

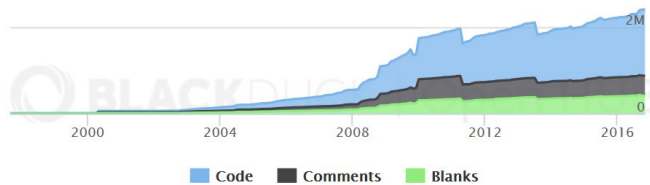
Qualitätsmanagement von und Infrastruktur für Open Source Software in der Wissenschaft am Beispiel des Medical Imaging Interaction Toolkits

Stefan Kisilinskiy & Caspar Goch
Medizinische und Biologische Informatik @ DKFZ

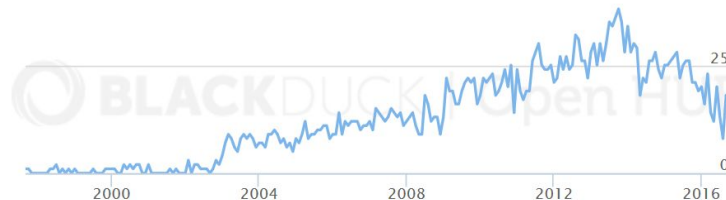
Was ist MITK?

- OSS Bibliothek und Anwendungssoftware
- Internationale Entwicklercommunity
- Installer für medizinische Forschungspartner

Lines of Code



Contributors per Month



Commits per Month



Bis zu 1600 Commits pro Monat von
bis zu 40 Autoren

Bilder von <https://www.openhub.net/p/mitk>

Was sind die Herausforderungen?

- Gros der Entwickler sind Doktoranden und Masteranden
 - Keine fachlich ausgebildeten Softwareentwickler
 - Hohe Fluktuation
 - Prioritäten auf der eigenen Forschung
- Sehr heterogene Anwendungsgebiete

Welche Anforderungen ergeben sich an das Qualitätsmanagement?

- Entwicklungen erhalten
 - Gemeinsame Codebasis
 - Kontinuierliche Integration inklusive Unit Tests
- Code Reviews
- Dokumentation
- Projektmanagement
- Lizenzmanagement
- Interne und externe Schulungen

Gemeinsame Codebasis

The screenshot shows the Phabricator interface for the MITK repository. The top navigation bar includes the Phabricator logo, the repository name 'MITK', and notification icons. Below the navigation bar, the repository path is shown as '</> Diffusion > MITK (master)'. The main content area is divided into several sections: 'Tags' with a 'MITK' tag, 'Details' with a 'Clone' button and the URL 'https://phabricator.mitk.org/source/mitk.git', 'Locate File' with a search input, and a table of repository files. The table has columns for 'Path' and 'Details'.

Path	Details
.arcconfig	Added .arcconfig file
.clang-format	Add .clang-format file
.gitattributes	Fixed style issues in code templates of the PluginGenerator.
.gitignore	Merge branch 'bug-18605-modern-cmake-and-cxx11'
Applications/	Merge branch 'T19210-reformat-code-base-continued'
CMake/	Merge remote-tracking branch 'origin/T19442-RelyOnCMakeFindDCMTKScript'
CMakeExternals/	Merge branch 'T20023-update-hdf5-for-msvs2015'

The screenshot shows the GitHub interface for the MITK repository. The top navigation bar includes the GitHub logo, navigation links (Personal, Open source, Business, Explore), and utility links (Pricing, Blog, Support). Below the navigation bar, the repository name 'MITK / MITK' is shown. The main content area is divided into several sections: 'Code' with a 'Pull requests' button, 'The Medical Imaging Interaction Toolkit' with the URL 'http://www.mitk.org', and a table of repository files. The table has columns for 'Path' and 'Details'.

Path	Details
Applications	Reformat general modules
CMake	Rely on CMake's FindDCMTK script.
CMakeExternals	Merge branch 'T20023-update-hdf5-for-msvs2015'
Documentation	Added missing lines to MITKPluginManuals to correct content level of ...
Examples	Reformat general modules
Modules	Merge branch 'T20218-DataStorageGeometryComputation'
Plugins	Merge remote-tracking branch 'origin/T19442-RelyOnCMakeFindDCMTKScript'
Utilities	Reformat general modules
.arcconfig	Added .arcconfig file
.clang-format	Add .clang-format file
.gitattributes	Fixed style issues in code templates of the PluginGenerator.
.gitignore	Removed custom .vimrc file.

Automatisierte Regeln

[MITK/MITK-MBI] Only allow merge commits in master branch

Description

When all of these conditions are met:

- Repository is any of [rMITK MITK](#), [rMBI MITK-MBI](#), [rSB Sandbox](#)
- Branches matches regexp `/^master$/`
- Is merge commit is false
- Accepted Differential revision does not exist

Take these actions every time this rule matches:






- Block push with message: Only merge commits allowed in master branch. If you're sure that this is a merge commit, you probably didn't push your branch.

