edmq – son of edm

Rolf Keitel

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Owned and operated as a joint venture by a consortium of Canadian universities via a contribution through the National Research Council Canada
Propriété d'un consortium d'universités canadiennes, géré en co-entreprise à partir d'une contribution administrée par le Conseil national de recherches Canada

EPICS at TRIUMF

- 23 Years + of EPICS at TRIUMF
- Transitions
  - Sun/Solaris → x86/Linux
  - Motorola MV162 / VxWorks → x86/Linux, Arm/Linux
  - edd/dm → edm
  - Capfast™ → tdct
  - EPICS 3.12.2 → EPICS 3.14.12
- Constants
  - Trar ASCII archiver
  - burt
  - StripTool
  - Alh

Motivation

- Started to prepare for Motif demise
  - no more Motif programmers
  - Linux support?
- Progress so far
  - StripTool → TChart
  - alh → TAlh
  - edm → ??

Why upgrade edm?

- TRIUMF has big investment in edm
  - EdlBuild libraries (Perl, Python)
- Looked at the other options (CS Studio, EPICS Qt, caQtDM)

- we like edm functionality
- we converted once edd/dm → edm (2005 – painful)

- I am cheap labour

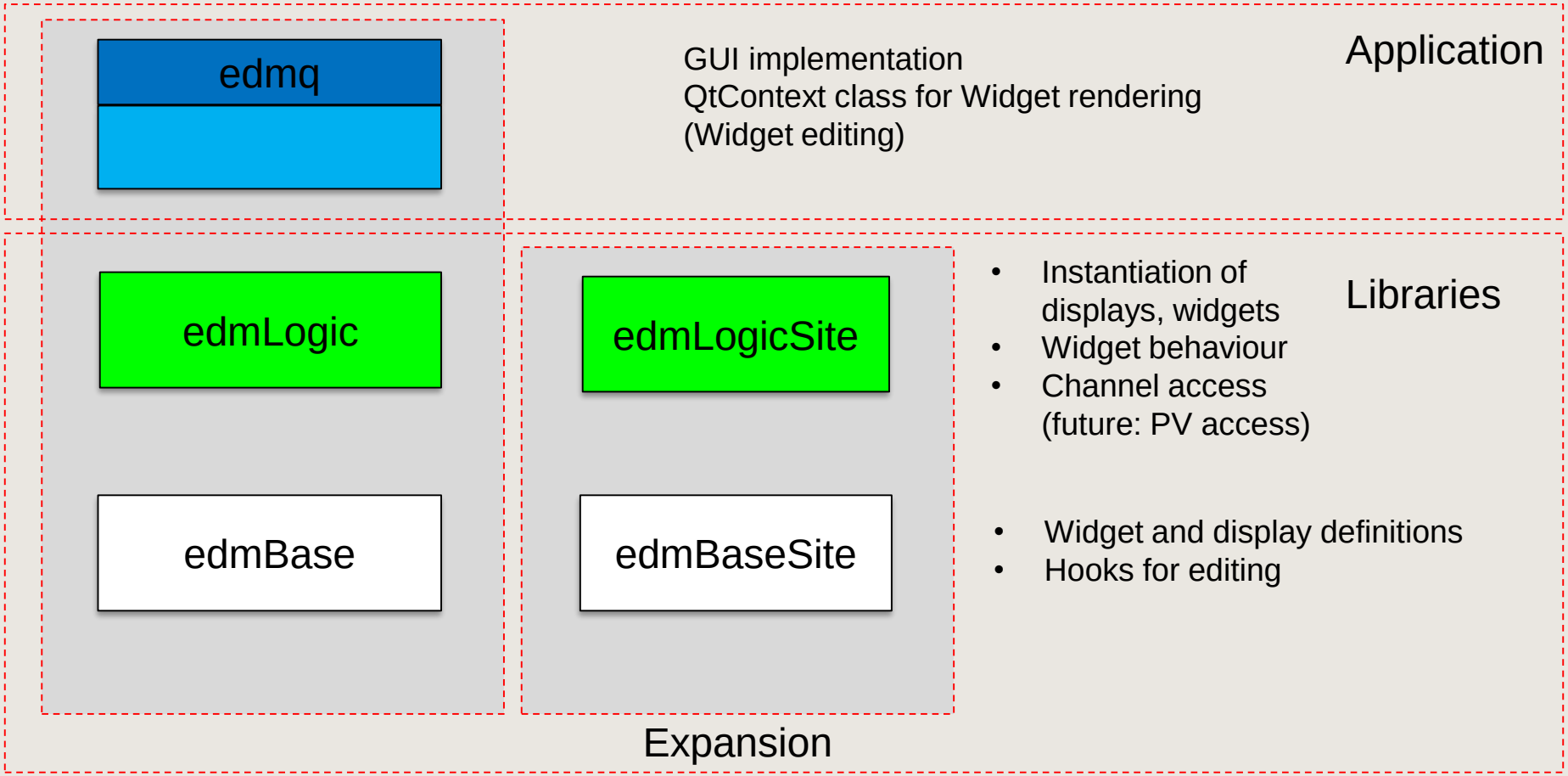
edmq

- Why “son of edm”
  - shares lots of genes
  - looks like the father
  - eats the same food (edl files)
  - thinks the father is old-fashioned …
  - .. but behaves exactly like him
  - the older he gets, the more he
    - acts like his dad
    - appreciates his dad
  - will do things his father never did

edmq

- In different words
  - fully backward compatible with edm
    - edl file format (100%) – must be able to coexist with edm
    - functionality (as much as possible)
  - uses Qt as GUI framework
  - C++11 STL
  - not predicated on Qt
    - design makes Qt replaceable
  - clear separation of
    - widget definitions
    - run-time behaviour
    - graphics rendering / user interaction

edmq Implementation



Present Status

- All functionality used at TRIUMF:

Arc
Embedded Window
Lines
Rectangle
Static Text

Bar
Byte
Message Box
Meter
NdArrayVideo
Symbol
Table
Text Monitor
XYGraph

Button
Choice Button
Exit Button
Include Widget
Menu Button
Menu Mux
Message Button
Radio Box
Related Display
Shell Command
Text Control
Triumf Slider

+

TriumfSlider2D
Process

Present Status

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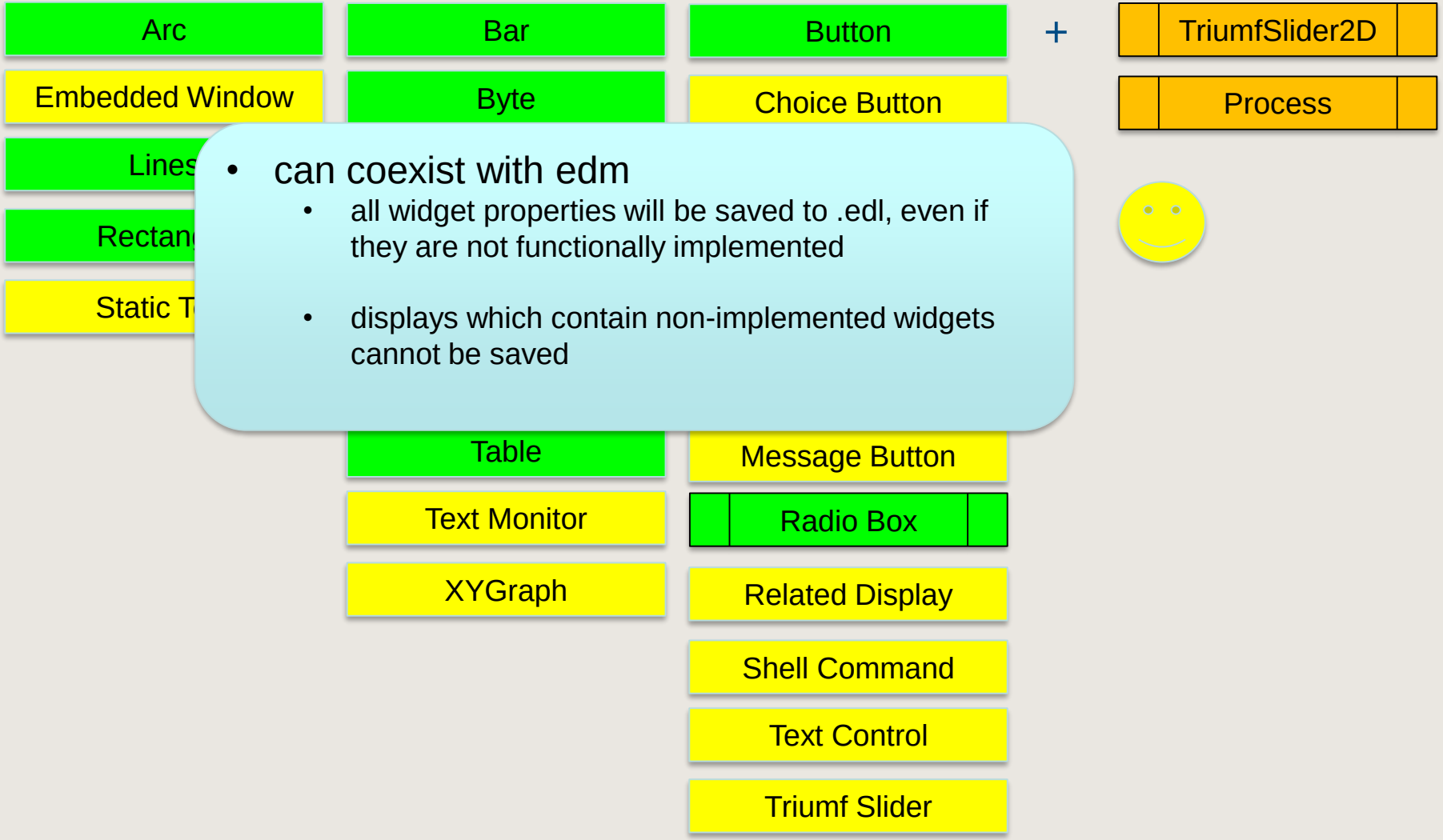

Present status

- 1st week of May: Review with J.W. Sinclair
- → architecture improvements are implemented
- Presently: testing, bug-fix. Started use for editing
- Production version for TRIUMF: end of summer

Thank you!

Merci!