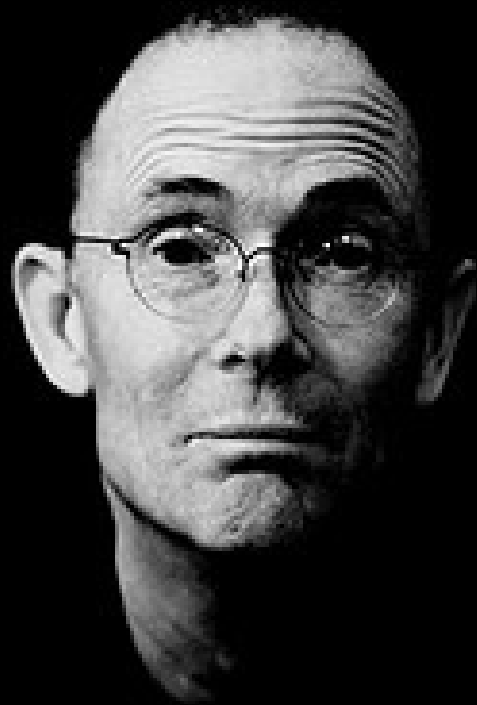


Future of

mxcube + collaboration



"The future is already here,...
it's just not evenly distributed."

William Gibson, Futurist | Cyber-Visionary

Compliments of
New Relic

Stephen O'Grady

The New Kingmakers

How **Developers**
Conquered the World



O'REILLY®



A billion thanks. 25 times over.

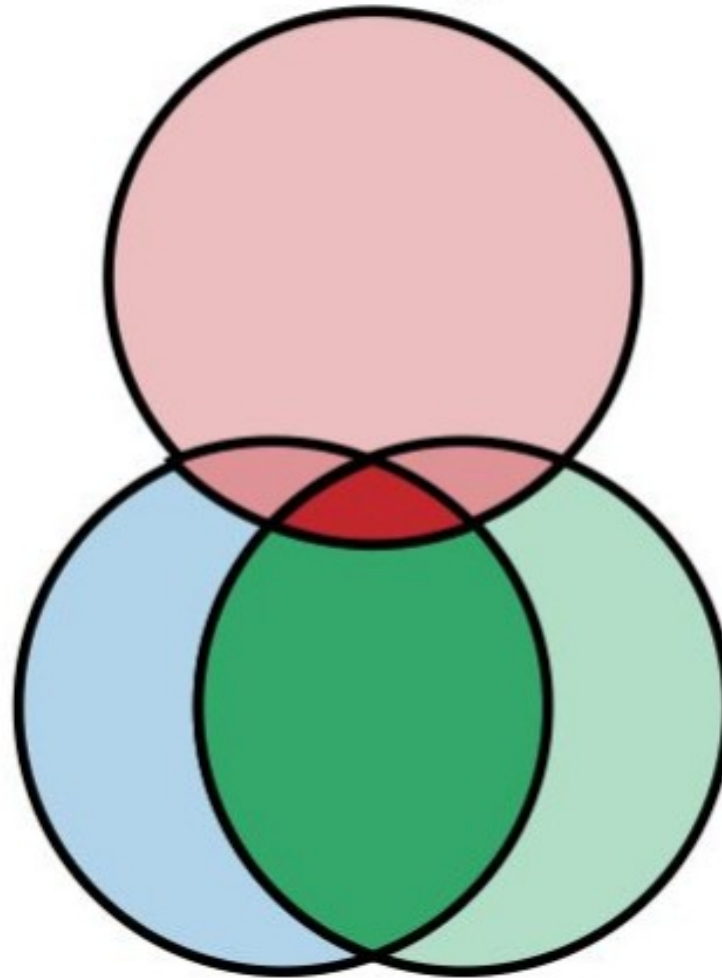
The App Store has reached 25 billion downloads. Thanks for getting us there.



What IT Decision Makers
Think is Being Used

What Developers
Want to Use

What is Actually
Being Used



What IT Decision Makers
Think is Being Used



**Release
management**

What Developers
Want to Use

html5

**Gevents
Zmq
...**

PyQt3

What is Actually
Being Used

MxCube Roadmap

The Past



- Jun 2003 V0
- Jan 2006 V0.n
- Sep 2007 Bessy
- Oct 2008 EMBL
Hamburg
- Sep 2009 MOU
- Jan 2012 V2.0
released
- Jan 2013 V1 frozen



Mxcube Roadmap



- **Apr 2013 V2**
- **Sep 2013 V2.1** bug fixes for USM,
- Implement features
- **Jun 2014 V2.n** complete separation of GUI from logic
- **Dec 2014 V3.0** RC demonstrating new GUI
- **Apr 2015 V3.0** stable
- **Dec 2018 V2.n** end LTS

