

**ARdevKit**

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Generated by Doxygen 1.8.5

Sun Mar 2 2014 17:32:37



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# Chapter 1

## Namespace Index

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# Chapter 2

## Hierarchical Index

### 2.1 Class Hierarchy

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| ARdevKit.Controller.ProjectController.AbstractProjectVisitor . . . . .                | 40  |
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| ARdevKit.Model.Project.AbstractSensor . . . . .                                       | 47  |
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| ARdevKit.View.SceneElementCategoryPanel . . . . .                                     | 197 |
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| ARdevKit.Controller.TestController.ProcessVideoWindow . . . . .                       | 184 |
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| ICloneable  |     |
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| ARdevKit.Model.Project.AbstractAugmentation . . . . .                                 | 23  |
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|---|-----|
| ARdevKit.Model.Project.AbstractDynamic2DAugmentation . . . . .      | 34  |
| ARdevKit.Model.Project.Chart . . . . .                              | 74  |
| ARdevKit.Model.Project.ImageAugmentation . . . . .                  | 124 |
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| ARdevKit.Model.Project.DbSource . . . . .                           | 85  |
| ARdevKit.Model.Project.FileSource . . . . .                         | 116 |
| ARdevKit.Model.Project.AbstractTrackable . . . . .                  | 56  |
| ARdevKit.Model.Project.Abstract2DTrackable . . . . .                | 19  |
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| ARdevKit.Model.Project.ImageTrackable . . . . .                     | 129 |
| ARdevKit.Model.Project.PictureMarker . . . . .                      | 164 |
| ARdevKit.Model.Project.MarkerFuser . . . . .                        | 147 |
| ARdevKit.Model.Project.MarkerlessFuser . . . . .                    | 149 |
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| ARdevKit.Model.Project.Project . . . . .                            | 187 |
| Controller.EditorController.PropertyController . . . . .            | 192 |
| ARdevKit.Controller.EditorController.SceneElement . . . . .         | 193 |
| ARdevKit.Controller.EditorController.SceneElementCategory . . . . . | 195 |
| ARdevKit.Model.Project.ScreenSize . . . . .                         | 200 |
| TableLayoutPanel  |     |
| ARdevKit.View.ElementIcon . . . . .                                 | 101 |
| ARdevKit.Controller.EditorController.ThumbCreator . . . . .         | 211 |
| UITypeEditor  |     |
| ARdevKit.View.FileSelectorTypeEditor . . . . .                      | 114 |
| ARdevKit.View.SliderEditor . . . . .                                | 205 |
| ARdevKit.View.TextEditor . . . . .                                  | 207 |
| UserControl   |     |
| ARdevKit.View.Slider . . . . .                                      | 202 |
| ARdevKit.Model.Project.Vector3D . . . . .                           | 215 |
| ARdevKit.Model.Project.Vector3Di . . . . .                          | 217 |

# Chapter 3

## Class Index

### 3.1 Class List

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

|  |    |
|--|----|
| <a href="#">ARdevKit.Model.Project.Abstract2DAugmentation</a>  |    |
| Describes an abstract two-dimensional augmentation with its additional features height and width.  |    |
| It inherits from <a href="#">AbstractAugmentation</a> .  | 15 |
| <a href="#">ARdevKit.Model.Project.Abstract2DTrackable</a>   |    |
| An <a href="#">Abstract2DTrackable</a> is a two-dimensional trackable image, that can be tracked by the metaio SDK.  | 19 |
| <a href="#">ARdevKit.Model.Project.AbstractAugmentation</a>  |    |
| describes an <a href="#">AbstractAugmentation</a> , which is bound to a certain <a href="#">AbstractTrackable</a> . is <a href="#">IPreviewable</a>  | 23 |
| <a href="#">ARdevKit.Model.Project.File.AbstractBlock</a>  |    |
| An <a href="#">AbstractBlock</a> has a <a href="#">level</a> and can contain other <a href="#">AbstractBlocks</a> . It can have a <a href="#">BlockMarker</a> and a <a href="#">parentFile</a> .   | 30 |
| <a href="#">ARdevKit.Model.Project.AbstractDynamic2DAugmentation</a>   |    |
| Inherits from <a href="#">Abstract2DAugmentation</a> and adds <a href="#">AbstractSource</a> , in order to show dynamic content.   | 34 |
| <a href="#">ARdevKit.Model.Project.File.AbstractFile</a>   |    |
| An <a href="#">AbstractFile</a> can be an <a href="#">ARELConfigFile</a> , an <a href="#">ARELProjectFile</a> , a <a href="#">TrackinDataFile</a> or an <a href="#">AREL-GlueFile</a> . It must have a <a href="#">filePath</a> and can have a header and consists of <a href="#">AbstractBlocks</a> . | 38 |
| <a href="#">ARdevKit.Controller.ProjectController.AbstractProjectVisitor</a>   |    |
| An abstract project visitor.   | 40 |
| <a href="#">ARdevKit.Model.Project.AbstractSensor</a>  |    |
| An <a href="#">AbstractSensor</a> has a name, a <a href="#">sensorType</a> , and can have a <a href="#">sensorSubType</a> . Moreover it has a <a href="#">sensorIDBase</a> which is used to create the <a href="#">sensorIDString</a> .  | 47 |
| <a href="#">ARdevKit.Model.Project.AbstractSource</a>  |    |
| AbstractSource has no <a href="#">PictureBox</a> in the <a href="#">PreviewPanel</a> , so it doesn't need a <a href="#">getPreview()</a> method, though <a href="#">getIcon()</a> is needed for the <a href="#">ElementSelectionPanel</a> .  | 51 |
| <a href="#">ARdevKit.Model.Project.AbstractTrackable</a>   |    |
| Describes an <a href="#">AbstractTrackable</a> with its associated <a href="#">AbstractAugmentations</a> and further details used for AREL. Is <a href="#">IPreviewable</a>  | 56 |
| <a href="#">ARdevKit.Model.Project.File.ARELConfigFile</a>   |    |
| An arelConfig.xml.   | 62 |
| <a href="#">ARdevKit.Model.Project.File.ARELGlueFile</a>   |    |
| An arelGlue.js.  | 65 |
| <a href="#">ARdevKit.Model.Project.File.ARELProjectFile</a>  |    |
| A arel[projectName].html.  | 68 |
| <a href="#">ARdevKit.Model.Project.File.BlockMarker</a>  |    |
| A <a href="#">BlockMarker</a> marks an <a href="#">AbstractBlock</a> . It has a <a href="#">Start</a> string and an <a href="#">End</a> string and can be open or closed.  | 71 |

|   |  |     |
|---|--|-----|
| <a href="#">ARdevKit.Model.Project.Chart</a>  | Describes a <a href="#">Chart</a> with its Colors and OptimalValues. It is a <a href="#">Chart</a> . . . . .   | 74  |
| <a href="#">ARdevKit.Model.Project.File.ChartFile</a>                                       | A <a href="#">ChartFile</a> is an <a href="#">AbstractFile</a> which represents the chart.js. . . . .  | 79  |
| <a href="#">ARdevKit.Model.Project.ChartPositioning</a>                                     | Used to set the position of a chart used by HighChart. . . . .   | 82  |
| <a href="#">ARdevKit.Model.Project.CustomUserEvent</a>                                      | The class <a href="#">CustomUserEvent</a> mainly contains a reference path to a file, which is in the /tmp/Folder. This file has ALL Events the user creates (inclusive the template events we provide) for ONE augmentation. . . . .                          | 84  |
| <a href="#">ARdevKit.Model.Project.DbSource</a>   | A database source . . . . .  | 85  |
| <a href="#">ARdevKit.View.DebugWindow</a>   | This is a Form, containing a TextBox, which can be filled threadsafe. Its for displaying Debug-Information. . . . .  | 89  |
| <a href="#">ARdevKit.Controller.Connections.DeviceConnection.DeviceConnectionController</a> | <a href="#">Controller</a> which provides functions, to gather Information about Devices, which are running ARdevKitPlayer and are connected to the local Network. On top of that it provides functions to send Projects and receive Debuginformation. . . . . | 92  |
| <a href="#">ARdevKit.EditorWindow</a>   | Form for viewing the editor. This is the main form of the program. . . . .   | 95  |
| <a href="#">ARdevKit.View.ElementIcon</a>   | An element icon is used to display a registered SceneElement in the SceneSelectionPanel. . . . .   | 101 |
| <a href="#">ARdevKit.Controller.EditorController.ElementSelectionController</a>             | The <a href="#">ElementSelectionController</a> is used to controll the section of the UI, . . . . .  | 105 |
| <a href="#">ARdevKit.Controller.ProjectController.ExportVisitor</a>                         | An <a href="#">ExportVisitor</a> is an <a href="#">AbstractProjectVisitor</a> which exports the project to the path defined in Project so that it is readable by the player. . . . .   | 107 |
| <a href="#">ARdevKit.View.FileSelectorTypeEditor</a>  | Class which acts as "bridge" for the .net propertyGrid and an custome ControlForm. . . . .   | 114 |
| <a href="#">ARdevKit.Model.Project.FileSource</a>   | A file source. . . . .   | 116 |
| <a href="#">ARdevKit.Model.Project.IDMarker</a>   | <a href="#">IDMarker</a> is a AbstractMarker adding an matrixID. . . . .   | 120 |
| <a href="#">ARdevKit.Model.Project.ImageAugmentation</a>                                    | An augmentation only described by an ImagePath. It is an <a href="#">Abstract2DAugmentation</a> . . . . .  | 124 |
| <a href="#">ARdevKit.Model.Project.ImageTrackable</a>                                       | Describes a Marker, which is very flexible, because it is also a Picture. It is an AbstractMarker . . . . .  | 129 |
| <a href="#">ARdevKit.Model.Project.IPreviewable</a>   | Interface for previewable elements from the <a href="#">Model</a> . . . . .  | 134 |
| <a href="#">ARdevKit.Model.Project.File.JavaScriptBlock</a>                                 | A <a href="#">JavaScriptBlock</a> block is an <a href="#">AbstractBlock</a> . It has a head and constits of other <a href="#">JavaScriptBlocks</a> and <a href="#">JavaScriptLines</a> . . . . .   | 136 |
| <a href="#">ARdevKit.Model.Project.File.JavaScriptInLine</a>                                | A <a href="#">JavaScriptInLine</a> is a <a href="#">JavaScriptLine</a> which is closed by a "," instead of a ";" . . . . .   | 140 |
| <a href="#">ARdevKit.Model.Project.File.JavaScriptLine</a>                                  | A <a href="#">JavaScriptLine</a> is a <a href="#">JavaScriptBlock</a> which has a <a href="#">content</a> that is written in a single line. . . . .  | 143 |
| <a href="#">ARdevKit.Model.Project.MarkerFuser</a>  | A <a href="#">MarkerFuser</a> has a fuserType, an alphaTranslation, an alphaRotation and a keepPoseFor-NumberOfFrames value. . . . .   | 147 |
| <a href="#">ARdevKit.Model.Project.MarkerlessFuser</a>                                      | The <a href="#">MarkerlessFuser</a> is a <a href="#">MarkerFuser</a> that additionally has, gravityAssistance, gamma-Translation, gammaRotation and continueLostTrackingWithOrientationSensor value. . . . .   | 149 |
| <a href="#">ARdevKit.Model.Project.MarkerlessSensor</a>                                     | Used to change the properties of the metaio SDK and how to track markerless trackables. it is an <a href="#">AbstractSensor</a> . . . . .  | 152 |
| <a href="#">ARdevKit.Model.Project.MarkerSensor</a>   | A <a href="#">MarkerSensor</a> is an <a href="#">AbstractSensor</a> which is used for marker based tracking. . . . .   | 157 |

|   |     |
|---|-----|
| ARdevKit.Model.Project.File.NonTerminatingXMLTag  | 162 |
| A NonTerminatingXMLTag is a XMLTag which has no end part.   | 162 |
| ARdevKit.Model.Project.PictureMarker  | 164 |
| Describes a Marker, which is very flexible, because it is also a Picture. It is an AbstractMarker .   | 164 |
| ARdevKit.Model.Project.PictureMarkerSensor  | 169 |
| A PictureMarkerSensor is a AbstractSensor used for PictureMarker. Contains the values, which are used from the MetaioSDK to populate the TrackingData.XML. They describe which Marker should be tracked, and at what quality and speed. | 169 |
| PreviewController   | 173 |
| The class PreviewController manages all things which are in contact with the PreviewPanel. Here are all methods, who influence the PreviewPanel.  | 173 |
| ARdevKit.Controller.TestController.ProcessVideoWindow   | 184 |
| The ProcessVideoWindow processes a video and shows the progress.  | 184 |
| ARdevKit.Model.Project.Project  | 187 |
| Encapsulates everything, that is needed for an AR-Application and so this the element, which the user saves, loads or exports   | 187 |
| Controller.EditorController.PropertyController  | 192 |
| The PropertyController contains events for the propertyGrid   | 192 |
| ARdevKit.Controller.EditorController.SceneElement   | 193 |
| An element that can be added to a Scene.  | 193 |
| ARdevKit.Controller.EditorController.SceneElementCategory   | 195 |
| A category for scene elements.  | 195 |
| ARdevKit.View.SceneElementCategoryPanel   | 197 |
| Panel the scene element category. Is used to display multiple ElementIcons in a row.  | 197 |
| ARdevKit.Model.Project.ScreenSize   | 200 |
| This class models the ScreenSize.   | 200 |
| ARdevKit.View.Slider  | 202 |
| UserControl for an Trackbar/Slider. Currently not used (2.3.14)   | 202 |
| ARdevKit.View.SliderEditor  | 205 |
| Class which acts as "bridge" for the .net propertyGrid and an custome ControlForm.  | 205 |
| ARdevKit.View.TextEditor  | 207 |
| Class which acts as "bridge" for the .net propertyGrid and an custome Form.   | 207 |
| ARdevKit.TextEditorForm   | 209 |
| Form-Class for the TextEditor.  | 209 |
| ARdevKit.Controller.EditorController.ThumbCreator   | 211 |
| Utility class to create a thumbnail from video files. Uses AForge library.  | 211 |
| ARdevKit.Model.Project.File.TrackingDataFile  | 213 |
| A trackingData_[SensorType][SensorSubType].xml.   | 213 |
| ARdevKit.Model.Project.Vector3D   | 215 |
| A 3D vektor.  | 215 |
| ARdevKit.Model.Project.Vector3Di  | 217 |
| A vector 3 di. Is a Vector3D with an extra int variable.  | 217 |
| ARdevKit.Model.Project.VideoAugmentation  | 219 |
| A VideoAugmentation is an Abstract2DAugmentation that contains a video file.  | 219 |
| ARdevKit.Model.Project.File.XMLBlock  | 224 |
| A XMLBlock is an AbstractBlock which can have XMLTags.  | 224 |
| ARdevKit.Model.Project.File.XMLLine   | 228 |
| A line is a XMLBlock which can have a value or not.   | 228 |
| ARdevKit.Model.Project.File.XMLTag  | 230 |
| A XMLTag is a BlockMarker.  | 230 |



# Chapter 4

## Namespace Documentation

### 4.1 Package ARdevKit

#### Namespaces

- package [Controller](#)
- package [Model](#)
- package [Properties](#)
- package [View](#)

#### Classes

- class [ARdevKitEditor](#)  
*Main entry class.*
- class [EditorWindow](#)  
*Form for viewing the editor. This is the main form of the program.*
- class [TextEditorForm](#)  
*Form-Class for the TextEditor.*

### 4.2 Package ARdevKit.Controller

#### Namespaces

- package [Connections](#)
- package [EditorController](#)
- package [ProjectController](#)
- package [TestController](#)

### 4.3 Package ARdevKit.Controller.Connections

#### Namespaces

- package [DeviceConnection](#)

## 4.4 Package ARdevKit.Controller.Connections.DeviceConnection

### Classes

- class [DeviceConnectionController](#)

*Controller which provides functions, to gather Information about Devices, which are running ARdevKitPlayer and are connected to the local Network. On top of that it provides functions to send Projects and receive Debuginformation.*

## 4.5 Package ARdevKit.Controller.EditorController

### Classes

- class [ElementSelectionController](#)

*The ElementSelectionController is used to controll the section of the UI,*

- class [SceneElement](#)

*An element that can be added to a Scene.*

- class [SceneElementCategory](#)

*A category for scene elements.*

- class [ThumbCreator](#)

*Utility class to create a thumbnail from video files. Uses AForge library.*

### Enumerations

- enum [MetaCategory](#) { **Source**, **Augmentation**, **Trackable** }

*A category for scene elements.*

### 4.5.1 Enumeration Type Documentation

#### 4.5.1.1 enum ARdevKit.Controller.EditorController.MetaCategory

A category for scene elements.

Robin, 19.01.2014.

## 4.6 Package ARdevKit.Controller.ProjectController

### Classes

- class [AbstractProjectVisitor](#)

*An abstract project visitor.*

- class [ExportVisitor](#)

*An ExportVisitor is an AbstractProjectVisitor which exports the project to the path defined in Project so that it is readable by the player.*

- class [SaveLoadController](#)

*Provides static methods for saving and loading a Project to or from a certain path*

## 4.7 Package ARdevKit.Controller.TestController

### Classes

- class [ProcessVideoWindow](#)  
*The ProcessVideoWindow processes a video and shows the progress.*
- class [TestController](#)  
*The TestController manages the start of the Player.*

## 4.8 Package ARdevKit.Model

### Namespaces

- package [Project](#)

## 4.9 Package ARdevKit.Model.Project

### Namespaces

- package [File](#)

### Classes

- class [Abstract2DAugmentation](#)  
*Describes an abstract twodimensional augmentation with its additional features height and width. It inherits from AbstractAugmentation.*
- class [Abstract2DTrackable](#)  
*An Abstract2DTrackable is a two-dimensional trackable image, that can be tracked by the metaio SDK.*
- class [AbstractAugmentation](#)  
*describes an AbstractAugmentation, which is bound to a certain AbstractTrackable. is IPreviewable*
- class [AbstractDynamic2DAugmentation](#)  
*Inherits from Abstract2DAugmentation and adds AbstractSource, in order to show dynamic content.*
- class [AbstractSensor](#)  
*An AbstractSensor has a name, a sensorType, and can have a sensorSubType. Moreover it has a sensorIDBase which is used to create the sensorIDString.*
- class [AbstractSource](#)  
*AbstractSource has no PictureBox in the PreviewPanel, so it doesn't need a getPreview() method, though getIcon() is needed for the ElementSelectionPanel.*
- class [AbstractTrackable](#)  
*Describes an AbstractTrackable with its associated AbstractAugmentations and further details used for AREL. Is IPreviewable*
- class [Chart](#)  
*Describes a Chart with its Colors and OptimalValues. It is a Chart.*
- class [ChartPositioning](#)  
*Used to set the position of a chart used by HighChart.*
- class [CustomUserEvent](#)  
*The class CustomUserEvent mainly contains a reference path to a file, which is in the /tmp/ Folder. This file has ALL Events the user creates (inclusive the template events we provide) for ONE augmentation.*
- class [DbSource](#)  
*A database source*

- class [FileSource](#)  
*A file source.*
- class [IDFactory](#)  
*An IDFactory produces the ids for [AbstractSensors](#) and [AbstractMarkers](#).*
- class [IDMarker](#)  
*IDMarker is a AbstractMarker adding an matrixID.*
- class [ImageAugmentation](#)  
*An augmentation only described by an ImagePath. It is an [Abstract2DAugmentation](#)*
- class [ImageTrackable](#)  
*Describes a Marker, which is very flexible, because it is also a Picture. It is an AbstractMarker*
- interface [IPreviewable](#)  
*Interface for previewable elements from the [Model](#).*
- class [MarkerFuser](#)  
*A [MarkerFuser](#) has a fuserType, an alphaTranslation, an alphaRotation and a keepPoseForNumberOfFrames value.*
- class [MarkerlessFuser](#)  
*The [MarkerlessFuser](#) is a [MarkerFuser](#) that additionally has, gravityAssistance, gammaTranslation, gammaRotation and continueLostTrackingWithOrientationSensor value.*
- class [MarkerlessSensor](#)  
*Used to change the properties of the metaio SDK and how to track markerless trackables. it is an [AbstractSensor](#)*
- class [MarkerSensor](#)  
*A [MarkerSensor](#) is an [AbstractSensor](#) which is used for marker based tracking.*
- class [PictureMarker](#)  
*Describes a Marker, which is very flexible, because it is also a Picture. It is an AbstractMarker*
- class [PictureMarkerSensor](#)  
*A [PictureMarkerSensor](#) is a [AbstractSensor](#) used for [PictureMarker](#). Contains the values, which are used from the MetaioSDK to populate the TrackingData.XML. They describe which Marker should be tracked, and at what quality and speed.*
- class [Project](#)  
*Encapsulates everything, that is needed for an AR-Application and so this the element, which the user saves, loads or exports*
- class [ScreenSize](#)  
*This class models the [ScreenSize](#).*
- class [Vector3D](#)  
*A 3D vektor.*
- class [Vector3Di](#)  
*A vector 3 di. Is a [Vector3D](#) with an extra int variable.*
- class [VideoAugmentation](#)  
*A [VideoAugmentation](#) is an [Abstract2DAugmentation](#) that contains a video file.*

## 4.10 Package ARdevKit.Model.Project.File

### Classes

- class [AbstractBlock](#)  
*An [AbstractBlock](#) has a [level](#) and can contain other [AbstractBlocks](#). It can have a [BlockMarker](#) and a [parentFile](#).*
- class [AbstractFile](#)  
*An [AbstractFile](#) can be an [ARELConfigFile](#), an [ARELProjectFile](#), a [TrackinDataFile](#) or an [ARELGlueFile](#). It must have a [filePath](#) and can have a header and consists of [AbstractBlocks](#).*
- class [ARELConfigFile](#)  
*An arelConfig.xml.*
- class [ARELGlueFile](#)

- class **ARELProjectFile**  
A *arel[projectName].html*.
- class **BlockMarker**  
A *BlockMarker* marks an *AbstractBlock*. It has a *Start* string and an *End* string and can be open or closed.
- class **ChartFile**  
A *ChartFile* is an *AbstractFile* which represents the chart.js.
- class **Helper**  
A static *Helper* class which contains some I/O methods.
- class **JavaScriptBlock**  
A *JavaScriptBlock* block is an *AbstractBlock*. It has a head and constits of other *JavaScriptBlocks* and *JavaScriptLines*.
- class **JavaScriptInLine**  
A *JavaScriptInLine* is a *JavaScriptLine* which is closed by a "," instead of a ";".
- class **JavaScriptLine**  
A *JavaScriptLine* is a *JavaScriptBlock* which has a *content* that is written in a single line.
- class **NonTerminatingXMLTag**  
A *NonTerminatingXMLTag* is a *XMLTag* which has no end part.
- class **TrackingDataFile**  
A *trackingData\_[SensorType][SensorSubType].xml*.
- class **XMLBlock**  
A *XMLBlock* is an *AbstractBlock* which can have *XMLTags*.
- class **XMLLine**  
A *line* is a *XMLBlock* which can have a value or not.
- class **XMLTag**  
A *XMLTag* is a *BlockMarker*.

## 4.11 Package ARdevKit.Properties

### Classes

- class **Resources**  
Eine stark typisierte Ressourcenklasse zum Suchen von lokalisierten Zeichenfolgen usw.
- class **Settings**

## 4.12 Package ARdevKit.View

### Classes

- class **DebugWindow**  
This is a Form, containing a TextBox, which can be filled threadsafe. Its for displaying DebugInformation.
- class **ElementIcon**  
An element icon is used to display a registered SceneElement in the SceneSelectionPanel.
- class **FileSelectorTypeEditor**  
Class which acts as "bridge" for the .net propertyGrid and an custome ControlForm.
- class **SceneElementCategoryPanel**  
Panel the scene element category. Is used to display multiple ElementIcons in a row.
- class **Slider**  
UserControl for an Trackbar/Slider. Currently not used (2.3.14)

- class [SliderEditor](#)  
*Class which acts as "bridge" for the .net propertyGrid and an custome ControlForm.*
- class [TextEditor](#)  
*Class which acts as "bridge" for the .net propertyGrid and an custome Form.*

## 4.13 Package Controller

### Namespaces

- package [EditorController](#)

## 4.14 Package Controller.EditorController

### Classes

- class [PropertyController](#)  
*The [PropertyController](#) contains events for the propertyGrid*

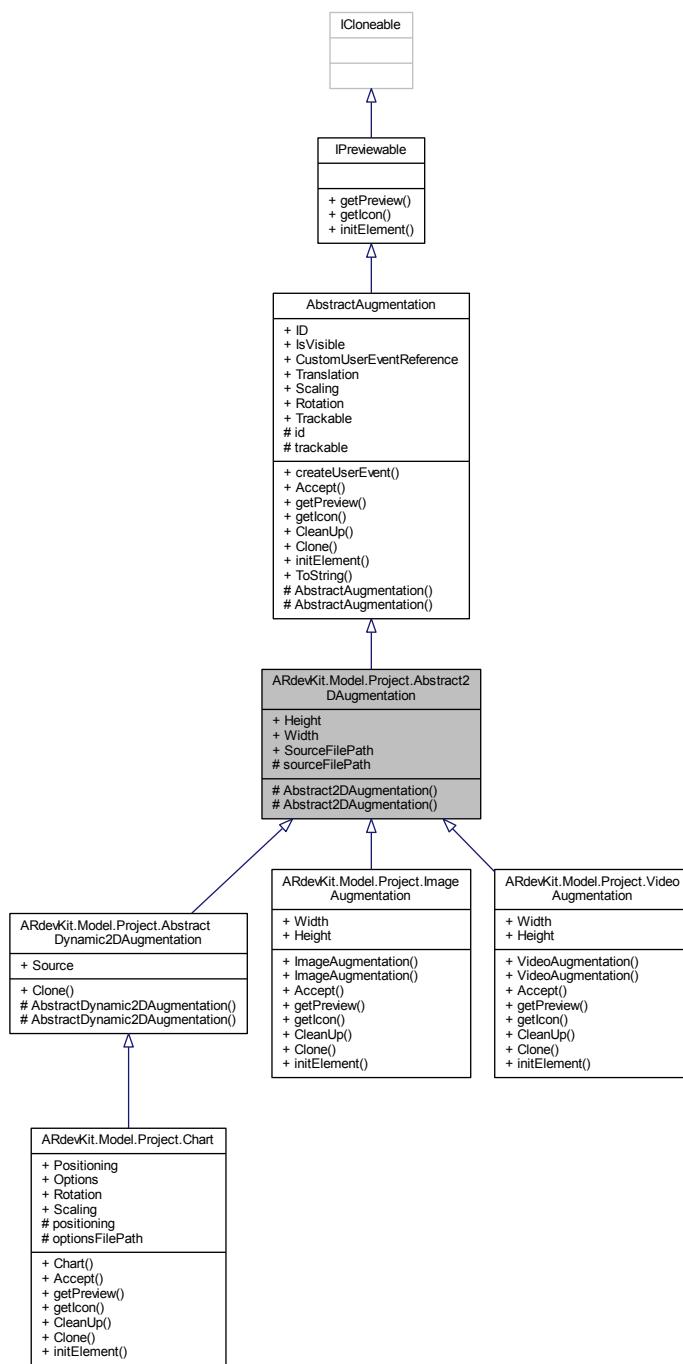
## Chapter 5

# Class Documentation

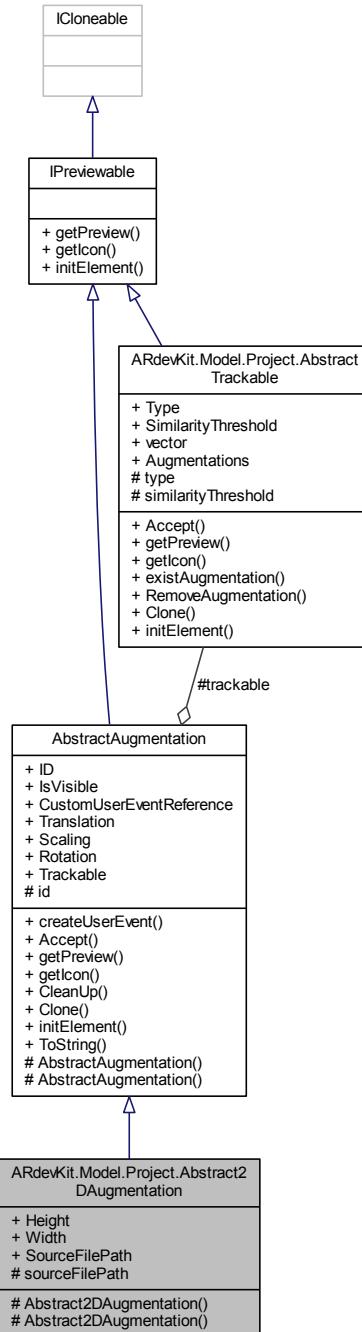
### 5.1 ARdevKit.Model.Project.Abstract2DAugmentation Class Reference

Describes an abstract twodimensional augmentation with its additional features height and width. It inherits from [AbstractAugmentation](#).

Inheritance diagram for ARdevKit.Model.Project.Abstract2DAugmentation:



Collaboration diagram for ARdevKit.Model.Project.Abstract2DAugmentation:



## Protected Member Functions

- **Abstract2DAugmentation ()**

*Initializes no new instance of the **Abstract2DAugmentation** class, but can be used in inheriting classes. sets height and width = 0*

- **Abstract2DAugmentation (bool isVisible, Vector3D translationVector, Vector3D scaling, AbstractTrackable trackable, int width, int height)**

*constructor, which sets every member of the class as specified, for use from inheriting classes*

## Protected Attributes

- string **sourceFilePath**

*Full pathname of the source file.*

## Properties

- int **Height** [get, set]  
*Gets or sets the height.*
- int **Width** [get, set]  
*Gets or sets the width.*
- string **SourceFilePath** [get, set]  
*Gets or sets the full pathname of the image file.*

## Additional Inherited Members

### 5.1.1 Detailed Description

Describes an abstract twodimensional augmentation with its additional features height and width. It inherits from [AbstractAugmentation](#).

### 5.1.2 Constructor & Destructor Documentation

#### 5.1.2.1 ARdevKit.Model.Project.Abstract2DAugmentation.Abstract2DAugmentation ( ) [protected]

Initializes no new instance of the [Abstract2DAugmentation](#) class, but can be used in inheriting classes. sets height and width = 0

#### 5.1.2.2 ARdevKit.Model.Project.Abstract2DAugmentation.Abstract2DAugmentation ( bool isVisible, Vector3D translationVector, Vector3D scaling, AbstractTrackable trackable, int width, int height ) [protected]

constructor, which sets every member of the class as specified, for use from inheriting classes

#### Parameters

|                          |                                 |
|--------------------------|---------------------------------|
| <i>isVisible</i>         | true if this object is visible. |
| <i>translationVector</i> | The translation vector.         |
| <i>scaling</i>           | The scaling.                    |
| <i>trackable</i>         | The trackable.                  |
| <i>width</i>             | The width.                      |
| <i>height</i>            | The height.                     |

### 5.1.3 Member Data Documentation

#### 5.1.3.1 string ARdevKit.Model.Project.Abstract2DAugmentation.sourceFilePath [protected]

Full pathname of the source file.

### 5.1.4 Property Documentation

5.1.4.1 int ARdevKit.Model.Project.Abstract2DAugmentation.Height [get], [set]

Gets or sets the height.

The height, in mm.

5.1.4.2 string ARdevKit.Model.Project.Abstract2DAugmentation.SourceFilePath [get], [set]

Gets or sets the full pathname of the image file.

The full pathname of the image file.

5.1.4.3 int ARdevKit.Model.Project.Abstract2DAugmentation.Width [get], [set]

Gets or sets the width.

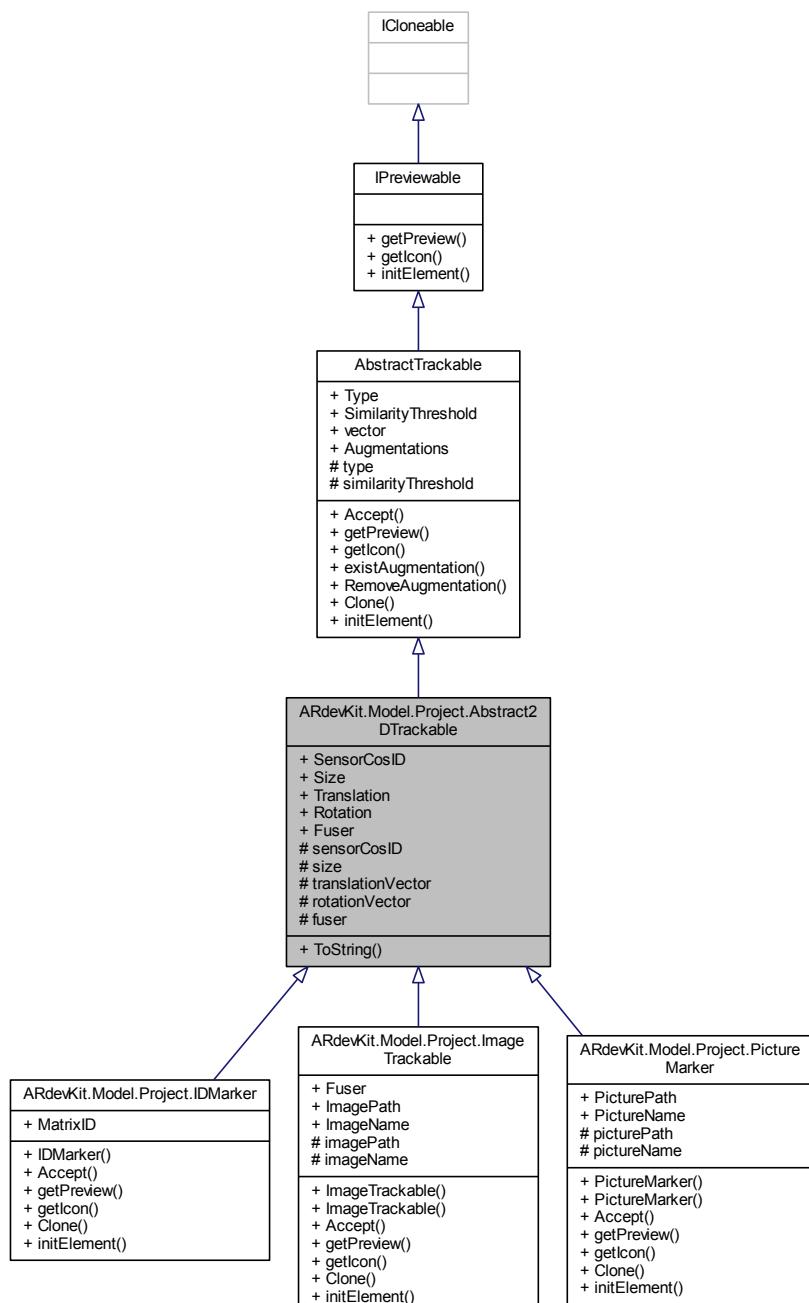
The width, in mm.

## 5.2 ARdevKit.Model.Project.Abstract2DTrackable Class Reference

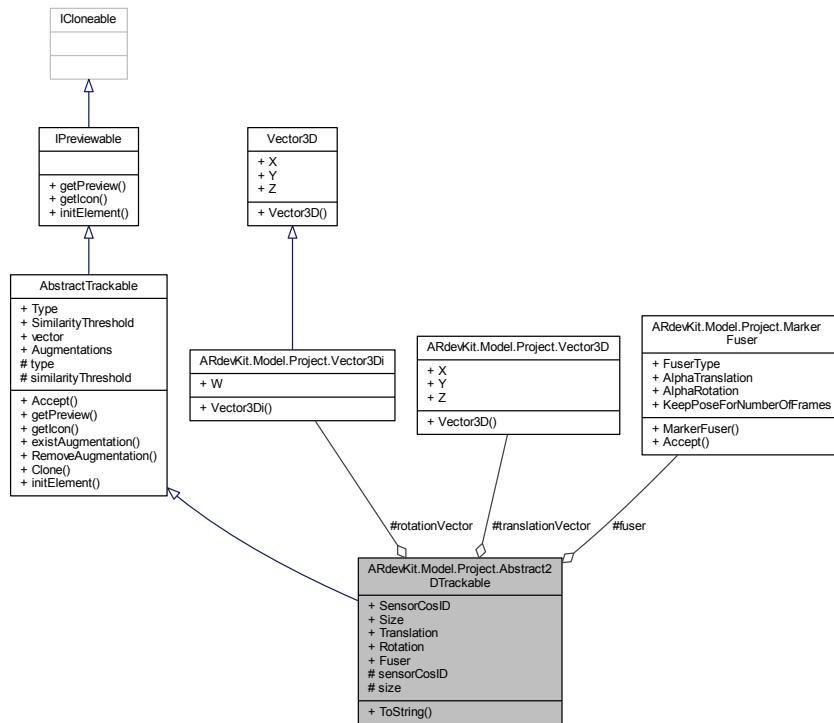
---

An [Abstract2DTrackable](#) is a two-dimensional trackable image, that can be tracked by the metaio SDK.

Inheritance diagram for ARdevKit.Model.Project.Abstract2DTrackable:



Collaboration diagram for ARdevKit.Model.Project.Abstract2DTrackable:



## Public Member Functions

- override string `ToString ()`

*Gibt eine Zeichenfolge zurück, die das aktuelle Objekt darstellt.*

## Protected Attributes

- string `sensorCosID`

*The sensor cos identifier, used by AREL to specify the TrackingData*

- int `size`

*The size of the Marker in mm*

- `Vector3D` `translationVector`

*Vector to describe the position on the PreviewPanel, and later to position it on the coordinatesystem given in AREL.*

- `Vector3D` `rotationVector`

*Vector, to describe the rotation of the `AbstractAugmentation` in x, y and z direction. w is used for TrackingFile Offset in AREL.*

- `MarkerFuser` `fuser`

*Describes how different elements are combined and connected in AREL.*

## Properties

- string `SensorCosID` [get, set]

*Gets or sets the sensor cos identifier.*

- int `Size` [get, set]

*Gets or sets the size.*

- **Vector3D Translation** [get, set]

*Get or set the position of the AbstractAugmentation.*

- **Vector3Di Rotation** [get, set]

*gets or sets the Vector*

- **MarkerFuser Fuser** [get, set]

*Gets or sets the fuser. Is not Browsable, therefore not editable in the PropertyPanel*

## 5.2.1 Detailed Description

An **Abstract2DTrackable** is a two-dimensional trackable image, that can be tracked by the metaio SDK.

## 5.2.2 Member Function Documentation

### 5.2.2.1 override string ARdevKit.Model.Project.Abstract2DTrackable.ToString ( )

Gibt eine Zeichenfolge zurück, die das aktuelle Objekt darstellt.

Robin, 14.01.2014.

#### Returns

Eine Zeichenfolge, die das aktuelle Objekt darstellt.

## 5.2.3 Member Data Documentation

### 5.2.3.1 MarkerFuser ARdevKit.Model.Project.Abstract2DTrackable.fuser [protected]

Describes how different elements are combined and connected in AREL.

### 5.2.3.2 Vector3Di ARdevKit.Model.Project.Abstract2DTrackable.rotationVector [protected]

Vector, to describe the rotation of the **AbstractAugmentation** in x, y and z direction. w is used for TrackingFile Offset in AREL.

### 5.2.3.3 string ARdevKit.Model.Project.Abstract2DTrackable.sensorCosID [protected]

The sensor cos identifier, used by AREL to specify the TrackingData

### 5.2.3.4 int ARdevKit.Model.Project.Abstract2DTrackable.size [protected]

The size of the Marker in mm

### 5.2.3.5 Vector3D ARdevKit.Model.Project.Abstract2DTrackable.translationVector [protected]

Vector to describe the position on the PreviewPanel, and later to position it on the coordinatesystem given in AREL.

## 5.2.4 Property Documentation

### 5.2.4.1 MarkerFuser ARdevKit.Model.Project.Abstract2DTrackable.Fuser [get], [set]

Gets or sets the fuser. Is not Browsable, therefore not editable in the PropertyPanel

The fuser.

### 5.2.4.2 Vector3Di ARdevKit.Model.Project.Abstract2DTrackable.Rotation [get], [set]

gets or sets the Vector

### 5.2.4.3 string ARdevKit.Model.Project.Abstract2DTrackable.SensorCosID [get], [set]

Gets or sets the sensor cos identifier.

### 5.2.4.4 int ARdevKit.Model.Project.Abstract2DTrackable.Size [get], [set]

Gets or sets the size.

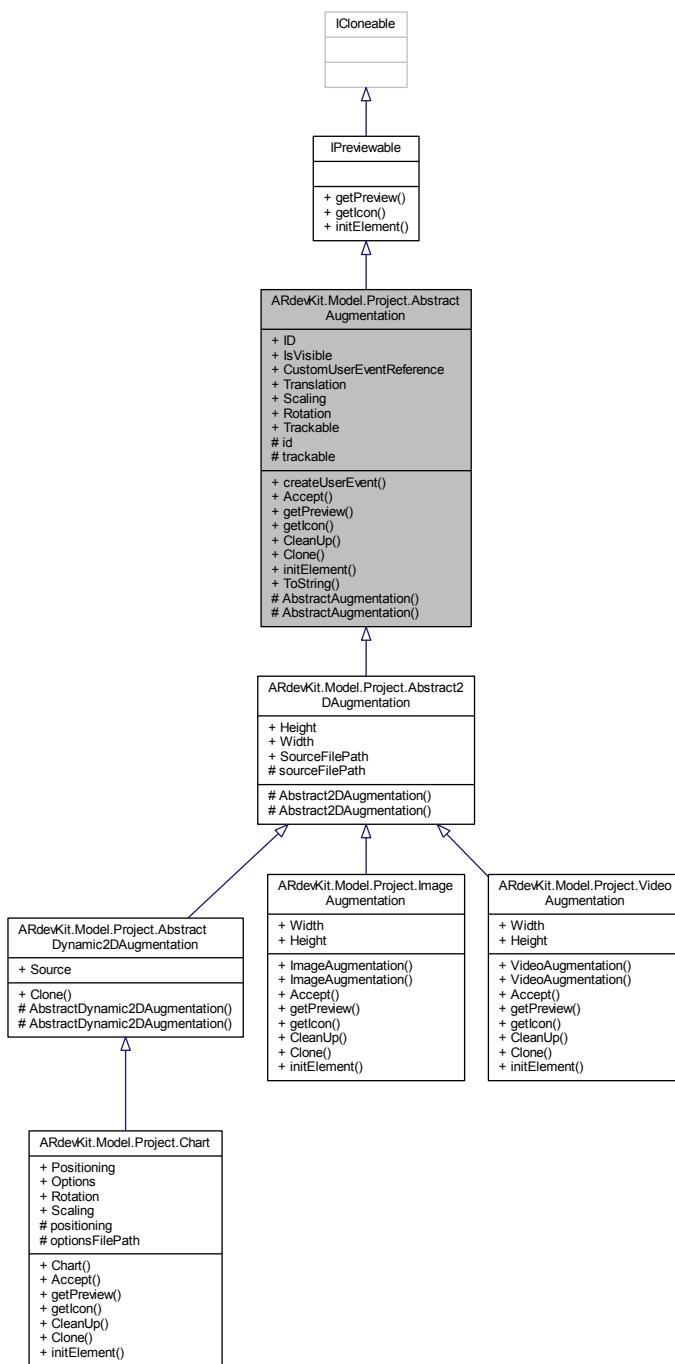
### 5.2.4.5 Vector3D ARdevKit.Model.Project.Abstract2DTrackable.Translation [get], [set]

Get or set the position of the [AbstractAugmentation](#).

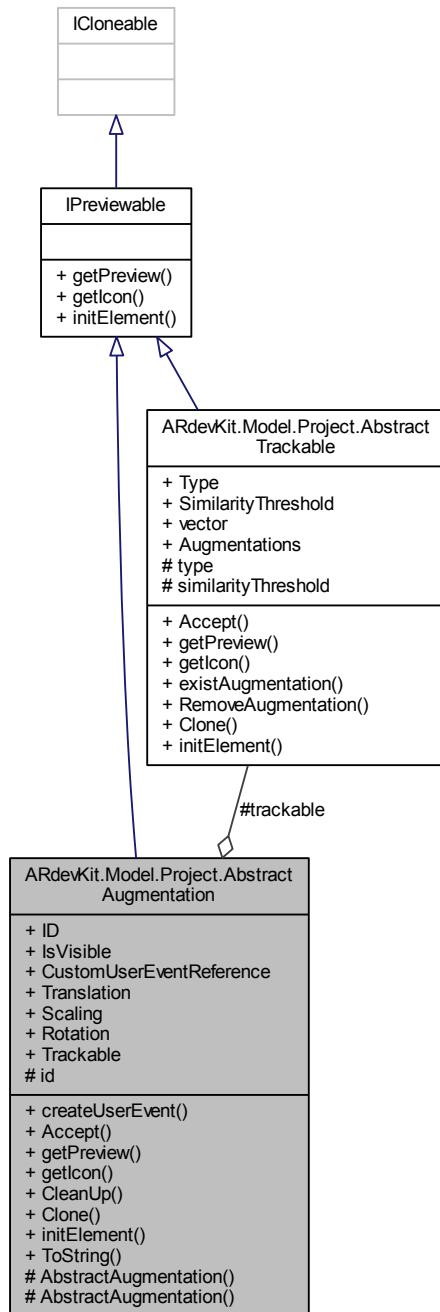
## 5.3 ARdevKit.Model.Project.AbstractAugmentation Class Reference

describes an [AbstractAugmentation](#), which is bound to a certain [AbstractTrackable](#). is [IPreviewable](#)

Inheritance diagram for ARdevKit.Model.Project.AbstractAugmentation:



Collaboration diagram for ARdevKit.Model.Project.AbstractAugmentation:



## Public Member Functions

- void `createUserEvent ()`

*Method to create an instance of the `CustomUserEvent`.*

- virtual void `Accept (AbstractProjectVisitor visitor)`

*An abstract method, to accept a `AbstractProjectVisitor` which must be implemented according to the visitor design pattern.*

- abstract Bitmap [getPreview \(\)](#)  
*returns a Bitmap in order to be displayed on the PreviewPanel, implements IPreviewable*
- abstract Bitmap [getIcon \(\)](#)  
*returns a Bitmap in order to be displayed on the ElementSelectionPanel, implements IPreviewable*
- abstract void [CleanUp \(\)](#)  
*Clean up (remove created/copied files and directories).*
- abstract object [Clone \(\)](#)  
*Makes a deep copy of this object.*
- virtual bool [initElement \(EditorWindow ew\)](#)  
*This method is called by the previewController when a new instance of the element is added to the Scene. It sets "must-have" properties.*
- override string [ToString \(\)](#)  
*Gibt eine Zeichenfolge zurück, die das aktuelle Objekt darstellt.*

## Protected Member Functions

- [AbstractAugmentation \(\)](#)  
*Initializes no new instance of the AbstractAugmentation class, but can be used in inheriting classes. Using standard values, such as emptyLists, vectors with 0 as coordinate and null.*
- [AbstractAugmentation \(bool isVisible, Vector3D translationVector, Vector3D scaling, AbstractTrackable trackable\)](#)  
*Initializes no new instance of the AbstractAugmentation class, but can be used in inheriting classes.*

## Protected Attributes

- string [id](#)  
*The identifier.*
- [AbstractTrackable trackable](#)  
*The AbstractTrackable with which this AbstractAugmentation is linked. It is visible in the same Scene as the trackable.*

## Properties

- string [ID \[get, set\]](#)  
*Gets or sets the identifier.*
- bool [IsVisible \[get, set\]](#)  
*Get or set if the AbstractAugmentation is visible the whole time using AREL or not.*
- [CustomUserEvent CustomUserEventReference \[get, set\]](#)  
*Get the CustomUserEvent.*
- [Vector3D Translation \[get, set\]](#)  
*Get or set the position of the AbstractAugmentation.*
- [Vector3D Scaling \[get, set\]](#)  
*gets or sets the scaling which is applied to the original AbstractAugmentation*
- [Vector3D Rotation \[get, set\]](#)  
*gets or sets the Vector*
- [AbstractTrackable Trackable \[get, set\]](#)  
*Get or set a trackable to the augmentation.*

### 5.3.1 Detailed Description

describes an [AbstractAugmentation](#), which is bound to a certain [AbstractTrackable](#). is [IPreviewable](#)

### 5.3.2 Constructor & Destructor Documentation

5.3.2.1 ARdevKit.Model.Project.AbstractAugmentation() [protected]

Initializes no new instance of the [AbstractAugmentation](#) class, but can be used in inheriting classes. Using standard values, such as emptyLists, vectors with 0 as coordinate and null.

