



**LibreOffice**  
The Document Foundation

# LibreOffice 10th Anniversary

the untold story of a global  
FOSS community

Italo Vignoli



# 10 Years / 20 Years

July 19, 2000: Sun announces OpenOffice.org

Sept 28, 2010: OpenOffice.org community announces LibreOffice



**LibreOffice**  
The Document Foundation



# Relaunch the Innovation

## *Visual Representation of the Fork*

*the community takes control  
to relaunch the innovation and  
develop a self sustaining project  
backed by a solid ecosystem*

**LibreOffice**

*today*

**OpenOffice**

*risk of abandon  
by Oracle after 10  
years of continuous  
growth backed by  
Sun and community*





# SEPTEMBER 28, 2010

OpenOffice.org Community announces  
The Document Foundation

The community of volunteers developing and promoting OpenOffice.org sets up an independent Foundation to drive the further growth of the project

The brand "LibreOffice" has been chosen for the software going forward



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# FREEDOM

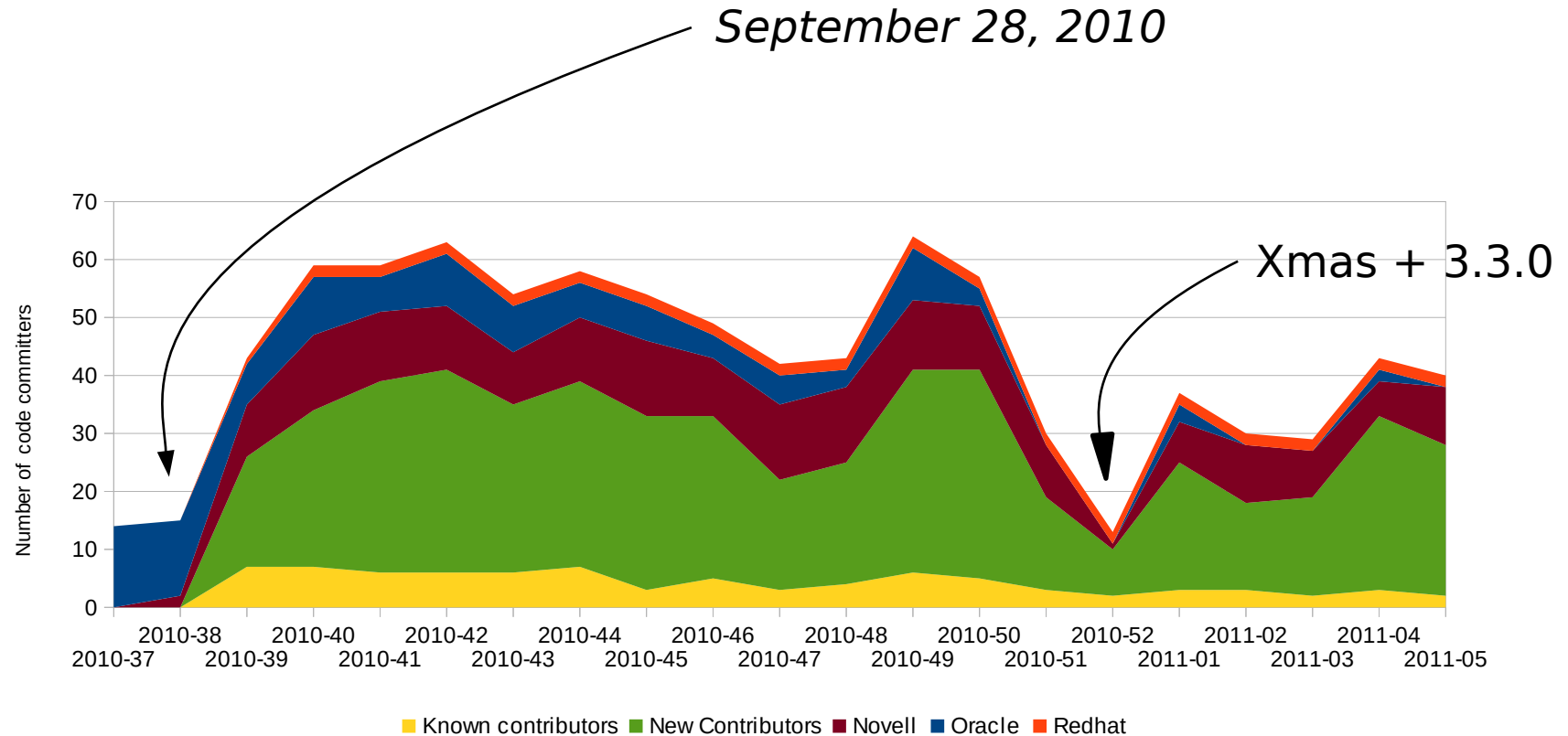
*never tasted so...*

# SUITE

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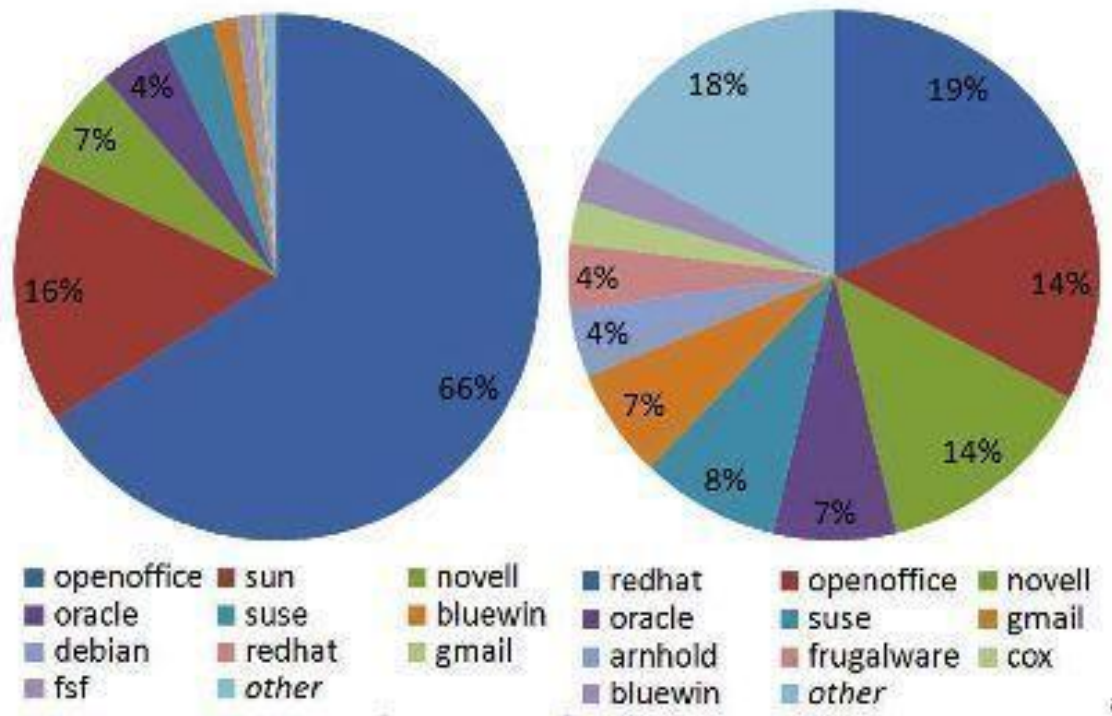


# Announcement to Release





### The total affiliation commit influence for LibreOffice 10 months before (left) & after the fork on 28 Sept. 2010

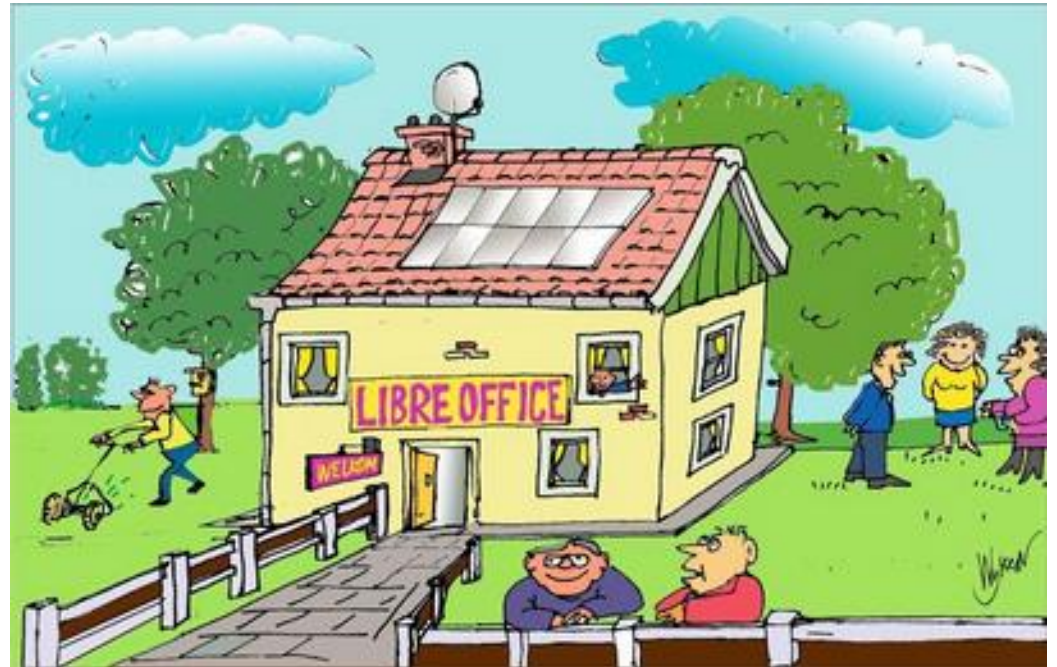


Gamalielsson, J. and Lundell, B. (2011) **Open Source communities for long-term maintenance of digital assets: what is offered for ODF & OOXML?**, in Hammouda, I. and Lundell, B. (Eds.) Proceedings of SOS 2011: **Towards Sustainable Open Source**, Tampere University of Technology, Tampere, ISBN 978-952-15-2718-0, ISSN 1797-836X.





# OpenOffice vs LibreOffice



# The Document Foundation

Founding Principles

**COPYLEFT LICENSE**

**NO CONTRIBUTOR AGREEMENT**

**MERITOCRACY**

**COMMUNITY GOVERNANCE**

**VENDOR INDEPENDENCE**



# The Document Foundation

The Document Foundation was born  
**TO PROMOTE** free software  
**TO PROMOTE** SW user freedom  
**TO PROMOTE** document freedom  
**TO PROMOTE** open standards  
**TO DEVELOP** LibreOffice



# The Document Foundation



The screenshot shows the homepage of The Document Foundation. At the top left is a document icon followed by the text "The Document Foundation". To the right of this is the tagline "The home of LibreOffice". Below the header is a navigation menu with the following items: "Welcome" (highlighted in green), "Foundation", "Develop", "Contribute", "Certification", "Supporters", and "Contact".

