

Macsur Adapter

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Chapter 1

Hierarchical Index

1.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

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MadData	7
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Chapter 2

Class Index

2.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

MadCategory	7
MadData	7
MadDataClassification	10
MadGuid The MadGuid class An abstract base class that has a Globally Unique Identifier (GUID) to represent a unique instance	11
MadMainWindow	12
MadModel The MadModel class, to represent a ModelTheme	13
MadSerialisable	16
MadSubCategory	18
MadUtils	19

Chapter 3

File Index

3.1 File List

Here is a list of all files with brief descriptions:

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/Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/ madmainwindow.h	31
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/Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/lib/ madversion.h	31

Chapter 4

Class Documentation

4.1 MadCategory Struct Reference

```
#include <maddata.h>
```

Public Attributes

- QString [name](#)
- QList< [MadSubCategory](#) > [children](#)

4.1.1 Detailed Description

Definition at line 52 of file maddata.h.

4.1.2 Member Data Documentation

4.1.2.1 QList<MadSubCategory> MadCategory::children

Definition at line 55 of file maddata.h.

4.1.2.2 QString MadCategory::name

Definition at line 54 of file maddata.h.

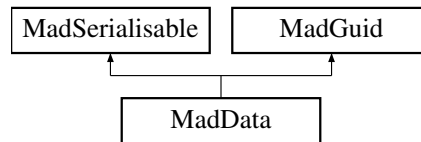
The documentation for this struct was generated from the following file:

- /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/lib/[maddata.h](#)

4.2 MadData Class Reference

```
#include <maddata.h>
```

Inheritance diagram for MadData:



Public Member Functions

- `MadData ()`
- `MadData (const MadData &theData)`
- `MadData & operator= (const MadData &theData)`
- `QString name () const`
- `QString description () const`
- `QString imageFile () const`
- `void setName (QString theName)`
- `void setDescription (QString theDescription)`
- `void setImageFile (QString theImageFileName)`
- `QString toXml ()`
- `QString toText ()`
- `QString toHtml ()`
- `bool fromXml (const QString theXml)`

4.2.1 Detailed Description

Definition at line 60 of file `maddata.h`.

4.2.2 Constructor & Destructor Documentation

4.2.2.1 `MadData::MadData ()`

Definition at line 41 of file `maddata.cpp`.

4.2.2.2 `MadData::MadData (const MadData & theData)`

copy constructor

Definition at line 54 of file `maddata.cpp`.

4.2.3 Member Function Documentation

4.2.3.1 `QString MadData::description () const`

The description of this dataset

Definition at line 78 of file `maddata.cpp`.

4.2.3.2 `bool MadData::fromXml (const QString theXml) [virtual]`

Read this object from xml and return result as true for success, false for failure.

See Also

[MadSerialisable](#) this class inherits the serialisable interface so it MUST implement this

Implements [MadSerialisable](#).

Definition at line 105 of file maddata.cpp.

4.2.3.3 QString MadData::imageFile () const

The cultivation vars of this dataset The image file associated with the dataset

Definition at line 83 of file maddata.cpp.

4.2.3.4 QString MadData::name () const

The name of this dataset

Definition at line 73 of file maddata.cpp.

4.2.3.5 MadData & MadData::operator= (const MadData & *theData*)

Assignment operator

Definition at line 62 of file maddata.cpp.

4.2.3.6 void MadData::setDescription (QString *theDescription*)

Set the model description

See Also

[description\(\)](#)

Definition at line 95 of file maddata.cpp.

4.2.3.7 void MadData::setImageFile (QString *theImageFileName*)

Set the image file

See Also

[imageFile\(\)](#)

Definition at line 100 of file maddata.cpp.

4.2.3.8 void MadData::setName (QString *theName*)

Set the modelName

See Also

[name\(\)](#)

Definition at line 90 of file maddata.cpp.

4.2.3.9 QString MadData::toHtml ()

Return a html text representation of this layer

Definition at line 155 of file maddata.cpp.

4.2.3.10 QString MadData::toText ()

Return a plain text representation of this layer

Definition at line 146 of file maddata.cpp.

4.2.3.11 QString MadData::toXml () [virtual]

Return an xml representation of this layer this class inherits the serialisable interface so it MUST implement this

Implements [MadSerialisable](#).

Definition at line 124 of file maddata.cpp.