5.3.2.2 ARdevKit.Model.Project.AbstractAugmentation( bool isVisible, Vector3D translationVector, Vector3D scaling, AbstractTrackable trackable ) [protected]

Initializes no new instance of the [AbstractAugmentation](#) class, but can be used in inheriting classes.

#### Parameters

|                          |   |
|--------------------------|---|
| <i>isVisible</i>         | if set to true [is visible] using AREL. |
| <i>translationVector</i> | The translation vector.                 |
| <i>scaling</i>           | The scaling.                            |
| <i>trackable</i>         | The trackable.                          |

### 5.3.3 Member Function Documentation

5.3.3.1 virtual void ARdevKit.Model.Project.AbstractAugmentation.Accept( AbstractProjectVisitor visitor ) [virtual]

An abstract method, to accept a AbstractProjectVisitor which must be implemented according to the visitor design pattern.

#### Parameters

|                |  |
|----------------|--|
| <i>visitor</i> | the visitor which encapsulates the action which is performed on this element |
|----------------|--|

Reimplemented in [ARdevKit.Model.Project.ImageAugmentation](#), and [ARdevKit.Model.Project.VideoAugmentation](#).

5.3.3.2 abstract void ARdevKit.Model.Project.AbstractAugmentation.CleanUp() [pure virtual]

Clean up (remove created/copied files and directories).

Immanuel, 31.01.2014.

Implemented in [ARdevKit.Model.Project.Chart](#), [ARdevKit.Model.Project.VideoAugmentation](#), and [ARdevKit.Model.Project.ImageAugmentation](#).

5.3.3.3 abstract object ARdevKit.Model.Project.AbstractAugmentation.Clone() [pure virtual]

Makes a deep copy of this object.

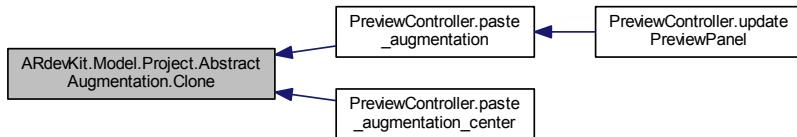
Robin, 22.01.2014.

**Returns**

A copy of this object.

Implemented in [ARdevKit.Model.Project.Chart](#), [ARdevKit.Model.Project.VideoAugmentation](#), [ARdevKit.Model.-Project.ImageAugmentation](#), and [ARdevKit.Model.Project.AbstractDynamic2DAugmentation](#).

Here is the caller graph for this function:

**5.3.3.4 void ARdevKit.Model.Project.AbstractAugmentation.createUserEvent( )**

Method to create an instance of the [CustomUserEvent](#).

**5.3.3.5 abstract Bitmap ARdevKit.Model.Project.AbstractAugmentation.getIcon( ) [pure virtual]**

returns a Bitmap in order to be displayed on the ElementSelectionPanel, implements [IPreviewable](#)

**Returns**

a representative iconized Bitmap

Implements [ARdevKit.Model.Project.IPreviewable](#).

Implemented in [ARdevKit.Model.Project.Chart](#), [ARdevKit.Model.Project.VideoAugmentation](#), and [ARdevKit.Model.-Project.ImageAugmentation](#).

**5.3.3.6 abstract Bitmap ARdevKit.Model.Project.AbstractAugmentation.getPreview( ) [pure virtual]**

returns a Bitmap in order to be displayed on the PreviewPanel, implements [IPreviewable](#)

**Returns**

a representative Bitmap

Implements [ARdevKit.Model.Project.IPreviewable](#).

Implemented in [ARdevKit.Model.Project.Chart](#), [ARdevKit.Model.Project.ImageAugmentation](#), and [ARdevKit.-Model.Project.VideoAugmentation](#).

**5.3.3.7 virtual bool ARdevKit.Model.Project.AbstractAugmentation.initElement( EditorWindow ew ) [virtual]**

This method is called by the previewController when a new instance of the element is added to the Scene. It sets "must-have" properties.

**Parameters**

|                 |         |
|-----------------|---------|
| <code>ew</code> | The ew. |
|-----------------|---------|

**Returns**

true if it succeeds, false if it fails.

Implements [ARdevKit.Model.Project.IPreviewable](#).

Reimplemented in [ARdevKit.Model.Project.Chart](#), [ARdevKit.Model.Project.VideoAugmentation](#), and [ARdevKit.Model.Project.ImageAugmentation](#).

### 5.3.3.8 override string ARdevKit.Model.Project.AbstractAugmentation.ToString( )

Gibt eine Zeichenfolge zurück, die das aktuelle Objekt darstellt.

Robin, 14.01.2014.

**Returns**

Eine Zeichenfolge, die das aktuelle Objekt darstellt.

## 5.3.4 Member Data Documentation

### 5.3.4.1 string ARdevKit.Model.Project.AbstractAugmentation.id [protected]

The identifier.

### 5.3.4.2 AbstractTrackable ARdevKit.Model.Project.AbstractAugmentation.trackable [protected]

The [AbstractTrackable](#) with which this [AbstractAugmentation](#) is linked. It is visible in the same Scene as the trackable.

## 5.3.5 Property Documentation

### 5.3.5.1 CustomUserEvent ARdevKit.Model.Project.AbstractAugmentation.CustomUserEventReference [get], [set]

Get the [CustomUserEvent](#).

### 5.3.5.2 string ARdevKit.Model.Project.AbstractAugmentation.ID [get], [set]

Gets or sets the identifier.

The identifier.

### 5.3.5.3 bool ARdevKit.Model.Project.AbstractAugmentation.isVisible [get], [set]

Get or set if the [AbstractAugmentation](#) is visible the whole time using AREL or not.

### 5.3.5.4 Vector3D ARdevKit.Model.Project.AbstractAugmentation.Rotation [get], [set]

gets or sets the Vector

**5.3.5.5 Vector3D ARdevKit.Model.Project.AbstractAugmentation.Scaling [get], [set]**

gets or sets the scaling which is applied to the original [AbstractAugmentation](#)

**5.3.5.6 AbstractTrackable ARdevKit.Model.Project.AbstractAugmentation.Trackable [get], [set]**

Get or set a trackable to the augmentation.

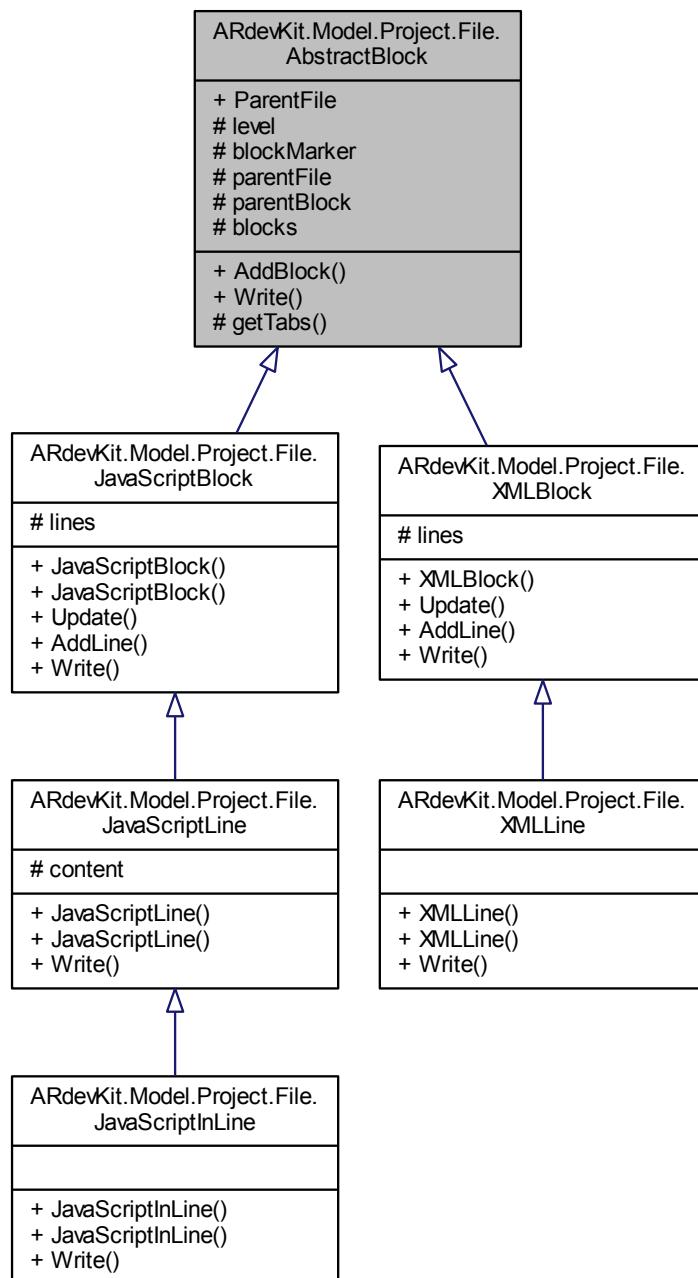
**5.3.5.7 Vector3D ARdevKit.Model.Project.AbstractAugmentation.Translation [get], [set]**

Get or set the position of the [AbstractAugmentation](#).

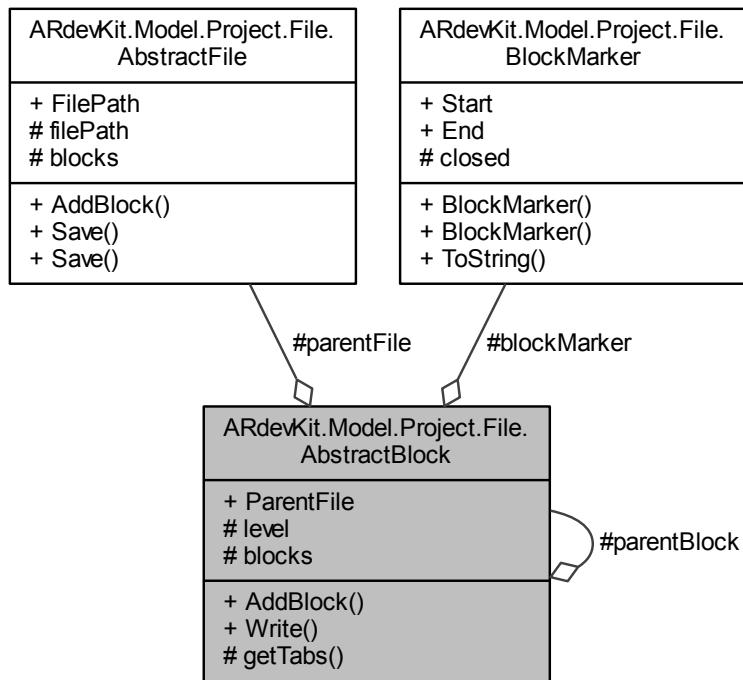
## 5.4 ARdevKit.Model.Project.File.AbstractBlock Class Reference

An [AbstractBlock](#) has a [level](#) and can contain other [AbstractBlock](#)s. It can have a [BlockMarker](#) and a [parentFile](#).

Inheritance diagram for ARdevKit.Model.Project.File.AbstractBlock:



Collaboration diagram for ARdevKit.Model.Project.File.AbstractBlock:



## Public Member Functions

- void `AddBlock (AbstractBlock block)`  
*Adds an `AbstractBlock`.*
- virtual void `Write (System.IO.StreamWriter writer)`  
*Writes the `AbstractBlock` with the given `writer`.*

## Protected Member Functions

- virtual string `getTabs ()`  
*Returns a string containing `[level]` tabs.*

## Protected Attributes

- int `level`  
*The level of the `AbstractBlock`.*
- `BlockMarker blockMarker`  
*The `BlockMarker` of this `AbstractBlock`.*
- `AbstractFile parentFile`  
*The `AbstractFile` this block belongs to.*
- `AbstractBlock parentBlock`  
*A `AbstractBlock` this `AbstractBlock` belongs to.*

- List< [AbstractBlock](#) > blocks  
*The AbstractBlocks that belong to this AbstractBlock.*

## Properties

- [AbstractFile ParentFile](#) [get, set]

*Gets or sets the parent file.*

### 5.4.1 Detailed Description

An [AbstractBlock](#) has a [level](#) and can contain other [AbstractBlock](#)s. It can have a [BlockMarker](#) and a [parentFile](#).

Immanuel, 17.01.2014.

### 5.4.2 Member Function Documentation

#### 5.4.2.1 void ARdevKit.Model.Project.File.AbstractBlock.AddBlock ( [AbstractBlock](#) block )

Adds an [AbstractBlock](#).

Immanuel, 17.01.2014.

##### Parameters

|              |                                     |
|--------------|-------------------------------------|
| <i>block</i> | The <a href="#">AbstractBlock</a> . |
|--------------|-------------------------------------|

#### 5.4.2.2 virtual string ARdevKit.Model.Project.File.AbstractBlock.getTabs ( ) [protected], [virtual]

Returns a string containing [[level](#)] tabs.

Immanuel, 17.01.2014.

##### Returns

The tabs.

#### 5.4.2.3 virtual void ARdevKit.Model.Project.File.AbstractBlock.Write ( [System.IO.StreamWriter](#) writer ) [virtual]

Writes the [AbstractBlock](#) with the given writer.

Immanuel, 15.01.2014.

##### Parameters

|               |                      |
|---------------|----------------------|
| <i>writer</i> | The writer to write. |
|---------------|----------------------|

Reimplemented in [ARdevKit.Model.Project.File.JavaScriptBlock](#), [ARdevKit.Model.Project.File.XMLBlock](#), [ARdevKit.Model.Project.File.JavaScriptLine](#), [ARdevKit.Model.Project.File.JavaScriptInLine](#), and [ARdevKit.Model.Project.File.XMLLine](#).

### 5.4.3 Member Data Documentation

#### 5.4.3.1 BlockMarker ARdevKit.Model.Project.File.AbstractBlock.blockMarker [protected]

The [BlockMarker](#) of this [AbstractBlock](#).

**5.4.3.2 List<AbstractBlock> ARdevKit.Model.Project.File.AbstractBlock.blocks [protected]**

The [AbstractBlocks](#) that belong to this [AbstractBlock](#).

**5.4.3.3 int ARdevKit.Model.Project.File.AbstractBlock.level [protected]**

The level of the [AbstractBlock](#).

The level.

**5.4.3.4 AbstractBlock ARdevKit.Model.Project.File.AbstractBlock.parentBlock [protected]**

A [AbstractBlock](#) this [AbstractBlock](#) belongs to.

**5.4.3.5 AbstractFile ARdevKit.Model.Project.File.AbstractBlock.parentFile [protected]**

The [AbstractFile](#) this block belongs to.

## 5.4.4 Property Documentation

**5.4.4.1 AbstractFile ARdevKit.Model.Project.File.AbstractBlock.ParentFile [get], [set]**

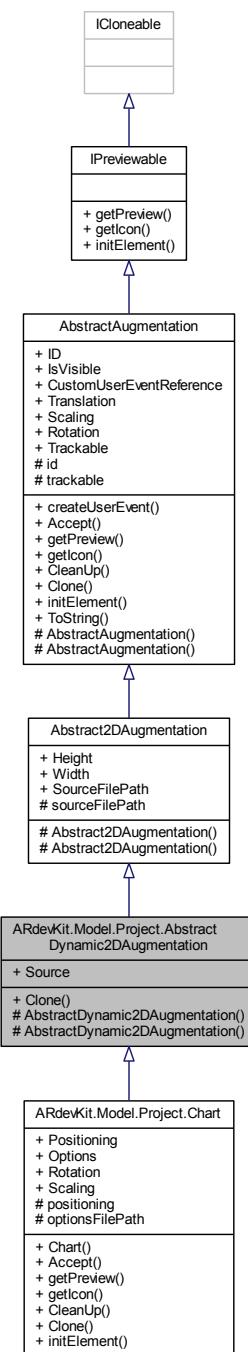
Gets or sets the parent file.

The parent file.

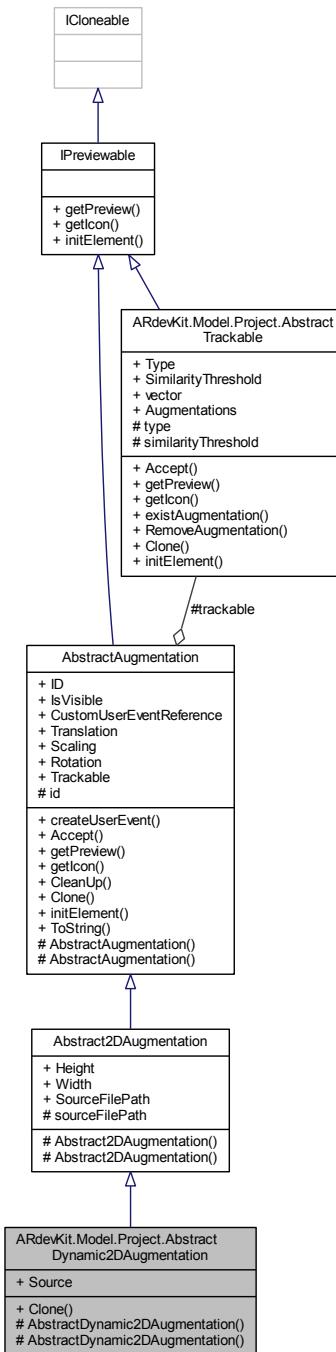
## 5.5 ARdevKit.Model.Project.AbstractDynamic2DAugmentation Class Reference

Inherits from [Abstract2DAugmentation](#) and adds [AbstractSource](#), in order to show dynamic content.

Inheritance diagram for ARdevKit.Model.Project.AbstractDynamic2DAugmentation:



Collaboration diagram for ARdevKit.Model.Project.AbstractDynamic2DAugmentation:



## Public Member Functions

- override object `Clone ()`

*Makes a deep copy of this object.*

## Protected Member Functions

- [AbstractDynamic2DAugmentation \(\)](#)  
*Initializes no new instance of the [AbstractDynamic2DAugmentation](#) class, but can be used by inheriting classes. It is using the standard constructor from [Abstract2DAugmentation](#).*
- [AbstractDynamic2DAugmentation \(bool isVisible, Vector3D translationVector, Vector3D scaling, AbstractTrackable trackable, int width, int height, AbstractSource source\)](#)  
*Initializes no new instance of the [AbstractDynamic2DAugmentation](#) class, but can be used by inheriting classes. It is using the constructor from [Abstract2DAugmentation](#).*

## Properties

- [AbstractSource Source \[get, set\]](#)  
*variable which links an [AbstractSource](#) to this [Abstract2DAugmentation](#).*

## Additional Inherited Members

### 5.5.1 Detailed Description

Inherits from [Abstract2DAugmentation](#) and adds [AbstractSource](#), in order to show dynamic content.

### 5.5.2 Constructor & Destructor Documentation

#### 5.5.2.1 ARdevKit.Model.Project.AbstractDynamic2DAugmentation.AbstractDynamic2DAugmentation ( ) [protected]

Initializes no new instance of the [AbstractDynamic2DAugmentation](#) class, but can be used by inheriting classes. It is using the standard constructor from [Abstract2DAugmentation](#).

#### 5.5.2.2 ARdevKit.Model.Project.AbstractDynamic2DAugmentation.AbstractDynamic2DAugmentation ( bool isVisible, Vector3D translationVector, Vector3D scaling, AbstractTrackable trackable, int width, int height, AbstractSource source ) [protected]

Initializes no new instance of the [AbstractDynamic2DAugmentation](#) class, but can be used by inheriting classes. It is using the constructor from [Abstract2DAugmentation](#).

#### Parameters

|                          |  |
|--------------------------|--|
| <i>isVisible</i>         | if set to <code>true</code> [is visible] using AREL. |
| <i>translationVector</i> | The translation vector.                              |
| <i>scaling</i>           | The scaling.   |
| <i>trackable</i>         | The trackable.                                       |
| <i>width</i>             | The width.   |
| <i>height</i>            | The height.  |
| <i>source</i>            | The source.  |

### 5.5.3 Member Function Documentation

#### 5.5.3.1 override object ARdevKit.Model.Project.AbstractDynamic2DAugmentation.Clone ( ) [virtual]

Makes a deep copy of this object.

Robin, 30.01.2014.

**Returns**

A copy of this object.

Implements [ARdevKit.Model.Project.AbstractAugmentation](#).

Reimplemented in [ARdevKit.Model.Project.Chart](#).

#### 5.5.4 Property Documentation

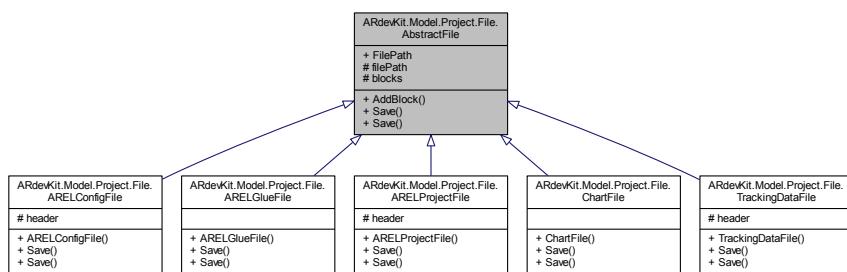
##### 5.5.4.1 AbstractSource [ARdevKit.Model.Project.AbstractDynamic2DAugmentation.Source](#) [get], [set]

variable which links an [AbstractSource](#) to this [Abstract2DAugmentation](#).

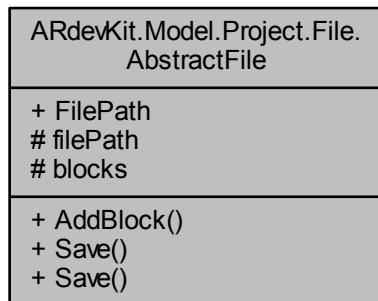
## 5.6 ARdevKit.Model.Project.File.AbstractFile Class Reference

An [AbstractFile](#) can be an [ARELConfigFile](#), an [ARELProjectFile](#), a [TrackinDataFile](#) or an [ARELGlueFile](#). It must have a [filePath](#) and can have a header and consists of [AbstractBlocks](#).

Inheritance diagram for [ARdevKit.Model.Project.File.AbstractFile](#):



Collaboration diagram for [ARdevKit.Model.Project.File.AbstractFile](#):



### Public Member Functions

- virtual void [AddBlock \(AbstractBlock block\)](#)

Adds an [AbstractBlock](#).

- abstract void [Save](#) (string projectPath)  
*Saves the file to the using the passed projectPath.*
- abstract void [Save](#) ()  
*Saves the file to its [filePath](#).*

## Protected Attributes

- string [filePath](#)  
*Full pathname of the file.*
- List< [AbstractBlock](#) > [blocks](#)  
*A list of the [AbstractBlocks](#) this file consists of.*

## Properties

- string [FilePath](#) [get]  
*Gets the full pathname of the file.*

### 5.6.1 Detailed Description

An [AbstractFile](#) can be an [ARELConfigFile](#), an [ARELProjectFile](#), a [TrackinDataFile](#) or an [ARELGlueFile](#). It must have a [filePath](#) and can have a header and consists of [AbstractBlocks](#).

Immanuel, 15.01.2014.

### 5.6.2 Member Function Documentation

#### 5.6.2.1 virtual void ARdevKit.Model.Project.File.AbstractFile.AddBlock ( AbstractBlock block ) [virtual]

Adds an [AbstractBlock](#).

Immanuel, 15.01.2014.

##### Parameters

|                       |                          |
|-----------------------|--------------------------|
| <a href="#">block</a> | The section to be added. |
|-----------------------|--------------------------|

#### 5.6.2.2 abstract void ARdevKit.Model.Project.File.AbstractFile.Save ( string projectPath ) [pure virtual]

Saves the file to the using the passed projectPath.

Immanuel, 15.01.2014.

##### Parameters

|                             |                            |
|-----------------------------|----------------------------|
| <a href="#">projectPath</a> | The project path to write. |
|-----------------------------|----------------------------|

Implemented in [ARdevKit.Model.Project.File.TrackingDataFile](#), [ARdevKit.Model.Project.File.ARELConfigFile](#), [ARdevKit.Model.Project.File.ARELProjectFile](#), [ARdevKit.Model.Project.File.ChartFile](#), and [ARdevKit.Model.Project.File.ARELGlueFile](#).

### 5.6.2.3 abstract void ARdevKit.Model.Project.File.AbstractFile.Save( ) [pure virtual]

Saves the file to its [filePath](#).

Immanuel, 17.01.2014.

Implemented in [ARdevKit.Model.Project.File.TrackingDataFile](#), [ARdevKit.Model.Project.File.ARELConfigFile](#), [ARdevKit.Model.Project.File.ARELProjectFile](#), [ARdevKit.Model.Project.File.ChartFile](#), and [ARdevKit.Model.Project.File.ARELGlueFile](#).

## 5.6.3 Member Data Documentation

### 5.6.3.1 List<AbstractBlock> ARdevKit.Model.Project.File.AbstractFile.blocks [protected]

A list of the [AbstractBlocks](#) this file consists of.

The sections.

### 5.6.3.2 string ARdevKit.Model.Project.File.AbstractFile.filePath [protected]

Full pathname of the file.

## 5.6.4 Property Documentation

### 5.6.4.1 string ARdevKit.Model.Project.File.AbstractFile.FilePath [get]

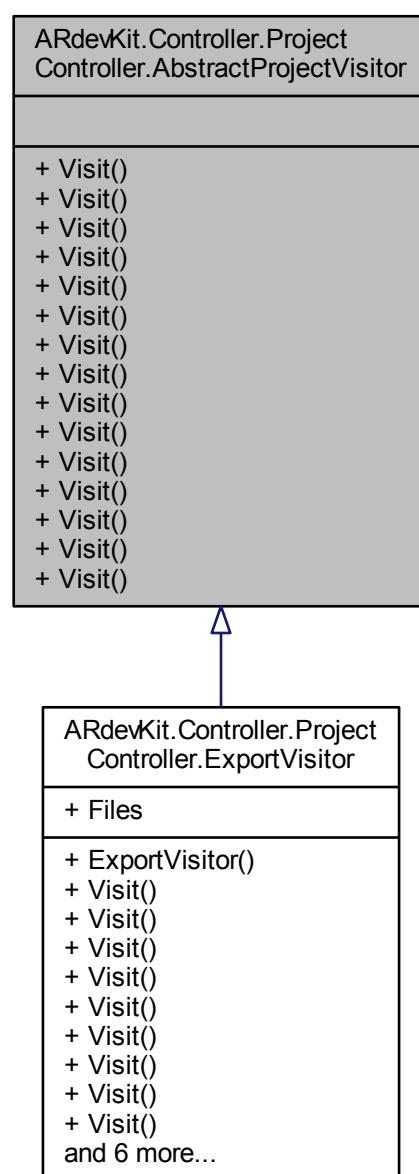
Gets the full pathname of the file.

The full pathname of the file.

## 5.7 ARdevKit.Controller.ProjectController.AbstractProjectVisitor Class Reference

An abstract project visitor.

Inheritance diagram for ARdevKit.Controller.ProjectController.AbstractProjectVisitor:



Collaboration diagram for ARdevKit.Controller.ProjectController.AbstractProjectVisitor:

|  |
|--|
| <b>ARdevKit.Controller.ProjectController.AbstractProjectVisitor</b>  |
| + Visit()<br>+ Visit() |

## Public Member Functions

- abstract void [Visit \(CustomUserEvent cue\)](#)  
*Visits the given CustomUserEvent.*
- abstract void [Visit \(Chart chart\)](#)  
*Visits the given Chart.*
- abstract void [Visit \(ImageAugmentation image\)](#)  
*Visits the given ImageAugmentation.*
- abstract void [Visit \(VideoAugmentation video\)](#)  
*Visits the given VideoAugmentation.*
- abstract void [Visit \(DbSource source\)](#)  
*Visits the given DbSource.*
- abstract void [Visit \(FileSource source\)](#)  
*Visits the given FileSource.*
- abstract void [Visit \(MarkerlessFuser markerlessFuser\)](#)  
*Visits the given MarkerlessFuser.*
- abstract void [Visit \(MarkerFuser markerFuser\)](#)  
*Visits the given MarkerFuser.*
- abstract void [Visit \(MarkerlessSensor MarkerlessSensor\)](#)  
*Visits the given MarkerlessSensor.*
- abstract void [Visit \(ImageTrackable image\)](#)  
*Visits the given ImageTrackable.*
- abstract void [Visit \(PictureMarkerSensor pictureMarkerSensor\)](#)  
*Visits the given PictureMarkerSensor.*
- abstract void [Visit \(PictureMarker pictureMarker\)](#)

- `abstract void Visit (MarkerSensor idMarkerSensor)`  
*Visits the given MarkerSensor.*
- `abstract void Visit (IDMarker idMarker)`  
*Visits the given IDMarker.*
- `abstract void Visit (Project project)`  
*Visits the given Project.*

### 5.7.1 Detailed Description

An abstract project visitor.

Immanuel, 17.01.2014.

### 5.7.2 Member Function Documentation

**5.7.2.1 abstract void ARdevKit.Controller.ProjectController.AbstractProjectVisitor.Visit ( CustomUserEvent cue ) [pure virtual]**

Visits the given CustomUserEvent.

Parameters

|                  |                        |
|------------------|------------------------|
| <code>cue</code> | The custom user event. |
|------------------|------------------------|

Implemented in [ARdevKit.Controller.ProjectController.ExportVisitor](#).

**5.7.2.2 abstract void ARdevKit.Controller.ProjectController.AbstractProjectVisitor.Visit ( Chart chart ) [pure virtual]**

Visits the given Chart.

Immanuel, 17.01.2014.

Parameters

|                    |            |
|--------------------|------------|
| <code>chart</code> | The chart. |
|--------------------|------------|

Implemented in [ARdevKit.Controller.ProjectController.ExportVisitor](#).

**5.7.2.3 abstract void ARdevKit.Controller.ProjectController.AbstractProjectVisitor.Visit ( ImageAugmentation image ) [pure virtual]**

Visits the given ImageAugmentation.

Immanuel, 17.01.2014.

Parameters

|                    |            |
|--------------------|------------|
| <code>image</code> | The image. |
|--------------------|------------|

Implemented in [ARdevKit.Controller.ProjectController.ExportVisitor](#).

**5.7.2.4 abstract void ARdevKit.Controller.ProjectController.AbstractProjectVisitor.Visit ( VideoAugmentation video ) [pure virtual]**

Visits the given VideoAugmentation.

Immanuel, 29.01.2014.

**Parameters**

|              |            |
|--------------|------------|
| <i>video</i> | The video. |
|--------------|------------|

Implemented in [ARdevKit.Controller.ProjectController.ExportVisitor](#).

**5.7.2.5 abstract void ARdevKit.Controller.ProjectController.AbstractProjectVisitor.Visit ( DbSource source ) [pure virtual]**

Visits the given DbSource.

Immanuel, 17.01.2014.

**Parameters**

|               |                 |
|---------------|-----------------|
| <i>source</i> | Source for the. |
|---------------|-----------------|

Implemented in [ARdevKit.Controller.ProjectController.ExportVisitor](#).

**5.7.2.6 abstract void ARdevKit.Controller.ProjectController.AbstractProjectVisitor.Visit ( FileSource source ) [pure virtual]**

Visits the given FileSource.

Immanuel, 23.01.2014.

**Parameters**

|               |   |
|---------------|---|
| <i>source</i> | Source for the AbstractDynamic2DAugmentation. |
|---------------|---|

Implemented in [ARdevKit.Controller.ProjectController.ExportVisitor](#).

**5.7.2.7 abstract void ARdevKit.Controller.ProjectController.AbstractProjectVisitor.Visit ( MarkerlessFuser markerlessFuser ) [pure virtual]**

Visits the given MarkerlessFuser.

Immanuel, 17.01.2014.

**Parameters**

|                        |                       |
|------------------------|-----------------------|
| <i>markerlessFuser</i> | The markerless fuser. |
|------------------------|-----------------------|

Implemented in [ARdevKit.Controller.ProjectController.ExportVisitor](#).

**5.7.2.8 abstract void ARdevKit.Controller.ProjectController.AbstractProjectVisitor.Visit ( MarkerFuser markerFuser ) [pure virtual]**

Visits the given MarkerFuser.

Immanuel, 17.01.2014.

**Parameters**

|                    |                   |
|--------------------|-------------------|
| <i>markerFuser</i> | The marker fuser. |
|--------------------|-------------------|

Implemented in [ARdevKit.Controller.ProjectController.ExportVisitor](#).

**5.7.2.9 abstract void ARdevKit.Controller.ProjectController.AbstractProjectVisitor.Visit ( MarkerlessSensor MarkerlessSensor ) [pure virtual]**

Visits the given MarkerlessSensor.

Immanuel, 17.01.2014.

## Parameters

|                          |                        |
|--------------------------|------------------------|
| <i>Markerless-Sensor</i> | The markerless sensor. |
|--------------------------|------------------------|

Implemented in [ARdevKit.Controller.ProjectController.ExportVisitor](#).

5.7.2.10 abstract void **ARdevKit.Controller.ProjectController.AbstractProjectVisitor.Visit** ( **ImageTrackable image** ) [pure virtual]

Visits the given ImageTrackable.

Immanuel, 26.01.2014.

## Parameters

|              |            |
|--------------|------------|
| <i>image</i> | The image. |
|--------------|------------|

Implemented in [ARdevKit.Controller.ProjectController.ExportVisitor](#).

5.7.2.11 abstract void **ARdevKit.Controller.ProjectController.AbstractProjectVisitor.Visit** ( **PictureMarkerSensor pictureMarkerSensor** ) [pure virtual]

Visits the given PictureMarkerSensor.

Immanuel, 17.01.2014.

## Parameters

|                             |                            |
|-----------------------------|----------------------------|
| <i>pictureMarker-Sensor</i> | The picture marker sensor. |
|-----------------------------|----------------------------|

Implemented in [ARdevKit.Controller.ProjectController.ExportVisitor](#).

5.7.2.12 abstract void **ARdevKit.Controller.ProjectController.AbstractProjectVisitor.Visit** ( **PictureMarker pictureMarker** ) [pure virtual]

Visits the given PictureMarker.

Immanuel, 17.01.2014.

## Parameters

|                      |                     |
|----------------------|---------------------|
| <i>pictureMarker</i> | The picture marker. |
|----------------------|---------------------|

Implemented in [ARdevKit.Controller.ProjectController.ExportVisitor](#).

5.7.2.13 abstract void **ARdevKit.Controller.ProjectController.AbstractProjectVisitor.Visit** ( **MarkerSensor idMarkerSensor** ) [pure virtual]

Visits the given MarkerSensor.

Immanuel, 17.01.2014.

## Parameters

|                       |                               |
|-----------------------|-------------------------------|
| <i>idMarkerSensor</i> | The identifier marker sensor. |
|-----------------------|-------------------------------|

Implemented in [ARdevKit.Controller.ProjectController.ExportVisitor](#).

5.7.2.14 abstract void ARdevKit.Controller.ProjectController.AbstractProjectVisitor.Visit ( **IDMarker idMarker** ) [pure virtual]

Visits the given IDMarker.

Immanuel, 17.01.2014.

#### Parameters

|                 |                        |
|-----------------|------------------------|
| <i>idMarker</i> | The identifier marker. |
|-----------------|------------------------|

Implemented in [ARdevKit.Controller.ProjectController.ExportVisitor](#).

5.7.2.15 abstract void ARdevKit.Controller.ProjectController.AbstractProjectVisitor.Visit ( **Project project** ) [pure virtual]

Visits the given Project.

Immanuel, 17.01.2014.

#### Parameters

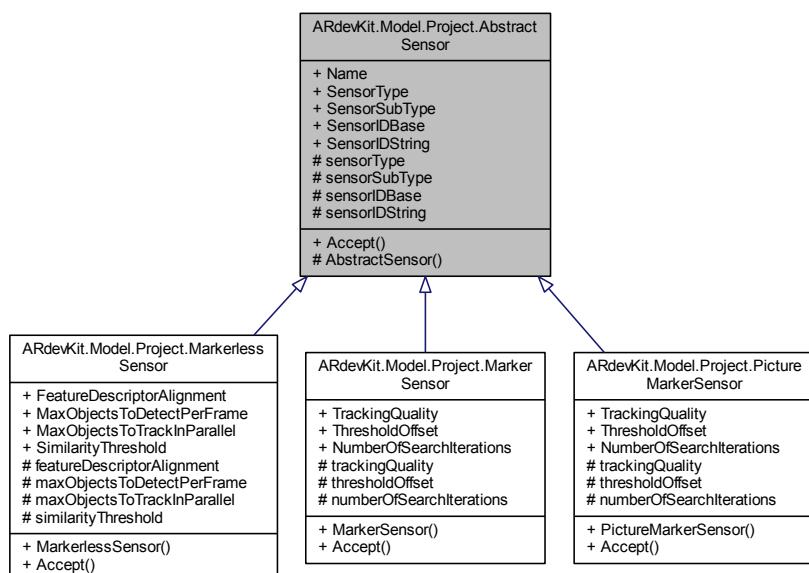
|                |              |
|----------------|--------------|
| <i>project</i> | The project. |
|----------------|--------------|

Implemented in [ARdevKit.Controller.ProjectController.ExportVisitor](#).

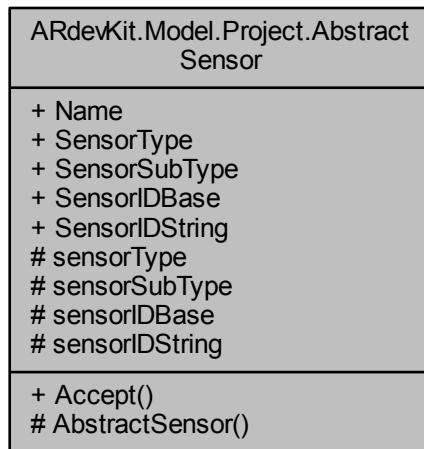
## 5.8 ARdevKit.Model.Project.AbstractSensor Class Reference

An [AbstractSensor](#) has a name, a [sensorType](#), and can have a [sensorSubType](#). Moreover it has a [sensorIDBase](#) which is used to create the [sensorIDString](#).

Inheritance diagram for ARdevKit.Model.Project.AbstractSensor:



Collaboration diagram for ARdevKit.Model.Project.AbstractSensor:



## Public Types

- enum **SensorTypes** { **FeatureBasedSensorSource**, **MarkerBasedSensorSource** }  
*Flags for specifying SensorTypes.*
- enum **SensorSubTypes** { **None**, **Fast**, **Robust** }  
*Flags for specifying SensorSubTypes.*
- enum **SensorIDBases** { **FeatureTracking**, **MarkerTracking** }  
*Flags for specifying SensorIDBases.*

## Public Member Functions

- abstract void **Accept** (**AbstractProjectVisitor** visitor)  
*Accepts the given visitor.*

## Protected Member Functions

- AbstractSensor** ()  
*Initializes no new instance of the **AbstractSensor** class, but can be used in inheriting classes.*

## Protected Attributes

- SensorTypes** **sensorType**  
*Type of the sensor.*
- SensorSubTypes** **sensorSubType**  
*SubType of the sensor.*
- SensorIDBases** **sensorIDBase**  
*The sensor identifier base.*
- string **sensorIDString**  
*The sensor identifier string.*

## Properties

- string **Name** [get, set]  
*Gets or sets the name.*
- **SensorTypes SensorType** [get, set]  
*Gets or sets the type of the sensor.*
- **SensorSubTypes SensorSubType** [get, set]  
*Gets or sets the SubType of the sensor.*
- **SensorIDBases SensorIDBase** [get, set]  
*Gets or sets the sensor identifier base.*
- string **SensorIDString** [get, set]  
*Gets or sets the sensor identifier string.*

### 5.8.1 Detailed Description

An **AbstractSensor** has a name, a **sensorType**, and can have a **sensorSubType**. Moreover it has a **sensorIDBase** which is used to create the **sensorIDString**.

Immanuel, 17.01.2014.

### 5.8.2 Member Enumeration Documentation

#### 5.8.2.1 enum ARdevKit.Model.Project.AbstractSensor.SensorIDBases

Flags for specifying SensorIDBases.

Immanuel, 17.01.2014.

#### 5.8.2.2 enum ARdevKit.Model.Project.AbstractSensor.SensorSubTypes

Flags for specifying SensorSubTypes.

Immanuel, 17.01.2014.

#### 5.8.2.3 enum ARdevKit.Model.Project.AbstractSensor.SensorTypes

Flags for specifying SensorTypes.

Immanuel, 17.01.2014.

### 5.8.3 Constructor & Destructor Documentation

#### 5.8.3.1 ARdevKit.Model.Project.AbstractSensor.AbstractSensor( ) [protected]

Initializes no new instance of the **AbstractSensor** class, but can be used in inheriting classes.

### 5.8.4 Member Function Documentation

#### 5.8.4.1 abstract void ARdevKit.Model.Project.AbstractSensor.Accept( AbstractProjectVisitor visitor ) [pure virtual]

Accepts the given visitor.

**Parameters**

|                |              |
|----------------|--------------|
| <i>visitor</i> | The visitor. |
|----------------|--------------|

Immanuel, 17.01.2014.

Implemented in [ARdevKit.Model.Project.MarkerlessSensor](#), [ARdevKit.Model.Project.PictureMarkerSensor](#), and [ARdevKit.Model.Project.MarkerSensor](#).

## 5.8.5 Member Data Documentation

### 5.8.5.1 SensorIDBases ARdevKit.Model.Project.AbstractSensor.sensorIDBase [protected]

The sensor identifier base.

### 5.8.5.2 string ARdevKit.Model.Project.AbstractSensor.sensorIDString [protected]

The sensor identifier string.

### 5.8.5.3 SensorSubTypes ARdevKit.Model.Project.AbstractSensor.sensorSubType [protected]

SubType of the sensor.

### 5.8.5.4 SensorTypes ARdevKit.Model.Project.AbstractSensor.sensorType [protected]

Type of the sensor.

## 5.8.6 Property Documentation

### 5.8.6.1 string ARdevKit.Model.Project.AbstractSensor.Name [get], [set]

Gets or sets the name.

The name.

### 5.8.6.2 SensorIDBases ARdevKit.Model.Project.AbstractSensor.SensorIDBase [get], [set]

Gets or sets the sensor identifier base.

The sensor identifier base.

### 5.8.6.3 string ARdevKit.Model.Project.AbstractSensor.SensorIDString [get], [set]

Gets or sets the sensor identifier string.

The sensor identifier string.

### 5.8.6.4 SensorSubTypes ARdevKit.Model.Project.AbstractSensor.SensorSubType [get], [set]

Gets or sets the SubType of the sensor.

The type of the sensor sub.

## 5.8.6.5 SensorTypes ARdevKit.Model.Project.AbstractSensor.SensorType [get], [set]

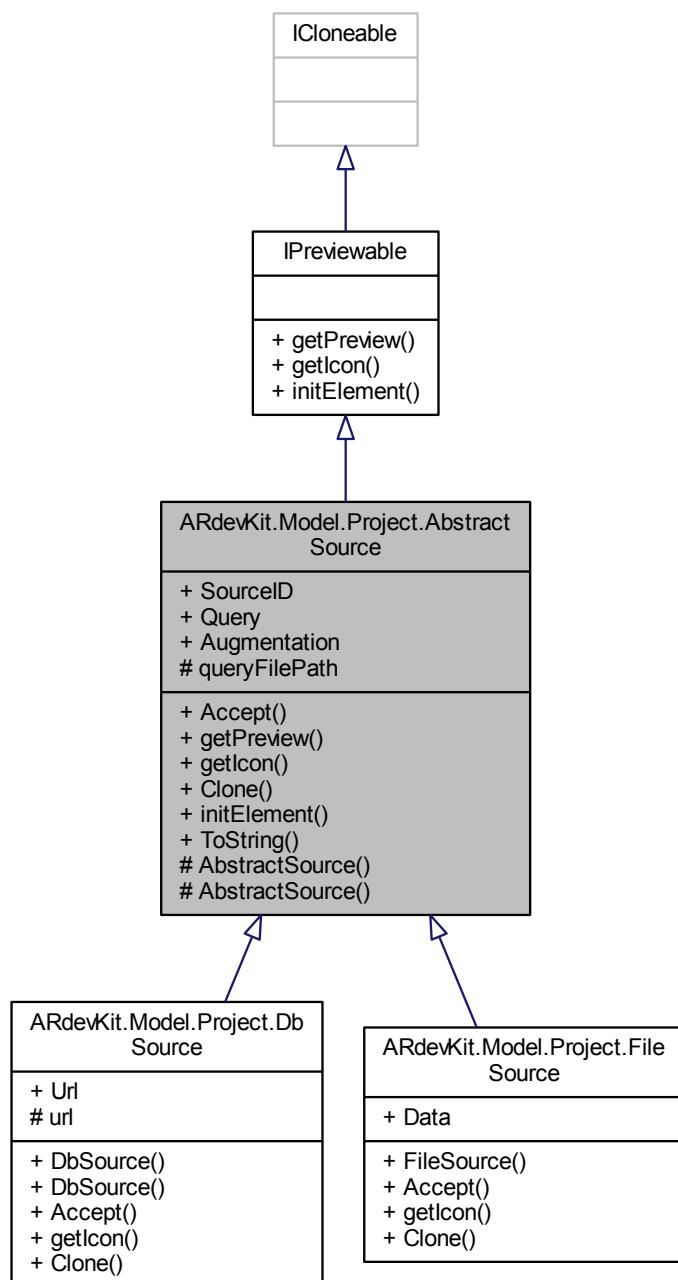
Gets or sets the type of the sensor.

The type of the sensor.

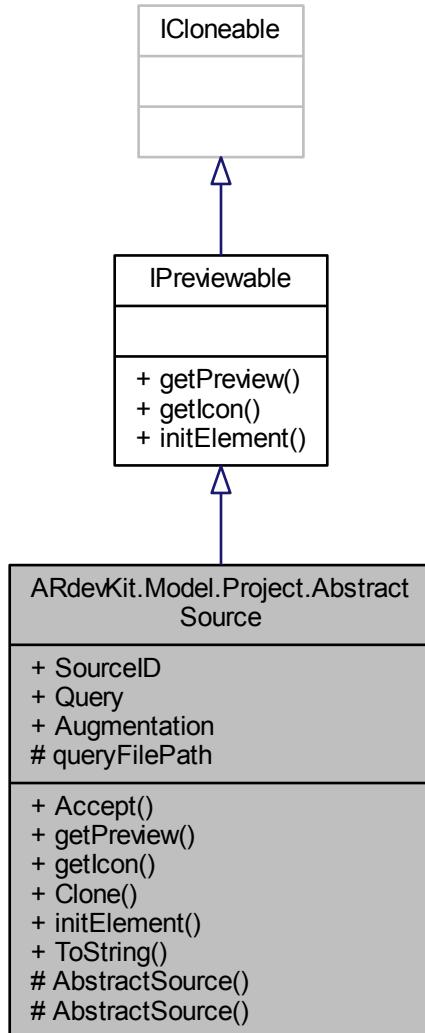
## 5.9 ARdevKit.Model.Project.AbstractSource Class Reference

[AbstractSource](#) has no PictureBox in the PreviewPanel, so it doesn't need a [getPreview\(\)](#) method, though [getIcon\(\)](#) is needed for the ElementSelectionPanel.

