

RAPP Platform

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userScoreHistoryForAllCategories	28
userScoresForAllCategories	28

Chapter 2

Hierarchical Index

2.1 Class Hierarchy

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

rapp_application_authentication_manager.application_authentication_node.ApplicationAuthentication-Manager	31
rapp_audio_processing.rapp_audio_processing.AudioProcessing	35
cognitive_exercise.CognitiveExercise	38
helper_functions.CognitiveExerciseHelperFunctions	41
CostmapLayer	
costmap_2d::RappStaticLayer	192
rapp_audio_processing.rapp_detect_silence.DetectSilence	51
rapp_audio_processing.rapp_energy_denoise.EnergyDenoise	57
Exception	
app_error_exception.AppError	29
app_error_exception.AppError	29
src.rapp_exceptions.RappError	184
FaceDetection	64
FaceDetector	66
rapp_speech_detection_sphinx4.global_parameters.GlobalParams	77
GreekSupport	85
HumanDetection	91
HumanDetector	93
image_classification.ImageClassification	96
image_registration_to_ontology.ImageRegistrationToOntology	99
IPLocatorFactory	103
KnowrobWrapper	104
KnowrobWrapperCommunications	116
rapp_speech_detection_sphinx4.limited_vocabulary_creator.LimitedVocabularyCreator	131
MapGenerator	132
MapServer	133
mysql_wrapper_old.MySQLdbWrapper	136
mysql_wrapper.MySQLdbWrapper	149
object	
rapp_application_authentication_manager.database_handler.DatabaseHandler	44
rapp_email.email_receiver.EmailReceiver	52
rapp_email.email_sender.EmailSender	55
rapp_geolocator.geolocator_base.GeolocatorBase	72
rapp_geolocator.ip_api_locator.IpAPILocator	101
rapp_geolocator.geolocator_factory.GeolocatorFactory	74
rapp_geolocator.geolocator_node.GeolocatorNode	75
rapp_news_explorer.engine_factory.EngineFactory	58

rapp_news_explorer.news_engine_base.NewsEngineBase	166
rapp_news_explorer.event_registry_engine.EventRegistryEngine	62
rapp_news_explorer.google_news_engine.GoogleNewsEngine	79
rapp_news_explorer.news_explorer_node.NewsExplorerNode	169
rapp_speech_detection_sphinx4.language_support.LanguageSupport	128
rapp_speech_detection_sphinx4.english_support.EnglishSupport	59
rapp_speech_detection_sphinx4.greek_english_support.GreekEnglishSupport	83
rapp_speech_detection_sphinx4.greek_support.GreekSupport	86
rapp_speech_detection_sphinx4.greek_english_support.GreekEnglishSupport	83
rapp_weather_reporter.weather_reporter_base.WeatherReporterBase	226
rapp_weather_reporter.forecastio_reporter.ForecastIOReporter	69
rapp_weather_reporter.yweather_reporter.YWeatherReporter	233
rapp_weather_reporter.weather_reporter_factory.WeatherReporterFactory	229
rapp_weather_reporter.weather_reporter_node.WeatherReporterNode	231
src.rapp_http_json_parser.RappHttpJSONParser	187
src.rapp_http_request_handler.RappHttpRequestHandler	189
src.rapp_utilities.RappUtilities	197
ontology_class_bridge.OntologyClassBridge	171
PathPlanner	172
PathPlanning	174
QrCode	177
QrDetection	177
QrDetector	179
caffe_wrapper.RappCaffeWrapper	181
rapp_audio_processing.rapp_set_noise_profile.SetNoiseProfile	198
rapp_audio_processing.rapp_sox_denoise.SoxDenoise	200
rapp_speech_detection_sphinx4.speech_recognition_sphinx4.SpeechRecognitionSphinx4	200
rapp_speech_detection_sphinx4.speech_recognition_sphinx4_handler_node.SpeechRecognition- Sphinx4HandlerNode	204
speech_recognition_google.SpeechToTextGoogle	207
Sphinx4	209
rapp_speech_detection_sphinx4.sphinx4_wrapper.Sphinx4Wrapper	212
rapp_speech_detection_sphinx4.sphinx4_configuration_params.SphinxConfigurationParams	216
text_to_speech_espeak.TextToSpeechEspeak	219
rapp_audio_processing.rapp_transform_audio.TransformAudio	220
userScoreHistoryForAllCategories.UserScoreHistoryForAllCategories	223
userScoresForAllCategories.UserScoresForAllCategories	225
rapp_audio_processing.rapp_utilities.Utilities	226
HTMLParser	
src.rapp_html_parser.RappHTMLParser	185

Chapter 3

Class Index

3.1 Class List

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

app_error_exception.AppError	29
Exception compliant with the ros error and trace srvs	
rapp_application_authentication_manager.application_authentication_node.ApplicationAuthentication-Manager	31
Provides user management features	
rapp_audio_processing.rapp_audio_processing.AudioProcessing	35
Provides audio processing utilities	
cognitive_exercise.CognitiveExercise	38
The Cognitive exercise ros node	
helper_functions.CognitiveExerciseHelperFunctions	41
rapp_application_authentication_manager.database_handler.DatabaseHandler	44
Handles database functions for authentication manager	
rapp_audio_processing.rapp_detect_silence.DetectSilence	51
Performs silence detection on an audio file	
rapp_email.email_receiver.EmailReceiver	52
Fetches emails from user's email account	
rapp_email.email_sender.EmailSender	55
rapp_audio_processing.rapp_energy_denoise.EnergyDenoise	57
Performs energy denoising on an audio file	
rapp_news_explorer.engine_factory.EngineFactory	58
Creates and returns the class of the news engine requested	
rapp_speech_detection_sphinx4.english_support.EnglishSupport	59
Allows the creation of configuration files for English Sphinx speech recognition	
rapp_news_explorer.event_registry_engine.EventRegistryEngine	62
EventRegistry news engine hndler	
FaceDetection	64
Class FaceDetection uptakes the task of handling the ROS service callbacks	
FaceDetector	66
Class that implements a face detection algorithm based on a Haar cascade classifier	
rapp_weather_reporter.forecastio_reporter.ForecastIOReporter	69
ForecastIO weather reporter	
rapp_geolocator.geolocator_base.GeolocatorBase	72
Base class for geolocators	
rapp_geolocator.geolocator_factory.GeolocatorFactory	74
rapp_geolocator.geolocator_node.GeolocatorNode	75
Calculates geolocation via IP	
rapp_speech_detection_sphinx4.global_parameters.GlobalParams	77
Contains global Sphinx parameters	

rapp_news_explorer.google_news_engine.GoogleNewsEngine	
Google news engine hndler	79
rapp_speech_detection_sphinx4.greek_english_support.GreekEnglishSupport	83
GreekSupport	
Allows the creation of configuration files for Greek Sphinx speech recognition	85
rapp_speech_detection_sphinx4.greek_support.GreekSupport	
Allows the creation of configuration files for Greek Sphinx speech recognition	86
HumanDetection	
Class HumanDetection uptakes the task of handling the ROS service callbacks	91
HumanDetector	
Class that implements a human detection algorithm based on a Haar cascade classifier	93
image_classification.ImageClassification	
Contains the necessary functions for classifying an images and requesting registration to the ontology	96
image_registration_to_ontology.ImageRegistrationToOntology	
Contains the necessary functions for registering images to the ontology	99
rapp_geolocator.ip_api_locator.IpAPILocator	
IP-API locator	101
IPLocatorFactory	
Creates and returns the class of the geolocator requested	103
KnowrobWrapper	
Class KnowrobWrapperCommunications contains all the necessary knowrob wrapper functions	104
KnowrobWrapperCommunications	
Class KnowrobWrapperCommunications uptakes the task of handling the ROS service callbacks	116
rapp_speech_detection_sphinx4.language_support.LanguageSupport	
Allows the creation of configuration files for Sphinx speech recognition	128
rapp_speech_detection_sphinx4.limited_vocabulary_creator.LimitedVocabularyCreator	
Creates temporary configuration files for the input limited vocabulary	131
MapGenerator	
Map generation node	132
MapServer	133
mysql_wrapper_old.MySQLdbWrapper	
The mysql wrapper ros node	136
mysql_wrapper.MySQLdbWrapper	
The mysql wrapper ros node	149
rapp_news_explorer.news_engine_base.NewsEngineBase	
Base class for news engines	166
rapp_news_explorer.news_explorer_node.NewsExplorerNode	
Fetches news from various News sites' APIs	169
ontology_class_bridge.OntologyClassBridge	
Contains the necessary functions for translating caffe classes to ontology classes	171
PathPlanner	
Class that implements a path planning algorithm based on global_planner and map_server ROS nodes	172
PathPlanning	174
QRCode	
Structure holding the essential info for a QR code	177
QRDetection	
Uptakes the task of setting up the ROS service callbacks towards qr detection	177
QRDetector	
Provides the QR detection functionality	179
caffe_wrapper.RappCaffeWrapper	
The RappCaffeWrapper ros node	181
src.rapp_exceptions.RappError	
Provides a RAPP specific exception	184
src.rapp_html_parser.RappHTMLParser	
Strips html from input string	185

src.rapp_http_json_parser.RappHttpJSONParser	
Retrieves key:value pairs from JSON responses	187
src.rapp_http_request_handler.RappHttpRequestHandler	
Performs http requests	189
costmap_2d::RappStaticLayer	192
src.rapp_utilities.RappUtilities	
Provides various utility functionalities	197
rapp_audio_processing.rapp_set_noise_profile.SetNoiseProfile	
Evaluates the noise profile for an audio file	198
rapp_audio_processing.rapp_sox_denoise.SoxDenoise	
Performs denoising on an audio file employing Sox application	200
rapp_speech_detection_sphinx4.speech_recognition_sphinx4.SpeechRecognitionSphinx4	
Provides a complete Rapp Sphinx Entity	200
rapp_speech_detection_sphinx4.speech_recognition_sphinx4_handler_node.SpeechRecognition-Sphinx4HandlerNode	
Maintains Sphinx instances to perform speech recognition	204
speech_recognition_google.SpeechToTextGoogle	
Implements calls the Google ASR API	207
Sphinx4	
Performs speech recognition employing Sphinx	209
rapp_speech_detection_sphinx4.sphinx4_wrapper.Sphinx4Wrapper	
Contains the Sphinx subprocess and is responsible for configuring Sphinx and performing the recognition request	212
rapp_speech_detection_sphinx4.sphinx4_configuration_params.SphinxConfigurationParams	
Contains the parameters required for the Sphinx configuration	216
text_to_speech_espeak.TextToSpeechEspeak	219
rapp_audio_processing.rapp_transform_audio.TransformAudio	
Provides audio type tranformation functionalities	220
userScoreHistoryForAllCategories.UserScoreHistoryForAllCategories	
Provides the necessary functions for returning the history of user scores	223
userScoresForAllCategories.UserScoresForAllCategories	
Provides the necessary functions for returning the user scores	225
rapp_audio_processing.rapp_utilities.Utilities	
Provides audio processing utilities	226
rapp_weather_reporter.weather_reporter_base.WeatherReporterBase	
Base class for weather reporters	226
rapp_weather_reporter.weather_reporter_factory.WeatherReporterFactory	
Creates and returns the class of the weather reporter requested	229
rapp_weather_reporter.weather_reporter_node.WeatherReporterNode	
Evaluates weather conditions	231
rapp_weather_reporter.yweather_reporter.YWeatherReporter	
Yweather weather reporter	233

Chapter 4

File Index

4.1 File List

Here is a list of all files with brief descriptions:

/home/travis/rapp_temp/rapp-platform/rapp_application_authentication_manager/src/rapp_application_authentication_manager/__init__.py	237
/home/travis/rapp_temp/rapp-platform/rapp_application_authentication_manager/src/rapp_application_authentication_manager/application_authentication_node.py	238
/home/travis/rapp_temp/rapp-platform/rapp_application_authentication_manager/src/rapp_application_authentication_manager/database_handler.py	239
/home/travis/rapp_temp/rapp-platform/rapp_audio_processing/src/rapp_audio_processing/__init__.py	237
/home/travis/rapp_temp/rapp-platform/rapp_audio_processing/src/rapp_audio_processing/rapp_audio_processing.py	239
/home/travis/rapp_temp/rapp-platform/rapp_audio_processing/src/rapp_audio_processing/rapp_detect_silence.py	239
/home/travis/rapp_temp/rapp-platform/rapp_audio_processing/src/rapp_audio_processing/rapp_energy_denoise.py	239
/home/travis/rapp_temp/rapp-platform/rapp_audio_processing/src/rapp_audio_processing/rapp_set_noise_profile.py	240
/home/travis/rapp_temp/rapp-platform/rapp_audio_processing/src/rapp_audio_processing/rapp_sox_denoise.py	240
/home/travis/rapp_temp/rapp-platform/rapp_audio_processing/src/rapp_audio_processing/rapp_transform_audio.py	240
/home/travis/rapp_temp/rapp-platform/rapp_audio_processing/src/rapp_audio_processing/rapp_utilities.py	240
/home/travis/rapp_temp/rapp-platform/rapp_caffe_wrapper/src/app_error_exception.py	241
/home/travis/rapp_temp/rapp-platform/rapp_caffe_wrapper/src/caffe_wrapper.py	241
/home/travis/rapp_temp/rapp-platform/rapp_caffe_wrapper/src/caffe_wrapper_main.py	242
/home/travis/rapp_temp/rapp-platform/rapp_caffe_wrapper/src/image_classification.py	242
/home/travis/rapp_temp/rapp-platform/rapp_caffe_wrapper/src/image_registration_to_ontology.py	242
/home/travis/rapp_temp/rapp-platform/rapp_caffe_wrapper/src/ontology_class_bridge.py	242
/home/travis/rapp_temp/rapp-platform/rapp_cognitive_exercise/src/app_error_exception.py	241
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/home/travis/rapp_temp/rapp-platform/rapp_cognitive_exercise/src/cognitive_exercise_main.py	243
/home/travis/rapp_temp/rapp-platform/rapp_cognitive_exercise/src/helper_functions.py	243
/home/travis/rapp_temp/rapp-platform/rapp_cognitive_exercise/src/userScoreHistoryForAllCategories.py	243
/home/travis/rapp_temp/rapp-platform/rapp_cognitive_exercise/src/userScoresForAllCategories.py	244
/home/travis/rapp_temp/rapp-platform/rapp_email/src/rapp_email/__init__.py	237
/home/travis/rapp_temp/rapp-platform/rapp_email/src/rapp_email/email_node.py	244
/home/travis/rapp_temp/rapp-platform/rapp_email/src/rapp_email/email_receiver.py	244
/home/travis/rapp_temp/rapp-platform/rapp_email/src/rapp_email/email_sender.py	244
/home/travis/rapp_temp/rapp-platform/rapp_face_detection/include/face_detection/face_detection.h	245

/home/travis/rapp_temp/rapp-platform/rapp_face_detection/include/face_detection/face_detector.h . . .	245
/home/travis/rapp_temp/rapp-platform/rapp_face_detection/src/face_detection.cpp	246
/home/travis/rapp_temp/rapp-platform/rapp_face_detection/src/face_detection_node.cpp	247
/home/travis/rapp_temp/rapp-platform/rapp_face_detection/src/face_detector.cpp	248
/home/travis/rapp_temp/rapp-platform/rapp_geolocator/src/rapp_geolocator/__init__.py	237
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/home/travis/rapp_temp/rapp-platform/rapp_path_planning/rapp_costmap2d/include/rapp_costmap_- 2d/rapp_static_layer.h	262
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/home/travis/rapp_temp/rapp-platform/rapp_utilities/src/rapp_exceptions.py	280
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/home/travis/rapp_temp/rapp-platform/rapp_weather_reporter/src/rapp_weather_reporter/weather_ reporter_factory.py	281
/home/travis/rapp_temp/rapp-platform/rapp_weather_reporter/src/rapp_weather_reporter/weather_ reporter_node.py	281
/home/travis/rapp_temp/rapp-platform/rapp_weather_reporter/src/rapp_weather_reporter/yweather_ reporter.py	282

Chapter 5

Namespace Documentation

5.1 app_error_exception Namespace Reference

Classes

- class [AppError](#)
Exception compliant with the ros error and trace srvs.

5.2 caffe_wrapper Namespace Reference

Classes

- class [RappCaffeWrapper](#)
The [RappCaffeWrapper](#) ros node.

5.3 caffe_wrapper_main Namespace Reference

Variables

- tuple [RappCaffeWrapperNode](#) = [RappCaffeWrapper](#)()
The main function that initiates the rapp_caffe_wrapper ROS Node.

5.3.1 Variable Documentation

5.3.1.1 tuple caffe_wrapper_main.RappCaffeWrapperNode = RappCaffeWrapper()

The main function that initiates the rapp_caffe_wrapper ROS Node.

Definition at line 26 of file caffe_wrapper_main.py.

5.4 cognitive_exercise Namespace Reference

Classes

- class [CognitiveExercise](#)
The Cognitive exercise ros node.

5.5 cognitive_exercise_main Namespace Reference

Variables

- tuple [CognitiveExerciseNode](#) = [CognitiveExercise\(\)](#)
The main function that initiates the CognitiveExercise ROS Node.

5.5.1 Variable Documentation

5.5.1.1 tuple cognitive_exercise_main.CognitiveExerciseNode = CognitiveExercise()

The main function that initiates the CognitiveExercise ROS Node.

Definition at line 27 of file cognitive_exercise_main.py.

5.6 costmap_2d Namespace Reference

Classes

- class [RappStaticLayer](#)

5.7 crop_map Namespace Reference

Functions

- def [computed_cropped_origin](#)
- def [find_bounds](#)

Variables

- tuple [bounds](#) = [find_bounds](#)([map_image](#))
- string [crop_image](#) = [crop_name](#)+".pgm"
- list [crop_name](#) = [sys.argv](#)[2]
- string [crop_yaml](#) = [crop_name](#)+".yaml"
- tuple [cropped_image](#) = [map_image](#).crop(([bounds](#)[0], [bounds](#)[2], [bounds](#)[1] + 1, [bounds](#)[3] + 1))
- tuple [map_data](#) = [yaml.safe_load](#)([f](#))
- tuple [map_image](#) = [Image.open](#)([map_image_file](#))
- list [map_image_file](#) = [map_data](#)["image"]
- list [origin](#) = [map_data](#)["origin"]
- list [resolution](#) = [map_data](#)["resolution"]

5.7.1 Function Documentation

5.7.1.1 def crop_map.computed_cropped_origin (map_image, bounds, resolution, origin)

Compute the image for the cropped map when map_image is cropped by bounds and had origin before.

Definition at line 24 of file crop_map.py.

5.7.1.2 `def crop_map.find_bounds (map_image)`

Definition at line 8 of file crop_map.py.

5.7.2 Variable Documentation

5.7.2.1 `tuple crop_map.bounds = find_bounds(map_image)`

Definition at line 66 of file crop_map.py.

5.7.2.2 `string crop_map.crop_image = crop_name+".pgm"`

Definition at line 55 of file crop_map.py.

5.7.2.3 `list crop_map.crop_name = sys.argv[2]`

Definition at line 51 of file crop_map.py.

5.7.2.4 `string crop_map.crop_yaml = crop_name+".yaml"`

Definition at line 54 of file crop_map.py.

5.7.2.5 `tuple crop_map.cropped_image = map_image.crop((bounds[0], bounds[2], bounds[1] + 1, bounds[3] + 1))`

Definition at line 69 of file crop_map.py.

5.7.2.6 `tuple crop_map.map_data = yaml.safe_load(f)`

Definition at line 48 of file crop_map.py.

5.7.2.7 `tuple crop_map.map_image = Image.open(map_image_file)`

Definition at line 64 of file crop_map.py.

5.7.2.8 `list crop_map.map_image_file = map_data["image"]`

Definition at line 60 of file crop_map.py.

5.7.2.9 `list crop_map.origin = map_data["origin"]`

Definition at line 62 of file crop_map.py.

5.7.2.10 `list crop_map.resolution = map_data["resolution"]`

Definition at line 61 of file crop_map.py.

5.8 helper_functions Namespace Reference

Classes

- class [CognitiveExerciseHelperFunctions](#)

5.9 image_classification Namespace Reference

Classes

- class [ImageClassification](#)

Contains the necessary functions for classifying an images and requesting registration to the ontology.

5.10 image_registration_to_ontology Namespace Reference

Classes

- class [ImageRegistrationToOntology](#)

Contains the necessary functions for registering images to the ontology.

5.11 map_server Namespace Reference

Functions

- void [loadMapFromFile](#) (nav_msgs::GetMap::Response *resp, const char *fname, double res, bool negate, double occ_th, double free_th, double *origin, bool trinary=true)

5.11.1 Function Documentation

5.11.1.1 void map_server::loadMapFromFile (nav_msgs::GetMap::Response * resp, const char * fname, double res, bool negate, double occ_th, double free_th, double * origin, bool trinary = true)

Read the image from file and fill out the resp object, for later use when our services are requested.

Parameters

<i>resp</i>	The map will be written into here
<i>fname</i>	The image file to read from
<i>res</i>	The resolution of the map (gets stored in resp)
<i>negate</i>	If true, then whiter pixels are occupied, and blacker pixels are free
<i>occ_th</i>	Threshold above which pixels are occupied
<i>free_th</i>	Threshold below which pixels are free
<i>origin</i>	Triple specifying 2-D pose of lower-left corner of image
<i>trinary</i>	If true, only outputs Occupied/Free/Unknown

Exceptions

<i>std::runtime_error</i>	If the image file can't be loaded
---------------------------	-----------------------------------

Definition at line 55 of file image_loader.cpp.

5.12 mysql_wrapper Namespace Reference

Classes

- class [MySQLdbWrapper](#)
The mysql wrapper ros node.

5.13 mysql_wrapper_main Namespace Reference

Variables

- tuple [MySQLWrapperNode](#) = [MySQLdbWrapper](#)()
The main function that initiates the rapp mysql wrapper ROS Node.

5.13.1 Variable Documentation

5.13.1.1 tuple mysql_wrapper_main.MySQLWrapperNode = MySQLdbWrapper()

The main function that initiates the rapp mysql wrapper ROS Node.

Definition at line 26 of file mysql_wrapper_main.py.

5.14 mysql_wrapper_old Namespace Reference

Classes

- class [MySQLdbWrapper](#)
The mysql wrapper ros node.

5.15 ontology_class_bridge Namespace Reference

Classes

- class [OntologyClassBridge](#)
Contains the necessary functions for translating caffe classes to ontology classes.

5.16 rapp_application_authentication_manager Namespace Reference

Namespaces

- [application_authentication_node](#)
- [database_handler](#)

5.17 rapp_application_authentication_manager.application_authentication_node Namespace Reference

Classes

- class [ApplicationAuthenticationManager](#)
Provides user management features.

Variables

- tuple [application_authentication_ros_node](#) = [ApplicationAuthenticationManager](#)()

5.17.1 Variable Documentation

5.17.1.1 tuple `rapp_application_authentication_manager.application_authentication_node.application_authentication_ros_node = ApplicationAuthenticationManager()`

Definition at line 365 of file `application_authentication_node.py`.

5.18 `rapp_application_authentication_manager.database_handler` Namespace Reference

Classes

- class [DatabaseHandler](#)
Handles database functions for authentication manager.

5.19 `rapp_audio_processing` Namespace Reference

Namespaces

- [rapp_audio_processing](#)
- [rapp_detect_silence](#)
- [rapp_energy_denoise](#)
- [rapp_set_noise_profile](#)
- [rapp_sox_denoise](#)
- [rapp_transform_audio](#)
- [rapp_utilities](#)

5.20 `rapp_audio_processing.rapp_audio_processing` Namespace Reference

Classes

- class [AudioProcessing](#)
Provides audio processing utilities.

Variables

- tuple [AudioProcessingNode](#) = [AudioProcessing](#)()

5.20.1 Variable Documentation

5.20.1.1 tuple rapp_audio_processing.rapp_audio_processing.AudioProcessingNode = AudioProcessing()

Definition at line 217 of file rapp_audio_processing.py.

5.21 rapp_audio_processing.rapp_detect_silence Namespace Reference

Classes

- class [DetectSilence](#)
Performs silence detection on an audio file.

5.22 rapp_audio_processing.rapp_energy_denoise Namespace Reference

Classes

- class [EnergyDenoise](#)
Performs energy denoising on an audio file.

5.23 rapp_audio_processing.rapp_set_noise_profile Namespace Reference

Classes

- class [SetNoiseProfile](#)
Evaluates the noise profile for an audio file.

5.24 rapp_audio_processing.rapp_sox_denoise Namespace Reference

Classes

- class [SoxDenoise](#)
Performs denoising on an audio file employing Sox application.

5.25 rapp_audio_processing.rapp_transform_audio Namespace Reference

Classes

- class [TransformAudio](#)
Provides audio type tranformation functionalities.

5.26 rapp_audio_processing.rapp_utilities Namespace Reference

Classes

- class [Utilities](#)
Provides audio processing utilities.

5.27 rapp_email Namespace Reference

Namespaces

- [email_node](#)
- [email_receiver](#)
- [email_sender](#)

5.28 rapp_email.email_node Namespace Reference

Variables

- tuple [emailReceiver](#) = EmailReceiver()
- tuple [emailSender](#) = EmailSender()

5.28.1 Variable Documentation

5.28.1.1 tuple rapp_email.email_node.emailReceiver = EmailReceiver()

Definition at line 28 of file email_node.py.

5.28.1.2 tuple rapp_email.email_node.emailSender = EmailSender()

Definition at line 29 of file email_node.py.

5.29 rapp_email.email_receiver Namespace Reference

Classes

- class [EmailReceiver](#)
Fetches emails from user's email account.

5.30 rapp_email.email_sender Namespace Reference

Classes

- class [EmailSender](#)

5.31 rapp_geolocator Namespace Reference

Namespaces

- [geolocator_base](#)
- [geolocator_factory](#)
- [geolocator_node](#)
- [ip_api_locator](#)

5.32 rapp_geolocator.geolocator_base Namespace Reference

Classes

- class [GeolocatorBase](#)
Base class for geolocators.

5.33 rapp_geolocator.geolocator_factory Namespace Reference

Classes

- class [GeolocatorFactory](#)

5.34 rapp_geolocator.geolocator_node Namespace Reference

Classes

- class [GeolocatorNode](#)
Calculates geolocation via IP.

Variables

- tuple [geolocator_node](#) = [GeolocatorNode](#)()

5.34.1 Variable Documentation

5.34.1.1 tuple `rapp_geolocator.geolocator_node.geolocator_node = GeolocatorNode()`

Definition at line 103 of file `geolocator_node.py`.

5.35 rapp_geolocator.ip_api_locator Namespace Reference

Classes

- class [IpAPILocator](#)
IP-API locator.

5.36 rapp_news_explorer Namespace Reference

Namespaces

- [engine_factory](#)
- [event_registry_engine](#)
- [google_news_engine](#)
- [news_engine_base](#)
- [news_explorer_node](#)

5.37 rapp_news_explorer.engine_factory Namespace Reference

Classes

- class [EngineFactory](#)
Creates and returns the class of the news engine requested.

5.38 rapp_news_explorer.event_registry_engine Namespace Reference

Classes

- class [EventRegistryEngine](#)
EventRegistry news engine handler.

5.39 rapp_news_explorer.google_news_engine Namespace Reference

Classes

- class [GoogleNewsEngine](#)
Google news engine handler.

5.40 rapp_news_explorer.news_engine_base Namespace Reference

Classes

- class [NewsEngineBase](#)
Base class for news engines.

5.41 rapp_news_explorer.news_explorer_node Namespace Reference

Classes

- class [NewsExplorerNode](#)
Fetches news from various News sites' APIs.

Variables

- tuple [news_explorer_node](#) = [NewsExplorerNode](#)()

5.41.1 Variable Documentation

5.41.1.1 tuple rapp_news_explorer.news_explorer_node.news_explorer_node = [NewsExplorerNode](#)()

Definition at line 103 of file news_explorer_node.py.

5.42 rapp_speech_detection_sphinx4 Namespace Reference

Namespaces

- [english_support](#)
- [global_parameters](#)
- [greek_english_support](#)
- [greek_support](#)
- [language_support](#)
- [limited_vocabulary_creator](#)
- [speech_recognition_sphinx4](#)
- [speech_recognition_sphinx4_handler_node](#)
- [sphinx4_configuration_params](#)
- [sphinx4_wrapper](#)

5.43 rapp_speech_detection_sphinx4.english_support Namespace Reference

Classes

- class [EnglishSupport](#)
Allows the creation of configuration files for English Sphinx speech recognition.

