

Lightning talk

Topic1: Code review in Chromium

Topic2: Future of MediaProcess

Julien Isorce j.isorce@samsung.com

Senior Software Engineer II at Samsung Research UK

GStreamer Conference – Berlin 11 October 2016

Contributions



- Chromium committer since 2016



- GpuProcess to better support open source GL drivers (mesa)
- Mesa3d committer since 2015



- Gallium vaapi and omx backends, nouveau driver
- GStreamer committer since 2008

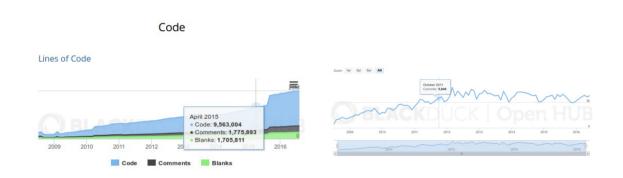


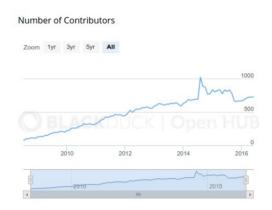
- GL plugins, HW decoders, zero-copy, A/V device capture
- → These 3 projects have a very different process for code reviews

Chromium



- 14 million lines of code
- 6000 commits / month
- 700 contributors / month





- → Need strict code review process
- → lots of bots (builds, tests, platforms/devices)

^{*} https://www.openhub.net/p/chrome

Chromium code review



Add owners per area.

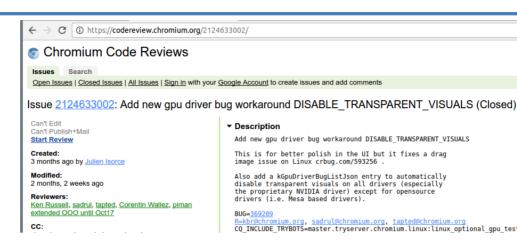
Requires owner's LGTM per domain changed

Can see diff between patch sets

Dozens of pre-commit bots Even more post-commit bots +real gpu bots for all platforms

Bot failure on post-commit: revert → rework → reland

Moving to Gerrit but same workflow



Add new gpu driver bug workaround DISABLE TRANSPARENT VISUALS

This is for better polish in the UI but it fixes a drag image issue on Linux crbug.com/593256

Also add a kGpuDriverBugListJson entry to automatically disable transparent visuals on all drivers (especially the proprietary NVIDIA driver) except for opensource drivers (i.e. Mesa based drivers).

CQ INCLUDE TRYBOTS=master.tryserver.chromium.linux:linux optional qpu tests rel;master.tryserver.chromium.mac:mac op

Creat	ed: 2 months, 2 weeks ago		
	Unified diffs	Side-by-side diffs	Delta from patch set
M	content/browser/browser_main_loop.cc	View	1 2 3 4 5 6 7 8 9 10 11 12 13
M	content/test/gpu/page_sets/gpu_process_tests.py	View	1 2 3 4 5 6 7 8 9 10 11 12 1
М	extensions/browser/api/app_window/app_window_apitest.cc	View	123456789
М	gpu/config/gpu_driver_bug_list_json.cc	View	1 2 3 4 5 6 7 8 9 10
М	gpu/config/gpu_driver_bug_workaround_type.h	View	12345678
М	ui/base/x/x11_util.cc	View	12345
М	ui/base/x/x11_util_internal.h	View	12345
М	ui/gfx/x/x11_switches.h	View	
М	ui/gfx/x/x11_switches.cc	View	
М	ui/views/widget/desktop_aura/desktop_window_tree_host_x11.cc	View	12345678910
М	ui/views/widget/widget_unittest.cc	View	12345678
rybot	results: chromium presubmit linux android rel ng win chromium con	mpile dbg ng win clang w	rin chromium rel ng win or
mac	chromium compile dbg ng lios-device mac optional gpu tests rel n	nac chromium rel ng ios-sir	mulator-gn ios-device-gn id
andro	id compile dbg linux chromium chromeos compile dbg ng linux chr	omium asan rel ng linux cl	hromium rel ng chromeos
chron	neos amd64-generic chromium compile only ng cast shell linux chro	omeos daisy chromium comp	ile only ng linux optional g
inux	chromium clobber rel ng More>>>		
	nit: (issue is closed) CQ Status CQ not working?		

sadrul igtm https://codereview.chromium.org/2124633002/diff/170001/ui/views/widgel/desktop_aura/desktop_window_tree_host_x11.cc File Julien Isorce On 2016/07/15 15:12:13, sadrul wrote: > Igtm > > https://codereview.chromium.org/2124633002/diff/170001/ui/views/widgel/desktop_aura/desktop_window_tree_host_x11.cc File commit-bot: I haz the power CQ is trying da patch. Follow status at https://chromium-cq-status.appspot.com/v2/patch-status/codereview.ch commit-bot: I haz the power Your CL relies on deprecated CQ feature(s): * Specifying master names in CQ_INCLUDE_TRYBOTS part of . commit-bot: I haz the power Try jobs failed on following builders: chromium_presubmit on master.tryserver.chromium.linux (JOB_FAILED,
commit-bot: I haz the power CQ is trying da patch. Follow status at https://chromium-cq-status.appspot.com/v2/patch-status/codereview.cr commit-bot: I haz the power Your CL relies on deprecated CQ feature(s): * Specifying master names in CQ_INCLUDE_TRYBOTS part of .
commit-bot: I haz the power Your CL relies on deprecated CQ feature(s): * Specifying master names in CQ_INCLUDE_TRYBOTS part of .
commit-bot: I haz the power Try jobs failed on following builders: chromium_presubmit on master.tryserver.chromium.linux (JOB_FAILED,
Julien Isorce ** Presubmit ERRORS ** Missing LGTM from an OWNER for these files: content/browser/browser_main_loop.cc Hi Antoine,
piman extended OOO until Oct17 igtm
commit-bot: I haz the power Your CL relies on deprecated CQ feature(s): * Specifying master names in CQ_INCLUDE_TRYBOTS part of .
commit-bot: I haz the power Your CL relies on deprecated CQ feature(s): * Specifying master names in CQ_INCLUDE_TRYBOTS part of .
Julien Isorce Hi, I have added 2 tests, please have a look. Thx
Ken Russell Thanks for adding the tests. LGTM
commit-bot: I haz the power CQ is trying da patch. Follow status at https://chromium-cq-status.appspot.com/v2/patch-status/codereview.ch
commit-bot: I haz the power Committed patchset #17 (id:310001)

https://github.com/Samsung/ChromiumGStreamerBackend



- Diff of this branch with upstream Chromium:
 - 25% is about GStreamer (gst_player, GstGL client, static plugins)
 - 75% is about our MediaProcess
 - 2015: implemented
 - 2016: rebasing every 2/3 months
 - 2017: replace it by using the new upstream features:
 MojoMediaService + UtilityProcess



Thank you.