Inheritance diagram for ARdevKit.Model.Project.AbstractSource:



Collaboration diagram for ARdevKit.Model.Project.AbstractSource:



## Public Member Functions

- abstract void [Accept \(AbstractProjectVisitor visitor\)](#)  
*An abstract method, to accept an AbstractProjectVisitor which must be implemented according to the visitor design pattern.*
- Bitmap [getPreview \(\)](#)  
*returns NO Bitmap in order to be displayed on the PreviewPanel, implements IPreviewable*
- abstract Bitmap [getIcon \(\)](#)  
*returns a Bitmap in order to be displayed on the ElementSelectionPanel, implements IPreviewable*
- abstract object [Clone \(\)](#)  
*Makes a deep copy of this object.*
- virtual bool [initElement \(EditorWindow ew\)](#)

*This method is called by the previewController when a new instance of the element is added to the Scene. It sets "must-have" properties.*

- override string [ToString \(\)](#)  
*Returns a System.String that represents this instance.*

## Protected Member Functions

- [AbstractSource \(\)](#)  
*Initializes no new instance of the [AbstractSource](#) class,*
- [AbstractSource \(string sourceld\)](#)  
*Initializes no new instance of the [AbstractSource](#) class. but can be used from inheriting classes.*

## Protected Attributes

- string [queryFilePath](#)  
*The query to the source.*

## Properties

- String [SourceID](#) [get, set]  
*Gets or sets the source identifier.*
- string [Query](#) [get, set]  
*Gets or sets the query.*
- [AbstractDynamic2DAugmentation Augmentation](#) [get, set]  
*Gets or sets the augmentations, which get their dynamic information from the [AbstractSource](#)*

### 5.9.1 Detailed Description

[AbstractSource](#) has no PictureBox in the PreviewPanel, so it doesn't need a [getPreview\(\)](#) method, though [getIcon\(\)](#) is needed for the ElementSelectionPanel.

### 5.9.2 Constructor & Destructor Documentation

#### 5.9.2.1 ARdevKit.Model.Project.AbstractSource.AbstractSource ( ) [protected]

Initializes no new instance of the [AbstractSource](#) class,

#### 5.9.2.2 ARdevKit.Model.Project.AbstractSource.AbstractSource ( string sourceld ) [protected]

Initializes no new instance of the [AbstractSource](#) class. but can be used from inheriting classes.

#### Parameters

|                       |                        |
|-----------------------|------------------------|
| <code>sourceld</code> | The source identifier. |
|-----------------------|------------------------|

### 5.9.3 Member Function Documentation

#### 5.9.3.1 abstract void ARdevKit.Model.Project.AbstractSource.Accept ( AbstractProjectVisitor visitor ) [pure virtual]

An abstract method, to accept an AbstractProjectVisitor which must be implemented according to the visitor design pattern.

**Parameters**

|                |  |
|----------------|--|
| <i>visitor</i> | the visitor which encapsulates the action which is performed on this element |
|----------------|--|

Implemented in [ARdevKit.Model.Project.DbSource](#).

**5.9.3.2 abstract object ARdevKit.Model.Project.AbstractSource.Clone ( ) [pure virtual]**

Makes a deep copy of this object.

Robin, 22.01.2014.

**Returns**

A copy of this object.

Implemented in [ARdevKit.Model.Project.DbSource](#), and [ARdevKit.Model.Project.FileSource](#).

**5.9.3.3 abstract Bitmap ARdevKit.Model.Project.AbstractSource.getIcon ( ) [pure virtual]**

returns a Bitmap in order to be displayed on the ElementSelectionPanel, implements [IPreviewable](#)

**Returns**

a representative iconized Bitmap

Implements [ARdevKit.Model.Project.IPreviewable](#).

Implemented in [ARdevKit.Model.Project.DbSource](#), and [ARdevKit.Model.Project.FileSource](#).

**5.9.3.4 Bitmap ARdevKit.Model.Project.AbstractSource.getPreview ( )**

returns NO Bitmap in order to be displayed on the PreviewPanel, implements [IPreviewable](#)

**Returns****Exceptions**

|                                     |  |
|-------------------------------------|--|
| <i>System.NotSupportedException</i> |  |
| <i>NotSupportedException</i>        |  |

Implements [ARdevKit.Model.Project.IPreviewable](#).

**5.9.3.5 virtual bool ARdevKit.Model.Project.AbstractSource.initElement ( EditorWindow ew ) [virtual]**

This method is called by the previewController when a new instance of the element is added to the Scene. It sets "must-have" properties.

**Parameters**

|           |         |
|-----------|---------|
| <i>ew</i> | The ew. |
|-----------|---------|

**Returns**

true if it succeeds, false if it fails.

Implements [ARdevKit.Model.Project.IPreviewable](#).

**5.9.3.6 override string ARdevKit.Model.Project.AbstractSource.ToString( )**

Returns a System.String that represents this instance.

**Returns**

A System.String that represents this instance.

## 5.9.4 Member Data Documentation

**5.9.4.1 string ARdevKit.Model.Project.AbstractSource.queryFilePath [protected]**

The query to the source.

## 5.9.5 Property Documentation

**5.9.5.1 AbstractDynamic2DAugmentation ARdevKit.Model.Project.AbstractSource.Augmentation [get], [set]**

Gets or sets the augmentations, which get their dynamic information from the [AbstractSource](#)

The augmentations.

**5.9.5.2 string ARdevKit.Model.Project.AbstractSource.Query [get], [set]**

Gets or sets the query.

The query.

**5.9.5.3 String ARdevKit.Model.Project.AbstractSource.SourceID [get], [set]**

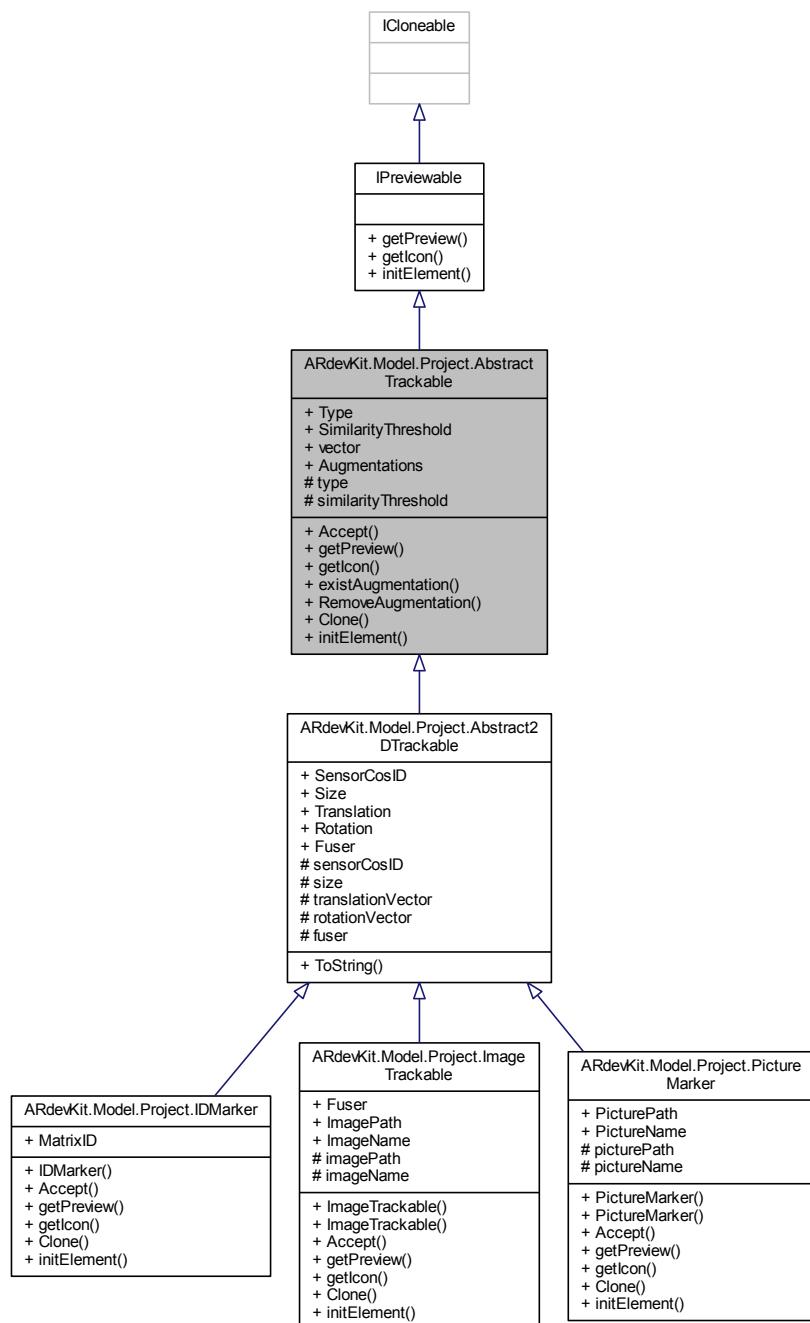
Gets or sets the source identifier.

The source identifier.

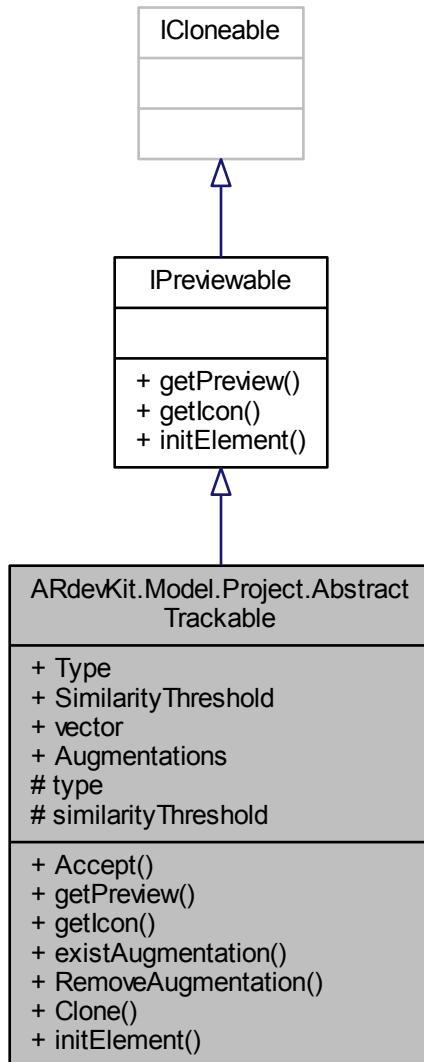
## 5.10 ARdevKit.Model.Project.AbstractTrackable Class Reference

Describes an [AbstractTrackable](#) with its associated [AbstractAugmentations](#)s and further details used for AREL. Is [IPreviewable](#)

Inheritance diagram for ARdevKit.Model.Project.AbstractTrackable:



Collaboration diagram for ARdevKit.Model.Project.AbstractTrackable:



## Public Member Functions

- abstract void [Accept \(AbstractProjectVisitor visitor\)](#)

An abstract method, to accept a `AbstractProjectVisitor` which must be implemented according to the visitor design pattern.
- abstract Bitmap [getPreview \(\)](#)

returns a `Bitmap` in order to be displayed on the `PreviewPanel`, implements [IPreviewable](#)
- abstract Bitmap [getIcon \(\)](#)

returns a `Bitmap` in order to be displayed on the `ElementSelectionPanel`, implements [IPreviewable](#)
- bool [existAugmentation \(IPreviewable a\)](#)

Checks if the augmentation is associated with this `AbstractTrackable`.
- void [RemoveAugmentation \(AbstractAugmentation augmentation\)](#)

*Removes the augmentation described by augmentation.*

- abstract object [Clone \(\)](#)  
*Makes a deep copy of this object.*
- virtual bool [initElement \(EditorWindow ew\)](#)

*This method is called by the previewController when a new instance of the element is added to the Scene. It sets "must-have" properties.*

## Protected Attributes

- string [type](#)  
*The type, to differtiate between different Marker types and their way to be tracked.*
- double [similarityThreshold](#)  
*Describes at which similarity, a picture recorded by the camera is recognized to be the desired one. Only experts usage.*

## Properties

- string [Type \[get, set\]](#)  
*Gets or sets the type.*
- double [SimilarityThreshold \[get, set\]](#)  
*Gets or sets the similarity threshold.*
- [Vector3D vector \[get, set\]](#)  
*Describes the position of the Trackable in the coordinatesystem used by metaio.*
- List< [AbstractAugmentation](#) > [Augmentations \[get, set\]](#)  
*Lists all associated AbstractAugmentations.*

### 5.10.1 Detailed Description

Describes an [AbstractTrackable](#) with its associated [AbstractAugmentations](#) and further details used for AREL. Is [IPreviewable](#)

### 5.10.2 Member Function Documentation

#### 5.10.2.1 abstract void ARdevKit.Model.Project.AbstractTrackable.Accept ( [AbstractProjectVisitor visitor](#) ) [pure virtual]

An abstract method, to accept a [AbstractProjectVisitor](#) which must be implemented according to the visitor design pattern.

##### Parameters

|                         |  |
|-------------------------|--|
| <a href="#">visitor</a> | the visitor which encapsulates the action which is performed on this element |
|-------------------------|--|

Implemented in [ARdevKit.Model.Project.PictureMarker](#).

#### 5.10.2.2 abstract object ARdevKit.Model.Project.AbstractTrackable.Clone ( ) [pure virtual]

Makes a deep copy of this object.

Robin, 22.01.2014.

**Returns**

A copy of this object.

Implemented in [ARdevKit.Model.Project.PictureMarker](#), [ARdevKit.Model.Project.ImageTrackable](#), and [ARdevKit.-Model.Project.IDMarker](#).

**5.10.2.3 bool ARdevKit.Model.Project.AbstractTrackable.existAugmentation ( IPreviewable a )**

Checks if the augmentation is associated with this [AbstractTrackable](#).

**Parameters**

|   |   |
|---|---|
| a | the <a href="#">IPreviewable</a> , which is checked existence for |
|---|---|

**Returns**

true, if its associated with this [AbstractTrackable](#) false, else

Here is the caller graph for this function:

**5.10.2.4 abstract Bitmap ARdevKit.Model.Project.AbstractTrackable.getIcon ( ) [pure virtual]**

returns a Bitmap in order to be displayed on the ElementSelectionPanel, implements [IPreviewable](#)

**Returns**

a representative iconized Bitmap

Implements [ARdevKit.Model.Project.IPreviewable](#).

Implemented in [ARdevKit.Model.Project.PictureMarker](#), [ARdevKit.Model.Project.ImageTrackable](#), and [ARdevKit.-Model.Project.IDMarker](#).

**5.10.2.5 abstract Bitmap ARdevKit.Model.Project.AbstractTrackable.getPreview ( ) [pure virtual]**

returns a Bitmap in order to be displayed on the PreviewPanel, implements [IPreviewable](#)

**Returns**

a representative Bitmap

Implements [ARdevKit.Model.Project.IPreviewable](#).

Implemented in [ARdevKit.Model.Project.ImageTrackable](#), [ARdevKit.Model.Project.PictureMarker](#), and [ARdevKit.-Model.Project.IDMarker](#).

**5.10.2.6 virtual bool ARdevKit.Model.Project.AbstractTrackable.initElement ( EditorWindow ew ) [virtual]**

This method is called by the previewController when a new instance of the element is added to the Scene. It sets "must-have" properties.

**Parameters**

|           |         |
|-----------|---------|
| <i>ew</i> | The ew. |
|-----------|---------|

**Returns**

true if it succeeds, false if it fails.

Implements [ARdevKit.Model.Project.IPreviewable](#).

Reimplemented in [ARdevKit.Model.Project.PictureMarker](#), [ARdevKit.Model.Project.ImageTrackable](#), and [ARdevKit.Model.Project.IDMarker](#).

**5.10.2.7 void ARdevKit.Model.Project.AbstractTrackable.RemoveAugmentation ( *AbstractAugmentation augmentation* )**

Removes the augmentation described by augmentation.

Immanuel, 31.01.2014.

**Parameters**

|                     |                   |
|---------------------|-------------------|
| <i>augmentation</i> | The augmentation. |
|---------------------|-------------------|

**5.10.3 Member Data Documentation****5.10.3.1 double ARdevKit.Model.Project.AbstractTrackable.similarityThreshold [protected]**

Describes at which similarity, a picture recorded by the camera is recognized to be the desired one. Only experts usage.

**5.10.3.2 string ARdevKit.Model.Project.AbstractTrackable.type [protected]**

The type, to differtiate between different Marker types and their way to be tracked.

**5.10.4 Property Documentation****5.10.4.1 List<AbstractAugmentation> ARdevKit.Model.Project.AbstractTrackable.Augmentations [get], [set]**

Lists all associated AbstractAugmentations.

The augmentations.

**5.10.4.2 double ARdevKit.Model.Project.AbstractTrackable.SimilarityThreshold [get], [set]**

Gets or sets the similarity threshold.

The similarity threshold.

**5.10.4.3 string ARdevKit.Model.Project.AbstractTrackable.Type [get], [set]**

Gets or sets the type.

**5.10.4.4 Vector3D ARdevKit.Model.Project.AbstractTrackable.vector [get], [set]**

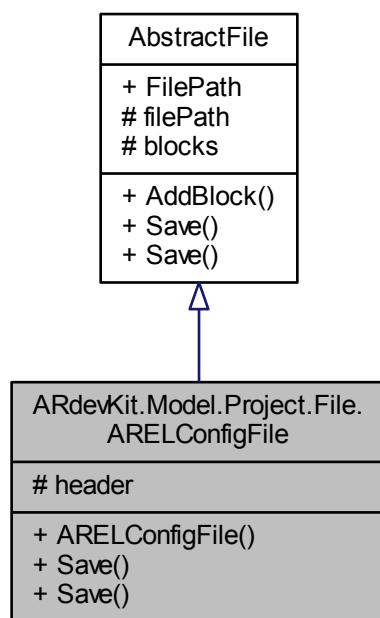
Describes the position of the Trackable in the coordinatesystem used by metaio.

The vector.

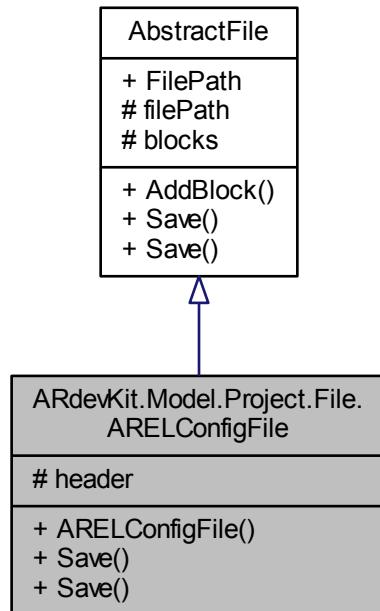
## 5.11 ARdevKit.Model.Project.File.ARELConfigFile Class Reference

An arelConfig.xml.

Inheritance diagram for ARdevKit.Model.Project.File.ARELConfigFile:



Collaboration diagram for ARdevKit.Model.Project.File.ARELConfigFile:



## Public Member Functions

- `ARELConfigFile (string header, string projectPath)`

*Constructor.*

- `override void Save ()`

*Saves the file to its `filePath`.*

- `override void Save (string projectPath)`

*Saves the file to the using the passed `projectPath`.*

## Protected Attributes

- `string header`

*The `header`.*

## Additional Inherited Members

### 5.11.1 Detailed Description

An arelConfig.xml.

Immanuel, 17.01.2014.

## 5.11.2 Constructor & Destructor Documentation

### 5.11.2.1 ARdevKit.Model.Project.File.ARELConfigFile.ARELConfigFile ( string *header*, string *projectPath* )

Constructor.

**Parameters**

|                    |                   |
|--------------------|-------------------|
| <i>header</i>      | The header.       |
| <i>projectPath</i> | The project path. |

Immanuel, 15.01.2014.

### 5.11.3 Member Function Documentation

#### 5.11.3.1 override void ARdevKit.Model.Project.File.ARELConfigFile.Save( ) [virtual]

Saves the file to its [filePath](#).

Immanuel, 17.01.2014.

Implements [ARdevKit.Model.Project.File.AbstractFile](#).

#### 5.11.3.2 override void ARdevKit.Model.Project.File.ARELConfigFile.Save( string *projectPath* ) [virtual]

Saves the file to the using the passed *projectPath*.

Immanuel, 17.01.2014.

**Parameters**

|                    |                            |
|--------------------|----------------------------|
| <i>projectPath</i> | The project path to write. |
|--------------------|----------------------------|

Implements [ARdevKit.Model.Project.File.AbstractFile](#).

### 5.11.4 Member Data Documentation

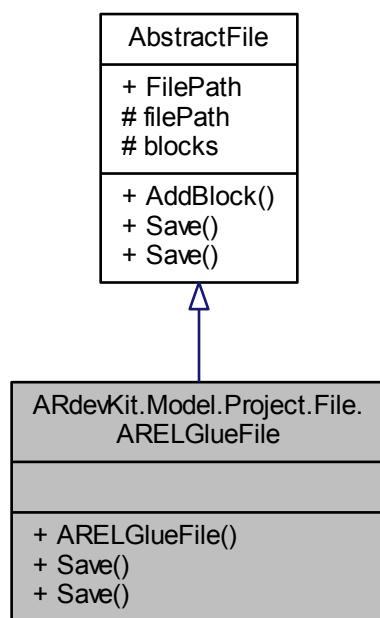
#### 5.11.4.1 string ARdevKit.Model.Project.File.ARELConfigFile.header [protected]

The header.

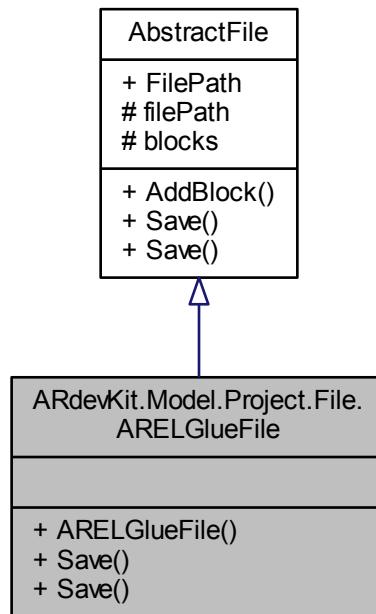
## 5.12 ARdevKit.Model.Project.File.ARELGlueFile Class Reference

An arelGlue.js.

Inheritance diagram for ARdevKit.Model.Project.File.ARELGlueFile:



Collaboration diagram for ARdevKit.Model.Project.File.ARELGlueFile:



## Public Member Functions

- `ARELGlueFile (string projectPath)`  
*Constructor.*
- `override void Save ()`  
*Saves the file to its `filePath`.*
- `override void Save (string projectPath)`  
*Saves the file to the using the passed `projectPath`.*

## Additional Inherited Members

### 5.12.1 Detailed Description

An arelGlue.js.

Immanuel, 17.01.2014.

### 5.12.2 Constructor & Destructor Documentation

#### 5.12.2.1 ARdevKit.Model.Project.File.ARELGlueFile.ARELGlueFile ( string *projectPath* )

Constructor.

Immanuel, 17.01.2014.

**Parameters**

|                    |                                    |
|--------------------|------------------------------------|
| <i>projectPath</i> | Full pathname of the project file. |
|--------------------|------------------------------------|

**5.12.3 Member Function Documentation**

5.12.3.1 `override void ARdevKit.Model.Project.File.ARELGlueFile.Save( ) [virtual]`

Saves the file to its [filePath](#).

Immanuel, 17.01.2014.

Implements [ARdevKit.Model.Project.File.AbstractFile](#).

5.12.3.2 `override void ARdevKit.Model.Project.File.ARELGlueFile.Save( string projectPath ) [virtual]`

Saves the file to the using the passed *projectPath*.

Immanuel, 17.01.2014.

**Parameters**

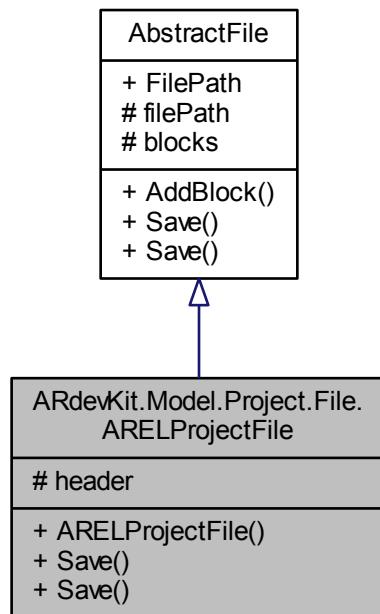
|                    |                            |
|--------------------|----------------------------|
| <i>projectPath</i> | The project path to write. |
|--------------------|----------------------------|

Implements [ARdevKit.Model.Project.File.AbstractFile](#).

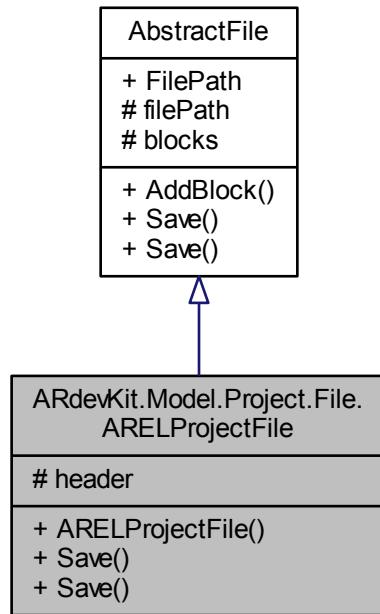
**5.13 ARdevKit.Model.Project.File.ARELProjectFile Class Reference**

A arel[ *projectName* ].html.

Inheritance diagram for ARdevKit.Model.Project.File.ARELProjectFile:



Collaboration diagram for ARdevKit.Model.Project.File.ARELProjectFile:



## Public Member Functions

- **ARELProjectFile** (string `header`, string `filePath`)

*Constructor.*

- override void **Save** ()

*Saves the file to its `filePath`.*

- override void **Save** (string `filePath`)

*Saves the file to the using the passed `projectPath`.*

## Protected Attributes

- string `header`

*The `header`.*

## Additional Inherited Members

### 5.13.1 Detailed Description

A arel[`projectName`].html.

Immanuel, 15.01.2014.

## 5.13.2 Constructor & Destructor Documentation

### 5.13.2.1 ARdevKit.Model.Project.File.ARELProjectFile.ARELProjectFile ( string *header*, string *filePath* )

Constructor.

## Parameters

|                 |                |
|-----------------|----------------|
| <i>header</i>   | The header.    |
| <i>filePath</i> | The file path. |

Immanuel, 15.01.2014.

### 5.13.3 Member Function Documentation

#### 5.13.3.1 override void ARdevKit.Model.Project.File.ARELProjectFile.Save( ) [virtual]

Saves the file to its [filePath](#).

Immanuel, 17.01.2014.

Implements [ARdevKit.Model.Project.File.AbstractFile](#).

#### 5.13.3.2 override void ARdevKit.Model.Project.File.ARELProjectFile.Save( string filePath ) [virtual]

Saves the file to the using the passed projectPath.

Immanuel, 17.01.2014.

## Parameters

|                 |                            |
|-----------------|----------------------------|
| <i>filePath</i> | The project path to write. |
|-----------------|----------------------------|

Implements [ARdevKit.Model.Project.File.AbstractFile](#).

### 5.13.4 Member Data Documentation

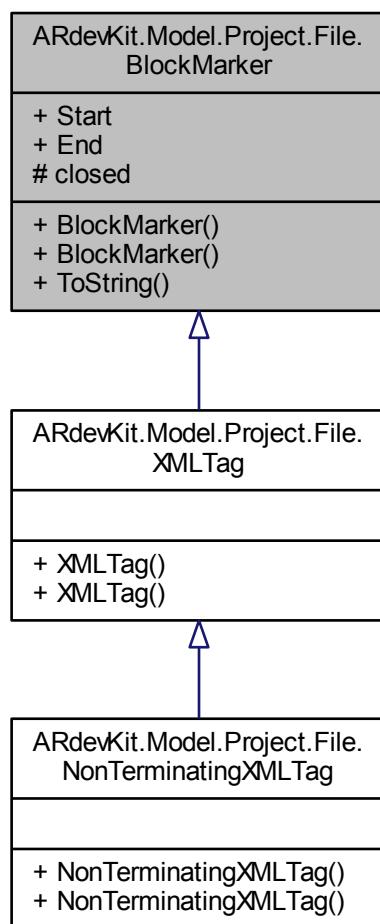
#### 5.13.4.1 string ARdevKit.Model.Project.File.ARELProjectFile.header [protected]

The header.

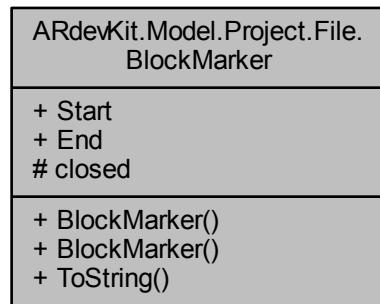
## 5.14 ARdevKit.Model.Project.File.BlockMarker Class Reference

A [BlockMarker](#) marks an [AbstractBlock](#). It has a [Start](#) string and an [End](#) string and can be open or closed.

Inheritance diagram for ARdevKit.Model.Project.File.BlockMarker:



Collaboration diagram for ARdevKit.Model.Project.File.BlockMarker:



## Public Member Functions

- **BlockMarker ()**  
*Default constructor.*
- **BlockMarker (string start, string end)**  
*Constructor.*
- **override string ToString ()**  
*Returns the start and end part alternating. Beginning with the start part on first call.*

## Protected Attributes

- **bool closed = true**  
*true if closed.*

## Properties

- **string Start [get, set]**  
*Gets or sets the start.*
- **string End [get, set]**  
*Gets or sets the end.*

### 5.14.1 Detailed Description

A **BlockMarker** marks an **AbstractBlock**. It has a **Start** string and an **End** string and can be open or closed.

Immanuel, 17.01.2014.

### 5.14.2 Constructor & Destructor Documentation

#### 5.14.2.1 ARdevKit.Model.Project.File.BlockMarker::BlockMarker ( )

Default constructor.

Immanuel, 17.01.2014.

### 5.14.2.2 ARdevKit.Model.Project.File.BlockMarker.BlockMarker ( string start, string end )

Constructor.

Immanuel, 17.01.2014.

#### Parameters

|              |            |
|--------------|------------|
| <i>start</i> | The start. |
| <i>end</i>   | The end.   |

## 5.14.3 Member Function Documentation

### 5.14.3.1 override string ARdevKit.Model.Project.File.BlockMarker.ToString ( )

Returns the start and end part alternating. Beginning with the start part on first call.

Immanuel, 15.01.2014.

#### Returns

Eine Zeichenfolge, die das aktuelle Objekt darstellt.

## 5.14.4 Member Data Documentation

### 5.14.4.1 bool ARdevKit.Model.Project.File.BlockMarker.closed = true [protected]

true if closed.

## 5.14.5 Property Documentation

### 5.14.5.1 string ARdevKit.Model.Project.File.BlockMarker.End [get], [set]

Gets or sets the end.

The end.

### 5.14.5.2 string ARdevKit.Model.Project.File.BlockMarker.Start [get], [set]

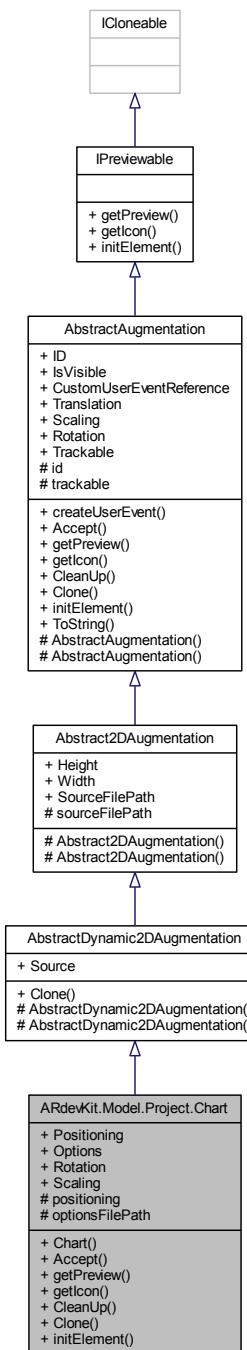
Gets or sets the start.

The start.

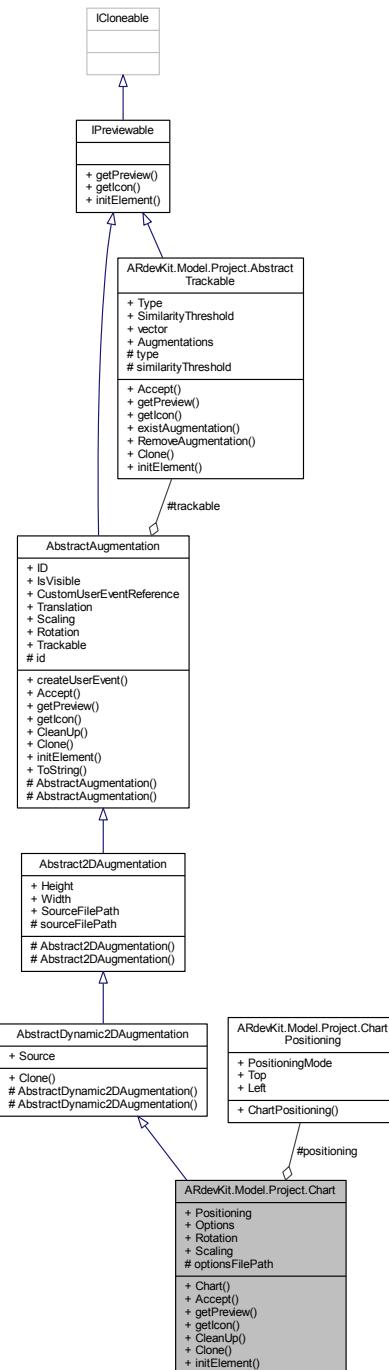
## 5.15 ARdevKit.Model.Project.Chart Class Reference

Describes a [Chart](#) with its Colors and OptimalValues. It is a [Chart](#).

Inheritance diagram for ARdevKit.Model.Project.Chart:



Collaboration diagram for ARdevKit.Model.Project.Chart:



## Public Member Functions

- **Chart ()**  
*Default constructor.*
- **override void Accept (Controller.ProjectController.AbstractProjectVisitor visitor)**  
*An overwriting method, to accept a AbstractProjectVisitor which must be implemented according to the visitor design pattern.*

- override Bitmap [getPreview \(\)](#)  
*returns a Bitmap in order to be displayed on the PreviewPanel, implements IPreviewable*
- override Bitmap [getIcon \(\)](#)  
*returns a Bitmap in order to be displayed on the ElementSelectionPanel, implements IPreviewable*
- override void [CleanUp \(\)](#)  
*Clean up (remove created/copied files and directories).*
- override object [Clone \(\)](#)  
*Makes a deep copy of this object.*
- override bool [initElement \(EditorWindow ew\)](#)  
*This method is called by the previewController when a new instance of the element is added to the Scene. It sets "must-have" properties.*

## Protected Attributes

- [ChartPositioning positioning](#)  
*The style used by HighChart.*
- string [optionsFilePath](#)  
*Full pathname of the options file.*

## Properties

- [ChartPositioning Positioning \[get, set\]](#)  
*Gets or sets the style.*
- string [Options \[get, set\]](#)  
*Gets or sets optionsFilePath.*
- new [Vector3D Rotation \[get, set\]](#)  
*gets or sets the Vector*
- new [Vector3D Scaling \[get, set\]](#)  
*Gets or sets the scaling.*

## Additional Inherited Members

### 5.15.1 Detailed Description

Describes a [Chart](#) with its Colors and OptimalValues. It is a [Chart](#).

### 5.15.2 Constructor & Destructor Documentation

#### 5.15.2.1 ARdevKit.Model.Project.Chart.Chart ( )

Default constructor.

### 5.15.3 Member Function Documentation

#### 5.15.3.1 override void ARdevKit.Model.Project.Chart.Accept ( Controller.ProjectController.AbstractProjectVisitor visitor )

An overwriting method, to accept a AbstractProjectVisitor which must be implemented according to the visitor design pattern.

**Parameters**

|                |  |
|----------------|--|
| <i>visitor</i> | the visitor which encapsulates the action which is performed on this <a href="#">Chart</a> |
|----------------|--|

**5.15.3.2 override void ARdevKit.Model.Project.Chart.CleanUp( ) [virtual]**

Clean up (remove created/copied files and directories).

Immanuel, 31.01.2014.

Implements [ARdevKit.Model.Project.AbstractAugmentation](#).

**5.15.3.3 override object ARdevKit.Model.Project.Chart.Clone( ) [virtual]**

Makes a deep copy of this object.

Robin, 21.01.2014.

**Returns**

A copy of this object.

Reimplemented from [ARdevKit.Model.Project.AbstractDynamic2DAugmentation](#).

**5.15.3.4 override Bitmap ARdevKit.Model.Project.Chart.getIcon( ) [virtual]**

returns a Bitmap in order to be displayed on the ElementSelectionPanel, implements [IPreviewable](#)

**Returns**

a representative iconized Bitmap

Implements [ARdevKit.Model.Project.AbstractAugmentation](#).

**5.15.3.5 override Bitmap ARdevKit.Model.Project.Chart.getPreview( ) [virtual]**

returns a Bitmap in order to be displayed on the PreviewPanel, implements [IPreviewable](#)

**Returns**

a representative Bitmap

Implements [ARdevKit.Model.Project.AbstractAugmentation](#).

**5.15.3.6 override bool ARdevKit.Model.Project.Chart.initElement( EditorWindow ew ) [virtual]**

This method is called by the previewController when a new instance of the element is added to the Scene. It sets "must-have" properties.

**Parameters**

|           |         |
|-----------|---------|
| <i>ew</i> | The ew. |
|-----------|---------|

**Returns**

true if it succeeds, false if it fails.

Reimplemented from [ARdevKit.Model.Project.AbstractAugmentation](#).

### 5.15.4 Member Data Documentation

5.15.4.1 `string ARdevKit.Model.Project.Chart.optionsFilePath [protected]`

Full pathname of the options file.

5.15.4.2 `ChartPositioning ARdevKit.Model.Project.Chart.positioning [protected]`

The style used by HighChart.

### 5.15.5 Property Documentation

5.15.5.1 `string ARdevKit.Model.Project.Chart.Options [get], [set]`

Gets or sets [optionsFilePath](#).

The options.

5.15.5.2 `ChartPositioning ARdevKit.Model.Project.Chart.Positioning [get], [set]`

Gets or sets the style.

The style.

5.15.5.3 `new Vector3D ARdevKit.Model.Project.Chart.Rotation [get], [set]`

gets or sets the Vector

5.15.5.4 `new Vector3D ARdevKit.Model.Project.Chart.Scaling [get], [set]`

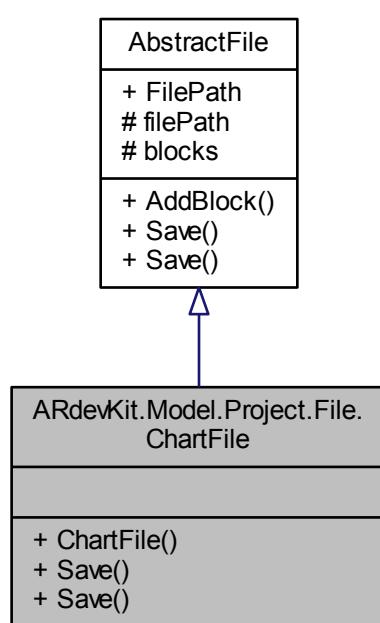
Gets or sets the scaling.

The scaling.

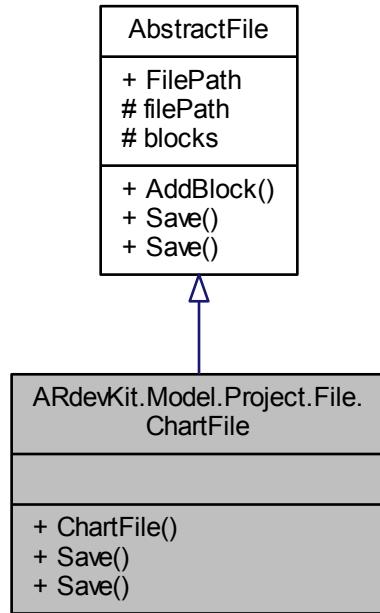
## 5.16 ARdevKit.Model.Project.File.ChartFile Class Reference

A [ChartFile](#) is an [AbstractFile](#) which represents the chart.js.

Inheritance diagram for ARdevKit.Model.Project.File.ChartFile:



Collaboration diagram for ARdevKit.Model.Project.File.ChartFile:



## Public Member Functions

- `ChartFile` (string `projectPath`, string `chartID`)  
*Constructor.*
- `override void Save ()`  
*Saves the file to its `filePath`.*
- `override void Save (string projectPath)`  
*Saves the file to the using the passed `projectPath`.*

## Additional Inherited Members

### 5.16.1 Detailed Description

A `ChartFile` is an `AbstractFile` which represents the chart.js.

### 5.16.2 Constructor & Destructor Documentation

#### 5.16.2.1 ARdevKit.Model.Project.File.ChartFile.ChartFile ( string `projectPath`, string `chartID` )

Constructor.

Immanuel, 23.01.2014.

**Parameters**

|                    |                            |
|--------------------|----------------------------|
| <i>projectPath</i> | The project path to write. |
| <i>chartID</i>     | Identifier for the chart.  |

**5.16.3 Member Function Documentation****5.16.3.1 override void ARdevKit.Model.Project.File.ChartFile.Save( ) [virtual]**

Saves the file to its [filePath](#).

Immanuel, 23.01.2014.

Implements [ARdevKit.Model.Project.File.AbstractFile](#).

**5.16.3.2 override void ARdevKit.Model.Project.File.ChartFile.Save( string *projectPath* ) [virtual]**

Saves the file to the using the passed *projectPath*.

Immanuel, 23.01.2014.

**Parameters**

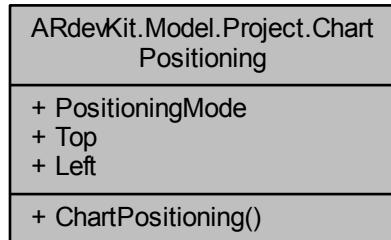
|                    |                            |
|--------------------|----------------------------|
| <i>projectPath</i> | The project path to write. |
|--------------------|----------------------------|

Implements [ARdevKit.Model.Project.File.AbstractFile](#).

**5.17 ARdevKit.Model.Project.ChartPositioning Class Reference**

Used to set the position of a chart used by HighChart.

Collaboration diagram for ARdevKit.Model.Project.ChartPositioning:

**Public Types**

- enum [PositioningModes](#) { **STATIC**, **ABSOLUTE**, **RELATIVE** }  
*Values that represent positioning modes.*

**Public Member Functions**

- [ChartPositioning](#) ([PositioningModes](#) *positioningMode*)

*Constructor.*

## Properties

- **PositioningModes PositioningMode** [get, set]  
*Gets or sets the positioning mode.*
- int **Top** [get, set]  
*Gets or sets the top.*
- int **Left** [get, set]  
*Gets or sets the left.*

### 5.17.1 Detailed Description

Used to set the position of a chart used by HighChart.

Immanuel, 20.01.2014.

### 5.17.2 Member Enumeration Documentation

#### 5.17.2.1 enum ARdevKit.Model.Project.ChartPositioning.PositioningModes

Values that represent positioning modes.

Immanuel, 27.01.2014.

### 5.17.3 Constructor & Destructor Documentation

#### 5.17.3.1 ARdevKit.Model.Project.ChartPositioning.ChartPositioning ( **PositioningModes positioningMode** )

Constructor.

Immanuel, 27.01.2014.

#### Parameters

|                        |               |
|------------------------|---------------|
| <i>positioningMode</i> | The position. |
|------------------------|---------------|

### 5.17.4 Property Documentation

#### 5.17.4.1 int ARdevKit.Model.Project.ChartPositioning.Left [get], [set]

Gets or sets the left.

The left.

#### 5.17.4.2 PositioningModes ARdevKit.Model.Project.ChartPositioning.PositioningMode [get], [set]

Gets or sets the positioning mode.

The positioning mode.

#### 5.17.4.3 int ARdevKit.Model.Project.ChartPositioning.Top [get], [set]

Gets or sets the top.

The top.

## 5.18 ARdevKit.Model.Project.CustomUserEvent Class Reference

The class [CustomUserEvent](#) mainly contains a reference path to a file, which is in the /tmp/ Folder. This file has ALL Events the user creates (inclusive the template events we provide) for ONE augmentation.

Collaboration diagram for ARdevKit.Model.Project.CustomUserEvent:

|  |
|--|
| ARdevKit.Model.Project.Custom<br>UserEvent |
| + FilePath                                 |
| + CustomUserEvent()<br>+ Accept()          |

### Public Member Functions

- [CustomUserEvent](#) (string augmentationID)  
*Constructor of the CustomUserEvent.*
- void [Accept](#) ([AbstractProjectVisitor](#) visitor)  
*A method, to accept a AbstractProjectVisitor which must be implemented according to the visitor design pattern.*

### Properties

- string [FilePath](#) [get, set]  
*Get or set the file path for the customUserEvents-File.*

#### 5.18.1 Detailed Description

The class [CustomUserEvent](#) mainly contains a reference path to a file, which is in the /tmp/ Folder. This file has ALL Events the user creates (inclusive the template events we provide) for ONE augmentation.

#### 5.18.2 Constructor & Destructor Documentation

##### 5.18.2.1 ARdevKit.Model.Project.CustomUserEvent.CUSTOMUSEREVENT ( string augmentationID )

Constructor of the [CustomUserEvent](#).

###### Parameters

|                       |                        |
|-----------------------|------------------------|
| <i>augmentationID</i> | ID of the augmentation |
|-----------------------|------------------------|

#### 5.18.3 Member Function Documentation

##### 5.18.3.1 void ARdevKit.Model.Project.CustomUserEvent.Accept ( [AbstractProjectVisitor](#) visitor )

A method, to accept a AbstractProjectVisitor which must be implemented according to the visitor design pattern.

**Parameters**

|                |  |
|----------------|--|
| <i>visitor</i> | the visitor which encapsulates the action which is performed on this <a href="#">CustomUserEvent</a> |
|----------------|--|

#### 5.18.4 Property Documentation

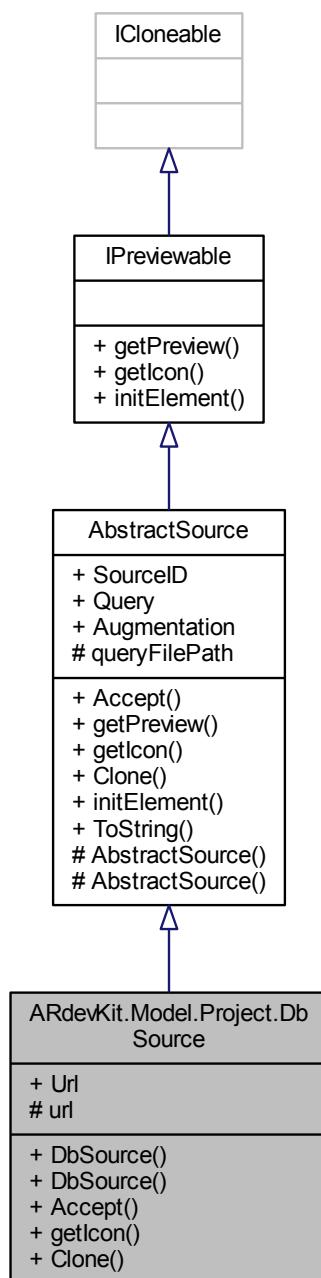
##### 5.18.4.1 string ARdevKit.Model.Project.CustomUserEvent.FilePath [get], [set]

Get or set the file path for the customUserEvents-File.

