The (im)perfect SRU

Why does it take so long?

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Canonical

Stable Release Update

What is an SRU?

The long story:

https://wiki.ubuntu.com/StableReleaseUpdates

We want to fix bugs

Without introducing new ones!

No change in user expected behavior

Don't fix one and break something else
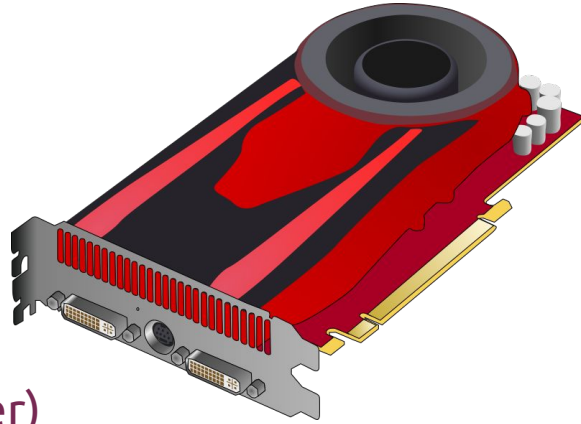
Targeted fix, not version bumps

How severe is it?

We may need new functionality
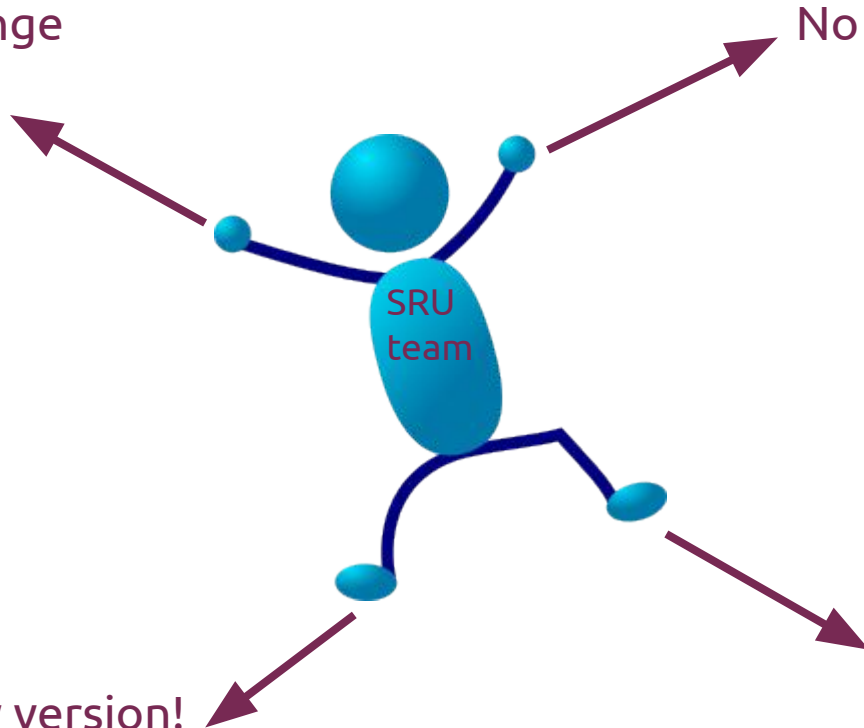
Support for new hardware

Protocol updates (client/server)

Competing requirements

Why did you change this??

No regressions!

SRU team

I *NEED* this new version!

Fix this critical bug!

How the team is organized

How the team is organized

Work in shifts

Day	SRU Team Member (IRC nick)
Monday	Łukasz Zemczak (sil2100)
Tuesday	Chris Halse Rogers (RAOF), Brian Murray (bdmurray)
Wednesday	Robie Basak (rbasak)
Thursday	Andreas Hasenack (ahasenack), Łukasz Zemczak (sil2100 - backup)
Friday	Timo Aaltonen (tjaalton), Steve Langasek (vorlon - backup)

