### TDebs

#### Neil Williams

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### **TDebs**

A guide to the Draft TDeb Specification.

Neil Williams

February 10, 2009

# Introduction

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Translation packages contain all localisation data for one source package and are designed to help solve several problems in Debian:

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 Translation updates should not require a source rebuild, either by the maintainer or as an NMU.

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Translation packages contain all localisation data for one source package and are designed to help solve several problems in Debian.

- Translation updates should not require a source rebuild, either by the maintainer or as an NMU.
- Localisation data should not be distributed in architecture dependent packages.
- Translators should have a common interface for getting updates into Debian (possibly with automated TDeb generation after i18n team review).

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TDebs have been debated and discussed for several years with various methods proposed. The Draft TDeb Specification borrows from established methods from the embedded world.

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- 2008 Emdebian implements modified TDebs with extra features for embedded usage.

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- 2008 Debian i18n/ftpmaster meeting in Extremadura prepares the Draft TDeb Specification.
- 2008 Emdebian implements modified TDebs with extra features for embedded usage.
- 2009 Lenny release allows work to start on preparing the Debian toolset to work with the Draft TDeb Specification.

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 The binary package format is a variation of the deb binary package format. It has the same structure as deb, but the (single) data member is replaced by bzip2-compressed members for each LOCALE\_ROOT supported.

 The members following the control.tar.bz2 are named t.\${LOCALE\_ROOT}.tar.bz2

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- e.g. Locale: pt\_BR Locale Root: pt
- Emdebian currently implements 98 locale roots.
- Future development can support isolating individual locales from a set of packages without installing unsupported localisation data.

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- Isolate changes to translations from the rest of the source package
- No changes will be allowed in the package binaries or untranslated content.
- Uploads by Debian maintainers are assumed to be t0.
- During the transition to TDebs, +t1 uploads will be able to close [i18n] bugs assigned to the source package. After Squeeze, i18.debian.org will take over translation tracking.

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There is room for further discussion about whether and how much untranslated content can or should be in a TDeb. Generally, a TDeb will (eventually) contain:

 Translations from upstream -/usr/share/locale/\*/LC\_MESSAGES/\*.mo

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- Translations from upstream -/usr/share/locale/\*/LC\_MESSAGES/\*.mo
- Other localisation files from upstream -/usr/share/locale/\*/LC\_\*/\*

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- Translations from upstream -/usr/share/locale/\*/LC\_MESSAGES/\*.mo
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- Packages with large amounts of translated documentation and debconf templates would create two tdebs, one minimal tdeb for debconf and one for the rest.

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- Translations from upstream -/usr/share/locale/\*/LC\_MESSAGES/\*.mo
- Other localisation files from upstream -/usr/share/locale/\*/LC\_\*/\*
- Debconf templates file
- Translated content, including translated manpages, translated documentation
- Packages with large amounts of translated documentation and debconf templates would create two tdebs, one minimal tdeb for debconf and one for the rest.
- Not the config or other related scripts. The regular deb will need to contain a untranslated copy of the templates file, too.

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 LINGUAS is an upstream file (often implemented as a variable within configure.ac or configure.in). Changes lead to a source rebuild.

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- LINGUAS is an upstream file (often implemented as a variable within configure.ac or configure.in). Changes lead to a source rebuild.
- TDeb generation avoids LINGUAS and processes all .po files in all po-?\*/ directories. Packages will no longer be able to have unactivated or unused translations.

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- Current code for generating TDebs needs to be extended to cope with non-gettext translations, where possible.

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- Current code for generating TDebs needs to be extended to cope with non-gettext translations, where possible.
- Translated packages do not need to make changes to generate TDebs until after the release of Squeeze but splitting I10n data into separate Arch: all .deb packages can be done beforehand.

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- Archive and tools support
- tdeb binary file definition (ratification and review)

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- apt and aptitude support for pulling in and removing tdebs (ensure TDeb is accessible to apt-extracttemplates).

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- ullet Convert debconf translation into the first TDebs (Squeeze + 1)
- dpkg class support (make it easier to selectively install translations for specific locale roots).

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- ullet Convert debconf translation into the first TDebs (Squeeze + 1)
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   Packages using non-gettext mechanisms include OOo, mozilla, Qt or Java properties, menus, desktop.)

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- Convert native packages with program translations to using TDebs (Squeeze + 1 or possibly later)
- Convert non-native packages with Debian maintainers who are also the upstream.
- Convert non-gettext packages and non-native packages where the Debian maintainer is not part of the upstream. (Squeeze +2?)

Modifications

Maintainers will need to make a variety of changes to support TDebs:

- Replaces Add the recommended \$src-tdeb package name with Replaces: \$binaries (<< \$srcversion) where \$srcversion is a fixed string for the version prior to TDebs
- e.g. Replaces: apt (<< 0.7.19), apt-utils (<< 0.7.19)

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- Remove any lines in debian/rules that handle translated content

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- e.g. Replaces: apt (<< 0.7.19), apt-utils (<< 0.7.19)
- Remove translated content from all \*.install files in debian/
- Remove any lines in debian/rules that handle translated content
- Ensure that dh\_gentdeb is called in debian/rules (CDBS will be patched to implement this support automatically).

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Thanks

http://www.emdebian.org/

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