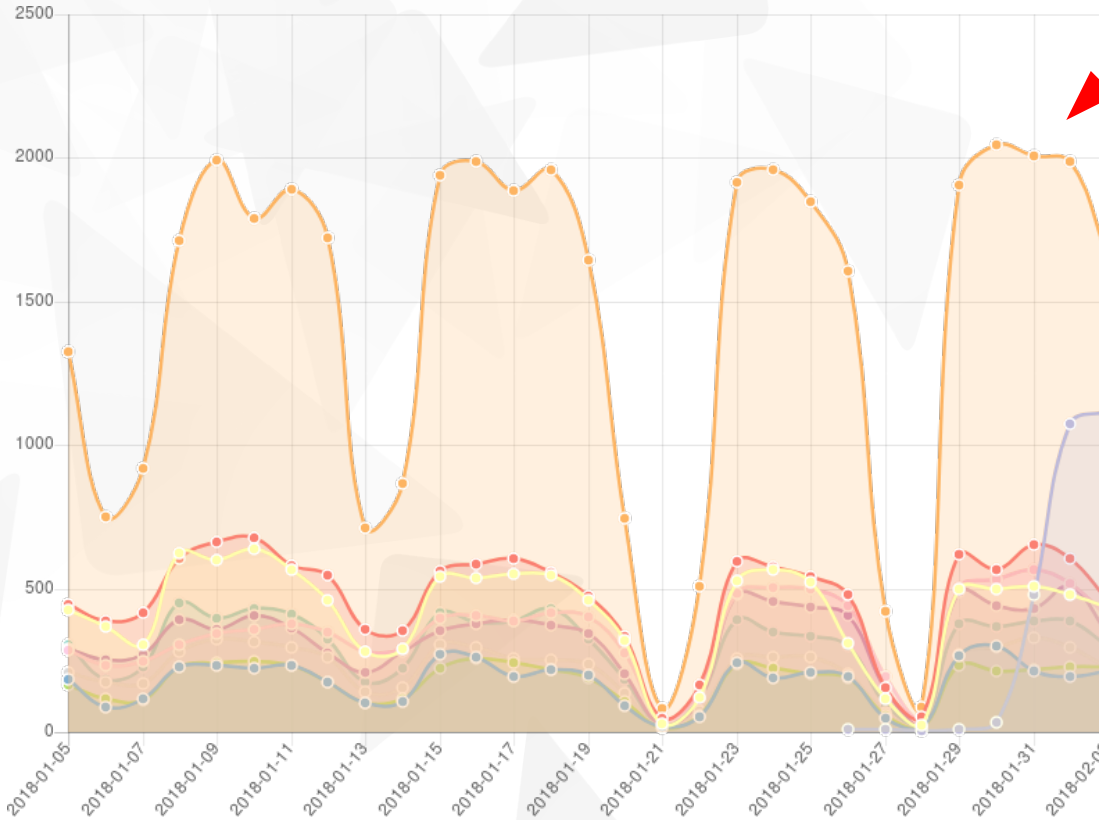




LibreOffice's automatic updater work

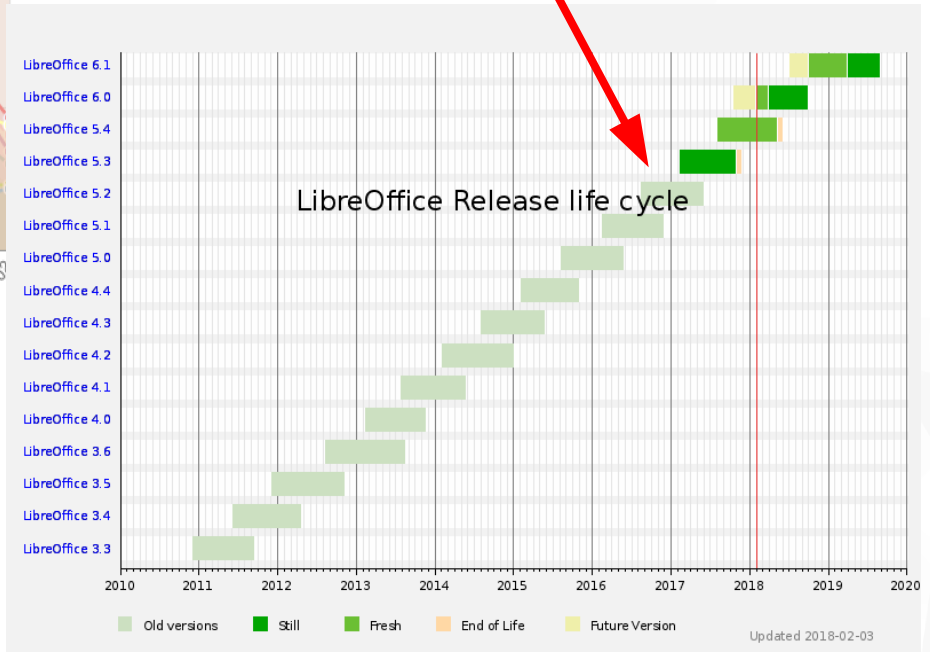
- ▼ Markus Mohrhard
- ▼ 2018-09-28

Motivation

