

My Project

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Chapter 1

Hierarchical Index

1.1 Class Hierarchy

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

| | |
|--|----|
| Interface | 13 |
| Message | |
| vss_command::Global_Commands | 9 |
| vss_command::Robot_Command | 20 |
| vss_state::Ball_State | 5 |
| vss_state::Global_State | 11 |
| vss_state::RGB | 18 |
| vss_state::Robot_State | 22 |
| QLabel | |
| QCustomLabel | 17 |
| QMainWindow | |
| MainWindow | 14 |
| QThread | |
| calibration | 7 |
| vision | 25 |
| SQLite | 23 |
| vss_command::StaticDescriptorInitializer_command_2eproto | 24 |
| vss_state::StaticDescriptorInitializer_state_2eproto | 24 |

Chapter 2

Class Index

2.1 Class List

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

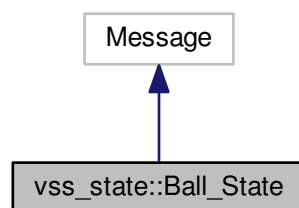
| | |
|---|----|
| vss_state::Ball_State | 5 |
| calibration | 7 |
| vss_command::Global_Commands | 9 |
| vss_state::Global_State | 11 |
| Interface | |
| This class is responsible for handle the communicatio between VSS-Vision, VSS-Simulator, V↔ | |
| SS-Viewer and VSS-SampleStratey | 13 |
| MainWindow | 14 |
| QCustomLabel | 17 |
| vss_state::RGB | 18 |
| vss_command::Robot_Command | 20 |
| vss_state::Robot_State | 22 |
| SQLite | 23 |
| vss_command::StaticDescriptorInitializer_command_2eprot | 24 |
| vss_state::StaticDescriptorInitializer_state_2eprot | 24 |
| vision | 25 |

Chapter 3

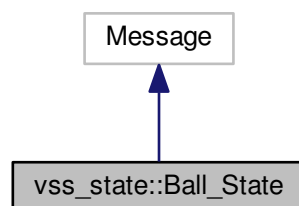
Class Documentation

3.1 vss_state::Ball_State Class Reference

Inheritance diagram for vss_state::Ball_State:



Collaboration diagram for vss_state::Ball_State:



Public Member Functions

- **Ball_State** (const [Ball_State](#) &from)
- [Ball_State](#) & **operator=** (const [Ball_State](#) &from)
- const ::google::protobuf::UnknownFieldSet & **unknown_fields** () const
- inline::google::protobuf::UnknownFieldSet * **mutable_unknown_fields** ()
- void **Swap** ([Ball_State](#) *other)
- [Ball_State](#) * **New** () const
- void **CopyFrom** (const ::google::protobuf::Message &from)
- void **MergeFrom** (const ::google::protobuf::Message &from)
- void **CopyFrom** (const [Ball_State](#) &from)
- void **MergeFrom** (const [Ball_State](#) &from)
- void **Clear** ()
- bool **IsInitialized** () const
- int **ByteSize** () const
- bool **MergePartialFromCodedStream** (::google::protobuf::io::CodedInputStream *input)
- void **SerializeWithCachedSizes** (::google::protobuf::io::CodedOutputStream *output) const
- ::google::protobuf::uint8 * **SerializeWithCachedSizesToArray** (::google::protobuf::uint8 *output) const
- int **GetCachedSize** () const
- ::google::protobuf::Metadata **GetMetadata** () const
- bool **has_x** () const
- void **clear_x** ()
- float **x** () const
- void **set_x** (float value)
- bool **has_y** () const
- void **clear_y** ()
- float **y** () const
- void **set_y** (float value)

Static Public Member Functions

- static const ::google::protobuf::Descriptor * **descriptor** ()
- static const [Ball_State](#) & **default_instance** ()

Static Public Attributes

- static const int **kXFieldNumber** = 1
- static const int **kYFieldNumber** = 2

Friends

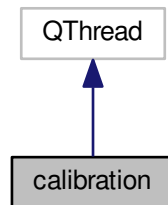
- void **protobuf_AddDesc_state_2eproto** ()
- void **protobuf_AssignDesc_state_2eproto** ()
- void **protobuf_ShutdownFile_state_2eproto** ()

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

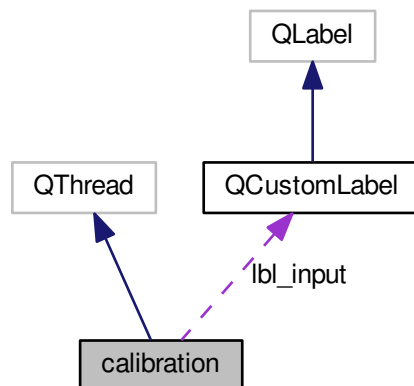
- /home/johnathan/Repositories/SIRLab/VSS-Vision/src/protos/state.pb.h
- /home/johnathan/Repositories/SIRLab/VSS-Vision/src/protos/state.pb.cc

