

One for all, all in one

The musketeers guide to merging multiple bundles into one

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Reasons to merge or not to merge

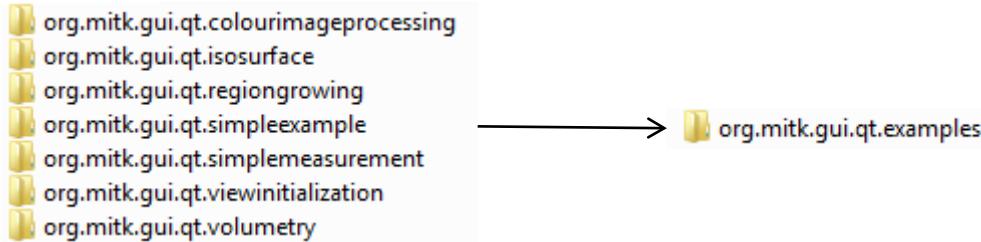
- Tidyness - Reduces cluttering
- Sensible
 - Grouping by subject
 - Grouping by purpose
 - Grouping by workflow
- Once merged will be switched on/off together, keep in mind

A wall of text – the overview

- Create a new ctk bundle (or reuse an existing one)
- Copy the old bundles into the new one
 - Either src -> src (...) or create subdirecotries within
 - Rename files if ambiguous (icon.png or similar)
 - Change names in files using them (e.g: .qrc .dox .xml)
- Remove references to old bundle and add new one in Modules/Bundles/CMakeLists.txt and /PluginList.cmake
- Adjust documentation
 - Change all but one \bundlemainpage{TAG} to \page TAG
 - (if required) create central bundlemainpage with subpages
 - (if required) adjust Documentation\Doxygen\ModuleList.dox

Steps in pictures – copying and configuring

- Only one activator



```
# The project name must correspond to the directory name of your plug-in
# and must not contain periods.
PROJECT(org_mitk_gui_qt_simplemeasurement)
```

```
MACRO_CREATE_MITK_CTK_PLUGIN(
  EXPORT_DIRECTIVE MITK_QT_SIMPLEMEASUREMENT
  EXPORTED_INCLUDE_SUFFIXES src
  MODULE_DEPENDENCIES QmitkExt
)
```

```
PROJECT(org_mitk_gui_qt_examples)
MACRO_CREATE_MITK_CTK_PLUGIN(
  EXPORT_DIRECTIVE EXAMPLES_EXPORT
  EXPORTED_INCLUDE_SUFFIXES src
  MODULE_DEPENDENCIES QmitkExt
)
```

Steps in pictures – copying and configuring 2

```

SET(SRC_CPP_FILES
)

SET(INTERNAL_CPP_FILES
    mitkPluginActivator.cpp
    colourimageprocessing/QmitkColourImageProcessingView.cpp
    colourimageprocessing/mitkColourImageProcessor.cpp
    isosurface/QmitkIsoSurface.cpp
    regiongrowing/QmitkRegionGrowingView.cpp
    simpleexample/QmitkSimpleExampleView.cpp
    simplemeasurement/QmitkSimpleMeasurement.cpp
    viewinitialization/QmitkViewInitializationView.cpp
    volumetry/QmitkVolumetryView.cpp
)

SET(UI_FILES
    src/internal/QmitkSimpleMeasurementControls.ui
)

SET(MOC_H_FILES
    src/internal/QmitkSimpleMeasurement.h
    src/internal/mitkPluginActivator.h
)

SET(CACHED_RESOURCE_FILES
    resources/SimpleMeasurement.png
    plugin.xml
)

SET(QRC_FILES
)

SET(CPP_FILES)

foreach(file ${SRC_CPP_FILES})
    SET(CPP_FILES ${CPP_FILES} src/${file})
endforeach(file ${SRC_CPP_FILES})

foreach(file ${INTERNAL_CPP_FILES})
    SET(CPP_FILES ${CPP_FILES} src/internal/${file})
endforeach(file ${INTERNAL_CPP_FILES})

```



```

SET(SRC_CPP_FILES
)

SET(INTERNAL_CPP_FILES
    mitkPluginActivator.cpp
    colourimageprocessing/QmitkColourImageProcessingView.cpp
    colourimageprocessing/mitkColourImageProcessor.cpp
    isosurface/QmitkIsoSurface.cpp
    regiongrowing/QmitkRegionGrowingView.cpp
    simpleexample/QmitkSimpleExampleView.cpp
    simplemeasurement/QmitkSimpleMeasurement.cpp
    viewinitialization/QmitkViewInitializationView.cpp
    volumetry/QmitkVolumetryView.cpp
)

SET(UI_FILES
    src/internal/colourimageprocessing/QmitkColourImageProcessingViewControls.ui
    src/internal/isosurface/QmitkIsoSurfaceControls.ui
    src/internal/regiongrowing/QmitkRegionGrowingViewControls.ui
    src/internal/simpleexample/QmitkSimpleExampleViewControls.ui
    src/internal/simplemeasurement/QmitkSimpleMeasurementControls.ui
    src/internal/viewinitialization/QmitkViewInitializationViewControls.ui
    src/internal/volumetry/QmitkVolumetryViewControls.ui
)

SET(MOC_H_FILES
    src/internal/mitkPluginActivator.h
    src/internal/colourimageprocessing/QmitkColourImageProcessingView.h
    src/internal/isosurface/QmitkIsoSurface.h
    src/internal/regiongrowing/QmitkRegionGrowingView.h
    src/internal/simpleexample/QmitkSimpleExampleView.h
    src/internal/simplemeasurement/QmitkSimpleMeasurement.h
    src/internal/viewinitialization/QmitkViewInitializationView.h
    src/internal/volumetry/QmitkVolumetryView.h
)

SET(CACHED_RESOURCE_FILES
    plugin.xml
    resources/ColorImageProcessing.png
    resources/isoSurface.xpm
    resources/regiongrowing.xpm
    resources/SimpleExample.png
    resources/SimpleMeasurement.png
    resources/viewInitializationIcon.xpm
    resources/volumetryIcon.xpm
)

SET(QRC_FILES
    resources/QmitkColourImageProcessingView.qrc
    resources/isosurface.qrc
    resources/regiongrowing.qrc
    resources/QmitkVolumetryView.qrc
)

SET(CPP_FILES
)

foreach(file ${SRC_CPP_FILES})
    SET(CPP_FILES ${CPP_FILES} src/${file})
endforeach(file ${SRC_CPP_FILES})

foreach(file ${INTERNAL_CPP_FILES})
    SET(CPP_FILES ${CPP_FILES} src/internal/${file})
endforeach(file ${INTERNAL_CPP_FILES})

