

# Challenge of Enterprise Desktop with GNOME 3

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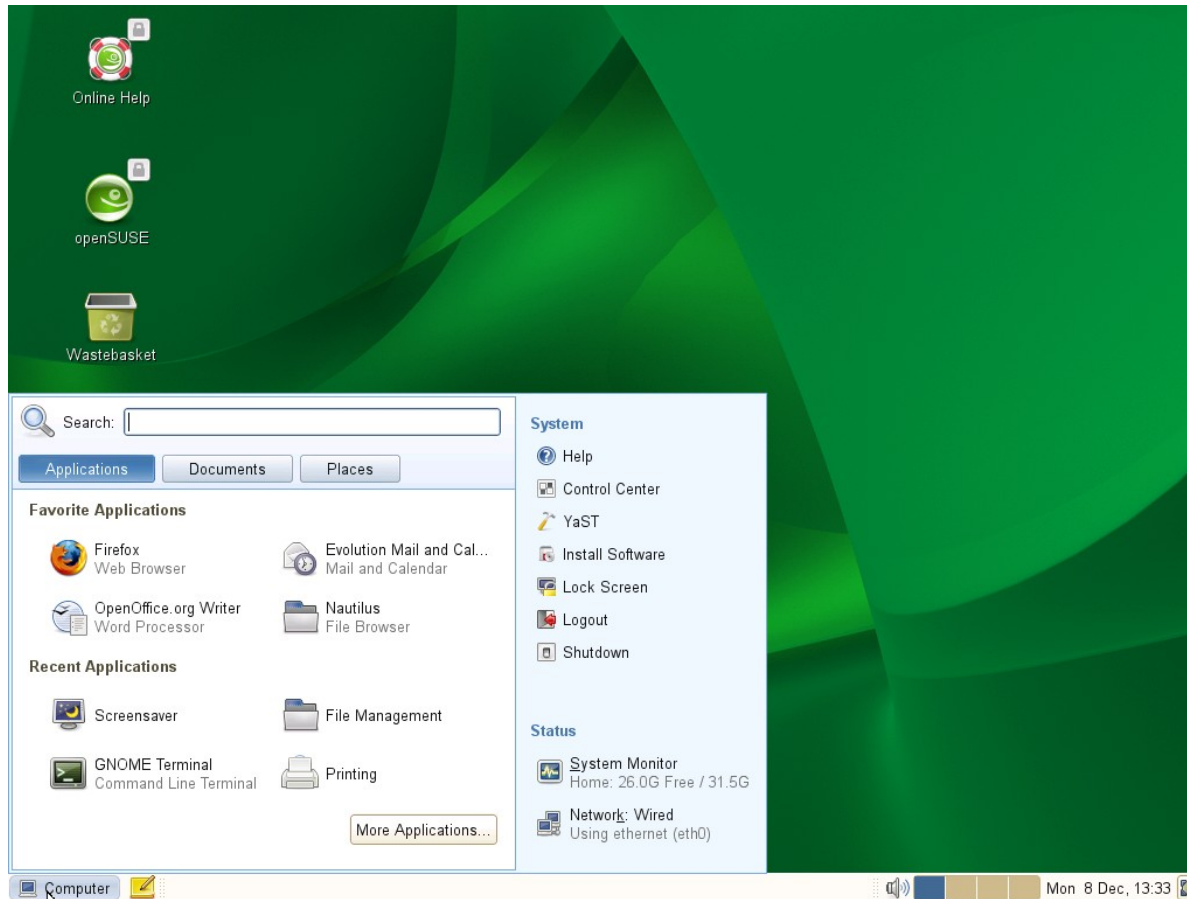