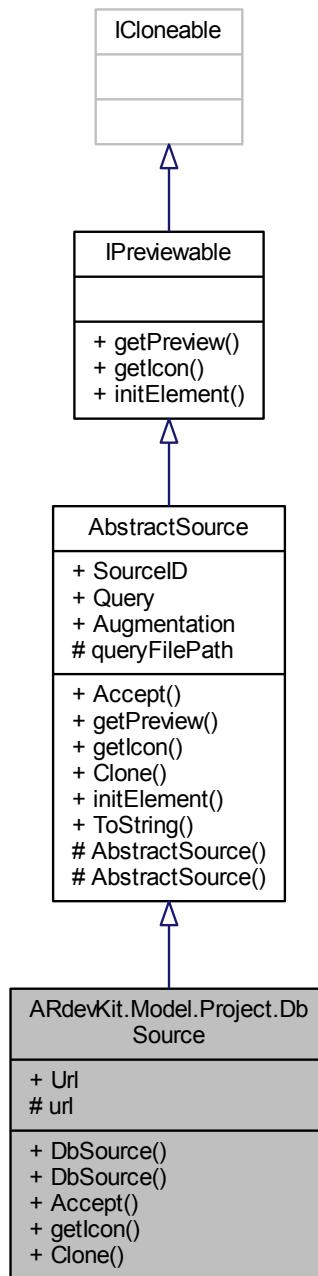
## 5.19 ARdevKit.Model.Project.DbSource Class Reference

A database source

Inheritance diagram for ARdevKit.Model.Project.DbSource:



Collaboration diagram for ARdevKit.Model.Project.DbSource:



## Public Member Functions

- **DbSource ()**  
*Default constructor.*
- **DbSource (string url)**  
*Constructor.*
- **override void Accept (AbstractProjectVisitor visitor)**

An abstract method, to accept a AbstractProjectVisitor which must be implemented according to the visitor design pattern.

- override Bitmap [GetIcon \(\)](#)  
*returns a Bitmap in order to be displayed on the ElementSelectionPanel, implements IPreviewable*
- override object [Clone \(\)](#)  
*Makes a deep copy of this object.*

## Protected Attributes

- string [url](#)  
*URL of the source.*

## Properties

- string [Url](#) [get, set]  
*Gets or sets URL of the source.*

## Additional Inherited Members

### 5.19.1 Detailed Description

A database source

### 5.19.2 Constructor & Destructor Documentation

#### 5.19.2.1 ARdevKit.Model.Project.DbSource ( )

Default constructor.

Immanuel, 26.01.2014.

#### 5.19.2.2 ARdevKit.Model.Project.DbSource ( string url )

Constructor.

Immanuel, 26.01.2014.

#### Parameters

|                     |                    |
|---------------------|--------------------|
| <a href="#">url</a> | URL of the source. |
|---------------------|--------------------|

### 5.19.3 Member Function Documentation

#### 5.19.3.1 override void ARdevKit.Model.Project.DbSource.Accept ( AbstractProjectVisitor visitor ) [virtual]

An abstract method, to accept a AbstractProjectVisitor which must be implemented according to the visitor design pattern.

Immanuel, 26.01.2014.

**Parameters**

|                |   |
|----------------|---|
| <i>visitor</i> | the visitor which encapsulates the action which is performed on this element. |
|----------------|---|

Implements [ARdevKit.Model.Project.AbstractSource](#).

**5.19.3.2 override object ARdevKit.Model.Project.DbSource.Clone( ) [virtual]**

Makes a deep copy of this object.

Robin, 21.01.2014.

**Returns**

A copy of this object.

Implements [ARdevKit.Model.Project.AbstractSource](#).

**5.19.3.3 override Bitmap ARdevKit.Model.Project.DbSource.getIcon( ) [virtual]**

returns a Bitmap in order to be displayed on the ElementSelectionPanel, implements [IPreviewable](#)

**Returns**

a representative iconized Bitmap

Implements [ARdevKit.Model.Project.AbstractSource](#).

**5.19.4 Member Data Documentation****5.19.4.1 string ARdevKit.Model.Project.DbSource.url [protected]**

URL of the source.

**5.19.5 Property Documentation****5.19.5.1 string ARdevKit.Model.Project.DbSource.Url [get], [set]**

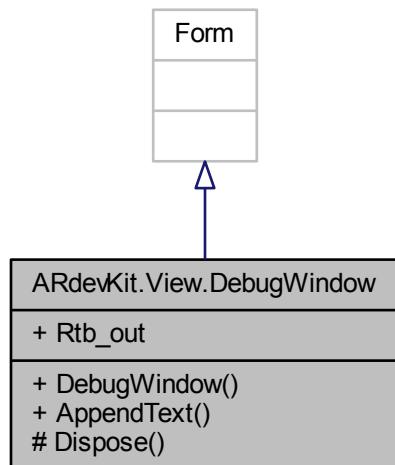
Gets or sets URL of the source.

The URL.

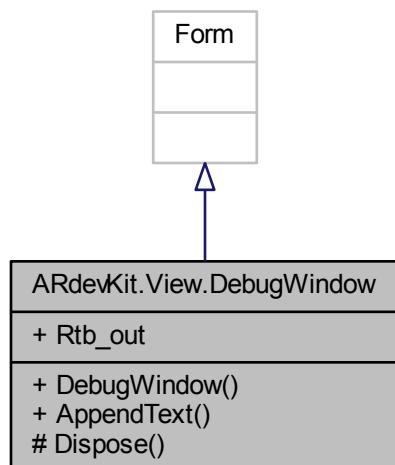
**5.20 ARdevKit.View.DebugWindow Class Reference**

This is a Form, containing a TextBox, which can be filled threadsafe. Its for displaying DebugInformation.

Inheritance diagram for ARdevKit.View.DebugWindow:



Collaboration diagram for ARdevKit.View.DebugWindow:



## Public Member Functions

- `DebugWindow (Controller.Connections.DeviceConnection.DeviceConnectionController controller)`  
*Initializes a new instance of the `DebugWindow` class.*
- `void AppendText (string text)`  
*Appends the text.*

## Protected Member Functions

- override void [Dispose](#) (bool disposing)

*Clean up any resources being used.*

## Properties

- System.Windows.Forms.RichTextBox [Rtb\\_out](#) [get]

*Gets the rtb\_out.*

### 5.20.1 Detailed Description

This is a Form, containing a TextBox, which can be filled threadsafe. Its for displaying DebugInformation.

### 5.20.2 Constructor & Destructor Documentation

#### 5.20.2.1 ARdevKit.View.DebugWindow.DebugWindow ( Controller.Connections.DeviceConnection.DeviceConnectionController controller )

Initializes a new instance of the [DebugWindow](#) class.

##### Parameters

|                   |                 |
|-------------------|-----------------|
| <i>controller</i> | The controller. |
|-------------------|-----------------|

### 5.20.3 Member Function Documentation

#### 5.20.3.1 void ARdevKit.View.DebugWindow.AppendText ( string text )

Appends the text.

##### Parameters

|             |           |
|-------------|-----------|
| <i>text</i> | The text. |
|-------------|-----------|

#### 5.20.3.2 override void ARdevKit.View.DebugWindow.Dispose ( bool disposing ) [protected]

Clean up any resources being used.

##### Parameters

|                  |   |
|------------------|---|
| <i>disposing</i> | true if managed resources should be disposed; otherwise, false. |
|------------------|---|

### 5.20.4 Property Documentation

#### 5.20.4.1 System.Windows.Forms.RichTextBox ARdevKit.View.DebugWindow.Rtb\_out [get]

Gets the rtb\_out.

The rtb\_out.

## 5.21 ARdevKit.Controller.Connections.DeviceConnection.DeviceConnectionController Class Reference

[Controller](#) which provides functions, to gather Information about Devices, which are running ARdevKitPlayer and are connected to the local Network. On top of that it provides functions to send Projects and receive Debuginformation.

Collaboration diagram for ARdevKit.Controller.Connections.DeviceConnection.DeviceConnectionController:

|   |
|---|
| ARdevKit.Controller.Connections.<br>DeviceConnection.DeviceConnectionController                             |
| + DebugConnected  |
| + DeviceConnectionController()<br>+ refresh()<br>+ getReportedDevices()<br>+ sendProject()<br>+ sendDebug() |

### Public Member Functions

- [DeviceConnectionController](#) (Form window)

*Initializes a new instance of the [DeviceConnectionController](#) class. Uses UDPListener to get information about devices. Communicating via HTTP order to secure currency of connections and sending the zipped project.*

- void [refresh](#) ()

*Runs the refresh listener, using a UDP Broadcast to which the ARdevKitPlayer responds.*

- List< string > [getReportedDevices](#) ()

*Gets the StringList of devices, which reported back to the UDPBroadcast.*

- bool [sendProject](#) (int index)

*Sends the opened Project to the chosen Device, using the selected index of the EditorWindowsDeviceList, which must be equal to the internal index of the reportedDevices List. Therefore it is exported. Exceptions which are thrown are written to a log file, in the path in which the Program is executed.*

- bool [sendDebug](#) (int index)

*Sends a Debugrequest to the selected Device and shows its DebugOutput on a PopupWindow with a RichTextbox*

### Properties

- bool [DebugConnected](#) [get, set]

*Gets or sets a value indicating whether [debug connected].*

#### 5.21.1 Detailed Description

[Controller](#) which provides functions, to gather Information about Devices, which are running ARdevKitPlayer and are connected to the local Network. On top of that it provides functions to send Projects and receive Debuginformation.

## **5.21.2 Constructor & Destructor Documentation**

### **5.21.2.1 ARdevKit.Controller.Connections.DeviceConnection.DeviceConnectionController ( Form window )**

Initializes a new instance of the [DeviceConnectionController](#) class. Uses UDPLListener to get information about devices. Communicating via HTTP order to secure currency of connections and sending the zipped project.

**Parameters**

|               |             |
|---------------|-------------|
| <i>window</i> | The window. |
|---------------|-------------|

**5.21.3 Member Function Documentation**

5.21.3.1 `List<string> ARdevKit.Controller.Connections.DeviceConnection.DeviceConnectionController.getReportedDevices ( )`

Gets the StringList of devices, which reported back to the UDPBroadcast.

**Returns**

StringList of devices, to which connections could be established

5.21.3.2 `void ARdevKit.Controller.Connections.DeviceConnection.DeviceConnectionController.refresh ( )`

Runs the refresh listener, using a UDP Broadcast to which the ARdevKitPlayer responds.

5.21.3.3 `bool ARdevKit.Controller.Connections.DeviceConnection.DeviceConnectionController.sendDebug ( int index )`

Sends a Debugrequest to the selected Device and shows its DebugOutput on a PopupWindow with a RichTextbox

**Parameters**

|              |                            |
|--------------|----------------------------|
| <i>index</i> | index of the chosen Device |
|--------------|----------------------------|

**Returns**

true if

5.21.3.4 `bool ARdevKit.Controller.Connections.DeviceConnection.DeviceConnectionController.sendProject ( int index )`

Sends the opened Project to the chosen Device, using the selected index of the EditorWindowsDeviceList, which must be equal to the internal index of the reportedDevices List. Therefore it is exported. Exceptions which are thrown are written to a log file, in the path in which the Program is executed.

**Parameters**

|              |                                      |
|--------------|--------------------------------------|
| <i>index</i> | index of the List of reportedDevices |
|--------------|--------------------------------------|

**Returns**

False, if the project could not be send

**5.21.4 Property Documentation**

5.21.4.1 `bool ARdevKit.Controller.Connections.DeviceConnection.DeviceConnectionController.DebugConnected [get], [set]`

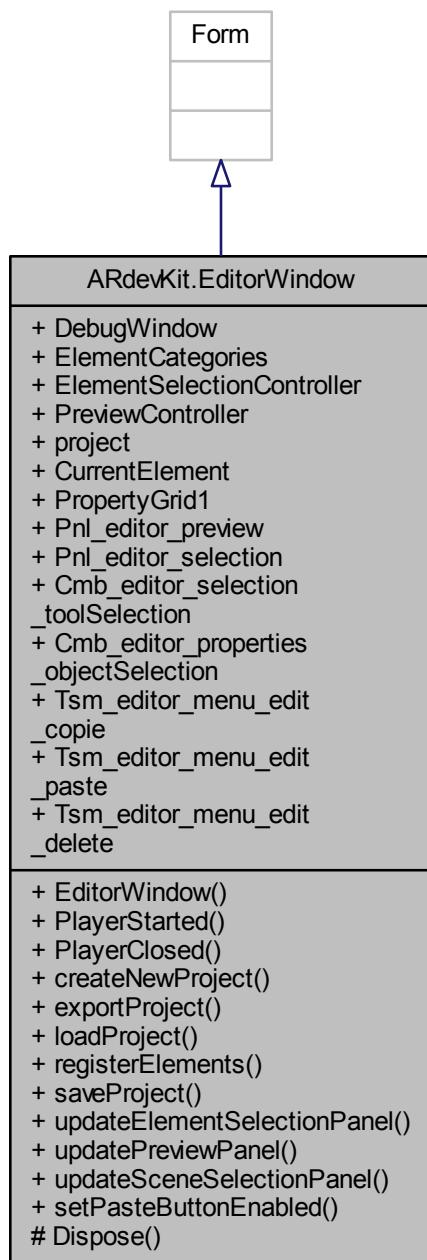
Gets or sets a value indicating whether [debug connected].

true if [debug connected] the Editor listens for Debugdata; otherwise, the connections will be closed false.

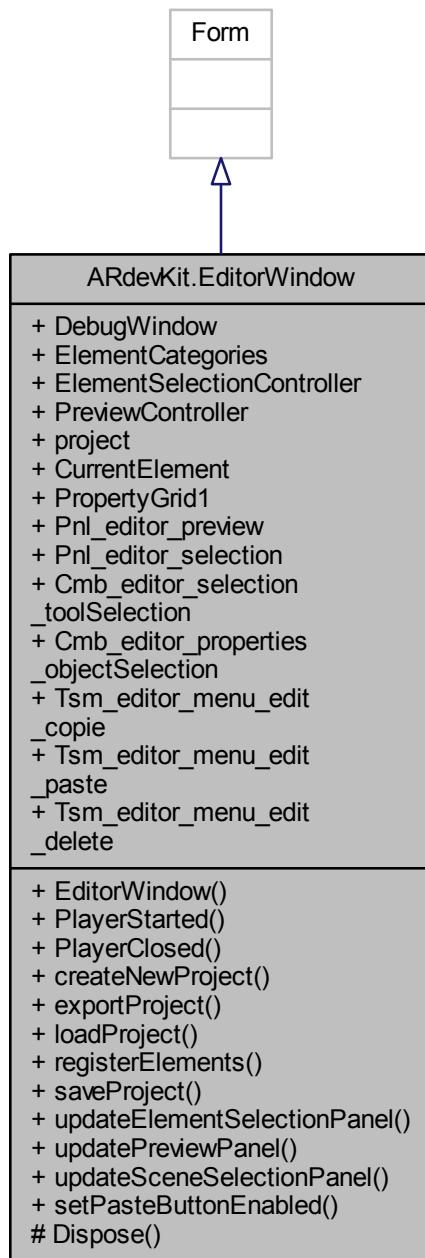
## 5.22 ARdevKit.EditorWindow Class Reference

Form for viewing the editor. This is the main form of the program.

Inheritance diagram for ARdevKit.EditorWindow:



Collaboration diagram for ARdevKit.EditorWindow:



## Public Member Functions

- [EditorWindow \(\)](#)  
*Default constructor. initializes components on startup.*
- [void PlayerStarted \(\)](#)  
*This method is used to tell the editorWindow that the player was started.*
- [void PlayerClosed \(\)](#)

- This method is used to tell the editorWindow that the player has been closed.*
- void [createNewProject](#) (String name)  
*Creates the new project. Initialized with the given name.*
  - void [exportProject](#) ()  
*Exports the project. saves the project first and then exports to project path*
  - void [loadProject](#) ()  
*Loads the project. Opens a file dialog to select a saved project.*
  - void [registerElements](#) ()  
*Registers all SceneElements that are available.*
  - void [saveProject](#) ()  
*Saves the project. Opens file save dialog if project Path isn't set yet. calls save(String path).*
  - void [updateElementSelectionPanel](#) ()  
*Updates the element selection panel. (Refreshes the [View](#))*
  - void [updatePreviewPanel](#) ()  
*This functions Updates the scene PreviewPanel. Alle elements will be removed and all current elements will add again to the panel.*
  - void [updateSceneSelectionPanel](#) ()  
*This functions Updates the scene SceneSelectionPanel. Alle elements will be removed and all current elements will add again to the panel.*
  - void [setPasteButtonEnabled](#) ()  
*Sets the PasteButton enabled.*

## Protected Member Functions

- override void [Dispose](#) (bool disposing)  
*Verwendete Ressourcen bereinigen.*

## Properties

- [DebugWindow](#) [DebugWindow](#) [get]  
*Gets the debug window.*
- [PreviewController](#) [PreviewController](#) [get, set]  
*Gets or sets the previewController.*
- [Project](#) [project](#) [get, set]  
*Gets or sets the project.*
- [System.Windows.Forms.PropertyGrid](#) [PropertyGrid1](#) [get, set]  
*Gets or sets the PropertyGrid1.*
- [System.Windows.Forms.Panel](#) [Pnl\\_editor\\_preview](#) [get, set]  
*Gets or sets the pnl editor preview.*
- [System.Windows.Forms.Panel](#) [Pnl\\_editor\\_selection](#) [get, set]  
*Gets or sets the pnl editor selection.*
- [System.Windows.Forms.ComboBox](#) [Cmb\\_editor\\_selection\\_toolSelection](#) [get, set]  
*Gets or sets the cmb editor selection tool selection.*
- [System.Windows.Forms.ComboBox](#) [Cmb\\_editor\\_properties\\_objectSelection](#) [get, set]  
*Gets or sets the cmb editor properties object selection.*
- [System.Windows.Forms.ToolStripItem](#) [Tsm\\_editor\\_menu\\_edit\\_copie](#) [get, set]  
*Gets or sets the tsm\_editor\_menu\_edit\_copie.*
- [System.Windows.Forms.ToolStripItem](#) [Tsm\\_editor\\_menu\\_edit\\_paste](#) [get, set]  
*Gets or sets the tsm\_editor\_menu\_edit\_paste.*
- [System.Windows.Forms.ToolStripItem](#) [Tsm\\_editor\\_menu\\_edit\\_delete](#) [get, set]  
*Gets or sets the tsm\_editor\_menu\_edit\_delete.*

### 5.22.1 Detailed Description

Form for viewing the editor. This is the main form of the program.

### 5.22.2 Member Function Documentation

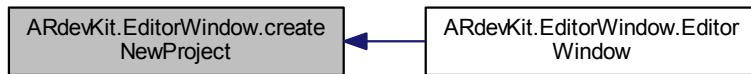
#### 5.22.2.1 void ARdevKit.EditorWindow.createNewProject ( String name )

Creates the new project. Initialized with the given name.

##### Parameters

|             |                          |
|-------------|--------------------------|
| <i>name</i> | Name of the new project. |
|-------------|--------------------------|

Here is the caller graph for this function:



#### 5.22.2.2 override void ARdevKit.EditorWindow.Dispose ( bool disposing ) [protected]

Verwendete Ressourcen bereinigen.

##### Parameters

|                  |   |
|------------------|---|
| <i>disposing</i> | True, wenn verwaltete Ressourcen gelöscht werden sollen; andernfalls False. |
|------------------|---|

#### 5.22.2.3 void ARdevKit.EditorWindow.exportProject ( )

Exports the project. saves the project first and then exports to project path

geht 19.01.2014 22:10

Here is the call graph for this function:



#### 5.22.2.4 void ARdevKit.EditorWindow.loadProject ( )

Loads the project. Opens a file dialog to select a saved project.

geht 19.01.2014 17:55

**5.22.2.5 void ARdevKit.EditorWindow.PlayerClosed( )**

This method is used to tell the editorWindow that the player has been closed.

**5.22.2.6 void ARdevKit.EditorWindow.PlayerStarted( )**

This method is used to tell the editorWindow that the player was started.

**5.22.2.7 void ARdevKit.EditorWindow.registerElements( )**

Registers all SceneElements that are available.

Robin, 14.01.2014.

**5.22.2.8 void ARdevKit.EditorWindow.saveProject( )**

Saves the project. Opens file save dialog if project Path isn't set yet. calls save(String path).

geht, 17.01.2014.

Here is the caller graph for this function:

**5.22.2.9 void ARdevKit.EditorWindow.setPasteButtonEnabled( )**

Sets the PasteButton enabled.

**5.22.2.10 void ARdevKit.EditorWindow.updateElementSelectionPanel( )**

Updates the element selection panel. (Refreshes the [View](#))

**5.22.2.11 void ARdevKit.EditorWindow.updatePreviewPanel( )**

This functions Updates the scene PreviewPanel. Alle elements will be removed and all current elements will add again to the panel.

Lizzard, 1/16/2014.

**5.22.2.12 void ARdevKit.EditorWindow.updateSceneSelectionPanel( )**

This functions Updates the scene SceneSelectionPanel. Alle elements will be removed and all current elements will add again to the panel.

Lizzard, 1/16/2014.

### 5.22.3 Property Documentation

5.22.3.1 **System.Windows.Forms.ComboBox** ARdevKit.EditorWindow.Cmb\_editor\_properties\_objectSelection [get], [set]

Gets or sets the cmb editor properties object selection.

The cmb editor properties object selection.

5.22.3.2 **System.Windows.Forms.ComboBox** ARdevKit.EditorWindow.Cmb\_editor\_selection\_toolSelection [get], [set]

Gets or sets the cmb editor selection tool selection.

The cmb editor selection tool selection.

5.22.3.3 **DebugWindow** ARdevKit.EditorWindow.DebugWindow [get]

Gets the debug window.

The debug window.

5.22.3.4 **System.Windows.Forms.Panel** ARdevKit.EditorWindow.Pnl\_editor\_preview [get], [set]

Gets or sets the pnl editor preview.

The pnl editor preview.

5.22.3.5 **System.Windows.Forms.Panel** ARdevKit.EditorWindow.Pnl\_editor\_selection [get], [set]

Gets or sets the pnl editor selection.

The pnl editor selection.

5.22.3.6 **PreviewController** ARdevKit.EditorWindow.PreviewController [get], [set]

Gets or sets the previewController.

The previewController.

5.22.3.7 **Project** ARdevKit.EditorWindow.project [get], [set]

Gets or sets the project.

The project.

5.22.3.8 **System.Windows.Forms.PropertyGrid** ARdevKit.EditorWindow.PropertyGrid1 [get], [set]

Gets or sets the PropertyGrid1.

PropertyGrid.

5.22.3.9 **System.Windows.Forms.ToolStripItem** ARdevKit.EditorWindow.Tsm\_editor\_menu\_edit\_copie [get], [set]

Gets or sets the tsm\_editor\_menu\_edit\_copie.

The tsm\_editor\_menu\_edit\_copie.

5.22.3.10 `System.Windows.Forms.ToolStripItem ARdevKit.EditorWindow.Tsm_editor_menu_edit_delete [get], [set]`

Gets or sets the `tsm_editor_menu_edit_delete`.

The `tsm_editor_menu_edit_delete`.

5.22.3.11 `System.Windows.Forms.ToolStripItem ARdevKit.EditorWindow.Tsm_editor_menu_edit_paste [get], [set]`

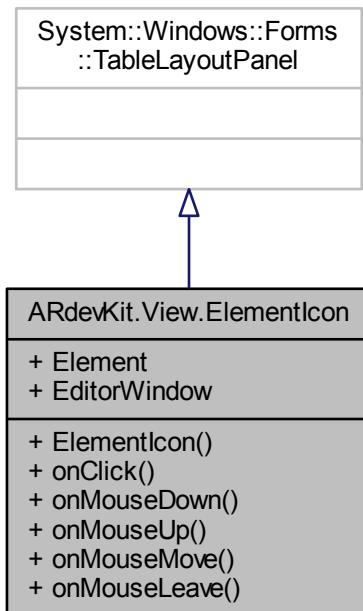
Gets or sets the `tsm_editor_menu_edit_paste`.

The `tsm_editor_menu_edit_paste`.

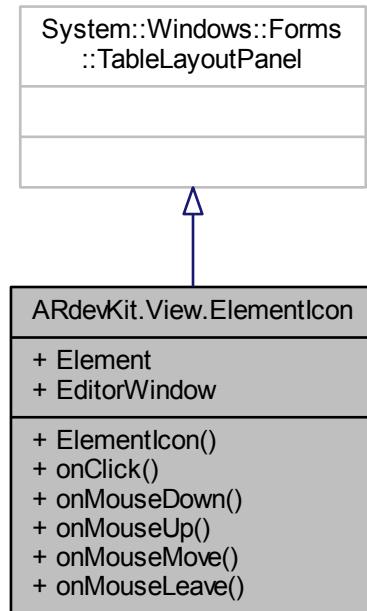
## 5.23 ARdevKit.View.ElementIcon Class Reference

An element icon is used to display a registered SceneElement in the SceneSelectionPanel.

Inheritance diagram for ARdevKit.View.ElementIcon:



Collaboration diagram for ARdevKit.View.ElementIcon:



## Public Member Functions

- `ElementIcon (SceneElement element, EditorWindow ew)`  
*Constructor. Creates the text label and the pictureBox and adds them to the Panel. Adds event handlers.*
- `void onClick (object sender, EventArgs e)`  
*Raises the click event of the panel, label and picturebox.*
- `void onMouseDown (object sender, EventArgs e)`  
*Raises the mouse down event. Initiates drag&drop.*
- `void onMouseUp (object sender, EventArgs e)`  
*Raises the mouse up event.*
- `void onMouseMove (object sender, EventArgs e)`  
*Raises the mouse move event.*
- `void onMouseLeave (object sender, EventArgs e)`  
*Raises the mouse leave event.*

## Properties

- `SceneElement Element [get]`  
*Gets the element.*
- `EditorWindow EditorWindow [get]`  
*Gets the editor window.*

### 5.23.1 Detailed Description

An element icon is used to display a registered SceneElement in the SceneSelectionPanel.

Robin, 14.01.2014.

### 5.23.2 Constructor & Destructor Documentation

#### 5.23.2.1 ARdevKit.View.ElementIcon.ElementIcon ( SceneElement *element*, EditorWindow *ew* )

Constructor. Creates the text label and the pictureBox and adds them to the Panel. Adds event handlers.

##### Parameters

|                |              |
|----------------|--------------|
| <i>element</i> | The element. |
| <i>ew</i>      | The ew.      |

Robin, 14.01.2014.

### 5.23.3 Member Function Documentation

#### 5.23.3.1 void ARdevKit.View.ElementIcon.onClick ( object *sender*, EventArgs *e* )

Raises the click event of the panel, label and picturebox.

Robin, 14.01.2014.

##### Parameters

|               |   |
|---------------|---|
| <i>sender</i> | Source of the event.                                    |
| <i>e</i>      | Event information to send to registered event handlers. |

#### 5.23.3.2 void ARdevKit.View.ElementIcon.onMouseDown ( object *sender*, EventArgs *e* )

Raises the mouse down event. Initiates drag&drop.

Robin, 18.01.2014.

##### Parameters

|               |   |
|---------------|---|
| <i>sender</i> | Source of the event.                                    |
| <i>e</i>      | Event information to send to registered event handlers. |

#### 5.23.3.3 void ARdevKit.View.ElementIcon.onMouseLeave ( object *sender*, EventArgs *e* )

Raises the mouse leave event.

Robin, 19.01.2014.

##### Parameters

|               |   |
|---------------|---|
| <i>sender</i> | Source of the event.                                    |
| <i>e</i>      | Event information to send to registered event handlers. |

#### 5.23.3.4 void ARdevKit.View.ElementIcon.onMouseMove ( object *sender*, EventArgs *e* )

Raises the mouse move event.

Robin, 19.01.2014.

## Parameters

|               |   |
|---------------|---|
| <i>sender</i> | Source of the event.                                    |
| <i>e</i>      | Event information to send to registered event handlers. |

5.23.3.5 void ARdevKit.View.ElementIcon.onMouseUp ( object *sender*, EventArgs *e* )

Raises the mouse up event.

Robin, 19.01.2014.

## Parameters

|               |   |
|---------------|---|
| <i>sender</i> | Source of the event.                                    |
| <i>e</i>      | Event information to send to registered event handlers. |

## 5.23.4 Property Documentation

## 5.23.4.1 EditorWindow ARdevKit.View.ElementIcon.EditorWindow [get]

Gets the editor window.

The editor window.

## 5.23.4.2 SceneElement ARdevKit.View.ElementIcon.Element [get]

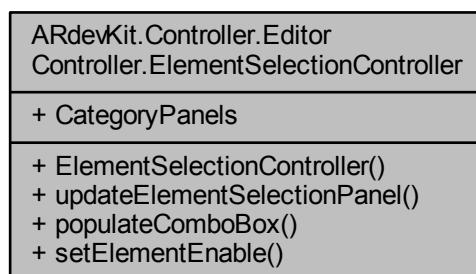
Gets the element.

The element.

## 5.24 ARdevKit.Controller.EditorController.ElementSelectionController Class Reference

The [ElementSelectionController](#) is used to controll the section of the UI,

Collaboration diagram for ARdevKit.Controller.EditorController.ElementSelectionController:



## Public Member Functions

- [ElementSelectionController \(EditorWindow ew\)](#)

*Constructor.*

- void [updateElementSelectionPanel \(\)](#)  
*Updates the ElementSelectionPanel.*
- void [populateComboBox \(\)](#)  
*Adds the SceneElementCategories to the ComboBox of the ElementSelectionPanel.*
- void [setElementEnable \(Type element, Boolean enable\)](#)  
*Disables or enables the given element in the Element Selection Panel.*

## Properties

- List< [SceneElementCategoryPanel](#) > [CategoryPanels](#) [ get, set ]  
*Gets or sets the category panels.*

### 5.24.1 Detailed Description

The [ElementSelectionController](#) is used to control the section of the UI,

### 5.24.2 Constructor & Destructor Documentation

#### 5.24.2.1 ARdevKit.Controller.EditorController.ElementSelectionController.ElementSelectionController ( EditorWindow ew )

Constructor.

Lizard, 1/13/2014.

#### Parameters

|           |                    |
|-----------|--------------------|
| <i>ew</i> | The Editor Window. |
|-----------|--------------------|

### 5.24.3 Member Function Documentation

#### 5.24.3.1 void ARdevKit.Controller.EditorController.ElementSelectionController.populateComboBox ( )

Adds the SceneElementCategories to the ComboBox of the ElementSelectionPanel.

Lizard, 1/13/2014.

#### 5.24.3.2 void ARdevKit.Controller.EditorController.ElementSelectionController.setElementEnable ( Type element, Boolean enable )

Disables or enables the given element in the Element Selection Panel.

Robin, 19.01.2014.

#### Parameters

|                |  |
|----------------|--|
| <i>element</i> | The element to disable or enable. Example: <code>typeof(IDMarker)</code> |
| <i>enable</i>  | Whether the element should be disabled or enabled.                       |

#### 5.24.3.3 void ARdevKit.Controller.EditorController.ElementSelectionController.updateElementSelectionPanel ( )

Updates the ElementSelectionPanel.

Lizard, 1/13/2014.

## 5.24.4 Property Documentation

5.24.4.1 `List<SceneElementCategoryPanel> ARdevKit.Controller.EditorController.ElementSelectionController.CategoryPanels [get], [set]`

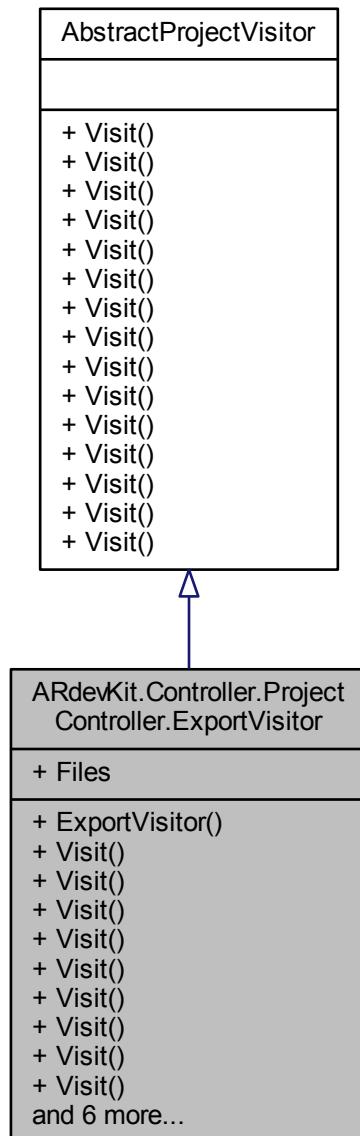
Gets or sets the category panels.

The category panels.

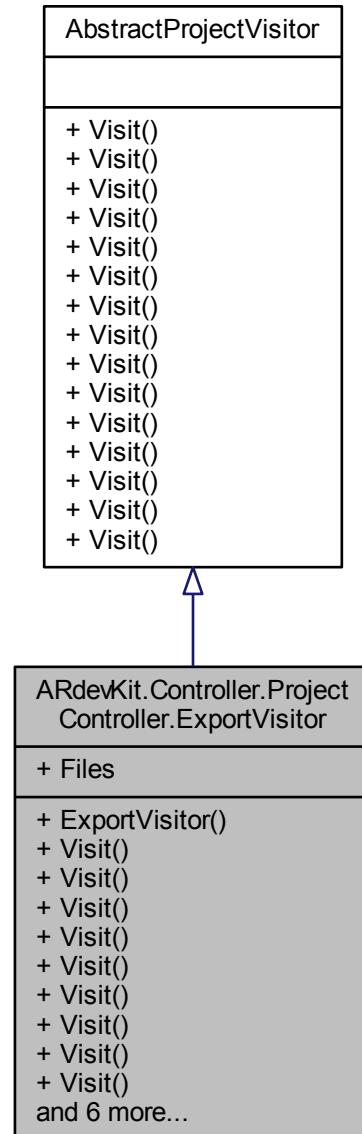
## 5.25 ARdevKit.Controller.ProjectController.ExportVisitor Class Reference

An `ExportVisitor` is an `AbstractProjectVisitor` which exports the project to the path defined in `Project` so that it is readable by the player.

Inheritance diagram for ARdevKit.Controller.ProjectController.ExportVisitor:



Collaboration diagram for ARdevKit.Controller.ProjectController.ExportVisitor:



## Public Member Functions

- [ExportVisitor \(\)](#)  
*Default constructor*
- [override void Visit \(CustomUserEvent cue\)](#)  
*Visits the given CustomUserEvent*
- [override void Visit \(VideoAugmentation video\)](#)  
*Visits the given VideoAugmentation*
- [override void Visit \(ImageAugmentation image\)](#)  
*Visits the given ImageAugmentation.*

- `override void Visit (Chart chart)`  
*Visits the given Chart.*
- `override void Visit (DbSource source)`  
*Visits the given DbSource.*
- `override void Visit (FileSource source)`  
*Visits the given FileSource.*
- `override void Visit (MarkerlessFuser markerlessFuser)`  
*Visits the given MarkerlessFuser.*
- `override void Visit (MarkerlessSensor markerlessSensor)`  
*Visits the given MarkerlessSensor.*
- `override void Visit (MarkerFuser markerFuser)`  
*Visits the given MarkerFuser.*
- `override void Visit (PictureMarkerSensor pictureMarkerSensor)`  
*Visits the given PictureMarkerSensor.*
- `override void Visit (ImageTrackable image)`  
*Visits the given Image.*
- `override void Visit (PictureMarker pictureMarker)`  
*Visits the given PictureMarker.*
- `override void Visit (MarkerSensor idMarkerSensor)`  
*Visits the given MarkerSensor.*
- `override void Visit (IDMarker idMarker)`  
*Visits the given IDMarker.*
- `override void Visit (Project p)`  
*Visits the given Project.*

## Properties

- `List< AbstractFile > Files [get, set]`  
*Gets or sets the AbstractFiles created by the export visitor.*

### 5.25.1 Detailed Description

An `ExportVisitor` is an `AbstractProjectVisitor` which exports the project to the path defined in `Project` so that it is readable by the player.

Immanuel, 15.01.2014.

### 5.25.2 Constructor & Destructor Documentation

#### 5.25.2.1 ARdevKit.Controller.ProjectController.ExportVisitor.ExportVisitor( )

Default constructor

### 5.25.3 Member Function Documentation

#### 5.25.3.1 override void ARdevKit.Controller.ProjectController.ExportVisitor.Visit ( CustomUserEvent cue ) [virtual]

Visits the given `CustomUserEvent`

**Parameters**

|            |                     |
|------------|---------------------|
| <i>cue</i> | The customUserEvent |
|------------|---------------------|

Implements [ARdevKit.Controller.ProjectController.AbstractProjectVisitor](#).

5.25.3.2 **override void ARdevKit.Controller.ProjectController.ExportVisitor.Visit ( *VideoAugmentation video* ) [virtual]**

Visits the given VideoAugmentation

**Parameters**

|              |           |
|--------------|-----------|
| <i>video</i> | The video |
|--------------|-----------|

Implements [ARdevKit.Controller.ProjectController.AbstractProjectVisitor](#).

5.25.3.3 **override void ARdevKit.Controller.ProjectController.ExportVisitor.Visit ( *ImageAugmentation image* ) [virtual]**

Visits the given ImageAugmentation.

Immanuel, 17.01.2014.

**Parameters**

|              |            |
|--------------|------------|
| <i>image</i> | The image. |
|--------------|------------|

Implements [ARdevKit.Controller.ProjectController.AbstractProjectVisitor](#).

5.25.3.4 **override void ARdevKit.Controller.ProjectController.ExportVisitor.Visit ( *Chart chart* ) [virtual]**

Visits the given Chart.

Immanuel, 17.01.2014.

**Parameters**

|              |                |
|--------------|----------------|
| <i>chart</i> | The bar graph. |
|--------------|----------------|

Implements [ARdevKit.Controller.ProjectController.AbstractProjectVisitor](#).

5.25.3.5 **override void ARdevKit.Controller.ProjectController.ExportVisitor.Visit ( *DbSource source* ) [virtual]**

Visits the given DbSource.

Immanuel, 17.01.2014.

**Exceptions**

|                                |   |
|--------------------------------|---|
| <i>NotImplementedException</i> | Thrown when the requested operation is unimplemented. |
|--------------------------------|---|

**Parameters**

|               |                 |
|---------------|-----------------|
| <i>source</i> | Source for the. |
|---------------|-----------------|

Implements [ARdevKit.Controller.ProjectController.AbstractProjectVisitor](#).

5.25.3.6 **override void ARdevKit.Controller.ProjectController.ExportVisitor.Visit ( *FileSource source* ) [virtual]**

Visits the given FileSource.

Immanuel, 23.01.2014.

**Exceptions**

|                                |   |
|--------------------------------|---|
| <i>NotImplementedException</i> | Thrown when the requested operation is unimplemented. |
|--------------------------------|---|

**Parameters**

|               |   |
|---------------|---|
| <i>source</i> | Source for the AbstractDynamic2DAugmentation. |
|---------------|---|

Implements [ARdevKit.Controller.ProjectController.AbstractProjectVisitor](#).

**5.25.3.7 override void ARdevKit.Controller.ProjectController.ExportVisitor.Visit ( **MarkerlessFuser** *markerlessFuser* ) [virtual]**

Visits the given MarkerlessFuser.

Immanuel, 17.01.2014.

**Parameters**

|                        |                       |
|------------------------|-----------------------|
| <i>markerlessFuser</i> | The markerless fuser. |
|------------------------|-----------------------|

Implements [ARdevKit.Controller.ProjectController.AbstractProjectVisitor](#).

**5.25.3.8 override void ARdevKit.Controller.ProjectController.ExportVisitor.Visit ( **MarkerlessSensor** *markerlessSensor* ) [virtual]**

Visits the given MarkerlessSensor.

Immanuel, 17.01.2014.

**Parameters**

|                          |                        |
|--------------------------|------------------------|
| <i>markerless-Sensor</i> | The markerless sensor. |
|--------------------------|------------------------|

Implements [ARdevKit.Controller.ProjectController.AbstractProjectVisitor](#).

**5.25.3.9 override void ARdevKit.Controller.ProjectController.ExportVisitor.Visit ( **MarkerFuser** *markerFuser* ) [virtual]**

Visits the given MarkerFuser.

Immanuel, 17.01.2014.

**Parameters**

|                    |                   |
|--------------------|-------------------|
| <i>markerFuser</i> | The marker fuser. |
|--------------------|-------------------|

Implements [ARdevKit.Controller.ProjectController.AbstractProjectVisitor](#).

**5.25.3.10 override void ARdevKit.Controller.ProjectController.ExportVisitor.Visit ( **PictureMarkerSensor** *pictureMarkerSensor* ) [virtual]**

Visits the given PictureMarkerSensor.

Immanuel, 17.01.2014.

**Parameters**

|                                   |                            |
|-----------------------------------|----------------------------|
| <code>pictureMarker-Sensor</code> | The picture marker sensor. |
|-----------------------------------|----------------------------|

Implements [ARdevKit.Controller.ProjectController.AbstractProjectVisitor](#).

#### 5.25.3.11 override void ARdevKit.Controller.ProjectController.ExportVisitor.Visit ( **ImageTrackable** *image* ) [virtual]

Visits the given Image.

Immanuel, 26.01.2014.

Parameters

|                    |            |
|--------------------|------------|
| <code>image</code> | The image. |
|--------------------|------------|

Implements [ARdevKit.Controller.ProjectController.AbstractProjectVisitor](#).

#### 5.25.3.12 override void ARdevKit.Controller.ProjectController.ExportVisitor.Visit ( **PictureMarker** *pictureMarker* ) [virtual]

Visits the given PictureMarker.

Immanuel, 17.01.2014.

Parameters

|                            |                     |
|----------------------------|---------------------|
| <code>pictureMarker</code> | The picture marker. |
|----------------------------|---------------------|

Implements [ARdevKit.Controller.ProjectController.AbstractProjectVisitor](#).

#### 5.25.3.13 override void ARdevKit.Controller.ProjectController.ExportVisitor.Visit ( **MarkerSensor** *idMarkerSensor* ) [virtual]

Visits the given MarkerSensor.

Immanuel, 17.01.2014.

Parameters

|                             |                               |
|-----------------------------|-------------------------------|
| <code>idMarkerSensor</code> | The identifier marker sensor. |
|-----------------------------|-------------------------------|

Implements [ARdevKit.Controller.ProjectController.AbstractProjectVisitor](#).

#### 5.25.3.14 override void ARdevKit.Controller.ProjectController.ExportVisitor.Visit ( **IDMarker** *idMarker* ) [virtual]

Visits the given IDMarker.

Immanuel, 17.01.2014.

Parameters

|                       |                        |
|-----------------------|------------------------|
| <code>idMarker</code> | The identifier marker. |
|-----------------------|------------------------|

Implements [ARdevKit.Controller.ProjectController.AbstractProjectVisitor](#).

#### 5.25.3.15 override void ARdevKit.Controller.ProjectController.ExportVisitor.Visit ( **Project** *p* ) [virtual]

Visits the given Project.

Immanuel, 17.01.2014.

**Parameters**

|          |              |
|----------|--------------|
| <i>p</i> | The project. |
|----------|--------------|

Implements [ARdevKit.Controller.ProjectController.AbstractProjectVisitor](#).

#### 5.25.4 Property Documentation

##### 5.25.4.1 List<AbstractFile> [ARdevKit.Controller.ProjectController.ExportVisitor.Files](#) [get], [set]

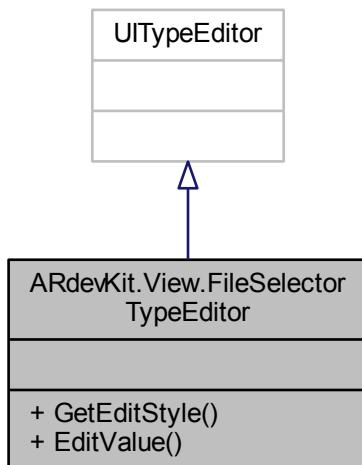
Gets or sets the AbstractFiles created by the export visitor.

The files.

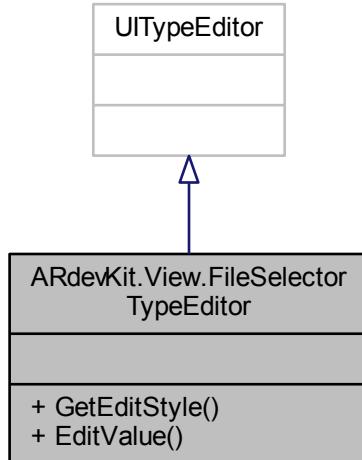
## 5.26 ARdevKit.View.FileSelectorTypeEditor Class Reference

Class which acts as "bridge" for the .net propertyGrid and an custome ControlForm.

Inheritance diagram for ARdevKit.View.FileSelectorTypeEditor:



Collaboration diagram for ARdevKit.View.FileSelectorTypeEditor:



## Public Member Functions

- override `UITypeEditor.EditValue` (`ITypeDescriptorContext context`)  
*Ruft den Editor-Stil ab, der von der M:System.Drawing.Design.UITypeEditor.EditValue(System.IServiceProvider, System.Object)-Methode verwendet wird.*
- override object `EditValue` (`ITypeDescriptorContext context, IServiceProvider provider, object value`)  
*Bearbeitet den Wert des angegebenen Objekts mit dem von der M:System.Drawing.Design.UITypeEditor.GetEditStyle-Methode angegebenen Editor-Stil.*

### 5.26.1 Detailed Description

Class which acts as "bridge" for the .net propertyGrid and an custome ControlForm.

### 5.26.2 Member Function Documentation

#### 5.26.2.1 override object ARdevKit.View.FileSelectorTypeEditor.EditValue ( `ITypeDescriptorContext context, IServiceProvider provider, object value` )

Bearbeitet den Wert des angegebenen Objekts mit dem von der M:System.Drawing.Design.UITypeEditor.GetEditStyle-Methode angegebenen Editor-Stil.

##### Parameters

|                       |   |
|-----------------------|---|
| <code>context</code>  | Eine T:System.ComponentModel.ITypeDescriptorContext-Schnittstelle, über die zusätzliche Kontextinformationen abgerufen werden können. |
| <code>provider</code> | Ein T:System.IServiceProvider, über den dieser Editor Dienste anfordern kann.   |

|              |                             |
|--------------|-----------------------------|
| <i>value</i> | Das zu bearbeitende Objekt. |
|--------------|-----------------------------|

#### Returns

Der neue Wert des Objekts. Wenn sich der Wert des Objekts nicht geändert hat, wird hierbei dasselbe Objekt zurückgegeben, das zuvor übergeben wurde.

#### 5.26.2.2 override UITypeEditorEditStyle ARdevKit.View.FileSelectorTypeEditor.GetEditStyle ( ITypeDescriptorContext context )

Ruft den Editor-Stil ab, der von der M:System.Drawing.Design.UITypeEditor.EditValue(System.IServiceProvider, System.Object)-Methode verwendet wird.