## Welcome

- It is an independent self-governing meritocratic entity, created by former leading members of the OpenOffice.org Community, in the form of a charitable Foundation under German law (gemeinnützige rechtsfähige Stiftung des bürgerlichen Rechts).
- It continues to build on the foundation of ten years' dedicated work by the OpenOffice.org Community.
- It was created in the belief that the culture born of an independent Foundation brings out the best in contributors and will deliver the best software for users.
- It is open to any individual who agrees with our core values and contributes to our activities.
- It welcomes corporate participation, e.g. by sponsoring individuals to work as equals alongside other contributors in the community.

The Document Foundation is proud to be the home of LibreOffice, the next evolution of the world's leading free office suite.

**Download LibreOffice**

- Understand the reasons for The Document Foundation
- Get involved by subscribing, showing support or donating
- Get press material or contact spokes people
- Read what supporters of The Document Foundation say

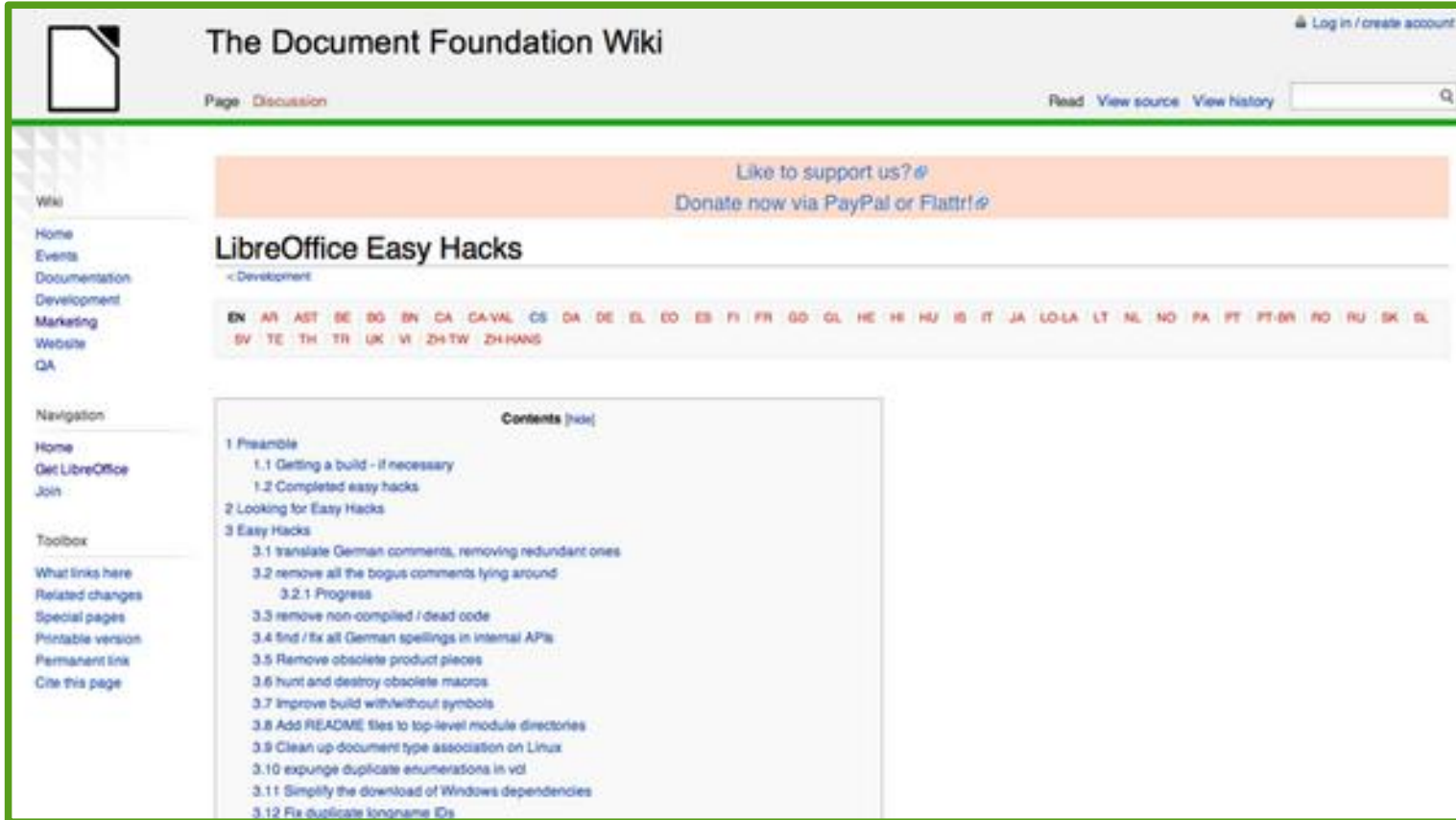




# LibreOffice Main Asset



# Incredible Easy Hacks



The screenshot shows the top portion of a wiki page. At the top left is a document icon. The page title is "The Document Foundation Wiki". On the right, there are links for "Log in / create account", "Read", "View source", and "View history", along with a search box. Below the title bar is a navigation menu with "Page" and "Discussion". A light orange banner contains the text "Like to support us?# Donate now via PayPal or Flattr!#". The main heading is "LibreOffice Easy Hacks" with a sub-heading "< Development". Below this is a language selection bar with codes for various languages: EN, AR, AST, BE, BG, BN, CA, CA-VAL, CS, DA, DE, EL, EO, ES, FI, FR, GD, GL, HE, HI, HU, IS, IT, JA, LO-LA, LT, NL, NO, PA, PT, PT-BR, RO, RU, SK, SL, SV, TE, TH, TR, UK, VI, ZH-TW, ZH-HANS. A "Contents [hide]" section lists the following items:

- 1 Preamble
  - 1.1 Getting a build - if necessary
  - 1.2 Completed easy hacks
- 2 Looking for Easy Hacks
- 3 Easy Hacks
  - 3.1 translate German comments, removing redundant ones
  - 3.2 remove all the bogus comments lying around
    - 3.2.1 Progress
  - 3.3 remove non-compiled / dead code
  - 3.4 find / fix all German spellings in internal APIs
  - 3.5 Remove obsolete product pieces
  - 3.6 hunt and destroy obsolete macros
  - 3.7 Improve build with/without symbols
  - 3.8 Add README files to top-level module directories
  - 3.9 Clean up document type association on Linux
  - 3.10 expunge duplicate enumerations in vcl
  - 3.11 Simplify the download of Windows dependencies
  - 3.12 Fix duplicate binname IDs



# Easy Hacks Advantages

- Easy hacks are simple and accessible tasks for developers new to the project with little or no knowledge of the code
- Easy hacks have a twofold objective: easing the learning curve and solving a number of problems which would distract core developers from their main task
- Core developers are committed in mentoring newcomers and checking their work