How the team is organized

Queues

Ex.: jammy unapproved

https://launchpad.net/ubuntu/jammy/+queue?queue_state=1

How the team is organized

Trello board

https://trello.com/b/XgBxtrZ9/sru
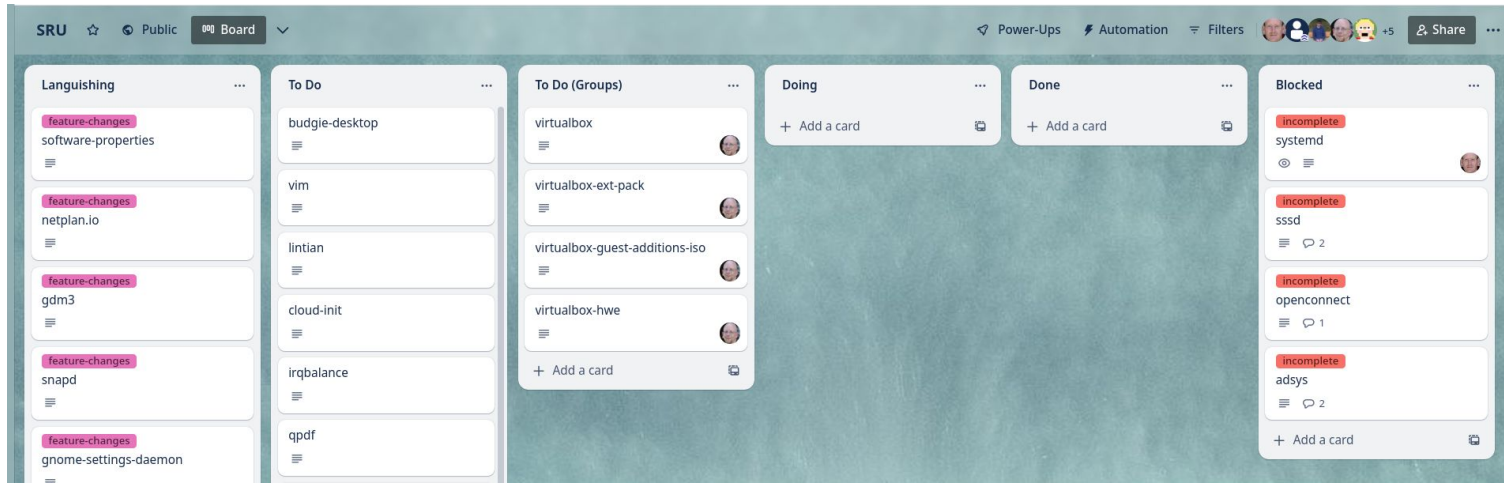
How the team is organized

Pending SRU report

https://ubuntu-archive-team.ubuntu.com/pending-sru.html

lunar

Package	-release	-updates	-proposed (signer, creator)	changelog bugs	days
virtualbox-ext-pack	7.0.6-1		7.0.8-1 (None, team+debian-virtualbox)		185
msmtp	1.8.23-1		1.8.23-1ubuntu0.1 (schopin)	2017759	173
pipewire	0.3.65-3		0.3.65-3ubuntu1 (seb128)	2018316	163
lttng-modules	2.13.8-1		2.13.8-1ubuntu1 (xnox, roxanan)	2017006	163
python-tz	2022.7.1-3		2022.7.1-3ubuntu0.1 (bdrung)	2017999	163
accel-config	3.5.2-1		4.0-2~ubuntu0.23.04 (xnox)	2020769	141
libcupsfilters Regression in autopkgtest for libppd (amd64): test log	2.0~rc1-0ubuntu1	2.0~rc1-0ubuntu1.1	2.0~rc1-0ubuntu1.2 (doko)	2025150	115
v4l2loopback	0.12.7-2ubuntu3		0.12.7-2ubuntu3.1 (bdrung, vicamo-yano)	2025204	107
util-linux Regression in autopkgtest for netplan.io (arm64): test log Regression in autopkgtest for systemd (arm64): test log Regression in autopkgtest for systemd (ppc64el): test log Regression in autopkgtest for systemd (s390x): test log	2.38.1-4ubuntu1		2.38.1-4ubuntu1.1 (mfo, hypothetical-lemon)	2019856	99

Stable Release Update

Stages of an SRU

Stages of an SRU

Bug template
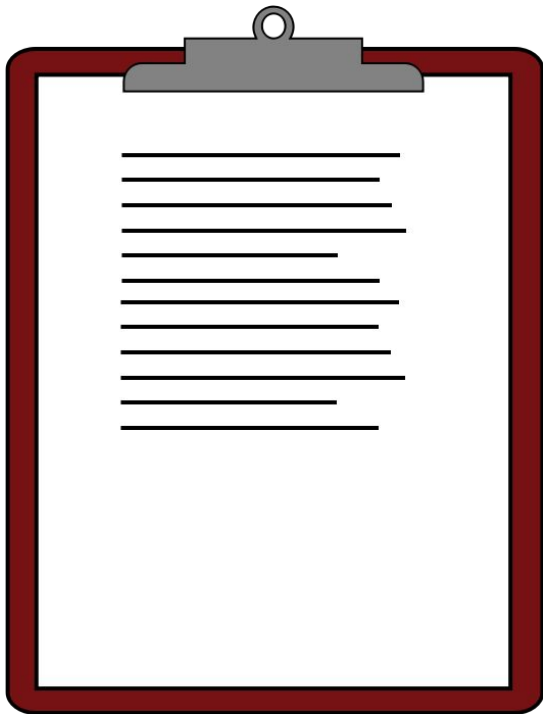
SRU Bug Template

[Impact]

 * An explanation of the effects of the bug on users and

 * justification for backporting the fix to the stable release.

