



# Working with design

How to build Yocto Project GUIs  
without dying in the process

Belén Barros Pena - July 2015

Branch: master ▾

Layers

Recipes

Machines

Search layers

Filter layers ▾

Layer name	Description	Type	Repository
<a href="#">meta-oe</a>	Additional shared OE metadata	Base	git://git.openembedded.org/meta-openembedded
<a href="#">openembedded-core</a>	Core metadata	Base	git://git.openembedded.org/openembedded-core
<a href="#">e100-bsp</a>	Ettus E1XX series BSP	Machine (BSP)	git://github.com/EttusResearch/meta-ettus.git
<a href="#">e300-bsp</a>	Ettus E3XX Series BSP	Machine (BSP)	https://github.com/EttusResearch/meta-ettus.git
<a href="#">meta-aarch64</a>	AArch64 (64-bit ARM) architecture support	Machine (BSP)	git://git.linaro.org/openembedded/meta-linaro.git
<a href="#">meta-acer</a>	Acer machines support	Machine (BSP)	git://github.com/shr-distribution/meta-smartphone.git
<a href="#">meta-altera</a>	Altera SoC BSP layer	Machine (BSP)	https://github.com/kraj/meta-altera
<a href="#">meta-amd</a>	AMD board support common layer (official)	Machine (BSP)	git://git.yoctoproject.org/meta-amd
<a href="#">meta-asus</a>	Asus machines support	Machine (BSP)	git://github.com/shr-distribution/meta-smartphone.git
<a href="#">meta-baldeagle</a>	AMD Bald Eagle platform BSP	Machine (BSP)	http://git.yoctoproject.org/cgit/cgit.cgi/meta-amd/
<a href="#">meta-beagleboard</a>	Support for beagleboard.org devices	Machine (BSP)	git://github.com/beagleboard/meta-beagleboard.git

1.9 M2

**23%** UpdatedUp-to-date: **584**Not updated: **101**Can't be updated: **10**Unknown: **33**[Export recipe list](#)[Recipes upstream status](#)[Maintainer statistics](#)

