

Introduction to Ubuntu Development

In this session you will:

- Learn how to package a simple application.
- Get to know about the various processes in Ubuntu Development.
- Learn how Ubuntu developers collaborate with Debian.

Tutorial: Packaging an application

Ubuntu is based on Debian

- Yes, that's true. Ubuntu is actually based on another distribution called Debian.
- Hence, Ubuntu developers need to co-operate with Debian during the development of the distribution.

Collaborating with Debian

- Every new package should go into Debian, not Ubuntu.
- There are a few exceptions for the above point, but explaining those is outside the scope of this session
- Once a new package gets into Debian, it gets synced automatically into Ubuntu. This is known as package auto-sync.

What about Ubuntu changes?

- Sometimes, packages already in Debian need some changes to make them run on Ubuntu.
- In such a case, the changes are made in the package *in Ubuntu*.
- However, this means that the package won't get auto-synced when a newer version of it is uploaded to Debian.

Merging from Debian

- If a newer version of a package is uploaded to Debian and that same package already has some Ubuntu changes, then the package will not be auto-synced.
- In such a case, a developer needs to manually merge the Debian and Ubuntu changes, test the result and upload it to Ubuntu.
- This process is outlined in detail on <https://wiki.ubuntu.com/UbuntuDevelopment/Merging>.

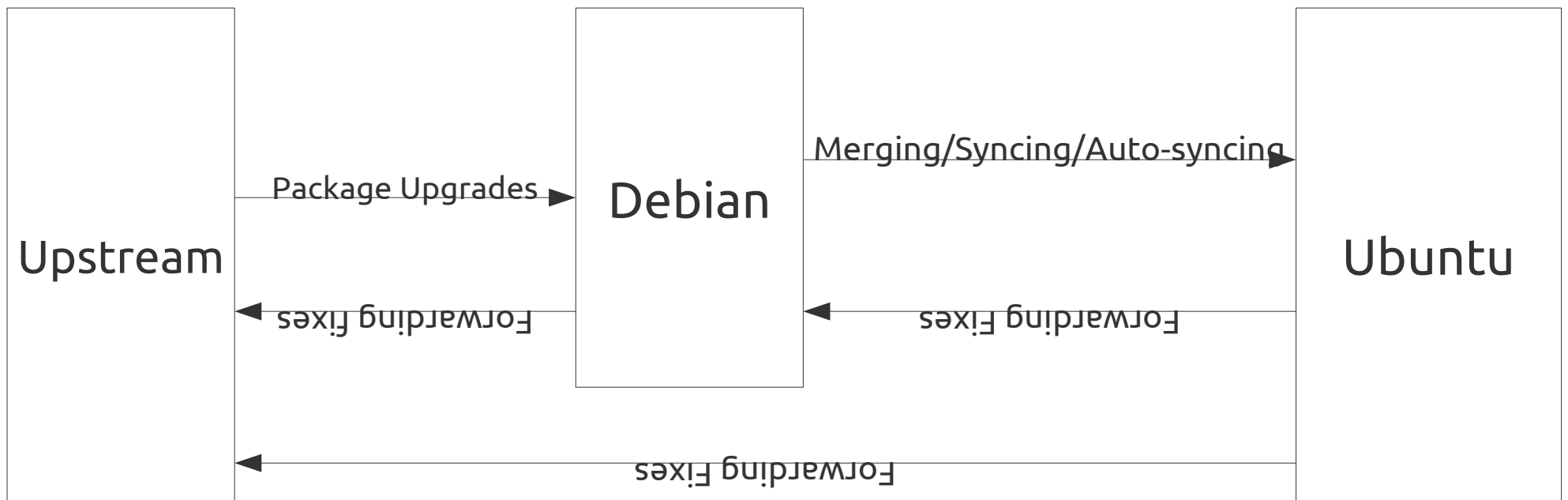
What about if no changes remain?

- If it does happen that the Ubuntu changes get accepted in Debian, and after merging, no Ubuntu changes remain, then the package can be synced.
- Packages synced this way will be auto-synced in the future if a new version comes in Debian.
- This procedure is outlined in more detail on <https://wiki.ubuntu.com/SyncRequestProcess> .

Bugs... bugs... bugs...

- People new to the development processes might consider fixing bugs a task for the original application developers (aka upstream developers) and not a task for Debian/Ubuntu developers.
- However, in some cases bugs need to be fixed at the distro level. For this, we fix the bugs directly in Ubuntu.
- At the same time, we need to check if the fix is needed in Debian and/or Upstream, and forward the change to the relevant place as well.
- This procedure is outlined in detail on <https://wiki.ubuntu.com/Bugs/HowToFix> .

A graph on the processes of development



Need help? We're here!

- Never hesitate to ask for help. Ask in the spirit of Ubuntu!
- You can ask for help on the [ubuntu-devel-discuss mailing list](#) or on the #ubuntu-devel , #ubuntu-motu or #ubuntu-packaging IRC channels on irc.freenode.net .