

Seek And Capture forocoches

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Chapter 1

Hierarchical Index

1.1 Class Hierarchy

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

BT::ActionNodeBase	
seek_and_capture_forocoches::FindPerson	8
seek_and_capture_forocoches::IsPerson	10
seek_and_capture_forocoches::Navigation	12
BT::ConditionNode	
seek_and_capture_forocoches::Is_on_ground	9
seek_and_capture_forocoches::LowBattery	11
rclcpp::Node	
DebugNode	7
seek_and_capture_forocoches::PIDController	13

Chapter 2

Class Index

2.1 Class List

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

DebugNode	7
seek_and_capture_forocoche::FindPerson	8
seek_and_capture_forocoche::Is_on_ground	9
seek_and_capture_forocoche::IsPerson	10
seek_and_capture_forocoche::LowBattery	11
seek_and_capture_forocoche::Navigation	12
seek_and_capture_forocoche::PIDController	13

Chapter 3

File Index

3.1 File List

Here is a list of all documented files with brief descriptions:

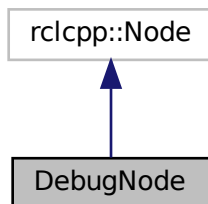
include/seek_and_capture_forocoche/DebugNode.hpp	
Node implementation for debugging purposes for the kobuki	15
include/seek_and_capture_forocoche/FindPerson.hpp	??
include/seek_and_capture_forocoche/Is_on_ground.hpp	??
include/seek_and_capture_forocoche/IsPerson.hpp	??
include/seek_and_capture_forocoche/LowBattery.hpp	??
include/seek_and_capture_forocoche/Navigation.hpp	??
include/seek_and_capture_forocoche/PIDController.hpp	??
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Chapter 4

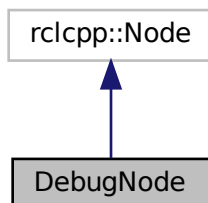
Class Documentation

4.1 DebugNode Class Reference

Inheritance diagram for DebugNode:



Collaboration diagram for DebugNode:



Public Types

- typedef rclcpp::Publisher< std_msgs::msg::Int32 >::SharedPtr **DebugPublisher**
- typedef std_msgs::msg::Int32 **DebugMessage**

Static Public Attributes

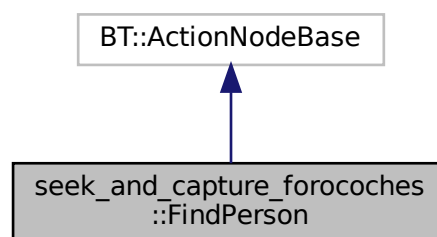
- static const char * **TOPIC_NAME** = "debug_topic"
- static const int **OFF** = 1
- static const int **PERSON_DETECTED** = 2
- static const int **PERSON_FOUND** = 3
- static const int **OK** = 9
- static const int **READY** = 17
- static const int **ROTATING** = 29
- static const int **MOVING_REALLY_SLOW** = 30
- static const int **MOVING_SLOW** = 31
- static const int **MOVING_MODERATE** = 32
- static const int **MOVING_FAST** = 33
- static const int **MOVING_TOO_FAST** = 34
- static const int **MOVING_NO_CONTROL** = 35
- static const int **LOW_BATTERY** = 40
- static const int **NOT_ON_GROUND** = 41
- static const int **ERROR** = 49

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

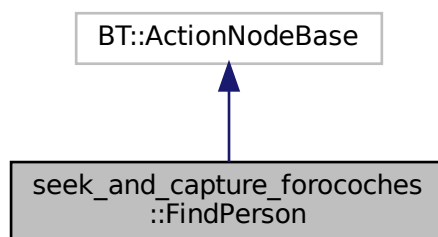
- include/seek_and_capture_forocoches/[DebugNode.hpp](#)
- src/seek_and_capture_forocoches/[DebugNode.cpp](#)

4.2 seek_and_capture_forocoches::FindPerson Class Reference

Inheritance diagram for seek_and_capture_forocoches::FindPerson:



Collaboration diagram for seek_and_capture_forocoches::FindPerson:



Public Member Functions

- **FindPerson** (const std::string &xml_tag_name, const BT::NodeConfiguration &conf)
- void **halt** ()
- BT::NodeStatus **tick** ()

Static Public Member Functions

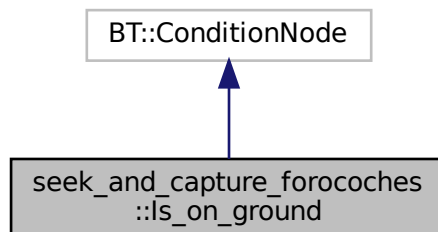
- static BT::PortsList **providedPorts** ()