#### Parameters

|                |   |
|----------------|---|
| <i>context</i> | Eine T:System.ComponentModel.ITypeDescriptorContext-Schnittstelle, über die zusätzliche Kontextinformationen abgerufen werden können. |
|----------------|---|

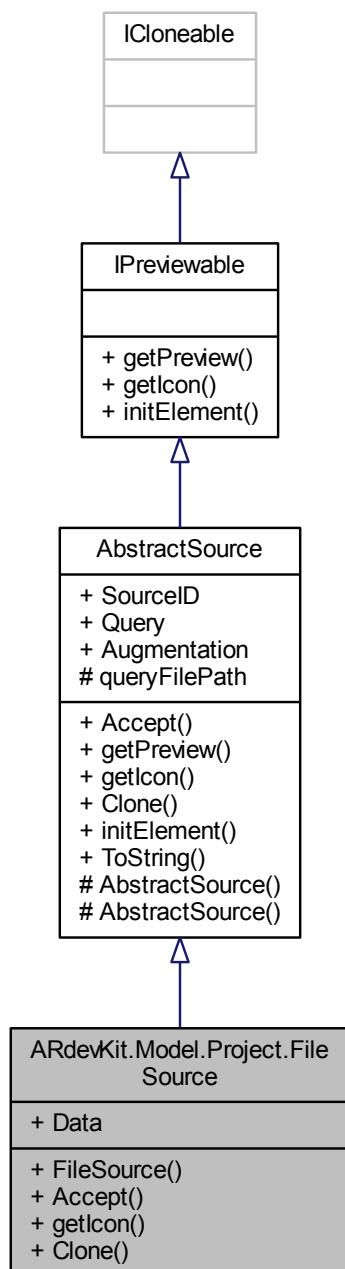
#### Returns

Ein T:System.Drawing.Design.UITypeEditorEditStyle-Wert, der den von der M:System.Drawing.Design.UITypeEditor.EditValue(System.IServiceProvider, System.Object)-Methode verwendeten Editor-Stil angibt. Wenn T:System.Drawing.Design.UITypeEditor diese Methode nicht unterstützt, gibt M:System.Drawing.Design.UITypeEditor.GetEditStyle den Wert F:System.Drawing.Design.UITypeEditorEditStyle.None zurück.

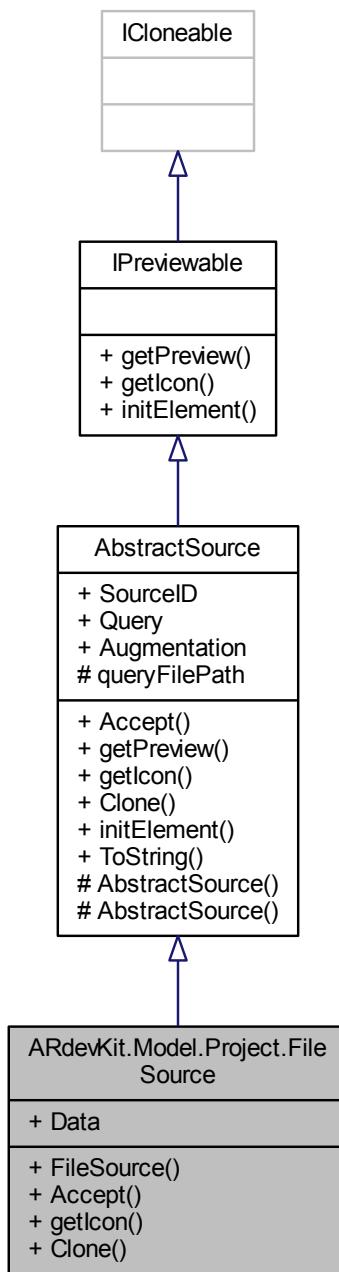
## 5.27 ARdevKit.Model.Project.FileSource Class Reference

A file source.

Inheritance diagram for ARdevKit.Model.Project.FileSource:



Collaboration diagram for ARdevKit.Model.Project.FileSource:



## Public Member Functions

- **FileSource** (string sourceFilePath)  
*Initializes a new instance of the `FileSource` class.*
- **override void Accept (Controller.ProjectController.AbstractProjectVisitor visitor)**  
*An abstract method, to accept an `AbstractProjectVisitor` which must be implemented according to the visitor design pattern.*

- override Bitmap [getIcon \(\)](#)  
*returns a Bitmap in order to be displayed on the ElementSelectionPanel, implements IPreviewable*
- override object [Clone \(\)](#)  
*Makes a deep copy of this object.*

## Properties

- string [Data \[get, set\]](#)  
*Gets or sets the file source.*

## Additional Inherited Members

### 5.27.1 Detailed Description

A file source.

### 5.27.2 Constructor & Destructor Documentation

#### 5.27.2.1 ARdevKit.Model.Project.FileSource ( string *sourceFilePath* )

Initializes a new instance of the [FileSource](#) class.

##### Parameters

|                       |                       |
|-----------------------|-----------------------|
| <i>sourceFilePath</i> | The source file path. |
|-----------------------|-----------------------|

### 5.27.3 Member Function Documentation

#### 5.27.3.1 override void ARdevKit.Model.Project.FileSource.Accept ( Controller.ProjectController.AbstractProjectVisitor *visitor* )

An abstract method, to accept an AbstractProjectVisitor which must be implemented according to the visitor design pattern.

Immanuel, 27.01.2014.

##### Parameters

|                |   |
|----------------|---|
| <i>visitor</i> | the visitor which encapsulates the action which is performed on this element. |
|----------------|---|

#### 5.27.3.2 override object ARdevKit.Model.Project.FileSource.Clone ( ) [virtual]

Makes a deep copy of this object.

Robin, 21.01.2014.

##### Returns

A copy of this object.

Implements [ARdevKit.Model.Project.AbstractSource](#).

5.27.3.3 `override Bitmap ARdevKit.Model.Project.FileSource.getIcon( ) [virtual]`

returns a Bitmap in order to be displayed on the ElementSelectionPanel, implements [IPreviewable](#)

#### Returns

a representative iconized Bitmap

Implements [ARdevKit.Model.Project.AbstractSource](#).

## 5.27.4 Property Documentation

5.27.4.1 `string ARdevKit.Model.Project.FileSource.Data [get], [set]`

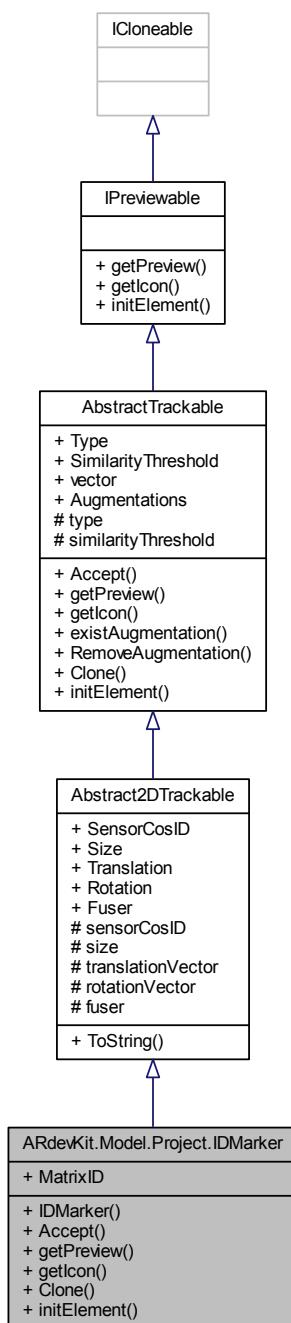
Gets or sets the file source.

The file source.

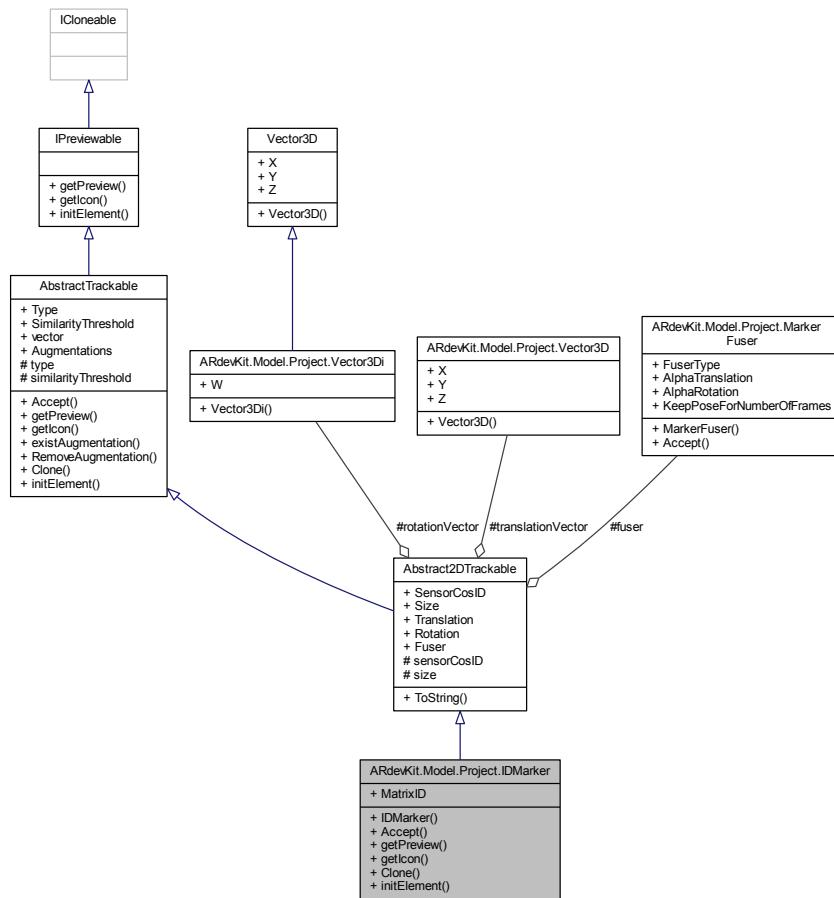
## 5.28 ARdevKit.Model.Project.IDMarker Class Reference

[IDMarker](#) is a AbstractMarker adding an matrixID.

Inheritance diagram for ARdevKit.Model.Project.IDMarker:



Collaboration diagram for ARdevKit.Model.Project.IDMarker:



## Public Member Functions

- **`IDMarker`** (int matrixID)
 

*Initializes a new instance of the `IDMarker` class.*
- **override void `Accept`** (Controller.ProjectController.AbstractProjectVisitor visitor)
 

*An method, to accept a `AbstractProjectVisitor` and let the visitor visit the associated fuser.*
- **override Bitmap `getPreview`** ()
 

*Gets the preview.*
- **override Bitmap `getIcon`** ()
 

*Gets the icon.*
- **override object `Clone`** ()
 

*Makes a deep copy of this object.*
- **override bool `initElement`** (EditorWindow ew)
 

*This method is called by the previewController when a new instance of the element is added to the Scene. It sets "must-have" properties.*

## Properties

- int `MatrixID` [get, set]
 

*Gets or sets the matrix identifier.*

## Additional Inherited Members

### 5.28.1 Detailed Description

[IDMarker](#) is a AbstractMarker adding an matrixID.

### 5.28.2 Constructor & Destructor Documentation

#### 5.28.2.1 ARdevKit.Model.Project.IDMarker.IDMarker ( int *matrixID* )

Initializes a new instance of the [IDMarker](#) class.

##### Parameters

|                 |                        |
|-----------------|------------------------|
| <i>matrixID</i> | The matrix identifier. |
|-----------------|------------------------|

### 5.28.3 Member Function Documentation

#### 5.28.3.1 override void ARdevKit.Model.Project.IDMarker.Accept ( Controller.ProjectController.AbstractProjectVisitor *visitor* )

An method, to accept a AbstractProjectVisitor and let the visitor visit the associated fuser.

##### Parameters

|                |  |
|----------------|--|
| <i>visitor</i> | the visitor which encapsulates the action which is performed on this element |
|----------------|--|

#### 5.28.3.2 override object ARdevKit.Model.Project.IDMarker.Clone ( ) [virtual]

Makes a deep copy of this object.

Robin, 22.01.2014.

##### Returns

A copy of this object.

Implements [ARdevKit.Model.Project.AbstractTrackable](#).

#### 5.28.3.3 override Bitmap ARdevKit.Model.Project.IDMarker.getIcon ( ) [virtual]

Gets the icon.

##### Returns

a representative iconized Bitmap

Implements [ARdevKit.Model.Project.AbstractTrackable](#).

#### 5.28.3.4 override Bitmap ARdevKit.Model.Project.IDMarker.getPreview ( ) [virtual]

Gets the preview.

##### Returns

a representative Bitmap

Implements [ARdevKit.Model.Project.AbstractTrackable](#).

5.28.3.5 `override bool ARdevKit.Model.Project.IDMarker.initElement ( EditorWindow ew ) [virtual]`

This method is called by the previewController when a new instance of the element is added to the Scene. It sets "must-have" properties.

**Parameters**

|                 |         |
|-----------------|---------|
| <code>ew</code> | The ew. |
|-----------------|---------|

**Returns**

true if it succeeds, false if it fails.

Reimplemented from [ARdevKit.Model.Project.AbstractTrackable](#).

## 5.28.4 Property Documentation

5.28.4.1 `int ARdevKit.Model.Project.IDMarker.MatrixID [get], [set]`

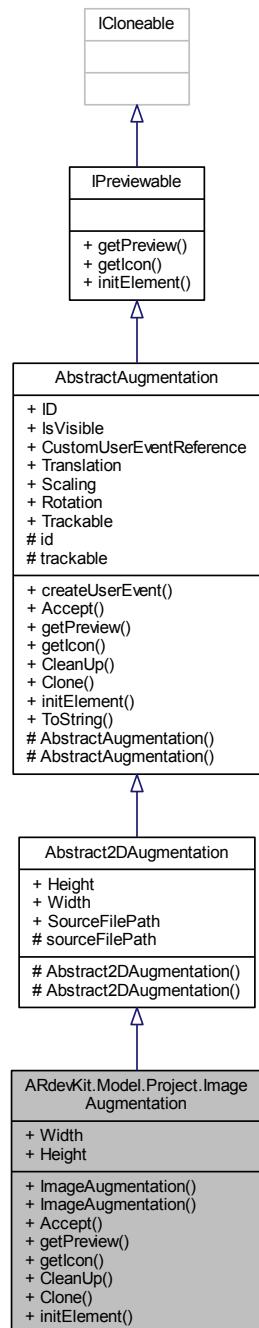
Gets or sets the matrix identifier.

The matrix identifier.

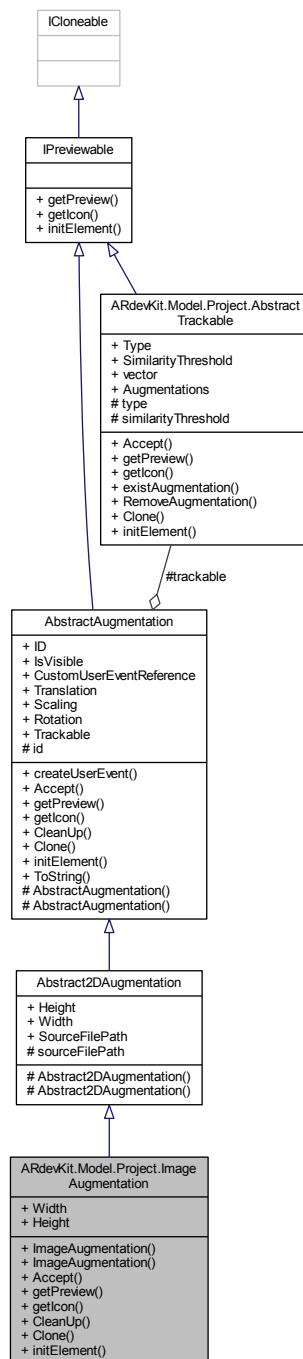
## 5.29 ARdevKit.Model.Project.ImageAugmentation Class Reference

An augmentation only described by an ImagePath. It is an [Abstract2DAugmentation](#)

Inheritance diagram for ARdevKit.Model.Project.ImageAugmentation:



Collaboration diagram for ARdevKit.Model.Project.ImageAugmentation:



## Public Member Functions

- **ImageAugmentation ()**  
*Default constructor.*
- **ImageAugmentation (string imagePath)**  
*Initializes a new instance of the [ImageAugmentation](#) class.*
- **override void Accept ([AbstractProjectVisitor](#) visitor)**

An overwriting method, to accept a `AbstractProjectVisitor` which must be implemented according to the visitor design pattern.

- `override Bitmap getPreview ()`  
*returns a Bitmap in order to be displayed on the PreviewPanel, implements `IPreviewable`*
- `override Bitmap getIcon ()`  
*returns a Bitmap in order to be displayed on the ElementSelectionPanel, implements `IPreviewable`*
- `override void CleanUp ()`  
*Clean up (remove created/copied files and directories).*
- `override object Clone ()`  
*Makes a deep copy of this object.*
- `override bool initElement (EditorWindow ew)`  
*This method is called by the previewController when a new instance of the element is added to the Scene. It sets "must-have" properties.*

## Properties

- `new int Width [get, set]`  
*Gets or sets the width.*
- `new int Height [get, set]`  
*Gets or sets the height.*

## Additional Inherited Members

### 5.29.1 Detailed Description

An augmentation only described by an `ImagePath`. It is an `Abstract2DAugmentation`

### 5.29.2 Constructor & Destructor Documentation

#### 5.29.2.1 ARdevKit.Model.Project.ImageAugmentation.ImageAugmentation ( )

Default constructor.

#### 5.29.2.2 ARdevKit.Model.Project.ImageAugmentation.ImageAugmentation ( string *imagePath* )

Initializes a new instance of the `ImageAugmentation` class.

##### Parameters

|                        |                 |
|------------------------|-----------------|
| <code>ImagePath</code> | The image path. |
|------------------------|-----------------|

### 5.29.3 Member Function Documentation

#### 5.29.3.1 override void ARdevKit.Model.Project.ImageAugmentation.Accept ( AbstractProjectVisitor *visitor* ) [virtual]

An overwriting method, to accept a `AbstractProjectVisitor` which must be implemented according to the visitor design pattern.

**Parameters**

|                |  |
|----------------|--|
| <i>visitor</i> | the visitor which encapsulates the action which is performed on this element |
|----------------|--|

Reimplemented from [ARdevKit.Model.Project.AbstractAugmentation](#).

**5.29.3.2 override void ARdevKit.Model.Project.ImageAugmentation.CleanUp( ) [virtual]**

Clean up (remove created/copied files and directories).

Immanuel, 31.01.2014.

Implements [ARdevKit.Model.Project.AbstractAugmentation](#).

**5.29.3.3 override object ARdevKit.Model.Project.ImageAugmentation.Clone( ) [virtual]**

Makes a deep copy of this object.

Robin, 22.01.2014.

**Returns**

A copy of this object.

Implements [ARdevKit.Model.Project.AbstractAugmentation](#).

**5.29.3.4 override Bitmap ARdevKit.Model.Project.ImageAugmentation.getIcon( ) [virtual]**

returns a Bitmap in order to be displayed on the ElementSelectionPanel, implements [IPreviewable](#)

**Returns**

a representative iconized Bitmap

**Exceptions**

|                              |                     |
|------------------------------|---------------------|
| <i>FileNotFoundException</i> | If ImagePath is bad |
|------------------------------|---------------------|

Implements [ARdevKit.Model.Project.AbstractAugmentation](#).

**5.29.3.5 override Bitmap ARdevKit.Model.Project.ImageAugmentation.getPreview( ) [virtual]**

returns a Bitmap in order to be displayed on the PreviewPanel, implements [IPreviewable](#)

**Returns**

a representative Bitmap

**Exceptions**

|                              |   |
|------------------------------|---|
| <i>FileNotFoundException</i> | Thrown when the requested <a href="#">File</a> is not found in <a href="#">SourceFilePath</a> . |
|------------------------------|---|

Implements [ARdevKit.Model.Project.AbstractAugmentation](#).

**5.29.3.6 override bool ARdevKit.Model.Project.ImageAugmentation.initElement( EditorWindow ew ) [virtual]**

This method is called by the previewController when a new instance of the element is added to the Scene. It sets "must-have" properties.

**Parameters**

|           |         |
|-----------|---------|
| <i>ew</i> | The ew. |
|-----------|---------|

**Returns**

true if it succeeds, false if it fails.

Reimplemented from [ARdevKit.Model.Project.AbstractAugmentation](#).

## 5.29.4 Property Documentation

### 5.29.4.1 new int ARdevKit.Model.Project.ImageAugmentation.Height [get], [set]

Gets or sets the height.

The height, in mm.

### 5.29.4.2 new int ARdevKit.Model.Project.ImageAugmentation.Width [get], [set]

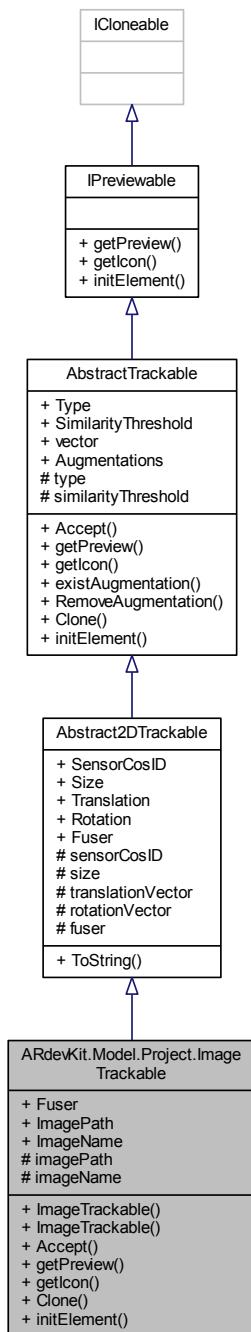
Gets or sets the width.

The width, in mm.

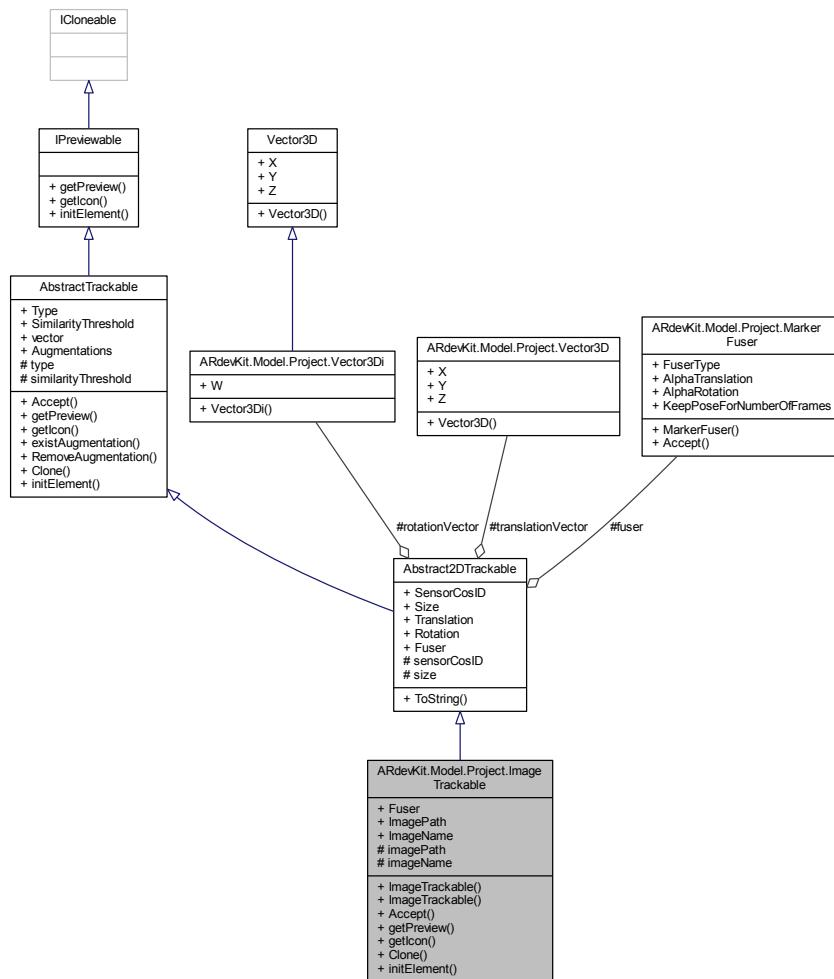
## 5.30 ARdevKit.Model.Project.ImageTrackable Class Reference

Describes a Marker, which is very flexible, because it is also a Picture. It is an AbstractMarker

Inheritance diagram for ARdevKit.Model.Project.ImageTrackable:



Collaboration diagram for ARdevKit.Model.Project.ImageTrackable:



## Public Member Functions

- **ImageTrackable ()**  
*Default Constructor.*
- **ImageTrackable (string imagePath)**  
*Constructor.*
- **override void Accept (Controller.ProjectController.AbstractProjectVisitor visitor)**  
*An abstract method, to accept a AbstractProjectVisitor which must be implemented according to the visitor design pattern.*
- **override System.Drawing.Bitmap getPreview ()**  
*returns a Bitmap in order to be displayed on the PreviewPanel, implements IPreviewable*
- **override System.Drawing.Bitmap getIcon ()**  
*returns a Bitmap in order to be displayed on the ElementSelectionPanel, implements IPreviewable*
- **override object Clone ()**  
*Makes a deep copy of this object.*
- **override bool initElement (EditorWindow ew)**  
*This method is called by the previewController when a new instance of the element is added to the Scene. It sets "must-have" properties.*

## Protected Attributes

- string `imagePath`  
*Full pathname of the image file.*
- string `imageName`  
*Name of the image.*

## Properties

- `MarkerlessFuser Fuser` [get, set]  
*Gets or sets the fuser. Is not Browsable, therefore not editable in the PropertyPanel*
- string `ImagePath` [get, set]  
*Gets or sets the full pathname of the image file.*
- string `ImageName` [get]  
*Gets or sets the name of the image.*

### 5.30.1 Detailed Description

Describes a Marker, which is very flexible, because it is also a Picture. It is an AbstractMarker

### 5.30.2 Constructor & Destructor Documentation

#### 5.30.2.1 ARdevKit.Model.Project.ImageTrackable.ImageTrackable( )

Default Constructor.

#### 5.30.2.2 ARdevKit.Model.Project.ImageTrackable.ImageTrackable( string imagePath )

Constructor.

##### Parameters

|                        |                                  |
|------------------------|----------------------------------|
| <code>imagePath</code> | Full pathname of the image file. |
|------------------------|----------------------------------|

### 5.30.3 Member Function Documentation

#### 5.30.3.1 override void ARdevKit.Model.Project.ImageTrackable.Accept( Controller.ProjectController.AbstractProjectVisitor visitor )

An abstract method, to accept a AbstractProjectVisitor which must be implemented according to the visitor design pattern.

##### Parameters

|                      |  |
|----------------------|--|
| <code>visitor</code> | the visitor which encapsulates the action which is performed on this element |
|----------------------|--|

#### 5.30.3.2 override object ARdevKit.Model.Project.ImageTrackable.Clone( ) [virtual]

Makes a deep copy of this object.

Robin, 22.01.2014.

**Returns**

A copy of this object.

Implements [ARdevKit.Model.Project.AbstractTrackable](#).

**5.30.3.3 override System.Drawing.Bitmap ARdevKit.Model.Project.ImageTrackable.getIcon( ) [virtual]**

returns a Bitmap in order to be displayed on the ElementSelectionPanel, implements [IPreviewable](#)

**Returns**

a representative iconized Bitmap

Implements [ARdevKit.Model.Project.AbstractTrackable](#).

**5.30.3.4 override System.Drawing.Bitmap ARdevKit.Model.Project.ImageTrackable.getPreview( ) [virtual]**

returns a Bitmap in order to be displayed on the PreviewPanel, implements [IPreviewable](#)

**Returns**

a representative Bitmap

Implements [ARdevKit.Model.Project.AbstractTrackable](#).

**5.30.3.5 override bool ARdevKit.Model.Project.ImageTrackable.initElement( EditorWindow ew ) [virtual]**

This method is called by the previewController when a new instance of the element is added to the Scene. It sets "must-have" properties.

**Parameters**

|           |         |
|-----------|---------|
| <i>ew</i> | The ew. |
|-----------|---------|

**Returns**

true if it succeeds, false if it fails.

Reimplemented from [ARdevKit.Model.Project.AbstractTrackable](#).

## 5.30.4 Member Data Documentation

**5.30.4.1 string ARdevKit.Model.Project.ImageTrackable.imageName [protected]**

Name of the image.

**5.30.4.2 string ARdevKit.Model.Project.ImageTrackable.imagePath [protected]**

Full pathname of the image file.

## 5.30.5 Property Documentation

**5.30.5.1 MarkerlessFuser ARdevKit.Model.Project.ImageTrackable.Fuser [get], [set]**

Gets or sets the fuser. Is not Browsable, therefore not editable in the PropertyPanel

The fuser.

### 5.30.5.2 string ARdevKit.Model.Project.ImageTrackable.ImageName [get]

Gets or sets the name of the image.

The name of the image.

### 5.30.5.3 string ARdevKit.Model.Project.ImageTrackableImagePath [get], [set]

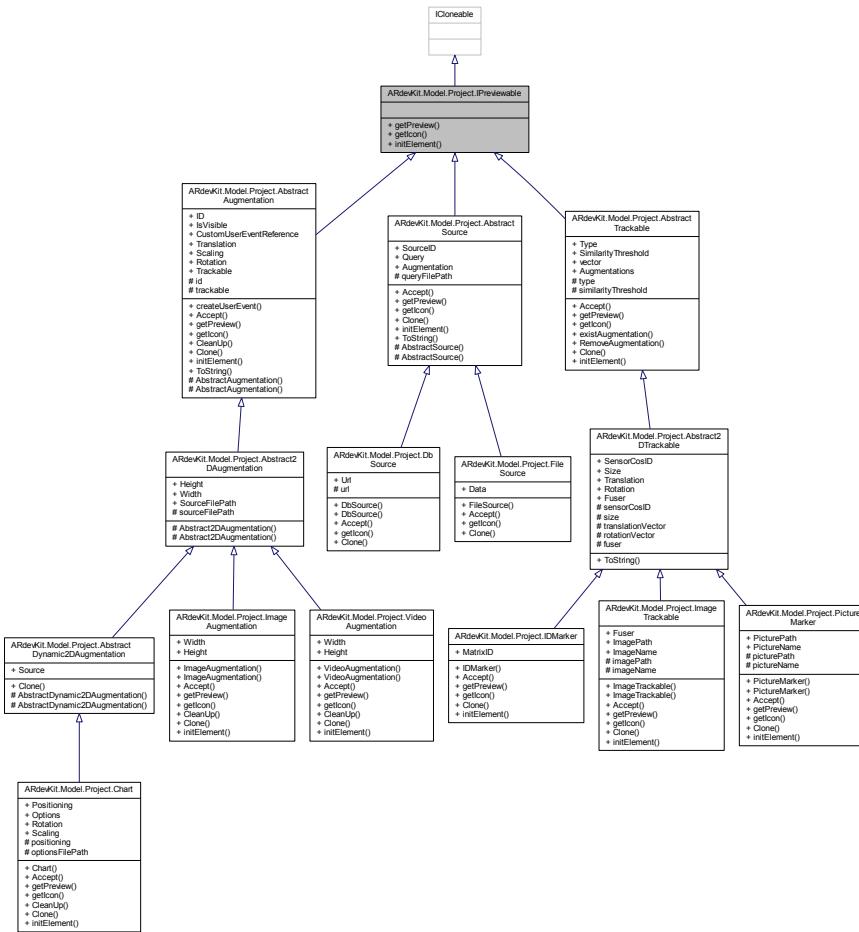
Gets or sets the full pathname of the image file.

The full pathname of the image file.

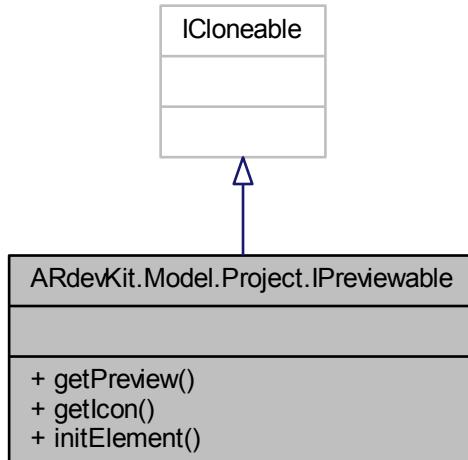
## 5.31 ARdevKit.Model.Project.IPreviewable Interface Reference

Interface for previewable elements from the [Model](#).

Inheritance diagram for ARdevKit.Model.Project.IPreviewable:



Collaboration diagram for ARdevKit.Model.Project.IPreviewable:



## Public Member Functions

- Bitmap [getPreview \(\)](#)  
*Gets the preview which is displayed by PreviewPanel.*
- Bitmap [getIcon \(\)](#)  
*Gets the icon which is displayed by ElementSelectionPanel.*
- bool [initElement \(EditorWindow ew\)](#)  
*This method is called by the previewController when a new instance of the element is added to the Scene. It sets "must-have" properties.*

### 5.31.1 Detailed Description

Interface for previewable elements from the [Model](#).

### 5.31.2 Member Function Documentation

#### 5.31.2.1 Bitmap ARdevKit.Model.Project.IPreviewable.getIcon ( )

Gets the icon which is displayed by ElementSelectionPanel.

##### Returns

The icon.

Implemented in [ARdevKit.Model.Project.AbstractAugmentation](#), [ARdevKit.Model.Project.PictureMarker](#), [ARdevKit.Model.Project.ImageTrackable](#), [ARdevKit.Model.Project.Chart](#), [ARdevKit.Model.Project.AbstractSource](#), [ARdevKit.Model.Project.IDMarker](#), [ARdevKit.Model.Project.VideoAugmentation](#), [ARdevKit.Model.Project.ImageAugmentation](#), [ARdevKit.Model.Project.AbstractTrackable](#), [ARdevKit.Model.Project.DbSource](#), and [ARdevKit.Model.Project.FileSource](#).

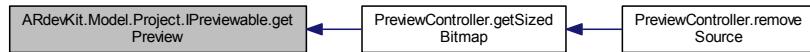
### 5.31.2.2 Bitmap ARdevKit.Model.Project.IPreviewable.getPreview( )

Gets the preview which is displayed by PreviewPanel.

#### Returns

Implemented in [ARdevKit.Model.Project.AbstractAugmentation](#), [ARdevKit.Model.Project.ImageTrackable](#), [ARdevKit.Model.Project.PictureMarker](#), [ARdevKit.Model.Project.Chart](#), [ARdevKit.Model.Project.AbstractSource](#), [ARdevKit.Model.Project.AbstractTrackable](#), [ARdevKit.Model.Project.ImageAugmentation](#), [ARdevKit.Model.Project.VideoAugmentation](#), and [ARdevKit.Model.Project.IDMarker](#).

Here is the caller graph for this function:



### 5.31.2.3 bool ARdevKit.Model.Project.IPreviewable.initElement( EditorWindow ew )

This method is called by the previewController when a new instance of the element is added to the Scene. It sets "must-have" properties.

#### Parameters

|           |         |
|-----------|---------|
| <i>ew</i> | The ew. |
|-----------|---------|

#### Returns

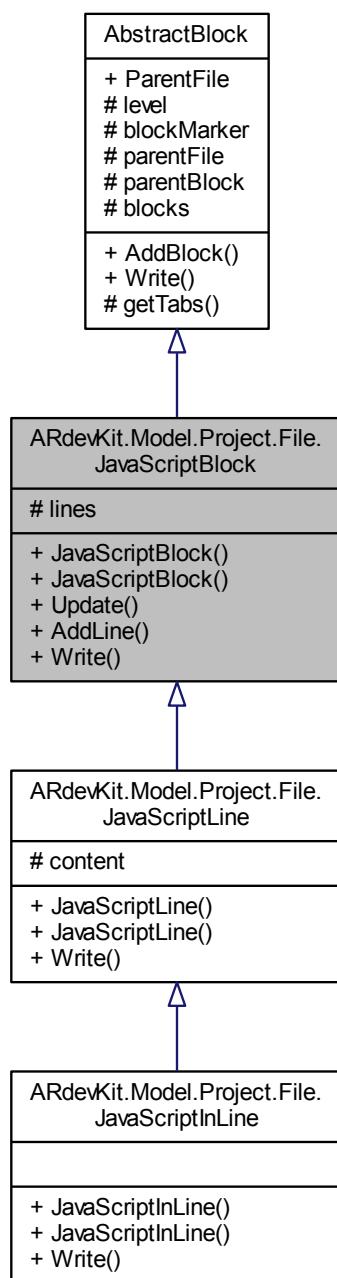
true if it succeeds, false if it fails.

Implemented in [ARdevKit.Model.Project.AbstractAugmentation](#), [ARdevKit.Model.Project.Chart](#), [ARdevKit.Model.Project.PictureMarker](#), [ARdevKit.Model.Project.AbstractTrackable](#), [ARdevKit.Model.Project.ImageTrackable](#), [ARdevKit.Model.Project.VideoAugmentation](#), [ARdevKit.Model.Project.ImageAugmentation](#), [ARdevKit.Model.Project.AbstractSource](#), and [ARdevKit.Model.Project.IDMarker](#).

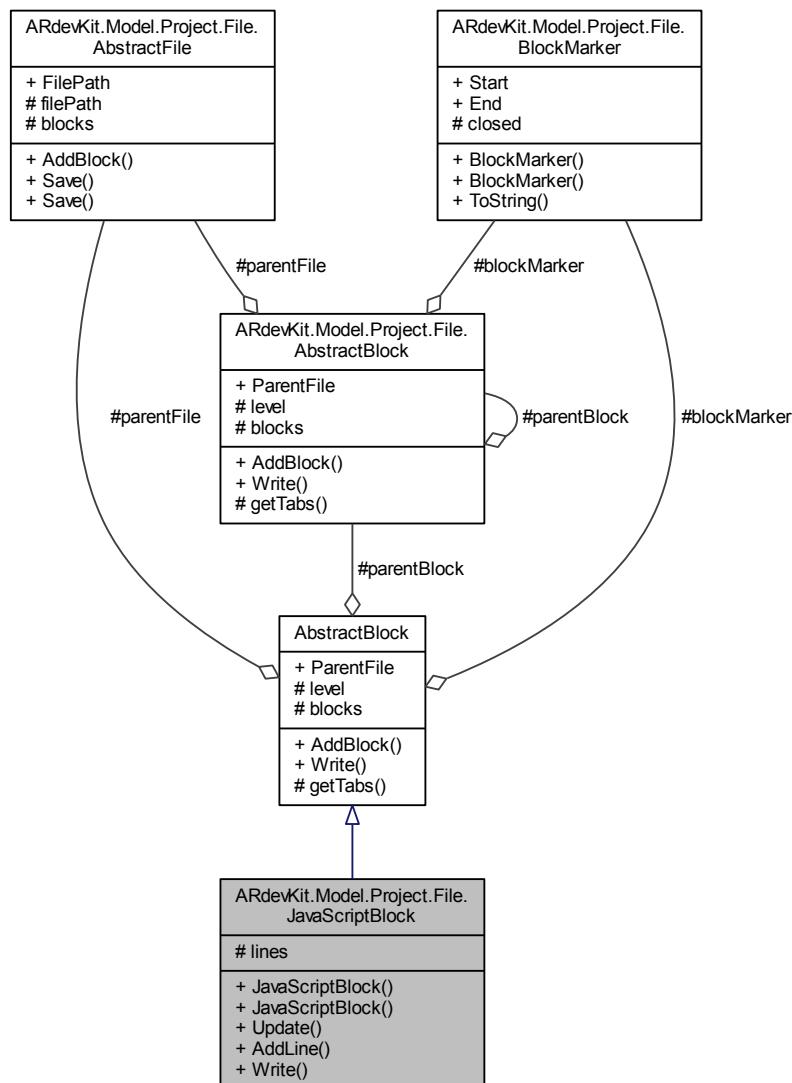
## 5.32 ARdevKit.Model.Project.File.JavaScriptBlock Class Reference

A [JavaScriptBlock](#) block is an [AbstractBlock](#). It has a head and constits of other [JavaScriptBlocks](#) and [JavaScriptLines](#).

Inheritance diagram for ARdevKit.Model.Project.File.JavaScriptBlock:



Collaboration diagram for ARdevKit.Model.Project.File.JavaScriptBlock:



## Public Member Functions

- **JavaScriptBlock ()**  
*Default constructor.*
- **JavaScriptBlock (string head, BlockMarker blockMarker)**  
*Constructor.*
- **void Update (string head, BlockMarker blockMarker)**  
*Updates the specified head.*
- **void AddLine (JavaScriptLine line)**  
*Adds a line.*
- **override void Write (System.IO.StreamWriter writer)**  
*Writes with the given writer.*

## Protected Attributes

- List< [JavaScriptLine](#) > `lines`

The `lines`.

## Additional Inherited Members

### 5.32.1 Detailed Description

A [JavaScriptBlock](#) block is an [AbstractBlock](#). It has a head and constits of other [JavaScriptBlocks](#) and [JavaScriptLines](#).

Immanuel, 17.01.2014.

### 5.32.2 Constructor & Destructor Documentation

#### 5.32.2.1 ARdevKit.Model.Project.File.JavaScriptBlock.JavaScriptBlock( )

Default constructor.

Immanuel, 17.01.2014.

#### 5.32.2.2 ARdevKit.Model.Project.File.JavaScriptBlock.JavaScriptBlock( string *head*, BlockMarker *blockMarker* )

Constructor.

Immanuel, 17.01.2014.

##### Parameters

|                          |                   |
|--------------------------|-------------------|
| <code>head</code>        | The head.         |
| <code>blockMarker</code> | The block marker. |

### 5.32.3 Member Function Documentation

#### 5.32.3.1 void ARdevKit.Model.Project.File.JavaScriptBlock.AddLine( JavaScriptLine *line* )

Adds a line.

Immanuel, 15.01.2014.

##### Parameters

|                   |          |
|-------------------|----------|
| <code>line</code> | The cln. |
|-------------------|----------|

#### 5.32.3.2 void ARdevKit.Model.Project.File.JavaScriptBlock.Update( string *head*, BlockMarker *blockMarker* )

Updates the specified head.

##### Parameters

|                          |                   |
|--------------------------|-------------------|
| <code>head</code>        | The head.         |
| <code>blockMarker</code> | The block marker. |

### 5.32.3.3 override void ARdevKit.Model.Project.File.JavaScriptBlock.Write ( System.IO.StreamWriter writer ) [virtual]

Writes with the given writer.

Immanuel, 15.01.2014.

#### Parameters

|               |                      |
|---------------|----------------------|
| <i>writer</i> | The writer to write. |
|---------------|----------------------|

Reimplemented from [ARdevKit.Model.Project.File.AbstractBlock](#).

Reimplemented in [ARdevKit.Model.Project.File.JavaScriptLine](#), and [ARdevKit.Model.Project.File.JavaScriptInLine](#).

### 5.32.4 Member Data Documentation

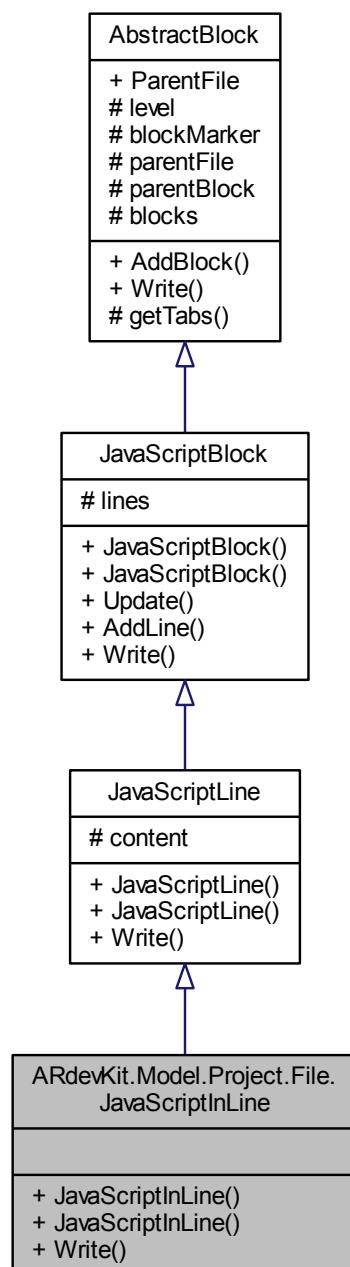
#### 5.32.4.1 List<JavaScriptLine> ARdevKit.Model.Project.File.JavaScriptBlock.lines [protected]

The lines.

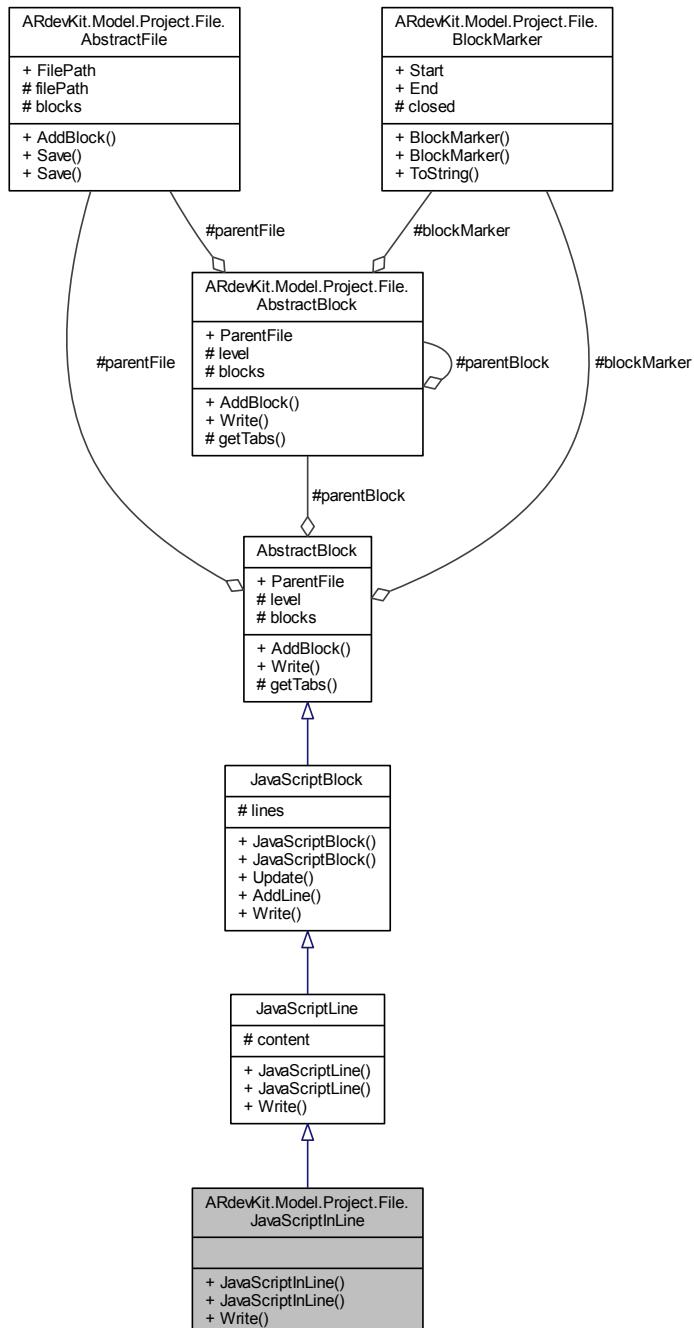
## 5.33 ARdevKit.Model.Project.File.JavaScriptInLine Class Reference

A [JavaScriptInLine](#) is a [JavaScriptLine](#) which is closed by a "," instead of a ";".

Inheritance diagram for ARdevKit.Model.Project.File.JavaScriptInLine:



Collaboration diagram for ARdevKit.Model.Project.File.JavaScriptInLine:



## Public Member Functions

- `JavaScriptInLine (string content, bool useComma)`  
*Constructor.*
- `JavaScriptInLine (string content, BlockMarker blockMarker, bool useComma)`  
*Constructor.*
- `override void Write (System.IO.StreamWriter writer)`

Writes with the given writer.

## Additional Inherited Members

### 5.33.1 Detailed Description

A [JavaScriptInLine](#) is a [JavaScriptLine](#) which is closed by a "," instead of a ":".

### 5.33.2 Constructor & Destructor Documentation

#### 5.33.2.1 ARdevKit.Model.Project.File.JavaScriptInLine.JavaScriptInLine ( *string content, bool useComma* )

Constructor.

##### Parameters

|                 |  |
|-----------------|--|
| <i>content</i>  | The content.                             |
| <i>useComma</i> | if set to <code>true</code> [use comma]. |

Immanuel, 17.01.2014.

#### 5.33.2.2 ARdevKit.Model.Project.File.JavaScriptInLine.JavaScriptInLine ( *string content, BlockMarker blockMarker, bool useComma* )

Constructor.