5.44 rapp_speech_detection_sphinx4.global_parameters Namespace Reference

Classes

- class [GlobalParams](#)
Contains global Sphinx parameters.

5.45 rapp_speech_detection_sphinx4.greek_english_support Namespace Reference

Classes

- class [GreekEnglishSupport](#)

5.46 rapp_speech_detection_sphinx4.greek_support Namespace Reference

Classes

- class [GreekSupport](#)
Allows the creation of configuration files for Greek Sphinx speech recognition.

5.47 rapp_speech_detection_sphinx4.language_support Namespace Reference

Classes

- class [LanguageSupport](#)
Allows the creation of configuration files for Sphinx speech recognition.

5.48 rapp_speech_detection_sphinx4.limited_vocabulary_creator Namespace Reference

Classes

- class [LimitedVocabularyCreator](#)
Creates temporary configuration files for the input limited vocabulary.

5.49 rapp_speech_detection_sphinx4.speech_recognition_sphinx4 Namespace Reference

Classes

- class [SpeechRecognitionSphinx4](#)
Provides a complete Rapp Sphinx Entity.

Variables

- tuple [SpeechRecognitionSphinx4Node](#) = [SpeechRecognitionSphinx4\(\)](#)

5.49.1 Variable Documentation

5.49.1.1 tuple rapp_speech_detection_sphinx4.speech_recognition_sphinx4.SpeechRecognitionSphinx4Node = [SpeechRecognitionSphinx4\(\)](#)

Definition at line 261 of file speech_recognition_sphinx4.py.

5.50 rapp_speech_detection_sphinx4.speech_recognition_sphinx4_handler_node Namespace Reference

Classes

- class [SpeechRecognitionSphinx4HandlerNode](#)
Maintains Sphinx instances to perform speech recognition.

Variables

- tuple [rospack](#) = rospkg.RosPack()
- tuple [SpeechRecognitionSphinx4HandlerNode](#) = [SpeechRecognitionSphinx4HandlerNode\(\)](#)
- tuple [sphinx_class](#) = rospack.get_path('rapp_speech_detection_sphinx4')

5.50.1 Variable Documentation

5.50.1.1 tuple rapp_speech_detection_sphinx4.speech_recognition_sphinx4_handler_node.rospack = rospkg.RosPack()

Definition at line 213 of file speech_recognition_sphinx4_handler_node.py.

5.50.1.2 tuple rapp_speech_detection_sphinx4.speech_recognition_sphinx4_handler_node.SpeechRecognitionSphinx4HandlerNode = SpeechRecognitionSphinx4HandlerNode()

Definition at line 220 of file speech_recognition_sphinx4_handler_node.py.

5.50.1.3 tuple rapp_speech_detection_sphinx4.speech_recognition_sphinx4_handler_node.sphinx_class = rospack.get_path('rapp_speech_detection_sphinx4')

Definition at line 214 of file speech_recognition_sphinx4_handler_node.py.

5.51 rapp_speech_detection_sphinx4.sphinx4_configuration_params Namespace Reference

Classes

- class [SphinxConfigurationParams](#)
Contains the parameters required for the Sphinx configuration.

5.52 rapp_speech_detection_sphinx4.sphinx4_wrapper Namespace Reference

Classes

- class [Sphinx4Wrapper](#)
Contains the Sphinx subprocess and is responsible for configuring Sphinx and performing the recognition request.

5.53 rapp_weather_reporter Namespace Reference

Namespaces

- [forecastio_reporter](#)
- [weather_reporter_base](#)
- [weather_reporter_factory](#)
- [weather_reporter_node](#)
- [yweather_reporter](#)

5.54 rapp_weather_reporter.forecastio_reporter Namespace Reference

Classes

- class [ForecastIOReporter](#)
ForecastIO weather reporter.

5.55 rapp_weather_reporter.weather_reporter_base Namespace Reference

Classes

- class [WeatherReporterBase](#)
Base class for weather reporters.

5.56 rapp_weather_reporter.weather_reporter_factory Namespace Reference

Classes

- class [WeatherReporterFactory](#)

Creates and returns the class of the weather reporter requested.

5.57 rapp_weather_reporter.weather_reporter_node Namespace Reference

Classes

- class [WeatherReporterNode](#)

Evaluates weather conditions.

Variables

- tuple [weather_reporter_node](#) = [WeatherReporterNode](#)()

5.57.1 Variable Documentation

5.57.1.1 tuple `rapp_weather_reporter.weather_reporter_node.weather_reporter_node = WeatherReporterNode()`

Definition at line 158 of file `weather_reporter_node.py`.

5.58 rapp_weather_reporter.yweather_reporter Namespace Reference

Classes

- class [YWeatherReporter](#)

Yweather weather reporter.

5.59 speech_recognition_google Namespace Reference

Classes

- class [SpeechToTextGoogle](#)

Implements calls the Google ASR API.

Variables

- tuple [speech_to_text_node](#) = [SpeechToTextGoogle](#)()

The main function.

5.59.1 Variable Documentation

5.59.1.1 `tuple speech_recognition_google.speech_to_text_node = SpeechToTextGoogle()`

The main function.

Creates a [SpeechToTextGoogle](#) object

Definition at line 272 of file `speech_recognition_google.py`.

5.60 src Namespace Reference

Namespaces

- [rapp_exceptions](#)
- [rapp_html_parser](#)
- [rapp_http_json_parser](#)
- [rapp_http_request_handler](#)
- [rapp_utilities](#)

5.61 src.rapp_exceptions Namespace Reference

Classes

- class [RappError](#)
Provides a RAPP specific exception.

5.62 src.rapp_html_parser Namespace Reference

Classes

- class [RappHTMLParser](#)
Strips html from input string.

5.63 src.rapp_http_json_parser Namespace Reference

Classes

- class [RappHttpJSONParser](#)
Retrieves key:value pairs from JSON responses.

5.64 src.rapp_http_request_handler Namespace Reference

Classes

- class [RappHttpRequestHandler](#)
Performs http requests.

5.65 src.rapp_utilities Namespace Reference

Classes

- class [RappUtilities](#)
Provides various utility functionalities.

5.66 text_to_speech_espeak Namespace Reference

Classes

- class [TextToSpeechEspeak](#)

Variables

- tuple [text_to_speech_espeak_ros_node](#) = [TextToSpeechEspeak\(\)](#)

5.66.1 Variable Documentation

5.66.1.1 tuple [text_to_speech_espeak.text_to_speech_espeak_ros_node](#) = [TextToSpeechEspeak\(\)](#)

Definition at line 82 of file [text_to_speech_espeak.py](#).

5.67 userScoreHistoryForAllCategories Namespace Reference

Classes

- class [UserScoreHistoryForAllCategories](#)
Provides the necessary functions for returning the history of user scores.

5.68 userScoresForAllCategories Namespace Reference

Classes

- class [UserScoresForAllCategories](#)
Provides the necessary functions for returning the user scores.

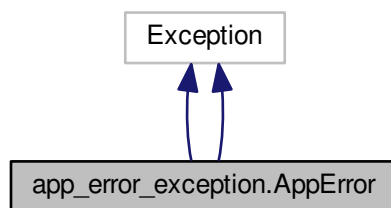
Chapter 6

Class Documentation

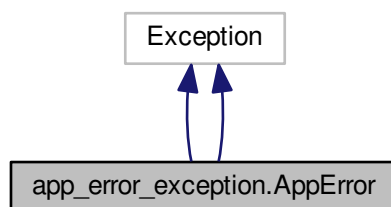
6.1 app_error_exception.AppError Class Reference

Exception compliant with the ros error and trace srvs.

Inheritance diagram for app_error_exception.AppError:



Collaboration diagram for app_error_exception.AppError:



Public Member Functions

- `def __init__`

- `def __init__`
Default constructor for passing error parameters.

Static Public Member Functions

- `def passErrorToRosSrv`
Validates the provided test type.
- `def passErrorToRosSrv`
Validates the provided test type.

Public Attributes

- `args`

6.1.1 Detailed Description

Exception compliant with the ros error and trace srvs.

Definition at line 3 of file `app_error_exception.py`.

6.1.2 Constructor & Destructor Documentation

6.1.2.1 `def app_error_exception.AppError.__init__(self, args)`

Default constructor for passing error parameters.

Definition at line 6 of file `app_error_exception.py`.

6.1.2.2 `def app_error_exception.AppError.__init__(self, args)`

Default constructor for passing error parameters.

Definition at line 6 of file `app_error_exception.py`.

6.1.3 Member Function Documentation

6.1.3.1 `def app_error_exception.AppError.passErrorToRosSrv(e, res) [static]`

Validates the provided test type.

Parameters

<code>e</code>	[AppError] The provided error
<code>trace</code>	[Srv] Ros srv with error [string] and trace [string[]] arguments

Returns

trace [Srv] Ros srv with error [string] and trace [string[]] arguments

Definition at line 16 of file `app_error_exception.py`.

6.1.3.2 `def app_error_exception.AppError.passErrorToRosSrv(e, res) [static]`

Validates the provided test type.

Parameters

<i>e</i>	[AppError] The provided error
<i>trace</i>	[Srv] Ros srv with error [string] and trace [string[]] arguments

Returns

[trace \[Srv\]](#) Ros srv with error [\[string\]](#) and trace [\[string\[\]\]](#) arguments

Definition at line 16 of file [app_error_exception.py](#).

6.1.4 Member Data Documentation

6.1.4.1 [app_error_exception.AppError.args](#)

Definition at line 8 of file [app_error_exception.py](#).

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

- [/home/travis/rapp_temp/rapp-platform/rapp_caffe_wrapper/src/app_error_exception.py](#)

6.2 rapp_application_authentication_manager.application_authentication_node.Application-AuthenticationManager Class Reference

Provides user management features.

Public Member Functions

- [def __init__](#)
ROS Service initializations.
- [def add_new_user_from_platform_callback](#)
Add new platform user using platform credentials.
- [def add_new_user_from_store_callback](#)
Add new platform user using rapp_store credentials.
- [def authenticate_token_callback](#)
Authenticate token.
- [def login_callback](#)
Login existing user using platform device token.
- [def login_from_store_callback](#)
Login existing user using store device token.

Private Member Functions

- [def _add_new_user_to_db](#)
Create password hash and store to the database.
- [def _validate_username_format](#)
Verify that new username complies with a set of rules.
- [def _verify_new_username_uniqueness](#)
Verify that new username is unique.
- [def _verify_user_credentials](#)
Verify username and password.

Private Attributes

- [_db_handler](#)

Handles the database queries.

6.2.1 Detailed Description

Provides user management features.

Definition at line 49 of file application_authentication_node.py.

6.2.2 Constructor & Destructor Documentation

6.2.2.1 `def rapp_application_authentication_manager.application_authentication_node.ApplicationAuthenticationManager.__init__(self)`

ROS Service initializations.

Definition at line 52 of file application_authentication_node.py.

6.2.3 Member Function Documentation

6.2.3.1 `def rapp_application_authentication_manager.application_authentication_node.ApplicationAuthenticationManager._add_new_user_to_db(self, new_user_username, new_user_password, creator_username, language)`
[private]

Create password hash and store to the databse.

Parameters

<i>username</i>	[string] The username
<i>password</i>	[string] The password

Definition at line 356 of file application_authentication_node.py.

6.2.3.2 `def rapp_application_authentication_manager.application_authentication_node.ApplicationAuthenticationManager._validate_username_format(self, username)` [private]

Verify that new username complies with a set of rules.

Alphanumerics, dashes and underscores are allowed

Parameters

<i>username</i>	[string] The username
-----------------	-----------------------

Exceptions

<i>RappError</i>	Username violates rules
------------------	-------------------------

Definition at line 346 of file application_authentication_node.py.

6.2.3.3 `def rapp_application_authentication_manager.application_authentication_node.ApplicationAuthenticationManager._verify_new_username_uniqueness(self, username)` [private]

Verify that new username is unique.

6.2 rapp_application_authentication_manager.application_authentication_node.ApplicationAuthenticationManager Class

Reference

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Parameters

<i>username</i>	[string] The username
-----------------	-----------------------

Returns

suggestion [string] A suggested username if the provided already exists

Exceptions

<i>RappError</i>	Username exists and can not find a username suggestion
------------------	--

Definition at line 324 of file application_authentication_node.py.

```
6.2.3.4 def rapp_application_authentication_manager.application_authentication_node.ApplicationAuthenticationManager._  
        verify_user_credentials ( self, username, password ) [private]
```

Verify username and password.

Parameters

<i>username</i>	[string] The username
<i>password</i>	[string] Password associated with username

Exceptions

<i>RappError</i>	Username does not exist or password does not match
------------------	--

Definition at line 312 of file application_authentication_node.py.

```
6.2.3.5 def rapp_application_authentication_manager.application_authentication_node.ApplicationAuthenticationManager.add-  
        _new_user_from_platform_callback ( self, req )
```

Add new platform user using platform credentials.

Parameters

<i>req</i>	[rapp_platform_ros_communications::ApplicationAuthentication::AddNewUserFromPlatformSrvRequest] The service request
------------	---

Returns

res [rapp_platform_ros_communications::ApplicationAuthentication::AddNewUserFromPlatformSrvResponse]
The service response

Definition at line 120 of file application_authentication_node.py.

```
6.2.3.6 def rapp_application_authentication_manager.application_authentication_node.ApplicationAuthenticationManager.add-  
        _new_user_from_store_callback ( self, req )
```

Add new platform user using rapp_store credentials.

Parameters

<i>req</i>	[rapp_platform_ros_communications::ApplicationAuthentication::AddNewUserFromStoreSrvRequest] The service request
------------	--

Returns

res [rapp_platform_ros_communications::ApplicationAuthentication::AddNewUserFromStoreSrvResponse]
The service response

Definition at line 162 of file application_authentication_node.py.

```
6.2.3.7 def rapp_application_authentication_manager.application_authentication_node.ApplicationAuthenticationManager.-
        authenticate_token_callback ( self, req )
```

Authenticate token.

Parameters

<i>req</i>	[rapp_platform_ros_communications::ApplicationAuthentication::UserTokenAuthenticationSrvRequest] The service request
------------	--

Returns

res [rapp_platform_ros_communications::ApplicationAuthentication::UserTokenAuthenticationSrvResponse]
The service response

Definition at line 295 of file application_authentication_node.py.

```
6.2.3.8 def rapp_application_authentication_manager.application_authentication_node.ApplicationAuthenticationManager.-
        login_callback ( self, req )
```

Login existing user using platform device token.

Parameters

<i>req</i>	[rapp_platform_ros_communications::ApplicationAuthentication::UserLoginSrvRequest] The service request
------------	--

Returns

res [rapp_platform_ros_communications::ApplicationAuthentication::UserLoginSrvResponse] The service response

Definition at line 207 of file application_authentication_node.py.

```
6.2.3.9 def rapp_application_authentication_manager.application_authentication_node.ApplicationAuthenticationManager.-
        login_from_store_callback ( self, req )
```

Login existing user using store device token.

Parameters

<i>req</i>	[rapp_platform_ros_communications::ApplicationAuthentication::UserLoginSrvRequest] The service request
------------	--

Returns

res [rapp_platform_ros_communications::ApplicationAuthentication::UserLoginSrvResponse] The service response

Definition at line 248 of file application_authentication_node.py.

6.2.4 Member Data Documentation

6.2.4.1 rapp_application_authentication_manager.application_authentication_node.ApplicationAuthenticationManager._db_handler [private]

Handles the database queries.

(see [database_handler.DatabaseHandler](#))

Definition at line 57 of file application_authentication_node.py.

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

- /home/travis/rapp_temp/rapp-platform/rapp_application_authentication_manager/src/rapp_application_authentication_manager/application_authentication_node.py

6.3 rapp_audio_processing.rapp_audio_processing.AudioProcessing Class Reference

Provides audio processing utilities.

Public Member Functions

- def [__init__](#)
Constructor performing initializations.
- def [denoiseCallback](#)
Service callback for denoising.
- def [detectSilenceCallback](#)
Service callback for Detecting silence.
- def [energyDenoiseCallback](#)
Service callback for Energy denoising.
- def [setNoiseProfileCallback](#)
Service callback for setting noise profile.
- def [transformAudioCallback](#)
Service callback for Audio transformation.

Private Attributes

- [_detect_silence_module](#)
Instantiates [rapp_detect_silence.DetectSilence](#).
- [_energy_denoise_module](#)
Instantiates [rapp_energy_denoise.EnergyDenoise](#).
- [_energy_denoising_debug](#)
Energy denoising debug flag.
- [_set_noise_profile_module](#)
Instantiates [rapp_set_noise_profile.SetNoiseProfile](#).
- [_sox_denoise_module](#)
Instantiates [rapp_sox_denoise.SoxDenoise](#).
- [_transform_audio_module](#)
Instantiates [rapp_transform_audio.TransformAudio](#).
- [_utilities_module](#)
Instantiates [rapp_utilities.Utilities](#).

6.3.1 Detailed Description

Provides audio processing utilities.

Implements service servers to perform denoising, audio transformation etc.

Definition at line 61 of file rapp_audio_processing.py.

6.3.2 Constructor & Destructor Documentation

6.3.2.1 `def rapp_audio_processing.rapp_audio_processing.AudioProcessing.__init__(self)`

Constructor performing initializations.

Definition at line 64 of file rapp_audio_processing.py.

6.3.3 Member Function Documentation

6.3.3.1 `def rapp_audio_processing.rapp_audio_processing.AudioProcessing.denoiseCallback(self, req)`

Service callback for denoising.

Parameters

<i>req</i>	[rapp_platform_ros_communications::AudioProcessing::AudioProcessingDenoiseSrv] The denoise request
------------	--

Returns

res [rapp_platform_ros_communications::AudioProcessing::AudioProcessingDenoiseSrvResponse] The denoise response

Definition at line 158 of file rapp_audio_processing.py.

6.3.3.2 `def rapp_audio_processing.rapp_audio_processing.AudioProcessing.detectSilenceCallback(self, req)`

Service callback for Detecting silence.

Parameters

<i>req</i>	[rapp_platform_ros_communications::AudioProcessing::AudioProcessingDetectSilence] The detect silence request
------------	--

Returns

res [rapp_platform_ros_communications::AudioProcessing::AudioProcessingDetectSilenceSrvResponse] The detect silence response

Definition at line 173 of file rapp_audio_processing.py.

6.3.3.3 `def rapp_audio_processing.rapp_audio_processing.AudioProcessing.energyDenoiseCallback(self, req)`

Service callback for Energy denoising.

Parameters

<i>req</i>	[rapp_platform_ros_communications::AudioProcessing::AudioProcessingDenoiseSrv] The denoise request
------------	---

Returns

res [rapp_platform_ros_communications::AudioProcessing::AudioProcessingDenoiseSrvResponse] The energy denoise response

Definition at line 188 of file rapp_audio_processing.py.

6.3.3.4 def rapp_audio_processing.rapp_audio_processing.AudioProcessing.setNoiseProfileCallback (self, req)

Service callback for setting noise profile.

Parameters

<i>req</i>	[rapp_platform_ros_communications::AudioProcessing::AudioProcessingSetNoiseProfileSrv] The set noise profile request
------------	---

Returns

res [rapp_platform_ros_communications::AudioProcessing::AudioProcessingSetNoiseProfileSrvResponse]
The set noise profile response

Definition at line 137 of file rapp_audio_processing.py.

6.3.3.5 def rapp_audio_processing.rapp_audio_processing.AudioProcessing.transformAudioCallback (self, req)

Service callback for Audio transformation.

Parameters

<i>req</i>	[rapp_platform_ros_communications::AudioProcessing::AudioProcessingTransformAudioSrv] The transform audio request
------------	--

Returns

res [rapp_platform_ros_communications::AudioProcessing::AudioProcessingTransformAudioSrvResponse]
The transform audio response

Definition at line 204 of file rapp_audio_processing.py.

6.3.4 Member Data Documentation

6.3.4.1 rapp_audio_processing.rapp_audio_processing.AudioProcessing._detect_silence_module [private]

Instantiates [rapp_detect_silence.DetectSilence](#).

Definition at line 67 of file rapp_audio_processing.py.

6.3.4.2 rapp_audio_processing.rapp_audio_processing.AudioProcessing._energy_denoise_module [private]

Instantiates [rapp_energy_denoise.EnergyDenoise](#).

Definition at line 69 of file rapp_audio_processing.py.

6.3.4.3 `rapp_audio_processing.rapp_audio_processing.AudioProcessing._energy_denoising_debug` [private]

Energy denoising debug flag.

Definition at line 104 of file `rapp_audio_processing.py`.

6.3.4.4 `rapp_audio_processing.rapp_audio_processing.AudioProcessing._set_noise_profile_module` [private]

Instantiates `rapp_set_noise_profile.SetNoiseProfile`.

Definition at line 75 of file `rapp_audio_processing.py`.

6.3.4.5 `rapp_audio_processing.rapp_audio_processing.AudioProcessing._sox_denoise_module` [private]

Instantiates `rapp_sox_denoise.SoxDenoise`.

Definition at line 71 of file `rapp_audio_processing.py`.

6.3.4.6 `rapp_audio_processing.rapp_audio_processing.AudioProcessing._transform_audio_module` [private]

Instantiates `rapp_transform_audio.TransformAudio`.

Definition at line 77 of file `rapp_audio_processing.py`.

6.3.4.7 `rapp_audio_processing.rapp_audio_processing.AudioProcessing._utilities_module` [private]

Instantiates `rapp_utilities.Utilities`.

Definition at line 73 of file `rapp_audio_processing.py`.

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

- `/home/travis/rapp_temp/rapp-platform/rapp_audio_processing/src/rapp_audio_processing/rapp_audio_processing.py`

6.4 `cognitive_exercise.CognitiveExercise` Class Reference

The Cognitive exercise ros node.

Public Member Functions

- `def __init__`
Default constructor.
- `def chooserDataHandler`
The cognitive exercise chooser service callback.
- `def cognitiveTestCreatorDataHandler`
The cognitive test creator service callback.
- `def recordUserCognitiveTestPerformanceDataHandler`
The record user cognitive test performance service callback.
- `def returnTestsOfTypeSubtypeDifficultyDataHandler`
The returnTestsOfTypeSubtypeDifficultyDataHandler service callback.
- `def userScoreHistoryForAllCategoriesDataHandler`
The userScoreHistoryForAllCategories service callback.
- `def userScoresForAllCategoriesDataHandler`
The userScoresForAllCategories service callback.

Public Attributes

- [serv](#)
- [serv_topic](#)

6.4.1 Detailed Description

The Cognitive exercise ros node.

Definition at line 49 of file cognitive_exercise.py.

6.4.2 Constructor & Destructor Documentation

6.4.2.1 def cognitive_exercise.CognitiveExercise.__init__(self)

Default constructor.

Waits for services the node depends on and declares the callbacks of the node's services

Definition at line 54 of file cognitive_exercise.py.

6.4.3 Member Function Documentation

6.4.3.1 def cognitive_exercise.CognitiveExercise.chooserDataHandler (self, req)

The cognitive exercise chooser service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::testSelectorSrvRequest::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::testSelectorSrvResponse::Response&] The ROS service response

Definition at line 123 of file cognitive_exercise.py.

6.4.3.2 def cognitive_exercise.CognitiveExercise.cognitiveTestCreatorDataHandler (self, req)

The cognitive test creator service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::cognitiveTestCreatorSrvRequest::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::cognitiveTestCreatorSrvResponse::Response&] The ROS service response

Definition at line 141 of file cognitive_exercise.py.

6.4.3.3 def cognitive_exercise.CognitiveExercise.recordUserCognitiveTestPerformanceDataHandler (self, req)

The record user cognitive test performance service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::recordUserCognitiveTestPerformanceSrvRequest::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::recordUserCognitiveTestPerformanceSrvResponse::Response&] The ROS service response

Definition at line 132 of file cognitive_exercise.py.

6.4.3.4 def cognitive_exercise.CognitiveExercise.returnTestsOfTypeSubtypeDifficultyDataHandler (self, req)

The returnTestsOfTypeSubtypeDifficultyDataHandler service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::returnTestsOfTypeSubtypeDifficultyDataHandler::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::returnTestsOfTypeSubtypeDifficultyDataHandler::Response&] The ROS service response

Definition at line 168 of file cognitive_exercise.py.

6.4.3.5 def cognitive_exercise.CognitiveExercise.userScoreHistoryForAllCategoriesDataHandler (self, req)

The [userScoreHistoryForAllCategories](#) service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::userScoreHistoryForAllCategoriesSrv::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::userScoreHistoryForAllCategoriesSrv::Response&] The ROS service response

Definition at line 159 of file cognitive_exercise.py.

6.4.3.6 def cognitive_exercise.CognitiveExercise.userScoresForAllCategoriesDataHandler (self, req)

The [userScoresForAllCategories](#) service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::userScoresForAllCategoriesSrvRequest::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::userScoresForAllCategoriesSrvResponse::Response&] The ROS service response

Definition at line 150 of file cognitive_exercise.py.

6.4.4 Member Data Documentation

6.4.4.1 cognitive_exercise.CognitiveExercise.serv

Definition at line 91 of file cognitive_exercise.py.

6.4.4.2 cognitive_exercise.CognitiveExercise.serv_topic

Definition at line 57 of file cognitive_exercise.py.

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

- [/home/travis/rapp_temp/rapp-platform/rapp_cognitive_exercise/src/cognitive_exercise.py](#)

6.5 helper_functions.CognitiveExerciseHelperFunctions Class Reference

Static Public Member Functions

- def [determineTestTypeListForReturningScoresOrHistory](#)
Validates the provided test type or selects all test types from ontology if non provided.
- def [filterTestsbyDifficultyAndSubtype](#)
Filters the tests by Difficulty and test subtype.
- def [getCognitiveTestsOfType](#)
Gets the cognitive tests of the given type and difficulty available in the ontology.
- def [getTestLanguagesFromOntology](#)
Queries the ontology and returns the cognitive test languages available.
- def [getTestTypesFromOntology](#)
Queries the ontology and returns the cognitive test types available.
- def [getUserLanguage](#)
Queries the MySQL database through the MySQL wrapper and returns the user's language.
- def [getUserOntologyAlias](#)
Gets the users ontology alias and if it doesnt exist it creates it.
- def [getUserPerformanceRecordsForTestType](#)
Gets the user cognitive test performance records for given test type.
- def [organizeUserPerformanceByTimestamp](#)
Organizes the user's performance entries by timestamp.
- def [traceError](#)
Traces and returns the code line where an error occurred.

6.5.1 Detailed Description

Definition at line 34 of file helper_functions.py.

6.5.2 Member Function Documentation

6.5.2.1 def helper_functions.CognitiveExerciseHelperFunctions.determineTestTypeListForReturningScoresOrHistory (*testType, validtestTypesList*) [static]

Validates the provided test type or selects all test types from ontology if non provided.

Parameters

<i>testType</i>	[string] The provided test type
<i>validtestTypes-List</i>	[list] The list of valid test types

Returns

testTypesList [list] The list of testTypes returned

Exceptions

<i>Exception</i>	AppError
------------------	----------

Definition at line 166 of file helper_functions.py.

```
6.5.2.2 def helper_functions.CognitiveExerciseHelperFunctions.filterTestsbyDifficultyAndSubtype ( testsOfType, chosenDif,
        testSubType ) [static]
```

Filters the tests by Difficulty and test subtype.

Parameters

<i>testsOfType</i>	[dictionary] The dictionary containing all the tests
<i>chosenDif</i>	[string] The test difficulty
<i>testSubType</i>	[string] The test sub type

Returns

d [dictionary] The selected cognitive tests after filtering was applied

Definition at line 132 of file helper_functions.py.

```
6.5.2.3 def helper_functions.CognitiveExerciseHelperFunctions.getCognitiveTestsOfType ( testType, userLanguage )
        [static]
```

Gets the cognitive tests of the given type and difficulty available in the ontology.

Parameters

<i>testType</i>	[string] The test type (category)
<i>userLanguage</i>	[string] The user's language

Returns

cognitiveTestsOfTypeResponse [cognitiveTestsOfTypeResponse] The cognitive tests of type service response

Exceptions

<i>Exception</i>	AppError
------------------	----------

Definition at line 113 of file helper_functions.py.

```
6.5.2.4 def helper_functions.CognitiveExerciseHelperFunctions.getTestLanguagesFromOntology ( ) [static]
```

Queries the ontology and returns the cognitive test languages available.