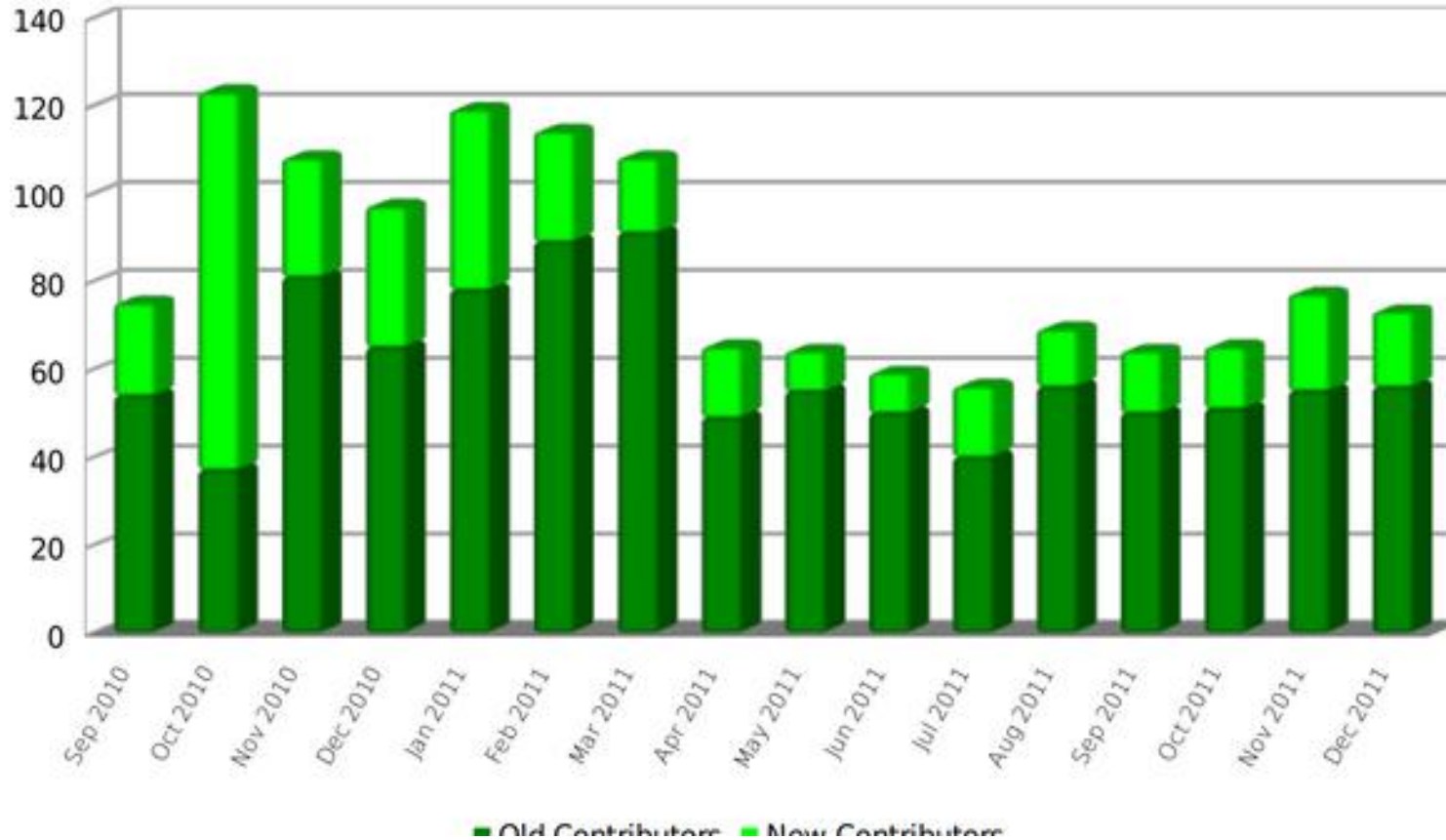


# Huge Mentoring Effort

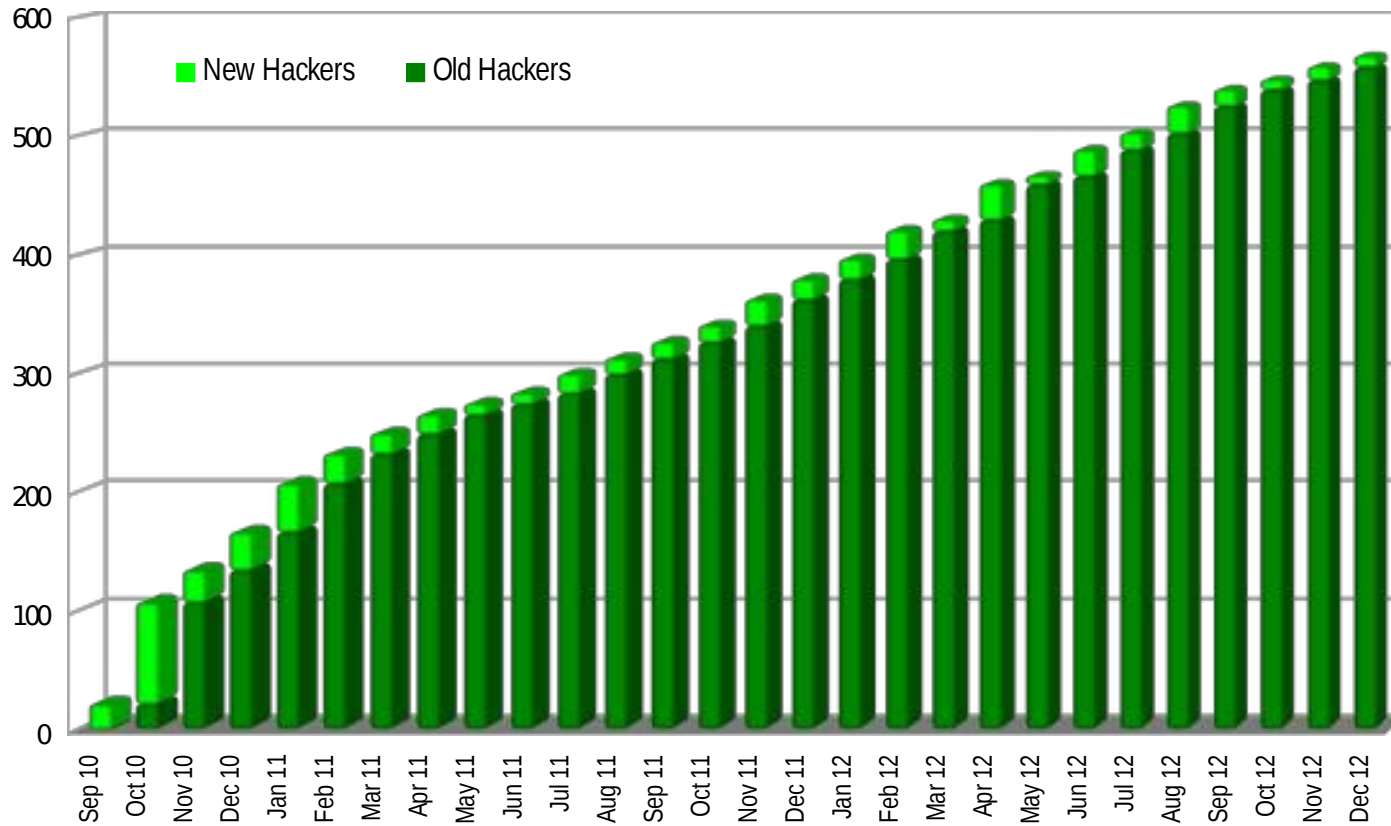


# LibreOffice Code Contributors

Contributors are Counted as New on Month of First Commit

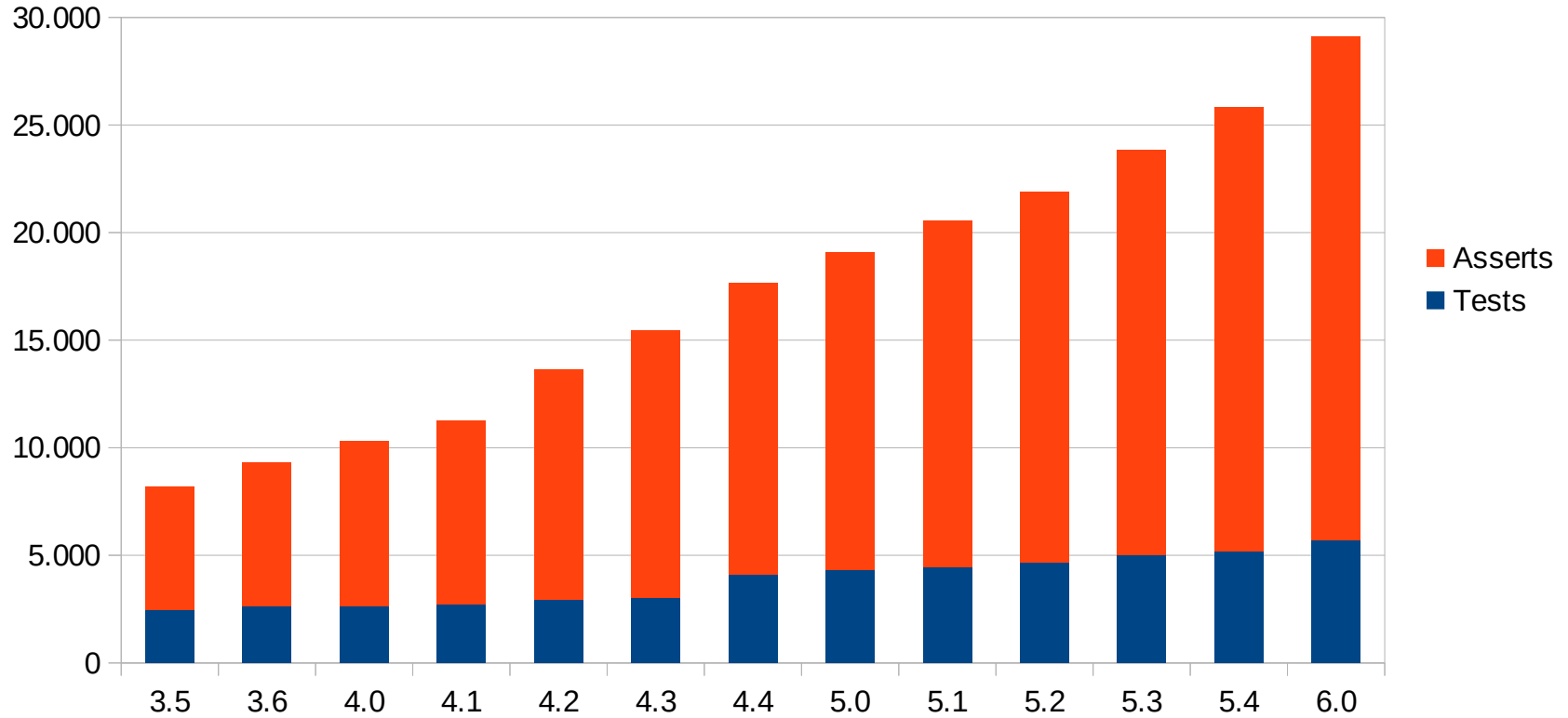


## Cumulative Number of LibreOffice New Code Committers



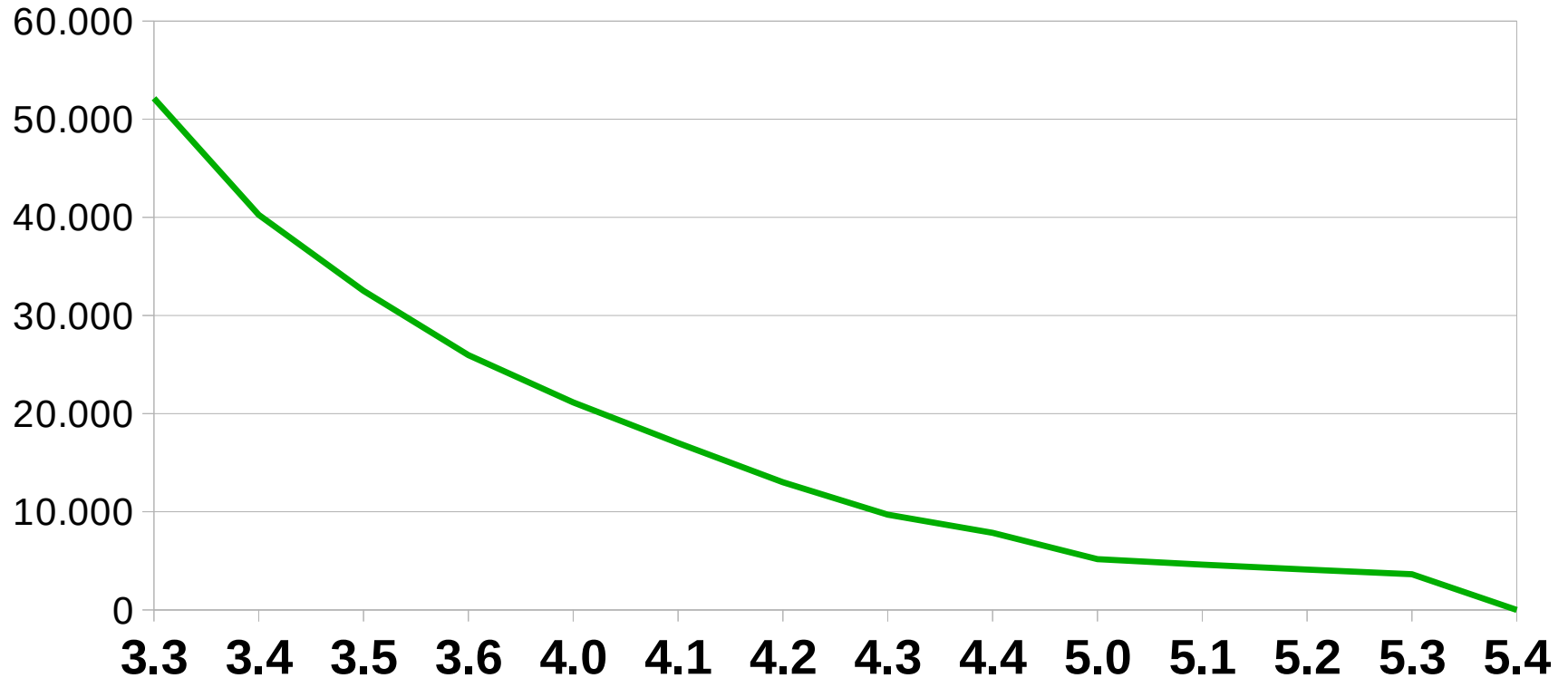
# Growth in unit tests over time

count of various CPPUNIT macros

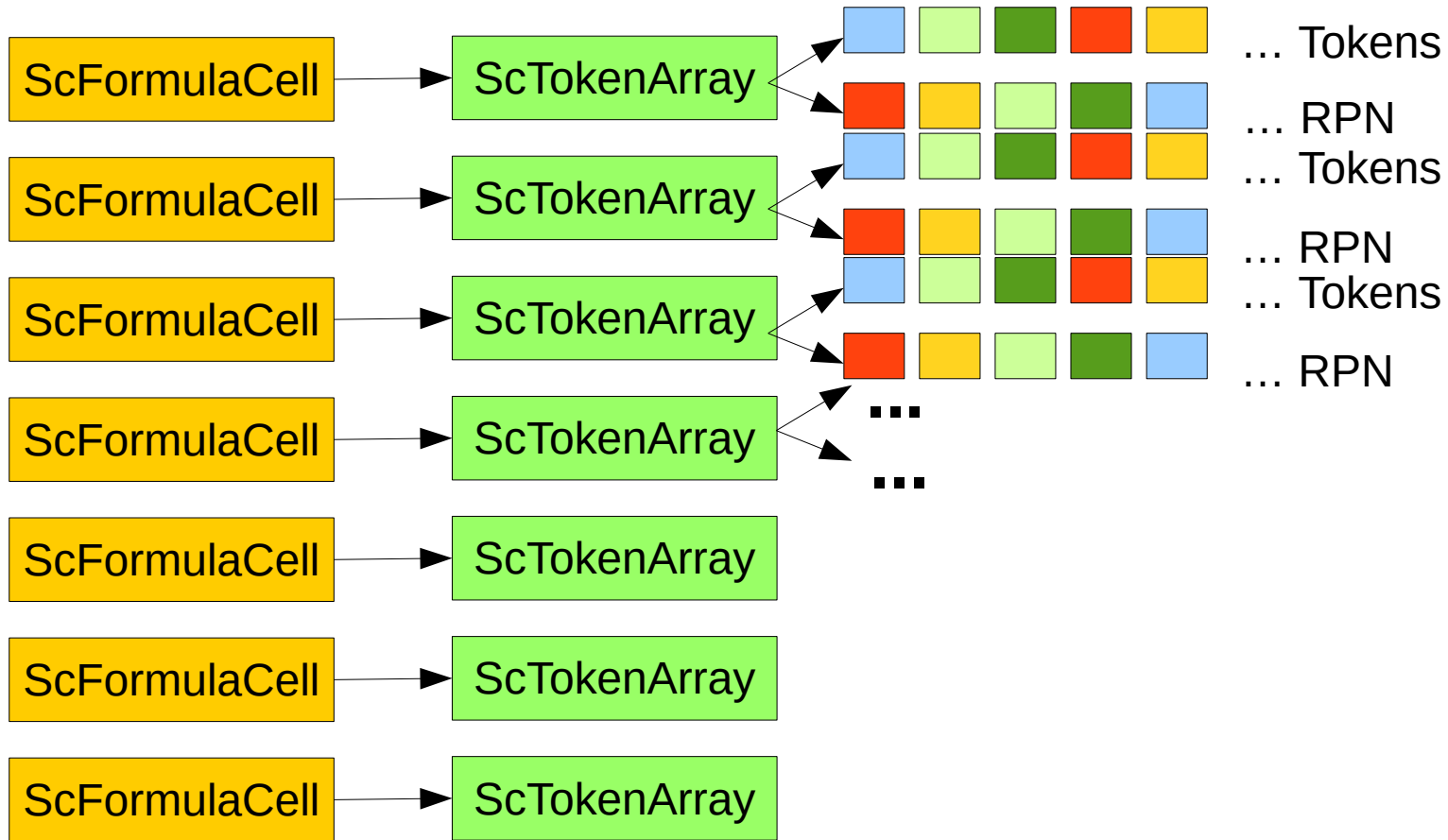


# German Comment Translation

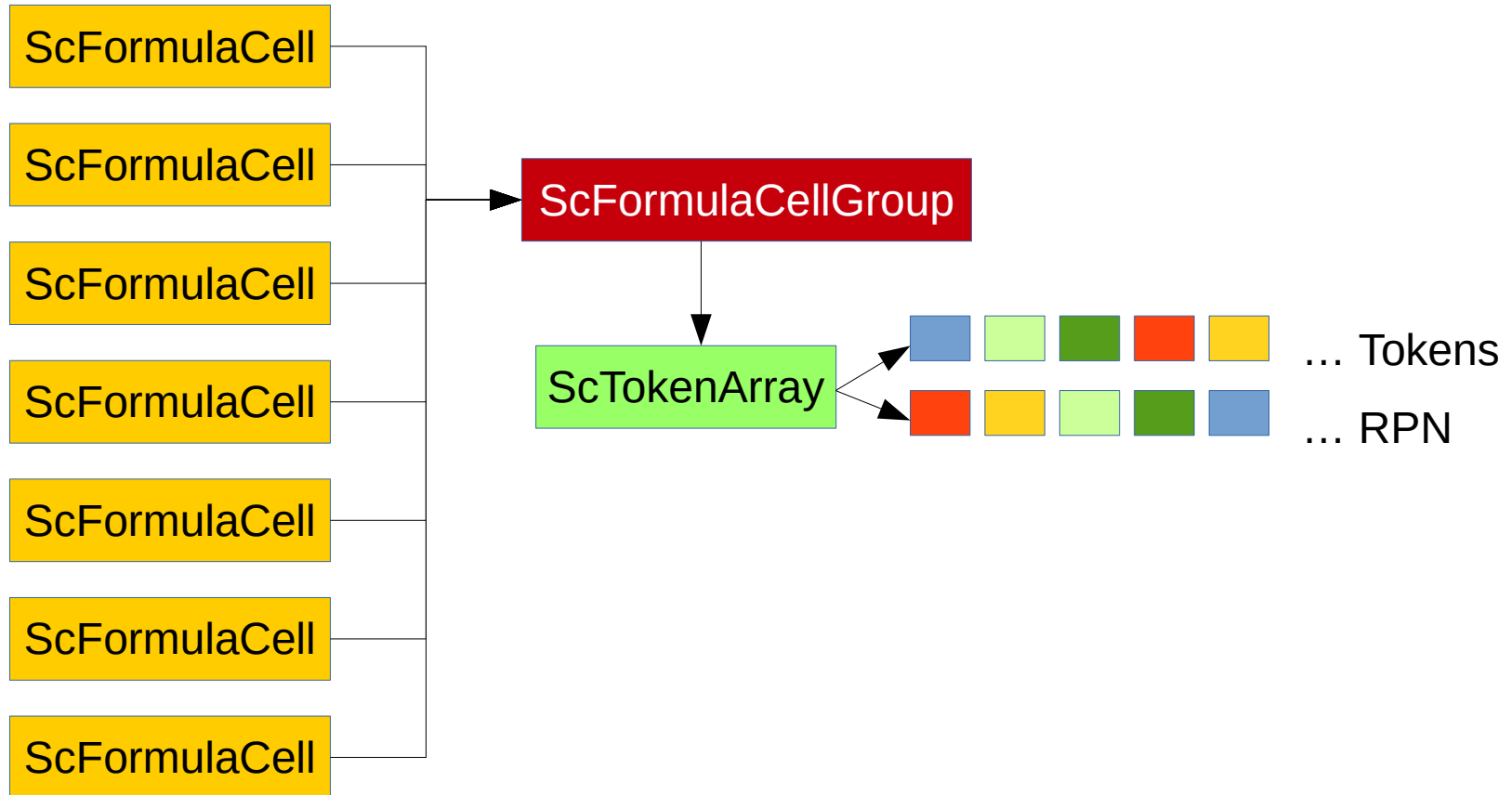