 * In addition, it is helpful, but not required, to include an
   explanation of how the upload fixes this bug.

[Test Plan]

 * detailed instructions how to reproduce the bug

 * these should allow someone who is not familiar with the affected
   package to reproduce the bug and verify that the updated package fixes
   the problem.

 * if other testing is appropriate to perform before landing this update,
   this should also be described here.

[Where problems could occur]

 * Think about what the upload changes in the software. Imagine the change is
   wrong or breaks something else: how would this show up?

 * It is assumed that any SRU candidate patch is well-tested before
   upload and has a low overall risk of regression, but it's important
   to make the effort to think about what ''could'' happen in the
   event of a regression.

 * This must '''never''' be "None" or "Low", or entirely an argument as to why
   your upload is low risk.

 * This both shows the SRU team that the risks have been considered,
   and provides guidance to testers in regression-testing the SRU.

[Other Info]

 * Anything else you think is useful to include
 * Anticipate questions from users, SRU, +1 maintenance, security teams and the Technical Board
 * and address these questions in advance

Stages of an SRU

Upload to unapproved

Stages of an SRU

Review by SRU team

Stages of an SRU

Accept into proposed (or reject, or ask questions)

Hello Bryce, or anyone else affected,

Accepted bind-dyndb-ldap into jammy-proposed. The package will build now and be available at https://launchpad.net/ubuntu/+source/bind-dyndb-ldap/11.9-5ubuntu0.22.04.4 in a few hours, and then in the -proposed repository.

Please help us by testing this new package. See https://wiki.ubuntu.com/Testing/EnableProposed for documentation on how to enable and use -proposed. Your feedback will aid us getting this update out to other Ubuntu users.

If this package fixes the bug for you, please add a comment to this bug, mentioning the version of the package you tested, what testing has been performed on the package and change the tag from verification-needed-jammy to verification-done-jammy. If it does not fix the bug for you, please add a comment stating that, and change the tag to verification-failed-jammy. In either case, without details of your testing we will not be able to proceed.

