, so what is it?

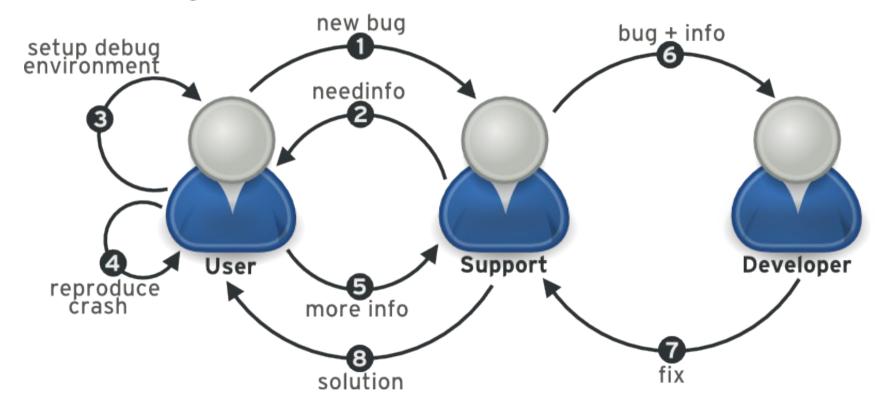
- set of tools to automatically detect and warn about problems
- new and easy way to report bugs
- ... and find a solution in existing knowledge base
- process to speed up bug resolutions





#### How it can help you/us – Saving time

RHEL5 bug flow

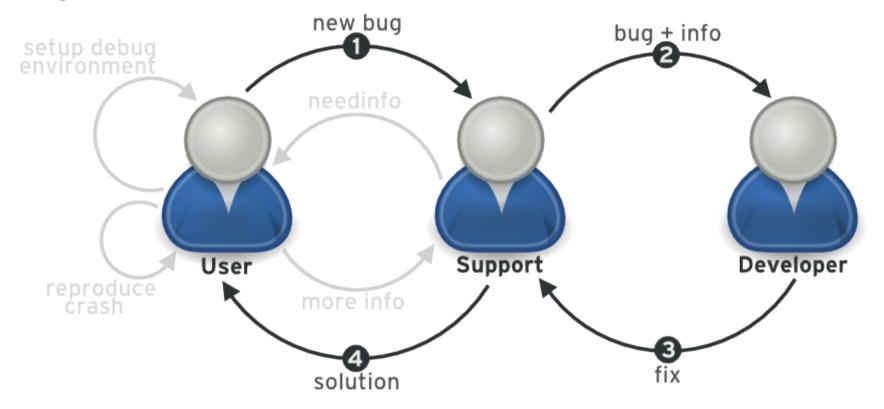






#### How it helps you/us - Saving time

Bug flow with ABRT







## How it helps you/us?

- Automatic detection
- Automatic data collecting
- Faster fix delivery
- Saves time and money





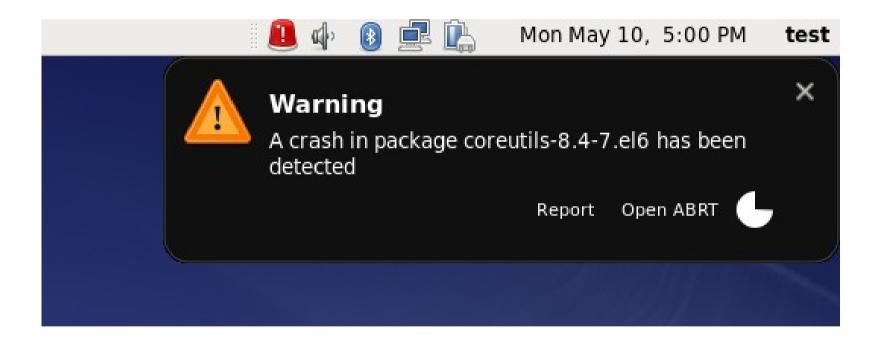
## How does it work?

- Daemon
  - A background process which looks for potential problems
  - notifies the clients about it
- Client
  - A process that can communicate with the daemon
  - Notification applet, GUI, CLI, email client ...





#### **User experience - Desktop**







#### **User experience – main window**

	Automatic Bug Reporting Tool	.ox
<u>F</u> ile <u>E</u> dit	<u>H</u> elp	
Reported	Application Latest Crash	
	/usr/lib64/firefox-3.6/firefox Mon 10 May 2010 02:02:59 PM	
0	/sbin/hdparm Mon 10 May 2010 02:03:03 PM	
	•	
	Hdparm Crash hdparm-9.16-3.2.el6 orts: Status: NEW https://bugzilla.redhat.com/show_bug.cgi?id=590649	
Latest C	rash: Mon 10 May 2010 02:03:03 PM Reason:	
Comman User: Crash Co	id:     /sbin/hdparm -g /dev/dm-0     Process /sbin/hdparm was killed by signal 8 (SIGFP)       root     Comment:	Ξ)
	Delete Copy to Clipboard Report	
<u>H</u> e	<u>C</u> lose	
JB	<u>Close</u>	

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#### **Reporting assistant – reporter selector**

send a bug report a	ication from the packa about this issue. The re provide a bug fix for y	eport will provide softw	crashed on your system. vare maintainers with info	. It's a good idea to rmation essential in
	nformation that follow you'd rather not share		ded to ensure your bug re	port does not contain
Select where you w	ould like to report the	bug, and press 'Forwa	rd' to continue.	
<ul> <li>✓ Bugzilla</li> <li>□ Logger</li> </ul>				
				Cancel



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#### **Reporting assistant -**