Kontinuierliche Integration inklusive Unit Tests

MITK											
Dashboard		Calendar	Previous	Current	Next	Project					
No update data as of Thursday, November 17 2016 - 21:00 CET								Show Filters	Advanced View	Auto-refresh	Help
Continuous											
Site	Build Name	Update	Configure		Build		Test			Build Time	Labels
		Files	Error	Warn	Error	Warn	Not Run	Fail	Pass		
MBIVM11	Win7_VS2013_x64_Release	1	0	2	0	0	0	0	438	Nov 18, 2016 - 16:44 CET	(11 labels)
MBIVM08	Ubuntu-14.04_gcc_x64_Release	1	0	3	0	1	0	0	444	Nov 18, 2016 - 16:40 CET	(11 labels)
MBIVM11	Win7_VS2013_x64_Release	5	0	2	0	54	0	0	438	Nov 18, 2016 - 14:36 CET	(11 labels)
MBIVM08	Ubuntu-14.04_gcc_x64_Release	5	0	3	0	9	0	0	444	Nov 18, 2016 - 14:33 CET	(11 labels)
MBIVM11	Win7_VS2013_x64_Release	1	0	2	0	0	0	0	438	Nov 18, 2016 - 13:42 CET	(11 labels)
MBIVM08	Ubuntu-14.04_gcc_x64_Release	1	0	3	0	1	0	0	444	Nov 18, 2016 - 13:37 CET	(11 labels)
MBIVM11	Win7_VS2013_x64_Release	2	0	2	0	0	0	1	437	Nov 18, 2016 - 12:43 CET	(11 labels)
MBIVM08	Ubuntu-14.04_gcc_x64_Release	2	0	3	0	2	0	1	443	Nov 18, 2016 - 12:26 CET	(11 labels)
MBIVM08	Ubuntu-14.04_gcc_x64_Release	1	0	3	2	0	0	0	0	Nov 18, 2016 - 12:14 CET	(3 labels)
MBIVM11	Win7_VS2013_x64_Release	1	0	2	0	4	0	1	437	Nov 18, 2016 - 12:09 CET	(11 labels)
MBIVM08	Ubuntu-14.04_gcc_x64_Release	1	0	3	2	0	0	0	0	Nov 18, 2016 - 12:02 CET	(3 labels)
MBIVM11	Win7_VS2013_x64_Release	2	0	2	0	0	0	1	437	Nov 18, 2016 - 11:35 CET	(11 labels)
MBIVM08	Ubuntu-14.04_gcc_x64_Release	2	0	3	2	0	0	0	0	Nov 18, 2016 - 11:28 CET	(3 labels)
MBIVM11	Win7_VS2013_x64_Release	3	0	2	0	0	0	1	437	Nov 18, 2016 - 11:01 CET	(11 labels)
MBIVM08	Ubuntu-14.04_gcc_x64_Release	3	0	3	0	2	0	1	443	Nov 18, 2016 - 10:46 CET	(11 labels)
MBIVM11	Win7_VS2013_x64_Release	1	0	2	0	0	0	1	437	Nov 18, 2016 - 10:28 CET	(11 labels)
MBIVM08	Ubuntu-14.04_gcc_x64_Release	1	0	3	0	9	0	1	443	Nov 18, 2016 - 10:27 CET	(11 labels)

Code Reviews






```
50     std::string codeValue;  
51     std::string codeScheme;  
52     std::string codeName;  
53     Modifier modifier;  
54     Type() = default;  
55     Type(std::string value, std::string scheme, std::string name) :  
    codeValue(value), codeScheme(scheme), codeName(name){}
```

 **kislinsk** ✓ Done    

And again. :-) Also the default ctor of `Modifier` will be called automatically, the following is enough:






```
Type() = default;  
// or  
Type() {}
```

```
56     };
```

 **kislinsk** ✓ Done    

I know I'm picky but `modifier = Modifier();` can be deleted here because the default ctor of the member `modifier` is called anyways. :-)

```
57
```

 **kislinsk** ✓ Done    

Please delete this line when it is not needed.

```
58 public:  
59     static AnatomicalStructureColorPresets *New();  
60     vtkTypeMacro(AnatomicalStructureColorPresets, vtkXMLParser);  
61
```