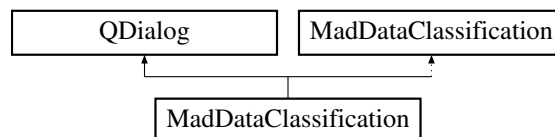
The documentation for this class was generated from the following files:

- /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/lib/[maddata.h](#)
- /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/lib/[maddata.cpp](#)

4.3 MadDataClassification Class Reference

```
#include <maddataclassification.h>
```

Inheritance diagram for MadDataClassification:



Public Member Functions

- [MadDataClassification](#) (QWidget *parent=0)

Protected Member Functions

- void [changeEvent](#) (QEvent *e)

4.3.1 Detailed Description

Definition at line 27 of file maddataclassification.h.

4.3.2 Constructor & Destructor Documentation

4.3.2.1 MadDataClassification::MadDataClassification (QWidget * *parent* = 0) [explicit]

Definition at line 29 of file maddataclassification.cpp.

4.3.3 Member Function Documentation

4.3.3.1 void MadDataClassification::changeEvent (QEvent * e) [protected]

Definition at line 39 of file maddataclassification.cpp.

The documentation for this class was generated from the following files:

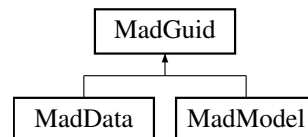
- /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/gui/maddataclassification.h
- /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/gui/maddataclassification.cpp

4.4 MadGuid Class Reference

The [MadGuid](#) class An abstract base class that has a Globally Unique Identifier (GUID) to represent a unique instance.

```
#include <madguid.h>
```

Inheritance diagram for MadGuid:



Public Member Functions

- [MadGuid](#) ()
- QString [guid](#) () const
MadGuid::guid.
- void [setGuid](#) (QString theGuid="")
MadGuid::setGuid.

4.4.1 Detailed Description

The [MadGuid](#) class An abstract base class that has a Globally Unique Identifier (GUID) to represent a unique instance.

Definition at line 32 of file madguid.h.

4.4.2 Constructor & Destructor Documentation

4.4.2.1 MadGuid::MadGuid ()

Constructor

Definition at line 28 of file madguid.cpp.

4.4.3 Member Function Documentation

4.4.3.1 QString MadGuid::guid () const

[MadGuid::guid.](#)

Destructor Retrieve the GUID

Returns

Definition at line 40 of file madguid.cpp.

4.4.3.2 void MadGuid::setGuid (QString *theGuid* = " ")

[MadGuid::setGuid](#).

Parameters

<i>theGuid</i>	
----------------	--

Definition at line 49 of file madguid.cpp.

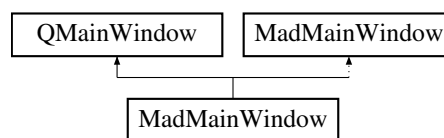
The documentation for this class was generated from the following files:

- /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/lib/[madguid.h](#)
- /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/lib/[madguid.cpp](#)

4.5 MadMainWindow Class Reference

```
#include <madmainwindow.h>
```

Inheritance diagram for MadMainWindow:



Public Member Functions

- [MadMainWindow](#) (QWidget *parent=0)

Protected Member Functions

- void [changeEvent](#) (QEvent *e)
loadModels Refreshes the list of known models

4.5.1 Detailed Description

This is the main GUI class

Author

Jason Jorgenson

Definition at line 38 of file madmainwindow.h.

4.5.2 Constructor & Destructor Documentation

4.5.2.1 MadMainWindow::MadMainWindow (QWidget * *parent* = 0) [explicit]

This is the main form GUI of MAD (Macsur ADapter) It sets up the required slot connections and initialises the GUI

Parameters

<i>parent</i>	
---------------	--

Definition at line 31 of file madmainwindow.cpp.

4.5.3 Member Function Documentation

4.5.3.1 void MadMainWindow::changeEvent (QEvent * *e*) [protected]

loadModels Refreshes the list of known models

changeEvent for translations in the future

Parameters

<i>e</i>	
----------	--

Definition at line 44 of file madmainwindow.cpp.