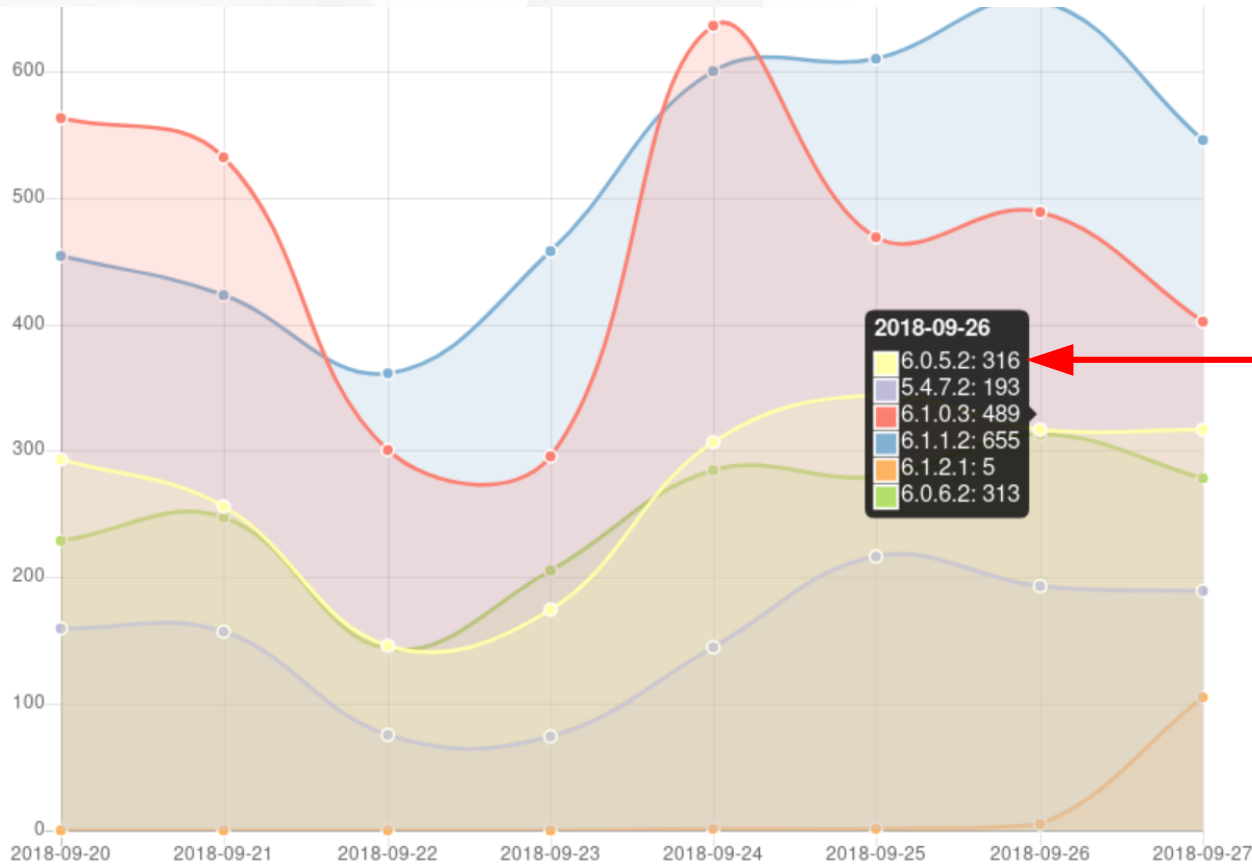


5.2.4.2 still on the top

About 1000 crashes for 5.2.4.2 each day
1.12 million crash reports for 5.2.4.2 in total



Motivation