Detected lines of German comment



# Ancient: Pre LibreOffice 4.2



# Modern: LibreOffice 4.2 / 4.3+



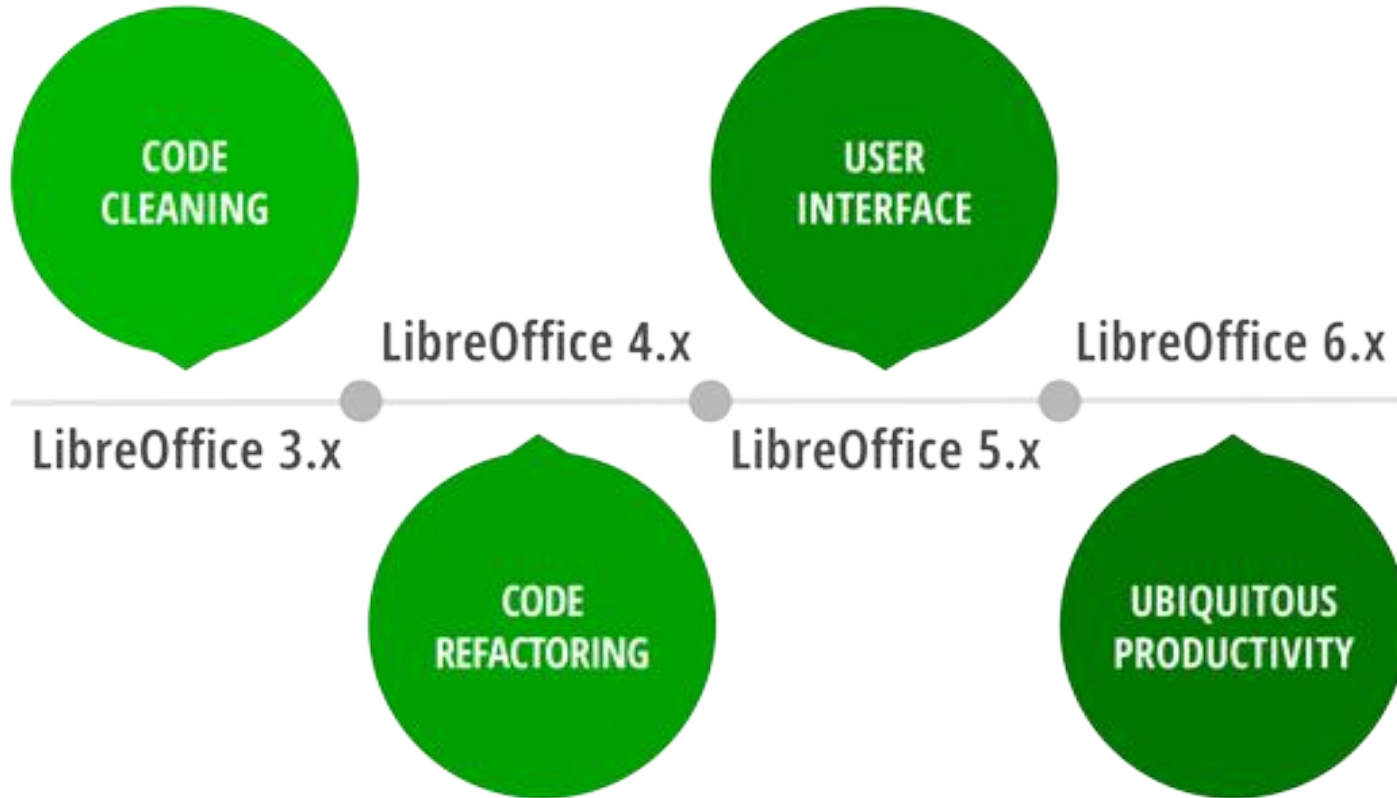
# Achievements

- Reduced footprint of the software
- Undertaken long awaited code renovation
- Removed tens of thousands lines of dead code
- Removed deprecated libraries
- Translated many German comments to English
- Many other code renovation actions
- All: paying down substantial technical debt
- Using 20'th Century C++ constructs