3.2 calibration Class Reference

Inheritance diagram for calibration:



Collaboration diagram for calibration:



Public Member Functions

- void **run** ()
- void **finish** ()
- void **applyFilters** ()
- void **zoom** ()
- void **paint_output** ()
- void **set_device** (int)
- void **set_id_camera** (int)
- void **set_path_image** (string)
- void **set_path_video** (string)
- void **set_vision_reception** (bool)
- void **set_id_color** (int)

- void **set_mouse_click_left** (int)
- void **set_mouse_click_right** (int)
- int **get_device** ()
- int **get_id_camera** ()
- string **get_path_image** ()
- bool **get_vision_reception** ()
- int **get_id_color** ()
- int **get_mouse_click_left** ()
- int **get_mouse_click_right** ()
- void **alloc_label_input** ([QCustomLabel](#) *)
- void **alloc_calibration** (Calibration *)

Protected Attributes

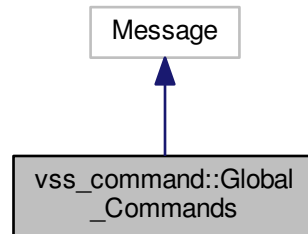
- bool **run_it**
- int **device_used**
- bool **vision_reception**
- bool **start_finish**
- int **id_camera**
- string **path_image**
- string **path_video**
- int **mouse_click_left**
- int **mouse_click_right**
- int **id_calib**
- Point **zoom_blob**
- Mat **in**
- Mat **out**
- Mat **saved**
- Mat **raw_in**
- Mat **raw_out**
- Mat **storage**
- Point **size**
- VideoCapture **cap**
- vector< vector< Point > > **labels**
- vector< vector< Point > > **contours**
- vector< Vec4i > **hierarchy**
- QImage **img**
- [QCustomLabel](#) * **lbl_input**
- Calibration * **_calib**
- TableColor **table_color**

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

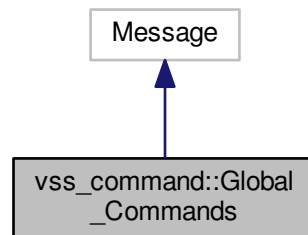
- /home/johnathan/Repositories/SIRLab/VSS-Vision/src/calibration.h
- /home/johnathan/Repositories/SIRLab/VSS-Vision/src/calibration.cpp

3.3 vss_command::Global_Commands Class Reference

Inheritance diagram for vss_command::Global_Commands:



Collaboration diagram for vss_command::Global_Commands:



Public Member Functions

- **Global_Commands** (const [Global_Commands](#) &from)
- [Global_Commands](#) & **operator=** (const [Global_Commands](#) &from)
- const ::google::protobuf::UnknownFieldSet & **unknown_fields** () const
- inline::google::protobuf::UnknownFieldSet * **mutable_unknown_fields** ()
- void **Swap** ([Global_Commands](#) *other)
- [Global_Commands](#) * **New** () const
- void **CopyFrom** (const ::google::protobuf::Message &from)
- void **MergeFrom** (const ::google::protobuf::Message &from)
- void **CopyFrom** (const [Global_Commands](#) &from)
- void **MergeFrom** (const [Global_Commands](#) &from)
- void **Clear** ()
- bool **IsInitialized** () const
- int **ByteSize** () const
- bool **MergePartialFromCodedStream** (::google::protobuf::io::CodedInputStream *input)

- void **SerializeWithCachedSizes** (::google::protobuf::io::CodedOutputStream *output) const
- ::google::protobuf::uint8 * **SerializeWithCachedSizesToArray** (::google::protobuf::uint8 *output) const
- int **GetCachedSize** () const
- ::google::protobuf::Metadata **GetMetadata** () const
- bool **has_id** () const
- void **clear_id** ()
- inline::google::protobuf::uint32 **id** () const
- void **set_id** (::google::protobuf::uint32 value)
- bool **has_is_team_yellow** () const
- void **clear_is_team_yellow** ()
- bool **is_team_yellow** () const
- void **set_is_team_yellow** (bool value)
- int **robot_commands_size** () const
- void **clear_robot_commands** ()
- const ::vss_command::Robot_Command & **robot_commands** (int index) const
- inline::vss_command::Robot_Command * **mutable_robot_commands** (int index)
- inline::vss_command::Robot_Command * **add_robot_commands** ()
- const ::google::protobuf::RepeatedPtrField< ::vss_command::Robot_Command > & **robot_commands** () const
- inline::google::protobuf::RepeatedPtrField< ::vss_command::Robot_Command > * **mutable_robot_commands** ()