Returns

languagesList [list] The list of the available cognitive test languages they were read from the ontology

Exceptions

<i>Exception</i>	AppError
------------------	----------

Definition at line 91 of file helper_functions.py.

6.5.2.5 def helper_functions.CognitiveExerciseHelperFunctions.getTestTypesFromOntology () [static]

Queries the ontology and returns the cognitive test types available.

Returns

testTypesList [list] The list of the available tests as they were read from the ontology

Exceptions

<i>Exception</i>	AppError
------------------	----------

Definition at line 71 of file helper_functions.py.

6.5.2.6 def helper_functions.CognitiveExerciseHelperFunctions.getUserLanguage (username) [static]

Queries the MySQL database through the MySQL wrapper and returns the user's language.

Parameters

<i>username</i>	[string] The username of the user as is in the MySQL database
<i>languageInSrv</i>	[string] The user's language for assigning it to the srv response trace

Returns

userLanguage [string] The user's language

Exceptions

<i>Exception</i>	AppError
------------------	----------

Definition at line 149 of file helper_functions.py.

6.5.2.7 def helper_functions.CognitiveExerciseHelperFunctions.getUserOntologyAlias (username) [static]

Gets the users ontology alias and if it doesnt exist it creates it.

Parameters

<i>username</i>	[string] The user's username
-----------------	------------------------------

Returns

ontologyAlias [string] The user's ontology alias

Exceptions

<i>Exception</i>	AppError
------------------	----------

Definition at line 56 of file helper_functions.py.

6.5.2.8 def helper_functions.CognitiveExerciseHelperFunctions.getUserPerformanceRecordsForTestType (testType, userOntologyAlias) [static]

Gets the user cognitive test performance records for given test type.

Parameters

<i>username</i>	[string] The user's username
-----------------	------------------------------

Returns

userPerformanceReq [rapp_platform_ros_communications::userPerformanceCognitiveTestsSrvRequest::Request&] The user's performance records

Exceptions

<i>Exception</i>	AppError
------------------	----------

Definition at line 42 of file helper_functions.py.

6.5.2.9 `def helper_functions.CognitiveExerciseHelperFunctions.organizeUserPerformanceByTimestamp (userPerf)`
`[static]`

Organizes the user's performance entries by timestamp.

Parameters

<i>userPerf</i>	[dict] The dictionary containing the user's performance entries
-----------------	---

Returns

userPerfOrganizedByTimestamp [OrderedDict] The dictionary containing the user's performance entries organized by timestamp

Definition at line 182 of file helper_functions.py.

6.5.2.10 `def helper_functions.CognitiveExerciseHelperFunctions.traceError (error, trace)` `[static]`

Traces and returns the code line where an error occurred.

Parameters

<i>error</i>	[String] the error occurred
<i>trace</i>	[list] the execution messages trace list
<i>trace</i>	[list] the execution messages trace list

Definition at line 196 of file helper_functions.py.

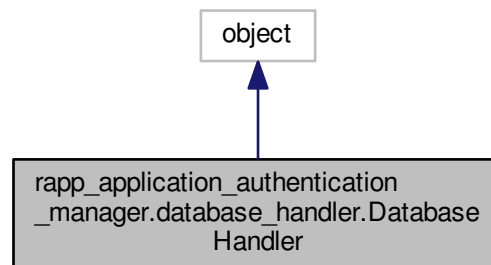
The documentation for this class was generated from the following file:

- /home/travis/rapp_temp/rapp-platform/rapp_cognitive_exercise/src/helper_functions.py

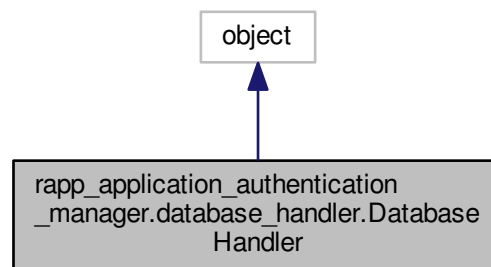
6.6 rapp_application_authentication_manager.database_handler.DatabaseHandler Class Reference

Handles database functions for authentication manager.

Inheritance diagram for rapp_application_authentication_manager.database_handler.DatabaseHandler:



Collaboration diagram for rapp_application_authentication_manager.database_handler.DatabaseHandler:



Public Member Functions

- def [__init__](#)
ROS Service initializations.
- def [add_new_user](#)
Write new user to the platform database.
- def [add_store_token_to_device](#)
Write store token the device table.
- def [get_token_user](#)
Retrieve username associated with application_token from platform database.
- def [get_user_password](#)
Retrieve user's password from platform database.
- def [username_exists](#)
Verify that username exists in platform database.
- def [validate_user_role](#)
Check if user has an admin/root role.
- def [verify_active_application_token](#)

- Check if the application_token is active/valid.*
- [def verify_active_robot_session](#)
Check if there is an active session (token) for the specified user and store_token (device_token)
- [def verify_platform_device_token](#)
Verify that the device token exists in platform database.
- [def verify_store_device_token](#)
Verify that the device token exists in store database.
- [def write_new_application_token](#)
Write new token to the platform database.

Private Attributes

- [_add_new_user_proxy](#)
Service proxy to add new user to the database.
- [_add_store_token_to_device_proxy](#)
Service proxy to add new device token from store to the database.
- [_create_new_app_token_proxy](#)
Service proxy to add new application token to the database.
- [_get_token_user_proxy](#)
Service proxy to query database for the user associated with a token.
- [_get_user_passwd_proxy](#)
Service proxy to query database for user password.
- [_username_exists_proxy](#)
Service proxy to query database for user existence.
- [_validate_existing_device_token_proxy](#)
Service proxy to query the database for a device token.
- [_validate_user_role_proxy](#)
Service proxy to query the database for the user's role.
- [_verify_appl_token_proxy](#)
Service proxy to query database for application token validity.
- [_verify_robot_session_proxy](#)
Service proxy to query database for active user session.

6.6.1 Detailed Description

Handles database functions for authentication manager.

Definition at line 58 of file database_handler.py.

6.6.2 Constructor & Destructor Documentation

6.6.2.1 `def rapp_application_authentication_manager.database_handler.DatabaseHandler.__init__(self)`

ROS Service initializations.

Definition at line 61 of file database_handler.py.

6.6.3 Member Function Documentation

6.6.3.1 `def rapp_application_authentication_manager.database_handler.DatabaseHandler.add_new_user(self, username, password, creator, language)`

Write new user to the platform database.

Parameters

<i>username</i>	[string] The username
<i>password</i>	[string] The user's password
<i>store_token</i>	[string] The user's store token
<i>language</i>	[string] The user's language

Returns

status [bool] True if token exists, false otherwise

Exceptions

<i>RappError</i>	Failed to create the new user
------------------	-------------------------------

Definition at line 316 of file database_handler.py.

6.6.3.2 `def rapp_application_authentication_manager.database_handler.DatabaseHandler.add_store_token_to_device (self, store_token)`

Write store token the device table.

Parameters

<i>store_token</i>	[string] The device_token of the application token
--------------------	--

Exceptions

<i>RappError</i>	Failed to write token
------------------	-----------------------

Definition at line 358 of file database_handler.py.

6.6.3.3 `def rapp_application_authentication_manager.database_handler.DatabaseHandler.get_token_user (self, app_token)`

Retrieve username associated with application_token from platform database.

Parameters

<i>token</i>	[string] The user's application token
--------------	---------------------------------------

Returns

username [string] The username

Definition at line 281 of file database_handler.py.

6.6.3.4 `def rapp_application_authentication_manager.database_handler.DatabaseHandler.get_user_password (self, username)`

Retrieve user's password from platform database.

Parameters

<i>username</i>	[string] The username
-----------------	-----------------------

Returns

password [string] Password associated with username

Exceptions

<i>RappError</i>	Username does not exist
------------------	-------------------------

Definition at line 250 of file database_handler.py.

```
6.6.3.5 def rapp_application_authentication_manager.database_handler.DatabaseHandler.username_exists ( self, username )
```

Verify that username exists in platform database.

Parameters

<i>username</i>	[string] The username
-----------------	-----------------------

Returns

status [bool] True if username exists, false otherwise

Definition at line 233 of file database_handler.py.

```
6.6.3.6 def rapp_application_authentication_manager.database_handler.DatabaseHandler.validate_user_role ( self, username )
```

Check if user has an admin/root role.

Parameters

<i>username</i>	[string] The user's username
-----------------	------------------------------

Exceptions

<i>RappError</i>	Invalid user role
------------------	-------------------

Definition at line 376 of file database_handler.py.

```
6.6.3.7 def rapp_application_authentication_manager.database_handler.DatabaseHandler.verify_active_application_token ( self, application_token )
```

Check if the application_token is active/valid.

Parameters

<i>token</i>	[string] The user's application token
--------------	---------------------------------------

Returns

status [bool] True if it is valid, false otherwise

Definition at line 265 of file database_handler.py.

```
6.6.3.8 def rapp_application_authentication_manager.database_handler.DatabaseHandler.verify_active_robot_session ( self, username, store_token )
```

Check if there is an active session (token) for the specified user and store_token (device_token)

Parameters

<i>username</i>	[string] The username
<i>store_token</i>	[string] The device_token associated with the appl_token

Returns

status [bool] True if token exists, false otherwise

Definition at line 295 of file database_handler.py.

```
6.6.3.9 def rapp_application_authentication_manager.database_handler.DatabaseHandler.verify_platform_device_token ( self,
device_token )
```

Verify that the device token exists in platform database.

Parameters

<i>device_token</i>	[string] The token
---------------------	--------------------

Returns

status [bool] True if token exists, false otherwise

Definition at line 221 of file database_handler.py.

```
6.6.3.10 def rapp_application_authentication_manager.database_handler.DatabaseHandler.verify_store_device_token ( self,
device_token )
```

Verify that the device token exists in store database.

Parameters

<i>device_token</i>	[string] The token
---------------------	--------------------

Returns

status [bool] True if token exists, false otherwise

Definition at line 211 of file database_handler.py.

```
6.6.3.11 def rapp_application_authentication_manager.database_handler.DatabaseHandler.write_new_application_token ( self,
username, store_token, appl_token )
```

Write new token to the platform database.

Parameters

<i>username</i>	[string] The user issuing the token
<i>store_token</i>	[string] The device_token of the application token
<i>appl_token</i>	[string] The user's application token

Exceptions

<i>RappError</i>	Failed to write token
------------------	-----------------------

Definition at line 339 of file database_handler.py.

6.6.4 Member Data Documentation

6.6.4.1 `rapp_application_authentication_manager.database_handler.DatabaseHandler._add_new_user_proxy` [private]

Service proxy to add new user to the database.

(see database_handler.add_new_user)

Definition at line 145 of file database_handler.py.

6.6.4.2 `rapp_application_authentication_manager.database_handler.DatabaseHandler._add_store_token_to_device_proxy` [private]

Service proxy to add new device token from store to the database.

(see database_handler.add_store_token_to_device)

Definition at line 173 of file database_handler.py.

6.6.4.3 `rapp_application_authentication_manager.database_handler.DatabaseHandler._create_new_app_token_proxy` [private]

Service proxy to add new application token to the database.

(see database_handler.write_new_application_token)

Definition at line 159 of file database_handler.py.

6.6.4.4 `rapp_application_authentication_manager.database_handler.DatabaseHandler._get_token_user_proxy` [private]

Service proxy to query database for the user associated with a token.

(see database_handler.get_token_user)

Definition at line 116 of file database_handler.py.

6.6.4.5 `rapp_application_authentication_manager.database_handler.DatabaseHandler._get_user_passwd_proxy` [private]

Service proxy to query database for user password.

(see database_handler.get_user_password)

Definition at line 86 of file database_handler.py.

6.6.4.6 `rapp_application_authentication_manager.database_handler.DatabaseHandler._username_exists_proxy` [private]

Service proxy to query database for user existence.

(see database_handler.username_exists)

Definition at line 72 of file database_handler.py.

6.6.4.7 rapp_application_authentication_manager.database_handler.DatabaseHandler._validate_existing_device_token_proxy [private]

Service proxy to query the database for a device token.

(see database_handler.verify_platform_device_token)

Definition at line 202 of file database_handler.py.

6.6.4.8 rapp_application_authentication_manager.database_handler.DatabaseHandler._validate_user_role_proxy [private]

Service proxy to query the database for the user's role.

(see database_handler.validate_user_role)

Definition at line 187 of file database_handler.py.

6.6.4.9 rapp_application_authentication_manager.database_handler.DatabaseHandler._verify_appl_token_proxy [private]

Service proxy to query database for application token validity.

(see database_handler.verify_active_application_token)

Definition at line 101 of file database_handler.py.

6.6.4.10 rapp_application_authentication_manager.database_handler.DatabaseHandler._verify_robot_session_proxy [private]

Service proxy to query database for active user session.

(see database_handler.verify_active_robot_session)

Definition at line 131 of file database_handler.py.

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

- /home/travis/rapp_temp/rapp-platform/rapp_application_authentication_manager/src/rapp_application_authentication_manager/[database_handler.py](#)

6.7 rapp_audio_processing.rapp_detect_silence.DetectSilence Class Reference

Performs silence detection on an audio file.

Public Member Functions

- def [detectSilence](#)
Detects silence.

6.7.1 Detailed Description

Performs silence detection on an audio file.

Definition at line 29 of file rapp_detect_silence.py.

6.7.2 Member Function Documentation

6.7.2.1 `def rapp_audio_processing.rapp_detect_silence.DetectSilence.detectSilence (self, audio_file, threshold)`

Detects silence.

Handles service callback [rapp_audio_processing.AudioProcessing::detectSilenceCallback](#)

Parameters

<i>audio_file</i>	[string] Audio file path
<i>threshold</i>	[float] Silence threshold

Returns

`rsd_sq` [float] Noise relative standard deviation

`has_silence` [bool] Indicates the existence of silence

Definition at line 41 of file `rapp_detect_silence.py`.

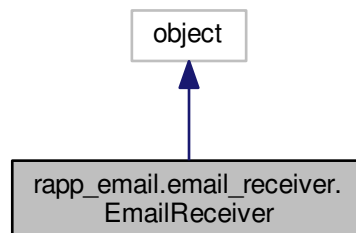
The documentation for this class was generated from the following file:

- `/home/travis/rapp_temp/rapp-platform/rapp_audio_processing/src/rapp_audio_processing/rapp_detect_silence.py`

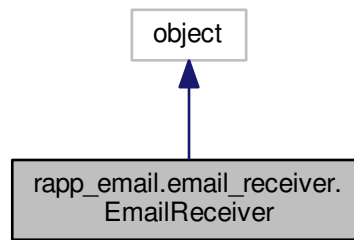
6.8 rapp_email.email_receiver.EmailReceiver Class Reference

Fetches emails from user's email account.

Inheritance diagram for `rapp_email.email_receiver.EmailReceiver`:



Collaboration diagram for rapp_email.email_receiver.EmailReceiver:



Public Member Functions

- `def __init__`
Constructor.
- `def receiveEmailSrvCallback`
The callback to receive specified mails from users email account.

Private Member Functions

- `def _connectImap`
Create an IMAP connection to the server.
- `def _fetchEmail`
Fetch specified email's data.
- `def _initializePath`
Create a temporary path for the user emails.
- `def _selectEmails`
Fetch the emails that match the requests criteria.

6.8.1 Detailed Description

Fetches emails from user's email account.

Definition at line 46 of file `email_receiver.py`.

6.8.2 Constructor & Destructor Documentation

6.8.2.1 `def rapp_email.email_receiver.EmailReceiver.__init__(self)`

Constructor.

Definition at line 49 of file `email_receiver.py`.

6.8.3 Member Function Documentation

6.8.3.1 `def rapp_email.email_receiver.EmailReceiver._connectImap (self, email, password, server, port) [private]`

Create an IMAP connection to the server.

Initiates an IMAP connection according to the user's email and logs in to the server using user's credentials

Parameters

<i>email</i>	[string] The user's email
<i>password</i>	[string] The user's password
<i>server</i>	[string] The email server
<i>port</i>	[string] The email server's port

Returns

imap [imaplib::IMAP4_SSL] The connection

Definition at line 264 of file email_receiver.py.

6.8.3.2 `def rapp_email.email_receiver.EmailReceiver._fetchEmail (self, imap, emailID, receivePath, emailCounter) [private]`

Fetch specified email's data.

Parameters

<i>imap</i>	[imaplib::IMAP4_SSL] The connection
<i>emailID</i>	[int] The emails UID
<i>receivePath</i>	[string] The absolute path where the contents of the email should be written.
<i>emailCounter</i>	[int] The number of emails processed

return mailMsg [rapp_platform_ros_communications::MailMsg] The mail msg to be appended in the service response

Definition at line 113 of file email_receiver.py.

6.8.3.3 `def rapp_email.email_receiver.EmailReceiver._initializePath (self, email) [private]`

Create a temporary path for the user emails.

The path will be placed in ~/rapp_platform_files/emails/{username}{random_string}

Parameters

<i>email</i>	[string] The rapp user's email
--------------	--------------------------------

Definition at line 188 of file email_receiver.py.

6.8.3.4 `def rapp_email.email_receiver.EmailReceiver._selectEmails (self, req, imap) [private]`

Fetch the emails that match the requests criteria.

req [rapp_platform_ros_communications::Email::ReceiveEmailSrvRequest] The receive email request

Returns

emails [list<int>] The UIDs of the selected emails

imaplib.IMAP4.error General imaplib error

Definition at line 215 of file email_receiver.py.

6.8.3.5 `def rapp_email.email_receiver.EmailReceiver.receiveEmailSrvCallback (self, req)`

The callback to receive specified mails from users email account.

req [rapp_platform_ros_communications::Email::ReceiveEmailSrvRequest] The receive email request

res [rapp_platform_ros_communications::Email::ReceiveEmailSrvResponse] The receive email response

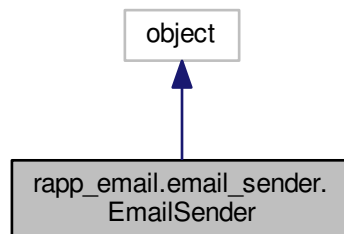
Definition at line 59 of file email_receiver.py.

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

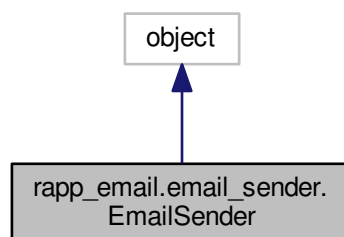
- /home/travis/rapp_temp/rapp-platform/rapp_email/src/rapp_email/[email_receiver.py](#)

6.9 rapp_email.email_sender.EmailSender Class Reference

Inheritance diagram for rapp_email.email_sender.EmailSender:



Collaboration diagram for rapp_email.email_sender.EmailSender:



Public Member Functions

- `def __init__`
- `def sendEmailSrvCallback`

The callback to send specified mails from users email account.

Private Member Functions

- [def _connectAndSend](#)
Connect to the requested SMTP server and send email.
- [def _createEmailBody](#)
Creates the emails main body.
- [def _handleAttachment](#)
Add attachment to the email.

6.9.1 Detailed Description

Definition at line 41 of file email_sender.py.

6.9.2 Constructor & Destructor Documentation

6.9.2.1 `def rapp_email.email_sender.EmailSender.__init__(self)`

Definition at line 43 of file email_sender.py.

6.9.3 Member Function Documentation

6.9.3.1 `def rapp_email.email_sender.EmailSender._connectAndSend(self, userEmail, userPassword, recipients, server, port, msg) [private]`

Connect to the requested SMTP server and send email.

Parameters

<i>userEmail</i>	[string] The sender's email
<i>userPassword</i>	[string] The sender's password
<i>recipients</i>	[list<string>] The recipients' emails
<i>server</i>	[string] The SMTP server's address
<i>port</i>	[string] The SMTP server's port

Exceptions

<i>smtpplib.SMTPException</i>	Base SMTP exception class
<i>socket.error</i>	Socket class exception (connection problem)

Definition at line 100 of file email_sender.py.

6.9.3.2 `def rapp_email.email_sender.EmailSender._createEmailBody(self, recipients, userEmail, body, subject) [private]`

Creates the emails main body.

Parameters

<i>recipients</i>	[list<string>] The recipients' emails
<i>userEmail</i>	[string] The sender's email
<i>subject</i>	[string] The email's subject

<i>body</i>	[string] The email's body text
-------------	--------------------------------

Returns

msg [MimeMultipart] The email's main body to be sent via SMTP

Definition at line 137 of file email_sender.py.

6.9.3.3 `def rapp_email.email_sender.EmailSender._handleAttachment (self, filename) [private]`

Add attachment to the email.

Parameters

<i>filename</i>	[string] The absolute path of the requested file
-----------------	--

Returns

attachment [mimeobject] The attachment format of the file to be appended to the email

Exceptions

<i>IOError</i>	General IO error
<i>EnvironmentError</i>	General IO error

Definition at line 158 of file email_sender.py.

6.9.3.4 `def rapp_email.email_sender.EmailSender.sendEmailSrvCallback (self, req)`

The callback to send specified mails from users email account.

req [rapp_platform_ros_communications::Email::SendEmailSrvRequest] The send email request

res [rapp_platform_ros_communications::Email::SendEmailSrvResponse] The send email response

Definition at line 53 of file email_sender.py.

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

- /home/travis/rapp_temp/rapp-platform/rapp_email/src/rapp_email/[email_sender.py](#)

6.10 rapp_audio_processing.rapp_energy_denoise.EnergyDenoise Class Reference

Performs energy denoising on an audio file.

Public Member Functions

- `def energyDenoise`
Performs energy-based denoising.

6.10.1 Detailed Description

Performs energy denoising on an audio file.

Definition at line 29 of file rapp_energy_denoise.py.

6.10.2 Member Function Documentation

6.10.2.1 `def rapp_audio_processing.rapp_energy_denoise.EnergyDenoise.energyDenoise (self, audio_file, scale, denoised_audio_file, energy_denoising_debug)`

Performs energy-based denoising.

Handles service callback [rapp_audio_processing.AudioProcessing::energyDenoiseCallback](#)

Parameters

<i>audio_file</i>	[string] Audio file path
<i>scale</i>	[float] Energy denoise scale
<i>denoised_audio_file</i>	[string] Path to write denoised audio file

Definition at line 39 of file `rapp_energy_denoise.py`.

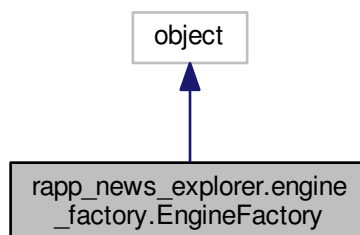
The documentation for this class was generated from the following file:

- `/home/travis/rapp_temp/rapp-platform/rapp_audio_processing/src/rapp_audio_processing/rapp_energy_denoise.py`

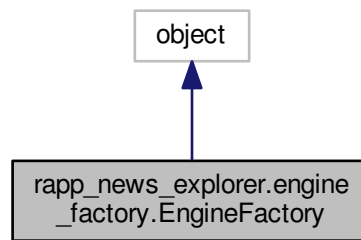
6.11 rapp_news_explorer.engine_factory.EngineFactory Class Reference

Creates and returns the class of the news engine requested.

Inheritance diagram for `rapp_news_explorer.engine_factory.EngineFactory`:



Collaboration diagram for rapp_news_explorer.engine_factory.EngineFactory:



Public Member Functions

- def [select_news_engine](#)
Select proper news engine according to request.

6.11.1 Detailed Description

Creates and returns the class of the news engine requested.

Implements a factory pattern.

Definition at line 31 of file `engine_factory.py`.

6.11.2 Member Function Documentation

6.11.2.1 def `rapp_news_explorer.engine_factory.EngineFactory.select_news_engine (self, engine)`

Select proper news engine according to request.

Parameters

<i>engine</i>	[string] The name of the news engine
---------------	--------------------------------------

Returns

res [rapp_news_explorer.rapp_news_explorer.NewsEngine] The news engine

RappError Wrong news engine provided by user

Definition at line 42 of file `engine_factory.py`.

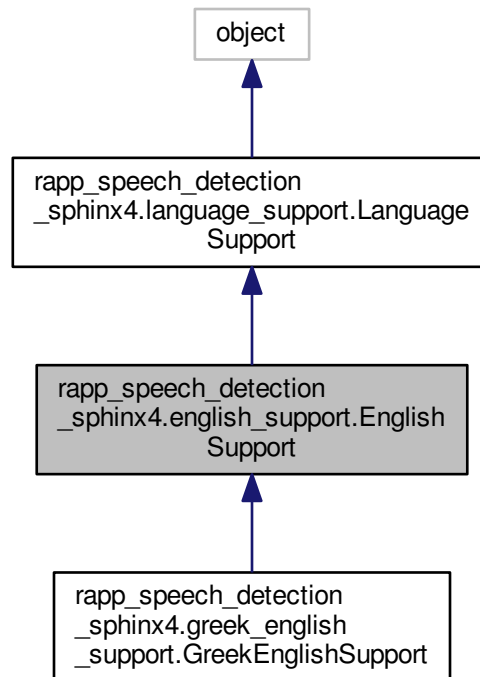
The documentation for this class was generated from the following file:

- `/home/travis/rapp_temp/rapp-platform/rapp_news_explorer/src/rapp_news_explorer/engine_factory.py`

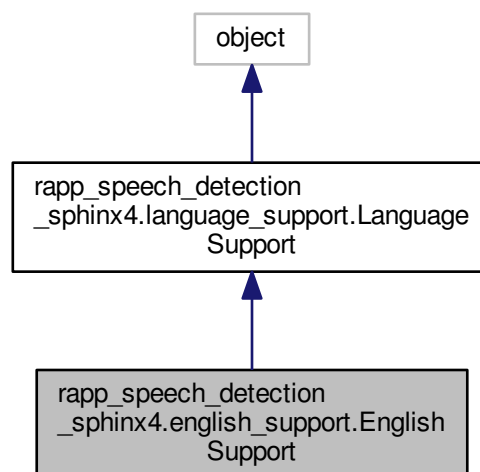
6.12 rapp_speech_detection_sphinx4.english_support.EnglishSupport Class Reference

Allows the creation of configuration files for English Sphinx speech recognition.

Inheritance diagram for `rapp_speech_detection_sphinx4.english_support.EnglishSupport`:



Collaboration diagram for `rapp_speech_detection_sphinx4.english_support.EnglishSupport`:



Public Member Functions

- def [__init__](#)
Performs initializations.
- def [getLimitedVocebularyConfiguration](#)
Computes the Limited English Configuration.
- def [getWordPhonemes](#)
Compute the English word phonemes.

Private Attributes

- [_english_dict_file](#)
The English dictionary file.
- [_english_dict_mapping](#)
The mmap of the English dictionary file contents.

6.12.1 Detailed Description

Allows the creation of configuration files for English Sphinx speech recognition.

Definition at line 27 of file english_support.py.

6.12.2 Constructor & Destructor Documentation

6.12.2.1 `def rapp_speech_detection_sphinx4.english_support.EnglishSupport.__init__(self)`

Performs initializations.

Definition at line 30 of file english_support.py.

6.12.3 Member Function Documentation

6.12.3.1 `def rapp_speech_detection_sphinx4.english_support.EnglishSupport.getLimitedVocebularyConfiguration (self, words, grammar, sentences)`

Computes the Limited English Configuration.

Parameters

<i>words</i>	[list::string] The set of words to be identified
<i>grammar</i>	[list::string] The Sphinx grammar parameter
<i>sentences</i>	[list::string] The Sphinx sentences parameter

Returns

limited_sphinx_configuration [dictionary] The Limited English configuration
engEngDict [dictionary] Introduced for code interface compliance

Definition at line 105 of file english_support.py.

6.12.3.2 `def rapp_speech_detection_sphinx4.english_support.EnglishSupport.getWordPhonemes (self, words)`

Compute the English word phonemes.

Parameters

<i>words</i>	[list::string] The set of English words
--------------	---

Returns

enhanced_words [dictionary] The English word->phonemes mapping

Definition at line 60 of file english_support.py.

6.12.4 Member Data Documentation

6.12.4.1 rapp_speech_detection_sphinx4.english_support.EnglishSupport._english_dict_file [private]

The English dictionary file.

Located in path [global_parameters.GlobalParams::_language_models_url](#) + "/englishPack/cmudict-en-us.dict"

Definition at line 39 of file english_support.py.