728 recipes

Upstream status: **All**

and

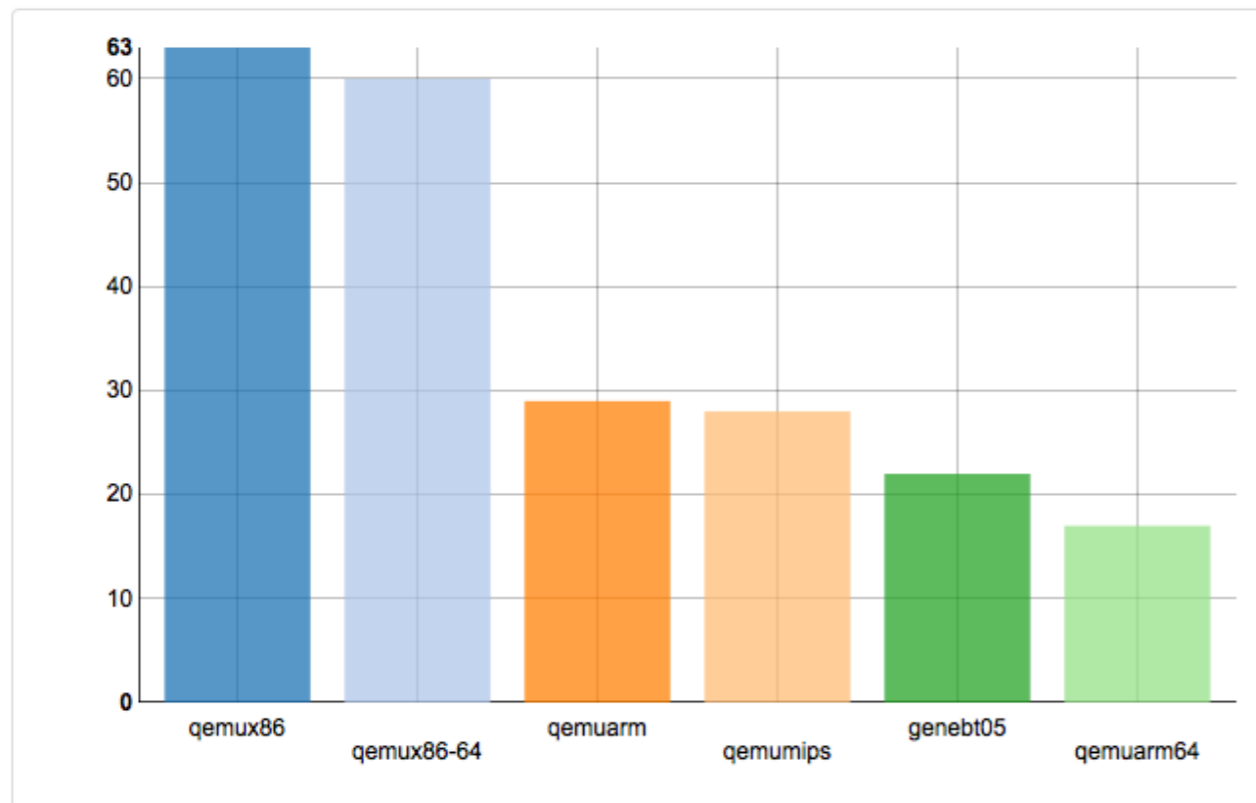
Maintainer: **All**

Recipe	Version	Upstream version	Upstream status	Last Updated	Maintainer	Summary
<a href="#">acl</a>	2.2.52	2.2.52	Up-to-date	Up-to-date	Chen Qi	Utilities for managing POSIX Access Control Lists
<a href="#">acpid</a>	2.0.23	2.0.23	Up-to-date	Up-to-date	Aníbal Limón	A daemon for delivering ACPI events
<a href="#">adt-installer</a>	0.2.0	0.2.0	Up-to-date	Up-to-date	Jessica Zhang	Application Development Toolkit
<a href="#">alsa-lib</a>	1.0.29	1.0.29	Up-to-date	Up-to-date	Tanu Kaskinen	ALSA sound library
<a href="#">alsa-plugins</a>	1.0.29	1.0.29	Up-to-date	Up-to-date	Tanu Kaskinen	
<a href="#">alsa-state</a>	0.2.0	0.2.0	Up-to-date	Up-to-date	Tanu Kaskinen	Alsa scenario files to enable alsa state restoration
<a href="#">alsa-tools</a>	1.0.29	1.0.29	Up-to-date	Up-to-date	Tanu Kaskinen	Advanced tools for certain ALSA sound card drivers
<a href="#">alsa-utils</a>	1.0.29	1.0.29	Up-to-date	Up-to-date	Tanu Kaskinen	ALSA sound utilities
<a href="#">alsa-utils-scripts</a>	1.0.29	1.0.29	Up-to-date	Up-to-date	Tanu Kaskinen	Shell scripts that show help info and create ALSA configuration files
<a href="#">apmd</a>	3.2.2-14	3.2.2	Unknown	2014-03-02	Cristian Iorga	Utilities for Advanced Power Management
<a href="#">apr</a>	1.5.2	1.5.2	Up-to-date	Up-to-date	Hongxu Jia	Apache Portable Runtime (APR) library
<a href="#">apr-util</a>	1.5.4	1.5.4	Up-to-date	Up-to-date	Hongxu Jia	Apache Portable Runtime (APR) companion library
<a href="#">apt</a>	1.0.9.9	1.0.9.9	Up-to-date	Up-to-date	Aníbal Limón	Advanced front-end for dpkg
<a href="#">aspell</a>	0.60.6.1	0.60.6.1	Up-to-date	Up-to-date	Alejandro Hernandez	GNU Aspell spell-checker
<a href="#">at</a>	3.1.16	3.1.16	Up-to-date	Up-to-date	Chen Qi	Delayed job execution and batch processing

