Editing Simulation

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Collabora Online

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What is it?

All about typing experience simulation!

- A tool to measure the performance & user experience while typing
- “N” number of views joining to the document
- Start meshing the keyboard..

What you can do:

- Adjust the typing speed
- Define the duration
- Setup single or multiple views
- Have it report tile per request statistics and much more.

Why is it needed?

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Why needed?

- Difficult and time consuming to measure performance without tools
- Even harder if not impossible for collaborative editing
- Not reliable without repeating the same steps.

How can one test it?

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How to use it

- cd path/to/online/browser
- make perf-test <parameters>
  - Parameters are not documented yet. Feel free to check browser/Makefile.am and “perf-test:” label

Tools used and needed (preferably):

- Linux perf
- Hotspot

How to develop

Two files:

- browser/test/bootstrap.js
  - Starts the test, runs collabora online and spawns the views
- browser/test/load.js
  - Represents a view that is spawnd and makes the keyboard events

Technologies that are used

- Node.js

Conclusion

Easily discovered problems

- Sidebar, text composition, networking, rendering and much more.
- Performance gains up to 30% in cpu time
- Thanks to Michael, Miklos, Tor, Noel, Lubos, Tor

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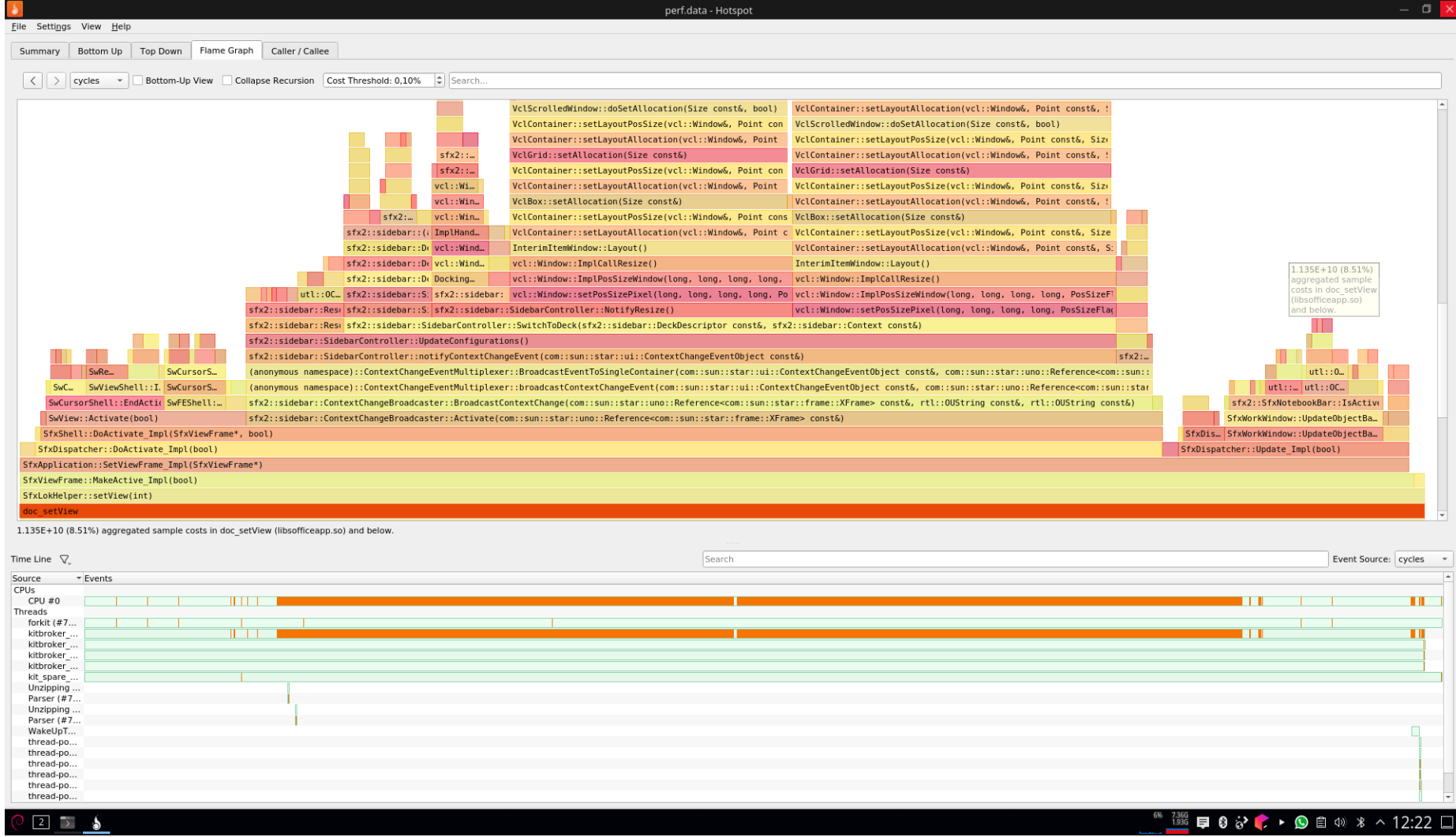
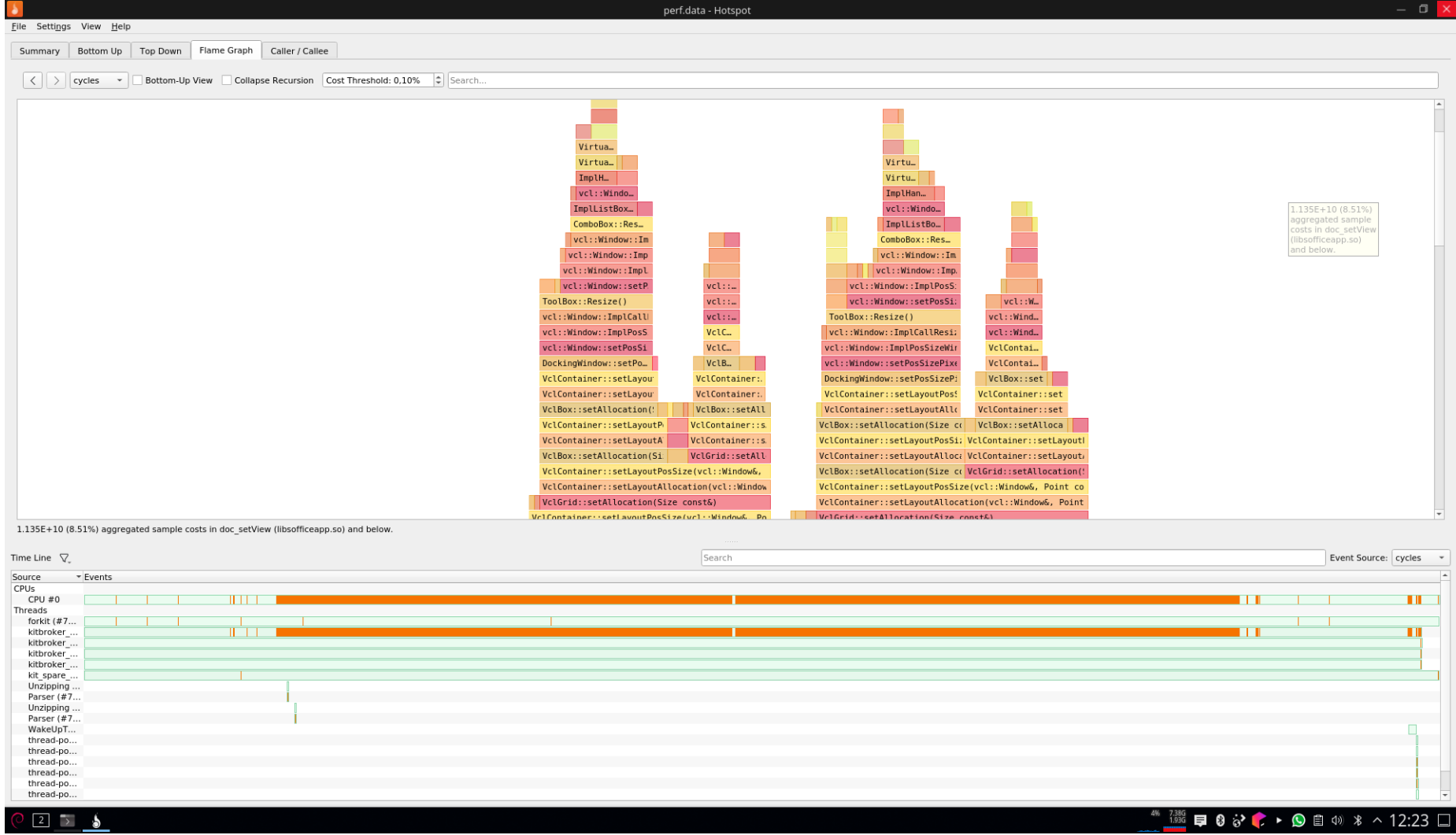