Can we make sense of these numbers?

Which version is better?

Did we manage to improve quality with each release?

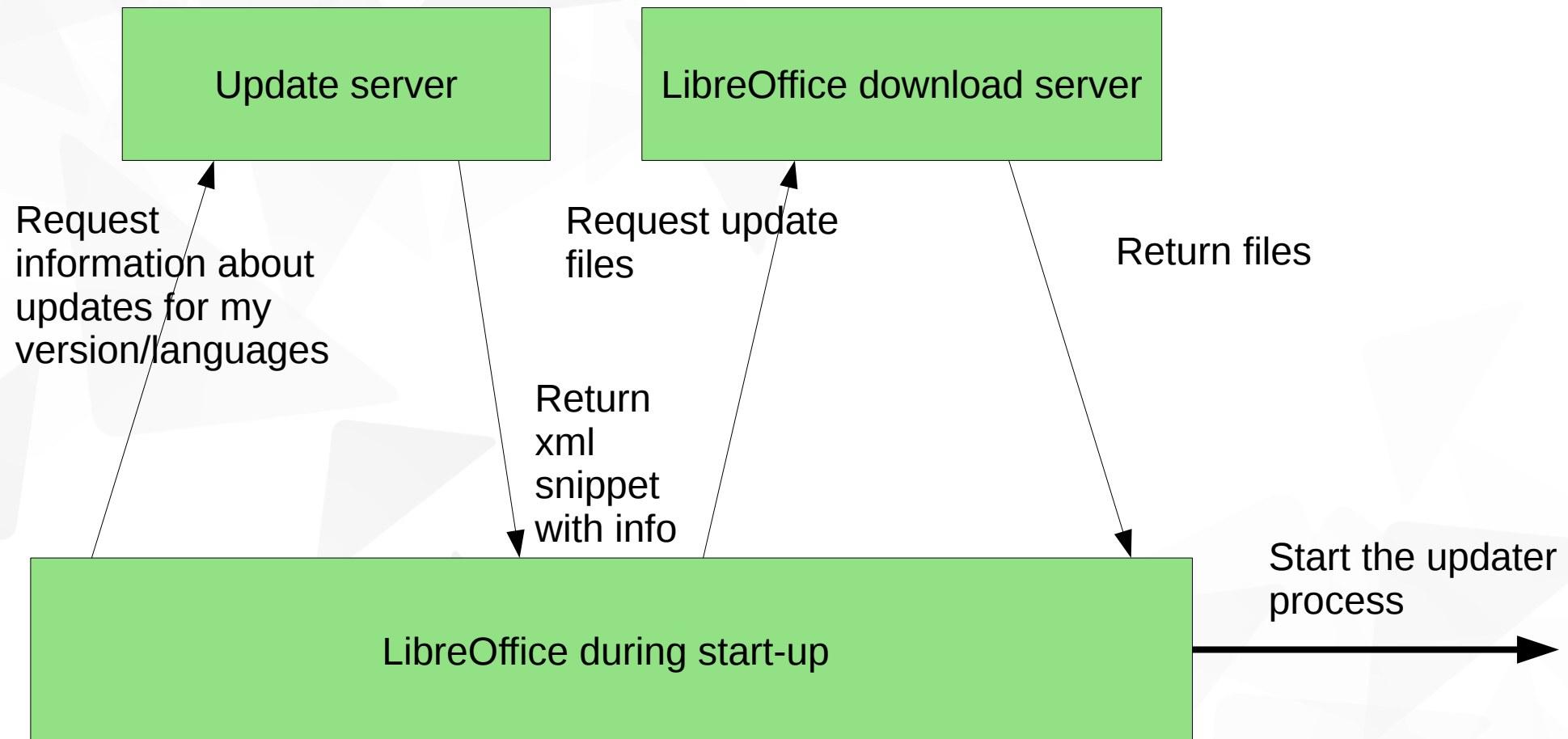
Can we detect a huge spike?