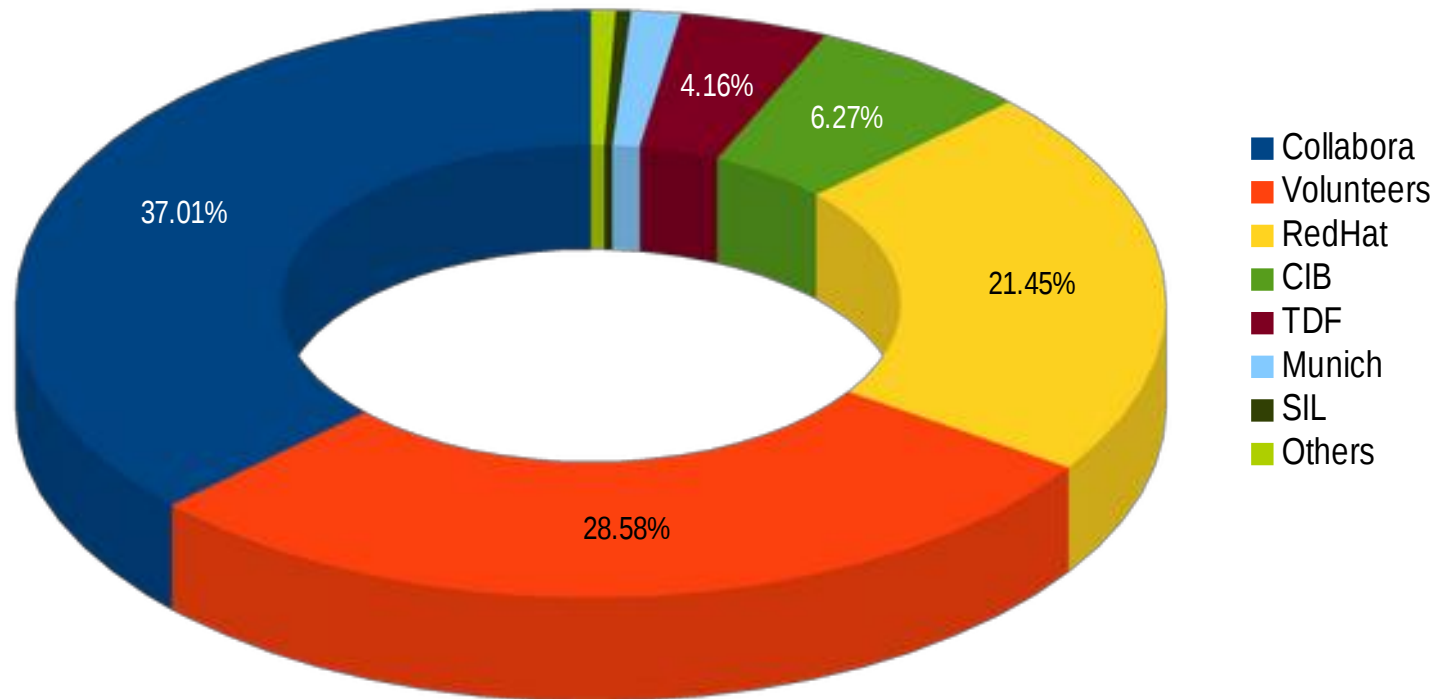


# Development Cycles

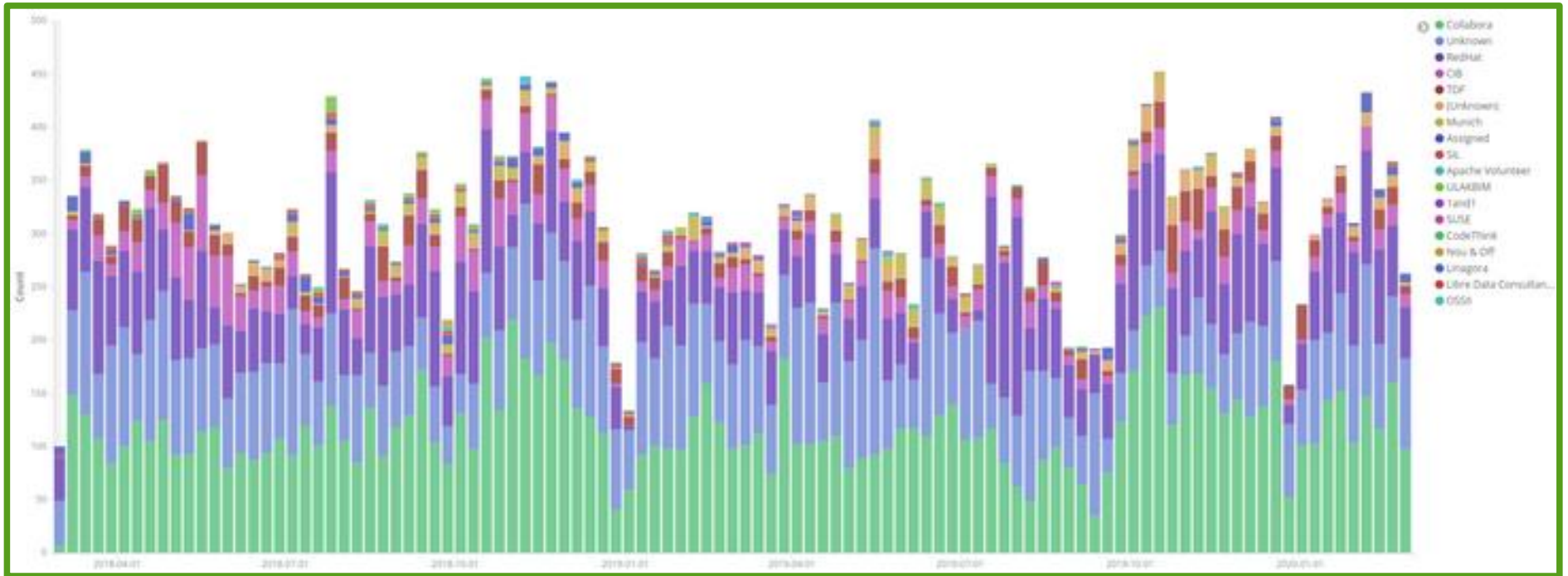


# Git Commits by Organization

LibreOffice Git Commits (Last Two Years)