6.12.4.2 rapp_speech_detection_sphinx4.english_support.EnglishSupport._english_dict_mapping [private]

The mmap of the English dictionary file contents.

Definition at line 41 of file english_support.py.

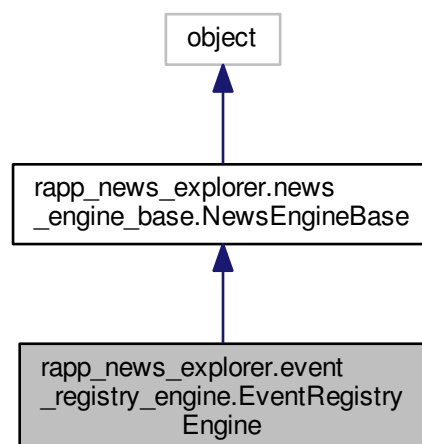
The documentation for this class was generated from the following file:

- /home/travis/rapp_temp/rapp-platform/rapp_speech_detection_sphinx4/src/rapp_speech_detection_sphinx4/[english-_support.py](#)

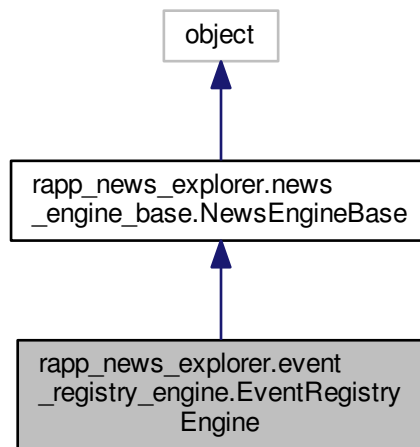
6.13 rapp_news_explorer.event_registry_engine.EventRegistryEngine Class Reference

EventRegistry news engine handler.

Inheritance diagram for rapp_news_explorer.event_registry_engine.EventRegistryEngine:



Collaboration diagram for rapp_news_explorer.event_registry_engine.EventRegistryEngine:



Public Member Functions

- `def __init__`
Constructor.
- `def fetch_news`
Fetch the news.

Private Attributes

- `_event_handler`
- `_max_requests`
- `_max_stories`
- `_password`
- `_username`

Additional Inherited Members

6.13.1 Detailed Description

EventRegistry news engine handler.

Definition at line 32 of file event_registry_engine.py.

6.13.2 Constructor & Destructor Documentation

6.13.2.1 `def rapp_news_explorer.event_registry_engine.EventRegistryEngine.__init__(self)`

Constructor.

Definition at line 35 of file event_registry_engine.py.

6.13.3 Member Function Documentation

6.13.3.1 `def rapp_news_explorer.event_registry_engine.EventRegistryEngine.fetch_news (self, req)`

Fetch the news.

Parameters

<i>req</i>	[<code>rapp_platform_ros_communications::NewsExplorer::NewsExplorerSrv</code>] The service request
------------	--

Returns

[list<dict>] The server results containing the stories

Definition at line 62 of file `event_registry_engine.py`.

6.13.4 Member Data Documentation

6.13.4.1 `rapp_news_explorer.event_registry_engine.EventRegistryEngine._event_handler` [private]

Definition at line 37 of file `event_registry_engine.py`.

6.13.4.2 `rapp_news_explorer.event_registry_engine.EventRegistryEngine._max_requests` [private]

Definition at line 52 of file `event_registry_engine.py`.

6.13.4.3 `rapp_news_explorer.event_registry_engine.EventRegistryEngine._max_stories` [private]

Definition at line 53 of file `event_registry_engine.py`.

6.13.4.4 `rapp_news_explorer.event_registry_engine.EventRegistryEngine._password` [private]

Definition at line 45 of file `event_registry_engine.py`.

6.13.4.5 `rapp_news_explorer.event_registry_engine.EventRegistryEngine._username` [private]

Definition at line 44 of file `event_registry_engine.py`.

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

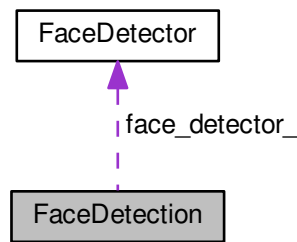
- `/home/travis/rapp_temp/rapp-platform/rapp_news_explorer/src/rapp_news_explorer/event_registry_engine.py`

6.14 FaceDetection Class Reference

Class [FaceDetection](#) uptakes the task of handling the ROS service callbacks.

```
#include <face_detection.h>
```

Collaboration diagram for FaceDetection:



Public Member Functions

- [FaceDetection](#) (void)
Default constructor.
- bool [faceDetectionCallback](#) (rapp_platform_ros_communications::FaceDetectionRosSrv::Request &req, rapp_platform_ros_communications::FaceDetectionRosSrv::Response &res)
Serves the face detection ROS service callback.

Private Attributes

- [FaceDetector](#) [face_detector_](#)
- ros::ServiceServer [faceDetectionService_](#)
- std::string [faceDetectionTopic_](#)
- ros::NodeHandle [nh_](#)

6.14.1 Detailed Description

Class [FaceDetection](#) uptakes the task of handling the ROS service callbacks.

Definition at line 31 of file [face_detection.h](#).

6.14.2 Constructor & Destructor Documentation

6.14.2.1 FaceDetection::FaceDetection (void)

Default constructor.

Default constructor. Performs initializations.

Definition at line 24 of file [face_detection.cpp](#).

6.14.3 Member Function Documentation

6.14.3.1 bool FaceDetection::faceDetectionCallback (rapp_platform_ros_communications::FaceDetectionRosSrv::Request & req, rapp_platform_ros_communications::FaceDetectionRosSrv::Response & res)

Serves the face detection ROS service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::FaceDetectionRosSrv::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::FaceDetectionRosSrv::Response&] The ROS service response

Returns

bool - The success status of the call

Definition at line 42 of file face_detection.cpp.

6.14.4 Member Data Documentation**6.14.4.1 FaceDetector FaceDetection::face_detector_ [private]**

Definition at line 62 of file face_detection.h.

6.14.4.2 ros::ServiceServer FaceDetection::faceDetectionService_ [private]

Member variable holding the face detection ROS service topic

Definition at line 56 of file face_detection.h.

6.14.4.3 std::string FaceDetection::faceDetectionTopic_ [private]

Object of type [FaceDetector](#)

Definition at line 59 of file face_detection.h.

6.14.4.4 ros::NodeHandle FaceDetection::nh_ [private]

< The ROS node handle The face detection service server

Definition at line 53 of file face_detection.h.

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

- /home/travis/rapp_temp/rapp-platform/rapp_face_detection/include/face_detection/[face_detection.h](#)
- /home/travis/rapp_temp/rapp-platform/rapp_face_detection/src/[face_detection.cpp](#)

6.15 FaceDetector Class Reference

Class that implements a face detection algorithm based on a Haar cascade classifier.

```
#include <face_detector.h>
```

Public Member Functions

- [FaceDetector](#) (void)
Default constructor.
- std::vector< cv::Rect > [detectFaces](#) (const cv::Mat &input_img, bool fast=false)
Detects faces from a cv::Mat.

- `std::vector< cv::Rect > findFaces (std::string file_name, bool fast=false)`
Finds faces in an image retrieved from a file URL.
- `cv::Mat loadImage (std::string file_name)`
Loads an image from a file URL.

Private Member Functions

- `std::vector< cv::Rect > detectFaces (const cv::Mat &input_img, const std::string &haar_path)`
Detects faces from a cv::Mat.
- `std::vector< cv::Rect > identifyUniqueFaces (const std::vector< cv::Rect > firstFaceVector, const std::vector< cv::Rect > secondFaceVector)`
Identify unique faces from two sets of faces.

6.15.1 Detailed Description

Class that implements a face detection algorithm based on a Haar cascade classifier.

Definition at line 33 of file `face_detector.h`.

6.15.2 Constructor & Destructor Documentation

6.15.2.1 FaceDetector::FaceDetector (void)

Default constructor.

Definition at line 26 of file `face_detector.cpp`.

6.15.3 Member Function Documentation

6.15.3.1 std::vector< cv::Rect > FaceDetector::detectFaces (const cv::Mat &input_img, bool fast = false)

Detects faces from a `cv::Mat`.

Parameters

<i>input_img</i>	[const cv::Mat&] The input image
<i>fast</i>	[bool] True for fast detection – frontal only

Returns

[std::vector<cv::Rect>] A vector containing the detected faces. Each face is represented by a rectangle.

Definition at line 50 of file `face_detector.cpp`.

6.15.3.2 std::vector< cv::Rect > FaceDetector::detectFaces (const cv::Mat &input_img, const std::string &haar_path) [private]

Detects faces from a `cv::Mat`.

Parameters

<i>input_img</i>	[const cv::Mat&] The input image
<i>haar_path</i>	[const std::string] The Haar training model path

Returns

[std::vector<cv::Rect>] A vector containing the detected faces. Each face is represented by a rectangle.

Definition at line 89 of file face_detector.cpp.

6.15.3.3 std::vector< cv::Rect > FaceDetector::findFaces (std::string *file_name*, bool *fast* = false)

Finds faces in an image retrieved from a file URL.

Parameters

<i>file_name</i>	[std::string] The image file's URL
<i>fast</i>	[bool] True for fast detection – frontal only

Returns

[std::vector<cv::Rect>] A vector containing the detected faces. Each face is represented by a rectangle.

Definition at line 168 of file face_detector.cpp.

6.15.3.4 std::vector< cv::Rect > FaceDetector::identifyUniqueFaces (const std::vector< cv::Rect > *firstFaceVector*, const std::vector< cv::Rect > *secondFaceVector*) [private]

Identify unique faces from two sets of faces.

Parameters

<i>frontFaceVector</i>	[const std::vector<cv::Rect>&] The first set of faces
<i>secondFaceVector</i>	[const std::vector<cv::Rect>&] The second set of faces

Returns

[std::vector<cv::Rect>] A vector containing the unique faces. Each face is represented by a rectangle.

Definition at line 140 of file face_detector.cpp.

6.15.3.5 cv::Mat FaceDetector::loadImage (std::string *file_name*)

Loads an image from a file URL.

Parameters

<i>file_name</i>	[std::string] The image's file URL
------------------	------------------------------------

Returns

[cv::Mat] The image in OpenCV representation

Definition at line 35 of file face_detector.cpp.

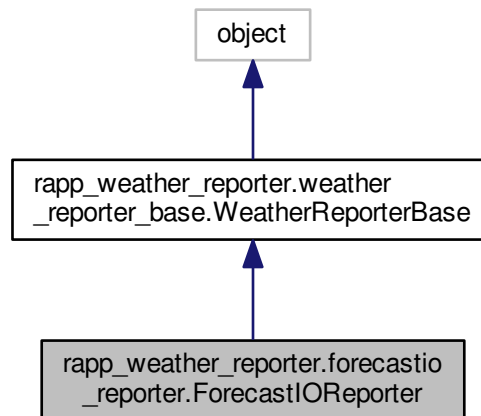
The documentation for this class was generated from the following files:

- /home/travis/rapp_temp/rapp-platform/rapp_face_detection/include/face_detection/face_detector.h
- /home/travis/rapp_temp/rapp-platform/rapp_face_detection/src/face_detector.cpp

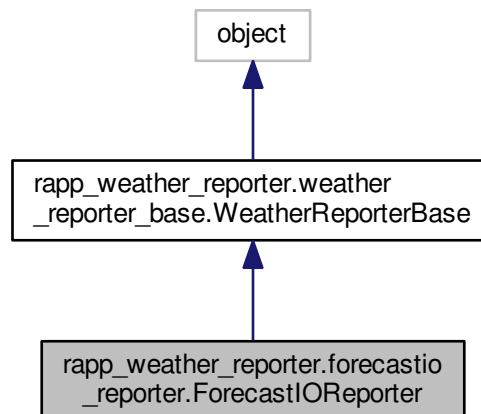
6.16 rapp_weather_reporter.forecastio_reporter.ForecastIOReporter Class Reference

ForecastIO weather reporter.

Inheritance diagram for rapp_weather_reporter.forecastio_reporter.ForecastIOReporter:



Collaboration diagram for rapp_weather_reporter.forecastio_reporter.ForecastIOReporter:



Public Member Functions

- def `__init__`
Constructor.
- def `fetch_current_weather`

- Fetch the current weather.*
 • def `fetch_weather_forecast`
Fetch the current weather.

Private Member Functions

- def `_get_fio_object`
Perform request for weather data.
- def `_handle_current_weather_report`
Handles the server's response.
- def `_handle_weather_forecast_report`

Private Attributes

- `_api_key`

Additional Inherited Members

6.16.1 Detailed Description

ForecastIO weather reporter.

Definition at line 34 of file `forecastio_reporter.py`.

6.16.2 Constructor & Destructor Documentation

6.16.2.1 def `rapp_weather_reporter.forecastio_reporter.ForecastIOReporter.__init__ (self)`

Constructor.

Definition at line 37 of file `forecastio_reporter.py`.

6.16.3 Member Function Documentation

6.16.3.1 def `rapp_weather_reporter.forecastio_reporter.ForecastIOReporter._get_fio_object (self, city, metric)` `[private]`

Perform request for weather data.

Parameters

<i>city</i>	[string] The city name
-------------	------------------------

Returns

fio [object] The weather report object

Definition at line 49 of file `forecastio_reporter.py`.

6.16.3.2 def `rapp_weather_reporter.forecastio_reporter.ForecastIOReporter._handle_current_weather_report (self, report)` `[private]`

Handles the server's response.

Parameters

<i>response</i>	[] The server's response to the request module.
-----------------	---

Returns

values [dict] The final values

Definition at line 100 of file forecastio_reporter.py.

6.16.3.3 `def rapp_weather_reporter.forecastio_reporter.ForecastIOReporter._handle_weather_forecast_report (self, report)`
[private]

Definition at line 115 of file forecastio_reporter.py.

6.16.3.4 `def rapp_weather_reporter.forecastio_reporter.ForecastIOReporter.fetch_current_weather (self, req)`

Fetch the current weather.

Parameters

<i>req</i>	[rapp_platform_ros_communications::WeatherReporter::WeatherReporterCurrentSrv] The service request
------------	--

Returns

[dict] The server results

Definition at line 72 of file forecastio_reporter.py.

6.16.3.5 `def rapp_weather_reporter.forecastio_reporter.ForecastIOReporter.fetch_weather_forecast (self, req)`

Fetch the current weather.

Parameters

<i>req</i>	[rapp_platform_ros_communications::WeatherReporter::WeatherReporterCurrentSrv] The service request
------------	--

Returns

[dict] The server results

Definition at line 87 of file forecastio_reporter.py.

6.16.4 Member Data Documentation

6.16.4.1 `rapp_weather_reporter.forecastio_reporter.ForecastIOReporter._api_key` [private]

Definition at line 42 of file forecastio_reporter.py.

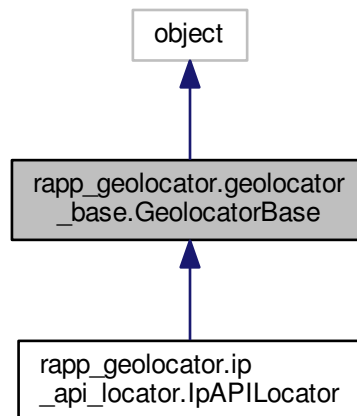
The documentation for this class was generated from the following file:

- [/home/travis/rapp_temp/rapp-platform/rapp_weather_reporter/src/rapp_weather_reporter/forecastio_reporter.py](#)

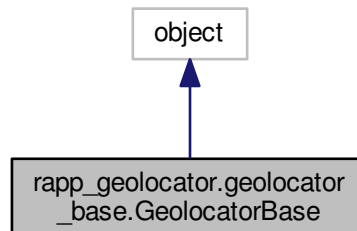
6.17 rapp_geolocator.geolocator_base.GeolocatorBase Class Reference

Base class for geolocators.

Inheritance diagram for rapp_geolocator.geolocator_base.GeolocatorBase:



Collaboration diagram for rapp_geolocator.geolocator_base.GeolocatorBase:



Public Member Functions

- `def __init__`
Constructor.
- `def fetch_geolocation`
Abstract method to fetch geolocation.

Public Attributes

- `rapp_http_json_parser`
Strips html tags from strings.

Private Attributes

- [_accepted_status](#)
The value of valid response status code.
- [_http_request](#)
Perform http requests to servers.
- [_url](#)
The base geolocator url.

Static Private Attributes

- [__metaclass__](#) = abc.ABCMeta

6.17.1 Detailed Description

Base class for geolocators.

Definition at line 32 of file geolocator_base.py.

6.17.2 Constructor & Destructor Documentation

6.17.2.1 `def rapp_geolocator.geolocator_base.GeolocatorBase.__init__(self)`

Constructor.

Definition at line 37 of file geolocator_base.py.

6.17.3 Member Function Documentation

6.17.3.1 `def rapp_geolocator.geolocator_base.GeolocatorBase.fetch_geolocation(self, req)`

Abstract method to fetch geolocation.

Definition at line 52 of file geolocator_base.py.

6.17.4 Member Data Documentation

6.17.4.1 `rapp_geolocator.geolocator_base.GeolocatorBase.__metaclass__ = abc.ABCMeta` [static],[private]

Definition at line 34 of file geolocator_base.py.

6.17.4.2 `rapp_geolocator.geolocator_base.GeolocatorBase._accepted_status` [private]

The value of valid response status code.

Definition at line 42 of file geolocator_base.py.

6.17.4.3 `rapp_geolocator.geolocator_base.GeolocatorBase._http_request` [private]

Perform http requests to servers.

Definition at line 45 of file geolocator_base.py.

6.17.4.4 `rapp_geolocator.geolocator_base.GeolocatorBase._url` [private]

The base geolocator url.

Definition at line 39 of file `geolocator_base.py`.

6.17.4.5 `rapp_geolocator.geolocator_base.GeolocatorBase.rapp_http_json_parser`

Strips html tags from strings.

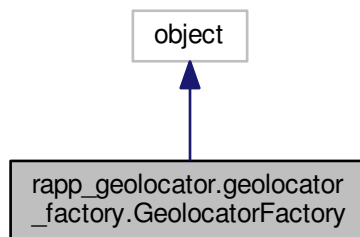
Definition at line 48 of file `geolocator_base.py`.

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

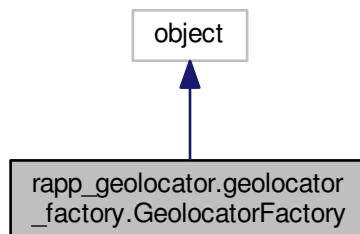
- `/home/travis/rapp_temp/rapp-platform/rapp_geolocator/src/rapp_geolocator/geolocator_base.py`

6.18 `rapp_geolocator.geolocator_factory.GeolocatorFactory` Class Reference

Inheritance diagram for `rapp_geolocator.geolocator_factory.GeolocatorFactory`:



Collaboration diagram for `rapp_geolocator.geolocator_factory.GeolocatorFactory`:



Public Member Functions

- `def select_geolocator`

Select proper geolocator according to request.

6.18.1 Detailed Description

Definition at line 30 of file geolocator_factory.py.

6.18.2 Member Function Documentation

6.18.2.1 `def rapp_geolocator.geolocator_factory.GeolocatorFactory.select_geolocator (self, geolocator = " ")`

Select proper geolocator according to request.

Parameters

<i>geolocator</i>	[string] The name of the geolocator
-------------------	-------------------------------------

Returns

res [rapp_geolocator.rapp_geolocator.GeolocatorBase] The geolocator

RappError Wrong geolocator provided by user

Definition at line 41 of file geolocator_factory.py.

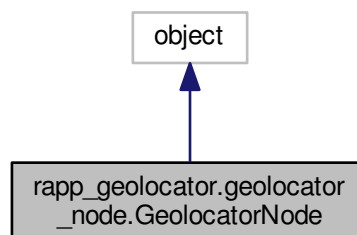
The documentation for this class was generated from the following file:

- /home/travis/rapp_temp/rapp-platform/rapp_geolocator/src/rapp_geolocator/[geolocator_factory.py](#)

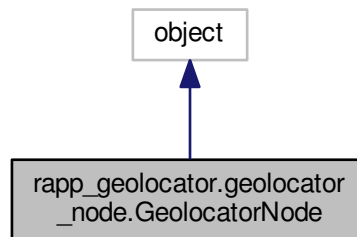
6.19 rapp_geolocator.geolocator_node.GeolocatorNode Class Reference

Calculates geolocation via IP.

Inheritance diagram for rapp_geolocator.geolocator_node.GeolocatorNode:



Collaboration diagram for `rapp_geolocator.geolocator_node.GeolocatorNode`:



Public Member Functions

- `def __init__`
Constructor.
- `def fetch_location_srv_callback`
The callback to calculate geolocation.

Private Member Functions

- `def _create_service_response`
The callback to geolocalize.

Private Attributes

- `_geolocator_factory`
Factory that returns proper geolocator.

6.19.1 Detailed Description

Calculates geolocation via IP.

Definition at line 36 of file `geolocator_node.py`.

6.19.2 Constructor & Destructor Documentation

6.19.2.1 `def rapp_geolocator.geolocator_node.GeolocatorNode.__init__(self)`

Constructor.

Definition at line 39 of file `geolocator_node.py`.

6.19.3 Member Function Documentation

6.19.3.1 `def rapp_geolocator.geolocator_node.GeolocatorNode._create_service_response(self, result)` `[private]`

The callback to geolocalize.

Parameters

<i>results</i>	[dict] The server results containing the location information
----------------	---

Returns

res [rapp_platform_ros_communications::Geolocator::GeolocatorSrvResponse] The service response

Definition at line 88 of file geolocator_node.py.

6.19.3.2 def rapp_geolocator.geolocator_node.GeolocatorNode.fetch_location_srv_callback (self, req)

The callback to calculate geolocation.

Parameters

<i>req</i>	[rapp_platform_ros_communications::Geolocator::GeolocatorSrv] The service request
------------	---

Returns

res [rapp_platform_ros_communications::Geolocator::GeolocatorSrvResponse] The service response

Definition at line 63 of file geolocator_node.py.

6.19.4 Member Data Documentation

6.19.4.1 rapp_geolocator.geolocator_node.GeolocatorNode._geolocator_factory [private]

Factory that returns proper geolocator.

Definition at line 41 of file geolocator_node.py.

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

- /home/travis/rapp_temp/rapp-platform/rapp_geolocator/src/rapp_geolocator/[geolocator_node.py](#)

6.20 rapp_speech_detection_sphinx4.global_parameters.GlobalParams Class Reference

Contains global Sphinx parameters.

Public Member Functions

- def [__init__](#)

Public Attributes

- [rospack](#)

Private Attributes

- [_acoustic_models_url](#)
Acoustic models path.
- [_allow_sphinx_output](#)
True if Sphinx is allowed output on STDIN, STDERR.

- [_language_models_url](#)
Language models path.
- [_noise_profiles_url](#)
Noise profiles path.
- [_socket_host](#)
IPC socket HOST parameter.
- [_sphinx_jar_file](#)
Sphinx jar file path.
- [_sphinx_jar_files_url](#)
Java libraries path.
- [_sphinx_package_url](#)
Sphinx package path.
- [_sphinx_preconf](#)
Sphinx preconfigurations yaml.
- [_tmp_language_models_url](#)
Temporary language models path.

6.20.1 Detailed Description

Contains global Sphinx parameters.

Definition at line 22 of file `global_parameters.py`.

6.20.2 Constructor & Destructor Documentation

6.20.2.1 `def rapp_speech_detection_sphinx4.global_parameters.GlobalParams.__init__(self)`

Definition at line 23 of file `global_parameters.py`.

6.20.3 Member Data Documentation

6.20.3.1 `rapp_speech_detection_sphinx4.global_parameters.GlobalParams._acoustic_models_url` `[private]`

Acoustic models path.

Definition at line 38 of file `global_parameters.py`.

6.20.3.2 `rapp_speech_detection_sphinx4.global_parameters.GlobalParams._allow_sphinx_output` `[private]`

True if Sphinx is allowed output on STDIN, STDERR.

Definition at line 43 of file `global_parameters.py`.

6.20.3.3 `rapp_speech_detection_sphinx4.global_parameters.GlobalParams._language_models_url` `[private]`

Language models path.

Definition at line 31 of file `global_parameters.py`.

6.20.3.4 `rapp_speech_detection_sphinx4.global_parameters.GlobalParams._noise_profiles_url` `[private]`

Noise profiles path.

Definition at line 36 of file `global_parameters.py`.

6.20.3.5 rapp_speech_detection_sphinx4.global_parameters.GlobalParams._socket_host [private]

IPC socket HOST parameter.

Definition at line 45 of file global_parameters.py.

6.20.3.6 rapp_speech_detection_sphinx4.global_parameters.GlobalParams._sphinx_jar_file [private]

Sphinx jar file path.

Definition at line 41 of file global_parameters.py.

6.20.3.7 rapp_speech_detection_sphinx4.global_parameters.GlobalParams._sphinx_jar_files_url [private]

Java libraries path.

Definition at line 27 of file global_parameters.py.

6.20.3.8 rapp_speech_detection_sphinx4.global_parameters.GlobalParams._sphinx_package_url [private]

Sphinx package path.

Definition at line 29 of file global_parameters.py.

6.20.3.9 rapp_speech_detection_sphinx4.global_parameters.GlobalParams._sphinx_preconf [private]

Sphinx preconfigurations yaml.

Definition at line 47 of file global_parameters.py.

6.20.3.10 rapp_speech_detection_sphinx4.global_parameters.GlobalParams._tmp_language_models_url [private]

Temporary language models path.

Definition at line 33 of file global_parameters.py.

6.20.3.11 rapp_speech_detection_sphinx4.global_parameters.GlobalParams.rospack

Definition at line 24 of file global_parameters.py.

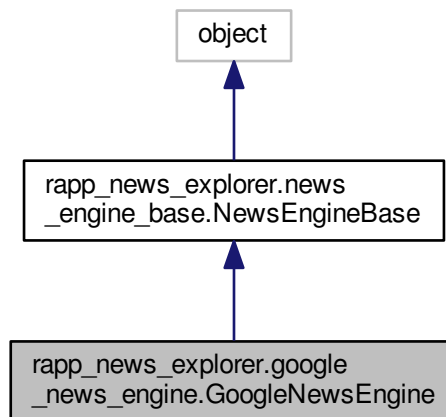
The documentation for this class was generated from the following file:

- [/home/travis/rapp_temp/rapp-platform/rapp_speech_detection_sphinx4/src/rapp_speech_detection_sphinx4/global_parameters.py](#)

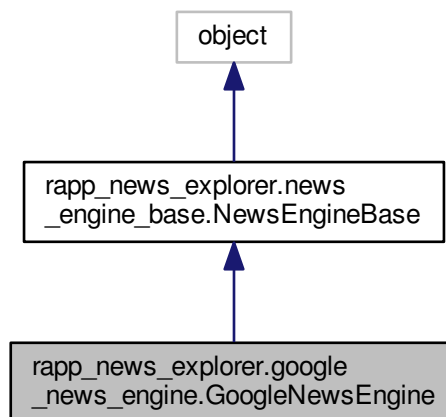
6.21 rapp_news_explorer.google_news_engine.GoogleNewsEngine Class Reference

Google news engine handler.

Inheritance diagram for `rapp_news_explorer.google_news_engine.GoogleNewsEngine`:



Collaboration diagram for `rapp_news_explorer.google_news_engine.GoogleNewsEngine`:



Public Member Functions

- def `__init__`
Constructor.
- def `fetch_news`
Fetch the news.

Private Member Functions

- [def _handle_params](#)
Create parameter dictionary for request module.
- [def _handle_server_response](#)
Handles the server's response.

Private Attributes

- [_max_requests](#)
- [_max_stories](#)
- [_params](#)
- [_url](#)

Additional Inherited Members

6.21.1 Detailed Description

Google news engine hndler.

Definition at line 30 of file google_news_engine.py.

6.21.2 Constructor & Destructor Documentation

6.21.2.1 `def rapp_news_explorer.google_news_engine.GoogleNewsEngine.__init__(self)`

Constructor.

Definition at line 33 of file google_news_engine.py.

6.21.3 Member Function Documentation

6.21.3.1 `def rapp_news_explorer.google_news_engine.GoogleNewsEngine._handle_params (self, req, iters)` [private]

Create parameter dictionary for request module.