The documentation for this class was generated from the following files:

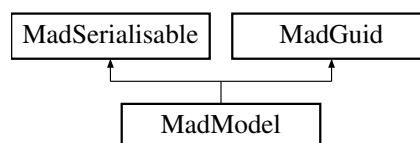
- /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/madmainwindow.h
- /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/madmainwindow.cpp

4.6 MadModel Class Reference

The [MadModel](#) class, to represent a ModelTheme.

```
#include <madmodel.h>
```

Inheritance diagram for MadModel:



Public Member Functions

- [MadModel](#) ()
- [MadModel](#) (const [MadModel](#) &theModel)
- [MadModel](#) & [operator=](#) (const [MadModel](#) &theModel)
- QString [name](#) () const
- QString [description](#) () const
- QString [imageFile](#) () const
- void [setName](#) (QString theName)
- void [setDescription](#) (QString theDescription)
- void [setImageFile](#) (QString theImageFileName)

- QString [toXml](#) ()
- QString [toText](#) ()
- QString [toHtml](#) ()
- bool [fromXml](#) (const QString theXml)

4.6.1 Detailed Description

The [MadModel](#) class, to represent a ModelTheme.

Definition at line 56 of file madmodel.h.

4.6.2 Constructor & Destructor Documentation

4.6.2.1 MadModel::MadModel ()

Constructor .

Definition at line 33 of file madmodel.cpp.

4.6.2.2 MadModel::MadModel (const MadModel & *theModel*)

Destructor . copy constructor

Definition at line 46 of file madmodel.cpp.

4.6.3 Member Function Documentation

4.6.3.1 QString MadModel::description () const

The description of this model

Definition at line 70 of file madmodel.cpp.

4.6.3.2 bool MadModel::fromXml (const QString *theXml*) [virtual]

Read this object from xml and return result as true for success, false for failure.

See Also

[MadSerialisable](#) this class inherits the serialisable interface so it MUST implement this

Implements [MadSerialisable](#).

Definition at line 97 of file madmodel.cpp.

4.6.3.3 QString MadModel::imageFile () const

The image file associated with the model

Definition at line 75 of file madmodel.cpp.

4.6.3.4 QString MadModel::name () const

The name of this model

Definition at line 65 of file madmodel.cpp.

4.6.3.5 MadModel & MadModel::operator= (const MadModel & *theModel*)

Assignment operator

Definition at line 54 of file madmodel.cpp.

4.6.3.6 void MadModel::setDescription (QString *theDescription*)

Set the model description

See Also

[description\(\)](#)

Definition at line 87 of file madmodel.cpp.

4.6.3.7 void MadModel::setImageFile (QString *theImageFileName*)

Set the image file

See Also

[imageFile\(\)](#)

Definition at line 92 of file madmodel.cpp.

4.6.3.8 void MadModel::setName (QString *theName*)

Set the modelName

See Also

[name\(\)](#)

Definition at line 82 of file madmodel.cpp.

4.6.3.9 QString MadModel::toHtml ()

Return a html text representation of this layer

Definition at line 147 of file madmodel.cpp.

4.6.3.10 QString MadModel::toText ()

Return a plain text representation of this layer

Definition at line 138 of file madmodel.cpp.

4.6.3.11 QString MadModel::toXml () [virtual]

Return an xml representation of this layer this class inherits the serialisable interface so it MUST implement this

Implements [MadSerialisable](#).

Definition at line 116 of file madmodel.cpp.

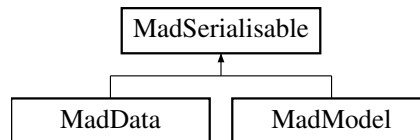
The documentation for this class was generated from the following files:

- /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/lib/[madmodel.h](#)
- /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/lib/[madmodel.cpp](#)

4.7 MadSerialisable Class Reference

```
#include <madserialisable.h>
```

Inheritance diagram for MadSerialisable:



Public Member Functions

- [MadSerialisable](#) ()
MadSerialisable Constructor.
- virtual QString [toXml](#) ()=0
toXml Write this object to xml and return result as qstring (virtual)
- virtual bool [toXmlFile](#) (const QString theFileName)
toXmlFile writes object to xml and return result (virtual qstring) We provide a basic default implementation where given a file name, we will write the serialised xml to that file. Internally it uses [toXml\(\)](#) method so that must be properly implemented.
- virtual bool [fromXml](#) (const QString theXml)=0
fromXml Read this object from xml
- virtual bool [fromXmlFile](#) (const QString theFileName)
fromXmlFile Read this object from xml in a file

4.7.1 Detailed Description

An abstract base class for any class that is serialiseable to xml

Author

Tim Sutton, Jason Jorgenson

Definition at line 50 of file madserialisable.h.