Static Public Member Functions

- static const ::google::protobuf::Descriptor * **descriptor** ()
- static const [Global_Commands](#) & **default_instance** ()

Static Public Attributes

- static const int **kIdFieldNumber** = 1
- static const int **kIsTeamYellowFieldNumber** = 2
- static const int **kRobotCommandsFieldNumber** = 3

Friends

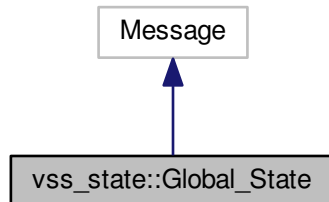
- void **protobuf_AddDesc_command_2proto** ()
- void **protobuf_AssignDesc_command_2proto** ()
- void **protobuf_ShutdownFile_command_2proto** ()

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

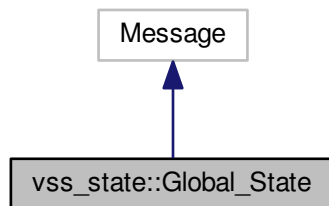
- /home/johnathan/Repositories/SIRLab/VSS-Vision/src/protos/command.pb.h
- /home/johnathan/Repositories/SIRLab/VSS-Vision/src/protos/command.pb.cc

3.4 vss_state::Global_State Class Reference

Inheritance diagram for vss_state::Global_State:



Collaboration diagram for vss_state::Global_State:



Public Member Functions

- **Global_State** (const [Global_State](#) &from)
- [Global_State](#) & **operator=** (const [Global_State](#) &from)
- const ::google::protobuf::UnknownFieldSet & **unknown_fields** () const
- inline::google::protobuf::UnknownFieldSet * **mutable_unknown_fields** ()
- void **Swap** ([Global_State](#) *other)
- [Global_State](#) * **New** () const
- void **CopyFrom** (const ::google::protobuf::Message &from)
- void **MergeFrom** (const ::google::protobuf::Message &from)
- void **CopyFrom** (const [Global_State](#) &from)
- void **MergeFrom** (const [Global_State](#) &from)
- void **Clear** ()
- bool **IsInitialized** () const
- int **ByteSize** () const
- bool **MergePartialFromCodedStream** (::google::protobuf::io::CodedInputStream *input)
- void **SerializeWithCachedSizes** (::google::protobuf::io::CodedOutputStream *output) const
- ::google::protobuf::uint8 * **SerializeWithCachedSizesToArray** (::google::protobuf::uint8 *output) const

- int **GetCachedSize** () const
- ::google::protobuf::Metadata **GetMetadata** () const
- bool **has_id** () const
- void **clear_id** ()
- inline::google::protobuf::uint32 **id** () const
- void **set_id** (::google::protobuf::uint32 value)
- bool **has_origin** () const
- void **clear_origin** ()
- bool **origin** () const
- void **set_origin** (bool value)
- int **balls_size** () const
- void **clear_balls** ()
- const ::vss_state::Ball_State & **balls** (int index) const
- inline::vss_state::Ball_State * **mutable_balls** (int index)
- inline::vss_state::Ball_State * **add_balls** ()
- const ::google::protobuf::RepeatedPtrField< ::vss_state::Ball_State > & **balls** () const
- inline::google::protobuf::RepeatedPtrField< ::vss_state::Ball_State > * **mutable_balls** ()
- int **robots_yellow_size** () const
- void **clear_robots_yellow** ()
- const ::vss_state::Robot_State & **robots_yellow** (int index) const
- inline::vss_state::Robot_State * **mutable_robots_yellow** (int index)
- inline::vss_state::Robot_State * **add_robots_yellow** ()
- const ::google::protobuf::RepeatedPtrField< ::vss_state::Robot_State > & **robots_yellow** () const
- inline::google::protobuf::RepeatedPtrField< ::vss_state::Robot_State > * **mutable_robots_yellow** ()
- int **robots_blue_size** () const
- void **clear_robots_blue** ()
- const ::vss_state::Robot_State & **robots_blue** (int index) const
- inline::vss_state::Robot_State * **mutable_robots_blue** (int index)
- inline::vss_state::Robot_State * **add_robots_blue** ()
- const ::google::protobuf::RepeatedPtrField< ::vss_state::Robot_State > & **robots_blue** () const
- inline::google::protobuf::RepeatedPtrField< ::vss_state::Robot_State > * **mutable_robots_blue** ()

Static Public Member Functions

- static const ::google::protobuf::Descriptor * **descriptor** ()
- static const [Global_State](#) & **default_instance** ()

Static Public Attributes

- static const int **kIdFieldNumber** = 1
- static const int **kOriginFieldNumber** = 2
- static const int **kBallsFieldNumber** = 3
- static const int **kRobotsYellowFieldNumber** = 4
- static const int **kRobotsBlueFieldNumber** = 5

