Debian GIS
Introducing a Debian Pure Blend for Geographic Information Systems

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1 The Blends concept
2 The Debian GIS team
3 Selected packages

Debian
GIS Applications in Debian

Debian Med
DebiChem
Debian Edu
Debian Science
Debian Jr
Debian Multimedia
Debian GIS

The name

- "Debian Internal Projects" became
- "Custom Debian Distributions" → total failure
- DebConf 2008 "Debian Internal Solutions"???
- People popped up for the only purpose of bikeshedding
- Vote ended up in "Debian Pure Blends" in short "Blends"
Similar structures in other distributions

- Fedora Geo Spin
- OpenSuSE ???
- Ubuntu GIS
- XUbuntu derivative: OsGeo-Live
- FreeBSD Ports: Geography

→ Debian GIS working together with Ubuntu GIS + OsGeoLive

Purpose of Blends

- Making a certain topic “hot”
- Attract users of the specific working field interested in Debian
- Teach users & developers how to work together with Debian (via Blend team)

A Blend is a way to advertise Debian in a specific work field

Why GIS in a Debian Blend?

- Following the example of Debian Med and Debian Science
- Specialised software has a comparatively small user base
- Complex packaging tasks are profiting from developer team
- Pushes Debian into a field of dominant proprietary software

Turn Debian into the distribution of choice for GIS applications

Team

Waking up in the morning and realising that somebody else has solved your problem from yesterday

Available Blends tools and formalisms

- General creation of metapackages based on tasks files (blends-dev)
- Web sentinel tasks
- Web sentinel bugs
- Web sentinel "thermometer" designed for Debian / Ubuntu GIS
- Handling of scientific citations
- Making use of UDD for several purposes (web sentinel, citations, prospective packages in VCS, upload + bugs statistics)
- Debian GIS policy
- Sponsoring of Blends
- Suggested: Mentoring of the Month

Top 10 people discussing on Debian GIS mailing list

![Graph of top 10 people discussing on Debian GIS mailing list]
Why two packaging teams

- packaging GRASS was historic root of Debian GIS
- that’s why the pkg-grass name came up first
- since there are people who consider OSM different enough to create a separate packaging team pkg-osm was started
- turned out that there is quite some common set and splitting man-power does not make sense
- packages maintained by pkg-osm will be merged into pkg-grass repository that remains the single Debian GIS repository

Cooperation UbuntuGIS & OSGeo

- OSGeoLive creates live medium based on UbuntuGIS
- since Ubuntu is based on Debian it makes sense to work together
- currently there is some effort to consolidate the packaging in pkg-grass repository (on alioth.debian.org)
- work together, do not reinvent the wheel
- working on this is one goal of a GSoC project
GRASS

- Geographic Resources Analysis Support System
- The free geographic information system
- Geospatial data management and analysis, image processing, graphics/map production, spatial modeling, and visualization
- Used in academic and commercial settings around the world, as well as by many government agencies and environmental consulting companies
- Steep learning curve

QGIS

- Quantum GIS
- Manages, analyzes, and displays databases of geographic information
- Shape file viewing and editing
- Spatial data storage with PostgreSQL/PostGIS (also packaged)
- Map composition
- Display of various georeferenced raster and Digital Elevation Model formats

Excursus: Do-O-cracy

- Several years ago on an LSM (RMLL) event I was asked: “Will Debian support Quantum GIS?”
- Sorry that’s the wrong question.
- Debian is a Do-O-cracy
  - The doer decides what will be done
- So if you, yes you, will package qgis in Debian than Debian will support qgis
- Finally such a “you” decided to do the work
- But if you … again I mean you have some interesting application in mind which should be in Debian according to your opinion it is up to you to start the work …
- … and the Debian GIS team will help you to finalise your work

JOSM

- (probably most used) editor for OpenStreetMap data
- There are users who swear that JOSM should be used from SVN and packaging would be useless
- There is a package anyway for those who disagree
- → There is a complete OSM workflow packaged by Debian GIS

QLandkarteGT

- GPS mapping (GeoTiff and vector) and GPS management
- Drivers for Garmin devices are in qlandkartegt-garmin package
- Testing selfmade Garmin maps
- Frontend to the GDAL tools
- Straightforward interface especially suited for non-scientific users

Various OSM server tools (random examples)

- Tilecache web map tile caching system
- Tilelite lightweight Mapnik tile-server
- Tilestache map tiles caching system
- Libjs-openlayers JavaScript library for displaying map data in web browsers
- Osmjs osmium-based Javascript framework for OSM data
- Libjs-leaflet JavaScript library for mobile-friendly interactive maps
## Summary

- various GIS applications packaged for Debian
- maintainers doing a high quality job in packaging
- unfortunately lacking publicity (via talks like this etc.)
- Blends strategie might enhance visibility
- enhance teamwork (pkg-grass + pkg-osm)
- find new team members to enlarge team
- common sprints (developer meetings)

→ Do good things and talk about it

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This talk is available at
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