# One desktop to rule them all

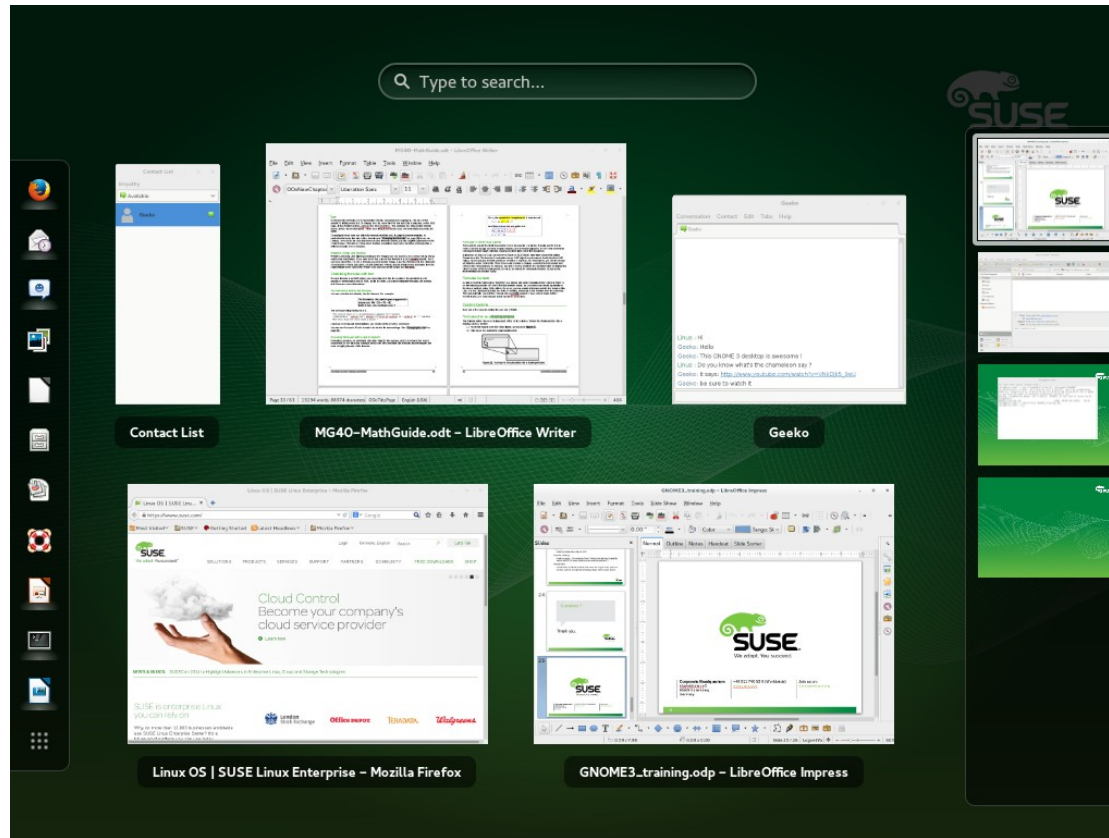
- Starting with SLE 12, SUSE Linux Enterprise is shipped with only one desktop environment: GNOME (3.10 for SLE12 GA)
- We are also shipping icewm as a light alternative for some specific usecases.
- KDE will be available through OBS, unsupported by SUSE.