Friends

- void **protobuf_AddDesc_state_2eproto** ()
- void **protobuf_AssignDesc_state_2eproto** ()
- void **protobuf_ShutdownFile_state_2eproto** ()

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

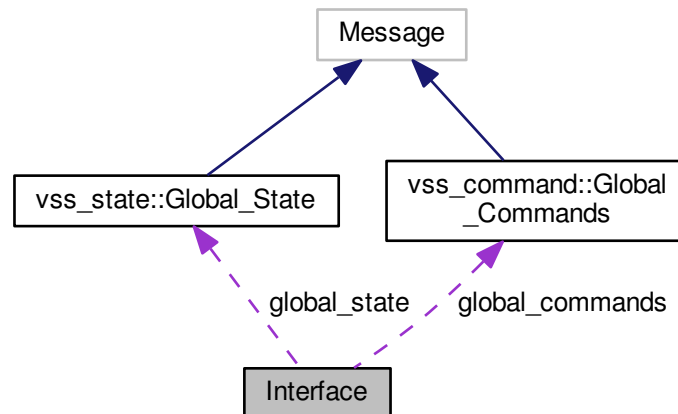
- /home/johnathan/Repositories/SIRLab/VSS-Vision/src/protos/state.pb.h
- /home/johnathan/Repositories/SIRLab/VSS-Vision/src/protos/state.pb.cc

3.5 Interface Class Reference

This class is responsible for handle the communicatio between VSS-Vision, VSS-Simulator, VSS-Viewer and VSS-SampleStrategy.

```
#include <interface.h>
```

Collaboration diagram for Interface:



Public Member Functions

- void **createSocketSendState** ([vss_state::Global_State](#) *)
- void **sendState** ()
- void **createSocketReceiveState** ([vss_state::Global_State](#) *)
- void **receiveState** ()
- void **createLoopSendCommandsTeam1** ([vss_command::Global_Commands](#) *)
- void **createLoopReceiveCommandsTeam1** ([vss_command::Global_Commands](#) *)
- void **createLoopSendCommandsTeam2** ([vss_command::Global_Commands](#) *)
- void **createLoopReceiveCommandsTeam2** ([vss_command::Global_Commands](#) *)
- void **printStats** ()
- void **printCommand** ()

Protected Attributes

- zmq::message_t **request**
- zmq::context_t * **context**
- zmq::socket_t * **socket**
- [vss_state::Global_State](#) * **global_state**
- [vss_command::Global_Commands](#) * **global_commands**
- const char * **addr_server_multicast** = "tcp://*:5555"
- const char * **addr_client_multicast** = "tcp://localhost:5555"
- const char * **addr_server_simulator_team1** = "tcp://*:5556"
- const char * **addr_client_simulator_team1** = "tcp://localhost:5556"
- const char * **addr_server_simulator_team2** = "tcp://*:5557"
- const char * **addr_client_simulator_team2** = "tcp://localhost:5557"

3.5.1 Detailed Description

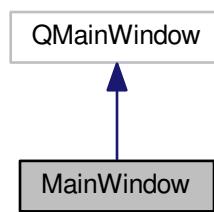
This class is responsible for handle the communicatio between VSS-Vision, VSS-Simulator, VSS-Viewer and VSS-SampleStrategy.

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

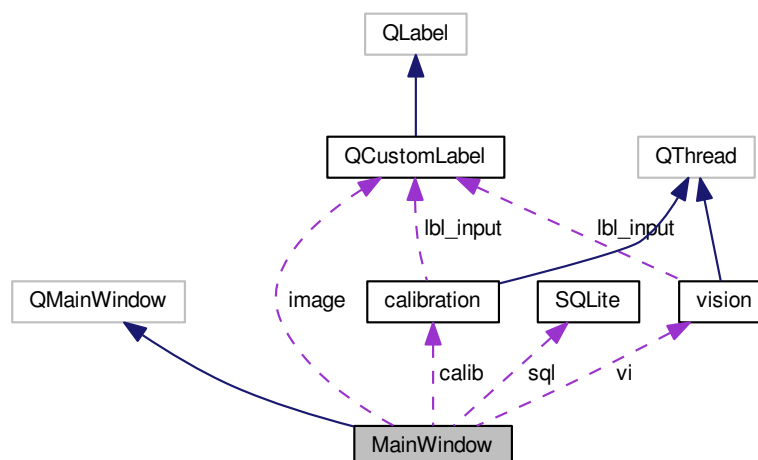
- /home/johnathan/Repositories/SIRLab/VSS-Vision/src/interface.h
- /home/johnathan/Repositories/SIRLab/VSS-Vision/src/interface.cpp

3.6 MainWindow Class Reference

Inheritance diagram for MainWindow:



Collaboration diagram for MainWindow:



Public Slots

- void **mouseCurrentPos** ()
- void **mouseLeftPressed** ()
- void **mouseRightPressed** ()
- void **mouseReleased** ()
- void **mouseLeave** ()
- void **keyPressed** ()
- void **evtCalibration** ()
- void **evtVision** ()
- void **checkboxCamera** (int)
- void **checkboxImage** (int)
- void **checkboxVideo** (int)
- void **updateHmin** (int)
- void **updateSmin** (int)
- void **updateVmin** (int)
- void **updateHmax** (int)
- void **updateSmax** (int)
- void **updateVmax** (int)

Public Member Functions

- **MainWindow** (QWidget *parent=0)

Protected Member Functions

- void **buildTrees** ()
- void **addMainItem** ()
- void **addInputDataItem** ()
- void **addCameraCalibrationItem** ()
- void **addBlobFindingItem** ()
- void **addVisualizationItem** ()
- void **addDefinePatternsItem** ()
- void **addExecutionConfig** ()
- void **addCalibrateColors** ()
- void **addVisionOptions** ()
- void **addNetOptions** ()
- void **addExecutionOptions** ()
- void **initCalibrationColors** ()
- void **finishCalibrationColors** ()
- void **initPlotValues** ()
- void **finishPlotValues** ()
- void **updateValuesHSV** ()
- void **update_hsv_s** ()
- char **calcHex** (float)
- void **getAllDevices** ()
- void **defineColors** ()
- int **translateColor** (QString)

Protected Attributes

- [calibration](#) **calib**
- [vision](#) **vi**
- [SQLite](#) * **sql**
- Ui::MainWindow * **ui**
- QIcon **blockdevice**
- QIcon **ksame**
- QIcon **kdf**
- QIcon **package**
- QTreeWidgetItem * **mainItem**
- QList< QTreeWidgetItem * > **inputData**
- QList< QTreeWidgetItem * > **cameraCalibration**
- QList< QTreeWidgetItem * > **blobFinding**
- QList< QTreeWidgetItem * > **visualization**
- QList< QTreeWidgetItem * > **definePatterns**
- QList< QTreeWidgetItem * > **defineExecutionConfig**
- QList< QTreeWidgetItem * > **calibrateColors**
- QList< QTreeWidgetItem * > **visionOptions**
- QList< QTreeWidgetItem * > **netOptions**
- QList< QTreeWidgetItem * > **executionOptions**
- QComboBox * **cmbCameraIds**
- QComboBox * **cmbSavedImages**
- QComboBox * **cmbSavedVideos**
- QComboBox * **cmbColors**
- QComboBox * **cmbMainColors_1**
- QComboBox * **cmbMainColors_2**
- QComboBox * **cmbSecColors_1**
- QComboBox * **cmbSecColors_2**
- QComboBox * **cmbSecColors_3**
- QComboBox * **cmbSecColors_4**
- QComboBox * **cmbSecColors_5**
- QComboBox * **cmbSecColors_6**
- QComboBox * **cmbBallColors**
- QCheckBox * **checkUseCamera**
- QCheckBox * **checkUseImage**
- QCheckBox * **checkUseVideo**
- QPushButton * **btnDoColorCalib**
- QPushButton * **btnRunVision**
- QWidget * **contLayoutH3**
- vector< QLabel * > **lblHeadersHSV**
- vector< QSlider * > **slidersHSV**
- vector< QLabel * > **lblHeadersPlot**
- vector< QLabel * > **lblPlots**
- QLabel * **lbl_val**
- [QCustomLabel](#) * **image**
- QLabel * **coordinate_mouse**
- QLabel * **zoom_image**
- QImage * **in**
- vector< string > **devices**
- vector< int > **colors**
- Calibration **_calib**
- State **state**
- ExecConfiguration **execConfig**
- stringstream **ss**

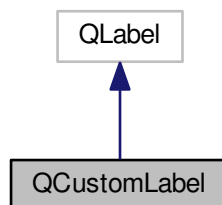
- string **hsv_s**
- bool **calib_vs_vision**
- bool **init**

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

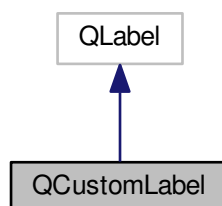
- /home/johnathan/Repositories/SIRLab/VSS-Vision/src/mainwindow.h
- /home/johnathan/Repositories/SIRLab/VSS-Vision/src/mainwindow.cpp

3.7 QCustomLabel Class Reference

Inheritance diagram for QCustomLabel:



Collaboration diagram for QCustomLabel:



Signals

- void **Mouse_Pos** ()
- void **Mouse_Left_Pressed** ()
- void **Mouse_Right_Pressed** ()
- void **Mouse_Release** ()
- void **Mouse_Left** ()
- void **Mouse_Scroll** ()
- void **Key_Pressed** ()