Dokumentation



2016.3.99-cd662207

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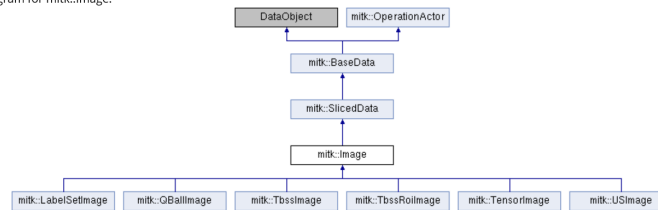
mitk::Image Class Reference

MITK Modules » Core » Data Classes

Image class for storing images. More...

```
#include <mitkImage.h>
```

Inheritance diagram for mitk::Image:



Public Types

enum	ImportMemoryManagementType { CopyMemory, ManageMemory, ReferenceMemory, DontManageMemory }
typedef Image	Self
typedef SlicedData	Superclass
typedef itk::SmartPointer< Self >	Pointer
typedef itk::SmartPointer< const Self >	ConstPointer
typedef itk::SmartPointer< ImageDataItem >	ImageDataItemPointer
typedef itk::Statistics::Histogram< double >	HistogramType
typedef mitk::ImageStatisticsHolder *	StatisticsHolderPointer
typedef std::vector< ImageDataItemPointer >	ImageDataItemPointerArray
	Vector container of SmartPointers to ImageDataItems; Class is only for internal usage to allow convenient access to all slices over iterators; See documentation of ImageDataItem for details. More...

Public Types inherited from **mitk::SlicedData**

Public Types inherited from **mitk::BaseData**

Public Member Functions

virtual std::vector< std::string >	GetClassHierarchy () const override
virtual const char *	GetClassName () const
Pointer	Clone () const
const mitk::PixelType	GetPixelType (int n=0) const
	Returns the PixelType of channel <i>n</i> . More...
unsigned int	GetDimension () const
	Get dimension of the image. More...

Projektmanagement

- </> **Diffusion**
Host and Browse Repositories
- 📖 **Phriction**
Wiki
- ⚙️ **Differential**
Review Code
- 🔍 **Audit**
Browse and Audit Commits
- 📁 **Projects**
Get Organized
- 👤 **People**
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- 🔗 **Applications**
Explore More Applications
- Customize Menu...



Phabricator is a collaboration platform open to all MITK contributors. We focus on [bug reporting](#) and [repositories](#) for now.

NOTE: Please change your profile picture and help us to get rid of a clone army of Pokémon silhouettes.

Recent Tasks

Open	Closed	Needs Triage
Tasks (10)		
T19210 Update style guide Mon, Nov 21, 11:07 Assigned: goch 🐛 Bugzilla 📁 MITK (2016-11)		
T20180 Axial renderer origin in top-left-front corner, not in the bottom-left-b... Mon, Nov 21, 10:45 📁 MITK 🗨 Request for Discussion		
T17812 SlicedGeometry3D initialisation fix for non-image geometries Mon, Nov 21, 10:45 📁 MITK 🐛 Bugzilla		
T11113 MITK doesn't visualize normalized and thus very small meshes in the e... Mon, Nov 21, 10:09 🐛 Bugzilla 📁 MITK		
T22114 re-init does not work with images with flipped axes Mon, Nov 21, 09:44 📁 MITK		

Today

goch committed [rMITK9888906c6c45: Add .clang-format file](#) (authored by **goch**).

Add .clang-format file

</> Mon, Nov 21, 11:07

goch closed [D12: Add .clang-format file](#) by committing [rMITK9888906c6c45: Add .clang-format file](#).

⚙️ Mon, Nov 21, 11:06

espak added a comment to [T17812: SlicedGeometry3D initialisation fix for non-image geometries](#).

It sound like that **T11113** definitely validates this issue in the sense that it does not just 'seem to be' wrong but can cause actual problems.

📌 Mon, Nov 21, 10:45 · Bugzilla, MITK

hentsch claimed [T22135: DIPP doesn't build with current RTTB trunk](#).

📌 Mon, Nov 21, 10:27 · FS-E IT Restructuring, DIPP

hentsch moved [T22135: DIPP doesn't build with current RTTB trunk](#) from [Backlog](#) to [Doing](#) on the [DIPP](#) board.

📌 Mon, Nov 21, 10:26 · FS-E IT Restructuring, DIPP

hentsch created [T22135: DIPP doesn't build with](#)

Lizenzmanagement



- ✓ LGPL
- ✗ GPL
- ✗ Kommerziell



- ✓ Apache 2.0



BSD - like

Interne und externe Schulungen



A photograph of the Deutsches Krebsforschungszentrum (DKFZ) building, a modern multi-story structure with a central glass-enclosed tower and multiple balconies. In the foreground, there is a paved courtyard with several water fountains and yellow benches. The sky is blue with some clouds.

dkfz.

Auf Wiedersehen im DKFZ!

Weitere Informationen unter www.dkfz.de

dkfz.

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