Automatic Bug Reporting Tool 📃 🗆 🗙						
Approve backtrace						
Below is the backtrace associated with your crash. A crash backtrace provides developers with details about how a crash happen, helping them track down the source of the problem						
Please review the backtrace below and modify it as needed to ensure your bug report does not contain any sensitive date you'd rather not share:						
<pre>[New Thread 4457] Core was generated by `/usr/libexec/wnck-appletoaf-activate-iid=OAFIID:GNOME_Wncklet_Factoryoaf Program terminated with signal 11, Segmentation fault. #0 wncklet_connect_while_alive (object=0x0, signal= 0x40aa17 "workspace_created", func= 0x3bb40fb0e8 <g_g_dataset_global_lock+8>, func_data=<value optimized="" out="">, alive_object=0x8d60b0) at wncklet.c:183 183 wncklet.c: No such file or directory. in wncklet.c</value></g_g_dataset_global_lock+8></pre>						
Thread 1 (Thread 4457):						
I agree with submitting the backtrace						
Cancel Last Back Forward						



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### **Reporting assistant – additional info**

Automatic Bug Reporting Tool		_ 0 ×
Provide additional details		
How this crash happen, step-by-step? How would you reproduce it?		
1. 2. 3.		
Are there any comment you'd like to share with the software maintainers?		
Brief description how to reproduce this or what you did		
Tip: Your comments are not private. Please monitor what you say accordingly		
	Cancel Back	Forward



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#### **Reporting assistant - summary**

	Automatic Bug	Reporting Tool		-0				
Confirm	and send report							
Below is a sumr	Below is a summary of your bug report. Please click 'Apply' to submit it.							
Basic details								
Component:	gnome-panel	Architecture:	x86_64					
Package:	gnome-panel	Kernel:	2.6.33.5-112.fc13.x86_64					
Executable:	/usr/libexec/wnck-applet	Release:	Fedora release 13 (Goddard)					
Cmdline:	/usr/libexec/wnck-applet oaf-activate- iid=OAFIID:GNOME_Wncklet_F oaf-ior-fd=24	Reason:	Process /usr/libexec/wnck- applet was killed by signal 11 (SIGSEGV)					
Backtrace	Click to view	·						
Steps to reporoduce: 1. right click on the pager and select preferences								
Comments: I tried to add more virtual desktops.								
			Cancel Back	Apply				



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#### **Reporting assistant – report status**

-0
elow:
Close



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#### **User experience – CLI**

Crash list

[12:24:05 jmoskovc@localhost Documents]\$ abrt-cliget-list 4.
UID : 501 UUID : 23f3d301581e97a63dd126c716a802fc61f4ccfd Package : coreutils-7.6-9.fc12 Executable : /bin/sleep Crash Time : Fri 23 Apr 2010 10:34:27 AM CEST Crash Count: 2
[12:24:08 jmoskovc@localhost Documents]\$





#### **User experience – report editor**

```
# Please check this report. Lines starting with '#' will be igno
# Lines starting with '%----' separate fields, please do not del
‰---backtrace
# Backtrace
# Check that it does not contain any sensitive data such as pass
Core was generated by `sleep 100'.
Program terminated with signal 11, Segmentation fault.
#0 0x0000003edd4a4d00 in nanosleep nocancel ()
   at ../sysdeps/unix/syscall-template.S:82
        ../sysdeps/unix/syscall-template.S: No such file or dire
82
       in ../sysdeps/unix/syscall-template.S
Thread 1 (Thread 3872):
\#0 0x0000003edd4a4d00 in __nanosleep_nocancel ()
   at ../sysdeps/unix/syscall-template.S:82
No locals.
\#1 0x000000000000403d9b in rpl nanosleep (requested delay=0x7fff
   remaining delay=0x0) at nanosleep.c:69
        r = <value optimized out>
       delay = {tv sec = 100, tv nsec = 0}
       t0 = \{tv sec = 3919, tv nsec = 511186517\}
\#2 0x0000000000000040343b in xnanosleep (seconds=<value optimized</pre>
   at xnanosleep.c:112
       overflow = false
```

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#### **User experience – CLI**

Report status

<pre>[12:26:13 jmoskovc@localhost Documents]\$ abrt-clireport</pre>	@4
The report bac been undated	
The report has been updated. Report using Bugzilla? [y/N]: y	
Wrong settings were detected for plugin Bugzilla. Enter your login, imaskays@rodbat.com	
Enter your login: jmoskovc@redhat.com Enter your password:	
>> Logging into bugzilla	
>> Checking for duplicates >> Creating new bug	
>> New bug id: 585166	
>> Logging out Bugzilla: Status: NEW	
https://bugzilla.redhat.com/show bug.cgi?id=585166	





## Scalability

- Analyzers
  - For handling a specific group of crashes
  - C/C++, python, kerneloops
- Reporters
  - For reporting the incident to the respective bug tracker
  - Bugzilla, GSS portal, ftp/scp uploader, kerneloops.org, mailx
- Action plugins
  - runapp





## **Flexible configuration**

Reporting a crash

/etc/abrt.conf:

Ccpp = Bugzilla, mailx Python = Bugzilla Kerneloops = KerneloopsReporter Ccpp:gimp = gimpreporter





### Summary

- Automatic problem detection => don't miss anything
- Better bug reports => faster fix delivery
- Faster fix delivery => less money spent!
- Less money spent => happy customer
- Happy customer => We are happy :-)











## **Useful links**

- http://fedorahosted.org/abrt/
- jmoskovc@redhat.com
- Red Hat booth





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