Public Member Functions

- **QCustomLabel** (QLabel *parent=0)
- void **mouseMoveEvent** (QMouseEvent *ev)
- void **mousePressEvent** (QMouseEvent *ev)
- void **mouseReleaseEvent** (QMouseEvent *ev)
- void **leaveEvent** (QEvent *ev)
- void **wheelEvent** (QWheelEvent *ev)
- void **keyPressEvent** (QKeyEvent *ev)

Public Attributes

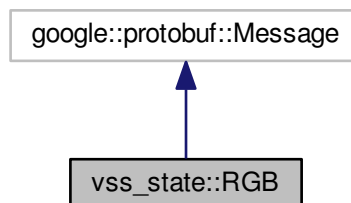
- int **x**
- int **y**
- int **delta**
- int **last_left_click_x**
- int **last_left_click_y**
- int **last_right_click_x**
- int **last_right_click_y**

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

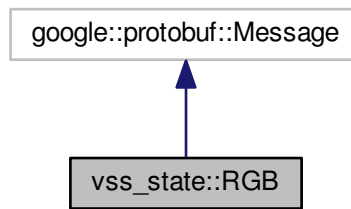
- /home/johnathan/Repositories/SIRLab/VSS-Vision/src/qcustomlabel.h
- /home/johnathan/Repositories/SIRLab/VSS-Vision/src/qcustomlabel.cpp

3.8 vss_state::RGB Class Reference

Inheritance diagram for vss_state::RGB:



Collaboration diagram for vss_state::RGB:



Public Member Functions

- **RGB** (const [RGB](#) &from)
- **RGB & operator=** (const [RGB](#) &from)
- const `::google::protobuf::UnknownFieldSet & unknown_fields ()` const
- inline `::google::protobuf::UnknownFieldSet * mutable_unknown_fields ()`
- void **Swap** ([RGB](#) *other)
- **RGB * New** () const
- void **CopyFrom** (const `::google::protobuf::Message` &from)
- void **MergeFrom** (const `::google::protobuf::Message` &from)
- void **CopyFrom** (const [RGB](#) &from)
- void **MergeFrom** (const [RGB](#) &from)
- void **Clear** ()
- bool **IsInitialized** () const
- int **ByteSize** () const
- bool **MergePartialFromCodedStream** (`::google::protobuf::io::CodedInputStream` *input)
- void **SerializeWithCachedSizes** (`::google::protobuf::io::CodedOutputStream` *output) const
- `::google::protobuf::uint8 * SerializeWithCachedSizesToArray` (`::google::protobuf::uint8` *output) const
- int **GetCachedSize** () const
- `::google::protobuf::Metadata` **GetMetadata** () const
- bool **has_r** () const
- void **clear_r** ()
- inline `::google::protobuf::uint32 r` () const
- void **set_r** (`::google::protobuf::uint32` value)
- bool **has_g** () const
- void **clear_g** ()
- inline `::google::protobuf::uint32 g` () const
- void **set_g** (`::google::protobuf::uint32` value)
- bool **has_b** () const
- void **clear_b** ()
- inline `::google::protobuf::uint32 b` () const
- void **set_b** (`::google::protobuf::uint32` value)

Static Public Member Functions

- static const `::google::protobuf::Descriptor` * **descriptor** ()
- static const [RGB](#) & **default_instance** ()

Static Public Attributes

- static const int **kRFieldNumber** = 1
- static const int **kGFieldNumber** = 2
- static const int **kBFieldNumber** = 3

Friends

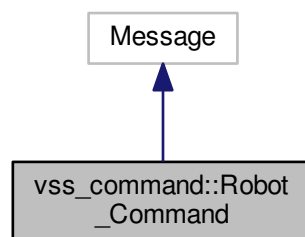
- void **protobuf_AddDesc_state_2eproto** ()
- void **protobuf_AssignDesc_state_2eproto** ()
- void **protobuf_ShutdownFile_state_2eproto** ()

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

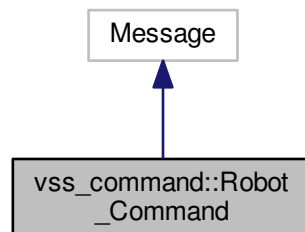
- /home/johnathan/Repositories/SIRLab/VSS-Vision/src/protos/state.pb.h
- /home/johnathan/Repositories/SIRLab/VSS-Vision/src/protos/state.pb.cc

3.9 vss_command::Robot_Command Class Reference

Inheritance diagram for vss_command::Robot_Command:



Collaboration diagram for vss_command::Robot_Command:



Public Member Functions

- **Robot_Command** (const [Robot_Command](#) &from)
- **Robot_Command** & **operator=** (const [Robot_Command](#) &from)
- const ::google::protobuf::UnknownFieldSet & **unknown_fields** () const
- inline::google::protobuf::UnknownFieldSet * **mutable_unknown_fields** ()
- void **Swap** ([Robot_Command](#) *other)
- **Robot_Command** * **New** () const
- void **CopyFrom** (const ::google::protobuf::Message &from)
- void **MergeFrom** (const ::google::protobuf::Message &from)
- void **CopyFrom** (const [Robot_Command](#) &from)
- void **MergeFrom** (const [Robot_Command](#) &from)
- void **Clear** ()
- bool **IsInitialized** () const
- int **ByteSize** () const
- bool **MergePartialFromCodedStream** (::google::protobuf::io::CodedInputStream *input)
- void **SerializeWithCachedSizes** (::google::protobuf::io::CodedOutputStream *output) const
- ::google::protobuf::uint8 * **SerializeWithCachedSizesToArray** (::google::protobuf::uint8 *output) const
- int **GetCachedSize** () const
- ::google::protobuf::Metadata **GetMetadata** () const
- bool **has_id** () const
- void **clear_id** ()
- inline::google::protobuf::uint32 **id** () const
- void **set_id** (::google::protobuf::uint32 value)
- bool **has_left_vel** () const
- void **clear_left_vel** ()
- float **left_vel** () const
- void **set_left_vel** (float value)
- bool **has_right_vel** () const
- void **clear_right_vel** ()
- float **right_vel** () const
- void **set_right_vel** (float value)

Static Public Member Functions

- static const ::google::protobuf::Descriptor * **descriptor** ()
- static const [Robot_Command](#) & **default_instance** ()

Static Public Attributes

- static const int **kIdFieldNumber** = 1
- static const int **kLeftVelFieldNumber** = 2
- static const int **kRightVelFieldNumber** = 3

Friends

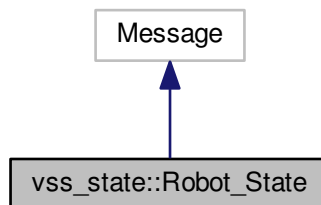
- void **protobuf_AddDesc_command_2eproto** ()
- void **protobuf_AssignDesc_command_2eproto** ()
- void **protobuf_ShutdownFile_command_2eproto** ()

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

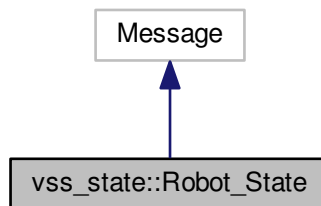
- /home/johnathan/Repositories/SIRLab/VSS-Vision/src/protos/command.pb.h
- /home/johnathan/Repositories/SIRLab/VSS-Vision/src/protos/command.pb.cc

3.10 vss_state::Robot_State Class Reference

Inheritance diagram for vss_state::Robot_State:



Collaboration diagram for vss_state::Robot_State:



Public Member Functions

- **Robot_State** (const [Robot_State](#) &from)
- [Robot_State](#) & **operator=** (const [Robot_State](#) &from)
- const ::google::protobuf::UnknownFieldSet & **unknown_fields** () const
- inline::google::protobuf::UnknownFieldSet * **mutable_unknown_fields** ()
- void **Swap** ([Robot_State](#) *other)
- [Robot_State](#) * **New** () const
- void **CopyFrom** (const ::google::protobuf::Message &from)
- void **MergeFrom** (const ::google::protobuf::Message &from)
- void **CopyFrom** (const [Robot_State](#) &from)
- void **MergeFrom** (const [Robot_State](#) &from)
- void **Clear** ()
- bool **IsInitialized** () const
- int **ByteSize** () const
- bool **MergePartialFromCodedStream** (::google::protobuf::io::CodedInputStream *input)
- void **SerializeWithCachedSizes** (::google::protobuf::io::CodedOutputStream *output) const
- ::google::protobuf::uint8 * **SerializeWithCachedSizesToArray** (::google::protobuf::uint8 *output) const

- int **GetCachedSize** () const
- ::google::protobuf::Metadata **GetMetadata** () const
- bool **has_x** () const
- void **clear_x** ()
- float **x** () const
- void **set_x** (float value)
- bool **has_y** () const
- void **clear_y** ()
- float **y** () const
- void **set_y** (float value)
- bool **has_color** () const
- void **clear_color** ()
- const ::vss_state::RGB & **color** () const
- inline::vss_state::RGB * **mutable_color** ()
- inline::vss_state::RGB * **release_color** ()
- void **set_allocated_color** (::vss_state::RGB *color)
- bool **has_yaw** () const
- void **clear_yaw** ()
- float **yaw** () const
- void **set_yaw** (float value)

Static Public Member Functions

- static const ::google::protobuf::Descriptor * **descriptor** ()
- static const [Robot_State](#) & **default_instance** ()