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

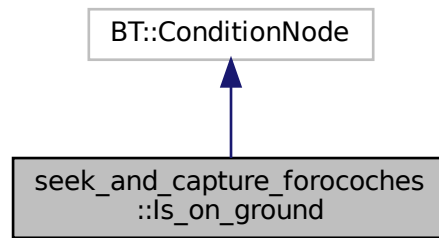
- include/seek_and_capture_forocoches/FindPerson.hpp
- src/seek_and_capture_forocoches/FindPerson.cpp

4.3 seek_and_capture_forocoches::ls_on_ground Class Reference

Inheritance diagram for seek_and_capture_forocoches::ls_on_ground:



Collaboration diagram for `seek_and_capture_forocoches::ls_on_ground`:



Public Member Functions

- **ls_on_ground** (const std::string &xml_tag_name, const BT::NodeConfiguration &conf)
- BT::NodeStatus **tick** ()
- void **wheel_drop_callback** (kobuki_ros_interfaces::msg::WheelDropEvent::UniquePtr msg)

Static Public Member Functions

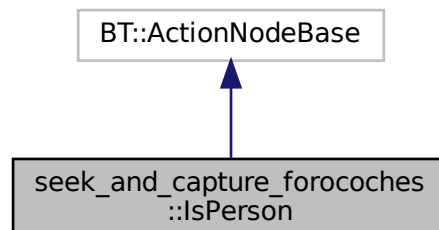
- static BT::PortsList **providedPorts** ()

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

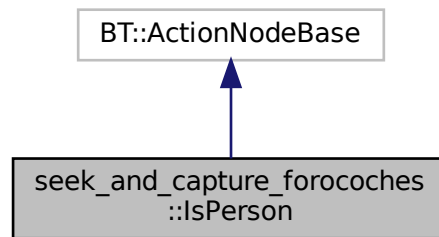
- include/seek_and_capture_forocoches/ls_on_ground.hpp
- src/seek_and_capture_forocoches/ls_on_ground.cpp

4.4 seek_and_capture_forocoches::lsPerson Class Reference

Inheritance diagram for `seek_and_capture_forocoches::lsPerson`:



Collaboration diagram for seek_and_capture_forocoches::IsPerson:



Public Member Functions

- **IsPerson** (const std::string &xml_tag_name, const BT::NodeConfiguration &conf)
- void **halt** ()
- BT::NodeStatus **tick** ()
- void **detection_callback** (vision_msgs::msg::Detection3DArray::UniquePtr msg)
- bool **tf_already_exists_in_position** (tf2::Transform robot2newPerson, int persons_detected)

Static Public Member Functions

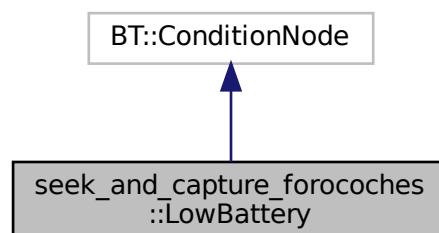
- static BT::PortsList **providedPorts** ()

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

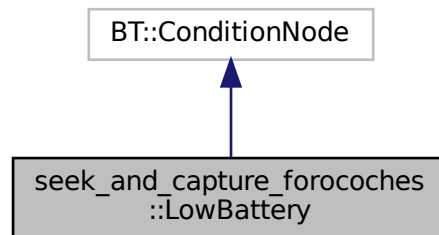
- include/seek_and_capture_forocoches/IsPerson.hpp
- src/seek_and_capture_forocoches/IsPerson.cpp

4.5 seek_and_capture_forocoches::LowBattery Class Reference

Inheritance diagram for seek_and_capture_forocoches::LowBattery:



Collaboration diagram for seek_and_capture_forocoches::LowBattery:



Public Member Functions

- **LowBattery** (const std::string &xml_tag_name, const BT::NodeConfiguration &conf)
- BT::NodeStatus **tick** ()
- void **battery_callback** (sensor_msgs::msg::BatteryState::UniquePtr msg)

Static Public Member Functions

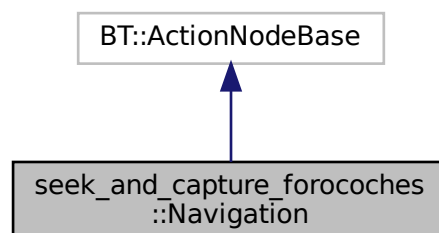
- static BT::PortsList **providedPorts** ()