Further information regarding the verification process can be found at https://wiki.ubuntu.com/QATeam/PerformingSRUVerification . Thank you in advance for helping!
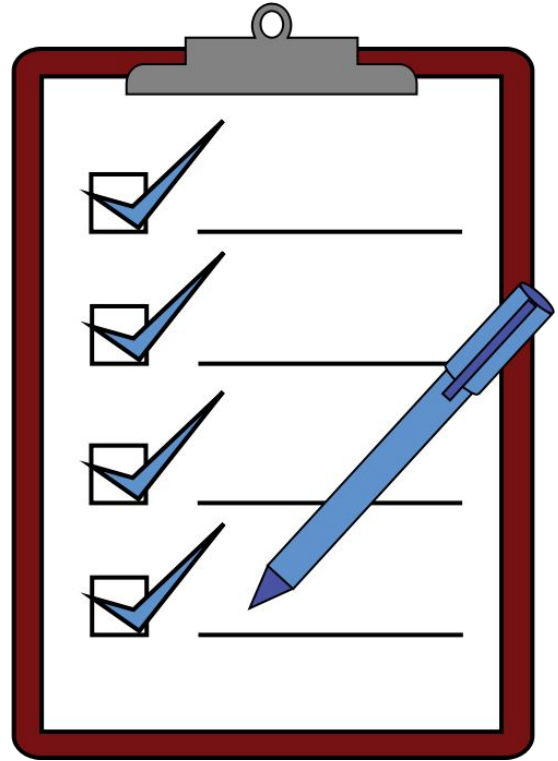
N.B. The updated package will be released to -updates after the bug(s) fixed by this package have been verified and the package has been in -proposed for a minimum of 7 days.
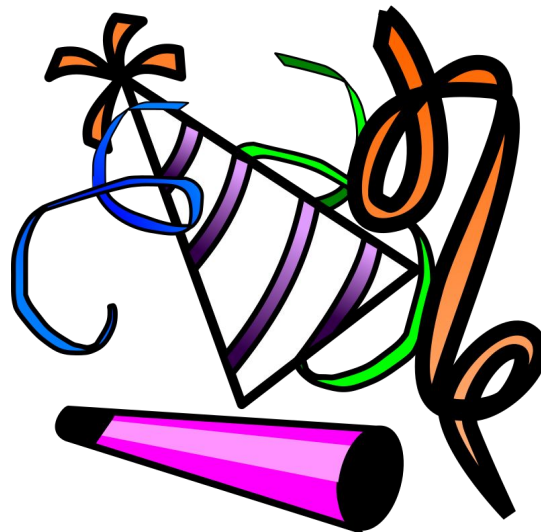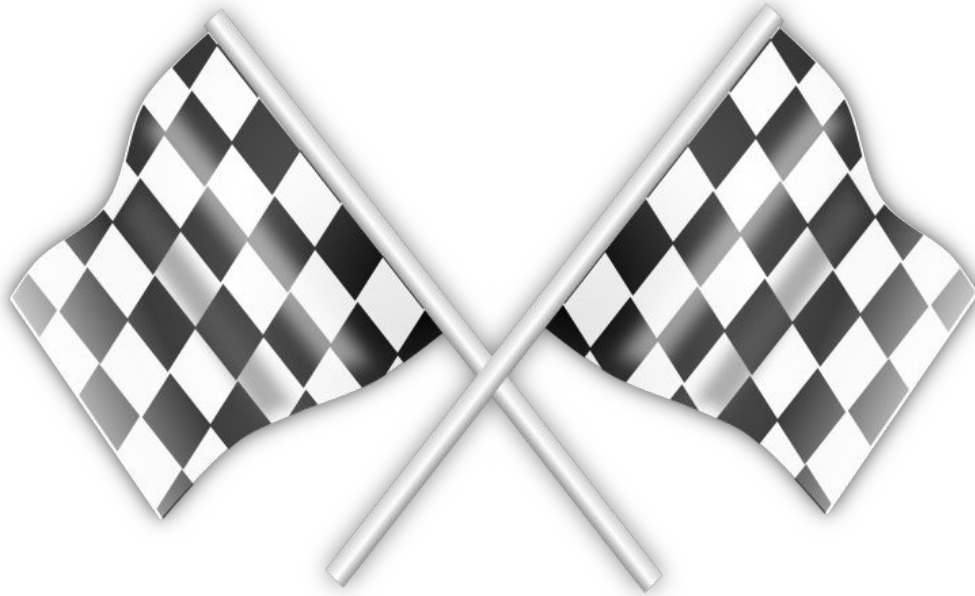
Stages of an SRU

Verification

Always according to the agreed test plan!

Stages of an SRU

Release (and almost done)

Stages of an SRU

Phased updates

https://ubuntu-archive-team.ubuntu.com/phased-updates.html

focal

Package	Version (signer, creator)	Update Percentage	Rate Increase	Errors	Days
gnome-software	3.36.1-0ubuntu0.20.04.1 (superm1, ycheng-twn)	0% of users (was 90%)		dcb236 2210ee 53f200 ab5486 4f3282	362

jammy

Package	Version (signer, creator)	Update Percentage	Rate Increase	Errors	Days
gjs	1.72.4-0ubuntu0.22.04.1 (vorlon, 3v1n0)	0% of users (was 10%)	+3577	6bdc17 9c26e9 5e24ef 5af4de ad86af b9cf68 76fcf4 e7176b d05869 306ce6 98b11b 93a1f1 88c026 c01b19 86f570 2ee1fe 4d3168 c58d86 82fbe9 554884 0afc62 35d5f8 f861bd c4b83d 883378 c031bc 85a597 b671c5 447b7e	72