4.7.2 Constructor & Destructor Documentation

4.7.2.1 MadSerialisable::MadSerialisable ()

[MadSerialisable](#) Constructor.

Definition at line 49 of file madserialisable.cpp.

4.7.3 Member Function Documentation

4.7.3.1 virtual bool MadSerialisable::fromXml (const QString theXml) [pure virtual]

fromXml Read this object from xml

Parameters

<i>theXml</i>	
---------------	--

Returns

result as true for success, false for failure (virtual)

Implemented in [MadData](#), and [MadModel](#).

4.7.3.2 bool MadSerialisable::fromXmlFile (const QString *theFileName*) [virtual]

fromXmlFile Read this object from xml in a file

See Also

[fromXmlFile\(\)](#) Internally it uses [fromXml\(QString\)](#) so that must be properly implemented

Parameters

<i>theFileName</i>	
--------------------	--

Returns

result as true for success, false for failure.

Definition at line 76 of file madserialisable.cpp.

4.7.3.3 virtual QString MadSerialisable::toXml () [pure virtual]

toXml Write this object to xml and return result as qstring (virtual)

Desctructor .

Returns

Implemented in [MadData](#), and [MadModel](#).

4.7.3.4 bool MadSerialisable::toXmlFile (const QString *theFileName*) [virtual]

toXmlFile writes object to xml and return result (virtual qstring) We provide a basic default implementation where given a file name, we will write the serialised xml to that file. Internally it uses [toXml\(\)](#) method so that must be properly implemented.

See Also

[toXml\(\)](#)

Parameters

<i>theFileName</i>	
--------------------	--

Returns

QString (virtual)

Definition at line 57 of file madserialisable.cpp.

The documentation for this class was generated from the following files:

- [/Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/lib/madserialisable.h](#)
- [/Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/lib/madserialisable.cpp](#)

4.8 MadSubCategory Struct Reference

```
#include <maddata.h>
```

Public Attributes

- QString [name](#)
- bool [minData](#)
- float [depth](#)
- int [observations](#)
- float [weightPoints](#)
- int [replicates](#)

4.8.1 Detailed Description

Definition at line 43 of file maddata.h.

4.8.2 Member Data Documentation

4.8.2.1 float MadSubCategory::depth

Definition at line 47 of file maddata.h.

4.8.2.2 bool MadSubCategory::minData

Definition at line 46 of file maddata.h.

4.8.2.3 QString MadSubCategory::name

Definition at line 45 of file maddata.h.

4.8.2.4 int MadSubCategory::observations

Definition at line 48 of file maddata.h.

4.8.2.5 int MadSubCategory::replicates

Definition at line 50 of file maddata.h.

4.8.2.6 float MadSubCategory::weightPoints

Definition at line 49 of file maddata.h.

The documentation for this struct was generated from the following file:

- [/Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/lib/maddata.h](#)

4.9 MadUtils Class Reference

```
#include <madutils.h>
```

Public Types

- typedef QMap< QString, [MadModel](#) > [ModelMap](#)
ModelMap (typedef) This typedef is used to refer to a collection of layersets. the key is the layerset name the value is the layerset itself.

Public Member Functions

- [MadUtils](#) ()
- QString [openGraphicFile](#) ()
- QString [saveFile](#) ()