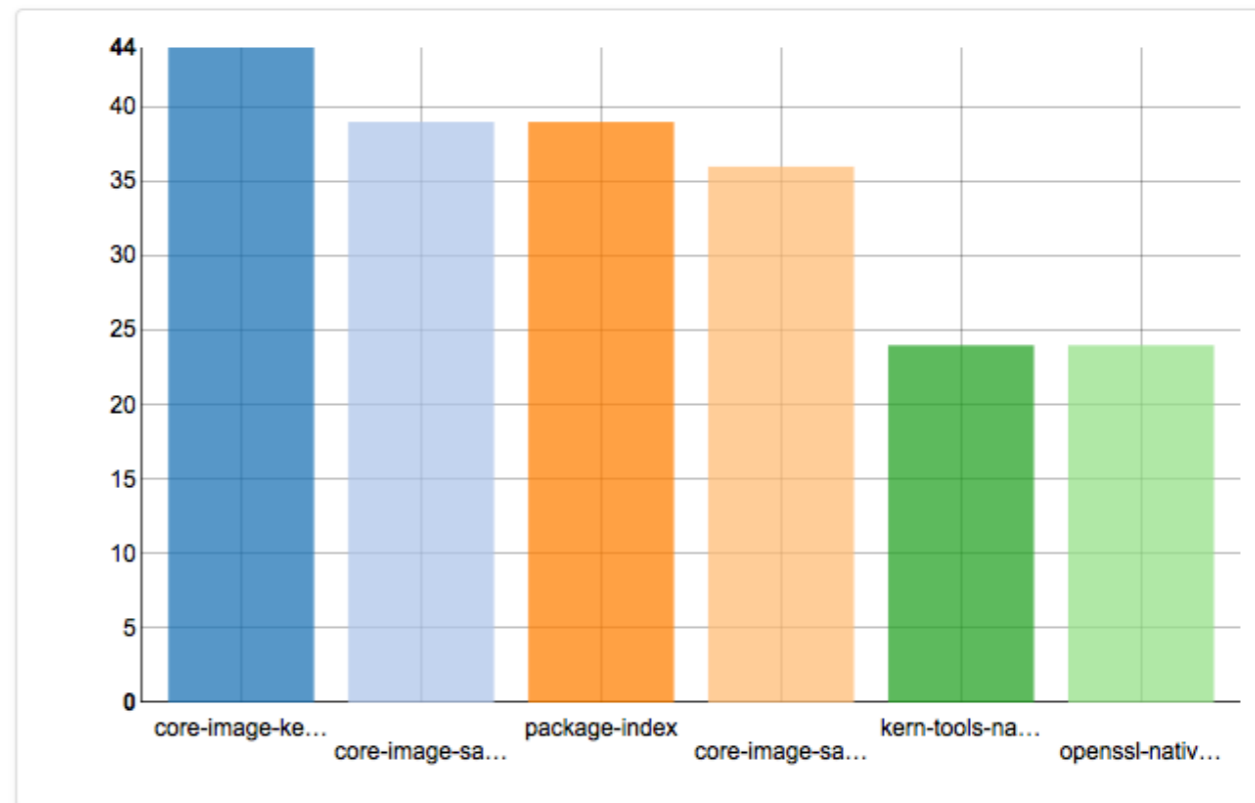
Latest Autobuilder errors Latest errors **Statistics**