Parameters

<i>req</i>	[rapp_platform_ros_communications::NewsExplorer::NewsExplorerSrv] The service request
------------	---

Returns

params [dict] The parameters

Definition at line 144 of file google_news_engine.py.

6.21.3.2 `def rapp_news_explorer.google_news_engine.GoogleNewsEngine._handle_server_response (self, response, story_list, exclude_list)` [private]

Handles the server's response.

Parameters

<i>response</i>	[] The server's response to the request module.
<i>story_list</i>	[string] The current list of stories
<i>exclude_list</i>	[string] The list of titles to be excluded from the results

Definition at line 115 of file google_news_engine.py.

6.21.3.3 `def rapp_news_explorer.google_news_engine.GoogleNewsEngine.fetch_news (self, req)`

Fetch the news.

Parameters

<i>req</i>	[rapp_platform_ros_communications::NewsExplorer::NewsExplorerSrv] The service request
------------	---

Returns

[list<dict>] The server results containing the stories

Definition at line 52 of file google_news_engine.py.

6.21.4 Member Data Documentation

6.21.4.1 `rapp_news_explorer.google_news_engine.GoogleNewsEngine._max_requests` [private]

Definition at line 42 of file google_news_engine.py.

6.21.4.2 `rapp_news_explorer.google_news_engine.GoogleNewsEngine._max_stories` [private]

Definition at line 43 of file google_news_engine.py.

6.21.4.3 `rapp_news_explorer.google_news_engine.GoogleNewsEngine._params` [private]

Definition at line 38 of file google_news_engine.py.

6.21.4.4 `rapp_news_explorer.google_news_engine.GoogleNewsEngine._url` [private]

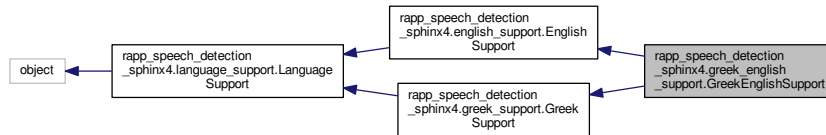
Definition at line 35 of file google_news_engine.py.

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

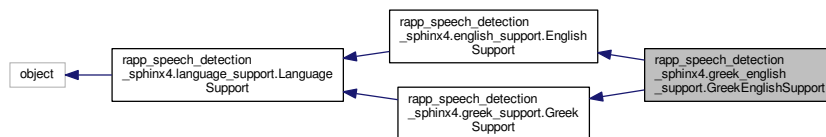
- [/home/travis/rapp_temp/rapp-platform/rapp_news_explorer/src/rapp_news_explorer/google_news_engine.py](#)

6.22 rapp_speech_detection_sphinx4.greek_english_support.GreekEnglishSupport Class Reference

Inheritance diagram for rapp_speech_detection_sphinx4.greek_english_support.GreekEnglishSupport:



Collaboration diagram for rapp_speech_detection_sphinx4.greek_english_support.GreekEnglishSupport:



Public Member Functions

- def [__init__](#)
Performs initializations.
- def [getLimitedVocebularyConfiguration](#)
Computes the Limited Greek/English Configuration.

Private Member Functions

- def [_separateEngGrWords](#)
Separates English from Greek words.

6.22.1 Detailed Description

Definition at line 32 of file greek_english_support.py.

6.22.2 Constructor & Destructor Documentation

6.22.2.1 def rapp_speech_detection_sphinx4.greek_english_support.GreekEnglishSupport.__init__(self)

Performs initializations.

Definition at line 35 of file greek_english_support.py.

6.22.3 Member Function Documentation

6.22.3.1 `def rapp_speech_detection_sphinx4.greek_english_support.GreekEnglishSupport._separateEngGrWords (self,
words, grammar, sentences) [private]`

Separates English from Greek words.

Parameters

<i>words</i>	[list::string] The set of words to be identified
<i>grammar</i>	[list::string] The Sphinx grammar parameter
<i>sentences</i>	[list::string] The Sphinx sentences parameter

Returns

english_words [list::string] The set of English words
 english_grammar [list::string] The set of English grammar
 english_sentences [list::string] The set of English sentences
 greek_words [list::string] The set of Greek words
 greek_grammar [list::string] The set of Greek words
 greek_sentences [list::string] The set of Greek words

Definition at line 59 of file greek_english_support.py.

```
6.22.3.2 def rapp_speech_detection_sphinx4.greek_english_support.GreekEnglishSupport.getLimitedVocebularyConfiguration
( self, words, grammar, sentences )
```

Computes the Limited Greek/English Configuration.

Parameters

<i>words</i>	[list::string] The set of words to be identified
<i>grammar</i>	[list::string] The Sphinx grammar parameter
<i>sentences</i>	[list::string] The Sphinx sentences parameter

Returns

limited_sphinx_configuration [dictionary] The Limited Greek/English configuration
 englified_to_greek_dict [dictionary] A dictionary to transform the englified greek words to actual greek words

Definition at line 103 of file greek_english_support.py.

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

- [/home/travis/rapp_temp/rapp-platform/rapp_speech_detection_sphinx4/src/rapp_speech_detection_sphinx4/greek-english_support.py](#)

6.23 GreekSupport Class Reference

Allows the creation of configuration files for Greek Sphinx speech recognition.

6.23.1 Detailed Description

Allows the creation of configuration files for Greek Sphinx speech recognition.

Also supports multilanguage words (English/Greek) by utilizing english_support.EnglishSupport

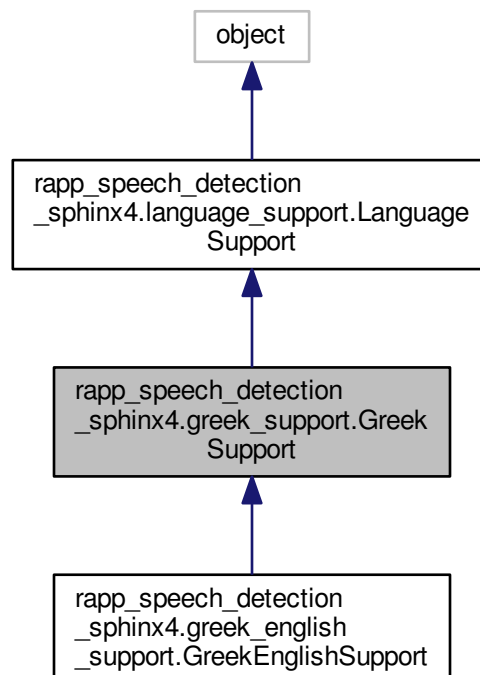
The documentation for this class was generated from the following file:

- [/home/travis/rapp_temp/rapp-platform/rapp_speech_detection_sphinx4/src/rapp_speech_detection_sphinx4/greek-english_support.py](#)

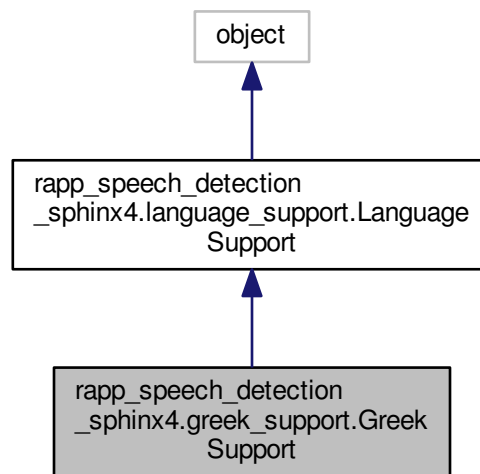
6.24 rapp_speech_detection_sphinx4.greek_support.GreekSupport Class Reference

Allows the creation of configuration files for Greek Sphinx speech recognition.

Inheritance diagram for rapp_speech_detection_sphinx4.greek_support.GreekSupport:



Collaboration diagram for rapp_speech_detection_sphinx4.greek_support.GreekSupport:



Public Member Functions

- def [__init__](#)
Performs initializations.
- def [getLimitedVocebularyConfiguration](#)
Computes the Limited Greek Configuration.

Private Member Functions

- def [_configureLetters](#)
Creates the basic Greek letter to English configuration.
- def [_englify_words](#)
Englify Greek words.
- def [_transformWords](#)
Transforms the Greek words into phonemes for the Sphinx configuration.

Private Attributes

- [_all_special_two_digit_letters](#)
All special two digit Greek letter->English phonemes mapping.
- [_capital_letters](#)
Greek uppercase to lowercase mapping.
- [_english_support](#)
Allows the creation of configuration files for English words.
- [_letters](#)
Standard Greek letter->English phonemes mapping.
- [_literal_letters](#)
Greek letters->English letters mapping.

- [_phonemes](#)
Greek words->English standard phonemes mapping.
- [_s_specific_rules](#)
Special Greek words ->English phonemes mapping.
- [_special_two_digit_letters](#)
Special two digit Greek letter->English phonemes mapping.
- [_two_digit_letters](#)
Two digit Greek letters->English phonemes mapping.

6.24.1 Detailed Description

Allows the creation of configuration files for Greek Sphinx speech recognition.

Also supports multilanguage words (English/Greek) by utilizing [english_support.EnglishSupport](#)

Definition at line 30 of file `greek_support.py`.

6.24.2 Constructor & Destructor Documentation

6.24.2.1 `def rapp_speech_detection_sphinx4.greek_support.GreekSupport.__init__(self)`

Performs initializations.

Definition at line 33 of file `greek_support.py`.

6.24.3 Member Function Documentation

6.24.3.1 `def rapp_speech_detection_sphinx4.greek_support.GreekSupport._configureLetters(self) [private]`

Creates the basic Greek letter to English configuration.

Definition at line 69 of file `greek_support.py`.

6.24.3.2 `def rapp_speech_detection_sphinx4.greek_support.GreekSupport._englify_words(self, words) [private]`

Englify Greek words.

Parameters

<i>words</i>	[list::string] The set of Greek words
--------------	---------------------------------------

Definition at line 308 of file `greek_support.py`.

6.24.3.3 `def rapp_speech_detection_sphinx4.greek_support.GreekSupport._transformWords(self, words) [private]`

Transforms the Greek words into phonemes for the Sphinx configuration.

Parameters

<i>words</i>	[list::string] The set of Greek words
--------------	---------------------------------------

Returns

enhanced_words [dictionary] The Greek word->phonemes mapping

englified_words [dictionary] The Greek word->Englified Greek word mapping

Definition at line 259 of file `greek_support.py`.

6.24.3.4 `def rapp_speech_detection_sphinx4.greek_support.GreekSupport.getLimitedVocebularyConfiguration (self, words, grammar, sentences)`

Computes the Limited Greek Configuration.

Parameters

<i>words</i>	[list::string] The set of words to be identified
<i>grammar</i>	[list::string] The Sphinx grammar parameter
<i>sentences</i>	[list::string] The Sphinx sentences parameter

Returns

limited_sphinx_configuration [dictionary] The Limited Greek configuration

englified_to_greek_dict [dictionary] A dictionary to transform the englified greek words to actual greek words

Definition at line 329 of file greek_support.py.

6.24.4 Member Data Documentation

6.24.4.1 `rapp_speech_detection_sphinx4.greek_support.GreekSupport._all_special_two_digit_letters` [private]

All special two digit Greek letter->English phonemes mapping.

Definition at line 58 of file greek_support.py.

6.24.4.2 `rapp_speech_detection_sphinx4.greek_support.GreekSupport._capital_letters` [private]

Greek uppercase to lowercase mapping.

Definition at line 50 of file greek_support.py.

6.24.4.3 `rapp_speech_detection_sphinx4.greek_support.GreekSupport._english_support` [private]

Allows the creation of configuration files for English words.

Instantiates [english_support.EnglishSupport](#) to identify english words

Definition at line 47 of file greek_support.py.

6.24.4.4 `rapp_speech_detection_sphinx4.greek_support.GreekSupport._letters` [private]

Standard Greek letter->English phonemes mapping.

Definition at line 62 of file greek_support.py.

6.24.4.5 `rapp_speech_detection_sphinx4.greek_support.GreekSupport._literal_letters` [private]

Greek letters->English letters mapping.

Definition at line 64 of file greek_support.py.

6.24.4.6 `rapp_speech_detection_sphinx4.greek_support.GreekSupport._phonemes` [private]

Greek words->English standard phonemes mapping.

Definition at line 52 of file greek_support.py.

6.24.4.7 `rapp_speech_detection_sphinx4.greek_support.GreekSupport._s_specific_rules` [private]

Special Greek words ->English phonemes mapping.

Definition at line 60 of file greek_support.py.

6.24.4.8 `rapp_speech_detection_sphinx4.greek_support.GreekSupport._special_two_digit_letters` [private]

Special two digit Greek letter->English phonemes mapping.

Definition at line 56 of file `greek_support.py`.

6.24.4.9 `rapp_speech_detection_sphinx4.greek_support.GreekSupport._two_digit_letters` [private]

Two digit Greek letters->English phonemes mapping.

Definition at line 54 of file `greek_support.py`.

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

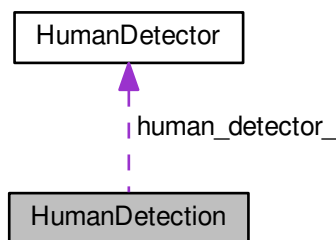
- `/home/travis/rapp_temp/rapp-platform/rapp_speech_detection_sphinx4/src/rapp_speech_detection_sphinx4/greek-_support.py`

6.25 HumanDetection Class Reference

Class [HumanDetection](#) uptakes the task of handling the ROS service callbacks.

```
#include <human_detection.h>
```

Collaboration diagram for HumanDetection:



Public Member Functions

- [HumanDetection](#) (void)
Default constructor.
- bool [humanDetectionCallback](#) (rapp_platform_ros_communications::HumanDetectionRosSrv::Request &req, rapp_platform_ros_communications::HumanDetectionRosSrv::Response &res)
Serves the human detection ROS service callback.

Private Attributes

- [HumanDetector](#) [human_detector_](#)
- `ros::ServiceServer` [humanDetectionService_](#)
- `std::string` [humanDetectionTopic_](#)
- `ros::NodeHandle` [nh_](#)

6.25.1 Detailed Description

Class [HumanDetection](#) uptakes the task of handling the ROS service callbacks.

Definition at line 31 of file `human_detection.h`.

6.25.2 Constructor & Destructor Documentation

6.25.2.1 HumanDetection::HumanDetection (void)

Default constructor.

Default constructor. Performs initializations.

Definition at line 24 of file `human_detection.cpp`.

6.25.3 Member Function Documentation

6.25.3.1 bool HumanDetection::humanDetectionCallback (rapp_platform_ros_communications::HumanDetectionRosSrv::Request & req, rapp_platform_ros_communications::HumanDetectionRosSrv::Response & res)

Serves the human detection ROS service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::HumanDetectionRosSrv::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::HumanDetectionRosSrv::Response&] The ROS service response

Returns

bool - The success status of the call

Definition at line 42 of file `human_detection.cpp`.

6.25.4 Member Data Documentation

6.25.4.1 HumanDetector HumanDetection::human_detector_ [private]

Definition at line 62 of file `human_detection.h`.

6.25.4.2 ros::ServiceServer HumanDetection::humanDetectionService_ [private]

Member variable holding the human detection ROS service topic

Definition at line 56 of file `human_detection.h`.

6.25.4.3 std::string HumanDetection::humanDetectionTopic_ [private]

Object of type [HumanDetector](#)

Definition at line 59 of file `human_detection.h`.

6.25.4.4 `ros::NodeHandle HumanDetection::nh_` `[private]`

< The ROS node handle The human detection service server

Definition at line 53 of file `human_detection.h`.

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

- `/home/travis/rapp_temp/rapp-platform/rapp_human_detection/include/human_detection/human_detection.h`
- `/home/travis/rapp_temp/rapp-platform/rapp_human_detection/src/human_detection.cpp`

6.26 HumanDetector Class Reference

Class that implements a human detection algorithm based on a Haar cascade classifier.

```
#include <human_detector.h>
```

Public Member Functions

- `HumanDetector` (void)
Default constructor.
- `std::vector< cv::Rect > detectHuman2D` (const `cv::Mat` &input_img)
Detects humans from a cv::Mat.
- `std::vector< cv::Rect > findHuman2D` (std::string file_name)
Finds humans in an image retrieved from a file URL.
- `cv::Mat loadImage` (std::string file_name)
Loads an image from a file URL.

Private Member Functions

- `std::vector< cv::Rect > detectHuman2D` (const `cv::Mat` &input_img, const std::string &haar_path)
Detects humans from a cv::Mat.
- `std::vector< cv::Rect > identifyUniqueHumans` (const std::vector< `cv::Rect` > pedestrianVector, const std::vector< `cv::Rect` > upperbodyVector)
Identify unique humans from two sets of humans.

6.26.1 Detailed Description

Class that implements a human detection algorithm based on a Haar cascade classifier.

Definition at line 35 of file `human_detector.h`.

6.26.2 Constructor & Destructor Documentation

6.26.2.1 `HumanDetector::HumanDetector (void)`

Default constructor.

Definition at line 23 of file `human_detector.cpp`.

6.26.3 Member Function Documentation

6.26.3.1 `std::vector< cv::Rect > HumanDetector::detectHuman2D (const cv::Mat & input_img)`

Detects humans from a `cv::Mat`.

Parameters

<i>input_img</i>	[const cv::Mat&] The input image
------------------	----------------------------------

Returns

[std::vector<cv::Rect>] A vector containing the detected humans. Each human is represented by a rectangle.

Definition at line 46 of file human_detector.cpp.

6.26.3.2 `std::vector< cv::Rect > HumanDetector::detectHuman2D (const cv::Mat & input_img, const std::string & haar_path)` [private]

Detects humans from a cv::Mat.

Parameters

<i>input_img</i>	[const cv::Mat&] The input image
<i>haar_path</i>	[const std::string] The Haar training model path

Returns

[std::vector<cv::Rect>] A vector containing the detected humans. Each human is represented by a rectangle.

Definition at line 80 of file human_detector.cpp.

6.26.3.3 `std::vector< cv::Rect > HumanDetector::findHuman2D (std::string file_name)`

Finds humans in an image retrieved from a file URL.

Parameters

<i>file_name</i>	[std::string] The image file's URL
------------------	------------------------------------

Returns

[std::vector<cv::Rect>] A vector containing the detected humans. Each human is represented by a rectangle.

Definition at line 166 of file human_detector.cpp.

6.26.3.4 `std::vector< cv::Rect > HumanDetector::identifyUniqueHumans (const std::vector< cv::Rect > pedestrianVector, const std::vector< cv::Rect > upperbodyVector)` [private]

Identify unique humans from two sets of humans.

Parameters

<i>pedestrianVector</i>	[const std::vector<cv::Rect>&] The first set of humans
<i>upperbodyVector</i>	[const std::vector<cv::Rect>&] The second set of humans

Returns

[std::vector<cv::Rect>] A vector containing the unique humans. Each human is represented by a rectangle.

Definition at line 139 of file human_detector.cpp.

6.26.3.5 `cv::Mat HumanDetector::loadImage (std::string file_name)`

Loads an image from a file URL.

Parameters

<i>file_name</i>	[std::string] The image's file URL
------------------	------------------------------------

Returns

[cv::Mat] The image in OpenCV representation

Definition at line 32 of file human_detector.cpp.

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

- /home/travis/rapp_temp/rapp-platform/rapp_human_detection/include/human_detection/human_detector.h
- /home/travis/rapp_temp/rapp-platform/rapp_human_detection/src/human_detector.cpp

6.27 image_classification.ImageClassification Class Reference

Contains the necessary functions for classifying an images and requesting registration to the ontology.

Public Member Functions

- def [__init__](#)
Initializes Caffe.
- def [classifyImage](#)
Implements the imageClassificationSrv service main function.
- def [getImageClass](#)
Obtains the name of the class of the image from the caffe image classes file.
- def [getOntologyClass](#)
Calls the caffe wrapper service that registers the image to the ontology.
- def [registerToOntology](#)
Calls the caffe wrapper service that registers the image to the ontology.

Public Attributes

- [caffe_root](#)
- [labels](#)
- [net](#)
- [transformer](#)

6.27.1 Detailed Description

Contains the necessary functions for classifying an images and requesting registration to the ontology.

Definition at line 46 of file image_classification.py.

6.27.2 Constructor & Destructor Documentation

6.27.2.1 def image_classification.ImageClassification.__init__(self)

Initializes Caffe.

Definition at line 49 of file image_classification.py.

6.27.3 Member Function Documentation

6.27.3.1 `def image_classification.ImageClassification.classifyImage (self, req)`

Implements the imageClassificationSrv service main function.

Parameters

<i>req</i>	[rapp_platform_ros_communications::imageClassificationSrvRequest::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::imageClassificationSrvResponse::Response&] The ROS service response

Exceptions

<i>Exception</i>	IndexError
<i>Exception</i>	IOError
<i>Exception</i>	AppError
<i>Exception</i>	KeyError

Definition at line 86 of file image_classification.py.

6.27.3.2 def image_classification.ImageClassification.getImageClass (self, req)

Obtains the name of the class of the image from the caffe image classes file.

Parameters

<i>req</i>	[rapp_platform_ros_communications::ontologyClassBridgeSrvRequest::Request&] The ROS service request
------------	---

Returns

res [string] The class of the image

Definition at line 163 of file image_classification.py.

6.27.3.3 def image_classification.ImageClassification.getOntologyClass (self, caffeObjectClass)

Calls the caffe wrapper service that registers the image to the ontology.

Parameters

<i>caffeObjectClass</i>	[string] The caffe object class
-------------------------	---------------------------------

Returns

ontologyClassBridgeResponse.ontologyClass [string] The ontology class of the image

Exceptions

<i>Exception</i>	AppError
------------------	----------

Definition at line 124 of file image_classification.py.

6.27.3.4 def image_classification.ImageClassification.registerToOntology (self, req, caffeObjectClass, ontologyClass, currentImagePath)

Calls the caffe wrapper service that registers the image to the ontology.

Parameters

<i>req</i>	[rapp_platform_ros_communications::ontologyClassBridgeSrvRequest::Request&] The ROS service request
<i>caffeObjectClass</i>	[string] The caffe object class
<i>ontologyClass</i>	[string] The ontology object class
<i>currentImagePath</i>	[string] The path of the image file

Returns

registerImageToOntologyResponse.object_entry [string] The ontology entry of the image

Exceptions

Exception	AppError
-----------	----------

Definition at line 145 of file image_classification.py.

6.27.4 Member Data Documentation

6.27.4.1 image_classification.ImageClassification.caffe_root

Definition at line 50 of file image_classification.py.

6.27.4.2 image_classification.ImageClassification.labels

Definition at line 76 of file image_classification.py.

6.27.4.3 image_classification.ImageClassification.net

Definition at line 60 of file image_classification.py.

6.27.4.4 image_classification.ImageClassification.transformer

Definition at line 66 of file image_classification.py.

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

- /home/travis/rapp_temp/rapp-platform/rapp_caffe_wrapper/src/[image_classification.py](#)

6.28 image_registration_to_ontology.ImageRegistrationToOntology Class Reference

Contains the necessary functions for registering images to the ontology.

Public Member Functions

- def [getUserOntologyAlias](#)
Gets the users ontology alias and if it doesnt exist it creates it.
- def [registerImage](#)
Implements the getCloudAgentServiceTypeAndHostPort service main function.
- def [registerImageToOntology](#)
Calls the knowrob_wrapper service that registers the image to the ontology.

6.28.1 Detailed Description

Contains the necessary functions for registering images to the ontology.

Definition at line 44 of file image_registration_to_ontology.py.

6.28.2 Member Function Documentation

6.28.2.1 `def image_registration_to_ontology.ImageRegistrationToOntology.getUserOntologyAlias (self, username)`

Gets the users ontology alias and if it doesnt exist it creates it.

Parameters

<i>username</i>	[string] The user's username
-----------------	------------------------------

Returns

ontologyAlias [string] The user's ontology alias

Exceptions

<i>Exception</i>	AppError
------------------	----------

Definition at line 93 of file image_registration_to_ontology.py.

6.28.2.2 `def image_registration_to_ontology.ImageRegistrationToOntology.registerImage (self, req)`

Implements the getCloudAgentServiceTypeAndHostPort service main function.

Parameters

<i>req</i>	[rapp_platform_ros_communications::registerImageToOntologySrvRequest::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::registerImageToOntologySrvResponse::Response&] The ROS service response

Exceptions

<i>Exception</i>	IndexError
<i>Exception</i>	IOError
<i>Exception</i>	AppError
<i>Exception</i>	KeyError

Definition at line 54 of file image_registration_to_ontology.py.

6.28.2.3 `def image_registration_to_ontology.ImageRegistrationToOntology.registerImageToOntology (self, req, baseDestinationFolder)`

Calls the knowrob_wrapper service that registers the image to the ontology.

Parameters

<i>req</i>	[rapp_platform_ros_communications::registerImageToOntologySrvRequest::Request&] The ROS service request
<i>baseDestination-Folder</i>	[string] The path to the image

Returns

registerImageObjectToOntologyResponse.object_entry [string] The ontology alias image entry

Exceptions

<i>Exception</i>	AppError
------------------	----------

Definition at line 109 of file image_registration_to_ontology.py.

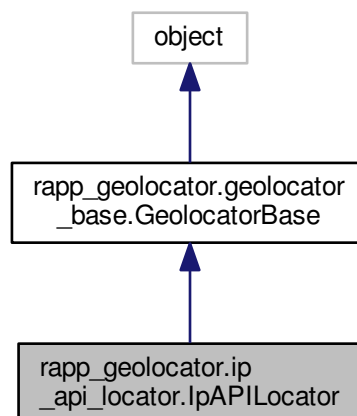
The documentation for this class was generated from the following file:

- /home/travis/rapp_temp/rapp-platform/rapp_caffe_wrapper/src/[image_registration_to_ontology.py](#)

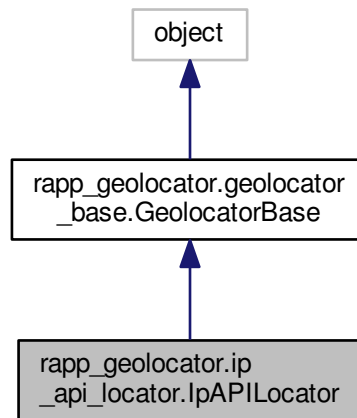
6.29 rapp_geolocator.ip_api_locator.IpAPILocator Class Reference

IP-API locator.

Inheritance diagram for rapp_geolocator.ip_api_locator.IpAPILocator:



Collaboration diagram for rapp_geolocator.ip_api_locator.IpAPILocator:



Public Member Functions

- `def __init__`
Constructor.
- `def fetch_geolocation`
Fetch the location.

Private Member Functions

- `def _handle_server_response`
Handles the server's response.

Private Attributes

- `_url`

Additional Inherited Members

6.29.1 Detailed Description

IP-API locator.

Definition at line 30 of file `ip_api_locator.py`.

6.29.2 Constructor & Destructor Documentation

6.29.2.1 `def rapp_geolocator.ip_api_locator.IpAPILocator.__init__(self)`

Constructor.

Definition at line 33 of file `ip_api_locator.py`.

6.29.3 Member Function Documentation

6.29.3.1 `def rapp_geolocator.ip_api_locator.IpAPILocator._handle_server_response (self, response) [private]`

Handles the server's response.

Parameters

<i>response</i>	[] The server's response to the request module.
-----------------	---

Returns

values [dict] The final values

Definition at line 74 of file `ip_api_locator.py`.

6.29.3.2 `def rapp_geolocator.ip_api_locator.IpAPILocator.fetch_geolocation (self, req)`

Fetch the location.

Parameters

<i>req</i>	[<code>rapp_platform_ros_communications::Geolocator::GeolocatorSrv</code>] The service request
------------	--

Returns

[dict] The server results

Definition at line 44 of file `ip_api_locator.py`.

6.29.4 Member Data Documentation

6.29.4.1 `rapp_geolocator.ip_api_locator.IpAPILocator._url [private]`

Definition at line 35 of file `ip_api_locator.py`.

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

- `/home/travis/rapp_temp/rapp-platform/rapp_geolocator/src/rapp_geolocator/ip_api_locator.py`

6.30 IPLocatorFactory Class Reference

Creates and returns the class of the geolocator requested.

6.30.1 Detailed Description

Creates and returns the class of the geolocator requested.

Implements a factory pattern.