Static Public Member Functions

- static const QString [userSettingsDirPath](#) ()
userSettingsDirPath Find the place on the filesystem where user data is stored
- static const QString [userModelProfilesDirPath](#) ()
userModelProfilesDirPath Find the place on the filesystem where user defined model profiles are stored.
- static const QString [userModelParametersDirPath](#) ()
userModelParametersDirPath Find the place on the filesystem where user defined model parameter profiles are stored.
- static const QString [getModelOutputDir](#) ()
getModelOutputDir Get the place where model outputs are to be stored. By default this is in ~/.macsurAdapter/model-Outputs But if modelOutputsDir is specified in QSettings, it will override the default.
- static const QString [userImagesDirPath](#) ()
userImagesDirPath Find the place on the filesystem where user images are stored.
- static [MadUtils::ModelMap](#) [getAvailableModels](#) ()
getAvailableModels Get a QMap of the available layersets in the users layersets directory
- static [MadModel](#) [getModel](#) (QString theGuid)
getModel Get a [MadModel](#) given its GUID. If no matching model is found, a blank one is returned.
- static QStringList [sortList](#) (QStringList theList)
sortList Sort a string list into descending alphabetic order and return the result.
- static QStringList [uniqueList](#) (QStringList theList)
uniqueList Remove any duplicate entries from a sorted list
- static bool [createTextFile](#) (QString theFileName, QString theData)
createTextFile A helper method to easily write a file to disk.
- static QString [xmlEncode](#) (QString theString)
xmlEncode A helper method to xml encode any special chars in a string (< > & etc) will become (< > & etc)
- static QString [xmlDecode](#) (QString theString)
xmlDecode A helper method to xml decode any special chars in a string (< > & etc) will become (< > & etc)
- static QString [getStandardCss](#) ()
getStandardCss Get the standard style sheet for reports. Typically this will be used like this: QString myStyle = [getStandardCss](#)(); textBrowserFoo->document()->setDefaultStylesheet(myStyle);
- static const QString [userConversionTablesDirPath](#) ()

4.9.1 Detailed Description

Definition at line 41 of file madutils.h.

4.9.2 Member Typedef Documentation

4.9.2.1 `typedef QMap<QString,MadModel> MadUtils::ModelMap`

ModelMap (typedef) This typedef is used to refer to a collection of layersets. the key is the layerset name the value is the layerset itself.

Definition at line 101 of file madutils.h.

4.9.3 Constructor & Destructor Documentation

4.9.3.1 `MadUtils::MadUtils ()`

Definition at line 44 of file madutils.cpp.

4.9.4 Member Function Documentation

4.9.4.1 `bool MadUtils::createTextFile (QString theFileName, QString theData) [static]`

createTextFile A helper method to easily write a file to disk.

Parameters

<i>theFileName</i>	- the filename to be created or overwritten
<i>theData</i>	- the data that will be written into the file

Returns

bool - false if the file could not be written

Definition at line 126 of file madutils.cpp.

4.9.4.2 `MadUtils::ModelMap MadUtils::getAvailableModels () [static]`

getAvailableModels Get a QMap of the available layersets in the users layersets directory

Returns

a QMap<QString,OmgLayerSet> where the QString key is the layerset name

Definition at line 93 of file madutils.cpp.

4.9.4.3 `static MadModel MadUtils::getModel (QString theGuid) [static]`

getModel Get a [MadModel](#) given its GUID. If no matching model is found, a blank one is returned.

4.9.4.4 `const QString MadUtils::getModelOutputDir () [static]`

getModelOutputDir Get the place where model outputs are to be stored. By default this is in ~/.macsur-Adapter/modelOutputs But if modelOutputsDir is specified in QSettings, it will override the default.

Definition at line 60 of file madutils.cpp.

4.9.4.5 QString MadUtils::getStandardCss () [static]

getStandardCss Get the standard style sheet for reports. Typically this will be used like this: `QString myStyle = getStandardCss(); textBrowserFoo->document()->setDefaultStyleSheet(myStyle);`

Definition at line 159 of file madutils.cpp.

4.9.4.6 QString MadUtils::openGraphicFile ()

Definition at line 180 of file madutils.cpp.

4.9.4.7 QString MadUtils::saveFile ()

Definition at line 191 of file madutils.cpp.

4.9.4.8 static QStringList MadUtils::sortList (QStringList *theList*) [static]

sortList Sort a string list into descending alphabetic order and return the result.

Parameters

<i>theList</i>	- the QStringList to be sorted
----------------	--------------------------------

Returns

QStringList - sorted in descending alphabetical order

4.9.4.9 static QStringList MadUtils::uniqueList (QStringList *theList*) [static]

uniqueList Remove any duplicate entries from a sorted list

Parameters

<i>theList</i>	- the QStringList to be sorted
----------------	--------------------------------

Returns

QStringList - a list with no sequential duplicates

4.9.4.10 const QString MadUtils::userConversionTablesDirPath () [static]

Find the place on the filesystem where user created conversion tables in csv format are stored

Typically this will be `~/macsurAdapter/conversionTables`

Returns

QString containing the relevant directory name

Definition at line 201 of file madutils.cpp.

4.9.4.11 const QString MadUtils::userImagesDirPath () [static]

userImagesDirPath Find the place on the filesystem where user images are stored.