##### Parameters

|                    |  |
|--------------------|--|
| <i>content</i>     | The content.                             |
| <i>blockMarker</i> | The block marker.                        |
| <i>useComma</i>    | if set to <code>true</code> [use comma]. |

Immanuel, 17.01.2014.

### 5.33.3 Member Function Documentation

#### 5.33.3.1 override void ARdevKit.Model.Project.File.JavaScriptInLine.Write ( *System.IO.StreamWriter writer* ) [virtual]

Writes with the given writer.

Immanuel, 17.01.2014.

##### Parameters

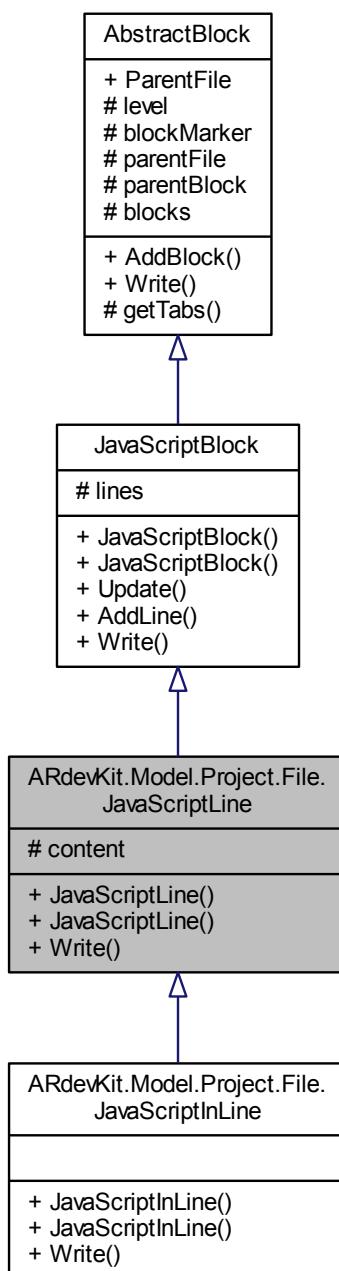
|               |                      |
|---------------|----------------------|
| <i>writer</i> | The writer to write. |
|---------------|----------------------|

Reimplemented from [ARdevKit.Model.Project.File.JavaScriptBlock](#).

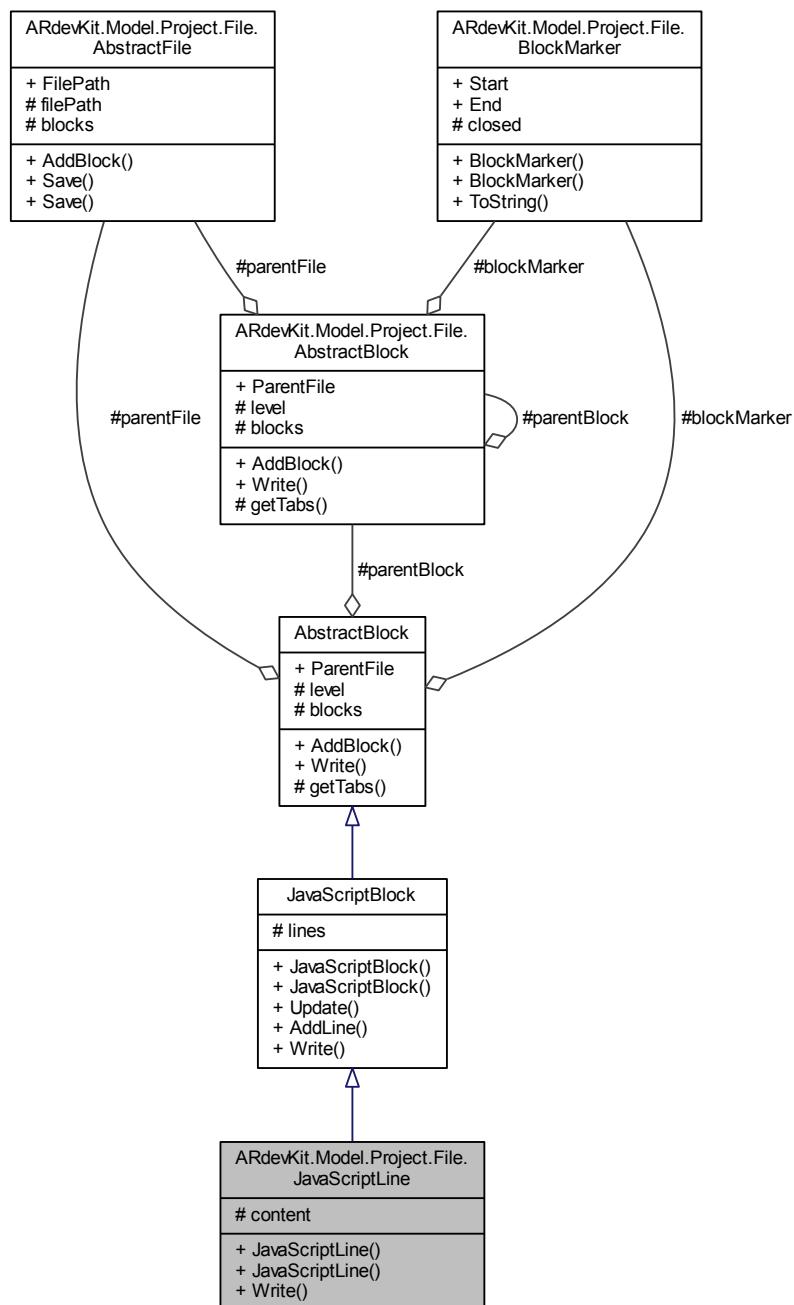
## 5.34 ARdevKit.Model.Project.File.JavaScriptLine Class Reference

A [JavaScriptLine](#) is a [JavaScriptBlock](#) which has a [content](#) that is written in a single line.

Inheritance diagram for ARdevKit.Model.Project.File.JavaScriptLine:



Collaboration diagram for ARdevKit.Model.Project.File.JavaScriptLine:



## Public Member Functions

- `JavaScriptLine (string content)`  
*Constructor.*
- `JavaScriptLine (string content, BlockMarker blockMarker)`  
*Constructor.*
- `override void Write (System.IO.StreamWriter writer)`

*Writes with the given writer.*

## Protected Attributes

- string `content` = ""

*The content.*

## Additional Inherited Members

### 5.34.1 Detailed Description

A [JavaScriptLine](#) is a [JavaScriptBlock](#) which has a `content` that is written in a single line.

Immanuel, 17.01.2014.

### 5.34.2 Constructor & Destructor Documentation

#### 5.34.2.1 ARdevKit.Model.Project.File.JavaScriptLine.JavaScriptLine ( `string content` )

Constructor.

Immanuel, 17.01.2014.

##### Parameters

|                      |              |
|----------------------|--------------|
| <code>content</code> | The content. |
|----------------------|--------------|

#### 5.34.2.2 ARdevKit.Model.Project.File.JavaScriptLine.JavaScriptLine ( `string content, BlockMarker blockMarker` )

Constructor.

Immanuel, 17.01.2014.

##### Parameters

|                          |                   |
|--------------------------|-------------------|
| <code>content</code>     | The content.      |
| <code>blockMarker</code> | The block marker. |

### 5.34.3 Member Function Documentation

#### 5.34.3.1 override void ARdevKit.Model.Project.File.JavaScriptLine.Write ( `System.IO.StreamWriter writer` ) [virtual]

Writes with the given writer.

Immanuel, 17.01.2014.

##### Parameters

|                     |                      |
|---------------------|----------------------|
| <code>writer</code> | The writer to write. |
|---------------------|----------------------|

Reimplemented from [ARdevKit.Model.Project.File.JavaScriptBlock](#).

### 5.34.4 Member Data Documentation

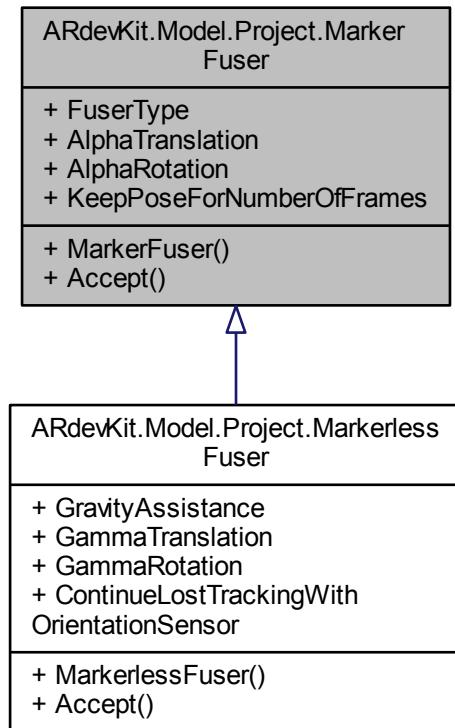
#### 5.34.4.1 string ARdevKit.Model.Project.File.JavaScriptLine.content = "" [protected]

The content.

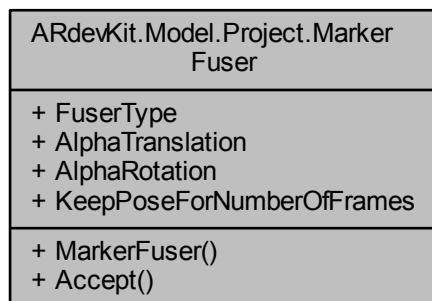
## 5.35 ARdevKit.Model.Project.MarkerFuser Class Reference

A [MarkerFuser](#) has a fuserType, an alphaTranslation, an alphaRotation and a keepPoseForNumberOfFrames value.

Inheritance diagram for ARdevKit.Model.Project.MarkerFuser:



Collaboration diagram for ARdevKit.Model.Project.MarkerFuser:



## Public Types

- enum **FuserTypes** { **SmoothingFuser**, **BestQualityFuser** }
- Values that represent FuserTypes.*

## Public Member Functions

- **MarkerFuser ()**  
*Initializes a new instance of the **MarkerFuser** class.*
- virtual void **Accept (AbstractProjectVisitor visitor)**  
*Accepts the given visitor.*

## Properties

- **FuserTypes FuserType** [get, set]  
*Gets or sets the type of the fuser.*
- **double AlphaTranslation** [get, set]  
*Gets or sets the alpha translation.*
- **double AlphaRotation** [get, set]  
*Gets or sets the alpha rotation.*
- **int KeepPoseForNumberOfFrames** [get, set]  
*Gets or sets the keep pose for number of frames.*

### 5.35.1 Detailed Description

A **MarkerFuser** has a fuserType, an alphaTranslation, an alphaRotation and a keepPoseForNumberOfFrames value.  
Immanuel, 17.01.2014.

### 5.35.2 Member Enumeration Documentation

#### 5.35.2.1 enum ARdevKit.Model.Project.MarkerFuser.FuserTypes

Values that represent FuserTypes.

Immanuel, 17.01.2014.

### 5.35.3 Constructor & Destructor Documentation

#### 5.35.3.1 ARdevKit.Model.Project.MarkerFuser()

Initializes a new instance of the **MarkerFuser** class.

### 5.35.4 Member Function Documentation

#### 5.35.4.1 virtual void ARdevKit.Model.Project.MarkerFuser.Accept ( AbstractProjectVisitor visitor ) [virtual]

Accepts the given visitor.

**Parameters**

|                |              |
|----------------|--------------|
| <i>visitor</i> | The visitor. |
|----------------|--------------|

Immanuel, 17.01.2014.

Reimplemented in [ARdevKit.Model.Project.MarkerlessFuser](#).

## 5.35.5 Property Documentation

### 5.35.5.1 double ARdevKit.Model.Project.MarkerFuser.AlphaRotation [get], [set]

Gets or sets the alpha rotation.

The alpha rotation.

### 5.35.5.2 double ARdevKit.Model.Project.MarkerFuser.AlphaTranslation [get], [set]

Gets or sets the alpha translation.

The alpha translation.

### 5.35.5.3 FuserTypes ARdevKit.Model.Project.MarkerFuser.FuserType [get], [set]

Gets or sets the type of the fuser.

The type of the fuser.

### 5.35.5.4 int ARdevKit.Model.Project.MarkerFuser.KeepPoseForNumberOfFrames [get], [set]

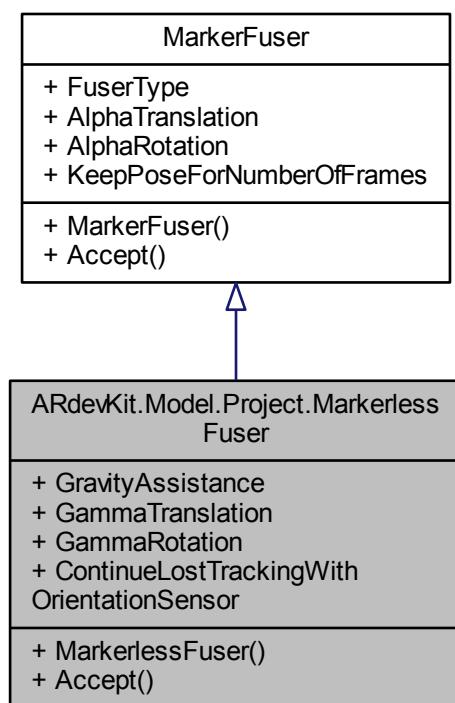
Gets or sets the keep pose for number of frames.

The keep pose for number of frames.

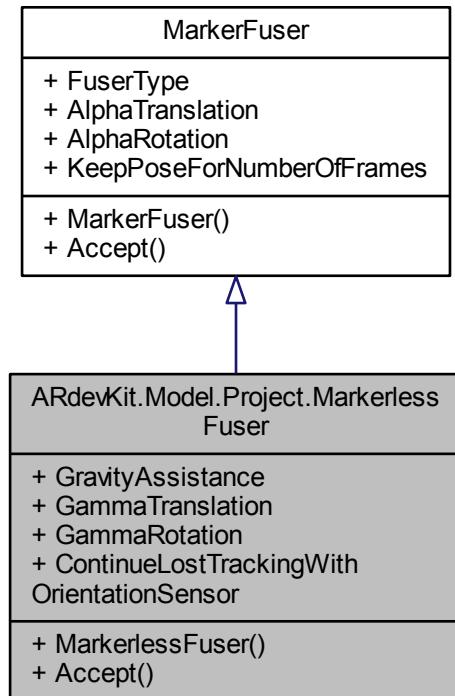
## 5.36 ARdevKit.Model.Project.MarkerlessFuser Class Reference

The [MarkerlessFuser](#) is a [MarkerFuser](#) that additionally has, gravityAssistance, gammaTranslation, gammaRotation and continueLostTrackingWithOrientationSensor value.

Inheritance diagram for ARdevKit.Model.Project.MarkerlessFuser:



Collaboration diagram for ARdevKit.Model.Project.MarkerlessFuser:



## Public Member Functions

- [MarkerlessFuser \(\)](#)  
*Initializes a new instance of the `MarkerlessFuser` class.*
- override void [Accept \(AbstractProjectVisitor visitor\)](#)  
*Accepts the given visitor.*

## Properties

- string [GravityAssistance](#) [get, set]  
*Gets or sets the gravity assistance.*
- double [GammaTranslation](#) [get, set]  
*Gets or sets the gamma translation.*
- double [GammaRotation](#) [get, set]  
*Gets or sets the gamma rotation.*
- bool [ContinueLostTrackingWithOrientationSensor](#) [get, set]  
*Gets or sets a value indicating whether the tracking should be continued with orientation sensor.*

## Additional Inherited Members

### 5.36.1 Detailed Description

The [MarkerlessFuser](#) is a [MarkerFuser](#) that additionally has, gravityAssistance, gammaTranslation, gammaRotation and continueLostTrackingWithOrientationSensor value.

Immanuel, 17.01.2014.

### 5.36.2 Constructor & Destructor Documentation

#### 5.36.2.1 ARdevKit.Model.Project.MarkerlessFuser.MarkerlessFuser( )

Initializes a new instance of the [MarkerlessFuser](#) class.

### 5.36.3 Member Function Documentation

#### 5.36.3.1 override void ARdevKit.Model.Project.MarkerlessFuser.Accept( AbstractProjectVisitor visitor ) [virtual]

Accepts the given visitor.

##### Parameters

|         |              |
|---------|--------------|
| visitor | The visitor. |
|---------|--------------|

Immanuel, 17.01.2014.

Reimplemented from [ARdevKit.Model.Project.MarkerFuser](#).

### 5.36.4 Property Documentation

#### 5.36.4.1 bool ARdevKit.Model.Project.MarkerlessFuser.ContinueLostTrackingWithOrientationSensor [get], [set]

Gets or sets a value indicating whether the tracking should be continued with orientation sensor.

true if continue lost tracking with orientation sensor, false if not.

#### 5.36.4.2 double ARdevKit.Model.Project.MarkerlessFuser.GammaRotation [get], [set]

Gets or sets the gamma rotation.

The gamma rotation.

#### 5.36.4.3 double ARdevKit.Model.Project.MarkerlessFuser.GammaTranslation [get], [set]

Gets or sets the gamma translation.

The gamma translation.

#### 5.36.4.4 string ARdevKit.Model.Project.MarkerlessFuser.GravityAssistance [get], [set]

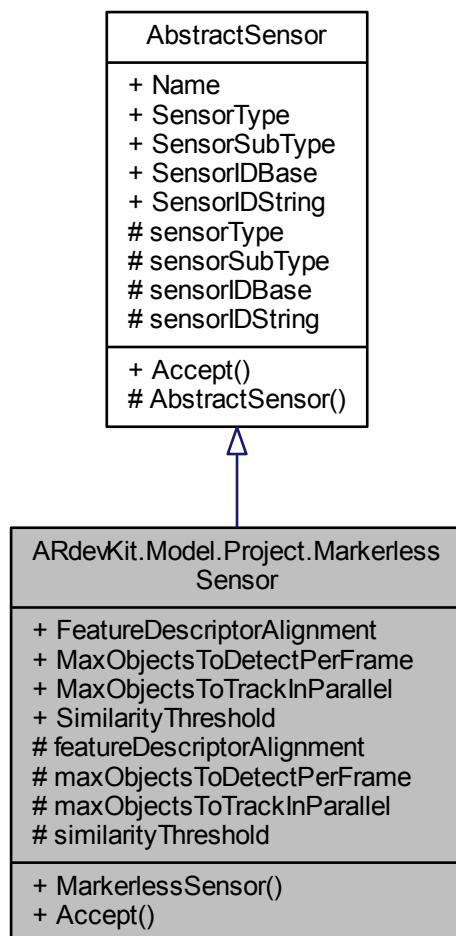
Gets or sets the gravity assistance.

The gravity assistance.

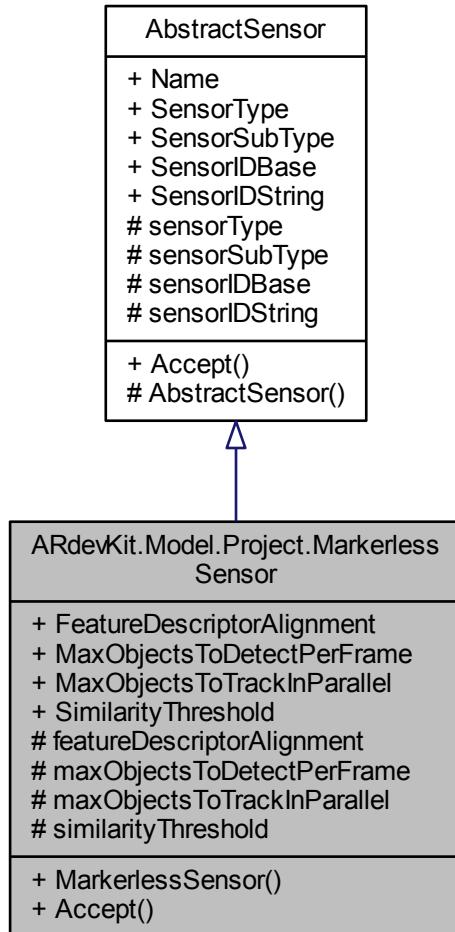
## 5.37 ARdevKit.Model.Project.MarkerlessSensor Class Reference

Used to change the properties of the metaio SDK and how to track markerless trackables. it is an [AbstractSensor](#)

Inheritance diagram for ARdevKit.Model.Project.MarkerlessSensor:



Collaboration diagram for ARdevKit.Model.Project.MarkerlessSensor:



## Public Types

- enum `FeatureDescriptorAlignments` { **regular**, **upright**, **gravity**, **rectified** }

*The following feature descriptor types are available: "regular", "upright", "gravity", "rectified".*

## Public Member Functions

- `MarkerlessSensor ()`  
*Default constructor.*
- `override void Accept (AbstractProjectVisitor visitor)`  
*Accepts the given visitor.*

## Protected Attributes

- `FeatureDescriptorAlignments featureDescriptorAlignment`

*The feature descriptor alignment*

- int [maxObjectsToDetectPerFrame](#)

*A restriction on the number of reference planar objects to be localized per frame. Localization takes longer than interframe tracking, and if the system tries to localize too many objects at the same time, it might cause a lower framerate. The default value for this is 5 and is used if the tag is not specified. Another name that can be used for this parameter is <MultipleReferenceImagesFast>. This name is however deprecated and should not be used any more. This parameter is for expert usage only. In general it is advised to leave the value unchanged.*

- int [maxObjectsToTrackInParallel](#)

*The maximum number of objects that should be tracked in parallel. Tracking many objects in parallel is quite expensive and might lead to a lower framerate. As soon as the maximum number of tracked objects is reached, the system will no longer try to localize new objects. The default value for this is 1 and is used if the tag is not specified. Another name that can be used for this parameter is <MaxNumCosesForInit>. This name is however deprecated and should not be used any more. This parameter is for expert usage only. In general it is advised to leave the value unchanged.*

- double [similarityThreshold](#)

*Default similarity threshold for specifying whether template tracking was successful or failed. The tracking quality measure is defined between -1 and 1, where 1 is the best possible value. If the tracking quality is reported to be below the threshold, the tracker will treat the corresponding frame as lost. The default value for this is 0.7 and is used if the tag is not specified. This setting can be overridden for each "COS" if it is defined there. This parameter is for expert usage only. In general it is advised to leave the value unchanged.*

## Properties

- [FeatureDescriptorAlignments FeatureDescriptorAlignment](#) [get, set]  
*Gets or sets the feature descriptor alignment.*
- int [MaxObjectsToDetectPerFrame](#) [get, set]  
*Gets or sets the maximum objects to detect per frame.*
- int [MaxObjectsToTrackInParallel](#) [get, set]  
*Gets or sets the maximum objects to track in parallel.*
- double [SimilarityThreshold](#) [get, set]  
*Gets or sets the similarity threshold.*

## Additional Inherited Members

### 5.37.1 Detailed Description

Used to change the properties of the metaio SDK and how to track markerless trackables. it is an [AbstractSensor](#)

### 5.37.2 Member Enumeration Documentation

#### 5.37.2.1 enum ARdevKit.Model.Project.MarkerlessSensor.FeatureDescriptorAlignments

The following feature descriptor types are available: "regular", "upright", "gravity", "rectified".

- The "regular" feature descriptor type is the most general feature descriptor type and is used as default if the tag is not specified.
- The "upright" feature descriptor type assumes that the camera is not rotated with respect to the optical axis, i.e. is turned upside down, during the tracking process.
- The "gravity" feature descriptor type can only be used with devices with inertial sensors which measures gravity. It is used for localizing static objects that provide (close to) vertical surfaces, e.g. buildings or posters on a wall. The orientation of the features will then be aligned with gravity.
- The "rectified" feature descriptor type can only be used with devices with inertial sensors which measures gravity. It is used for planar objects on a horizontal surface, e.g. a magazine on a table. This will improve the result of the localization of planar objects under steep camera angles at the cost of a lower framerate during localization. This parameter is for expert usage only. In general it is advised to leave the value unchanged.

### 5.37.3 Constructor & Destructor Documentation

#### 5.37.3.1 ARdevKit.Model.Project.MarkerlessSensor.MarkerlessSensor( )

Default constructor.

Immanuel, 17.01.2014.

### 5.37.4 Member Function Documentation

#### 5.37.4.1 override void ARdevKit.Model.Project.MarkerlessSensor.Accept( AbstractProjectVisitor visitor ) [virtual]

Accepts the given visitor.

##### Parameters

|                |              |
|----------------|--------------|
| <i>visitor</i> | The visitor. |
|----------------|--------------|

Immanuel, 17.01.2014.

Implements [ARdevKit.Model.Project.AbstractSensor](#).

### 5.37.5 Member Data Documentation

#### 5.37.5.1 FeatureDescriptorAlignments ARdevKit.Model.Project.MarkerlessSensor.featureDescriptorAlignment [protected]

The feature descriptor alignment

#### 5.37.5.2 int ARdevKit.Model.Project.MarkerlessSensor.maxObjectsToDetectPerFrame [protected]

A restriction on the number of reference planar objects to be localized per frame. Localization takes longer than interframe tracking, and if the system tries to localize too many objects at the same time, it might cause a lower framerate. The default value for this is 5 and is used if the tag is not specified. Another name that can be used for this parameter is <MultipleReferenceImagesFast>. This name is however deprecated and should not be used any more. This parameter is for expert usage only. In general it is advised to leave the value unchanged.

#### 5.37.5.3 int ARdevKit.Model.Project.MarkerlessSensor.maxObjectsToTrackInParallel [protected]

The maximum number of objects that should be tracked in parallel. Tracking many objects in parallel is quite expensive and might lead to a lower framerate. As soon as the maximum number of tracked objects is reached, the system will no longer try to localize new objects. The default value for this is 1 and is used if the tag is not specified. Another name that can be used for this parameter is <MaxNumCosesForInit>. This name is however deprecated and should not be used any more. This parameter is for expert usage only. In general it is advised to leave the value unchanged.

#### 5.37.5.4 double ARdevKit.Model.Project.MarkerlessSensor.similarityThreshold [protected]

Default similarity threshold for specifying whether template tracking was successful or failed. The tracking quality measure is defined between -1 and 1, where 1 is the best possible value. If the tracking quality is reported to be below the threshold, the tracker will treat the corresponding frame as lost. The default value for this is 0.7 and is used if the tag is not specified. This setting can be overridden for each "COS" if it is defined there. This parameter is for expert usage only. In general it is advised to leave the value unchanged.

### 5.37.6 Property Documentation

5.37.6.1 **FeatureDescriptorAlignments** ARdevKit.Model.Project.MarkerlessSensor.FeatureDescriptorAlignment [get], [set]

Gets or sets the feature descriptor alignment.

The feature descriptor alignment.

5.37.6.2 **int ARdevKit.Model.Project.MarkerlessSensor.MaxObjectsToDetectPerFrame** [get], [set]

Gets or sets the maximum objects to detect per frame.

The maximum objects to detect per frame.

5.37.6.3 **int ARdevKit.Model.Project.MarkerlessSensor.MaxObjectsToTrackInParallel** [get], [set]

Gets or sets the maximum objects to track in parallel.

The maximum objects to track in parallel.

5.37.6.4 **double ARdevKit.Model.Project.MarkerlessSensor.SimilarityThreshold** [get], [set]

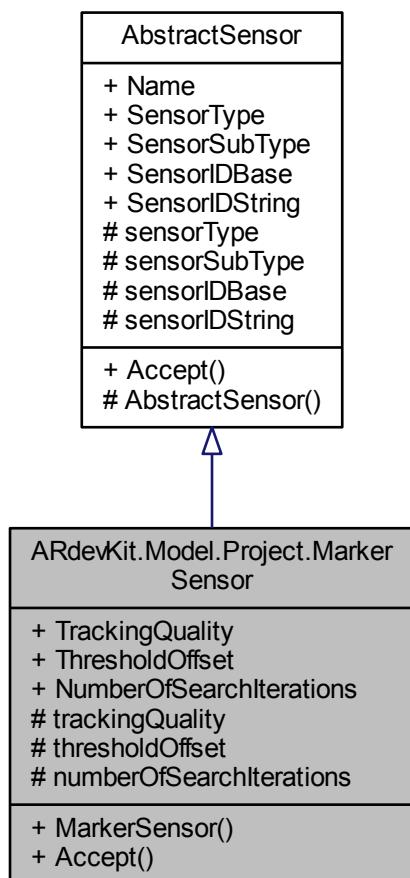
Gets or sets the similarity threshold.

The similarity threshold.

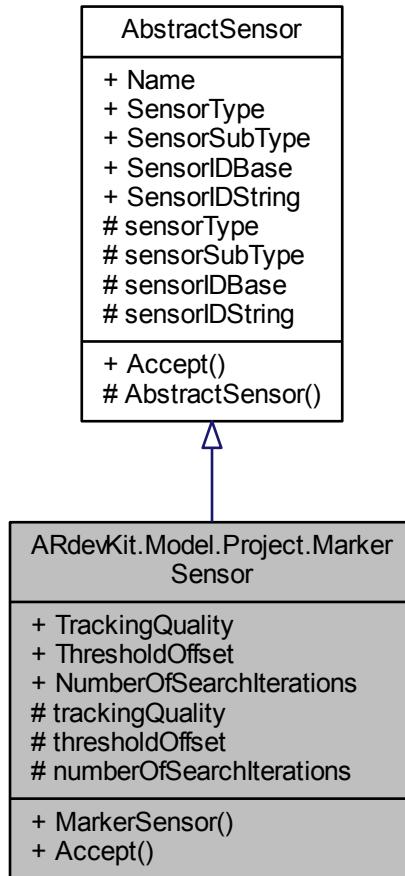
## 5.38 ARdevKit.Model.Project.MarkerSensor Class Reference

A [MarkerSensor](#) is an [AbstractSensor](#) which is used for marker based tracking.

Inheritance diagram for ARdevKit.Model.Project.MarkerSensor:



Collaboration diagram for ARdevKit.Model.Project.MarkerSensor:



## Public Types

- enum `TrackingQualities` { **robust**, **fast** }

*Specifies the `trackingQuality`.*

## Public Member Functions

- `MarkerSensor ()`  
*Default constructor.*
- `override void Accept (AbstractProjectVisitor visitor)`  
*Accepts the given visitor.*

## Protected Attributes

- `TrackingQualities trackingQuality`  
*Strategy which is used for the marker detection. There are two types available:*
- `int thresholdOffset`

*The threshold which is used to binarize the camera image. Binarizing is the process where each pixel is converted to a grayscale value (between 0 and 255) and then is set to 0 when the value is below the threshold and to 1 when the value is above. This helps to clearly identify the marker and is therefore important for the detection process. When the tracking quality is set to "fast", then this value is fixed and will not change during the tracking process. When the tracking quality is set to "robust", then the value is only the starting value in the very first frame after loading the tracking.xml. Detecting markers using a fixed threshold can lead to failure. The value range for the threshold is between 0 and 255.*

- int [numberOfSearchIterations](#)

*Number of search iterations which controls the number of attempts to find a marker with a new ThresholdOffset. This parameter matters when "robust" is set as "TrackingQuality", but is ignored for "fast". The ThresholdOffset is adapted when no marker was detected. With a high number, the marker tracker is more likely to detect a marker, but it also needs more computational time, i.e. is slower.*

## Properties

- [TrackingQualities TrackingQuality](#) [get, set]

*Gets or sets the tracking quality.*

- int [ThresholdOffset](#) [get, set]

*Gets or sets the threshold offset.*

- int [NumberOfSearchIterations](#) [get, set]

*Gets or sets the number of search iterations.*

## Additional Inherited Members

### 5.38.1 Detailed Description

A [MarkerSensor](#) is an [AbstractSensor](#) which is used for marker based tracking.

### 5.38.2 Member Enumeration Documentation

#### 5.38.2.1 enum ARdevKit.Model.Project.MarkerSensor.TrackingQualities

Specifies the [trackingQuality](#).

Immanuel, 15.01.2014.

### 5.38.3 Constructor & Destructor Documentation

#### 5.38.3.1 ARdevKit.Model.Project.MarkerSensor.MarkerSensor( )

Default constructor.

Immanuel, 17.01.2014.

### 5.38.4 Member Function Documentation

#### 5.38.4.1 override void ARdevKit.Model.Project.MarkerSensor.Accept( AbstractProjectVisitor visitor ) [virtual]

Accepts the given visitor.

**Parameters**

|                |              |
|----------------|--------------|
| <i>visitor</i> | The visitor. |
|----------------|--------------|

Immanuel, 17.01.2014.

Implements [ARdevKit.Model.Project.AbstractSensor](#).

## 5.38.5 Member Data Documentation

### 5.38.5.1 int ARdevKit.Model.Project.MarkerSensor.numberOfSearchIterations [protected]

Number of search iterations which controls the number of attempts to find a marker with a new ThresholdOffset. This parameter matters when "robust" is set as "TrackingQuality", but is ignored for "fast". The ThresholdOffset is adapted when no marker was detected. With a high number, the marker tracker is more likely to detect a marker, but it also needs more computational time, i.e. is slower.

### 5.38.5.2 int ARdevKit.Model.Project.MarkerSensor.thresholdOffset [protected]

The threshold which is used to binarize the camera image. Binarizing is the process where each pixel is converted to a grayscale value (between 0 and 255) and then is set to 0 when the value is below the threshold and to 1 when the value is above. This helps to clearly identify the marker and is therefore important for the detection process. When the tracking quality is set to "fast", then this value is fixed and will not change during the tracking process. When the tracking quality is set to "robust", then the value is only the starting value in the very first frame after loading the tracking.xml. Detecting markers using a fixed threshold can lead to failure. The value range for the threshold is between 0 and 255.

### 5.38.5.3 TrackingQualities ARdevKit.Model.Project.MarkerSensor.trackingQuality [protected]

Strategy which is used for the marker detection. There are two types available:

- "robust" to use a robust approach to detect the markers, which usually gives the best results, but consumes more computational time, i.e. is slower.
- "fast" to use a more simple approach to detect the markers, which is less precise, but faster than robust.

## 5.38.6 Property Documentation

### 5.38.6.1 int ARdevKit.Model.Project.MarkerSensor.NumberOfSearchIterations [get], [set]

Gets or sets the number of search iterations.

The total number of search iterations.

### 5.38.6.2 int ARdevKit.Model.Project.MarkerSensor.ThresholdOffset [get], [set]

Gets or sets the threshold offset.

The threshold offset.

### 5.38.6.3 TrackingQualities ARdevKit.Model.Project.MarkerSensor.TrackingQuality [get], [set]

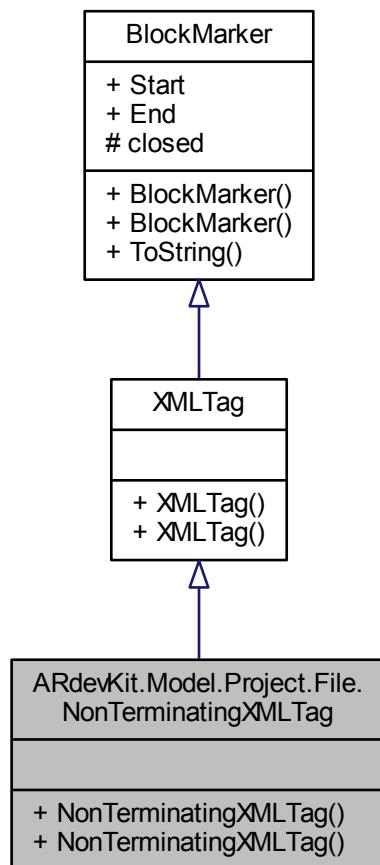
Gets or sets the tracking quality.

The tracking quality.

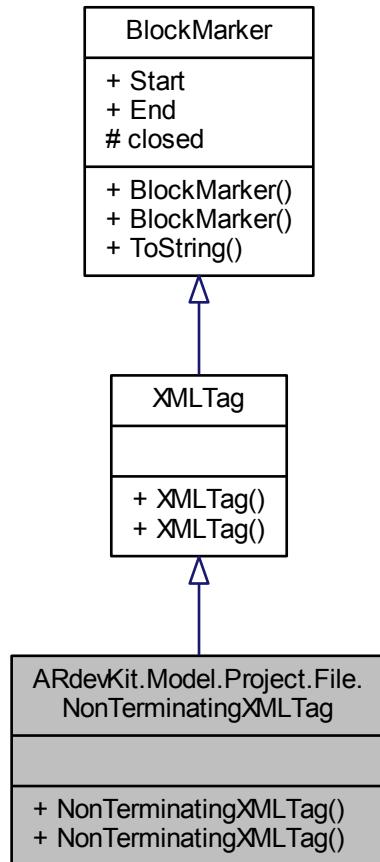
## 5.39 ARdevKit.Model.Project.File.NonTerminatingXMLTag Class Reference

A [NonTerminatingXMLTag](#) is a [XMLTag](#) which has no end part.

Inheritance diagram for ARdevKit.Model.Project.File.NonTerminatingXMLTag:



Collaboration diagram for ARdevKit.Model.Project.File.NonTerminatingXMLTag:



## Public Member Functions

- [NonTerminatingXMLTag](#) (string text)  
*Constructor.*
- [NonTerminatingXMLTag](#) (string text, string extension)  
*Constructor.*

## Additional Inherited Members

### 5.39.1 Detailed Description

A [NonTerminatingXMLTag](#) is a [XMLTag](#) which has no end part.

Immanuel, 15.01.2014.

### 5.39.2 Constructor & Destructor Documentation

**5.39.2.1 ARdevKit.Model.Project.File.NonTerminatingXMLTag.NonTerminatingXMLTag ( string *text* )**

Constructor.

Immanuel, 15.01.2014.

**Parameters**

|             |           |
|-------------|-----------|
| <i>text</i> | The text. |
|-------------|-----------|

**5.39.2.2 ARdevKit.Model.Project.File.NonTerminatingXMLTag.NonTerminatingXMLTag ( string *text*, string *extension* )**

Constructor.

Immanuel, 15.01.2014.

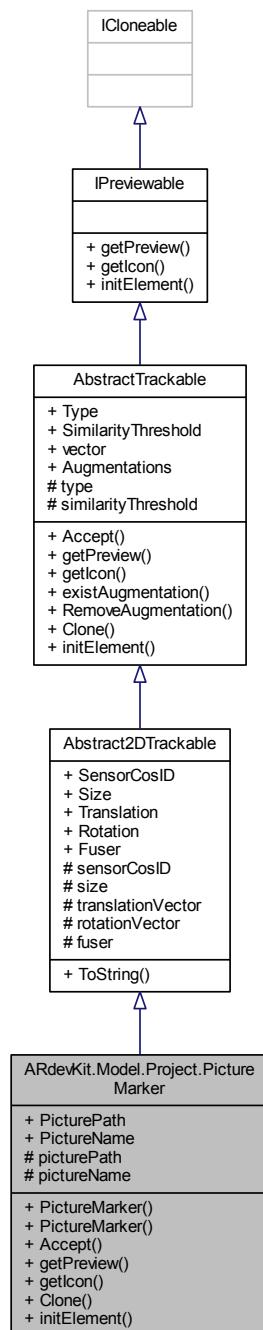
**Parameters**

|                  |                |
|------------------|----------------|
| <i>text</i>      | The text.      |
| <i>extension</i> | The extension. |

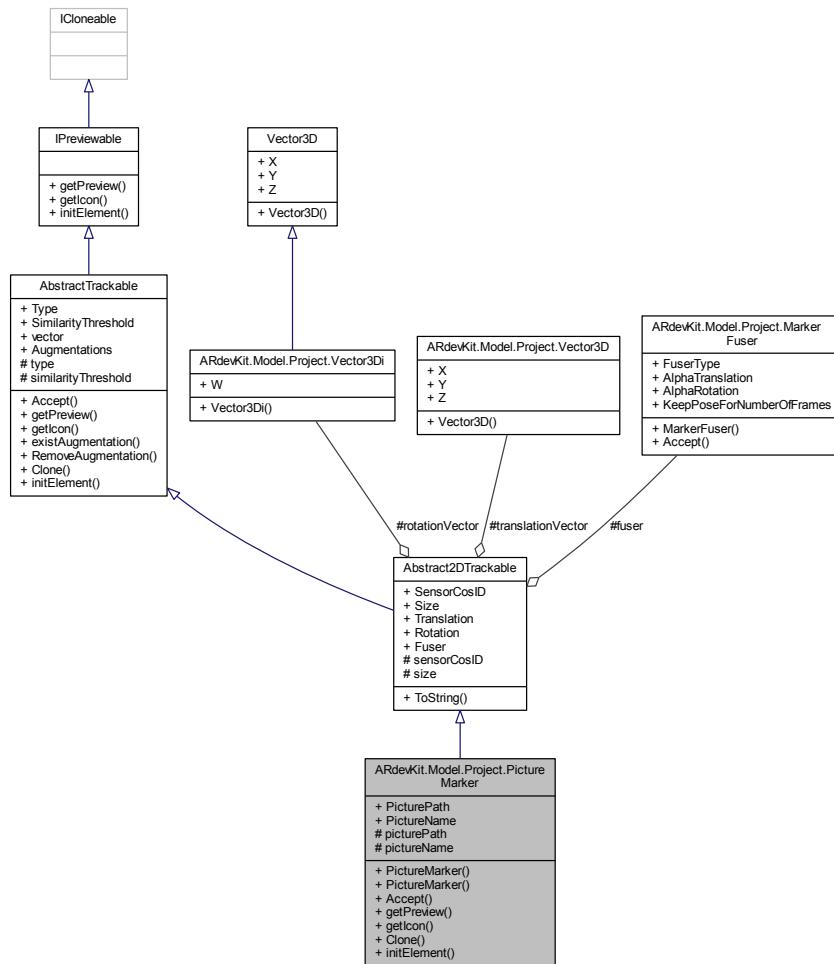
## 5.40 ARdevKit.Model.Project.PictureMarker Class Reference

Describes a Marker, which is very flexible, because it is also a Picture. It is an AbstractMarker

Inheritance diagram for ARdevKit.Model.Project.PictureMarker:



Collaboration diagram for ARdevKit.Model.Project.PictureMarker:



## Public Member Functions

- **PictureMarker ()**  
*Default Constructor.*
- **PictureMarker (string picturePath)**  
*Constructor.*
- **override void Accept (AbstractProjectVisitor visitor)**  
*An overwriting method, to accept a AbstractProjectVisitor which must be implemented according to the visitor design pattern. It lets the visitor visit every augmentation associated with it.*
- **override Bitmap getPreview ()**  
*returns a Bitmap in order to be displayed on the PreviewPanel, implements IPreviewable*
- **override System.Drawing.Bitmap getIcon ()**  
*returns a Bitmap in order to be displayed on the ElementSelectionPanel, implements IPreviewable*
- **override object Clone ()**  
*Makes a deep copy of this object.*
- **override bool initElement (EditorWindow ew)**  
*This method is called by the previewController when a new instance of the element is added to the Scene. It sets "must-have" properties.*

## Protected Attributes

- string `picturePath`  
*Full pathname of the picture file.*
- string `pictureName`  
*Name of the picture.*

## Properties

- string `PicturePath` [get, set]  
*Gets or sets the full pathname of the picture file.*
- string `PictureName` [get]  
*Gets or sets the name of the picture.*

### 5.40.1 Detailed Description

Describes a Marker, which is very flexible, because it is also a Picture. It is an AbstractMarker

### 5.40.2 Constructor & Destructor Documentation

#### 5.40.2.1 ARdevKit.Model.Project.PictureMarker( )

Default Constructor.

#### 5.40.2.2 ARdevKit.Model.Project.PictureMarker( string `picturePath` )

Constructor.

##### Parameters

|                          |                   |
|--------------------------|-------------------|
| <code>picturePath</code> | The picture path. |
|--------------------------|-------------------|

### 5.40.3 Member Function Documentation

#### 5.40.3.1 override void ARdevKit.Model.Project.PictureMarker.Accept( AbstractProjectVisitor visitor ) [virtual]

An overwriting method, to accept a AbstractProjectVisitor which must be implemented according to the visitor design pattern. It lets the visitor visit every augmentation associated with it.

##### Parameters

|                      |  |
|----------------------|--|
| <code>visitor</code> | the visitor which encapsulates the action which is performed on this element |
|----------------------|--|

Implements [ARdevKit.Model.Project.AbstractTrackable](#).

#### 5.40.3.2 override object ARdevKit.Model.Project.PictureMarker.Clone( ) [virtual]

Makes a deep copy of this object.

Robin, 22.01.2014.

##### Returns

A copy of this object.

Implements [ARdevKit.Model.Project.AbstractTrackable](#).

5.40.3.3 `override System.Drawing.Bitmap ARdevKit.Model.Project.PictureMarker.getIcon( ) [virtual]`

returns a Bitmap in order to be displayed on the ElementSelectionPanel, implements [IPreviewable](#)

#### Returns

a representative iconized Bitmap

Implements [ARdevKit.Model.Project.AbstractTrackable](#).

5.40.3.4 `override Bitmap ARdevKit.Model.Project.PictureMarker.getPreview( ) [virtual]`

returns a Bitmap in order to be displayed on the PreviewPanel, implements [IPreviewable](#)

#### Returns

a representative Bitmap

#### Exceptions

|                                    |                              |
|------------------------------------|------------------------------|
| <code>FileNotFoundException</code> | If ImagePath is not correct. |
|------------------------------------|------------------------------|

Implements [ARdevKit.Model.Project.AbstractTrackable](#).

5.40.3.5 `override bool ARdevKit.Model.Project.PictureMarker.initElement( EditorWindow ew ) [virtual]`

This method is called by the previewController when a new instance of the element is added to the Scene. It sets "must-have" properties.

#### Parameters

|                 |         |
|-----------------|---------|
| <code>ew</code> | The ew. |
|-----------------|---------|

#### Returns

true if it succeeds, false if it fails.

Reimplemented from [ARdevKit.Model.Project.AbstractTrackable](#).

## 5.40.4 Member Data Documentation

5.40.4.1 `string ARdevKit.Model.Project.PictureMarker.pictureName [protected]`

Name of the picture.

5.40.4.2 `string ARdevKit.Model.Project.PictureMarker.picturePath [protected]`

Full pathname of the picture file.

## 5.40.5 Property Documentation

5.40.5.1 `string ARdevKit.Model.Project.PictureMarker.PictureName [get]`

Gets or sets the name of the picture.

The name of the picture.

## 5.40.5.2 string ARdevKit.Model.Project.PictureMarker.PicturePath [get], [set]

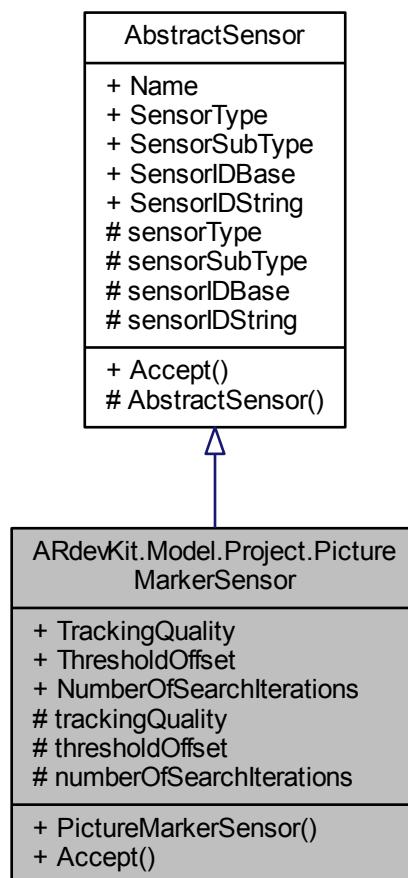
Gets or sets the full pathname of the picture file.

The full pathname of the picture file.