Our Challenge: replacing SLAB

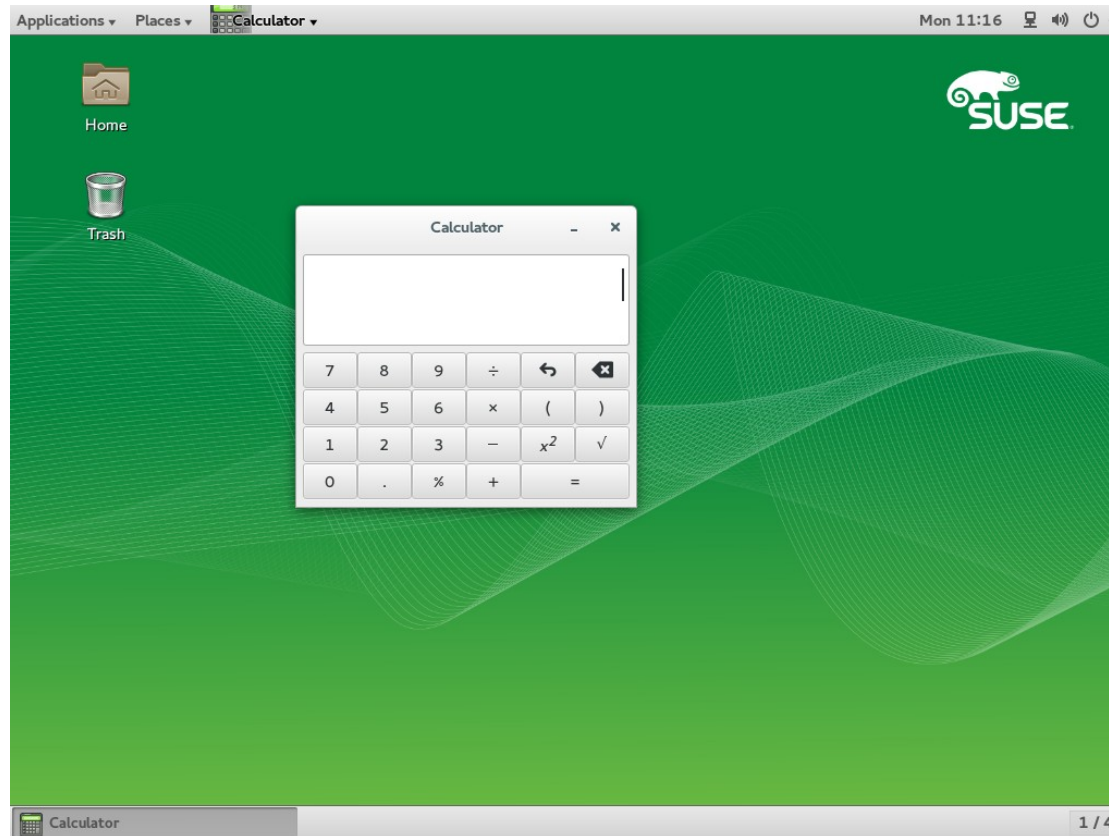
# from SLAB



# .. to GNOME-Shell



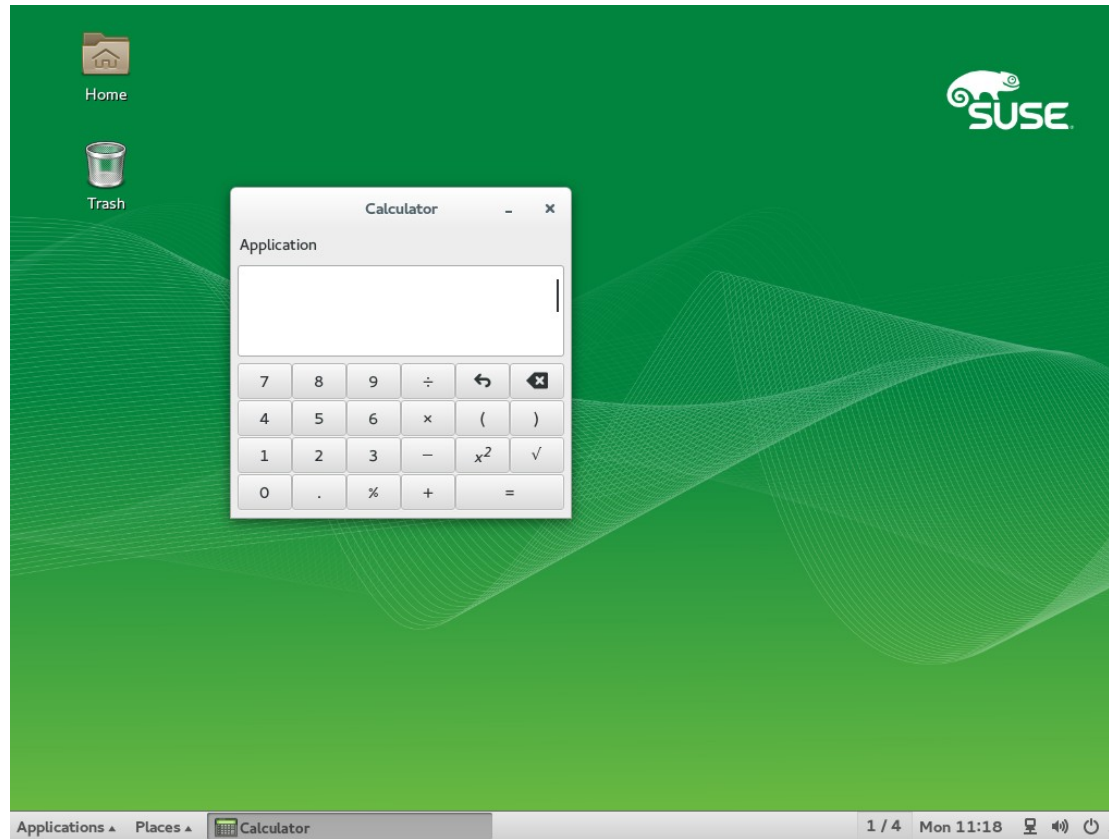
# One solution: GNOME Classic



# Not really a good fit for SLE12

- GNOME Classic was designed to replace GNOME upstream default layout (two panels)
- SLAB (in SLE11) was designed as Windows replacement, with a single bottom panel
- Changing this layout by default could confuse enterprise customers