Static Public Attributes

- static const int **kXFieldNumber** = 1
- static const int **kYFieldNumber** = 2
- static const int **kColorFieldNumber** = 3
- static const int **kYawFieldNumber** = 4

Friends

- void **protobuf_AddDesc_state_2eproto** ()
- void **protobuf_AssignDesc_state_2eproto** ()
- void **protobuf_ShutdownFile_state_2eproto** ()

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

- /home/johnathan/Repositories/SIRLab/VSS-Vision/src/protos/state.pb.h
- /home/johnathan/Repositories/SIRLab/VSS-Vision/src/protos/state.pb.cc

3.11 SQLite Class Reference

Public Member Functions

- **SQLite** (string, string)
- void **open** ()
- void **close** ()
- void **insert_calibration** ()
- void **select_calibration** (string s="")

Protected Member Functions

- void **clean_query** ()

Static Protected Member Functions

- static int **callback** (void *NotUsed, int argc, char **argv, char **azColName)

Protected Attributes

- sqlite3 * **db**
- string **path_database**
- string **password**
- stringstream **query**
- int **status_db**
- char * **error_query**
- const char * **data**

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

- /home/johnathan/Repositories/SIRLab/VSS-Vision/src/sqlite.h
- /home/johnathan/Repositories/SIRLab/VSS-Vision/src/sqlite.cpp

3.12 vss_command::StaticDescriptorInitializer_command_2proto Struct Reference

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

- /home/johnathan/Repositories/SIRLab/VSS-Vision/src/protos/command.pb.cc

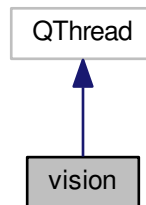
3.13 vss_state::StaticDescriptorInitializer_state_2proto Struct Reference

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

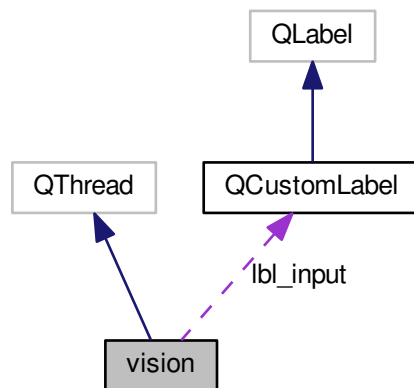
- /home/johnathan/Repositories/SIRLab/VSS-Vision/src/protos/state.pb.cc

3.14 vision Class Reference

Inheritance diagram for vision:



Collaboration diagram for vision:



Public Member Functions

- void **run** ()
- void **search_color** (int)
- void **alloc_calibration** (Calibration *)
- void **alloc_state** (State *)
- void **alloc_label_input** (QCustomLabel *)
- void **alloc_colors** (vector< int > *)
- void **alloc_execution_config** (ExecConfiguration *)
- void **alloc_label_plots** (vector< QLabel * > *)
- void **set_device** (int)
- void **set_id_camera** (int)
- void **set_path_image** (string)

- void **set_vision_reception** (bool)
- void **set_path_video** (string)
- int **get_device** ()
- int **get_id_camera** ()
- string **get_path_image** ()
- bool **get_vision_reception** ()
- string **get_path_video** ()
- void **finish** ()

Protected Member Functions

- vector< Rect > **orderByArea** (vector< Rect >)
- Rect **expandRect** (Point)
- bool **itsALabel** (Rect)
- bool **itsAwayFromLimits** (Point)
- void **recognizeObjects** ()
- bool **isValidPoint** (Point)
- void **updatePlot** ()

Protected Attributes

- bool **run_it**
- bool **start_finish**
- int **device_used**
- int **id_camera**
- bool **vision_reception**
- string **path_image**
- string **path_video**
- int **side_cut**
- float **area_min**
- float **area_max**
- float **distc_min**
- float **distc_max**
- float **propc_min**
- float **propc_max**
- Calibration * **calib**
- State * **state**
- ExecConfiguration * **exec_config**
- TableColor **table_color**
- Mat **in**
- Mat **out**
- Mat **saved**
- Mat **raw_out**
- Mat **raw_in**
- Mat **storage**
- VideoCapture **cap**
- vector< vector< Point > > **coordinate_old**
- vector< vector< Point > > **labels**
- vector< vector< Point > > **contours**
- vector< Vec4i > **hierarchy**
- vector< Point > **vol_coordinate**
- vector< int > * **colors**
- bool **find_old_labels** [13]

- KalmanFilter **kfs** [13]
- [QCustomLabel](#) * **lbl_input**
- vector< QLabel * > * **lbl_plots**

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

- /home/johnathan/Repositories/SIRLab/VSS-Vision/src/vision.h
- /home/johnathan/Repositories/SIRLab/VSS-Vision/src/vision.cpp

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