Errors reported in the last 2 weeks

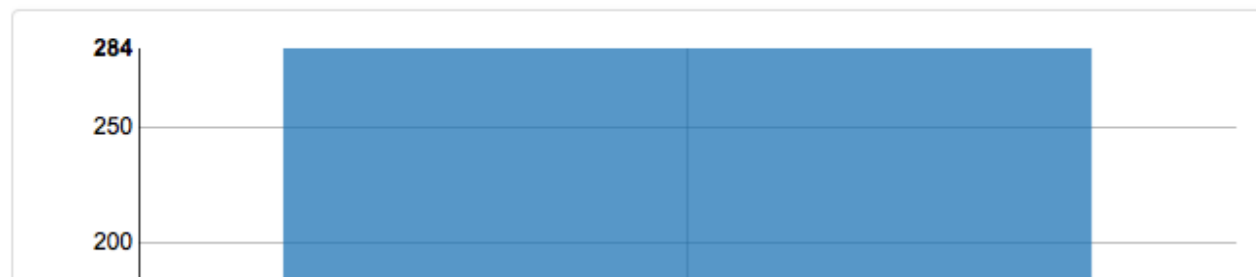
### By machine



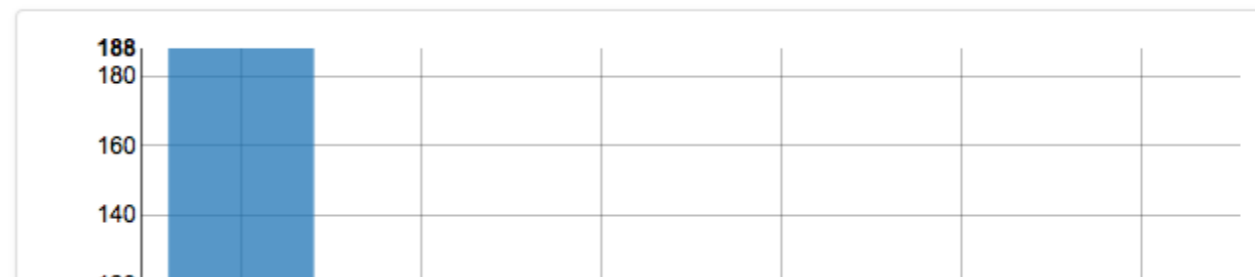
### By recipe



### By target



### By distro



GUIs are  
different

They must be  
designed

They are built  
iteratively

In general, they are a  
pain



To minimise the pain  
work with design

# How?

# In 3 simple steps

# Step 1 - Set Bugzilla right

- Add a designer to the CC list of the Bugzilla entry (for now, [belen.barros.pena@intel.com](mailto:belen.barros.pena@intel.com))
- Type "GUI design pending" in the Whiteboard field

Bug List: (1 of 6) First Last Prev Next Show last search results

Bug 7855 - Show blacklist information in layer index (edit) Save Changes

Status: NEW (edit)

• Create test case

Reported: 2015-06-08 13:27 UTC by Paul Eggleton

Modified: 2015-07-15 13:54 UTC (History)

CC List: 2 users including you

Product: Maintenance Tools
Component: Layer Index
Version: unspecified
Platform: PC Multiple

Importance: Medium enhancement

Target Milestone: 1.9 M3

Assigned To: Alex Franco (edit) (take)

QA Contact: Alexandru Georgescu (edit)

Whiteboard: GUI design pending

Depends on: 7981 (edit)

Blocks:

Show dependency tree / graph

Add

belen.barros.pena@intel.com
benjamin.esquivel@intel.com

Remove selected CCs

See Also: (add)

Type of Regression: ---

Documentation change: No (bug/feature does not impact docs)

Estimate: Person-Days

2.0

## Step 2 - Get your design

Before starting work in the feature, **contact the designer** (email, jabber or IRC will do), and let her know you are ready to implement a fix.

The designer might need some additional information about the feature. She will ask by email or schedule a quick call (30 mins or so).

Layerindex blacklisting - Yocto

Message

Delete Reply Reply All Forward Move Junk Unread Categorize Follow Up

Layerindex blacklisting

Franco, Alejandro

Sent: Tuesday, 14 July 2015 19:37  
To: Barros Pena, Belen

You replied to this message on 15/07/2015 11:43. Show Reply

Hello Belen!

I was looking at this bug:  
[https://bugzilla.yoctoproject.org/show\\_bug.cgi?id=7855](https://bugzilla.yoctoproject.org/show_bug.cgi?id=7855)

It is related to layerindex-web.

According to Paul's comments, blacklisted recipes should be displayed in:

- Recipe details pages
- Recipe list (with "some kind of marking")

I guess it would be similar to what you designed for the images, right?

Thanks, and best regards!

Alex Franco

# Still step 2 - Get you design

The designer will go off and:

- produce a **design document** (and sometimes a prototype)
- upload it to the Bugzilla entry
- set the Whiteboard to "GUI design available"



**Status:** NEW ([edit](#))**Product:** Maintenance Tools**Component:** Layer Index**Version:** unspecified**Platform:** PC Multiple**Importance:** Medium enhancement**Target Milestone:** 1.9 M3**Assigned To:** [Alex Franco](#) ([edit](#)) ([take](#))**QA Contact:** [Alexandru Georgescu](#) ([edit](#))**URL:****Whiteboard:** GUI design available**Depends on:** [7981](#) ([edit](#))**Blocks:**Show dependency [tree](#) / [graph](#)• [Create test case](#)**Reported:** 2015-06-08 13:27 UTC by [Paul Eggleton](#)**Modified:** 2015-07-15 13:54 UTC ([History](#))**CC List:** 2 users including you ([edit](#))**See Also:** ([add](#))**Type of Regression:** ---**Documentation change:** No (bug/feature does not impact docs)**Estimate: Person-Days**