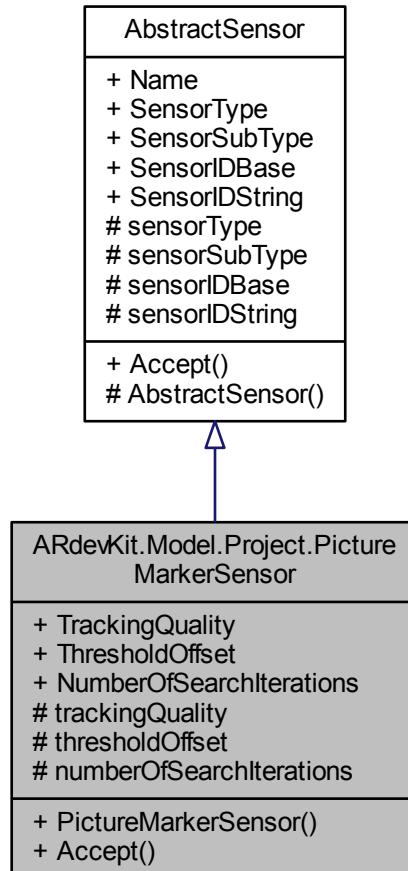
## 5.41 ARdevKit.Model.Project.PictureMarkerSensor Class Reference

A [PictureMarkerSensor](#) is a [AbstractSensor](#) used for [PictureMarker](#). Contains the values, which are used from the MetaioSDK to populate the TrackingData.XML. They describe which Marker should be tracked, and at what quality and speed.

Inheritance diagram for ARdevKit.Model.Project.PictureMarkerSensor:



Collaboration diagram for ARdevKit.Model.Project.PictureMarkerSensor:



## Public Types

- enum `TrackingQualities` { **robust**, **fast** }

*Specifies the `trackingQuality`.*

## Public Member Functions

- `PictureMarkerSensor ()`  
*Default constructor.*
- `override void Accept (AbstractProjectVisitor visitor)`  
*Accepts the given visitor.*

## Protected Attributes

- `TrackingQualities trackingQuality`  
*Strategy which is used for the marker detection. There are two types available:*
- `int thresholdOffset`

The threshold which is used to binarize the camera image. Binarizing is the process where each pixel is converted to a grayscale value (between 0 and 255) and then is set to 0 when the value is below the threshold and to 1 when the value is above. This helps to clearly identify the marker and is therefore important for the detection process. When the tracking quality is set to "fast", then this value is fixed and will not change during the tracking process. When the tracking quality is set to "robust", then the value is only the starting value in the very first frame after loading the tracking.xml. Detecting markers using a fixed threshold can lead to failure. The value range for the threshold is between 0 and 255.

- int [numberOfSearchIterations](#)

Number of search iterations which controls the number of attempts to find a marker with a new ThresholdOffset. This parameter matters when "robust" is set as "TrackingQuality", but is ignored for "fast". The ThresholdOffset is adapted when no marker was detected. With a high number, the marker tracker is more likely to detect a marker, but it also needs more computational time, i.e. is slower.

## Properties

- [TrackingQualities TrackingQuality](#) [get, set]

Gets or sets the tracking quality.

- int [ThresholdOffset](#) [get, set]

Gets or sets the threshold offset.

- int [NumberOfSearchIterations](#) [get, set]

Gets or sets the number of search iterations.

## Additional Inherited Members

### 5.41.1 Detailed Description

A PictureMarkerSensor is a [AbstractSensor](#) used for [PictureMarker](#). Contains the values, which are used from the MetaioSDK to populate the TrackingData.XML. They describe which Marker should be tracked, and at what quality and speed.

### 5.41.2 Member Enumeration Documentation

#### 5.41.2.1 enum ARdevKit.Model.Project.PictureMarkerSensor.TrackingQualities

Specifies the [trackingQuality](#).

Immanuel, 15.01.2014.

### 5.41.3 Constructor & Destructor Documentation

#### 5.41.3.1 ARdevKit.Model.Project.PictureMarkerSensor.PictureMarkerSensor( )

Default constructor.

Immanuel, 17.01.2014.

### 5.41.4 Member Function Documentation

#### 5.41.4.1 override void ARdevKit.Model.Project.PictureMarkerSensor.Accept( AbstractProjectVisitor visitor ) [virtual]

Accepts the given visitor.

**Parameters**

|                |              |
|----------------|--------------|
| <i>visitor</i> | The visitor. |
|----------------|--------------|

Immanuel, 17.01.2014.

Implements [ARdevKit.Model.Project.AbstractSensor](#).

**5.41.5 Member Data Documentation****5.41.5.1 int ARdevKit.Model.Project.PictureMarkerSensor.numberOfSearchIterations [protected]**

Number of search iterations which controls the number of attempts to find a marker with a new ThresholdOffset. This parameter matters when "robust" is set as "TrackingQuality", but is ignored for "fast". The ThresholdOffset is adapted when no marker was detected. With a high number, the marker tracker is more likely to detect a marker, but it also needs more computational time, i.e. is slower.

**5.41.5.2 int ARdevKit.Model.Project.PictureMarkerSensor.thresholdOffset [protected]**

The threshold which is used to binarize the camera image. Binarizing is the process where each pixel is converted to a grayscale value (between 0 and 255) and then is set to 0 when the value is below the threshold and to 1 when the value is above. This helps to clearly identify the marker and is therefore important for the detection process. When the tracking quality is set to "fast", then this value is fixed and will not change during the tracking process. When the tracking quality is set to "robust", then the value is only the starting value in the very first frame after loading the tracking.xml. Detecting markers using a fixed threshold can lead to failure. The value range for the threshold is between 0 and 255.

**5.41.5.3 TrackingQualities ARdevKit.Model.Project.PictureMarkerSensor.trackingQuality [protected]**

Strategy which is used for the marker detection. There are two types available:

- "robust" to use a robust approach to detect the markers, which usually gives the best results, but consumes more computational time, i.e. is slower.
- "fast" to use a more simple approach to detect the markers, which is less precise, but faster than robust.

**5.41.6 Property Documentation****5.41.6.1 int ARdevKit.Model.Project.PictureMarkerSensor.NumberOfSearchIterations [get], [set]**

Gets or sets the number of search iterations.

The total number of search iterations.

**5.41.6.2 int ARdevKit.Model.Project.PictureMarkerSensor.ThresholdOffset [get], [set]**

Gets or sets the threshold offset.

The threshold offset.

**5.41.6.3 TrackingQualities ARdevKit.Model.Project.PictureMarkerSensor.TrackingQuality [get], [set]**

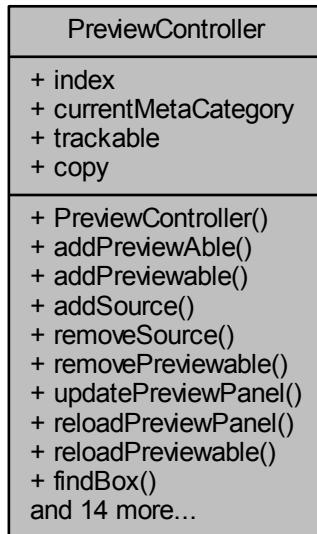
Gets or sets the tracking quality.

The tracking quality.

## 5.42 PreviewController Class Reference

The class [PreviewController](#) manages all things which are in contact with the PreviewPanel. Here are all methods, who influence the PreviewPanel.

Collaboration diagram for PreviewController:



### Public Member Functions

- **PreviewController (EditorWindow ew)**  
*Constructor.*
- **void addPreviewAble (IPreviewable p)**  
*(This method is obsolete) adds a preview able.*
- **void addPreviewable (IPreviewable currentElement, Vector3D v)**  
*add Trackable is the method for adding the trackable, each PreviewPanel can holding one Trackable.*
- **void addSource (AbstractSource source, AbstractAugmentation currentElement)**  
*add Source or augmentation, this method can only be used with the element, which is the over element by augmentation the overelement is Trackable. by Source the overelement is augmentation.*
- **void removeSource (AbstractSource source, IPreviewable currentElement)**  
*Removes the choosen Source out of the Augmentation and also out of the sourcesList in Project.*
- **void removePreviewable (IPreviewable currentElement)**  
*Removes the Previewable and the Objekt, what is linked to the Previewable.*
- **void updatePreviewPanel ()**  
*updates the preview panel.*
- **void reloadPreviewPanel (int index)**  
*load the project with the identical index to the previewPanel (the index is the index of the trackable list in project)*
- **void reloadPreviewable (AbstractAugmentation prev)**  
*Reloads a single previewable.*
- **PictureBox findBox (IPreviewable prev)**

- Searchs in the Panel for the important PictureBox and gives this box back.*
- void `setCurrentElement (IPreviewable currentElement)`

*sets the currentElement in EditorWindow an marks the PictureBox in the PreviewPanel.*
  - Bitmap `scaleIPreviewable (IPreviewable prev)`

*scales the Pictureboxes to their own scale size the size is in dependency to the scale, the sideScale of the images and and the scale of the augmentation.*
  - Bitmap `scaleBitmap (Bitmap bit, int width, int height)`

*scales the bitmap to the width & height which you want*
  - void `rescalePreviewPanel ()`

*Rescales the preview panel if the size was changed.*
  - void `setCoordinates (IPreviewable prev, Vector3D newV)`

*Set all needed Coordinates for the augmentation.*
  - void `updateTranslation ()`

*This updates the position of the currentElement-Picturebox.*
  - void `updateElementCombobox (AbstractTrackable t)`

*Updates the element combobox.*
  - void `rotateAugmentation (IPreviewable currentElement)`

*Rotates the augmentation, after you've changed the Rotation.Z Vector.*
  - Bitmap `getSizedBitmap (IPreviewable currentElement)`

*Refreshs the Augmentation with the new Scale.*
  - void `copy_augmentation (object sender, EventArgs e)`

*EventHandler for copy function. copies the currentElement*
  - void `paste_augmentation (object sender, EventArgs e)`

*EventHandler for paste function. paste the object at the current cursor position.*
  - void `paste_augmentation_center (object sender, EventArgs e)`

*EventHandler for paste function. paste the object in the center of panel*
  - void `onAugmentationEnter (object sender, DragEventArgs e)`

*Raises the drag event when a source enters a augmentation.*
  - void `onAugmentationDrop (object sender, DragEventArgs e)`

*Raises the drag event when a source is droped on an augmentation.*

## Public Attributes

- int `index`

*The Index which Trackable out of Project we musst use*

## Properties

- MetaCategory `currentMetaCategory [get, set]`

*The MetaCategory of the current element.*
- AbstractTrackable `trackable [get, set]`

*The Trackable which hold the Augmentations and Sources.*
- AbstractAugmentation `copy [get, set]`

*Gets or sets the copy.*

### 5.42.1 Detailed Description

The class `PreviewController` manages all things which are in contact with the `PreviewPanel`. Here are all methods, who influence the `PreviewPanel`.

## 5.42.2 Constructor & Destructor Documentation

### 5.42.2.1 PreviewController.PreviewController ( EditorWindow ew )

Constructor.

**Parameters**

|           |                       |
|-----------|-----------------------|
| <i>ew</i> | EditorWindow Instanz. |
|-----------|-----------------------|

**5.42.3 Member Function Documentation****5.42.3.1 void PreviewController.addPreviewAble ( IPreviewable *p* )**

(This method is obsolete) adds a preview able.

**Exceptions**

|                                |   |
|--------------------------------|---|
| <i>NotImplementedException</i> | Thrown when the requested operation is unimplemented. |
|--------------------------------|---|

**Parameters**

|          |                       |
|----------|-----------------------|
| <i>p</i> | The Panel to process. |
|----------|-----------------------|

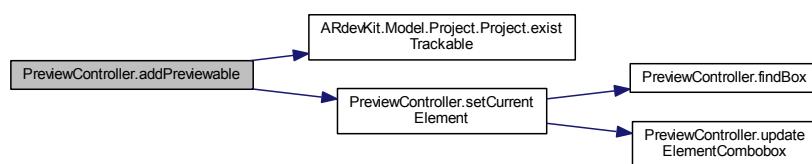
**5.42.3.2 void PreviewController.addPreviewable ( IPreviewable *currentElement*, Vector3D *v* )**

add Trackable is the method for adding the trackable, each PreviewPanel can holding one Trackable.

**Parameters**

|                       |                                    |
|-----------------------|------------------------------------|
| <i>currentElement</i> | The current element.               |
| <i>v</i>              | The Vector3D to set the Trackable. |

Here is the call graph for this function:

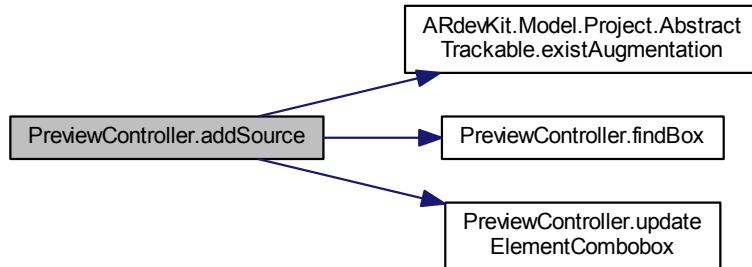
**5.42.3.3 void PreviewController.addSource ( AbstractSource *source*, AbstractAugmentation *currentElement* )**

add Source or augmentation, this method can only be used with the element, which is the over element by augmentation the overelement is Trackable. by Source the overelement is augmentation.

**Parameters**

|                       |                      |
|-----------------------|----------------------|
| <i>source</i>         | The source.          |
| <i>currentElement</i> | The current element. |

Here is the call graph for this function:



Here is the caller graph for this function:



#### 5.42.3.4 void PreviewController.copy\_augmentation ( object sender, EventArgs e )

EventHandler for copy function. copies the currentElement

##### Parameters

|               |   |
|---------------|---|
| <i>sender</i> | The source of the event.                          |
| <i>e</i>      | The EventArgs instance containing the event data. |

#### 5.42.3.5 PictureBox PreviewController.findBox ( IPreviewable prev )

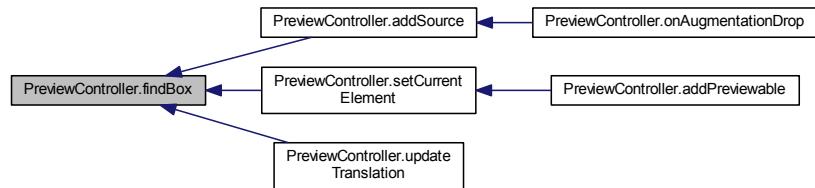
Searches in the Panel for the important PictureBox and gives this box back.

##### Parameters

|             |               |
|-------------|---------------|
| <i>prev</i> | The previous. |
|-------------|---------------|

**Returns**

Here is the caller graph for this function:

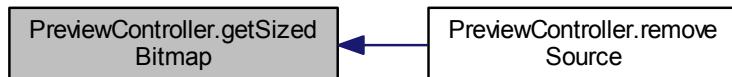
**5.42.3.6 Bitmap PreviewController.getSizedBitmap ( IPreviewable currentElement )**

Refreshes the Augmentation with the new Scale.

Here is the call graph for this function:



Here is the caller graph for this function:

**5.42.3.7 void PreviewController.onAugmentationDrop ( object sender, DragEventArgs e )**

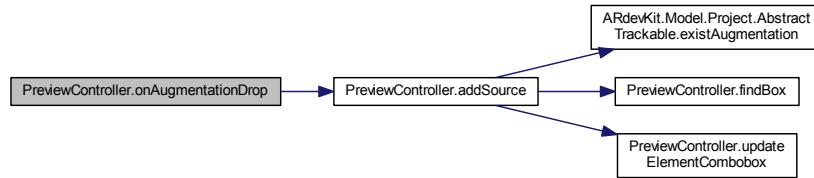
Raises the drag event when a source is droped on an augmentation.

Robin, 19.01.2014.

## Parameters

|               |   |
|---------------|---|
| <i>sender</i> | Source of the event.                                    |
| <i>e</i>      | Event information to send to registered event handlers. |

Here is the call graph for this function:



#### 5.42.3.8 void PreviewController.onAugmentationEnter ( object sender, DragEventArgs e )

Raises the drag event when a source enters a augmentation.

Robin, 19.01.2014.

## Parameters

|               |   |
|---------------|---|
| <i>sender</i> | Source of the event.                                    |
| <i>e</i>      | Event information to send to registered event handlers. |

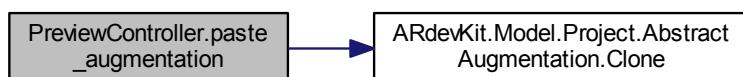
#### 5.42.3.9 void PreviewController.paste\_augmentation ( object sender, EventArgs e )

EventHandler for paste function. paste the object at the current cursor position.

## Parameters

|               |   |
|---------------|---|
| <i>sender</i> | The source of the event.                          |
| <i>e</i>      | The EventArgs instance containing the event data. |

Here is the call graph for this function:



Here is the caller graph for this function:



#### 5.42.3.10 void PreviewController.paste\_augmentation\_center ( object sender, EventArgs e )

EventHandler for paste function. paste the object in the center of panel

##### Parameters

|               |   |
|---------------|---|
| <i>sender</i> | The source of the event.                          |
| <i>e</i>      | The EventArgs instance containing the event data. |

Here is the call graph for this function:



#### 5.42.3.11 void PreviewController.reloadPreviewable ( AbstractAugmentation prev )

Reloads a single previewable.

##### Parameters

|             |               |
|-------------|---------------|
| <i>prev</i> | The previous. |
|-------------|---------------|

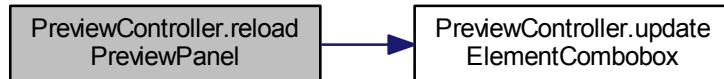
#### 5.42.3.12 void PreviewController.reloadPreviewPanel ( int index )

load the project with the identical index to the previewPanel (the index is the index of the trackable list in project)

##### Parameters

|              |            |
|--------------|------------|
| <i>index</i> | The index. |
|--------------|------------|

Here is the call graph for this function:



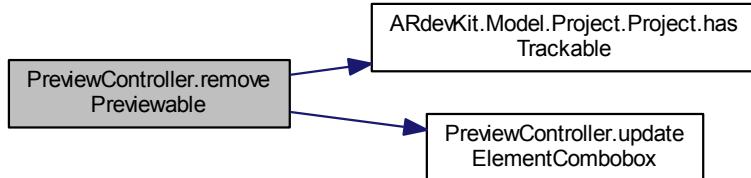
#### 5.42.3.13 void PreviewController.removePreviewable ( IPreviewable currentElement )

Removes the Previewable and the Objekt, what is linked to the Previewable.

##### Parameters

|                       |                      |
|-----------------------|----------------------|
| <i>currentElement</i> | The current element. |
|-----------------------|----------------------|

Here is the call graph for this function:



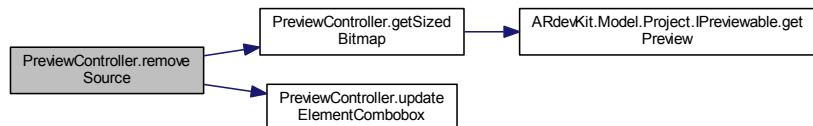
#### 5.42.3.14 void PreviewController.removeSource ( AbstractSource source, IPreviewable currentElement )

Removes the choosen Source out of the Augmentation and also out of the sourcesList in Project.

##### Parameters

|                       |                      |
|-----------------------|----------------------|
| <i>source</i>         | The source.          |
| <i>currentElement</i> | The current element. |

Here is the call graph for this function:



#### 5.42.3.15 void PreviewController.rescalePreviewPanel ( )

Rescales the preview panel if the size was changed.

#### 5.42.3.16 void PreviewController.rotateAugmentation ( IPreviewable currentElement )

Rotates the augmentation, after you've changed the Rotation.Z Vector.

#### 5.42.3.17 Bitmap PreviewController.scaleBitmap ( Bitmap bit, int width, int height )

scales the bitmap to the width & height which you want

##### Parameters

|               |             |
|---------------|-------------|
| <i>bit</i>    | The bit.    |
| <i>width</i>  | The width.  |
| <i>height</i> | The height. |

##### Returns

scaled bitmap

#### 5.42.3.18 Bitmap PreviewController.scaleIPreviewable ( IPreviewable prev )

scales the Pictureboxes to their own scale size the size is in dependency to the scale, the sideScale of the images and and the scale of the augmentation.

##### Parameters

|             |               |
|-------------|---------------|
| <i>prev</i> | The previous. |
|-------------|---------------|

##### Returns

#### 5.42.3.19 void PreviewController.setCoordinates ( IPreviewable prev, Vector3D newV )

Set all needed Coordinates for the augmentation.

##### Parameters

|             |               |
|-------------|---------------|
| <i>prev</i> | The previous. |
| <i>newV</i> | The new v.    |

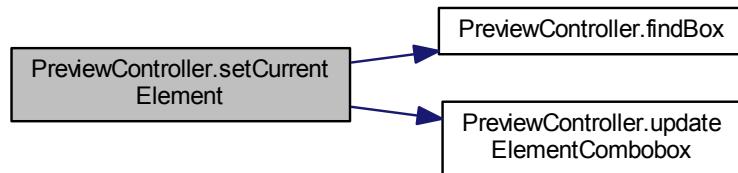
#### 5.42.3.20 void PreviewController.setCurrentElement ( IPreviewable currentElement )

sets the currentElement in EditorWindow an marks the PictureBox in the PreviewPanel.

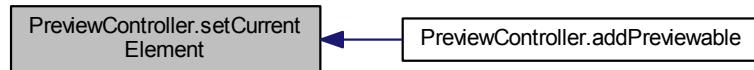
##### Parameters

|                       |                      |
|-----------------------|----------------------|
| <i>currentElement</i> | The current element. |
|-----------------------|----------------------|

Here is the call graph for this function:



Here is the caller graph for this function:



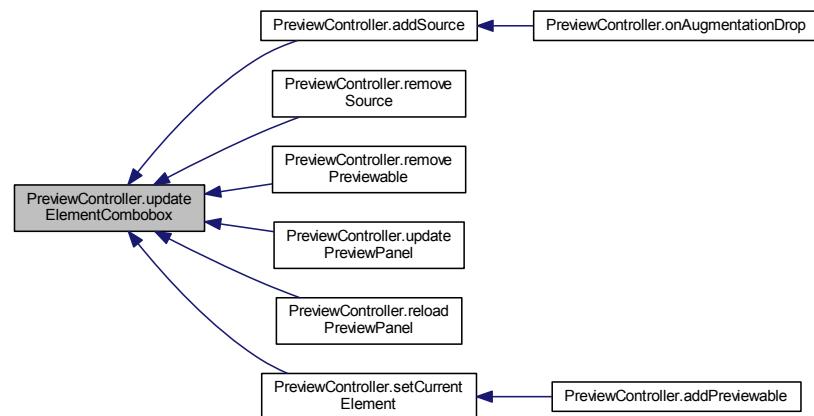
#### 5.42.3.21 void PreviewController.updateElementCombobox ( AbstractTrackable t )

Updates the element combobox.

##### Parameters

|   |        |
|---|--------|
| t | The t. |
|---|--------|

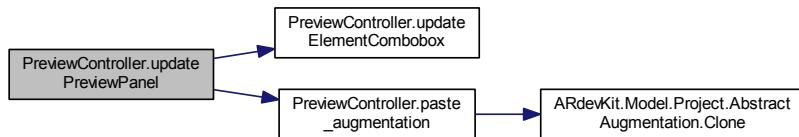
Here is the caller graph for this function:



### 5.42.3.22 void PreviewController.updatePreviewPanel ( )

updates the preview panel.

Here is the call graph for this function:



### 5.42.3.23 void PreviewController.updateTranslation ( )

This updates the position of the currentElement-Picturebox.

Here is the call graph for this function:



## 5.42.4 Member Data Documentation

### 5.42.4.1 int PreviewController.index

The Index which Trackable out of Project we musst use

## 5.42.5 Property Documentation

### 5.42.5.1 AbstractAugmentation PreviewController.copy [get], [set]

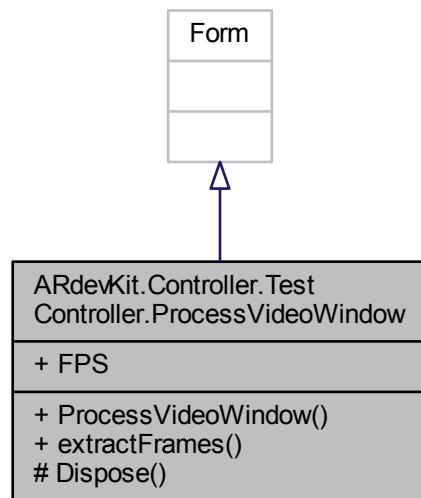
Gets or sets the copy.

The copy.

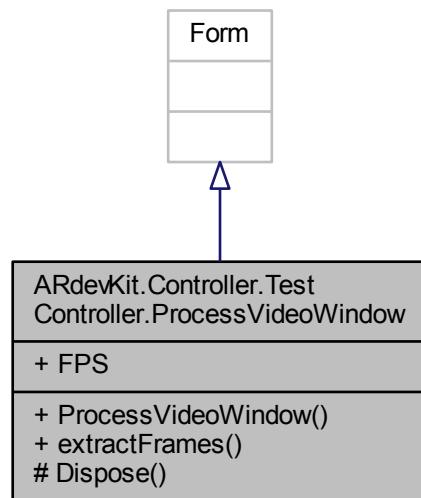
## 5.43 ARdevKit.Controller.TestController.ProcessVideoWindow Class Reference

The [ProcessVideoWindow](#) processes a video and shows the progress.

Inheritance diagram for ARdevKit.Controller.TestController.ProcessVideoWindow:



Collaboration diagram for ARdevKit.Controller.TestController.ProcessVideoWindow:



## Public Member Functions

- [ProcessVideoWindow \(\)](#)  
*Initializes a new instance of the `ProcessVideoWindow` class.*
- [void extractFrames \(string testFilePath, string tmpPath\)](#)

*Extracts the frames.*

## Protected Member Functions

- override void [Dispose](#) (bool disposing)

*Clean up any resources being used.*

## Properties

- int [FPS](#) [get, set]

*Gets or sets the FPS.*

### 5.43.1 Detailed Description

The [ProcessVideoWindow](#) processes a video and shows the progress.

### 5.43.2 Constructor & Destructor Documentation

#### 5.43.2.1 ARdevKit.Controller.TestController.ProcessVideoWindow.ProcessVideoWindow( )

Initializes a new instance of the [ProcessVideoWindow](#) class.

### 5.43.3 Member Function Documentation

#### 5.43.3.1 override void ARdevKit.Controller.TestController.ProcessVideoWindow.Dispose( bool disposing ) [protected]

Clean up any resources being used.

##### Parameters

|                  |   |
|------------------|---|
| <i>disposing</i> | true if managed resources should be disposed; otherwise, false. |
|------------------|---|

#### 5.43.3.2 void ARdevKit.Controller.TestController.ProcessVideoWindow.extractFrames( string testFilePath, string tmpPath )

Extracts the frames.

##### Parameters

|                     |                     |
|---------------------|---------------------|
| <i>testFilePath</i> | The test file path. |
| <i>tmpPath</i>      | The temporary path. |

### 5.43.4 Property Documentation

#### 5.43.4.1 int ARdevKit.Controller.TestController.ProcessVideoWindow.FPS [get], [set]

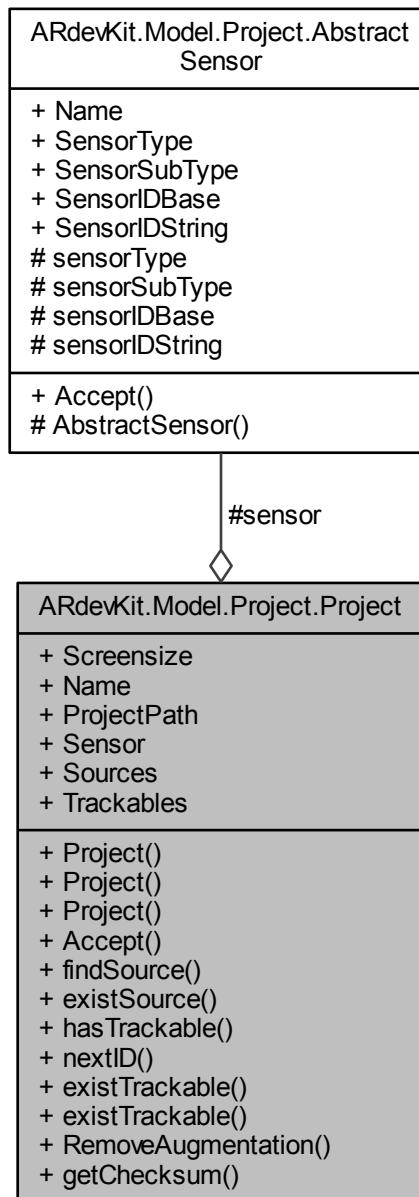
Gets or sets the FPS.

The FPS.

## 5.44 ARdevKit.Model.Project.Project Class Reference

Encapsulates everything, that is needed for an AR-Application and so this the element, which the user saves, loads or exports

Collaboration diagram for ARdevKit.Model.Project.Project:



### Public Member Functions

- `Project ()`

*Initializes a new instance of the `Project` class with default values.*

- **Project (string name)**  
*Initializes a new instance of the [Project](#) class with specified name.*
- **Project (string name, string projectPath)**  
*Initializes a new instance of the [Project](#) class with specified name and projectPath.*
- void [Accept \(AbstractProjectVisitor visitor\)](#)  
*Accepts the specified visitor.*
- [AbstractSource findSource \(AbstractSource source\)](#)  
*Returns the associated source, if it is associated with the project.*
- bool [existSource \(AbstractSource source\)](#)  
*Returns, if the specified source is associated with this project.*
- bool [hasTrackable \(\)](#)  
*tests if all trackables in this.trackables are null. if there are one which is not null it's true.*
- int [nextID \(\)](#)  
*Returns the next bigger Matrix ID.*
- bool [existTrackable \(IPreviewable prev\)](#)  
*true if an Trackable with the same Path/ID exists, false if not.*
- bool [existTrackable \(int matrixID\)](#)  
*true if an Trackable with the same Path/ID exists, false if not.*
- void [RemoveAugmentation \(AbstractAugmentation augmentation\)](#)  
*Removes the augmentation and deletes connected files if other augmentations dont need it.*
- string [getChecksum \(\)](#)  
*Gets the checksum of the project lying at the project path.*

## Protected Attributes

- [AbstractSensor sensor](#)  
*The sensor, is dependend on the used trackables.*

## Properties

- [ScreenSize Screensize \[get, set\]](#)  
*Gets or sets the screensize.*
- string [Name \[get, set\]](#)  
*Gets or sets the name.*
- string [ProjectPath \[get, set\]](#)  
*Gets or sets the full pathname of the project file.*
- [AbstractSensor Sensor \[get, set\]](#)  
*Gets or sets the sensor.*
- List<[AbstractSource](#)> [Sources \[get, set\]](#)  
*Gets or sets the sources.*
- List<[AbstractTrackable](#)> [Trackables \[get, set\]](#)  
*Gets or sets the trackables.*

### 5.44.1 Detailed Description

Encapsulates everything, that is needed for an AR-Application and so this the element, which the user saves, loads or exports

## 5.44.2 Constructor & Destructor Documentation

### 5.44.2.1 ARdevKit.Model.Project.Project( )

Initializes a new instance of the [Project](#) class with default values.

### 5.44.2.2 ARdevKit.Model.Project.Project( string name )

Initializes a new instance of the [Project](#) class with specified name.

#### Parameters

|             |           |
|-------------|-----------|
| <i>name</i> | The name. |
|-------------|-----------|

### 5.44.2.3 ARdevKit.Model.Project.Project( string name, string projectPath )

Initializes a new instance of the [Project](#) class with specified name and projectPath.

#### Parameters

|                    |                                    |
|--------------------|------------------------------------|
| <i>name</i>        | The name.                          |
| <i>projectPath</i> | Full pathname of the project file. |

## 5.44.3 Member Function Documentation

### 5.44.3.1 void ARdevKit.Model.Project.Project.Accept( AbstractProjectVisitor visitor )

Accepts the specified visitor.

#### Parameters

|                |              |
|----------------|--------------|
| <i>visitor</i> | The visitor. |
|----------------|--------------|

### 5.44.3.2 bool ARdevKit.Model.Project.Project.existSource( AbstractSource source )

Returns, if the specified source is associated with this project.

#### Parameters

|               |                       |
|---------------|-----------------------|
| <i>source</i> | The specified source. |
|---------------|-----------------------|

#### Returns

true, if the source is associated with this project false, else

### 5.44.3.3 bool ARdevKit.Model.Project.Project.existTrackable( IPreviewable prev )

true if an Trackable with the same Path/ID exists, false if not.

#### Parameters

|             |               |
|-------------|---------------|
| <i>prev</i> | The previous. |
|-------------|---------------|

**Returns**

Here is the caller graph for this function:

**5.44.3.4 bool ARdevKit.Model.Project.Project.existTrackable ( int matrixID )**

true if an Trackable with the same Path/ID exists, false if not.

**Parameters**

|                 |                            |
|-----------------|----------------------------|
| <i>matrixID</i> | Identifier for the matrix. |
|-----------------|----------------------------|

**Returns**

true if it succeeds, false if it fails.

**5.44.3.5 AbstractSource ARdevKit.Model.Project.Project.findSource ( AbstractSource source )**

Returns the associated source, if it is associated with the project.

**Parameters**

|               |                                |
|---------------|--------------------------------|
| <i>source</i> | The source, which is searched. |
|---------------|--------------------------------|

**Returns**

the associated source

**5.44.3.6 string ARdevKit.Model.Project.Project.getChecksum ( )**

Gets the checksum of the project lying at the project path.

**Returns**

geht 20.02.2014 13:36

**5.44.3.7 bool ARdevKit.Model.Project.Project.hasTrackable ( )**

tests if all trackables in this.trackables are null. if there are one which is not null it's true.

**Returns**

true if trackable, false if not.

Lizzard, 1/19/2014.

Here is the caller graph for this function:

**5.44.3.8 int ARdevKit.Model.Project.Project.nextID( )**

Returns the next bigger Matrix ID.

**Returns****5.44.3.9 void ARdevKit.Model.Project.Project.RemoveAugmentation( AbstractAugmentation augmentation )**

Removes the augmentation and deletes connected files if other augmentations dont need it.

**Parameters**

|                     |                   |
|---------------------|-------------------|
| <i>augmentation</i> | The augmentation. |
|---------------------|-------------------|

**5.44.4 Member Data Documentation****5.44.4.1 AbstractSensor ARdevKit.Model.Project.Project.sensor [protected]**

The sensor, is dependent on the used trackables.

**5.44.5 Property Documentation****5.44.5.1 string ARdevKit.Model.Project.Project.Name [get], [set]**

Gets or sets the name.

The name.

**5.44.5.2 string ARdevKit.Model.Project.Project.ProjectPath [get], [set]**

Gets or sets the full pathname of the project file.

The full pathname of the project file.

#### 5.44.5.3 ScreenSize ARdevKit.Model.Project.Project.Screensize [get], [set]

Gets or sets the screensize.

The screensize.

geht 28.01.2014 14:43

#### 5.44.5.4 AbstractSensor ARdevKit.Model.Project.Project.Sensor [get], [set]

Gets or sets the sensor.

The sensor.

#### 5.44.5.5 List<AbstractSource> ARdevKit.Model.Project.Project.Sources [get], [set]

Gets or sets the sources.

The sources.

#### 5.44.5.6 List<AbstractTrackable> ARdevKit.Model.Project.Project.Trackables [get], [set]

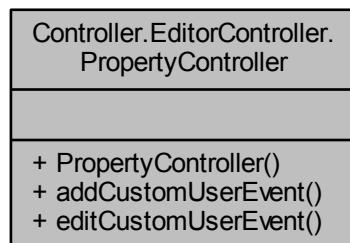
Gets or sets the trackables.

The trackables.

## 5.45 Controller.EditorController.PropertyController Class Reference

The [PropertyController](#) contains events for the propertyGrid

Collaboration diagram for Controller.EditorController.PropertyController:



### Public Member Functions

- [PropertyController \(EditorWindow ew\)](#)

*Constructor of the class. It adds automatically all events which belongs to the propertyGrid.*

- void [addCustomUserEvent \(\)](#)

*See issue #13 for reason of these invalid methods etc.*

- void [editCustomUserEvent \(\)](#)

*See issue #13 for reason of these invalid methods etc.*

### 5.45.1 Detailed Description

The [PropertyController](#) contains events for the propertyGrid

### 5.45.2 Constructor & Destructor Documentation

#### 5.45.2.1 Controller.EditorController.PropertyController.PropertyController ( EditorWindow ew )

Constructor of the class. It adds automatically all events which belongs to the propertyGrid.

##### Parameters

|                 |  |
|-----------------|--|
| <code>ew</code> |  |
|-----------------|--|

### 5.45.3 Member Function Documentation

#### 5.45.3.1 void Controller.EditorController.PropertyController.addCustomUserEvent ( )

See issue #13 for reason of these invalid methods etc.

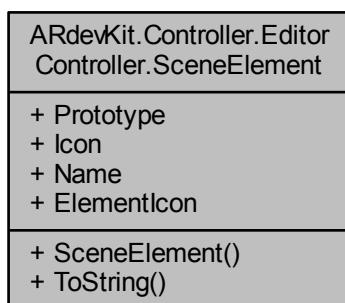
#### 5.45.3.2 void Controller.EditorController.PropertyController.editCustomUserEvent ( )

See issue #13 for reason of these invalid methods etc.

## 5.46 ARdevKit.Controller.EditorController.SceneElement Class Reference

An element that can be added to a Scene.

Collaboration diagram for ARdevKit.Controller.EditorController.SceneElement:



### Public Member Functions

- [SceneElement](#) (String name, [IPreviewable](#) prototype, [EditorWindow](#) ew)

*Konstruktor. Create a new [SceneElement](#), takes a prototype of Type [IPreviewable](#), an icon of Typ Bitmap and a name of Typ String.*

- override string [ToString](#) ()

Gibt eine Zeichenfolge zurück, die das aktuelle Objekt darstellt.

## Properties

- **IPreviewable Prototype** [get, set]  
*Gets or sets the prototype.*
- **Bitmap Icon** [get, set]  
*Gets or sets the icon.*
- **String Name** [get, set]  
*Gets or sets the name.*
- **ElementIcon ElementIcon** [get]  
*The ElementIcon.*

### 5.46.1 Detailed Description

An element that can be added to a Scene.

Robin, 19.01.2014.

### 5.46.2 Constructor & Destructor Documentation

#### 5.46.2.1 ARdevKit.Controller.EditorController.SceneElement.SceneElement ( String name, IPreviewable prototype, EditorWindow ew )

Konstruktor. Create a new **SceneElement**, takes a prototype of Type IPreviewable, an icon of Typ Bitmap and a name of Typ String.

Lizard, 1/13/2014.

#### Parameters

|                  |                          |
|------------------|--------------------------|
| <i>name</i>      | The name of the Element. |
| <i>prototype</i> | The prototype.           |
| <i>ew</i>        | The Editor window.       |

### 5.46.3 Member Function Documentation

#### 5.46.3.1 override string ARdevKit.Controller.EditorController.SceneElement.ToString ( )

Gibt eine Zeichenfolge zurück, die das aktuelle Objekt darstellt.

Robin, 14.01.2014.

#### Returns

Eine Zeichenfolge, die das aktuelle Objekt darstellt.

### 5.46.4 Property Documentation

#### 5.46.4.1 ElementIcon ARdevKit.Controller.EditorController.SceneElement.ElementIcon [get]

The ElementIcon.

Lizard, 1/13/2014.

**Exceptions**

|                                |   |
|--------------------------------|---|
| <i>NotImplementedException</i> | Thrown when the requested operation is unimplemented. |
|--------------------------------|---|

**5.46.4.2 Bitmap ARdevKit.Controller.EditorController.SceneElement.Icon [get], [set]**

Gets or sets the icon.

The icon.

**5.46.4.3 String ARdevKit.Controller.EditorController.SceneElement.Name [get], [set]**

Gets or sets the name.

The name.

**5.46.4.4 IPreviewable ARdevKit.Controller.EditorController.SceneElement.Prototype [get], [set]**

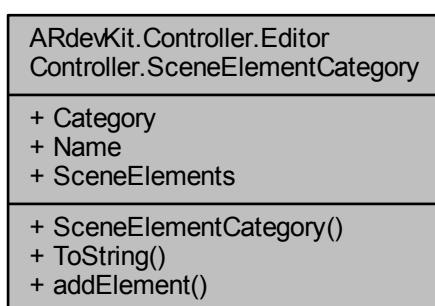
Gets or sets the prototype.

The prototype.

**5.47 ARdevKit.Controller.EditorController.SceneElementCategory Class Reference**

A category for scene elements.

Collaboration diagram for ARdevKit.Controller.EditorController.SceneElementCategory:

**Public Member Functions**

- **SceneElementCategory** (*MetaCategory* metaCategory, String name)  
*Constructor.*
- override string **ToString** ()  
*Gibt eine Zeichenfolge zurück, die das aktuelle Objekt darstellt.*
- void **addElement** (*SceneElement* e)  
*Adds an element to the category.*

## Properties

- **MetaCategory Category** [get, set]  
Gets or sets the category the meta belongs to.
- **String Name** [get, set]  
Gets or sets the name.
- **List< SceneElement > SceneElements** [get, set]  
Gets or sets the scene elements.

### 5.47.1 Detailed Description

A category for scene elements.

Robin, 19.01.2014.

### 5.47.2 Constructor & Destructor Documentation

#### 5.47.2.1 ARdevKit.Controller.EditorController.SceneElementCategory.SceneElementCategory ( MetaCategory metaCategory, String name )

Constructor.

Robin, 14.01.2014.

##### Parameters

|                     |  |
|---------------------|--|
| <i>metaCategory</i> | Holds the Meta Category of the IPreviewables of this category. |
| <i>name</i>         | Holds a name for the category that is shown in the ComboBox.   |

### 5.47.3 Member Function Documentation

#### 5.47.3.1 void ARdevKit.Controller.EditorController.SceneElementCategory.addElement ( SceneElement e )

Adds an element to the category.

Robin, 14.01.2014.

##### Parameters

|          |                                     |
|----------|-------------------------------------|
| <i>e</i> | The <b>SceneElement</b> to process. |
|----------|-------------------------------------|

#### 5.47.3.2 override string ARdevKit.Controller.EditorController.SceneElementCategory.ToString ( )

Gibt eine Zeichenfolge zurück, die das aktuelle Objekt darstellt.

Robin, 14.01.2014.

##### Returns

Eine Zeichenfolge, die das aktuelle Objekt darstellt.

### 5.47.4 Property Documentation

#### 5.47.4.1 MetaCategory ARdevKit.Controller.EditorController.SceneElementCategory.Category [get], [set]

Gets or sets the category the meta belongs to.

The meta category.

**5.47.4.2 String ARdevKit.Controller.EditorController.SceneElementCategory.Name [get], [set]**

Gets or sets the name.

The name.

**5.47.4.3 List<SceneElement> ARdevKit.Controller.EditorController.SceneElementCategory.SceneElements [get], [set]**

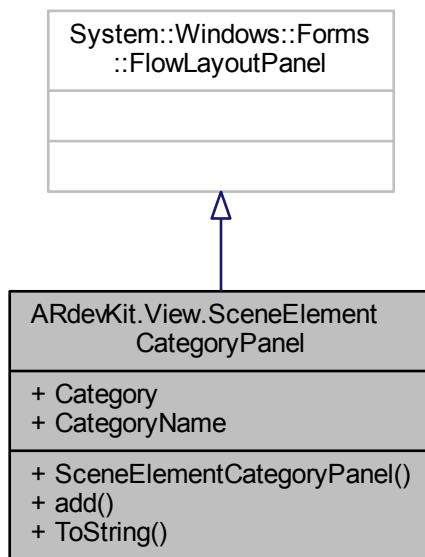
Gets or sets the scene elements.

The scene elements.

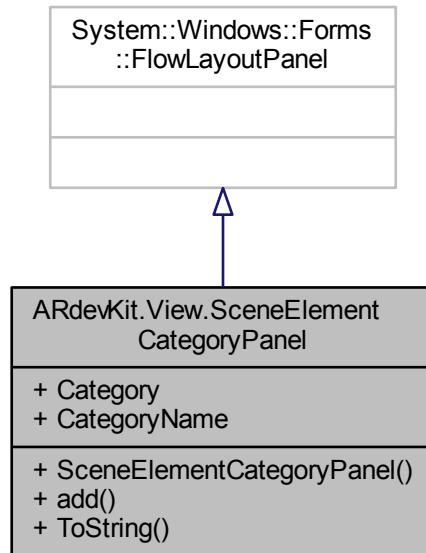
## 5.48 ARdevKit.View.SceneElementCategoryPanel Class Reference

Panel the scene element category. Is used to display multiple ElementIcons in a row.

Inheritance diagram for ARdevKit.View.SceneElementCategoryPanel:



Collaboration diagram for ARdevKit.View.SceneElementCategoryPanel:



## Public Member Functions

- `SceneElementCategoryPanel (SceneElementCategory category)`  
*Constructor. Sets the category.*
- `void add (ElementIcon icon)`  
*Adds `ElementIcon` to the panel.*
- `override string ToString ()`  
*Gibt eine Zeichenfolgendarstellung für dieses Steuerelement zurück.*

## Properties

- `SceneElementCategory Category [get, set]`  
*Gets or sets the category.*
- `string CategoryName [get]`  
*Gets the name of the category.*

### 5.48.1 Detailed Description

Panel the scene element category. Is used to display multiple `ElementIcons` in a row.

Robin, 14.01.2014.

### 5.48.2 Constructor & Destructor Documentation

5.48.2.1 ARdevKit.View.SceneElementCategoryPanel.SceneElementCategoryPanel ( SceneElementCategory *category* )

Constructor. Sets the category.

Robin, 14.01.2014.

**Parameters**

|                 |  |
|-----------------|--|
| <i>category</i> | The category of the elements in the panel. |
|-----------------|--|

### 5.48.3 Member Function Documentation

#### 5.48.3.1 void ARdevKit.View.SceneElementCategoryPanel.add ( ElementIcon *icon* )

Adds [ElementIcon](#) to the panel.

Robin, 19.01.2014.

**Parameters**

|             |                  |
|-------------|------------------|
| <i>icon</i> | The icon to add. |
|-------------|------------------|

#### 5.48.3.2 override string ARdevKit.View.SceneElementCategoryPanel.ToString ( )

Gibt eine Zeichenfolgendarstellung für dieses Steuerelement zurück.

Robin, 19.01.2014.

**Returns**

Eine T:System.String-Darstellung des Steuerelements.

### 5.48.4 Property Documentation

#### 5.48.4.1 SceneElementCategory ARdevKit.View.SceneElementCategoryPanel.Category [get], [set]

Gets or sets the category.

The category.

#### 5.48.4.2 string ARdevKit.View.SceneElementCategoryPanel.CategoryName [get]

Gets the name of the category.

The name of the category.

## 5.49 ARdevKit.Model.Project.ScreenSize Class Reference

This class models the [ScreenSize](#).

Collaboration diagram for ARdevKit.Model.Project.ScreenSize:

| ARdevKit.Model.Project.ScreenSize |
|-----------------------------------|
| + Width                           |
| + Height                          |
| + SizeChanged                     |
| + ScreenSize()                    |

## Public Member Functions

- [ScreenSize \(\)](#)  
*Initializes a new instance of the ScreenSize class. default constructor.*

## Properties

- uint [Width](#) [get, set]  
*Gets or sets the width.*
- uint [Height](#) [get, set]  
*Gets or sets the height.*
- EventHandler [SizeChanged](#) [get, set]  
*Gets or sets the sizeChanged event handler.*

### 5.49.1 Detailed Description

This class models the ScreenSize.

geht 26.01.2014 20:15

### 5.49.2 Constructor & Destructor Documentation

#### 5.49.2.1 ARdevKit.Model.Project.ScreenSize.ScreenSize ( )

Initializes a new instance of the ScreenSize class. default constructor.

geht 26.01.2014 20:18

### 5.49.3 Property Documentation

#### 5.49.3.1 uint ARdevKit.Model.Project.ScreenSize.Height [get], [set]

Gets or sets the height.