Stable Release Update

Common issues

Common issues

Weak SRU information

```
[ Impact ]

When run with option -x, <random-app-I-made-up-for-this>
fails to clear screen before running.

[ Test Plan ]

Make sure it works.

[ Where problems could occur ]

Nothing expected, the change is upstream and simple.
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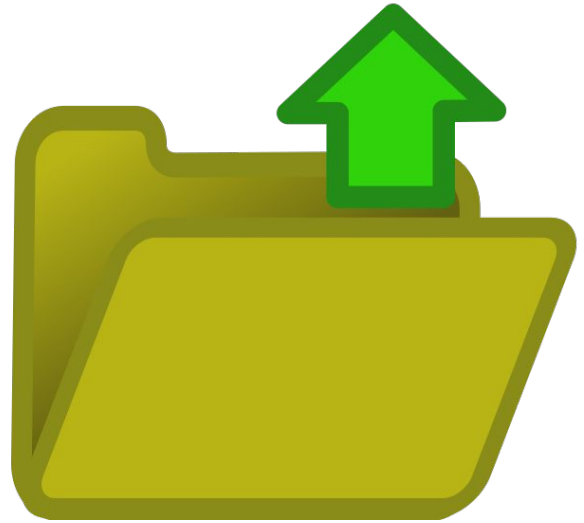# Common issues

Bad upload

Missing bug number

Private bug instead of public

Bad version

d/changelog not matching actual changes

.changes file does not include previous upload

Missing upload for an affected release

Common issues

Weak or incomplete verification

Did not follow agreed-upon test plan

Vague: "it works now"

Verified Ubuntu release X, flipped tags for all releases

Verified just one Ubuntu release, not the others

Tested with a PPA package

Which version of the package was used

Common issues

Many flagged in the report

lunar

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Common issues

Not fully verified

phpmyadmin	4:5.1.1+dfsg1-5ubuntu1	4:5.1.1+dfsg1-5ubuntu1.1 (athos-ribeiro, williamdes)	2016015 2016016 2016018

Common issues

Missing bug updates

👤 Chris Halse Rogers (raof) wrote on 2023-08-09:   #12

Is someone going to do a Lunar upload for this? I don't see how you can have done a Lunar verification, as there isn't a package in lunar-proposed to test!

👤 Andreas Hasenack (ahasenack) wrote on 2023-08-17:   🗒️ ⛔ #13

Still no lunar upload. This is blocking the release to jammy.

                                                                                                                          Hide

👤 Launchpad Janitor (janitor) wrote on 2023-08-26:   #14

Status changed to 'Confirmed' because the bug affects multiple users.

Changed in rtl8812au (Ubuntu Lunar):
    status:New → Confirmed

👤 Andreas Hasenack (ahasenack) wrote on 2023-09-21:   🗒️ ⛔ #15

Still no lunar upload. This is blocking the release to jammy.

Stable Release Update

Tips

Tips for a great SRU

Bug count

Use DEP3 headers in patches

https://dep-team.pages.debian.net/deps/dep3/

```
Origin: upstream, https://github.com/SSSD/sssd/commit/85c60e525e8e7d4c75
Bug: https://github.com/SSSD/sssd/issues/6347
Bug-Ubuntu: https://bugs.launchpad.net/ubuntu/+source/sssd/+bug/1989356
Bug-Debian: https://bugs.debian.org/cgi-bin/bugreport.cgi?bug=1001377
```
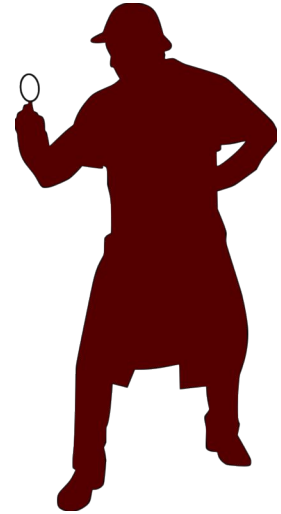
Document all changes in the changelog

Document what was changed,
and all that was changed

Tips for a great SRU

Proper impact and regression assessment

Tips for a great SRU

Have a great test plan

```
[ Test Plan ]

 * detailed instructions how to reproduce the bug

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   the problem.

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```
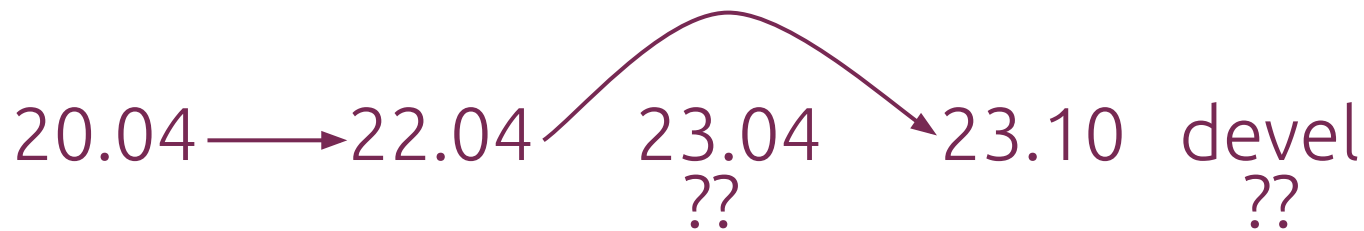
Tips for a great SRU

Unambiguous verification

Tips for a great SRU

Don't forget other Ubuntu releases

20.04 ⟶ 22.04   23.04   23.10   devel
                  ??   ??

Tips for a great SRU

SRU Exceptions don't mean a ~~blank check~~

unlimited credit card

Tips for a great SRU

Great SRUs here!

All the information you need and more!

Closing remarks