meta-debian
Extension to build Debian-based embedded system

What is meta-debian?
meta-debian is a set of recipes (metadata) for the poky build system, which allows cross-building Linux images using Debian source packages. By enabling meta-debian, poky fetches required sources from Debian source repository and LTSI kernel repository. meta-debian is independent of OpenEmbedded-core recipes, so OE-Core recipes are still available after meta-debian is enabled. meta-debian is mainly intended to be used for embedded products which needs long-term support.

Purpose
The purpose is to provide the following things
• Stability and long-term support
• Wide embedded CPU support
• Fully customizable embedded Linux

Development policies
meta-debian recipes follow Debian’s build rules by default, but sometimes customize them for embedded systems if necessary (e.g. remove dependencies). Also they re-use essential patches from OE-Core to support cross-building.

Quick start
Setup build tools

- `$ git clone git://git.yoctoproject.org/poky.git`
- `$ cd poky`
- `$ git checkout daisy`
- `$ git clone https://github.com/meta-debian/meta-debian.git`
- `$ cd meta-debian`
- `$ git checkout daisy`

- `$ export TEMPLATECONF=meta-debian/conf`
- `$ source /path/to/poky/oe-init-build-env`
- `$ bitbake core-image-minimal`

Build tiny Linux image

- `$ runemu gemux86 nographic Y bootparams="init=/init root=/dev/sda"`

Run tiny Linux image on QEMU

See README in meta-debian for more details.

Current state and future goals

<table>
<thead>
<tr>
<th></th>
<th>Current</th>
<th>Future (stable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>poky version</td>
<td>1.6 daisy</td>
<td>(the latest)</td>
</tr>
<tr>
<td>Debian version</td>
<td>8.0 jessie</td>
<td>8.0 jessie</td>
</tr>
<tr>
<td>Kernel</td>
<td>LTSI</td>
<td>LTSI, RT</td>
</tr>
<tr>
<td>Architectures</td>
<td>x86, ARM, PowerPC</td>
<td>x86, ARM, PowerPC</td>
</tr>
<tr>
<td>BSPs</td>
<td>4 (QEMU)</td>
<td>over 10</td>
</tr>
<tr>
<td>Packages</td>
<td>80</td>
<td>over 200</td>
</tr>
</tbody>
</table>

Contact us
Please send us your feedback. We would like to know about the embedded Linux features that you need and reflect them into our framework.

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