2.0

**Attachments**[Design - Showing blacklisted recipes](#) (304.78 KB, application/pdf)2015-07-15 13:54 UTC, [Belen Barros Pena](#)

no flags

[Details](#)[Add an attachment](#) (logfile, testcase, etc. Please submit patches to the mailing lists.) [View All](#)**Additional Comments:**

OpenEmbedded Metadata Index Submit layer Log in

[master](#) → [meta-oe](#) → [obex-data-server](#)

## obex-data-server 0.4.6 **blacklisted**

This recipe is **blacklisted** by the [meta-oe](#) layer. The reason provided is:

```
_${@bb.utils.contains('DISTRO_FEATURES', 'bluez5', 'bluez5 conflicts with bluez4 and bluez5 is selected in DISTRO_FEATURES', '', d)}
```

<b>Name</b>	obex-data-server
<b>Version</b>	0.4.6
<b>Summary</b>	
<b>Description</b>	obex-data-server is a D-Bus service providing high-level OBEX client and server side functionality
<b>Section</b>	base
<b>License</b>	GPLv2
<b>Homepage</b>	
<b>Recipe file</b>	<a href="#">recipes-connectivity/obex/obex-data-server_0.4.6.bb</a>
<b>Layer</b>	<a href="#">meta-oe</a> (master branch)

[change history](#) • [about this site](#) • [FAQ](#)

### In the recipe details page

There we use:

1. The same label as in the tables in the h1. We just need to make sure to override bootstrap.css and set the value of vertical-align for these labels to 'middle'

2. An alert saying:

"This recipe is blacklisted by the [LAYER-NAME] layer. The reason provided is:

[VALUE OF PNBLACKLIST]"

The word 'blacklisted' is highlighted with bold font:

```
<strong>blacklisted</strong>
```

The [LAYER-NAME] is a link to the layer details page.

Just a couple of notes about the markup in that alert:

- The value of PNBLACKLIST is inside a <blockquote>, like so

```
<blockquote class="span7">
  <p>value of PNBLACKLIST</p>
</blockquote>
```

The span7 class limits the line length of the <blockquote>, otherwise lines of text become too long and hard to read. But that span7 needs to be inside a row-fluid, so the alert needs to be:

```
<div class="alert row-fluid">
```

We need to override the default colour of the <blockquote> left border and set it to #c09853.

To get the <blockquote> left aligned with the text above it we need to set the margin-left of the <blockquote> to 0px.

# No, no: still step 2 - Get your design

You must **review** the design document and give **feedback**.

**Design** is not just done by the designer: is a collaboration process between designers and developers. It **does not happen without you**.

Once you and the designer have agreed on a design, development can begin.

## Step 3 - Share your work

Good GUIs are all about the details, that's why it's impossible to get them right at the first go.

**Share your work in progress** with the designer, and she'll give you the feedback you need to implement the feature | fix as you (both) designed it.

# Still step 3 - Share your work

To share your work in progress, you can:

- Set up an instance of the application the designer can access (easier for the designer, more work for you), or
- Help the designer to set up the tool locally (it will be a pain to help her, but you'll only have to do it once)

## No, no: still step 3 - Share your work

Once you and the designer are happy with the GUI implementation, you can submit the patches upstream.

It's possible you'll get design feedback on the submission, but it should not be the usual thing. Step 3 done right will avoid design issues stopping the patches from being merged once in the mailing list.

1. Set Bugzilla right
2. Get your design and
3. Share your work

1. For happier designers
2. Happier users
3. And *a saner you!*



A decorative graphic in the top-left corner consisting of a cluster of semi-transparent, light gray hexagons of varying sizes, arranged in a roughly triangular shape pointing right.

# Thank you

`belen.barros.pena@intel.com`

**yocto** .  
PROJECT

THE  
**LINUX**  
FOUNDATION