Component overview

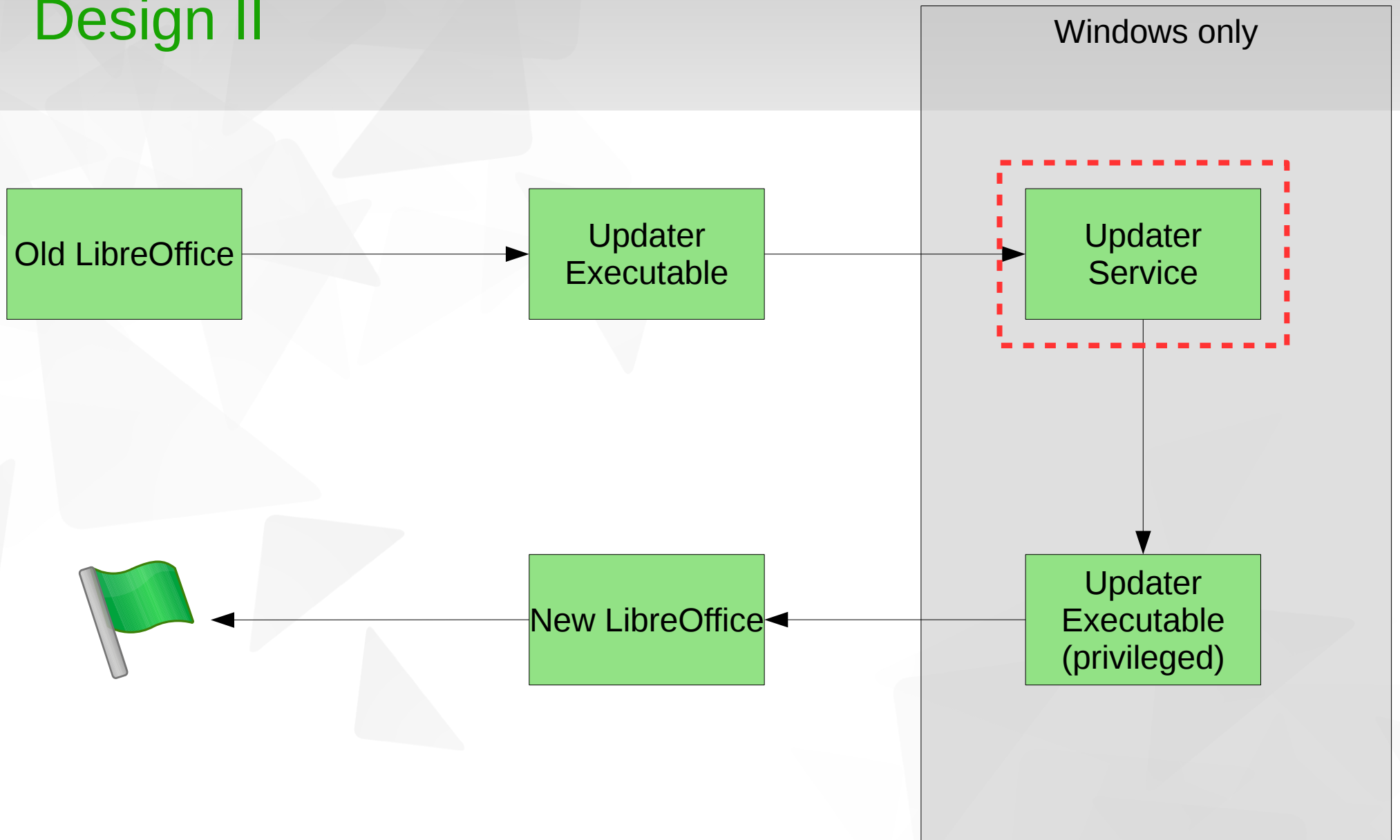
Overview

- ▼ mar based updater service
- ▼ Merged to master from a feature branch
- ▼ Updater is actually an own process
- ▼ Works with daily builds already
 - ▼ Linux done as a jenkins job
 - ▼ Windows done manually on my machine
- ▼ Incremental updates
 - ▼ Currently for daily builds between 1 and 10 MB

Design I – Checking for available updates



Design II



Updater Service

- ▼ System service for automatic updating on Windows
- ▼ Builds and works but not integrated into our installer yet
 - ▼ Missing integration into MSI
 - ▼ Quite a bit of low level Windows work necessary
- ▼ Huge missing piece
 - ▼ High priority

Server

- ▼ Small django app that serves small update snippets
- ▼ Stores hash, size and location of the update files
- ▼ Collects some statistics about versions
- ▼ More work on statistics and stability are necessary
- ▼ <https://github.com/mmohrhard/updater>
- ▼ Running test instance: <http://vm195.documentfoundation.org>