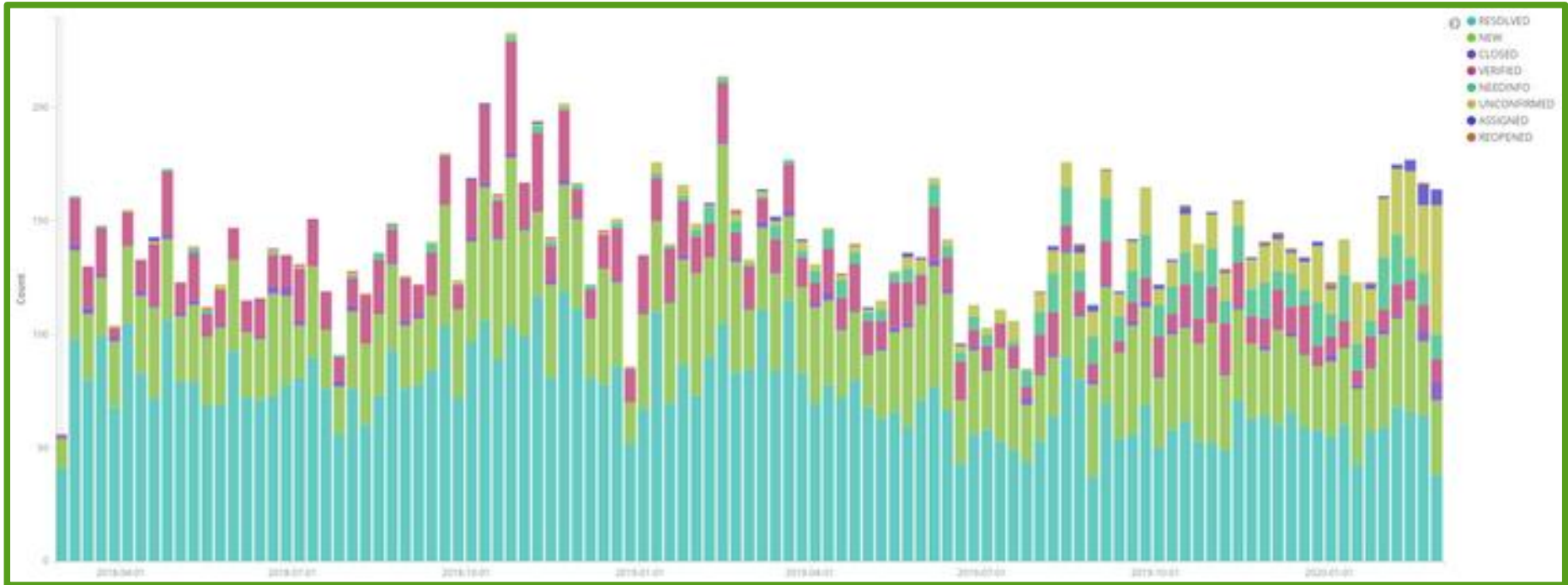
# Same Git Commits x Week



March 2018 – February 2020



# Bugzilla Issues by Status



March 2018 – February 2020



# Coverity Scan Score

Oct 01, 2018

Last Analyzed

6,444,539

Lines of Code Analyzed

6,425,051

Lines of Code in Selected  
Components

0.00

Defect Density

## Defect changes since previous build dated Sep 24, 2018

0

Newly detected

0

Eliminated

## Defects by status for current build

25,432

Total defects

0

Outstanding

351

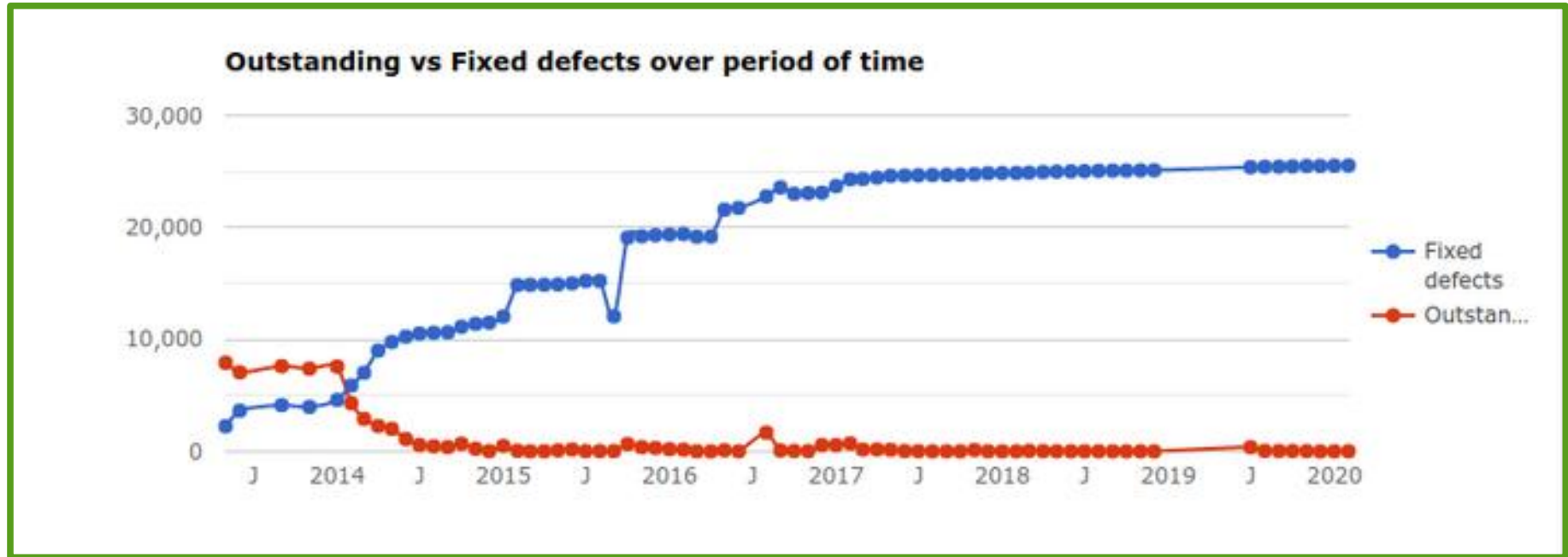
Dismissed

25,081

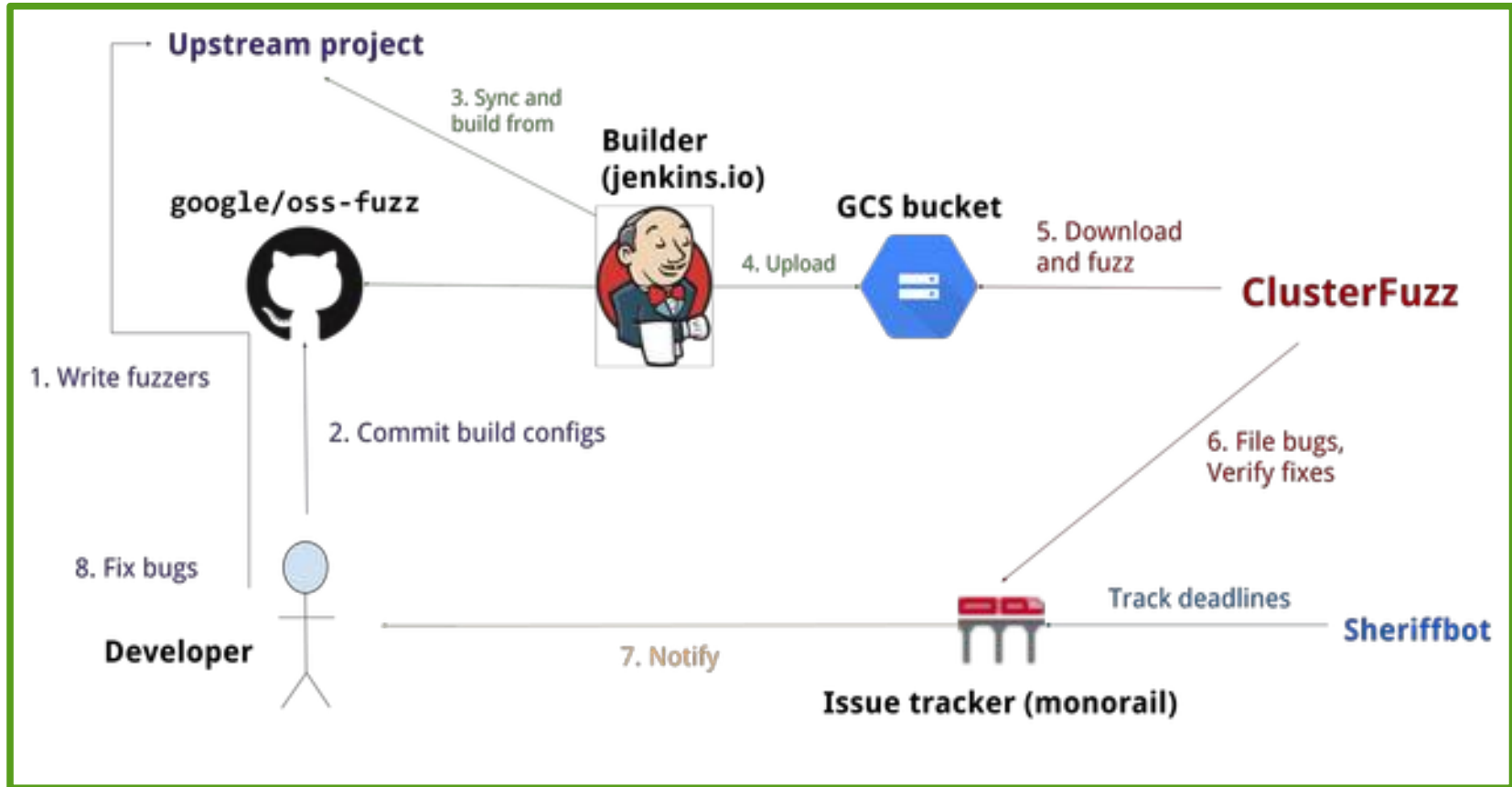
Fixed



# Coverity Scan @ LibreOffice



# Google's OSS-Fuzz



# Fuzzing: the Take Home ...

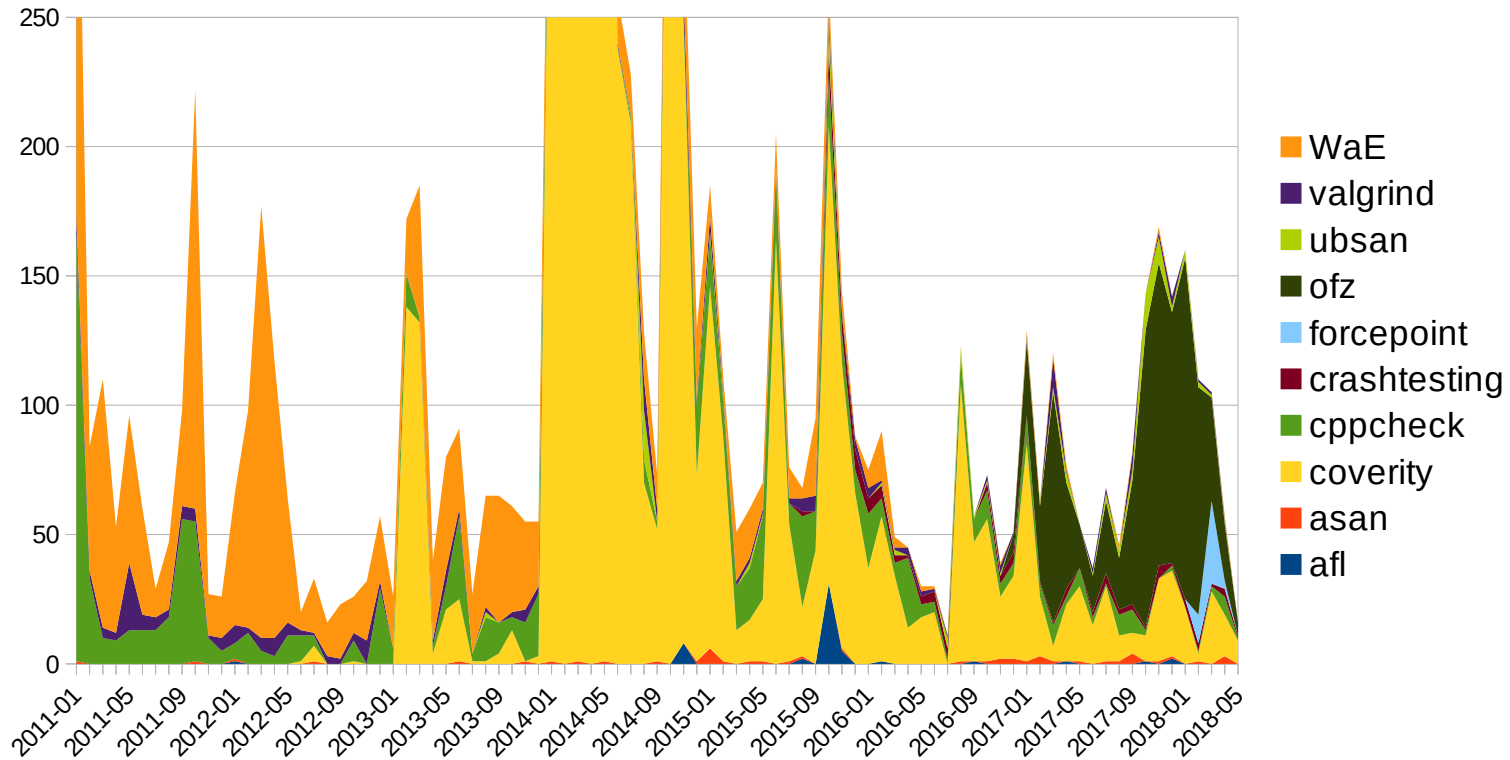
- New tools find new bugs, and over time that reduces
- Hard to see: not everyone uses consistent git commit tooling references, eg. crashtesting is badly under-represented