perf.data - Hotspot
File Settings View Help
Summary Bottom Up Top Down Flame Graph Caller / Callee
cycles Bottom-Up View Collapse Recursion Cost Threshold: 0,10% Search...
VclScrolledWindow::doSetAllocation(Size const&, bool)
VclContainer::setLayoutPosSize(vcl::Window&, Point con
VclContainer::setLayoutAllocation(vcl::Window&, Point
VclGrid::setAllocation(Size const&)
VclBox::setAllocation(Size const&)
VclContainer::setLayoutAllocation(vcl::Window&, Point cons
VclContainer::setLayoutAllocation(vcl::Window&, Point c
InterimItemWindow::Layout()
vcl::Window::ImplCallResize()
vcl::Window::ImplPosSizeWindow(long, long, long, long,
vcl::Window::setPosSizePixel(long, long, long, long, Po
sfx2::sidebar::SidebarController::NotifyResize()
sfx2::sidebar::SidebarController::SwitchToDeck(sfx2::sidebar::DeckDescriptor const&, sfx2::sidebar::Context const&)
sfx2::sidebar::SidebarController::UpdateConfigurations()
sfx2::sidebar::SidebarController::notifyContextChangeEvent(com::sun::star::ui::ContextChangeEventObject const&)
(anonymous namespace)::ContextChangeEventMultiplexer::BroadcastEventToSingleContainer(com::sun::star::ui::ContextChangeEventObject const&, com::sun::star::uno::Reference<com::sun::
(anonymous namespace)::ContextChangeEventMultiplexer::broadcastContextChangeEvent(com::sun::star::ui::ContextChangeEventObject const&, com::sun::star::uno::Reference<com::sun::star
sfx2::sidebar::ContextChangeBroadcaster::BroadcastContextChange(com::sun::star::uno::Reference<com::sun::star::frame::XFrame> const&, rtl::OUString const&, rtl::OUString const&)
sfx2::sidebar::ContextChangeBroadcaster::Activate(com::sun::star::uno::Reference<com::sun::star::frame::XFrame> const&)
SfxShell::DoActivate_Impl(SfxViewFrame*, bool)
SfxDispatcher::DoActivate_Impl(bool)
SfxApplication::SetViewFrame_Impl(SfxViewFrame*)
SfxViewFrame::MakeActive_Impl(bool)
SfxLokHelper::setView(int)
doc_setView
1.135E+10 (8.51%) aggregated sample costs in doc_setView (libsofficeapp.so) and below.
Time Line
Search
Event Source: cycles
Source
Events
CPUs
CPU #0
Threads
forkit (#7...
kitbroker_...
kit_spare_...
Unzipping ...
Parser (#7...
WakeUpT...
thread-po...
12:22