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

- `/home/travis/rapp_temp/rapp-platform/rapp_geolocator/src/rapp_geolocator/geolocator_factory.py`

6.31 KnowrobWrapper Class Reference

Class [KnowrobWrapperCommunications](#) contains all the necessary knowrob wrapper functions.

```
#include <knowrob_wrapper.h>
```

Public Member Functions

- [KnowrobWrapper](#) (ros::NodeHandle nh)
Default constructor.
- rapp_platform_ros_communications::assertRetractAttributeSrv::Response [assertAttributeValue](#) (rapp_platform_ros_communications::assertRetractAttributeSrv::Request req)
Implements the assertRetractAttribute ROS service.
- rapp_platform_ros_communications::clearUserPerformanceCognitiveTestsSrv::Response [clear_user_cognitive_tests_performance_records](#) (rapp_platform_ros_communications::clearUserPerformanceCognitiveTestsSrv::Request req)
Implements the clear_user_cognitive_tests_performance_records ROS service.
- rapp_platform_ros_communications::cognitiveTestsOfTypeSrv::Response [cognitive_tests_of_type](#) (rapp_platform_ros_communications::cognitiveTestsOfTypeSrv::Request req)
Implements the cognitive_tests_of_type ROS service.
- rapp_platform_ros_communications::createCognitiveExerciseTestSrv::Response [create_cognitive_tests](#) (rapp_platform_ros_communications::createCognitiveExerciseTestSrv::Request req)
Implements the create_cognitive_tests ROS service.
- rapp_platform_ros_communications::createOntologyAliasSrv::Response [create_ontology_alias](#) (rapp_platform_ros_communications::createOntologyAliasSrv::Request req)
Implements the create_ontology_alias ROS service.
- std::string [create_ontology_alias_for_new_user](#) (std::string user_id)
Creates a new ontology alias for a user.
- rapp_platform_ros_communications::createInstanceSrv::Response [createInstanceQuery](#) (rapp_platform_ros_communications::createInstanceSrv::Request req)
Implements the createInstance ROS service.
- void [dump_ontology_now](#) ()
Dumps the ontology to default path.
- rapp_platform_ros_communications::ontologyLoadDumpSrv::Response [dumpOntologyQuery](#) (rapp_platform_ros_communications::ontologyLoadDumpSrv::Request req)
Implements the dumpOntology ROS service.
- std::string [get_ontology_alias](#) (std::string user_id)
Returns the ontology alias of the user.
- rapp_platform_ros_communications::ontologyIsSubSuperClassOfSrv::Response [isSubSuperclassOfQuery](#) (rapp_platform_ros_communications::ontologyIsSubSuperClassOfSrv::Request req)
Implements the isSubSuperclass ROS service.
- rapp_platform_ros_communications::ontologyLoadDumpSrv::Response [loadOntologyQuery](#) (rapp_platform_ros_communications::ontologyLoadDumpSrv::Request req)
Implements the loadOntology ROS service.
- rapp_platform_ros_communications::recordUserPerformanceCognitiveTestsSrv::Response [record_user_cognitive_tests_performance](#) (rapp_platform_ros_communications::recordUserPerformanceCognitiveTestsSrv::Request req)
Implements the record_user_cognitive_tests_performance ROS service.
- rapp_platform_ros_communications::registerImageObjectToOntologySrv::Response [register_image_object_to_ontology](#) (rapp_platform_ros_communications::registerImageObjectToOntologySrv::Request req)
Implements the register_image_object_to_ontology ROS service.
- rapp_platform_ros_communications::retractUserOntologyAliasSrv::Response [retract_user_ontology_alias](#) (rapp_platform_ros_communications::retractUserOntologyAliasSrv::Request req)

Implements the retract_user_ontology_alias ROS service.

- `rapp_platform_ros_communications::ontologySubSuperClassesOfSrv::Response` [subclassesOfQuery](#) (`rapp_platform_ros_communications::ontologySubSuperClassesOfSrv::Request req`)

Implements the subclassesOf ROS service.

- `rapp_platform_ros_communications::ontologySubSuperClassesOfSrv::Response` [superclassesOfQuery](#) (`rapp_platform_ros_communications::ontologySubSuperClassesOfSrv::Request req`)

Implements the superclassesOf ROS service.

- `rapp_platform_ros_communications::returnUserInstancesOfClassSrv::Response` [user_instances_of_class](#) (`rapp_platform_ros_communications::returnUserInstancesOfClassSrv::Request req`)

Implements the returnUserInstancesOfClass ROS service.

- `rapp_platform_ros_communications::userPerformanceCognitiveTestsSrv::Response` [user_performance_cognitive_tests](#) (`rapp_platform_ros_communications::userPerformanceCognitiveTestsSrv::Request req`)

Implements the user_performance_cognitive_tests ROS service.

Private Attributes

- `ros::ServiceClient` [mysql_get_user_ontology_alias_client](#)
- `ros::ServiceClient` [mysql_register_user_ontology_alias_client](#)
- `ros::NodeHandle` [nh_](#)
- `json_prolog::Prolog` [pl](#)

6.31.1 Detailed Description

Class [KnowrobWrapperCommunications](#) contains all the necessary knowrob wrapper functions.

Definition at line 49 of file `knowrob_wrapper.h`.

6.31.2 Constructor & Destructor Documentation

6.31.2.1 KnowrobWrapper::KnowrobWrapper (`ros::NodeHandle nh`)

Default constructor.

Definition at line 30 of file `knowrob_wrapper.cpp`.

6.31.3 Member Function Documentation

6.31.3.1 `rapp_platform_ros_communications::assertRetractAttributeSrv::Response` [KnowrobWrapper::assertAttributeValue](#) (`rapp_platform_ros_communications::assertRetractAttributeSrv::Request req`)

Implements the `assertRetractAttribute` ROS service.

Parameters

<i>req</i>	[<code>rapp_platform_ros_communications::assertRetractAttributeSrv::Request&</code>] The ROS service request
------------	--

Returns

res [`rapp_platform_ros_communications::assertRetractAttributeSrv::Response&`] The ROS service response

6.31.3.2 `rapp_platform_ros_communications::clearUserPerformanceCognitiveTestsSrv::Response`
`KnowrobWrapper::clear_user_cognitive_tests_performance_records (rapp_platform_ros_communications::clearUserPerformanceCognitiveTestsSrv::Request req)`

Implements the `clear_user_cognitive_tests_performance_records` ROS service.

Parameters

<i>req</i>	[rapp_platform_ros_communications::clearUserPerformanceCognitiveTestsSrv::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::clearUserPerformanceCognitiveTestsSrv::Response&] The ROS service response

Parameters

<i>req</i>	[rapp_platform_ros_communications::clearUserPerformanceCognitiveTestsSrv::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::clearUserPerformanceCognitiveTestsSrv::Response&] The ROS service response

Exceptions

<i>AppError</i>	
-----------------	--

Definition at line 444 of file knowrob_wrapper.cpp.

6.31.3.3 rapp_platform_ros_communications::cognitiveTestsOfTypeSrv::Response KnowrobWrapper::cognitive_tests_of_type (rapp_platform_ros_communications::cognitiveTestsOfTypeSrv::Request *req*)

Implements the cognitive_tests_of_type ROS service.

Parameters

<i>req</i>	[rapp_platform_ros_communications::cognitiveTestsOfTypeSrv::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::cognitiveTestsOfTypeSrv::Response&] The ROS service response

Parameters

<i>req</i>	[rapp_platform_ros_communications::cognitiveTestsOfTypeSrv::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::cognitiveTestsOfTypeSrv::Response&] The ROS service response

Exceptions

<i>AppError</i>	
-----------------	--

Definition at line 329 of file knowrob_wrapper.cpp.

6.31.3.4 rapp_platform_ros_communications::createCognitiveExerciseTestSrv::Response KnowrobWrapper::create_cognitive_tests (rapp_platform_ros_communications::createCognitiveExerciseTestSrv::Request *req*)

Implements the create_cognitive_tests ROS service.

Parameters

<i>req</i>	[rapp_platform_ros_communications::createCognitiveExerciseTestSrv::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::createCognitiveExerciseTestSrv::Response&] The ROS service response

Parameters

<i>req</i>	[rapp_platform_ros_communications::createCognitiveExerciseTestSrv::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::createCognitiveExerciseTestSrv::Response&] The ROS service response

Exceptions

<i>AppError</i>	
-----------------	--

Definition at line 271 of file knowrob_wrapper.cpp.

6.31.3.5 rapp_platform_ros_communications::createOntologyAliasSrv::Response KnowrobWrapper::create_ontology_alias (rapp_platform_ros_communications::createOntologyAliasSrv::Request *req*)

Implements the create_ontology_alias ROS service.

Parameters

<i>req</i>	[rapp_platform_ros_communications::createOntologyAliasSrv::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::createOntologyAliasSrv::Response&] The ROS service response

Parameters

<i>req</i>	[rapp_platform_ros_communications::createOntologyAliasSrv::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::createOntologyAliasSrv::Response&] The ROS service response

Exceptions

<i>AppError</i>	
-----------------	--

Definition at line 132 of file knowrob_wrapper.cpp.

6.31.3.6 std::string KnowrobWrapper::create_ontology_alias_for_new_user (std::string *username*)

Creates a new ontology alias for a user.

Parameters

<i>user_id</i>	[string] The username of the user
----------------	-----------------------------------

Returns

ontology_alias [string] The ontology_alias of the user or possible error

Parameters

<i>username</i>	[string] The username of the user
-----------------	-----------------------------------

Returns

ontology_alias [string] The ontology_alias of the user or possible error

Exceptions

<i>AppError</i>	
-----------------	--

Definition at line 183 of file knowrob_wrapper.cpp.

6.31.3.7 rapp_platform_ros_communications::createInstanceSrv::Response KnowrobWrapper::createInstanceQuery (rapp_platform_ros_communications::createInstanceSrv::Request req)

Implements the createInstance ROS service.

Parameters

<i>req</i>	[rapp_platform_ros_communications::createInstanceSrv::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::createInstanceSrv::Response&] The ROS service response

Parameters

<i>req</i>	[rapp_platform_ros_communications::createInstanceSrv::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::createInstanceSrv::Response&] The ROS service response

Exceptions

<i>AppError</i>	
-----------------	--

Definition at line 633 of file knowrob_wrapper.cpp.

6.31.3.8 void KnowrobWrapper::dump_ontology_now ()

Dumps the ontology to default path.

Definition at line 39 of file knowrob_wrapper.cpp.

6.31.3.9 rapp_platform_ros_communications::ontologyLoadDumpSrv::Response KnowrobWrapper::dumpOntologyQuery (rapp_platform_ros_communications::ontologyLoadDumpSrv::Request req)

Implements the dumpOntology ROS service.

Parameters

<i>req</i>	[rapp_platform_ros_communications::ontologyLoadDumpSrv::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::ontologyLoadDumpSrv::Response&] The ROS service response

Parameters

<i>req</i>	[rapp_platform_ros_communications::ontologyLoadDumpSrv::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::ontologyLoadDumpSrv::Response&] The ROS service response

Exceptions

<i>AppError</i>	
-----------------	--

Definition at line 682 of file knowrob_wrapper.cpp.

6.31.3.10 std::string KnowrobWrapper::get_ontology_alias (std::string *username*)

Returns the ontology alias of the user.

Parameters

<i>user_id</i>	[string] The username of the user
----------------	-----------------------------------

Returns

ontology_alias [string] The ontology_alias of the user or possible error

Parameters

<i>username</i>	[string] The username of the user
-----------------	-----------------------------------

Returns

ontology_alias [string] The ontology_alias of the user or possible error

Exceptions

<i>AppError</i>	
-----------------	--

Definition at line 161 of file knowrob_wrapper.cpp.

6.31.3.11 rapp_platform_ros_communications::ontologyIsSubSuperClassOfSrv::Response KnowrobWrapper::isSubSuperclassOfQuery (rapp_platform_ros_communications::ontologyIsSubSuperClassOfSrv::Request *req*)

Implements the isSubSuperclass ROS service.

Parameters

<i>req</i>	[rapp_platform_ros_communications::ontologyIsSubSuperClassOfSrv::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::ontologyIsSubSuperClassOfSrv::Response&] The ROS service response

Parameters

<i>req</i>	[rapp_platform_ros_communications::ontologyIsSubSuperClassOfSrv::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::ontologyIsSubSuperClassOfSrv::Response&] The ROS service response

Exceptions

<i>AppError</i>	
-----------------	--

Definition at line 580 of file knowrob_wrapper.cpp.

6.31.3.12 rapp_platform_ros_communications::ontologyLoadDumpSrv::Response KnowrobWrapper::loadOntologyQuery (rapp_platform_ros_communications::ontologyLoadDumpSrv::Request *req*)

Implements the loadOntology ROS service.

Parameters

<i>req</i>	[rapp_platform_ros_communications::ontologyLoadDumpSrv::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::ontologyLoadDumpSrv::Response&] The ROS service response

Parameters

<i>req</i>	[rapp_platform_ros_communications::ontologyLoadDumpSrv::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::ontologyLoadDumpSrv::Response&] The ROS service response

Exceptions

<i>AppError</i>	
-----------------	--

Definition at line 723 of file knowrob_wrapper.cpp.

6.31.3.13 rapp_platform_ros_communications::recordUserPerformanceCognitiveTestsSrv::Response KnowrobWrapper::record_user_cognitive_tests_performance (rapp_platform_ros_communications::recordUserPerformanceCognitiveTestsSrv::Request *req*)

Implements the record_user_cognitive_tests_performance ROS service.

Parameters

<i>req</i>	[rapp_platform_ros_communications::recordUserPerformanceCognitiveTestsSrv::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::recordUserPerformanceCognitiveTestsSrv::Response&] The ROS service response

Definition at line 226 of file knowrob_wrapper.cpp.

```
6.31.3.14 rapp_platform_ros_communications::registerImageObjectToOntologySrv::Response KnowrobWrapper::register_
         image_object_to_ontology ( rapp_platform_ros_communications::registerImageObjectToOntologySrv::Request req
         )
```

Implements the register_image_object_to_ontology ROS service.

Parameters

<i>req</i>	[rapp_platform_ros_communications::registerImageObjectToOntologySrv::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::registerImageObjectToOntologySrv::Response&] The ROS service response

Definition at line 804 of file knowrob_wrapper.cpp.

```
6.31.3.15 rapp_platform_ros_communications::retractUserOntologyAliasSrv::Response KnowrobWrapper::retract-
         _user_ontology_alias ( rapp_platform_ros_communications::retractUserOntologyAliasSrv::Request req
         )
```

Implements the retract_user_ontology_alias ROS service.

Parameters

<i>req</i>	[rapp_platform_ros_communications::retractUserOntologyAliasSrv::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::retractUserOntologyAliasSrv::Response&] The ROS service response

Definition at line 853 of file knowrob_wrapper.cpp.

```
6.31.3.16 rapp_platform_ros_communications::ontologySubSuperClassesOfSrv::Response KnowrobWrapper-
         ::subclassesOfQuery ( rapp_platform_ros_communications::ontologySubSuperClassesOfSrv::Request req
         )
```

Implements the subclassesOf ROS service.

Parameters

<i>req</i>	[rapp_platform_ros_communications::ontologySubSuperClassesOfSrv::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::ontologySubSuperClassesOfSrv::Response&] The ROS service response

Parameters

<i>req</i>	[rapp_platform_ros_communications::ontologySubSuperClassesOfSrv::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::ontologySubSuperClassesOfSrv::Response&] The ROS service response

Exceptions

<i>AppError</i>	
-----------------	--

Definition at line 486 of file knowrob_wrapper.cpp.

6.31.3.17 `rapp_platform_ros_communications::ontologySubSuperClassesOfSrv::Response KnowrobWrapper::superclassesOfQuery (rapp_platform_ros_communications::ontologySubSuperClassesOfSrv::Request req)`

Implements the superclassesOf ROS service.

Parameters

<i>req</i>	[rapp_platform_ros_communications::ontologySubSuperClassesOfSrv::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::ontologySubSuperClassesOfSrv::Response&] The ROS service response

Parameters

<i>req</i>	[rapp_platform_ros_communications::ontologySubSuperClassesOfSrv::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::ontologySubSuperClassesOfSrv::Response&] The ROS service response

Exceptions

<i>AppError</i>	
-----------------	--

Definition at line 533 of file knowrob_wrapper.cpp.

6.31.3.18 `rapp_platform_ros_communications::returnUserInstancesOfClassSrv::Response` KnowrobWrapper::user_instances_of_class (`rapp_platform_ros_communications::returnUserInstancesOfClassSrv::Request req`)

Implements the returnUserInstancesOfClass ROS service.

Parameters

<i>req</i>	[rapp_platform_ros_communications::returnUserInstancesOfClassSrv::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::returnUserInstancesOfClassSrv::Response&] The ROS service response

Parameters

<i>req</i>	[rapp_platform_ros_communications::returnUserInstancesOfClassSrv::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::returnUserInstancesOfClassSrv::Response&] The ROS service response

Exceptions

<i>AppError</i>	
-----------------	--

Definition at line 759 of file knowrob_wrapper.cpp.

6.31.3.19 rapp_platform_ros_communications::userPerformanceCognitiveTestsSrv::Response KnowrobWrapper::user_performance_cognitive_tests (rapp_platform_ros_communications::userPerformanceCognitiveTestsSrv::Request *req*)

Implements the user_performance_cognitive_tests ROS service.

Parameters

<i>req</i>	[rapp_platform_ros_communications::userPerformanceCognitiveTestsSrv::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::userPerformanceCognitiveTestsSrv::Response&] The ROS service response

Parameters

<i>req</i>	[rapp_platform_ros_communications::userPerformanceCognitiveTestsSrv::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::userPerformanceCognitiveTestsSrv::Response&] The ROS service response

Exceptions

<i>AppError</i>	
-----------------	--

Definition at line 387 of file knowrob_wrapper.cpp.

6.31.4 Member Data Documentation

6.31.4.1 `ros::ServiceClient KnowrobWrapper::mysql_get_user_ontology_alias_client` [private]

The mysql update tblUser client server

Definition at line 62 of file `knowrob_wrapper.h`.

6.31.4.2 `ros::ServiceClient KnowrobWrapper::mysql_register_user_ontology_alias_client` [private]

The mysql fetch from tblUser client server

Definition at line 59 of file `knowrob_wrapper.h`.

6.31.4.3 `ros::NodeHandle KnowrobWrapper::nh_` [private]

< The ROS node handle The json prolog handle

Definition at line 53 of file `knowrob_wrapper.h`.

6.31.4.4 `json_prolog::Prolog KnowrobWrapper::pl` [private]

The mysql write to tblUser client server

Definition at line 56 of file `knowrob_wrapper.h`.

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

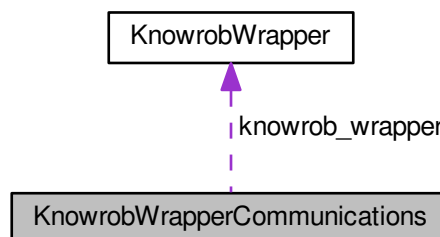
- [/home/travis/rapp_temp/rapp-platform/rapp_knowrob_wrapper/include/knowrob_wrapper/knowrob_wrapper.h](#)
- [/home/travis/rapp_temp/rapp-platform/rapp_knowrob_wrapper/src/knowrob_wrapper.cpp](#)

6.32 KnowrobWrapperCommunications Class Reference

Class [KnowrobWrapperCommunications](#) uptakes the task of handling the ROS service callbacks.

```
#include <knowrob_wrapper_communications.h>
```

Collaboration diagram for KnowrobWrapperCommunications:



Public Member Functions

- [KnowrobWrapperCommunications](#) ()

Default constructor.

- bool [clear_user_cognitive_tests_performance_records_callback](#) (rapp_platform_ros_communications::clearUserPerformanceCognitiveTestsSrv::Request &req, rapp_platform_ros_communications::clearUserPerformanceCognitiveTestsSrv::Response &res)

Serves the clear_user_cognitive_tests_performance_records ROS service callback.

- bool [cognitive_tests_of_type_callback](#) (rapp_platform_ros_communications::cognitiveTestsOfTypeSrv::Request &req, rapp_platform_ros_communications::cognitiveTestsOfTypeSrv::Response &res)

Serves the cognitive_tests_of_type ROS service callback.

- bool [create_cognitive_tests_callback](#) (rapp_platform_ros_communications::createCognitiveExerciseTestSrv::Request &req, rapp_platform_ros_communications::createCognitiveExerciseTestSrv::Response &res)

Serves the create_cognitive_tests ROS service callback.

- bool [create_ontology_alias_callback](#) (rapp_platform_ros_communications::createOntologyAliasSrv::Request &req, rapp_platform_ros_communications::createOntologyAliasSrv::Response &res)

Serves the create_ontology_alias ROS service callback.

- bool [createInstanceCallback](#) (rapp_platform_ros_communications::createInstanceSrv::Request &req, rapp_platform_ros_communications::createInstanceSrv::Response &res)

Serves the createInstance ROS service callback.

- bool [dumpOntologyCallback](#) (rapp_platform_ros_communications::ontologyLoadDumpSrv::Request &req, rapp_platform_ros_communications::ontologyLoadDumpSrv::Response &res)

Serves the dumpOntology ROS service callback.

- bool [isSubSuperclassOfCallback](#) (rapp_platform_ros_communications::ontologyIsSubSuperClassOfSrv::Request &req, rapp_platform_ros_communications::ontologyIsSubSuperClassOfSrv::Response &res)

Serves the isSubSuperclassOf ROS service callback.

- bool [loadOntologyCallback](#) (rapp_platform_ros_communications::ontologyLoadDumpSrv::Request &req, rapp_platform_ros_communications::ontologyLoadDumpSrv::Response &res)

Serves the loadOntology ROS service callback.

- bool [record_user_cognitive_tests_performance_callback](#) (rapp_platform_ros_communications::recordUserPerformanceCognitiveTestsSrv::Request &req, rapp_platform_ros_communications::recordUserPerformanceCognitiveTestsSrv::Response &res)

Serves the record_user_cognitive_tests_performance ROS service callback.

- bool [register_image_object_to_ontology_callback](#) (rapp_platform_ros_communications::registerImageObjectToOntologySrv::Request &req, rapp_platform_ros_communications::registerImageObjectToOntologySrv::Response &res)

Serves the register_image_object_to_ontology ROS service callback.

- bool [retract_user_ontology_alias_callback](#) (rapp_platform_ros_communications::retractUserOntologyAliasSrv::Request &req, rapp_platform_ros_communications::retractUserOntologyAliasSrv::Response &res)

Serves the retract_user_ontology_alias ROS service callback.

- bool [subclassesOfCallback](#) (rapp_platform_ros_communications::ontologySubSuperClassesOfSrv::Request &req, rapp_platform_ros_communications::ontologySubSuperClassesOfSrv::Response &res)

Serves the subclassesOf ROS service callback.

- bool [superclassesOfCallback](#) (rapp_platform_ros_communications::ontologySubSuperClassesOfSrv::Request &req, rapp_platform_ros_communications::ontologySubSuperClassesOfSrv::Response &res)

Serves the superlassesOf ROS service callback.

- bool [user_instances_of_class_callback](#) (rapp_platform_ros_communications::returnUserInstancesOfClassSrv::Request &req, rapp_platform_ros_communications::returnUserInstancesOfClassSrv::Response &res)

Serves the user_instances_of_class ROS service callback.

- bool [user_performance_cognitive_tests_callback](#) (rapp_platform_ros_communications::userPerformanceCognitiveTestsSrv::Request &req, rapp_platform_ros_communications::userPerformanceCognitiveTestsSrv::Response &res)

Serves the user_performance_cognitive_tests ROS service callback.

Private Attributes

- `ros::ServiceServer clear_user_cognitive_tests_performance_records_service_`
- `std::string clear_user_cognitive_tests_performance_records_topic_`
- `ros::ServiceServer cognitive_tests_of_type_service_`
- `std::string cognitive_tests_of_type_topic_`
- `ros::ServiceServer create_cognitive_tests_service_`
- `std::string create_cognitive_tests_topic_`
- `ros::ServiceServer create_ontology_alias_service_`
- `std::string create_ontology_alias_topic_`
- `ros::ServiceServer createInstanceService_`
- `std::string createInstanceServiceTopic_`
- `ros::ServiceServer dumpOntologyService_`
- `std::string dumpOntologyServiceTopic_`
- `ros::ServiceServer is_subsuperclass_of_service_`
- `std::string is_subsuperclass_of_service_topic_`
- `KnowrobWrapper knowrob_wrapper`
- `ros::ServiceServer loadOntologyService_`
- `std::string loadOntologyServiceTopic_`
- `ros::NodeHandle nh_`
- `ros::ServiceServer record_user_cognitive_tests_performance_service_`
- `std::string record_user_cognitive_tests_performance_topic_`
- `ros::ServiceServer register_image_object_to_ontology_service_`
- `std::string register_image_object_to_ontology_topic_`
- `ros::ServiceServer retract_user_ontology_alias_service_`
- `std::string retract_user_ontology_alias_topic_`
- `ros::ServiceServer subclasses_of_service_`
- `std::string subclasses_of_service_topic_`
- `ros::ServiceServer superclasses_of_service_`
- `std::string superclasses_of_service_topic_`
- `ros::ServiceServer user_instances_of_class_service_`
- `std::string user_instances_of_class_topic_`
- `ros::ServiceServer user_performance_cognitive_tests_service_`
- `std::string user_performance_cognitive_tests_topic_`

6.32.1 Detailed Description

Class [KnowrobWrapperCommunications](#) uptakes the task of handling the ROS service callbacks.

Definition at line 28 of file `knowrob_wrapper_communications.h`.

6.32.2 Constructor & Destructor Documentation

6.32.2.1 KnowrobWrapperCommunications::KnowrobWrapperCommunications ()

Default constructor.

Default constructor Waits for services it depends on and declares the knowrob wrapper services callbacks.

Definition at line 28 of file `knowrob_wrapper_communications.cpp`.

6.32.3 Member Function Documentation

6.32.3.1 `bool KnowrobWrapperCommunications::clear_user_cognitive_tests_performance_records_callback`
(`rapp_platform_ros_communications::clearUserPerformanceCognitiveTestsSrv::Request & req`,
 `rapp_platform_ros_communications::clearUserPerformanceCognitiveTestsSrv::Response & res`)

Serves the `clear_user_cognitive_tests_performance_records` ROS service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::clearUserPerformanceCognitiveTestsSrv::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::clearUserPerformanceCognitiveTestsSrv::Response&] The ROS service response

Returns

bool - The success status of the call

Definition at line 331 of file knowrob_wrapper_communications.cpp.

6.32.3.2 bool KnowrobWrapperCommunications::cognitive_tests_of_type_callback (rapp_platform_ros_communications::cognitiveTestsOfTypeSrv::Request & *req*, rapp_platform_ros_communications::cognitiveTestsOfTypeSrv::Response & *res*)

Serves the cognitive_tests_of_type ROS service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::cognitiveTestsOfTypeSrv::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::cognitiveTestsOfTypeSrv::Response&] The ROS service response

Returns

bool - The success status of the call

Definition at line 303 of file knowrob_wrapper_communications.cpp.

6.32.3.3 bool KnowrobWrapperCommunications::create_cognitive_tests_callback (rapp_platform_ros_communications::createCognitiveExerciseTestSrv::Request & *req*, rapp_platform_ros_communications::createCognitiveExerciseTestSrv::Response & *res*)

Serves the create_cognitive_tests ROS service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::createCognitiveExerciseTestSrv::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::createCognitiveExerciseTestSrv::Response&] The ROS service response

Returns

bool - The success status of the call

Definition at line 289 of file knowrob_wrapper_communications.cpp.