Server response

http://vm195.documentfoundation.org/update/check/1/LibreOfficeDev/d6c4c576ef71f2294ec8eefc6576a797220e6809/Linux_X86_64/daily-master-gandalf

```
url: "http://dev-builds.libreoffice.org/update/daily-master-gandalf/5000b334e99f9c917c57726960fd51a6c2d7f90e/Linux_X86_64/LibreOfficeDev_6.2.0.0.alpha0+_Linux_X86_64_5000b334e99f9c917c57726960fd51a6c2d7f90e_complete_langpack.mar"
hash: "67cceedac25684f9ea4076f8dc07c687937fa59036504e8f8d9a4c0cafe675e080e4034a9f4cb9c0816dbc9c9770be048dc4c53aa3e78db28bc7a5c27f5989f66"
hash_function: "sha512"
size: 19018541
qtz:
url: "http://dev-builds.libreoffice.org/update/daily-master-gandalf/5000b334e99f9c917c57726960fd51a6c2d7f90e/Linux_X86_64/LibreOfficeDev_6.2.0.0.alpha0+_Linux_X86_64_5000b334e99f9c917c57726960fd51a6c2d7f90e_qtz_complete_langpack.mar"
hash: "0e4a8f5054cca4c3105ba1c0b325da9d664836eff2668d31ba9baf71776a4713cbeb0a69070f0fcccdb0a36501e7573d93949b2e4307beba4bfcdf7f8a0b20a4"
hash_function: "sha512"
size: 77661
zh-CN:
url: "http://dev-builds.libreoffice.org/update/daily-master-gandalf/5000b334e99f9c917c57726960fd51a6c2d7f90e/Linux_X86_64/LibreOfficeDev_6.2.0.0.alpha0+_Linux_X86_64_5000b334e99f9c917c57726960fd51a6c2d7f90e_zh-CN_complete_langpack.mar"
hash: "7855a0696fe78b7abb99824fbac0f64f952ac31d6234e53a85accdc593312ffdf3ed08fab23c6d78662677d9437ae7811ac3b39db940537c42098ff5cb77a5d"
hash_function: "sha512"
size: 759990
ar:
url: "http://dev-builds.libreoffice.org/update/daily-master-gandalf/5000b334e99f9c917c57726960fd51a6c2d7f90e/Linux_X86_64/LibreOfficeDev_6.2.0.0.alpha0+_Linux_X86_64_5000b334e99f9c917c57726960fd51a6c2d7f90e_ar_complete_langpack.mar"
hash: "258f573a171fcb23ebee2c85ded4c4b5dc4eb7507aab0aa90a8904e35c273e937fe00e1ae75262105e038489dd7f90f25a17dc71ca33c4b70120341431eebee"
hash_function: "sha512"
size: 2013662
es:
url: "http://dev-builds.libreoffice.org/update/daily-master-gandalf/5000b334e99f9c917c57726960fd51a6c2d7f90e/Linux_X86_64/LibreOfficeDev_6.2.0.0.alpha0+_Linux_X86_64_5000b334e99f9c917c57726960fd51a6c2d7f90e_es_complete_langpack.mar"