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

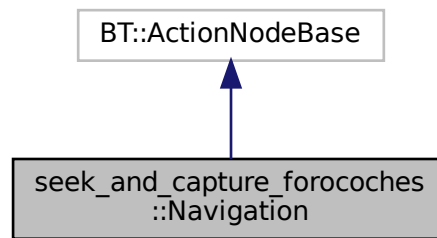
- include/seek_and_capture_forocoches/LowBattery.hpp
- src/seek_and_capture_forocoches/LowBattery.cpp

4.6 seek_and_capture_forocoches::Navigation Class Reference

Inheritance diagram for seek_and_capture_forocoches::Navigation:



Collaboration diagram for seek_and_capture_forocoches::Navigation:



Public Member Functions

- **Navigation** (const std::string &xml_tag_name, const BT::NodeConfiguration &conf)
- void **halt** ()
- BT::NodeStatus **tick** ()

Static Public Member Functions

- static BT::PortsList **providedPorts** ()

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

- include/seek_and_capture_forocoches/Navigation.hpp
- src/seek_and_capture_forocoches/Navigation.cpp

4.7 seek_and_capture_forocoches::PIDController Class Reference

Public Member Functions

- **PIDController** (double min_ref, double max_ref, double min_output, double max_output)
- void **set_pid** (double n_KP, double n_KI, double n_KD)
- double **get_output** (double new_reference)

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

- include/seek_and_capture_forocoches/PIDController.hpp
- src/seek_and_capture_forocoches/PIDController.cpp

Chapter 5

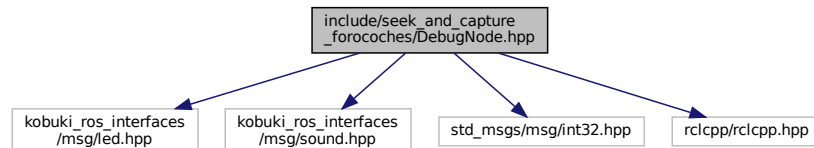
File Documentation

5.1 include/seek_and_capture_forocoches/DebugNode.hpp File Reference

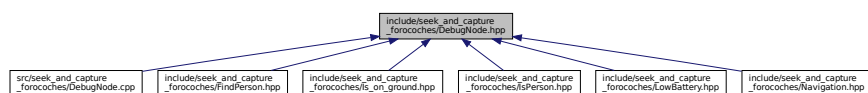
Node implementation for debugging purposes for the kobuki.

```
#include "kobuki_ros_interfaces/msg/led.hpp"
#include "kobuki_ros_interfaces/msg/sound.hpp"
#include "std_msgs/msg/int32.hpp"
#include "rclcpp/rclcpp.hpp"
```

Include dependency graph for DebugNode.hpp:



This graph shows which files directly or indirectly include this file:



Classes

- class [DebugNode](#)

5.1.1 Detailed Description

Node implementation for debugging purposes for the kobuki.

Author

Javier Izquierdo Hernandez (j.izquierdoh.2021@alumnos.urjc.es)

Note

Uses leds, sound and terminal functions for debugging

Version

1.0

Date

2023-02-17

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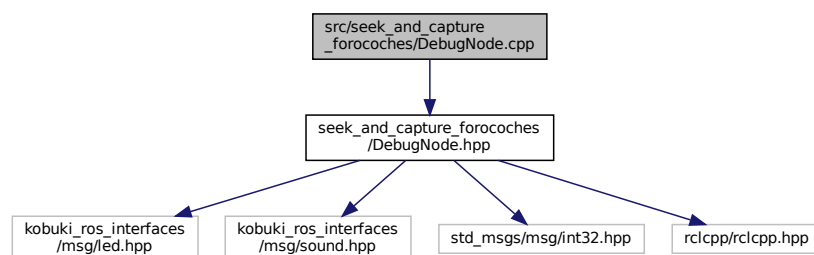
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5.2 src/seek_and_capture_forocoches/DebugNode.cpp File Reference

Node implementation for debugging purposes for the kobuki.

```
#include "seek_and_capture_forocoches/DebugNode.hpp"
```

Include dependency graph for DebugNode.cpp:



5.2.1 Detailed Description

Node implementation for debugging purposes for the kobuki.

Author

Javier Izquierdo Hernandez (j.izquierdoh.2021@alumnos.urjc.es)

Note

Uses leds, sound and terminal functions for debugging

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