# Commits Based on Fuzzing

Commits per month easily attributable to various tools

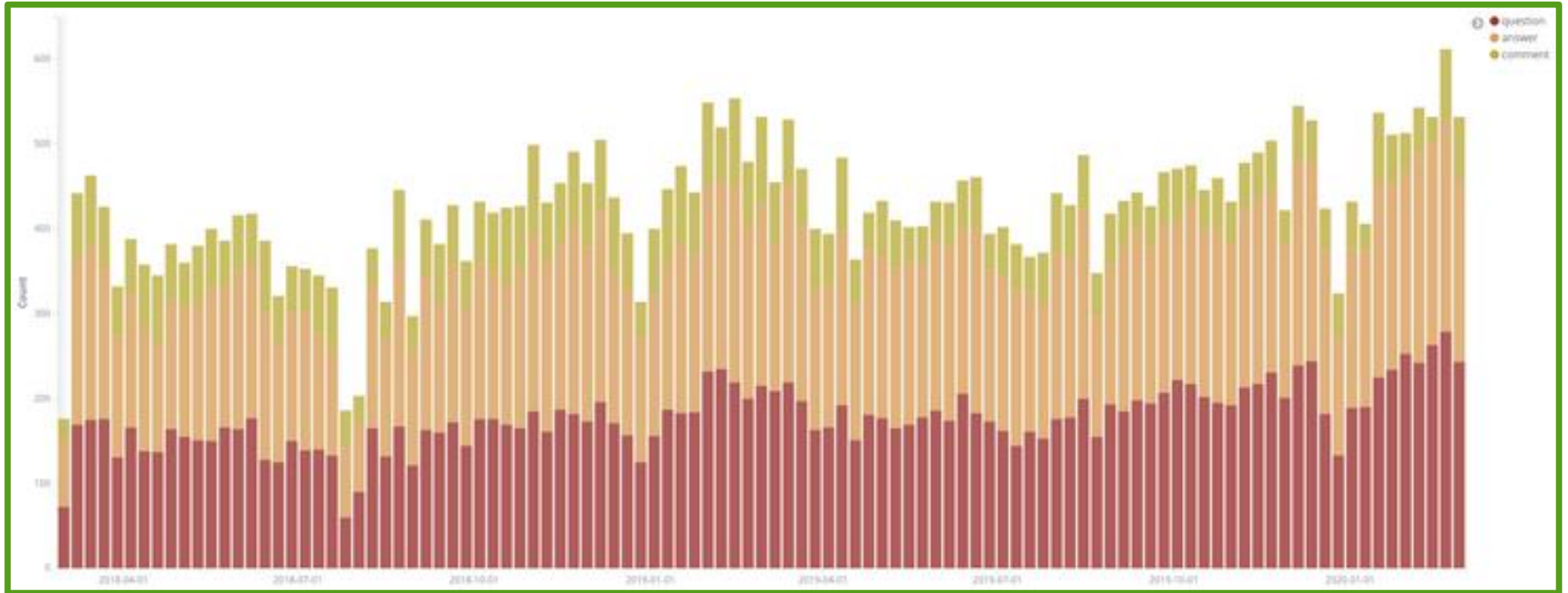




**COMMUNITY**



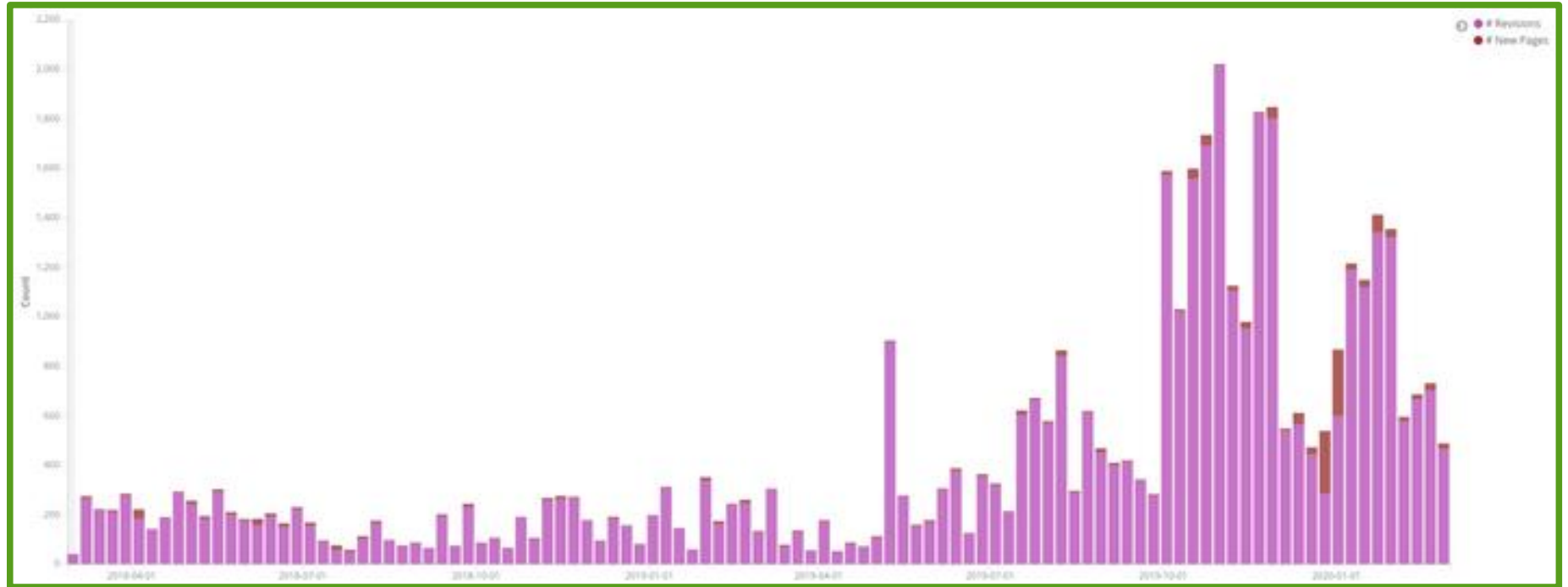
# Ask Q&A and Comments



March 2018 – February 2020



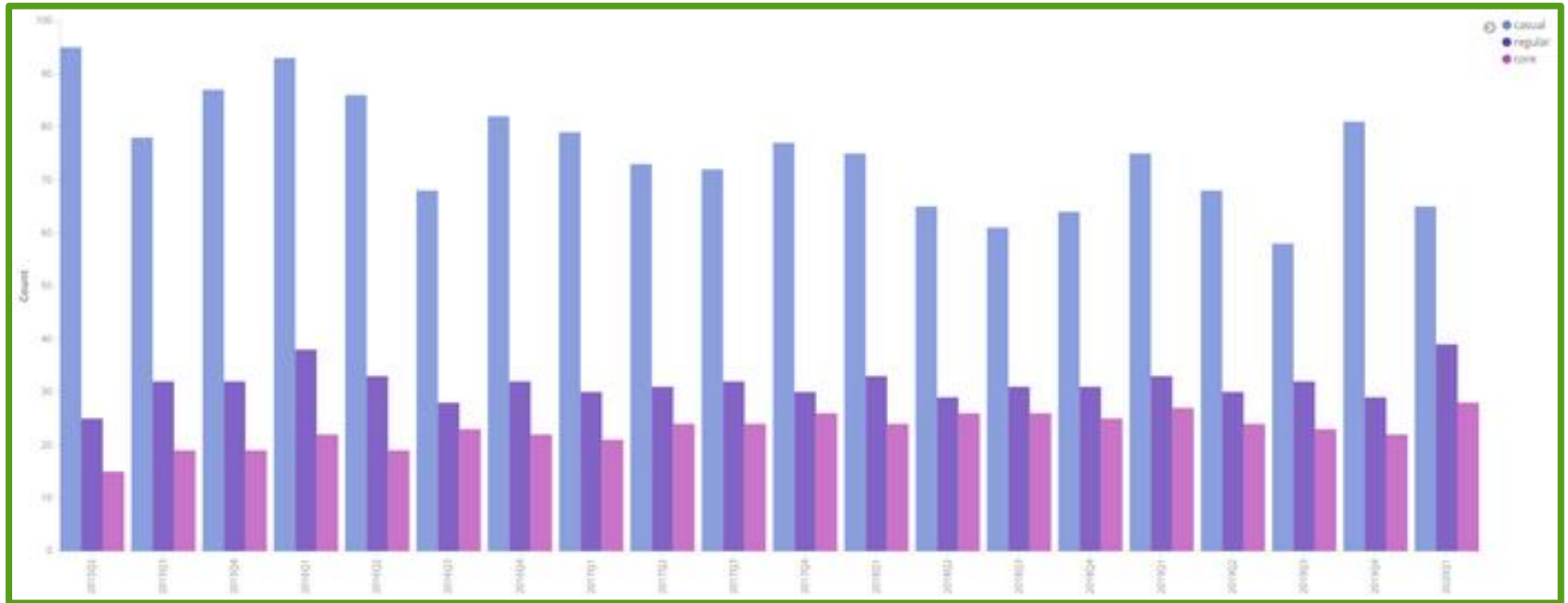
# Mediawiki Edits



March 2018 – February 2020



# Community

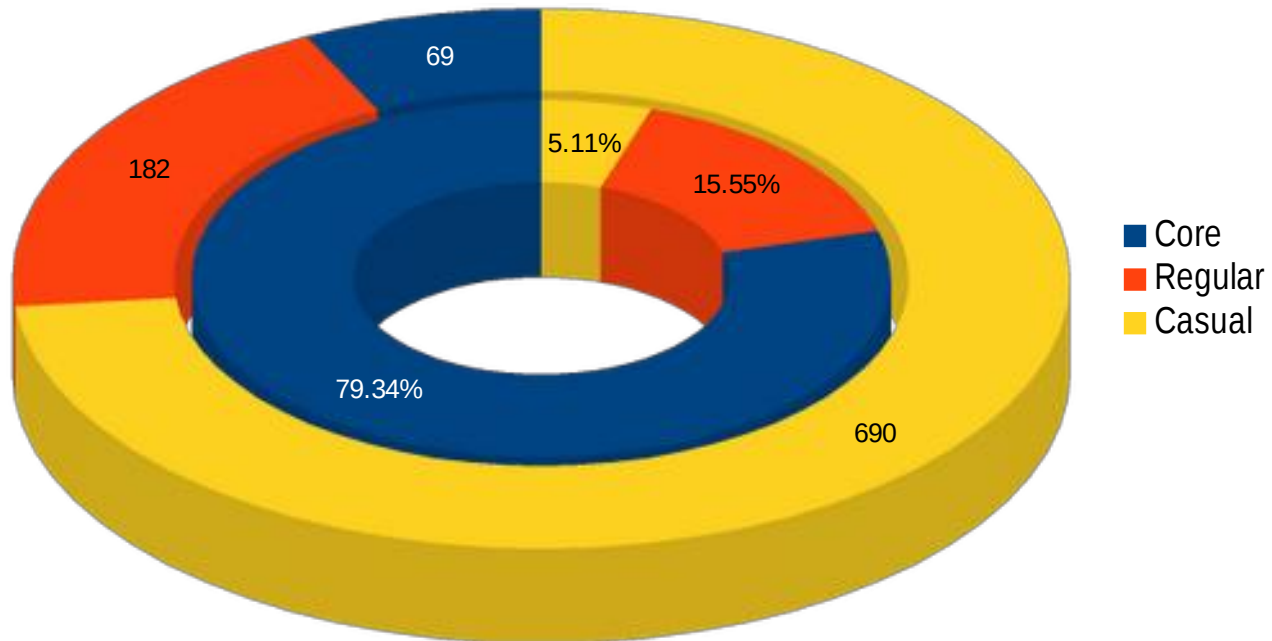


March 2018 – February 2020



# Community by Numbers

**Community by Numbers**  
*People Outside - Contributions Inside*



# Future of OSS 2017

SECTION 4 TECHNOLOGY

#FUTUREFOSS  
#FUTUREOSS

## MOST VALUABLE OPEN SOURCE PROJECT?

openstack  
docker  
Drupal  
LibreOffice  
Linux  
ubuntu  
PostgreSQL



# Ubuntu 18.04 LTS Default Desktops Applications Survey

## Office Suites Category





# LibreOffice User Base Estimate

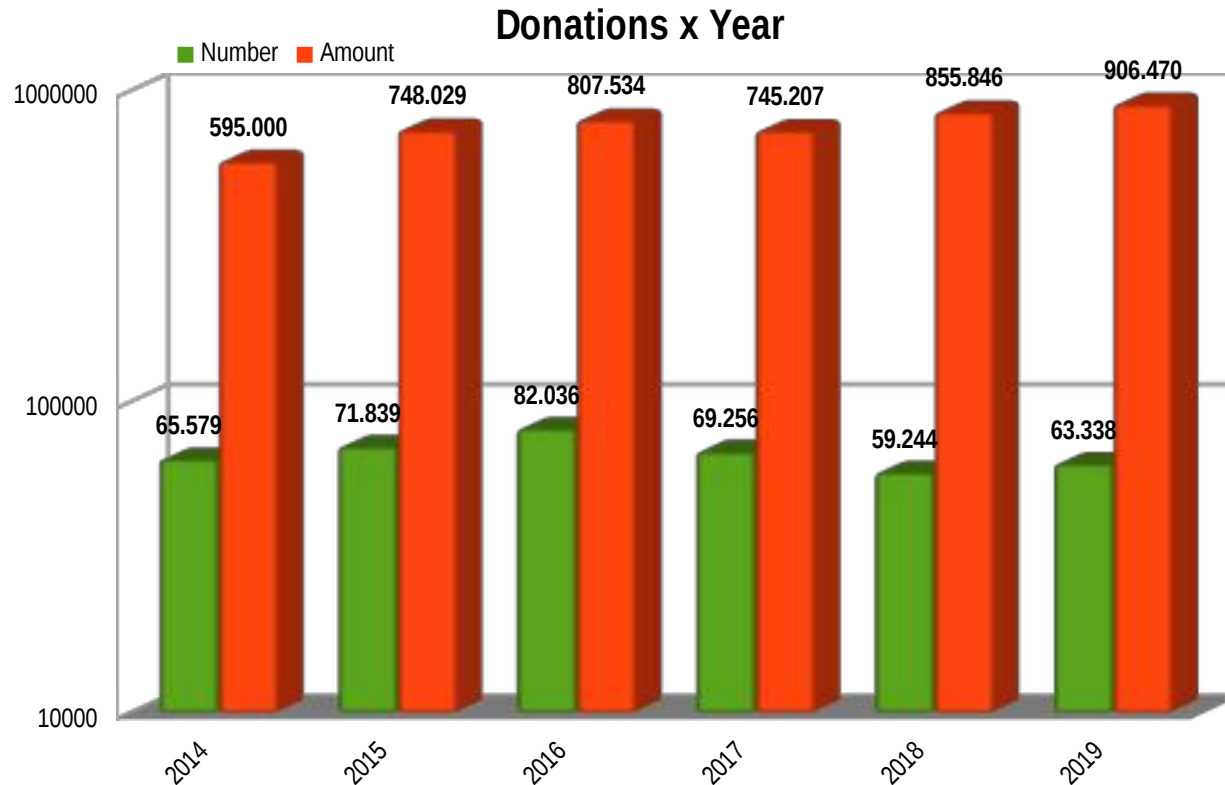
In term of number of users worldwide, we provide the following estimate based on a global number of PC users between 2 and 3 billion (90% Windows, 8% macOS, 2% Linux):

- 100% of desktop Linux users (between 40 and 60 million)
- 10% of desktop Windows users (between 180 and 270 million)
- 10% of desktop macOS users (between 16 and 24 million)

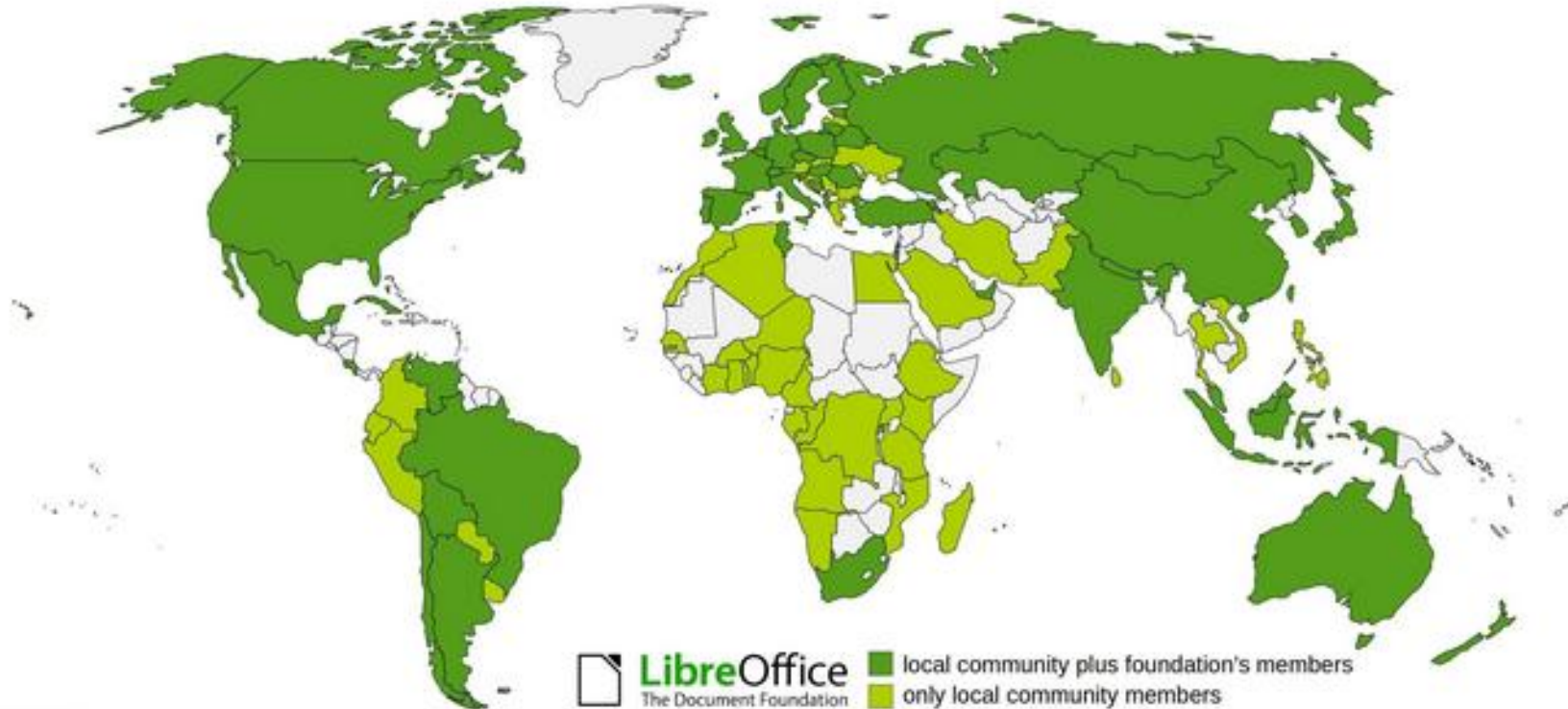
So, we pick the lower figure of 236 million users worldwide, and we further reduce it to 200 million users worldwide to account for some duplications.