Typically this will be `~/macsurAdapter/images`

Returns

QString containing the relevant directory name

Definition at line 85 of file madutils.cpp.

4.9.4.12 const QString MadUtils::userModelParametersDirPath () [static]

userModelParametersDirPath Find the place on the filesystem where user defined model parameter profiles are stored.

Typically this will be ~/.macsurAdapter/animalParameters

Returns

QString containing the relevant directory name

Definition at line 76 of file madutils.cpp.

4.9.4.13 const QString MadUtils::userModelProfilesDirPath () [static]

uerModelProfilesDirPath Find the place on the filesystem where user defined model profiles are stored.

Typically this will be ~/.macsurAdapter/modelProfiles

Returns

QString containing the relevant directory name

Definition at line 67 of file madutils.cpp.

4.9.4.14 const QString MadUtils::userSettingsDirPath () [static]

userSettingsDirPath Find the place on the filesystem where user data is stored

Typically, this will be ~/.macsurAdapter

Returns

QString containing the relevant directory name

Returns the path to the settings directory in user's home dir

Definition at line 51 of file madutils.cpp.

4.9.4.15 QString MadUtils::xmlDecode (QString *theString*) [static]

xmlDecode A helper method to xml deencode any special chars in a string (< > & etc) will become (< > & etc)

Parameters

<i>QString</i>	- the string to be properly decoded
----------------	-------------------------------------

Returns

A QString with the encoded chars properly decoded

Definition at line 151 of file madutils.cpp.

4.9.4.16 QString MadUtils::xmlEncode (QString *theString*) [static]

xmlEncode A helper method to xml encode any special chars in a string (< > & etc) will become (< > & etc)

Parameters

QString	- the string to be properly encoded
---------	-------------------------------------

Returns

A QString with the special chars properly encoded

Definition at line 143 of file madutils.cpp.

The documentation for this class was generated from the following files:

- /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/lib/[madutils.h](#)
- /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/lib/[madutils.cpp](#)

Chapter 5

File Documentation

5.1 /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/gui/maddataclassification.cpp File Reference

```
#include <iomanip>
#include "maddataclassification.h"
#include "lib/mad.h"
```

5.2 /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/gui/maddataclassification.h File Reference

```
#include "ui_maddataclassificationbase.h"
```

Classes

- class [MadDataClassification](#)

5.3 /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/lib/mad.h File Reference

```
#include <QMap>
#include <QPair>
#include <QString>
#include "madmodel.h"
#include "maddata.h"
```

Typedefs

- typedef QMap< QString, QPair
< bool, QString > > [MadTripleMap](#)
MadTripleMap.

- typedef QPair< QPair< QString,
QString >, QPair< QString,
QString > > [MadModelInfo](#)
MadModelInfo.

Enumerations

- enum [ModelTheme](#) { [CropM](#), [LiveM](#), [TradeM](#) }
MadModelMap.
- enum [Scale](#) {
[Farm](#), [Locality](#), [Region](#), [National](#),
[International](#), [Global](#) }
The Scale enum.
- enum [Nuts](#) { [Nuts1](#), [Nuts2](#), [Nuts3](#) }
The Nuts enum.
- enum [AreaUnits](#) {
[Dunum](#), [Hectare](#), [Acre](#), [SquareKm](#),
[SquareMile](#) }
The AreaUnits enum.
- enum [FileType](#) { [CSV](#), [TAB](#), [OtherDelimited](#), [Binary](#) }
The FileType enum.
- enum [EnergyType](#) { [KCalories](#), [TDN](#) }
The EnergyType enum.
- enum [DataClass](#) { [Platinum](#), [Gold](#), [Silver](#), [Bronze](#) }
The DataClass enum.

5.3.1 Typedef Documentation

5.3.1.1 typedef QPair<QPair<QString,QString>, QPair<QString,QString> > [MadModelInfo](#)

[MadModelInfo](#).

Definition at line 57 of file mad.h.

5.3.1.2 typedef QMap<QString,QPair<bool,QString> > [MadTripleMap](#)

[MadTripleMap](#).

Definition at line 53 of file mad.h.

5.3.2 Enumeration Type Documentation

5.3.2.1 enum [AreaUnits](#)

The [AreaUnits](#) enum.

Enumerator

[Dunum](#)
[Hectare](#)
[Acre](#)
[SquareKm](#)
[SquareMile](#)

Definition at line 78 of file mad.h.