Mxcube Deployment and Support



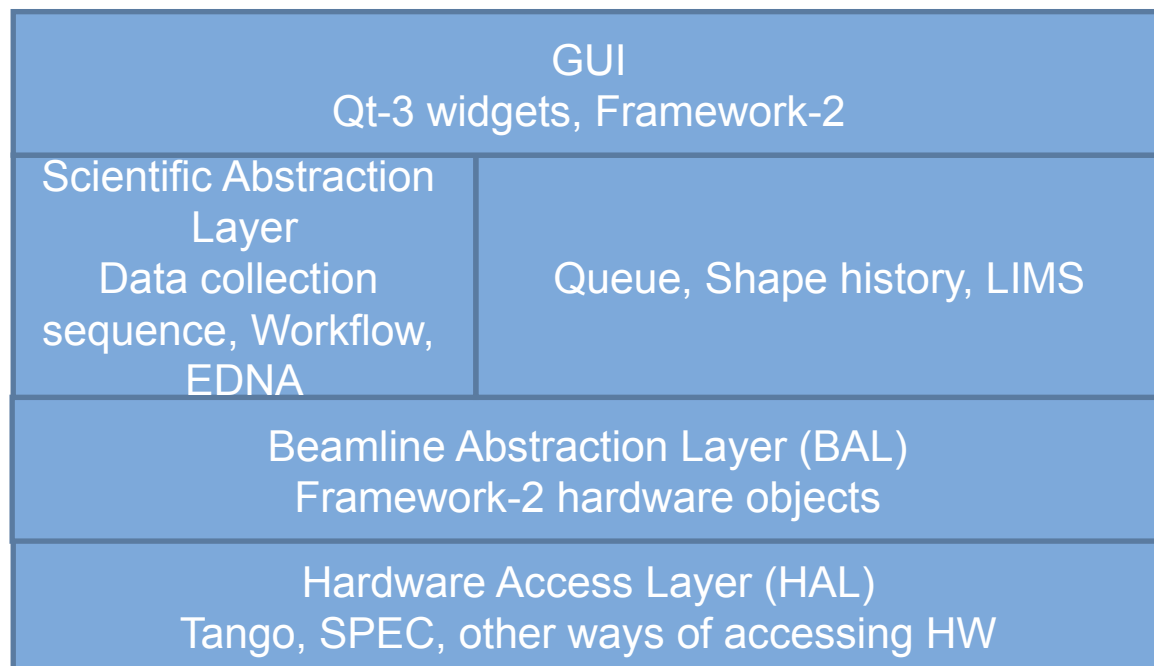
- **Apr 2013** V2 testing
- **Jun 2013** V2 user mode @ ESRF
- **Sep 2013 to Aug 2014** installation on other sites
- New implementations of GUI
- **Dec 2018** V2 end LTS (Long Term Support)

Why upgrade to MxCube 2.0 ?

- It's the latest greatest version. Thanks to the developers !!!
- It has **MORE** and **BETTER FEATURES** e.g.
 - Extended Queue and Data Collection
 - Better separation of site specific differences and implementation of logic + graphics layer
 - Easier to implement on a new site
- All future developments will be in V2
- MxCube V1 is a frozen development

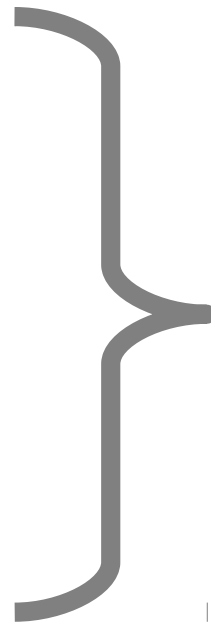
What is MxCube ?

- GUI ?
- User Interface ?
- Scientific Layer ?
- Logic Layer ?
- Hardware Layer ?



MxCube is the

- *User Interface*
- *Scientific Layer*
- *Logic Layer*



*“A scientists dream of
how to do a
crystallography
experiment”*

Martin

GUI

Qt-3 widgets, Framework-2

Scientific Abstraction
Layer

Data collection sequence,
Workflow, EDNA

Queue, Shape history, LIMS

Beamline Abstraction Layer (BAL)
Framework-2 hardware objects

Hardware Access Layer (HAL)
Tango, SPEC, other ways of accessing HW

GUI

Scientific Abstraction
Layer

Data collection sequence,
Workflow, EDNA

Queue, Shape history, LIMS

Beamline Abstraction Layer (BAL)
Framework-2 hardware objects

Hardware Access Layer (HAL)
Tango, SPEC, other ways of accessing HW

The GUI toolkit

- Qt3
- Qt4
- HTML5
- ...