hash: "e45d9e09366f26030b1f1e181974cae6677a3c263c04b2671df2af649fd5a265b5f57836e8dd0a10df226009e2c02573186ece503e28e472526708b22aaca5b12"
hash_function: "sha512"
size: 1885610
to: "5000b334e99f9c917c57726960fd51a6c2d7f90e"
see_also: "https://wiki.documentfoundation.org/Development/Updater/SeeAlso"
from: "*"
update:
url: "http://dev-builds.libreoffice.org/update/daily-master-gandalf/5000b334e99f9c917c57726960fd51a6c2d7f90e/Linux_X86_64/LibreOfficeDev_6.2.0.0.alpha0+_Linux_X86_64_5000b334e99f9c917c57726960fd51a6c2d7f90e_complete.mar"
hash: "f24ae8f5742a222c9c03b0502c9ad9fa25fb3a4ee4ed3def7ce73b5ff307da1e8c57891ebd2865faaacb2a0db090923d940ee989b322db131c9c424f7396af67"
hash_function: "sha512"
size: 269136107
```



```
update:
url: "http://dev-builds.libreoffice.org/update/daily-master-gandalf/5000b334e99f9c917c57726960fd51a6c2d7f90e/Linux_X86_64/LibreOfficeDev_6.2.0.0.alpha0+_Linux_X86_64_5000b334e99f9c917c57726960fd51a6c2d7f90e_complete.mar"
hash: "f24ae8f5742a222c9c03b0502c9ad9fa25fb3a4ee4ed3def7ce73b5ff307da1e8c57891ebd2865faaacb2a0db090923d940ee989b322db131c9c424f7396af67"
hash_function: "sha512"
size: 269136107
```

Windows MSI

- ▼ MSI has an own incremental update format – MSP
- ▼ No MSI/MSP support in Mozilla code
- ▼ MSP generation in LibreOffice is a horrible mess
 - ▼ Different way to run the packaging
 - ▼ Configuration for MSP generation really complicated
 - ▼ Part of the LibreOffice build – Why?

libreoffice-msp-generator

- ▼ <https://github.com/mmohrhard/libreoffice-msp-generator>
- ▼ Uses already build MSI files
- ▼ Same config variables as LibreOffice msp build
- ▼ Packaged pcg files
- ▼ MSP files are not perfect yet
 - ▼ More work needed

Automated testing

- ▼ How to make sure that incremental updates produce correct builds?
- ▼ Testing surface explodes
- ▼ Interacts with the system a lot
- ▼ UI testing to the rescue?



Thank you ...

- ▼ ... listening!
- ▼ ... for supporting LibreOffice!



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