# Our solution: SLE Classic

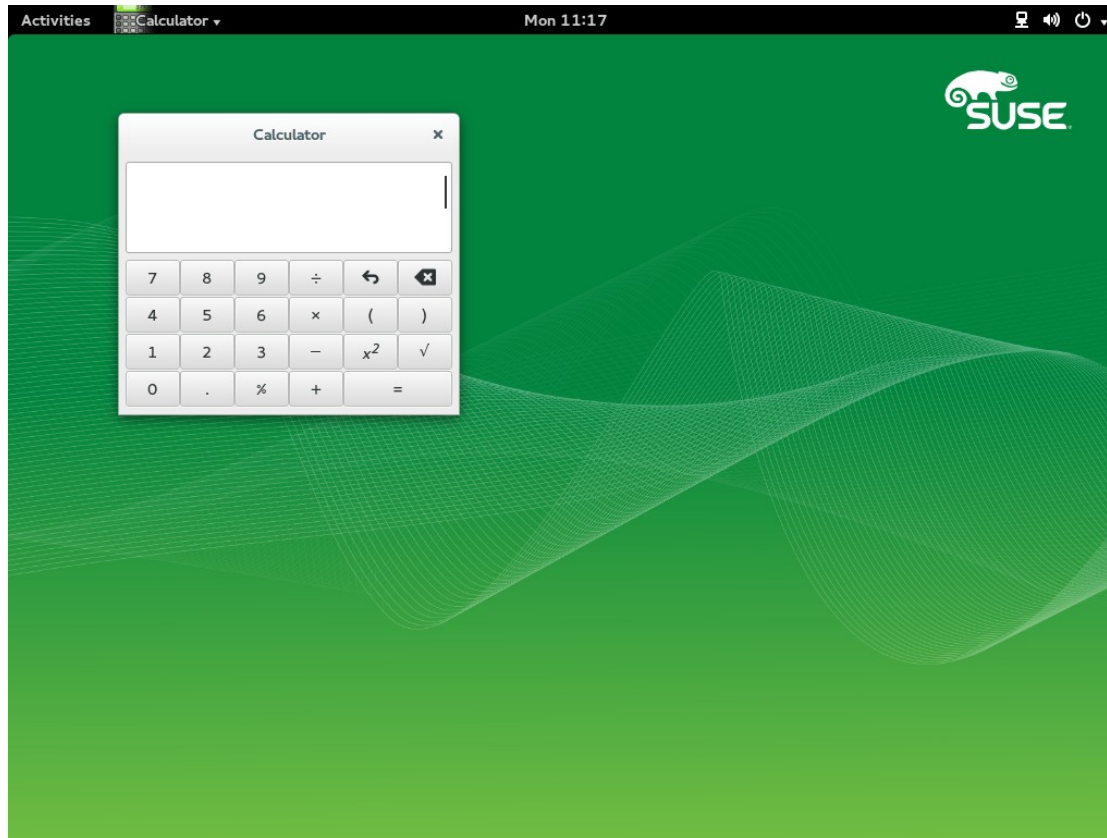




# SLE Classic

- Merging two panels into one
- Disable Applications menu (including some backport from Gtk+ 3.12) and detect which “mode” is running
- Modify Windows decorations
- To do that, we have to fork GNOME-Classic code and sometime, to patch gnome-shell :(
  - Extension code : <https://bitbucket.org/carltonf/sle-classic/>
  - Additional patches required to gnome-shell and gnome-shell-extensions :
    - <https://build.opensuse.org/package/show/SUSE:SLE-12:GA/gnome-shell> to allow one single panel and change arrow direction ;)
    - <https://build.opensuse.org/package/show/SUSE:SLE-12:GA/gnome-shell-extensions> to move where Favorites menu is inserted

# GNOME Shell still available



# All UI available

- SLE Classic is an additional UI, we are shipping:
  - SLE Classic
  - GNOME (Shell)
  - GNOME Classic
- Default is SLE Classic

# Additional tweaks we did

- Shield is now automatically lifted when user moves mouse by 100px (upstream behavior was undiscoverable by most of our beta testers)
- Add a few launchers to GNOME Control Center (Tweak UI, Tracker, YaST)
- Migration from KDE Environment (only Email import from Kmail to Evolution)
- Disable some functions in G-C-C Network panel when using wicked or when firewalld isn't there
- Forward port of GNOME 3.10 to upower 0.9x/1.0

Pushing graphics stack

# Not everything is running accelerated openGL

- Virtual machine
- “strange” architecture, such as s390 (yes, mainframe !) or powerpc
- Remote desktop
- Llvmpipe to the rescue:
  - bugs causing fullscreen update were found and fixed in Mesa and clutter (Thanks to Federico and Hans-Peter)

Remaining issues

# Remote display is not fully resolved

- Some customers are still using old X stack to remotely access up-to-date desktop:
  - X servers on Windows are old, missing extensions which are now mandatory on GNOME, such as:
    - XFixes  $\geq 5$
    - Xinput  $\geq 2.2$
  - Remote X is slooowwww, compared to VNC (no caching)
  - No encryption with XDMCP
- GDM doesn't cope well with this (nice black screen ;)



# GNOME Shell

- Still a work in progress, API wise
- Desktop upgrade will cause pain :
  - Extensions breakage
  - Upgrade story isn't fully handled (when desktop is upgraded or when extensions is upgraded)
- Join BoF on Monday
- Rebase SLE Classic to more recent desktop (3.16 or 3.18) and have it available in openSUSE Leap / Tumbleweed
- Design changes could cause trouble in the future (Tray icon with 3.16)

Questions ?

Thank you.



BTW, we are hiring :  
64 jobs position available

Thank you.