# Donation Trends



# LibreOffice Community



**LibreOffice**  
The Document Foundation

■ local community plus foundation's members  
■ only local community members

# Native-Language Communities

- **Localization teams are growing** (Weblate stats)
  - 145 active languages
  - ~119 shipping languages
  - **4605** users
  - 404532 translations made
- **Thanks to so many for their hard work translating !**



# LibOCon Paris 2011



# LibOCon Berlin 2012



# LibOCon Milan 2013



# LibOCon Bern 2014





# LibOCon Aarhus 2015



# LibOCon Brno 2016



# LibOCon Rome 2017



# LibOCon Tirana 2018



# LibOCon Almería 2019



# Albania: Community Meeting



# Japan: LibreOffice Meeting



# Taiwan: LibreOffice Hackfest





# Turkey: GNU/Linux Conference



# Italy: Rome ODF PlugFest 2017



# LibOCon Indonesia 2018



# Nepal: Localization Sprint 2018



# Paraguay: LibOCon LATAM 2019

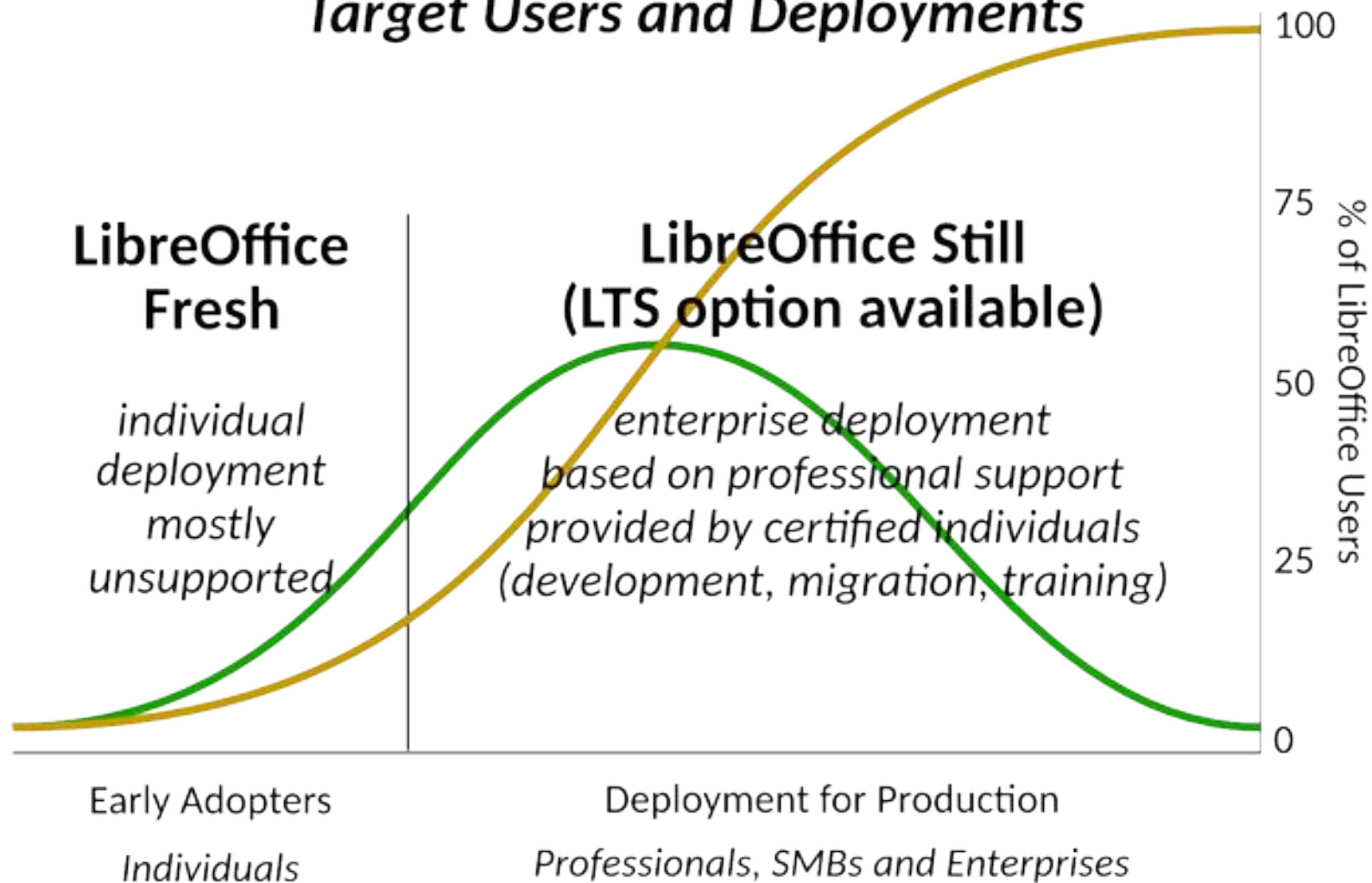


# Tokyo: LibOCon Asia 2019



# LibreOffice Fresh vs Still

## Target Users and Deployments



# Providers of LTS Versions

**CIB**



Collabora Productivity





# Our Dream

**THEN  
YOU WIN.**

MOHANDAS GANDHI



# Thanks

Italo Vignoli  
The Document Foundation  
[italo@libreoffice.org](mailto:italo@libreoffice.org)  
[italo@vignoli.org](mailto:italo@vignoli.org)