6.32.3.4 bool KnowrobWrapperCommunications::create_ontology_alias_callback (rapp_platform_ros_communications::createOntologyAliasSrv::Request & *req*, rapp_platform_ros_communications::createOntologyAliasSrv::Response & *res*)

Serves the create_ontology_alias ROS service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::createOntologyAliasSrv::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::createOntologyAliasSrv::Response&] The ROS service response

Returns

bool - The success status of the call

Definition at line 247 of file knowrob_wrapper_communications.cpp.

```
6.32.3.5 bool KnowrobWrapperCommunications::createInstanceCallback ( rapp_platform_ros_communications-
::createInstanceSrv::Request & req, rapp_platform_ros_communications::createInstanceSrv::Response & res
)
```

Serves the createInstance ROS service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::createInstanceSrv::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::createInstanceSrv::Response&] The ROS service response

Returns

bool - The success status of the call

Definition at line 205 of file knowrob_wrapper_communications.cpp.

```
6.32.3.6 bool KnowrobWrapperCommunications::dumpOntologyCallback ( rapp_platform_ros_communications::ontology-
LoadDumpSrv::Request & req, rapp_platform_ros_communications::ontologyLoadDumpSrv::Response & res
)
```

Serves the dumpOntology ROS service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::ontologyLoadDumpSrv::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::ontologyLoadDumpSrv::Response&] The ROS service response

Returns

bool - The success status of the call

Definition at line 219 of file knowrob_wrapper_communications.cpp.

```
6.32.3.7 bool KnowrobWrapperCommunications::isSubSuperclassOfCallback ( rapp_platform_ros_communications::ontology-
IsSubSuperClassOfSrv::Request & req, rapp_platform_ros_communications::ontologyIsSubSuperClassOfSrv::-
Response & res )
```

Serves the isSubSuperclassOf ROS service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::ontologyIsSubSuperClassOfSrv::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::ontologyIsSubSuperClassOfSrv::Response&] The ROS service response

Returns

bool - The success status of the call

Definition at line 191 of file knowrob_wrapper_communications.cpp.

6.32.3.8 bool KnowrobWrapperCommunications::loadOntologyCallback (rapp_platform_ros_communications::ontologyLoadDumpSrv::Request & *req*, rapp_platform_ros_communications::ontologyLoadDumpSrv::Response & *res*)

Serves the loadOntology ROS service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::ontologyLoadDumpSrv::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::ontologyLoadDumpSrv::Response&] The ROS service response

Returns

bool - The success status of the call

Definition at line 233 of file knowrob_wrapper_communications.cpp.

6.32.3.9 bool KnowrobWrapperCommunications::record_user_cognitive_tests_performance_callback (rapp_platform_ros_communications::recordUserPerformanceCognitiveTestsSrv::Request & *req*, rapp_platform_ros_communications::recordUserPerformanceCognitiveTestsSrv::Response & *res*)

Serves the record_user_cognitive_tests_performance ROS service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::recordUserPerformanceCognitiveTestsSrv::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::recordUserPerformanceCognitiveTestsSrv::Response&] The ROS service response

Returns

bool - The success status of the call

Definition at line 317 of file knowrob_wrapper_communications.cpp.

6.32.3.10 bool KnowrobWrapperCommunications::register_image_object_to_ontology_callback (rapp_platform_ros_communications::registerImageObjectToOntologySrv::Request & *req*, rapp_platform_ros_communications::registerImageObjectToOntologySrv::Response & *res*)

Serves the register_image_object_to_ontology ROS service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::registerImageToOntologySrv::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::registerImageToOntologySrv::Response&] The ROS service response

Returns

bool - The success status of the call

Definition at line 359 of file knowrob_wrapper_communications.cpp.

6.32.3.11 bool KnowrobWrapperCommunications::retract_user_ontology_alias_callback (rapp_platform_ros_communications::retractUserOntologyAliasSrv::Request & *req*, rapp_platform_ros_communications::retractUserOntologyAliasSrv::Response & *res*)

Serves the retract_user_ontology_alias ROS service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::retractUserOntologyAliasSrv::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::retractUserOntologyAliasSrv::Response&] The ROS service response

Returns

bool - The success status of the call

Definition at line 345 of file knowrob_wrapper_communications.cpp.

6.32.3.12 bool KnowrobWrapperCommunications::subclassesOfCallback (rapp_platform_ros_communications::ontologySubSuperClassesOfSrv::Request & *req*, rapp_platform_ros_communications::ontologySubSuperClassesOfSrv::Response & *res*)

Serves the subclassesOf ROS service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::ontologySubSuperClassesOfSrv::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::ontologySubSuperClassesOfSrv::Response&] The ROS service response

Returns

bool - The success status of the call

Definition at line 163 of file knowrob_wrapper_communications.cpp.

6.32.3.13 bool KnowrobWrapperCommunications::superclassesOfCallback (rapp_platform_ros_communications::ontologySubSuperClassesOfSrv::Request & *req*, rapp_platform_ros_communications::ontologySubSuperClassesOfSrv::Response & *res*)

Serves the superlassesOf ROS service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::ontologySubSuperClassesOfSrv::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::ontologySubSuperClassesOfSrv::Response&] The R-OS service response

Returns

bool - The success status of the call

Definition at line 177 of file knowrob_wrapper_communications.cpp.

6.32.3.14 bool KnowrobWrapperCommunications::user_instances_of_class_callback (rapp_platform_ros_communications::returnUserInstancesOfClassSrv::Request & *req*, rapp_platform_ros_communications::returnUserInstancesOfClassSrv::Response & *res*)

Serves the user_instances_of_class ROS service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::returnUserInstancesOfClassSrv::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::returnUserInstancesOfClassSrv::Response&] The R-OS service response

Returns

bool - The success status of the call

Definition at line 261 of file knowrob_wrapper_communications.cpp.

6.32.3.15 bool KnowrobWrapperCommunications::user_performance_cognitive_tests_callback (rapp_platform_ros_communications::userPerformanceCognitiveTestsSrv::Request & *req*, rapp_platform_ros_communications::userPerformanceCognitiveTestsSrv::Response & *res*)

Serves the user_performance_cognitive_tests ROS service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::userPerformanceCognitiveTestsSrv::Request&] The R-OS service request
<i>res</i>	[rapp_platform_ros_communications::userPerformanceCognitiveTestsSrv::Response&] The ROS service response

Returns

bool - The success status of the call

Definition at line 275 of file knowrob_wrapper_communications.cpp.

6.32.4 Member Data Documentation

6.32.4.1 ros::ServiceServer KnowrobWrapperCommunications::clear_user_cognitive_tests_performance_records_service_
[private]

Member variable holding the clear_user_cognitive_tests_performance_records ROS service topic

Definition at line 99 of file knowrob_wrapper_communications.h.

6.32.4.2 `std::string KnowrobWrapperCommunications::clear_user_cognitive_tests_performance_records_topic_ [private]`

The retract_user_ontology_alias service server

Definition at line 101 of file knowrob_wrapper_communications.h.

6.32.4.3 `ros::ServiceServer KnowrobWrapperCommunications::cognitive_tests_of_type_service_ [private]`

Member variable holding the cognitive_tests_of_type ROS service topic

Definition at line 89 of file knowrob_wrapper_communications.h.

6.32.4.4 `std::string KnowrobWrapperCommunications::cognitive_tests_of_type_topic_ [private]`

The record_user_cognitive_tests_performance service server

Definition at line 91 of file knowrob_wrapper_communications.h.

6.32.4.5 `ros::ServiceServer KnowrobWrapperCommunications::create_cognitive_tests_service_ [private]`

Member variable holding the create_cognitive_tests ROS service topic

Definition at line 84 of file knowrob_wrapper_communications.h.

6.32.4.6 `std::string KnowrobWrapperCommunications::create_cognitive_tests_topic_ [private]`

The cognitive_tests_of_type service server

Definition at line 86 of file knowrob_wrapper_communications.h.

6.32.4.7 `ros::ServiceServer KnowrobWrapperCommunications::create_ontology_alias_service_ [private]`

Member variable holding the create_ontology_alias ROS service topic

Definition at line 74 of file knowrob_wrapper_communications.h.

6.32.4.8 `std::string KnowrobWrapperCommunications::create_ontology_alias_topic_ [private]`

The user_performance_cognitive_tests service server

Definition at line 76 of file knowrob_wrapper_communications.h.

6.32.4.9 `ros::ServiceServer KnowrobWrapperCommunications::createInstanceService_ [private]`

Member variable holding the createInstanceServiceTopic ROS service topic

Definition at line 54 of file knowrob_wrapper_communications.h.

6.32.4.10 `std::string KnowrobWrapperCommunications::createInstanceServiceTopic_ [private]`

The dumpOntologyService service server

Definition at line 56 of file knowrob_wrapper_communications.h.

6.32.4.11 `ros::ServiceServer KnowrobWrapperCommunications::dumpOntologyService_` [private]

Member variable holding the dumpOntologyServiceTopic ROS service topic

Definition at line 59 of file knowrob_wrapper_communications.h.

6.32.4.12 `std::string KnowrobWrapperCommunications::dumpOntologyServiceTopic_` [private]

The loadOntologyService service server

Definition at line 61 of file knowrob_wrapper_communications.h.

6.32.4.13 `ros::ServiceServer KnowrobWrapperCommunications::is_subsuperclass_of_service_` [private]

Member variable holding the is_subsuperclass ROS service topic

Definition at line 49 of file knowrob_wrapper_communications.h.

6.32.4.14 `std::string KnowrobWrapperCommunications::is_subsuperclass_of_service_topic_` [private]

The createInstanceService service server

Definition at line 51 of file knowrob_wrapper_communications.h.

6.32.4.15 `KnowrobWrapper KnowrobWrapperCommunications::knowrob_wrapper` [private]

The subclasses_of service server

Definition at line 35 of file knowrob_wrapper_communications.h.

6.32.4.16 `ros::ServiceServer KnowrobWrapperCommunications::loadOntologyService_` [private]

Member variable holding the loadOntologyServiceTopic ROS service topic

Definition at line 64 of file knowrob_wrapper_communications.h.

6.32.4.17 `std::string KnowrobWrapperCommunications::loadOntologyServiceTopic_` [private]

The user_instances_of_class service server

Definition at line 66 of file knowrob_wrapper_communications.h.

6.32.4.18 `ros::NodeHandle KnowrobWrapperCommunications::nh_` [private]

< The ROS node handle Object of type knowrob_wrapper

Definition at line 32 of file knowrob_wrapper_communications.h.

6.32.4.19 `ros::ServiceServer KnowrobWrapperCommunications::record_user_cognitive_tests_performance_service_` [private]

Member variable holding the record_user_cognitive_tests_performance ROS service topic

Definition at line 94 of file knowrob_wrapper_communications.h.

6.32.4.20 `std::string KnowrobWrapperCommunications::record_user_cognitive_tests_performance_topic_` [private]

The clear_user_cognitive_tests_performance_records service server

Definition at line 96 of file knowrob_wrapper_communications.h.

6.32.4.21 `ros::ServiceServer KnowrobWrapperCommunications::register_image_object_to_ontology_service_` [private]

Member variable holding the register_image_object_to_ontology ROS service topic

Definition at line 109 of file knowrob_wrapper_communications.h.

6.32.4.22 `std::string KnowrobWrapperCommunications::register_image_object_to_ontology_topic_` [private]

Definition at line 111 of file knowrob_wrapper_communications.h.

6.32.4.23 `ros::ServiceServer KnowrobWrapperCommunications::retract_user_ontology_alias_service_` [private]

Member variable holding the retract_user_ontology_alias ROS service topic

Definition at line 104 of file knowrob_wrapper_communications.h.

6.32.4.24 `std::string KnowrobWrapperCommunications::retract_user_ontology_alias_topic_` [private]

The register_image_object_to_ontology service server

Definition at line 106 of file knowrob_wrapper_communications.h.

6.32.4.25 `ros::ServiceServer KnowrobWrapperCommunications::subclasses_of_service_` [private]

Member variable holding the subclasses_of ROS service topic

Definition at line 38 of file knowrob_wrapper_communications.h.

6.32.4.26 `std::string KnowrobWrapperCommunications::subclasses_of_service_topic_` [private]

The superclasses_of service server

Definition at line 41 of file knowrob_wrapper_communications.h.

6.32.4.27 `ros::ServiceServer KnowrobWrapperCommunications::superclasses_of_service_` [private]

Member variable holding the superclasses_of ROS service topic

Definition at line 44 of file knowrob_wrapper_communications.h.

6.32.4.28 `std::string KnowrobWrapperCommunications::superclasses_of_service_topic_` [private]

The is_subsuperclass service server

Definition at line 46 of file knowrob_wrapper_communications.h.

6.32.4.29 `ros::ServiceServer KnowrobWrapperCommunications::user_instances_of_class_service_` [private]

Member variable holding the user_instances_of_class ROS service topic

Definition at line 69 of file knowrob_wrapper_communications.h.

6.32.4.30 `std::string KnowrobWrapperCommunications::user_instances_of_class_topic_` [private]

The create_ontology_alias service server

Definition at line 71 of file knowrob_wrapper_communications.h.

6.32.4.31 `ros::ServiceServer KnowrobWrapperCommunications::user_performance_cognitive_tests_service_` [private]

Member variable holding the user_performance_cognitive_tests ROS service topic

Definition at line 79 of file knowrob_wrapper_communications.h.

6.32.4.32 `std::string KnowrobWrapperCommunications::user_performance_cognitive_tests_topic_` [private]

The create_cognitive_tests service server

Definition at line 81 of file knowrob_wrapper_communications.h.

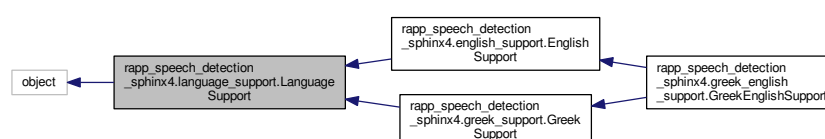
The documentation for this class was generated from the following files:

- /home/travis/rapp_temp/rapp-platform/rapp_knowrob_wrapper/include/knowrob_wrapper/knowrob_wrapper_communications.h
- /home/travis/rapp_temp/rapp-platform/rapp_knowrob_wrapper/src/knowrob_wrapper_communications.cpp

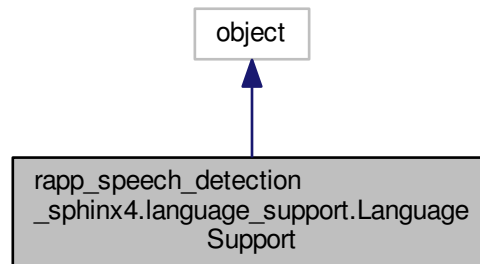
6.33 `rapp_speech_detection_sphinx4.language_support.LanguageSupport` Class Reference

Allows the creation of configuration files for Sphinx speech recognition.

Inheritance diagram for `rapp_speech_detection_sphinx4.language_support.LanguageSupport`:



Collaboration diagram for rapp_speech_detection_sphinx4.language_support.LanguageSupport:



Public Member Functions

- def [__init__](#)
Performs initializations.
- def [getGenericConfiguration](#)
Returns the Generic English Configuration.
- def [getLimitedVocebularyConfiguration](#)
Computes the Limited English Configuration.

Private Attributes

- [_generic_sphinx_configuration](#)
The generic Sphinx configuration.
- [_globalParams](#)
Contains global Sphinx parameters.
- [_vocabulary](#)
The limited vocabulary creator.

6.33.1 Detailed Description

Allows the creation of configuration files for Sphinx speech recognition.

Definition at line 32 of file `language_support.py`.

6.33.2 Constructor & Destructor Documentation

6.33.2.1 def rapp_speech_detection_sphinx4.language_support.LanguageSupport.__init__(self)

Performs initializations.

Definition at line 35 of file `language_support.py`.

6.33.3 Member Function Documentation

6.33.3.1 `def rapp_speech_detection_sphinx4.language_support.LanguageSupport.getGenericConfiguration (self)`

Returns the Generic English Configuration.

Returns

[_generic_sphinx_configuration](#) [dictionary] The Generic English configuration

Definition at line 84 of file `language_support.py`.

6.33.3.2 `def rapp_speech_detection_sphinx4.language_support.LanguageSupport.getLimitedVocebularyConfiguration (self, words, grammar, sentences)`

Computes the Limited English Configuration.

Parameters

<i>words</i>	[list::string] The set of words to be identified
<i>grammar</i>	[list::string] The Sphinx grammar parameter
<i>sentences</i>	[list::string] The Sphinx sentences parameter

Returns

`limited_sphinx_configuration` [dictionary] The Limited configuration
`englified_to_lang_dict` [dictionary] A dictionary to transform the englified words to the words in the proper language

Definition at line 78 of file `language_support.py`.

6.33.4 Member Data Documentation

6.33.4.1 `rapp_speech_detection_sphinx4.language_support.LanguageSupport._generic_sphinx_configuration` [private]

The generic Sphinx configuration.

Note

Check acoustic model!!

Definition at line 54 of file `language_support.py`.

6.33.4.2 `rapp_speech_detection_sphinx4.language_support.LanguageSupport._globalParams` [private]

Contains global Sphinx parameters.

(see [global_parameters.GlobalParams](#))

Definition at line 39 of file `language_support.py`.

6.33.4.3 `rapp_speech_detection_sphinx4.language_support.LanguageSupport._vocabulary` [private]

The limited vocabulary creator.

Instantiates [limited_vocabulary_creator.LimitedVocabularyCreator](#)

Definition at line 44 of file language_support.py.

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

- /home/travis/rapp_temp/rapp-platform/rapp_speech_detection_sphinx4/src/rapp_speech_detection_sphinx4/language_support.py

6.34 rapp_speech_detection_sphinx4.limited_vocabulary_creator.LimitedVocabularyCreator Class Reference

Creates temporary configuration files for the input limited vocabulary.

Public Member Functions

- def [__init__](#)
Performs initializations.
- def [createConfigurationFiles](#)
Creates temporary configuration files for the input limited vocabulary.

Private Attributes

- [_globalParams](#)
Contains global Sphinx parameters.
- [_languages_package](#)
The temporary directory containing the configurations.
- [_sphinx_configuration](#)
The default configuration.

6.34.1 Detailed Description

Creates temporary configuration files for the input limited vocabulary.

Definition at line 35 of file limited_vocabulary_creator.py.

6.34.2 Constructor & Destructor Documentation

6.34.2.1 `def rapp_speech_detection_sphinx4.limited_vocabulary_creator.LimitedVocabularyCreator.__init__(self)`

Performs initializations.

Definition at line 38 of file limited_vocabulary_creator.py.

6.34.3 Member Function Documentation

6.34.3.1 `def rapp_speech_detection_sphinx4.limited_vocabulary_creator.LimitedVocabularyCreator.createConfigurationFiles (self, words, grammar, sentences)`

Creates temporary configuration files for the input limited vocabulary.

The 'words' input argument is of the form: words = { 'word1_en_chars': [phonem1, phonem2,...], 'word2_en_chars': [phonem1, phonem2,...] ... }

Parameters

<i>words</i>	[list::string] The set of words to be identified
<i>grammar</i>	[list::string] The Sphinx grammar parameter
<i>sentences</i>	[list::string] The Sphinx sentences parameter

Returns

conf [dictionary] The final configuration
 status [string] Either the error (string) or True (bool)

Definition at line 88 of file limited_vocabulary_creator.py.

6.34.4 Member Data Documentation

6.34.4.1 `rapp_speech_detection_sphinx4.limited_vocabulary_creator.LimitedVocabularyCreator._globalParams` [private]

Contains global Sphinx parameters.

(see [global_parameters.GlobalParams](#))

Definition at line 42 of file limited_vocabulary_creator.py.

6.34.4.2 `rapp_speech_detection_sphinx4.limited_vocabulary_creator.LimitedVocabularyCreator._languages_package` [private]

The temporary directory containing the configurations.

Definition at line 50 of file limited_vocabulary_creator.py.

6.34.4.3 `rapp_speech_detection_sphinx4.limited_vocabulary_creator.LimitedVocabularyCreator._sphinx_configuration` [private]

The default configuration.

Definition at line 58 of file limited_vocabulary_creator.py.

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

- `/home/travis/rapp_temp/rapp-platform/rapp_speech_detection_sphinx4/src/rapp_speech_detection_sphinx4/limited_vocabulary_creator.py`

6.35 MapGenerator Class Reference

Map generation node.

Public Member Functions

- [MapGenerator](#) (const std::string &mapname)
- void [mapCallback](#) (const nav_msgs::OccupancyGridConstPtr &map)

Public Attributes

- ros::Subscriber [map_sub_](#)

- `std::string` [mapname_](#)
- `bool` [saved_map_](#)

6.35.1 Detailed Description

Map generation node.

Definition at line 43 of file `map_saver.cpp`.

6.35.2 Constructor & Destructor Documentation

6.35.2.1 `MapGenerator::MapGenerator (const std::string & mapname)` `[inline]`

Definition at line 47 of file `map_saver.cpp`.

6.35.3 Member Function Documentation

6.35.3.1 `void MapGenerator::mapCallback (const nav_msgs::OccupancyGridConstPtr & map)` `[inline]`

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

6.35.4 Member Data Documentation

6.35.4.1 `ros::Subscriber` `MapGenerator::map_sub_`

Definition at line 119 of file `map_saver.cpp`.

6.35.4.2 `std::string` `MapGenerator::mapname_`

Definition at line 118 of file `map_saver.cpp`.

6.35.4.3 `bool` `MapGenerator::saved_map_`

Definition at line 120 of file `map_saver.cpp`.

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

- `/home/travis/rapp_temp/rapp-platform/rapp_path_planning/rapp_map_server/src/map_saver.cpp`

6.36 MapServer Class Reference

Public Member Functions

- `MapServer` (`std::string` [fname](#))

Private Member Functions

- `bool` [mapCallback](#) (`rapp_platform_ros_communications::MapServerGetMapRosSrv::Request` &req, `rapp_platform_ros_communications::MapServerGetMapRosSrv::Response` &res)
- `bool` [mapUploadCallback](#) (`rapp_platform_ros_communications::MapServerUploadMapRosSrv::Request` &req, `rapp_platform_ros_communications::MapServerUploadMapRosSrv::Response` &res)
- `bool` [updateMap](#) (`const std::string` [fname](#), `double` res)

Private Attributes

- bool [deprecated](#)
- std::string [fname](#)
- ros::ServiceServer [get_service](#)
- const char * [homedir](#)
- ros::Publisher [map_pub](#)
- nav_msgs::GetMap::Response [map_resp_](#)
- nav_msgs::MapMetaData [meta_data_message_](#)
- ros::Publisher [metadata_pub](#)
- ros::NodeHandle [n](#)
- ros::ServiceServer [test_service](#)
- bool [upload_map_trigger](#)
- std::string [upload_map_trigger_name](#)
- ros::ServiceServer [upload_service](#)

6.36.1 Detailed Description

Definition at line 74 of file main.cpp.

6.36.2 Constructor & Destructor Documentation

6.36.2.1 MapServer::MapServer (std::string *fname*) [\[inline\]](#)

Trivial constructor

Definition at line 78 of file main.cpp.

6.36.3 Member Function Documentation

6.36.3.1 bool MapServer::mapCallback (rapp_platform_ros_communications::MapServerGetMapRosSrv::Request & *req*, rapp_platform_ros_communications::MapServerGetMapRosSrv::Response & *res*) [\[inline\]](#), [\[private\]](#)

Callback invoked when someone requests our service

Definition at line 162 of file main.cpp.

6.36.3.2 bool MapServer::mapUploadCallback (rapp_platform_ros_communications::MapServerUploadMapRosSrv::Request & *req*, rapp_platform_ros_communications::MapServerUploadMapRosSrv::Response & *res*) [\[inline\]](#), [\[private\]](#)

Definition at line 121 of file main.cpp.

6.36.3.3 bool MapServer::updateMap (const std::string *fname*, double *res*) [\[inline\]](#), [\[private\]](#)

Definition at line 178 of file main.cpp.

6.36.4 Member Data Documentation

6.36.4.1 bool MapServer::deprecated [\[private\]](#)

Definition at line 119 of file main.cpp.

6.36.4.2 `std::string MapServer::fname` [private]

Definition at line 118 of file main.cpp.

6.36.4.3 `ros::ServiceServer MapServer::get_service` [private]

Definition at line 117 of file main.cpp.

6.36.4.4 `const char* MapServer::homedir` [private]

Definition at line 111 of file main.cpp.

6.36.4.5 `ros::Publisher MapServer::map_pub` [private]

Definition at line 115 of file main.cpp.

6.36.4.6 `nav_msgs::GetMap::Response MapServer::map_resp_` [private]

Definition at line 285 of file main.cpp.

6.36.4.7 `nav_msgs::MapMetaData MapServer::meta_data_message_` [private]

The map data is cached here, to be sent out to service callers

Definition at line 284 of file main.cpp.

6.36.4.8 `ros::Publisher MapServer::metadata_pub` [private]

Definition at line 116 of file main.cpp.

6.36.4.9 `ros::NodeHandle MapServer::n` [private]

Definition at line 114 of file main.cpp.

6.36.4.10 `ros::ServiceServer MapServer::test_service` [private]

Definition at line 117 of file main.cpp.

6.36.4.11 `bool MapServer::upload_map_trigger` [private]

Definition at line 113 of file main.cpp.

6.36.4.12 `std::string MapServer::upload_map_trigger_name` [private]

Definition at line 112 of file main.cpp.

6.36.4.13 `ros::ServiceServer MapServer::upload_service` `[private]`

Definition at line 117 of file `main.cpp`.

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

- `/home/travis/rapp_temp/rapp-platform/rapp_path_planning/rapp_map_server/src/main.cpp`

6.37 `mysql_wrapper_old.MySQLdbWrapper` Class Reference

The mysql wrapper ros node.

Public Member Functions

- def `__init__`
Default constructor.
- def `authTokenByService`
- def `authTokenByServiceDataHandler`
The authTokenByService service callback.
- def `checkConnection`
Checks connectivity to the DB.
- def `constructAndQuery`
Constructs the where= ..and where=...
- def `constructCommaColumns`
Places commas between columns and constructs a string.
- def `deleteData`
Implements the general delete data from table function.
- def `fetchData`
Implements the general fetch data from table function.
- def `getLogin`
Loads login details from file.
- def `getTableColumnNames`
Gets the columns of the table.
- def `tblAppsRobotsDeleteDataHandler`
The tbl appsRobots delete data service callback.
- def `tblAppsRobotsFetchDataHandler`
The tbl appsRobots fetch data service callback.
- def `tblAppsRobotsUpdateDataHandler`
The tbl appsRobots update data service callback.
- def `tblAppsRobotsWriteDataHandler`
The tbl appsRobots write data service callback.
- def `tblCloudAgentDeleteDataHandler`
The tbl cloud_agent delete data service callback.
- def `tblCloudAgentFetchDataHandler`
The tbl cloud_agent fetch data service callback.
- def `tblCloudAgentServiceArgumentsDeleteDataHandler`
The tbl cloud_agent_service_arguments delete data service callback.
- def `tblCloudAgentServiceArgumentsFetchDataHandler`
The tbl cloud_agent_service_arguments fetch data service callback.
- def `tblCloudAgentServiceArgumentsUpdateDataHandler`
The tbl cloud_agent_service_arguments update data service callback.

- def [tblCloudAgentServiceArgumentsWriteDataHandler](#)
The tbl cloud_agent_service_arguments write data service callback.
- def [tblCloudAgentServiceDeleteDataHandler](#)
The tbl cloud_agent_service delete data service callback.
- def [tblCloudAgentServiceFetchDataHandler](#)
The tbl cloud_agent_service fetch data service callback.
- def [tblCloudAgentServiceUpdateDataHandler](#)
The tbl cloud_agent_service update data service callback.
- def [tblCloudAgentServiceWriteDataHandler](#)
The tbl cloud_agent_service write data service callback.
- def [tblCloudAgentUpdateDataHandler](#)
The tbl cloud_agent update data service callback.
- def [tblCloudAgentWriteDataHandler](#)
The tbl cloud_agent write data service callback.
- def [tblModelDeleteDataHandler](#)
The tbl model delete data service callback.
- def [tblModelFetchDataHandler](#)
The tbl model fetch data service callback.
- def [tblModelUpdateDataHandler](#)
The tbl model update data service callback.
- def [tblModelWriteDataHandler](#)
The tbl model write data service callback.
- def [tblRappDeleteDataHandler](#)
The tbl rapp delete data service callback.
- def [tblRappFetchDataHandler](#)
The tbl rapp fetch data service callback.
- def [tblRappUpdateDataHandler](#)
The tbl rapp update data service callback.
- def [tblRappWriteDataHandler](#)
The tbl rapp write data service callback.
- def [tblRobotDeleteDataHandler](#)
The tbl robot delete data service callback.
- def [tblRobotFetchDataHandler](#)
The tbl robot fetch data service callback.
- def [tblRobotUpdateDataHandler](#)
The tbl robot update data service callback.
- def [tblRobotWriteDataHandler](#)
The tbl robot write data service callback.
- def [tblUserDeleteDataHandler](#)
The tbl user delete data service callback.
- def [tblUserFetchDataHandler](#)
The tbl user fetch data service callback.
- def [tblUsersOntologyInstancesDeleteDataHandler](#)
The tbl usersOntologyInstances delete data service callback.
- def [tblUsersOntologyInstancesFetchDataHandler](#)
The tbl usersOntologyInstances fetch data service callback.
- def [tblUsersOntologyInstancesUpdateDataHandler](#)
The tbl usersOntologyInstances update data service callback.
- def [tblUsersOntologyInstancesWriteDataHandler](#)
The tbl usersOntologyInstances write data service callback.
- def [tblUserUpdateDataHandler](#)

- The tbl user update data service callback.*

 - def [tblUserWriteDataHandler](#)

The tbl user write data service callback.
- def [updateData](#)

Implements the general update data from table function.
- def [viewUsersRobotsAppsFetchDataHandler](#)

The view usersRobotsApps fetch data service callback.
- def [whatRappsCanRun](#)

Implements the whatRappsCanRun service.
- def [whatRappsCanRunDataHandler](#)

The what rappRappCanRun service callback.
- def [writeData](#)

Implements the general write data to table function.