Collaboration



OK/Cancel



collaborate and listen : copyright 2006 tom chi and kevin cheng _

COLLABORATION
=
SHARING
GOALS + WORKLOAD

“Collaboration is working with each other to do a task. It is a recursive process where two or more people or organizations work together to realize shared goals, This is more than the intersection of common goals seen in co-operative ventures, but a deep, collective, determination to reach an identical objective”

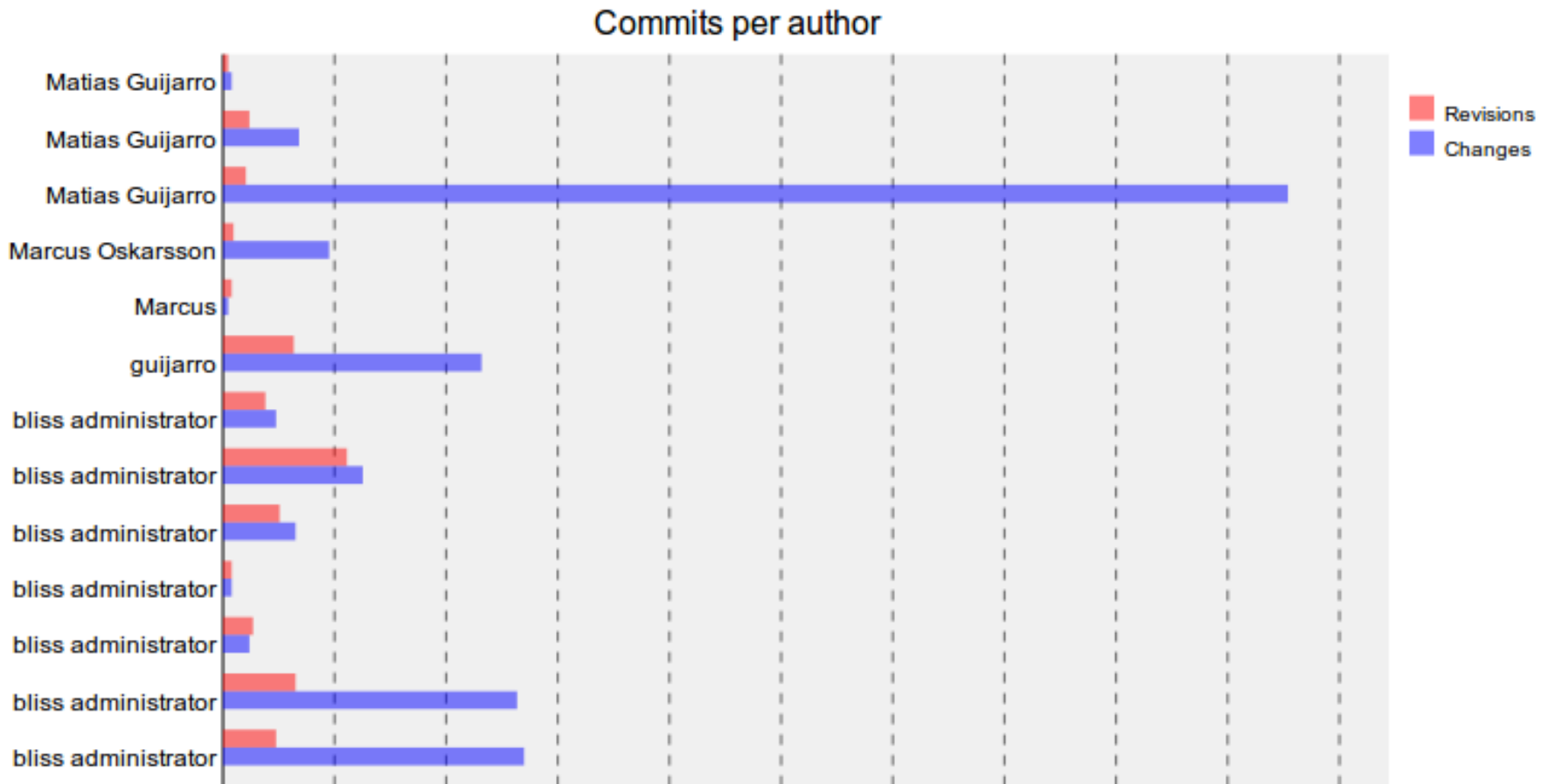
[Source = Wikipedia]

The Fundamental Question in any Collaboration is

***What are you getting from and giving back to
the collaboration ?***



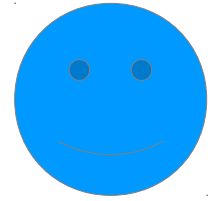
Commits by author



How to collaborate better

- **Have a common goal(s)** (list them)
- **Use the same version**
 - Upgrade to V2
- **Give something back**
 - code, documentation, porting, packaging, ...
- **Communicate more**
 - Email list, Discussion on Forum, Video calls, Blogs, Issue Tracker, (Q: are the current tools sufficient ?)

Mxcube Version N (where $N \geq 3$)



THANKS to the DEVELOPERS !!!

UPGRADE to V2

**CONTRIBUTE to the
COLLABORATION**