perf.data - Hotspot
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1.135E+10 (8.51%) aggregated sample costs in doc_setView (libsofficeapp.so) and below.
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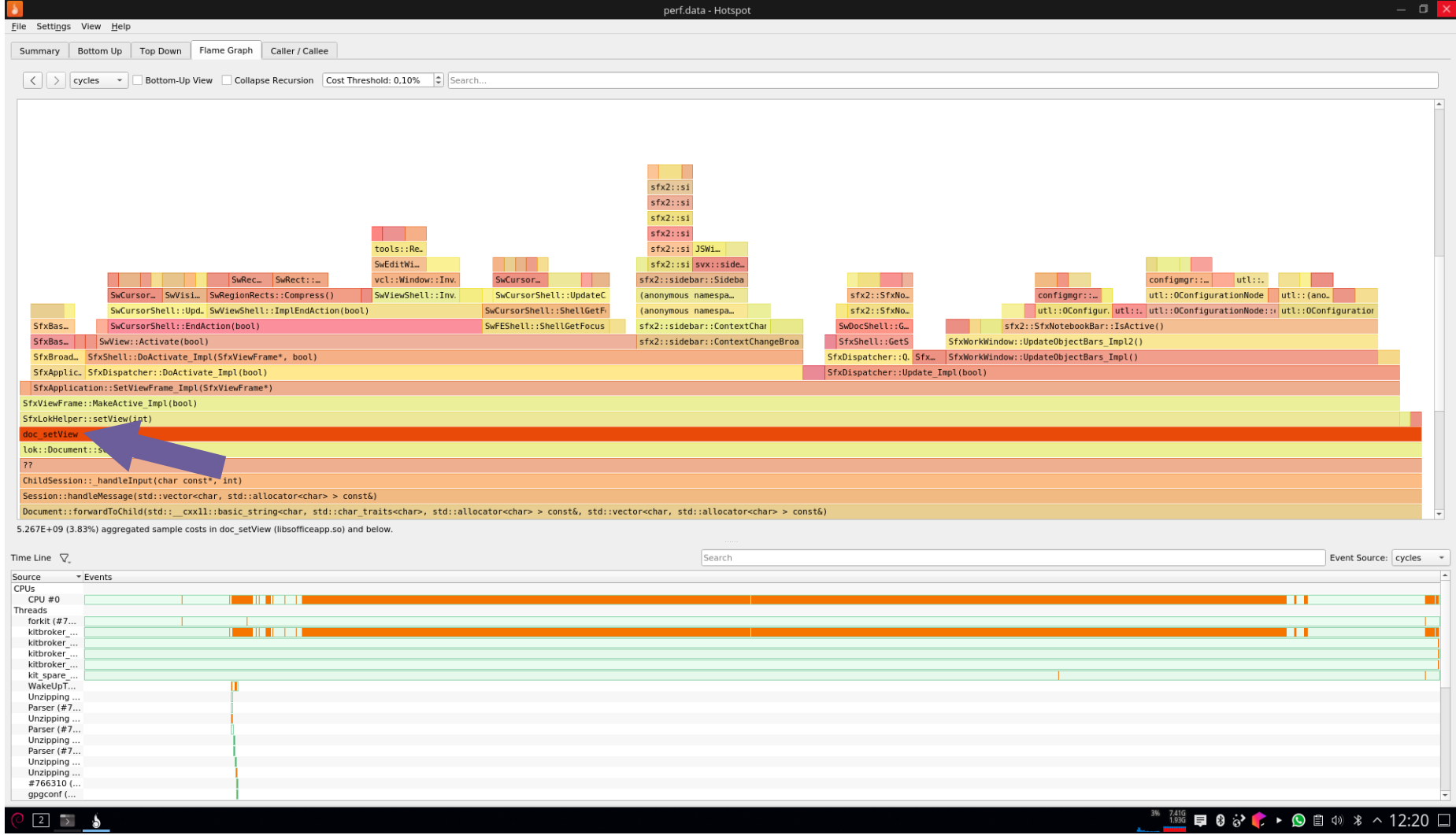
Search
Event Source: cycles
Source Events
CPUs
CPU #0
Threads
forkit (#7...
kitbroker_...
kit_spare_...
Unzipping ...
Parser (#7...
WakeUpT...
thread-po...
12:23

Easy discovery

```
diff --git a/sfx2/source/sidebar/SidebarController.cxx b/sfx2/source/sidebar/SidebarController.cxx
index 266a69f..db4f967 100644
--- a/sfx2/source/sidebar/SidebarController.cxx
+++ b/sfx2/source/sidebar/SidebarController.cxx

@@ -333,7 +333,8 @@ void SAL_CALL SidebarController::notifyContextChangeEvent (const css::ui::Contex
                                                // calling with held
                                                // solarmutex
         // TODO: this call is redundant but mandatory for unit test to update context on document loading
-        UpdateConfigurations();
+        if (!comphelper::LibreOfficeKit::isActive())
+            UpdateConfigurations();
     }
 }
```


perf.data - Hotspot
File Settings View Help
Summary Bottom Up Top Down Flame Graph Caller / Callee
cycles Bottom-Up View Collapse Recursion Cost Threshold: 0,10% Search...
doc_setView
ChildSession:: handleInput(char const*, int)
Session::handleMessage(std::vector<char, std::allocator<char> > const&)
Document::forwardToChild(std::__cxx11::basic_string<char, std::char_traits<char>, std::allocator<char> > const&, std::vector<char, std::allocator<char> > const&)
5.267E+09 (3.83%) aggregated sample costs in doc_setView (libsofficeapp.so) and below.
Time Line
Search
Event Source: cycles
Source
Events
CPUs
CPU #0
Threads
12:20

Thanks !

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