```

Steps in pictures – copying and configuring 3

```
set(Plugin-Name "MITK Examples")
set(Plugin-Version "0.1")
set(Plugin-Vendor "DKFZ, Medical and Biological Informatics")
set(Plugin-ContactAddress "http://www.mitk.org")
set(Require-Plugin org.mitk.gui.qt.common)
```

```
set(Plugin-Name "MITK Simple Measurement")
set(Plugin-Version "1.0.0")
set(Plugin-Vendor "DKFZ, Medical and Biological Informatics")
set(Plugin-ContactAddress "http://www.mitk.org")
set(Require-Plugin org.mitk.gui.qt.common)
```

```
<?xml version="1.0" encoding="UTF-8"?>
<eclipse version="3.0"?>
<plugin>

    <extension point="org.blueberry.ui.views">
        <category
            id="org.mitk.views.general"
            name="MITK General"/>
        <view
            id="org.mitk.views.simplemeasurement"
            name="SimpleMeasurement"
            category="org.mitk.views.general"
            icon="resources/SimpleMeasurement.png"
            class="QmitkSimpleMeasurement" />
    </extension>

</plugin>
```

```
<?xml version="1.0" encoding="UTF-8"?>
<BlueBerry version="0.1"?>
<plugin>

    <extension point="org.blueberry.ui.views">
        <view id="org.mitk.views.colourimageprocessing"
            name="Colour Image Processing"
            class="QmitkColourImageProcessingView"
            icon="resources/ColorImageProcessing.png" />
    </extension>

    <extension point="org.blueberry.ui.views">
        <category
            id="org.mitk.views.general"
            name="MITK General"/>
        <view
            id="org.mitk.views.isosurface"
            name="IsoSurface"
            category="org.mitk.views.general"
            icon="resources/IsoSurface.xpm"
            class="QmitkIsoSurface" />
    </extension>

    <extension point="org.blueberry.ui.views">
        <category
            id="org.mitk.views.general"
            name="MITK General"/>
        <view
            id="org.mitk.views.regiongrowing"
            name="RegionGrowing"
            category="org.mitk.views.general"
            icon="resources/regiongrowing.xpm"
            class="QmitkRegionGrowingView" />
    </extension>

    <extension point="org.blueberry.ui.views">
        <category
            id="org.mitk.views.general"
            name="MITK General"/>
        <view
            id="org.mitk.views.simplemeasurement"
            name="SimpleMeasurement"
            category="org.mitk.views.general"
            icon="resources/SimpleMeasurement.png"
            class="QmitkSimpleMeasurement" />
    </extension>

    <extension point="org.blueberry.ui.views">
        <view id="org.mitk.views.simpleexample"
            name="Simple Example"
            class="QmitkSimpleExampleView"
            icon="resources/SimpleExample.png" />
    </extension>

    <extension point="org.blueberry.ui.views">
        <view id="org.mitk.views.viewinitialization"
            name="ViewInitialization"
            class="QmitkViewInitializationView"
            icon="resources/viewInitializationIcon.xpm"/>
    </extension>

    <extension point="org.blueberry.ui.views">
        <view id="org.mitk.views.volumetry"
            name="Volumetry"
            class="QmitkVolumetryView"
            icon="resources/volumetryIcon.xpm" />
    </extension>

</plugin>
```

Steps in pictures – documentation

```
/***
\bundlemainpage{org_simplemeasurement} The Simple Measurement Module

\image html SimpleMeasurementIcon.png "Icon of the Module"

    /**
     \page org_simplemeasurement The Simple Measurement Module

     \image html SimpleMeasurementIcon.png "Icon of the Module"

**+
\bundlemainpage{org_mitkexamples} Examples for the use of MITK

\section QmitkSimpleExampleViewUserManualSummary Summary

This module is a collection of examples for developing with mitk. The following examples are included:

<ul>
<li> \subpage org_simpleexample
<li> \subpage org_simplemeasurement
<li> \subpage org_regiongrowing
<li> \subpage org_isosurface
<li> \subpage org_colourimageprocessing
<li> \subpage org_viewinitialization
<li> The Volumetry Module
</ul>
*/
```