The height.

geht 26.01.2014 20:16

**5.49.3.2 EventHandler ARdevKit.Model.Project.ScreenSize.SizeChanged [get], [set]**

Gets or sets the sizeChanged event handler.

The size changed.

geht 26.01.2014 20:16

**5.49.3.3 uint ARdevKit.Model.Project.ScreenSize.Width [get], [set]**

Gets or sets the width.

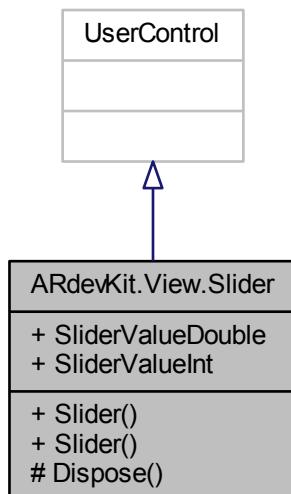
The width.

geht 26.01.2014 20:16

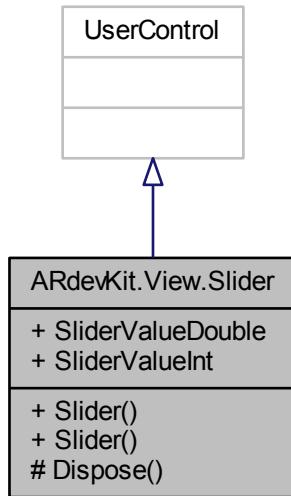
## 5.50 ARdevKit.View.Slider Class Reference

UserControl for an Trackbar/Slider. Currently not used (2.3.14)

Inheritance diagram for ARdevKit.View.Slider:



Collaboration diagram for ARdevKit.View.Slider:



## Public Member Functions

- [Slider](#) (int initialValue, int maxValue)  
*Init the SliderForm for an integer return value.*
- [Slider](#) (double initialValue)  
*Init the SliderForm for a double return value.*

## Protected Member Functions

- override void [Dispose](#) (bool disposing)  
*Verwendete Ressourcen bereinigen.*

## Properties

- double [SliderValueDouble](#) [get, set]  
*Get and set the sliderValueDouble*
- int [SliderValueInt](#) [get, set]  
*Get and set the sliderValueInt*

### 5.50.1 Detailed Description

UserControl for an Trackbar/Slider. Currently not used (2.3.14)

### 5.50.2 Constructor & Destructor Documentation

### 5.50.2.1 ARdevKit.View.Slider.Slider ( int *initValue*, int *maxValue* )

Init the SliderForm for an integer return value.

**Parameters**

|                  |                               |
|------------------|-------------------------------|
| <i>initValue</i> | Initial value                 |
| <i>maxValue</i>  | Maximum value of the trackbar |

**5.50.2.2 ARdevKit.View.Slider.Slider ( double *initValue* )**

Init the SliderForm for a double return value.

**Parameters**

|                  |               |
|------------------|---------------|
| <i>initValue</i> | Initial value |
|------------------|---------------|

**5.50.3 Member Function Documentation****5.50.3.1 override void ARdevKit.View.Slider.Dispose ( bool *disposing* ) [protected]**

Verwendete Ressourcen bereinigen.

**Parameters**

|                  |   |
|------------------|---|
| <i>disposing</i> | True, wenn verwaltete Ressourcen gelöscht werden sollen; andernfalls False. |
|------------------|---|

**5.50.4 Property Documentation****5.50.4.1 double ARdevKit.View.Slider.SliderValueDouble [get], [set]**

Get and set the sliderValueDouble

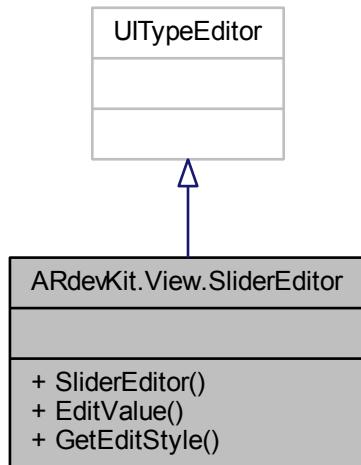
**5.50.4.2 int ARdevKit.View.Slider.SliderValueInt [get], [set]**

Get and set the sliderValueInt

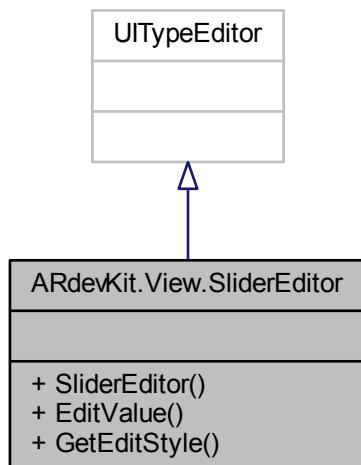
**5.51 ARdevKit.View.SliderEditor Class Reference**

Class which acts as "bridge" for the .net propertyGrid and an custome ControlForm.

Inheritance diagram for ARdevKit.View.SliderEditor:



Collaboration diagram for ARdevKit.View.SliderEditor:



## Public Member Functions

- [SliderEditor \(\)](#)  
*Initializes a new instance of the `SliderEditor` class.*
- [override object EditValue \(ITypeDescriptorContext context, IServiceProvider provider, object value\)](#)  
*Bearbeitet den Wert des angegebenen Objekts mit dem von der M:System.Drawing.Design.UITypeEditor.GetEditStyle-Methode angegebenen Editor-Stil.*

- override UITypeEditorEditStyle [GetEditStyle](#) (ITypeDescriptorContext context)  
*Ruft den Editor-Stil ab, der von der M:System.Drawing.Design.UITypeEditor.EditValue(System.IServiceProvider, System.Object)-Methode verwendet wird.*

### 5.51.1 Detailed Description

Class which acts as "bridge" for the .net propertyGrid and an custome ControlForm.

### 5.51.2 Constructor & Destructor Documentation

#### 5.51.2.1 ARdevKit.View.SliderEditor.SliderEditor ( )

Initializes a new instance of the [SliderEditor](#) class.

### 5.51.3 Member Function Documentation

#### 5.51.3.1 override object ARdevKit.View.SliderEditor.EditValue ( ITypeDescriptorContext context, IServiceProvider provider, object value )

Bearbeitet den Wert des angegebenen Objekts mit dem von der M:System.Drawing.Design.UITypeEditor.GetEditStyle-Methode angegebenen Editor-Stil.

##### Parameters

|                 |   |
|-----------------|---|
| <i>context</i>  | Eine T:System.ComponentModel.ITypeDescriptorContext-Schnittstelle, über die zusätzliche Kontextinformationen abgerufen werden können. |
| <i>provider</i> | Ein T:System.IServiceProvider, über den dieser Editor Dienste anfordern kann.   |
| <i>value</i>    | Das zu bearbeitende Objekt.   |

##### Returns

Der neue Wert des Objekts. Wenn sich der Wert des Objekts nicht geändert hat, wird hierbei dasselbe Objekt zurückgegeben, das zuvor übergeben wurde.

#### 5.51.3.2 override UITypeEditorEditStyle ARdevKit.View.SliderEditor.GetEditStyle ( ITypeDescriptorContext context )

Ruft den Editor-Stil ab, der von der M:System.Drawing.Design.UITypeEditor.EditValue(System.IServiceProvider, System.Object)-Methode verwendet wird.

##### Parameters

|                |   |
|----------------|---|
| <i>context</i> | Eine T:System.ComponentModel.ITypeDescriptorContext-Schnittstelle, über die zusätzliche Kontextinformationen abgerufen werden können. |
|----------------|---|

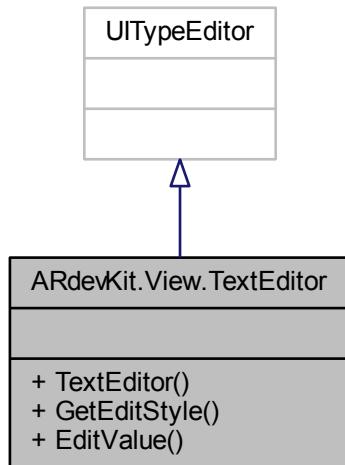
##### Returns

Ein T:System.Drawing.Design.UITypeEditorEditStyle-Wert, der den von der M:System.Drawing.Design.UITypeEditor.EditValue(System.IServiceProvider, System.Object)-Methode verwendeten Editor-Stil angibt. Wenn T:System.Drawing.Design.UITypeEditor diese Methode nicht unterstützt, gibt M:System.Drawing.Design.UITypeEditor.GetEditStyle den Wert F:System.Drawing.Design.UITypeEditorEditStyle.None zurück.

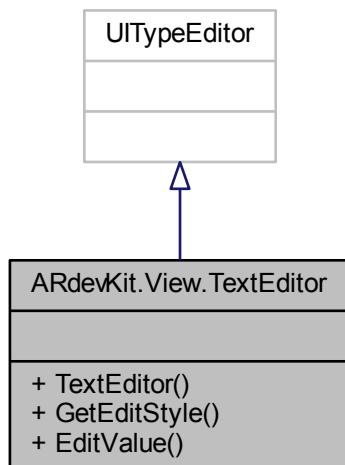
## 5.52 ARdevKit.View.TextEditor Class Reference

Class which acts as "bridge" for the .net propertyGrid and an custome Form.

Inheritance diagram for ARdevKit.View.TextEditor:



Collaboration diagram for ARdevKit.View.TextEditor:



## Public Member Functions

- [TextEditor \(\)](#)  
*Initializes a new instance of the `TextEditor` class.*
- [override UITypeEditorEditStyle GetEditStyle \(ITypeDescriptorContext context\)](#)  
*Ruft den Editor-Stil ab, der von der M:System.Drawing.Design.UITypeEditor.EditValue(System.IServiceProvider, System.Object)-Methode verwendet wird.*

- override object [EditValue](#) (ITypeDescriptorContext context, IServiceProvider provider, object value)  
*Bearbeitet den Wert des angegebenen Objekts mit dem von der M:System.Drawing.Design.UITypeEditor.GetEditStyle-Methode angegebenen Editor-Stil.*

### 5.52.1 Detailed Description

Class which acts as "bridge" for the .net propertyGrid and an custome Form.

### 5.52.2 Constructor & Destructor Documentation

#### 5.52.2.1 ARdevKit.View.TextEditor.TextEditor ( )

Initializes a new instance of the [TextEditor](#) class.

### 5.52.3 Member Function Documentation

#### 5.52.3.1 override object ARdevKit.View.TextEditor.EditValue ( ITypeDescriptorContext context, IServiceProvider provider, object value )

Bearbeitet den Wert des angegebenen Objekts mit dem von der M:System.Drawing.Design.UITypeEditor.GetEditStyle-Methode angegebenen Editor-Stil.

##### Parameters

|                 |   |
|-----------------|---|
| <i>context</i>  | Eine T:System.ComponentModel.ITypeDescriptorContext-Schnittstelle, über die zusätzliche Kontextinformationen abgerufen werden können. |
| <i>provider</i> | Ein T:System(IServiceProvider, über den dieser Editor Dienste anfordern kann.   |
| <i>value</i>    | Das zu bearbeitende Objekt.   |

##### Returns

Der neue Wert des Objekts. Wenn sich der Wert des Objekts nicht geändert hat, wird hierbei dasselbe Objekt zurückgegeben, das zuvor übergeben wurde.

#### 5.52.3.2 override UITypeEditorEditStyle ARdevKit.View.TextEditor.GetEditStyle ( ITypeDescriptorContext context )

Ruft den Editor-Stil ab, der von der M:System.Drawing.Design.UITypeEditor.EditValue(System.IServiceProvider,-System.Object)-Methode verwendet wird.

##### Parameters

|                |   |
|----------------|---|
| <i>context</i> | Eine T:System.ComponentModel.ITypeDescriptorContext-Schnittstelle, über die zusätzliche Kontextinformationen abgerufen werden können. |
|----------------|---|

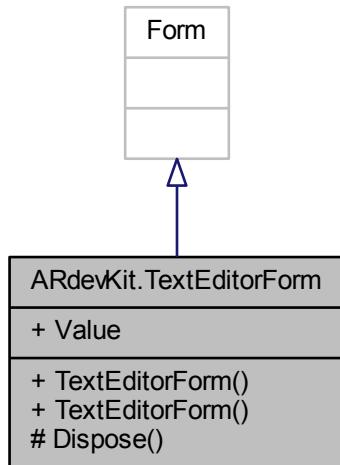
##### Returns

Ein T:System.Drawing.Design.UITypeEditorEditStyle-Wert, der den von der M:System.Drawing.Design.UITypeEditor.EditValue(System.IServiceProvider,System.Object)-Methode verwendeten Editor-Stil angibt. Wenn T:System.Drawing.Design.UITypeEditor diese Methode nicht unterstützt, gibt M:System.Drawing.Design.UITypeEditor.GetEditStyle den Wert F:System.Drawing.Design.UITypeEditorEditStyle.None zurück.

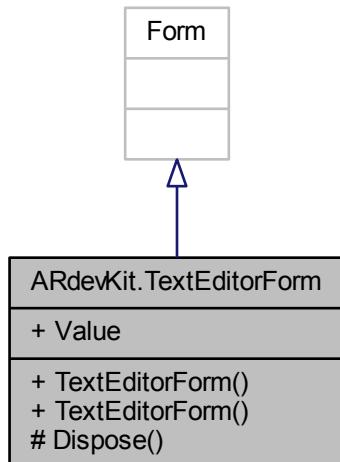
## 5.53 ARdevKit.TextEditorForm Class Reference

Form-Class for the TextEditor.

Inheritance diagram for ARdevKit.TextEditorForm:



Collaboration diagram for ARdevKit.TextEditorForm:



## Public Member Functions

- [TextEditorForm \(\)](#)  
*Initializes a new instance of the `TextEditorForm` class.*
- [TextEditorForm \(string filePath\)](#)  
*Initializes a new instance of the `TextEditorForm` class.*

## Protected Member Functions

- override void [Dispose](#) (bool disposing)

*Clean up any resources being used.*

## Properties

- string[] [Value](#) [get, set]

*Gets or sets the value.*

### 5.53.1 Detailed Description

Form-Class for the TextEditor.

### 5.53.2 Constructor & Destructor Documentation

#### 5.53.2.1 ARdevKit.TextEditorForm.TextEditorForm ( )

Initializes a new instance of the [TextEditorForm](#) class.

#### 5.53.2.2 ARdevKit.TextEditorForm.TextEditorForm ( string filePath )

Initializes a new instance of the [TextEditorForm](#) class.

##### Parameters

|                 |                |
|-----------------|----------------|
| <i>filePath</i> | The file path. |
|-----------------|----------------|

### 5.53.3 Member Function Documentation

#### 5.53.3.1 override void ARdevKit.TextEditorForm.Dispose ( bool disposing ) [protected]

Clean up any resources being used.

##### Parameters

|                  |   |
|------------------|---|
| <i>disposing</i> | true if managed resources should be disposed; otherwise, false. |
|------------------|---|

### 5.53.4 Property Documentation

#### 5.53.4.1 string [] ARdevKit.TextEditorForm.Value [get], [set]

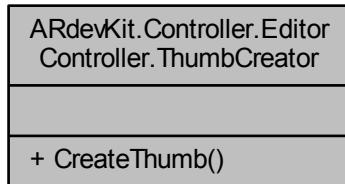
Gets or sets the value.

The value.

## 5.54 ARdevKit.Controller.EditorController.ThumbCreator Class Reference

Utility class to create a thumbnail from video files. Uses AForge library.

Collaboration diagram for ARdevKit.Controller.EditorController.ThumbCreator:



## Static Public Member Functions

- static Bitmap [CreateThumb](#) (string videoFilename)

*Creates the thumb.*

### 5.54.1 Detailed Description

Utility class to create a thumbnail from video files. Uses AForge library.

### 5.54.2 Member Function Documentation

#### 5.54.2.1 static Bitmap ARdevKit.Controller.EditorController.ThumbCreator.CreateThumb ( string videoFilename ) [static]

Creates the thumb.

##### Parameters

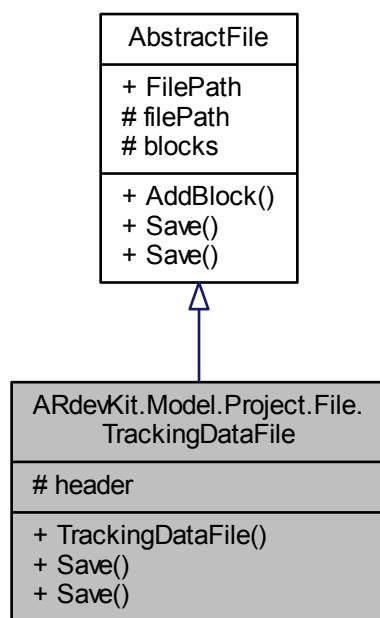
|               |                     |
|---------------|---------------------|
| videoFilename | The video filename. |
|---------------|---------------------|

Returns

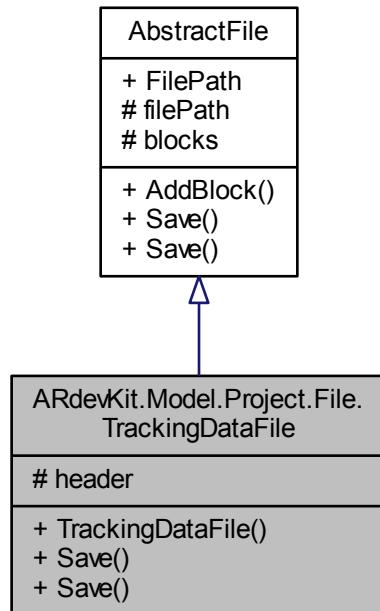
## 5.55 ARdevKit.Model.Project.File.TrackingDataFile Class Reference

A trackingData\_[SensorType][SensorSubType].xml.

Inheritance diagram for ARdevKit.Model.Project.File.TrackingDataFile:



Collaboration diagram for ARdevKit.Model.Project.File.TrackingDataFile:



## Public Member Functions

- `TrackingDataFile` (string `header`, string `projectPath`, string `fileName`)  
*Constructor.*
- `override void Save ()`  
*Saves the file to its `filePath`.*
- `override void Save (string projectPath)`  
*Saves the file to the using the passed `projectPath`.*

## Protected Attributes

- string `header`

*The `header`.*

## Additional Inherited Members

### 5.55.1 Detailed Description

A `trackingData_[SensorType][SensorSubType].xml`.

Immanuel, 17.01.2014.

## 5.55.2 Constructor & Destructor Documentation

5.55.2.1 ARdevKit.Model.Project.File.TrackingDataFile ( string *header*, string *projectPath*, string *fileName* )

Constructor.

Immanuel, 17.01.2014.

### Parameters

|                    |                                    |
|--------------------|------------------------------------|
| <i>header</i>      | The header.                        |
| <i>projectPath</i> | Full pathname of the project file. |
| <i>fileName</i>    | Filename of the file.              |

## 5.55.3 Member Function Documentation

5.55.3.1 override void ARdevKit.Model.Project.File.TrackingDataFile.Save ( ) [virtual]

Saves the file to its [filePath](#).

Immanuel, 17.01.2014.

Implements [ARdevKit.Model.Project.File.AbstractFile](#).

5.55.3.2 override void ARdevKit.Model.Project.File.TrackingDataFile.Save ( string *projectPath* ) [virtual]

Saves the file to the using the passed projectPath.

Immanuel, 17.01.2014.

### Parameters

|                    |                            |
|--------------------|----------------------------|
| <i>projectPath</i> | The project path to write. |
|--------------------|----------------------------|

Implements [ARdevKit.Model.Project.File.AbstractFile](#).

## 5.55.4 Member Data Documentation

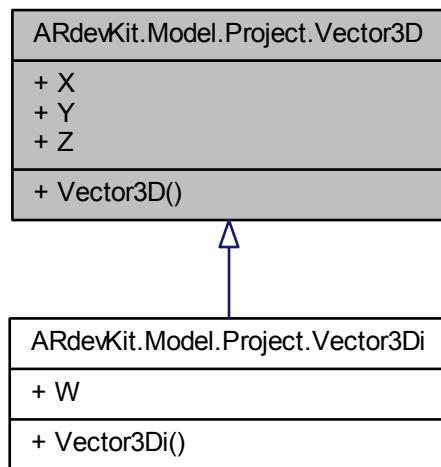
5.55.4.1 string ARdevKit.Model.Project.File.TrackingDataFile.header [protected]

The header.

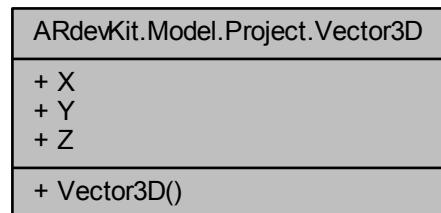
## 5.56 ARdevKit.Model.Project.Vector3D Class Reference

A 3D vektor.

Inheritance diagram for ARdevKit.Model.Project.Vector3D:



Collaboration diagram for ARdevKit.Model.Project.Vector3D:



## Public Member Functions

- `Vector3D` (double x, double y, double z)  
*Constructor.*

## Properties

- `double X [get, set]`  
*Gets or sets the x.*
- `double Y [get, set]`  
*Gets or sets the y.*
- `double Z [get, set]`  
*Gets or sets the z.*

### 5.56.1 Detailed Description

A 3D vektor.

### 5.56.2 Constructor & Destructor Documentation

#### 5.56.2.1 ARdevKit.Model.Project.Vector3D.Vector3D ( double x, double y, double z )

Constructor.

##### Parameters

|   |                   |
|---|-------------------|
| x | The x coordinate. |
| y | The y coordinate. |
| z | The z coordinate. |

Lizard, 1/15/2014.

### 5.56.3 Property Documentation

#### 5.56.3.1 double ARdevKit.Model.Project.Vector3D.X [get], [set]

Gets or sets the x.

The x.

#### 5.56.3.2 double ARdevKit.Model.Project.Vector3D.Y [get], [set]

Gets or sets the y.

The y.

#### 5.56.3.3 double ARdevKit.Model.Project.Vector3D.Z [get], [set]

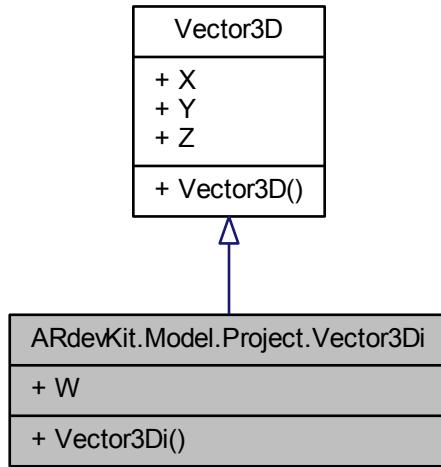
Gets or sets the z.

The z.

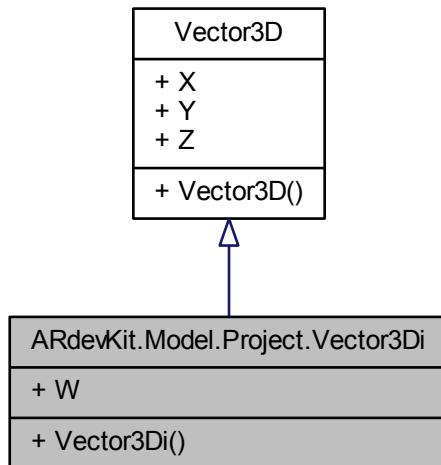
## 5.57 ARdevKit.Model.Project.Vector3Di Class Reference

A vector 3 di. Is a [Vector3D](#) with an extra int variable.

Inheritance diagram for ARdevKit.Model.Project.Vector3Di:



Collaboration diagram for ARdevKit.Model.Project.Vector3Di:



## Public Member Functions

- [Vector3Di](#) (int x, int y, int z, int w)

*Constructor.*

## Properties

- int [W](#) [get, set]

*Gets or sets the w.*

### 5.57.1 Detailed Description

A vector 3 di. Is a [Vector3D](#) with an extra int variable.

### 5.57.2 Constructor & Destructor Documentation

#### 5.57.2.1 ARdevKit.Model.Project.Vector3Di.Vector3Di ( int x, int y, int z, int w )

Constructor.

##### Parameters

|   |                                       |
|---|---------------------------------------|
| x | The x coordinate.                     |
| y | The y coordinate.                     |
| z | The z coordinate.                     |
| w | Used by TrackingConfig from metaioSDK |

### 5.57.3 Property Documentation

#### 5.57.3.1 int ARdevKit.Model.Project.Vector3Di.W [get], [set]

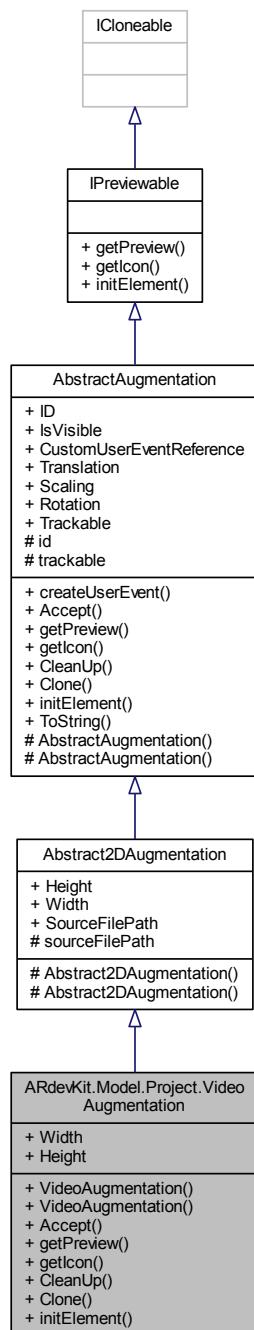
Gets or sets the w.

The w.

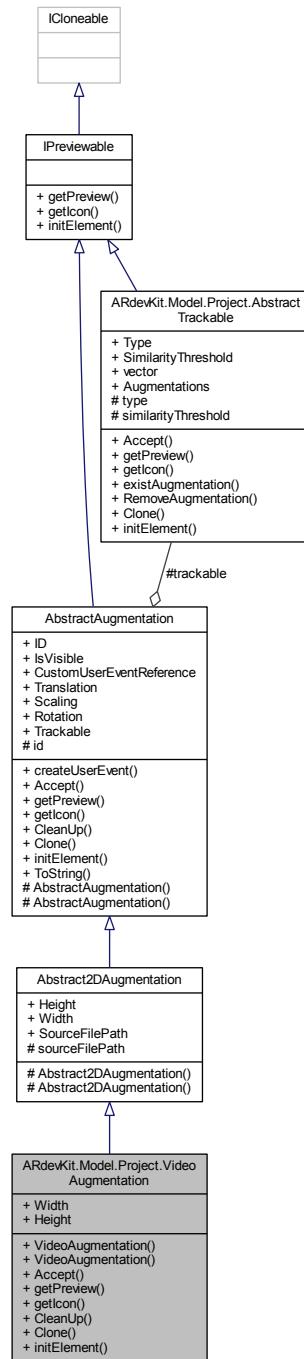
## 5.58 ARdevKit.Model.Project.VideoAugmentation Class Reference

A [VideoAugmentation](#) is an [Abstract2DAugmentation](#) that contains a video file.

Inheritance diagram for ARdevKit.Model.Project.VideoAugmentation:



Collaboration diagram for ARdevKit.Model.Project.VideoAugmentation:



## Public Member Functions

- [VideoAugmentation \(\)](#)  
*Default constructor.*
- [VideoAugmentation \(string videoPath\)](#)  
*Initializes a new instance of the [ImageAugmentation](#) class.*
- [override void Accept \(AbstractProjectVisitor visitor\)](#)

*An overwriting method, to accept a AbstractProjectVisitor which must be implemented according to the visitor design pattern.*

- **override Bitmap getPreview ()**  
*returns a Bitmap in order to be displayed on the PreviewPanel, implements IPreviewable*
- **override Bitmap getIcon ()**  
*returns a Bitmap in order to be displayed on the ElementSelectionPanel, implements IPreviewable*
- **override void CleanUp ()**  
*Clean up (remove created/copied files and directories).*
- **override object Clone ()**  
*Makes a deep copy of this object.*
- **override bool initElement (EditorWindow ew)**  
*This method is called by the previewController when a new instance of the element is added to the Scene. It sets "must-have" properties.*

## Properties

- **new int Width [get, set]**  
*Gets or sets the width.*
- **new int Height [get, set]**  
*Gets or sets the height.*

## Additional Inherited Members

### 5.58.1 Detailed Description

A [VideoAugmentation](#) is an [Abstract2DAugmentation](#) that contains a video file.

### 5.58.2 Constructor & Destructor Documentation

#### 5.58.2.1 ARdevKit.Model.Project.VideoAugmentation.VideoAugmentation ( )

Default constructor.

#### 5.58.2.2 ARdevKit.Model.Project.VideoAugmentation.VideoAugmentation ( string videoPath )

Initializes a new instance of the [ImageAugmentation](#) class.

##### Parameters

|                        |                 |
|------------------------|-----------------|
| <code>videoPath</code> | The video path. |
|------------------------|-----------------|

### 5.58.3 Member Function Documentation

#### 5.58.3.1 override void ARdevKit.Model.Project.VideoAugmentation.Accept ( AbstractProjectVisitor visitor ) [virtual]

An overwriting method, to accept a AbstractProjectVisitor which must be implemented according to the visitor design pattern.

**Parameters**

|                |  |
|----------------|--|
| <i>visitor</i> | the visitor which encapsulates the action which is performed on this element |
|----------------|--|

Reimplemented from [ARdevKit.Model.Project.AbstractAugmentation](#).

**5.58.3.2 override void ARdevKit.Model.Project.VideoAugmentation.CleanUp( ) [virtual]**

Clean up (remove created/copied files and directories).

Immanuel, 31.01.2014.

Implements [ARdevKit.Model.Project.AbstractAugmentation](#).

**5.58.3.3 override object ARdevKit.Model.Project.VideoAugmentation.Clone( ) [virtual]**

Makes a deep copy of this object.

Robin, 22.01.2014.

**Returns**

A copy of this object.

Implements [ARdevKit.Model.Project.AbstractAugmentation](#).

**5.58.3.4 override Bitmap ARdevKit.Model.Project.VideoAugmentation.getIcon( ) [virtual]**

returns a Bitmap in order to be displayed on the ElementSelectionPanel, implements [IPreviewable](#)

**Returns**

a representative iconized Bitmap

**Exceptions**

|                              |                     |
|------------------------------|---------------------|
| <i>FileNotFoundException</i> | If ImagePath is bad |
|------------------------------|---------------------|

Implements [ARdevKit.Model.Project.AbstractAugmentation](#).

**5.58.3.5 override Bitmap ARdevKit.Model.Project.VideoAugmentation.getPreview( ) [virtual]**

returns a Bitmap in order to be displayed on the PreviewPanel, implements [IPreviewable](#)

**Returns**

a representative Bitmap

**Exceptions**

|                              |   |
|------------------------------|---|
| <i>FileNotFoundException</i> | Thrown when the requested <a href="#">File</a> is not found in ImagePath. |
|------------------------------|---|

Implements [ARdevKit.Model.Project.AbstractAugmentation](#).

**5.58.3.6 override bool ARdevKit.Model.Project.VideoAugmentation.initElement( EditorWindow ew ) [virtual]**

This method is called by the previewController when a new instance of the element is added to the Scene. It sets "must-have" properties.

**Parameters**

|           |         |
|-----------|---------|
| <i>ew</i> | The ew. |
|-----------|---------|

**Returns**

true if it succeeds, false if it fails.

Reimplemented from [ARdevKit.Model.Project.AbstractAugmentation](#).

#### 5.58.4 Property Documentation

##### 5.58.4.1 new int ARdevKit.Model.Project.VideoAugmentation.Height [get], [set]

Gets or sets the height.

The height, in mm.

##### 5.58.4.2 new int ARdevKit.Model.Project.VideoAugmentation.Width [get], [set]

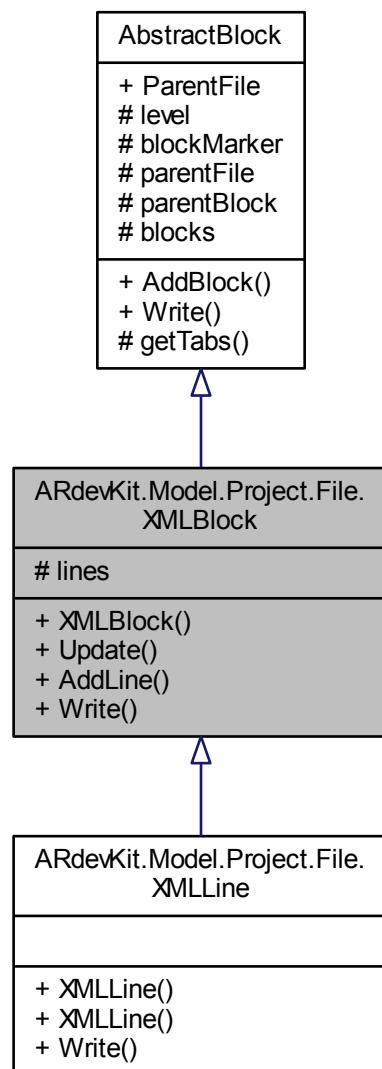
Gets or sets the width.

The width, in mm.

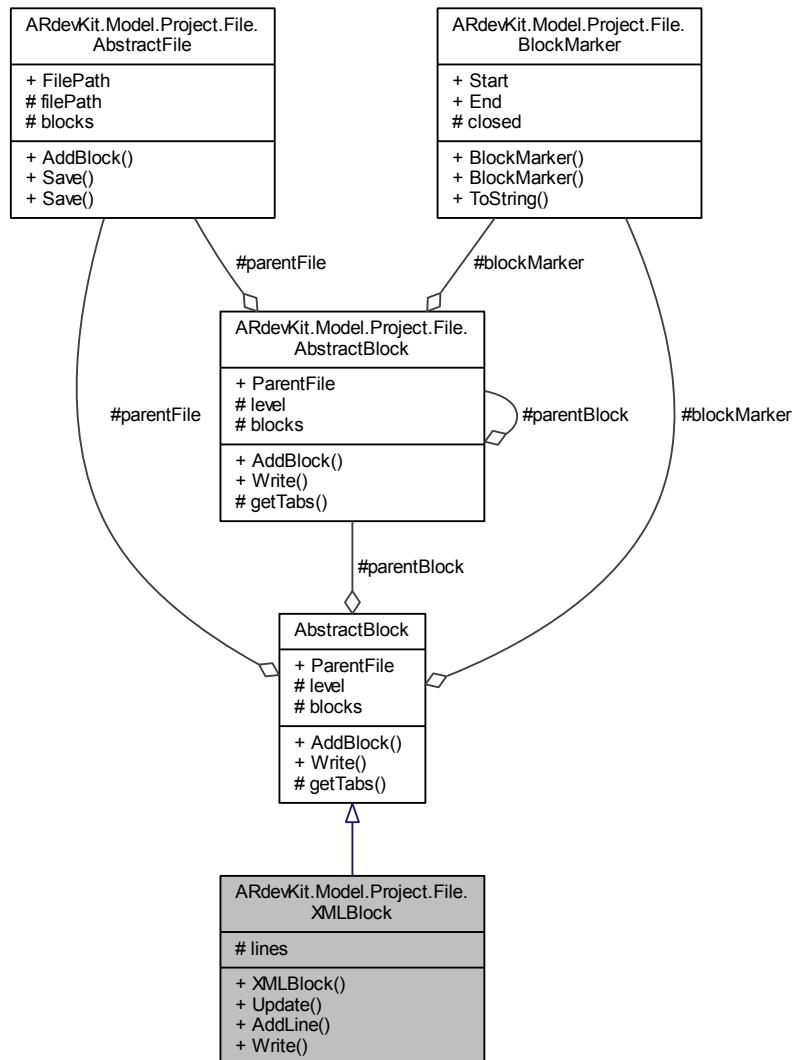
### 5.59 ARdevKit.Model.Project.File.XMLBlock Class Reference

A [XMLBlock](#) is an [AbstractBlock](#) which can have [XMLTags](#).

Inheritance diagram for ARdevKit.Model.Project.File.XMLBlock:



Collaboration diagram for ARdevKit.Model.Project.File.XMLBlock:



## Public Member Functions

- **XMLBlock (XMLTag tag)**  
*Constructor.*
- **void Update (XMLTag tag)**  
*Updates the BlockMarker.*
- **void AddLine (XMLLine line)**  
*Adds a line.*
- **override void Write (System.IO.StreamWriter writer)**  
*Writes the given writer.*

## Protected Attributes

- **List< XMLLine > lines**

*The lines.*

## Additional Inherited Members

### 5.59.1 Detailed Description

A [XMLBlock](#) is an [AbstractBlock](#) which can have [XMLTags](#).

Immanuel, 15.01.2014.

### 5.59.2 Constructor & Destructor Documentation

#### 5.59.2.1 ARdevKit.Model.Project.File.XMLBlock.XMLBlock ( [XMLTag tag](#) )

Constructor.

Immanuel, 17.01.2014.

##### Parameters

|                     |          |
|---------------------|----------|
| <a href="#">tag</a> | The tag. |
|---------------------|----------|

### 5.59.3 Member Function Documentation

#### 5.59.3.1 void ARdevKit.Model.Project.File.XMLBlock.AddLine ( [XMLLine line](#) )

Adds a line.

Immanuel, 15.01.2014.

##### Parameters

|                      |          |
|----------------------|----------|
| <a href="#">line</a> | The cln. |
|----------------------|----------|

#### 5.59.3.2 void ARdevKit.Model.Project.File.XMLBlock.Update ( [XMLTag tag](#) )

Updates the [BlockMarker](#).

Immanuel, 17.01.2014.

##### Parameters

|                     |          |
|---------------------|----------|
| <a href="#">tag</a> | The tag. |
|---------------------|----------|

#### 5.59.3.3 override void ARdevKit.Model.Project.File.XMLBlock.Write ( [System.IO.StreamWriter writer](#) ) [virtual]

Writes the given writer.

Immanuel, 17.01.2014.

##### Parameters

|                        |                      |
|------------------------|----------------------|
| <a href="#">writer</a> | The writer to write. |
|------------------------|----------------------|

Reimplemented from [ARdevKit.Model.Project.File.AbstractBlock](#).

Reimplemented in [ARdevKit.Model.Project.File.XMLLine](#).

#### 5.59.4 Member Data Documentation

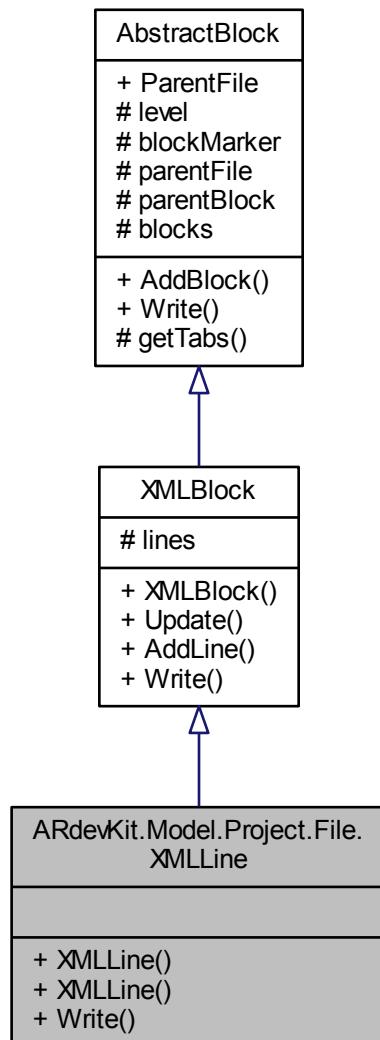
5.59.4.1 List<XMLLine> ARdevKit.Model.Project.File.XMLBlock.lines [protected]

The lines.

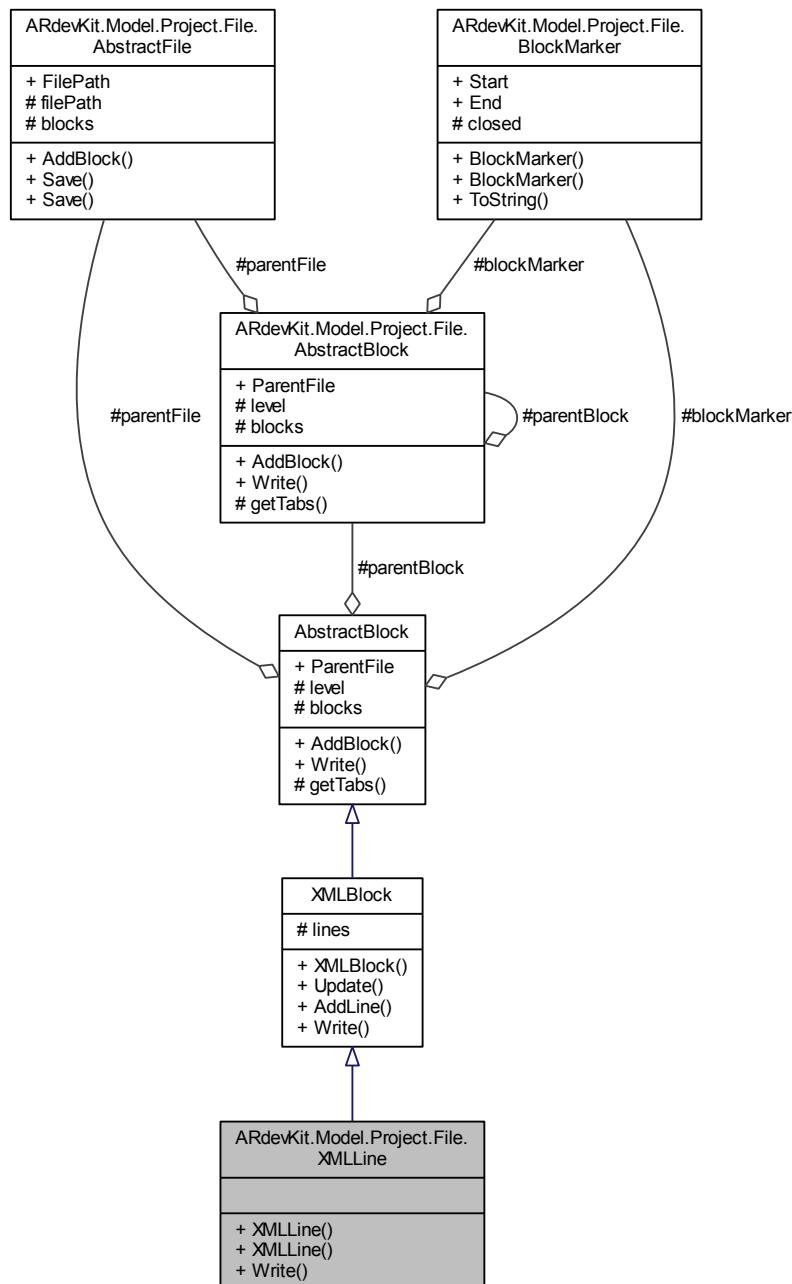
### 5.60 ARdevKit.Model.Project.File.XMLLine Class Reference

A line is a [XMLBlock](#) which can have a value or not.

Inheritance diagram for ARdevKit.Model.Project.File.XMLLine:



Collaboration diagram for ARdevKit.Model.Project.File.XMLLine:



## Public Member Functions

- [XMLLine \(XMLTag tag\)](#)  
*Constructor.*
- [XMLLine \(XMLTag tag, string value\)](#)  
*Constructor.*
- [override void Write \(System.IO.StreamWriter writer\)](#)  
*Writes itself the given writer.*

## Additional Inherited Members

### 5.60.1 Detailed Description

A line is a [XMLBlock](#) which can have a value or not.

Immanuel, 15.01.2014.

### 5.60.2 Constructor & Destructor Documentation

#### 5.60.2.1 ARdevKit.Model.Project.File.XMLLine.XMLLine ( [XMLTag tag](#) )

Constructor.

Immanuel, 15.01.2014.

##### Parameters

|                  |          |
|------------------|----------|
| <code>tag</code> | The tag. |
|------------------|----------|

#### 5.60.2.2 ARdevKit.Model.Project.File.XMLLine.XMLLine ( [XMLTag tag](#), [string value](#) )

Constructor.

Immanuel, 15.01.2014.

##### Parameters

|                    |            |
|--------------------|------------|
| <code>tag</code>   | The tag.   |
| <code>value</code> | The value. |

### 5.60.3 Member Function Documentation

#### 5.60.3.1 override void ARdevKit.Model.Project.File.XMLLine.Write ( [System.IO.StreamWriter writer](#) ) [virtual]

Writes itself the given writer.

Immanuel, 15.01.2014.

##### Parameters

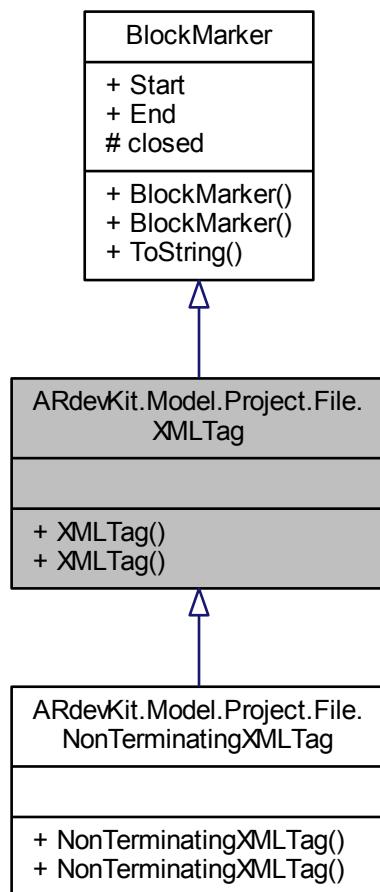
|                     |                      |
|---------------------|----------------------|
| <code>writer</code> | The writer to write. |
|---------------------|----------------------|

Reimplemented from [ARdevKit.Model.Project.File.XMLBlock](#).

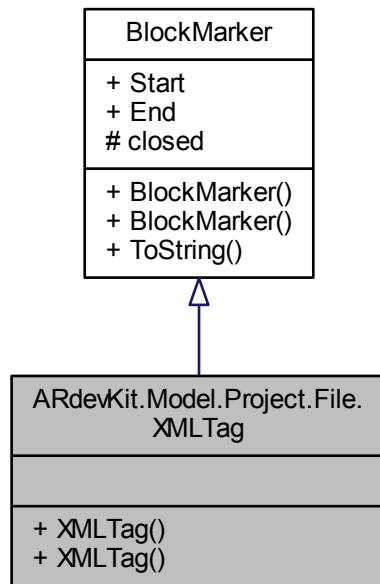
## 5.61 ARdevKit.Model.Project.File.XMLTag Class Reference

A [XMLTag](#) is a [BlockMarker](#).

Inheritance diagram for ARdevKit.Model.Project.File.XMLTag:



Collaboration diagram for ARdevKit.Model.Project.File.XMLTag:



## Public Member Functions

- `XMLTag` (string text)  
*Constructor.*
- `XMLTag` (string text, string extension)  
*Constructor.*

## Additional Inherited Members

### 5.61.1 Detailed Description

A `XMLTag` is a `BlockMarker`.

Immanuel, 15.01.2014.

### 5.61.2 Constructor & Destructor Documentation

#### 5.61.2.1 ARdevKit.Model.Project.File.XMLTag.XMLTag ( string text )

*Constructor.*

Immanuel, 15.01.2014.

**Parameters**

|             |   |
|-------------|---|
| <i>text</i> | The text within the brackets (<text></text>). |
|-------------|---|

**5.61.2.2 ARdevKit.Model.Project.File.XMLTag.XMLTag ( string *text*, string *extension* )**

Constructor.

Immanuel, 15.01.2014.

**Parameters**

|                  |                |
|------------------|----------------|
| <i>text</i>      | The text.      |
| <i>extension</i> | The extension. |