5.3.2.2 enum DataClass

The DataClass enum.

Enumerator

Platinum

Gold

Silver

Bronze

Definition at line 90 of file mad.h.

5.3.2.3 enum EnergyType

The EnergyType enum.

Enumerator

KCalories

TDN

Definition at line 86 of file mad.h.

5.3.2.4 enum FileType

The FileType enum.

Enumerator

CSV

TAB

OtherDelimited

Binary

Definition at line 82 of file mad.h.

5.3.2.5 enum ModelTheme

MadModelMap.

The ModelTheme enum

Enumerator

CropM

LiveM

TradeM

Definition at line 66 of file mad.h.

5.3.2.6 enum Nuts

The Nuts enum.

Enumerator

Nuts1

Nuts2

Nuts3

Definition at line 74 of file mad.h.

5.3.2.7 enum Scale

The Scale enum.

Enumerator

Farm

Locality

Region

National

International

Global

Definition at line 70 of file mad.h.

5.4 /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/lib/maddata.cpp File Reference

```
#include "maddata.h"
#include "madutils.h"
#include <QString>
#include <QDomDocument>
#include <QDomElement>
#include <QDebug>
```

5.5 /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/lib/maddata.h File Reference

```
#include "madserialisable.h"
#include "madguid.h"
#include "mad.h"
#include <QString>
```

Classes

- struct [MadSubCategory](#)
- struct [MadCategory](#)
- class [MadData](#)

5.6 /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/lib/madguid.cpp File Reference

```
#include "madguid.h"
#include <QUuid>
```

5.7 /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/lib/madguid.h File Reference

```
#include <QString>
```

Classes

- class [MadGuid](#)

The [MadGuid](#) class An abstract base class that has a Globally Unique Identifier (GUID) to represent a unique instance.

5.8 /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/lib/madmodel.cpp File Reference

```
#include "madmodel.h"
#include "madutils.h"
#include <QString>
#include <QDomDocument>
#include <QDomElement>
#include <QDebug>
```

5.9 /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/lib/madmodel.h File Reference

```
#include "madserialisable.h"
#include "madguid.h"
#include "mad.h"
#include <QString>
```

Classes

- class [MadModel](#)

The [MadModel](#) class, to represent a ModelTheme.

5.10 /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/lib/madserialisable.cpp File Reference

```
#include "madserialisable.h"
#include <QFile>
#include <QString>
#include <QTextStream>
#include <QDebug>
```

5.11 /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/lib/madserialisable.h File Reference

```
#include <QFile>
```

Classes

- class [MadSerialisable](#)

5.12 /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/lib/madutils.cpp File Reference

```
#include "madutils.h"
#include "madmodel.h"
#include <QApplication>
#include <QDir>
#include <QFile>
#include <QPluginLoader>
#include <QSettings>
#include <QString>
#include <QStringList>
#include <QVector>
#include <QtXml>
#include <QFileDialog>
```

5.13 /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/lib/madutils.h File Reference

```
#include "mad.h"
#include "madmodel.h"
#include "maddata.h"
#include <QHash>
#include <QMap>
#include <QString>
#include <QStringList>
#include <QColumnView>
```

Classes

- class [MadUtils](#)

5.14 /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/lib/madversion.h File Reference

Macros

- `#define VERSION "0.1"`

5.14.1 Macro Definition Documentation

5.14.1.1 `#define VERSION "0.1"`

Definition at line 23 of file madversion.h.

5.15 /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/madmainwindow.cpp File Reference

```
#include <QModelIndex>
#include <QDebug>
#include <QTreeView>
#include "madmainwindow.h"
#include "lib/madversion.h"
#include "gui/maddataclassification.h"
```

5.16 /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/madmainwindow.h File Reference

```
#include "gui/maddataclassification.h"
#include <QModelIndex>
#include "ui_madmainwindowbase.h"
```

Classes

- class [MadMainWindow](#)

5.17 /Users/arkygeek/QtProjects/macsur-adapter/src/MacsurAdapter/main.cpp File Reference

```
#include <QApplication>
#include "madmainwindow.h"
#include "lib/madversion.h"
```

Functions

- int `main` (int argc, char *argv[])

5.17.1 Function Documentation

5.17.1.1 int main (int *argc*, char * *argv*[])

Definition at line 37 of file main.cpp.

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