Public Attributes

- [serv](#)
- [serv_topic](#)

6.37.1 Detailed Description

The mysql wrapper ros node.

Definition at line 49 of file `mysql_wrapper_old.py`.

6.37.2 Constructor & Destructor Documentation

6.37.2.1 `def mysql_wrapper_old.MySQLdbWrapper.__init__(self)`

Default constructor.

Declares the callbacks of the node's services

Definition at line 54 of file `mysql_wrapper_old.py`.

6.37.3 Member Function Documentation

6.37.3.1 `def mysql_wrapper_old.MySQLdbWrapper.authTokenByService(self, req)`

Definition at line 418 of file `mysql_wrapper_old.py`.

6.37.3.2 `def mysql_wrapper_old.MySQLdbWrapper.authTokenByServiceDataHandler(self, req)`

The authTokenByService service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::authTokenByServiceSrvResponse::Request&] The R-OS service request
------------	--

<i>res</i>	[rapp_platform_ros_communications::authTokenByServiceSrvRequest::Response&] The ROS service response
------------	--

Definition at line 738 of file mysql_wrapper_old.py.

6.37.3.3 def mysql_wrapper_old.MySQLdbWrapper.checkConnection (*self*)

Checks connectivity to the DB.

Returns

[void] Connection performed successfully

Definition at line 515 of file mysql_wrapper_old.py.

6.37.3.4 def mysql_wrapper_old.MySQLdbWrapper.constructAndQuery (*self*, *cols*)

Construcs the where= ..and where=...

clause

Parameters

<i>cols</i>	[list] the columns needed to construct the clause
-------------	---

Returns

returnquery [string] the And clause

Definition at line 474 of file mysql_wrapper_old.py.

6.37.3.5 def mysql_wrapper_old.MySQLdbWrapper.constructCommaColumns (*self*, *cols*)

Places commas between columns and constructs a string.

Parameters

<i>cols</i>	[list] the input columns
-------------	--------------------------

Returns

returncols [string] the output string

Definition at line 456 of file mysql_wrapper_old.py.

6.37.3.6 def mysql_wrapper_old.MySQLdbWrapper.deleteData (*self*, *req*, *tblName*)

Implements the general delete data from table function.

Parameters

<i>req</i>	[rapp_platform_ros_communications::deleteDataSrvRequest::Request&] The ROS service request
<i>tblName</i>	[string] the table name
<i>res</i>	[rapp_platform_ros_communications::deleteDataSrvResponse::Response&] The ROS service response

Definition at line 276 of file mysql_wrapper_old.py.

6.37.3.7 `def mysql_wrapper_old.MySQLdbWrapper.fetchData (self, req, tblName)`

Implements the general fetch data from table function.

Parameters

<i>req</i>	[rapp_platform_ros_communications::fetchDataSrvRequest::Request&] The ROS service request
<i>tblName</i>	[string] the table name
<i>res</i>	[rapp_platform_ros_communications::fetchDataSrvResponse::Response&] The ROS service response

Definition at line 342 of file mysql_wrapper_old.py.

6.37.3.8 def mysql_wrapper_old.MySQLdbWrapper.getLogin (self)

Loads login details from file.

Returns

[void] Login details loaded successfully

Definition at line 505 of file mysql_wrapper_old.py.

6.37.3.9 def mysql_wrapper_old.MySQLdbWrapper.getTableColumnNames (self, tblName)

Gets the columns of the table.

Returns

Columns [list] the columns of the table

Definition at line 489 of file mysql_wrapper_old.py.

6.37.3.10 def mysql_wrapper_old.MySQLdbWrapper.tblAppsRobotsDeleteDataHandler (self, req)

The tbl appsRobots delete data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::deleteDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::deleteDataSrvResponse::Response&] The ROS service response

Definition at line 674 of file mysql_wrapper_old.py.

6.37.3.11 def mysql_wrapper_old.MySQLdbWrapper.tblAppsRobotsFetchDataHandler (self, req)

The tbl appsRobots fetch data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::fetchDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::fetchDataSrvResponse::Response&] The ROS service response

Definition at line 658 of file mysql_wrapper_old.py.

6.37.3.12 def mysql_wrapper_old.MySQLdbWrapper.tblAppsRobotsUpdateDataHandler (self, req)

The tbl appsRobots update data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::updateDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::updateDataSrvResponse::Response&] The ROS service response

Definition at line 682 of file mysql_wrapper_old.py.

6.37.3.13 `def mysql_wrapper_old.MySQLdbWrapper.tblAppsRobotsWriteDataHandler (self, req)`

The tbl appsRobots write data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::writeDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::writeDataResponse::Response&] The ROS service response

Definition at line 666 of file mysql_wrapper_old.py.

6.37.3.14 `def mysql_wrapper_old.MySQLdbWrapper.tblCloudAgentDeleteDataHandler (self, req)`

The tbl cloud_agent delete data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::deleteDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::deleteDataSrvResponse::Response&] The ROS service response

Definition at line 764 of file mysql_wrapper_old.py.

6.37.3.15 `def mysql_wrapper_old.MySQLdbWrapper.tblCloudAgentFetchDataHandler (self, req)`

The tbl cloud_agent fetch data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::fetchDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::fetchDataSrvResponse::Response&] The ROS service response

Definition at line 748 of file mysql_wrapper_old.py.

6.37.3.16 `def mysql_wrapper_old.MySQLdbWrapper.tblCloudAgentServiceArgumentsDeleteDataHandler (self, req)`

The tbl cloud_agent_service_arguments delete data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::deleteDataSrvRequest::Request&] The ROS service request
------------	--

<i>res</i>	[rapp_platform_ros_communications::deleteDataSrvResponse::Response&] The ROS service response
------------	---

Definition at line 828 of file mysql_wrapper_old.py.

6.37.3.17 def mysql_wrapper_old.MySQLdbWrapper.tblCloudAgentServiceArgumentsFetchDataHandler (*self*, *req*)

The tbl cloud_agent_service_arguments fetch data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::fetchDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::fetchDataSrvResponse::Response&] The ROS service response

Definition at line 812 of file mysql_wrapper_old.py.

6.37.3.18 def mysql_wrapper_old.MySQLdbWrapper.tblCloudAgentServiceArgumentsUpdateDataHandler (*self*, *req*)

The tbl cloud_agent_service_arguments update data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::updateDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::updateDataSrvResponse::Response&] The ROS service response

Definition at line 836 of file mysql_wrapper_old.py.

6.37.3.19 def mysql_wrapper_old.MySQLdbWrapper.tblCloudAgentServiceArgumentsWriteDataHandler (*self*, *req*)

The tbl cloud_agent_service_arguments write data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::writeDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::writeDataResponse::Response&] The ROS service response

Definition at line 820 of file mysql_wrapper_old.py.

6.37.3.20 def mysql_wrapper_old.MySQLdbWrapper.tblCloudAgentServiceDeleteDataHandler (*self*, *req*)

The tbl cloud_agent_service delete data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::deleteDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::deleteDataSrvResponse::Response&] The ROS service response

Definition at line 796 of file mysql_wrapper_old.py.

6.37.3.21 `def mysql_wrapper_old.MySQLdbWrapper.tblCloudAgentServiceFetchDataHandler (self, req)`

The tbl cloud_agent_service fetch data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::fetchDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::fetchDataSrvResponse::Response&] The ROS service response

Definition at line 780 of file mysql_wrapper_old.py.

6.37.3.22 def mysql_wrapper_old.MySQLdbWrapper.tblCloudAgentServiceUpdateDataHandler (*self*, *req*)

The tbl cloud_agent_service update data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::updateDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::updateDataSrvResponse::Response&] The ROS service response

Definition at line 804 of file mysql_wrapper_old.py.

6.37.3.23 def mysql_wrapper_old.MySQLdbWrapper.tblCloudAgentServiceWriteDataHandler (*self*, *req*)

The tbl cloud_agent_service write data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::writeDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::writeDataResponse::Response&] The ROS service response

Definition at line 788 of file mysql_wrapper_old.py.

6.37.3.24 def mysql_wrapper_old.MySQLdbWrapper.tblCloudAgentUpdateDataHandler (*self*, *req*)

The tbl cloud_agent update data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::updateDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::updateDataSrvResponse::Response&] The ROS service response

Definition at line 772 of file mysql_wrapper_old.py.

6.37.3.25 def mysql_wrapper_old.MySQLdbWrapper.tblCloudAgentWriteDataHandler (*self*, *req*)

The tbl cloud_agent write data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::writeDataSrvRequest::Request&] The ROS service request
------------	---

<i>res</i>	[rapp_platform_ros_communications::writeDataResponse::Response&] The ROS service response
------------	---

Definition at line 756 of file mysql_wrapper_old.py.

6.37.3.26 `def mysql_wrapper_old.MySQLdbWrapper.tblModelDeleteDataHandler (self, req)`

The tbl model delete data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::deleteDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::deleteDataSrvResponse::Response&] The ROS service response

Definition at line 578 of file mysql_wrapper_old.py.

6.37.3.27 `def mysql_wrapper_old.MySQLdbWrapper.tblModelFetchDataHandler (self, req)`

The tbl model fetch data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::fetchDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::fetchDataSrvResponse::Response&] The ROS service response

Definition at line 562 of file mysql_wrapper_old.py.

6.37.3.28 `def mysql_wrapper_old.MySQLdbWrapper.tblModelUpdateDataHandler (self, req)`

The tbl model update data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::updateDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::updateDataSrvResponse::Response&] The ROS service response

Definition at line 586 of file mysql_wrapper_old.py.

6.37.3.29 `def mysql_wrapper_old.MySQLdbWrapper.tblModelWriteDataHandler (self, req)`

The tbl model write data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::writeDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::writeDataSrvResponse::Response&] The ROS service response

Definition at line 570 of file mysql_wrapper_old.py.

6.37.3.30 `def mysql_wrapper_old.MySQLdbWrapper.tblRappDeleteDataHandler (self, req)`

The tbl rapp delete data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::deleteDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::deleteDataSrvResponse::Response&] The ROS service response

Definition at line 610 of file mysql_wrapper_old.py.

6.37.3.31 def mysql_wrapper_old.MySQLdbWrapper.tblRappFetchDataHandler (*self*, *req*)

The tbl rapp fetch data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::fetchDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::fetchDataSrvResponse::Response&] The ROS service response

Definition at line 594 of file mysql_wrapper_old.py.

6.37.3.32 def mysql_wrapper_old.MySQLdbWrapper.tblRappUpdateDataHandler (*self*, *req*)

The tbl rapp update data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::updateDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::updateDataSrvResponse::Response&] The ROS service response

Definition at line 618 of file mysql_wrapper_old.py.

6.37.3.33 def mysql_wrapper_old.MySQLdbWrapper.tblRappWriteDataHandler (*self*, *req*)

The tbl rapp write data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::writeDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::writeDataResponse::Response&] The ROS service response

Definition at line 602 of file mysql_wrapper_old.py.

6.37.3.34 def mysql_wrapper_old.MySQLdbWrapper.tblRobotDeleteDataHandler (*self*, *req*)

The tbl robot delete data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::deleteDataSrvRequest::Request&] The ROS service request
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<i>res</i>	[rapp_platform_ros_communications::deleteDataSrvResponse::Response&] The ROS service response
------------	---

Definition at line 642 of file mysql_wrapper_old.py.

6.37.3.35 `def mysql_wrapper_old.MySQLdbWrapper.tblRobotFetchDataHandler (self, req)`

The tbl robot fetch data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::fetchDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::fetchDataSrvResponse::Response&] The ROS service response

Definition at line 626 of file mysql_wrapper_old.py.

6.37.3.36 `def mysql_wrapper_old.MySQLdbWrapper.tblRobotUpdateDataHandler (self, req)`

The tbl robot update data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::updateDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::updateDataSrvResponse::Response&] The ROS service response

Definition at line 650 of file mysql_wrapper_old.py.

6.37.3.37 `def mysql_wrapper_old.MySQLdbWrapper.tblRobotWriteDataHandler (self, req)`

The tbl robot write data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::writeDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::writeDataResponse::Response&] The ROS service response

Definition at line 634 of file mysql_wrapper_old.py.

6.37.3.38 `def mysql_wrapper_old.MySQLdbWrapper.tblUserDeleteDataHandler (self, req)`

The tbl user delete data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::deleteDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::deleteDataSrvResponse::Response&] The ROS service response

Definition at line 546 of file mysql_wrapper_old.py.

6.37.3.39 `def mysql_wrapper_old.MySQLdbWrapper.tblUserFetchDataHandler (self, req)`

The tbl user fetch data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::fetchDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::fetchDataSrvResponse::Response&] The ROS service response

Definition at line 530 of file mysql_wrapper_old.py.

6.37.3.40 def mysql_wrapper_old.MySQLdbWrapper.tblUsersOntologyInstancesDeleteDataHandler (*self*, *req*)

The tbl usersOntologyInstances delete data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::deleteDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::deleteDataSrvResponse::Response&] The ROS service response

Definition at line 706 of file mysql_wrapper_old.py.

6.37.3.41 def mysql_wrapper_old.MySQLdbWrapper.tblUsersOntologyInstancesFetchDataHandler (*self*, *req*)

The tbl usersOntologyInstances fetch data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::fetchDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::fetchDataSrvResponse::Response&] The ROS service response

Definition at line 690 of file mysql_wrapper_old.py.

6.37.3.42 def mysql_wrapper_old.MySQLdbWrapper.tblUsersOntologyInstancesUpdateDataHandler (*self*, *req*)

The tbl usersOntologyInstances update data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::updateDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::updateDataSrvResponse::Response&] The ROS service response

Definition at line 714 of file mysql_wrapper_old.py.

6.37.3.43 def mysql_wrapper_old.MySQLdbWrapper.tblUsersOntologyInstancesWriteDataHandler (*self*, *req*)

The tbl usersOntologyInstances write data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::writeDataSrvRequest::Request&] The ROS service request
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<i>res</i>	[rapp_platform_ros_communications::writeDataResponse::Response&] The ROS service response
------------	---

Definition at line 698 of file mysql_wrapper_old.py.

6.37.3.44 `def mysql_wrapper_old.MySQLdbWrapper.tblUserUpdateDataHandler (self, req)`

The tbl user update data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::updateDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::updateDataSrvResponse::Response&] The ROS service response

Definition at line 554 of file mysql_wrapper_old.py.

6.37.3.45 `def mysql_wrapper_old.MySQLdbWrapper.tblUserWriteDataHandler (self, req)`

The tbl user write data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::writeDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::writeDataResponse::Response&] The ROS service response

Definition at line 538 of file mysql_wrapper_old.py.

6.37.3.46 `def mysql_wrapper_old.MySQLdbWrapper.updateData (self, req, tblName)`

Implements the general update data from table function.

Parameters

<i>req</i>	[rapp_platform_ros_communications::updateDataSrvRequest::Request&] The ROS service request
<i>tblName</i>	[string] the table name
<i>res</i>	[rapp_platform_ros_communications::updateDataSrvResponse::Response&] The ROS service response

Definition at line 308 of file mysql_wrapper_old.py.

6.37.3.47 `def mysql_wrapper_old.MySQLdbWrapper.viewUsersRobotsAppsFetchDataHandler (self, req)`

The view usersRobotsApps fetch data service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::fetchDataSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::fetchDataSrvResponse::Response&] The ROS service response

Definition at line 722 of file mysql_wrapper_old.py.

6.37.3.48 `def mysql_wrapper_old.MySQLdbWrapper.whatRappsCanRun (self, req, tblName)`

Implements the whatRappsCanRun service.

Parameters

<i>req</i>	[rapp_platform_ros_communications::whatRappsCanRunSrvResponse::Request&] The ROS service request
<i>tblName</i>	[string] the table name
<i>res</i>	[rapp_platform_ros_communications::whatRappsCanRunSrvResponse::Response&] The ROS service response

Definition at line 386 of file mysql_wrapper_old.py.

6.37.3.49 `def mysql_wrapper_old.MySQLdbWrapper.whatRappsCanRunDataHandler (self, req)`

The what rappRappCanRun service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::whatRappsCanRunSrvResponse::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::whatRappsCanRunSrvRequest::Response&] The ROS service response

Definition at line 730 of file mysql_wrapper_old.py.

6.37.3.50 `def mysql_wrapper_old.MySQLdbWrapper.writeData (self, req, tblName)`

Implements the general write data to table function.

Parameters

<i>req</i>	[rapp_platform_ros_communications::writeDataSrvRequest::Request&] The ROS service request
<i>tblName</i>	[string] the table name
<i>res</i>	[rapp_platform_ros_communications::writeDataResponse::Response&] The ROS service response

Definition at line 233 of file mysql_wrapper_old.py.

6.37.4 Member Data Documentation

6.37.4.1 `mysql_wrapper_old.MySQLdbWrapper.serv`

Definition at line 59 of file mysql_wrapper_old.py.

6.37.4.2 `mysql_wrapper_old.MySQLdbWrapper.serv_topic`

Definition at line 56 of file mysql_wrapper_old.py.

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

- [/home/travis/rapp_temp/rapp-platform/rapp_mysql_wrapper/src/mysql_wrapper_old.py](#)

6.38 mysql_wrapper.MySQLdbWrapper Class Reference

The mysql wrapper ros node.

Public Member Functions

- def [`__init__`](#)
Default constructor.
- def [`addStoreTokenToDevice`](#)
Implements the addStoreTokenToDevice service main function.
- def [`addStoreTokenToDeviceDataHandler`](#)
The addStoreTokenToDeviceSrv service callback.
- def [`checkActiveApplicationToken`](#)
Implements the checkActiveRobotSession service main function.
- def [`checkActiveApplicationTokenDataHandler`](#)
The checkActiveApplicationTokenSrv service callback.
- def [`checkActiveRobotSession`](#)
Implements the checkActiveRobotSession service main function.
- def [`checkActiveRobotSessionDataHandler`](#)
The checkActiveRobotSessionSrv service callback.
- def [`checkConnection`](#)
Checks connectivity to the DB.
- def [`checkIfUserExists`](#)
Implements the checkIfUserExists service main function.
- def [`checkIfUserExistsDataHandler`](#)
The checkIfUserExistsSrv service callback.
- def [`createNewApplicationToken`](#)
Implements the createNewApplicationToken service main function.
- def [`createNewApplicationTokenDataHandler`](#)
The createNewApplicationTokenSrv service callback.
- def [`createNewCloudAgent`](#)
Implements the createNewCloudAgent service main function.
- def [`createNewCloudAgentDataHandler`](#)
The createNewCloudAgentSrv service callback.
- def [`createNewCloudAgentService`](#)
Implements the createNewCloudAgentService service main function.
- def [`createNewCloudAgentServiceDataHandler`](#)
The createNewCloudAgentServiceSrv service callback.
- def [`createNewPlatformUser`](#)
Implements the createNewPlatformUser service main function.
- def [`createNewPlatformUserDataHandler`](#)
The createNewPlatformUserSrv service callback.
- def [`getCloudAgentServiceTypeAndHostPort`](#)
Implements the getCloudAgentServiceTypeAndHostPort service main function.
- def [`getCloudAgentServiceTypeAndHostPortDataHandler`](#)
The getCloudAgentServiceTypeAndHostPortSrv service callback.
- def [`getLogin`](#)
Loads login details from file.
- def [`getTableColumnNames`](#)
Gets the columns of the table.
- def [`getUserLanguage`](#)
Implements the getUserLanguage service main function.
- def [`getUserLanguageDataHandler`](#)
The getUserLanguage service callback.
- def [`getUsernameAssociatedWithApplicationToken`](#)

- Implements the getUsernameAssociatedWithApplicationToken service main function.*
- def [getUsernameAssociatedWithApplicationTokenDataHandler](#)
The getUsernameAssociatedWithApplicationTokenSrv service callback.
- def [getUserOntologyAlias](#)
Implements the getUserOntologyAlias service main function.
- def [getUserOntologyAliasDataHandler](#)
The getUserOntologyAlias service callback.
- def [getUserPassword](#)
Implements the getUserPassword service main function.
- def [getUserPasswordDataHandler](#)
The getUserPasswordSrv service callback.
- def [registerNewTokenDataHandler](#)
The registerNewTokenSrv service callback.
- def [registerUserOntologyAlias](#)
Implements the registerUserOntologyAlias service main function.
- def [registerUserOntologyAliasDataHandler](#)
The registerUserOntologyAliasSrv service callback.
- def [removePlatformUser](#)
Implements the removePlatformUser service main function.
- def [removePlatformUserDataHandler](#)
The removePlatformUserSrv service callback.
- def [validateExistingPlatformDeviceToken](#)
Implements the validateExistingPlatformDeviceToken service main function.
- def [validateExistingPlatformDeviceTokenDataHandler](#)
The validateExistingPlatformDeviceTokenSrv service callback.
- def [validateUserRole](#)
Implements the validateUserRole service main function.
- def [validateUserRoleDataHandler](#)
The validateUserRoleSrv service callback.

Public Attributes

- [serv](#)
- [serv_topic](#)

6.38.1 Detailed Description

The mysql wrapper ros node.

Definition at line 79 of file mysql_wrapper.py.

6.38.2 Constructor & Destructor Documentation

6.38.2.1 def mysql_wrapper.MySQLdbWrapper.__init__(self)

Default contructor.

Declares the callbacks of the node's services

Definition at line 84 of file mysql_wrapper.py.

6.38.3 Member Function Documentation

6.38.3.1 `def mysql_wrapper.MySQLdbWrapper.addStoreTokenToDevice (self, req)`

Implements the addStoreTokenToDevice service main function.

Parameters

<i>req</i>	[rapp_platform_ros_communications::addStoreTokenToDeviceSrvRequest::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::addStoreTokenToDeviceSrvResponse::Response&] The ROS service response

Exceptions

<i>Exception</i>	IndexError
<i>Exception</i>	IOError
<i>Exception</i>	mdbError

Definition at line 507 of file mysql_wrapper.py.

6.38.3.2 `def mysql_wrapper.MySQLdbWrapper.addStoreTokenToDeviceDataHandler (self, req)`

The addStoreTokenToDeviceSrv service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::addStoreTokenToDeviceSrvRequest::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::addStoreTokenToDeviceSrvResponse::Response&] The ROS service response

Definition at line 924 of file mysql_wrapper.py.

6.38.3.3 `def mysql_wrapper.MySQLdbWrapper.checkActiveApplicationToken (self, req)`

Implements the checkActiveRobotSession service main function.

Parameters

<i>req</i>	[rapp_platform_ros_communications::checkActiveRobotSessionSrvRequest::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::checkActiveRobotSessionSrvResponse::Response&] The ROS service response

Exceptions

<i>Exception</i>	IndexError
<i>Exception</i>	IOError
<i>Exception</i>	mdbError

Definition at line 613 of file mysql_wrapper.py.

6.38.3.4 `def mysql_wrapper.MySQLdbWrapper.checkActiveApplicationTokenDataHandler (self, req)`

The checkActiveApplicationTokenSrv service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::checkActiveApplicationTokenSrvResponse::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::checkActiveApplicationTokenSrvRequest::Response&] The ROS service response

Definition at line 908 of file mysql_wrapper.py.

6.38.3.5 def mysql_wrapper.MySQLdbWrapper.checkActiveRobotSession (*self*, *req*)

Implements the checkActiveRobotSession service main function.

Parameters

<i>req</i>	[rapp_platform_ros_communications::checkActiveRobotSessionSrvRequest::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::checkActiveRobotSessionSrvResponse::Response&] The ROS service response

Exceptions

<i>Exception</i>	IndexError
<i>Exception</i>	IOError
<i>Exception</i>	mdbError

Definition at line 576 of file mysql_wrapper.py.

6.38.3.6 def mysql_wrapper.MySQLdbWrapper.checkActiveRobotSessionDataHandler (*self*, *req*)

The checkActiveRobotSessionSrv service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::checkActiveRobotSessionSrvRequest::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::checkActiveRobotSessionSrvResponse::Response&] The ROS service response

Definition at line 916 of file mysql_wrapper.py.

6.38.3.7 def mysql_wrapper.MySQLdbWrapper.checkConnection (*self*)

Checks connectivity to the DB.

Returns

[void] Connection performed successfully

Definition at line 821 of file mysql_wrapper.py.

6.38.3.8 `def mysql_wrapper.MySQLdbWrapper.checkIfUserExists (self, req)`

Implements the checkIfUserExists service main function.

Parameters

<i>req</i>	[rapp_platform_ros_communications::checkIfUserExistsSrvRequest::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::checkIfUserExistsSrvResponse::Response&] The ROS service response

Exceptions

<i>Exception</i>	IndexError
<i>Exception</i>	IOError
<i>Exception</i>	mdbError

Definition at line 291 of file mysql_wrapper.py.

6.38.3.9 `def mysql_wrapper.MySQLdbWrapper.checkIfUserExistsDataHandler (self, req)`

The checkIfUserExistsSrv service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::checkIfUserExistsSrvResponse::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::checkIfUserExistsSrvRequest::Response&] The ROS service response

Definition at line 868 of file mysql_wrapper.py.

6.38.3.10 `def mysql_wrapper.MySQLdbWrapper.createNewApplicationToken (self, req)`

Implements the createNewApplicationToken service main function.

Parameters

<i>req</i>	[rapp_platform_ros_communications::createNewApplicationTokenSrvRequest::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::createNewApplicationTokenSrvResponse::Response&] The ROS service response

Exceptions

<i>Exception</i>	IndexError
<i>Exception</i>	IOError
<i>Exception</i>	mdbError

Definition at line 472 of file mysql_wrapper.py.

6.38.3.11 `def mysql_wrapper.MySQLdbWrapper.createNewApplicationTokenDataHandler (self, req)`

The createNewApplicationTokenSrv service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::createNewApplicationTokenSrvResponse::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::createNewApplicationTokenSrvRequest::Response&] The ROS service response

Definition at line 900 of file mysql_wrapper.py.

6.38.3.12 `def mysql_wrapper.MySQLdbWrapper.createNewCloudAgent (self, req)`

Implements the createNewCloudAgent service main function.

Parameters

<i>req</i>	[rapp_platform_ros_communications::createNewCloudAgentSrvRequest::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::createNewCloudAgentSrvResponse::Response&] The ROS service response

Exceptions

<i>Exception</i>	IndexError
<i>Exception</i>	IOError
<i>Exception</i>	mdbError

Definition at line 688 of file mysql_wrapper.py.

6.38.3.13 `def mysql_wrapper.MySQLdbWrapper.createNewCloudAgentDataHandler (self, req)`

The createNewCloudAgentSrv service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::createNewCloudAgentSrvRequest::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::createNewCloudAgentSrvResponse::Response&] The ROS service response

Definition at line 956 of file mysql_wrapper.py.

6.38.3.14 `def mysql_wrapper.MySQLdbWrapper.createNewCloudAgentService (self, req)`

Implements the createNewCloudAgentService service main function.

Parameters

<i>req</i>	[rapp_platform_ros_communications::createNewCloudAgentServiceSrvRequest::Request& The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::createNewCloudAgentServiceSrvResponse::Response&] The ROS service response

Exceptions

<i>Exception</i>	IndexError
<i>Exception</i>	IOError
<i>Exception</i>	mdbError

Definition at line 723 of file mysql_wrapper.py.

6.38.3.15 `def mysql_wrapper.MySQLdbWrapper.createNewCloudAgentServiceDataHandler (self, req)`

The createNewCloudAgentServiceSrv service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::createNewCloudAgentServiceSrvRequest::Request& The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::createNewCloudAgentServiceSrvResponse::Response&] The ROS service response

Definition at line 964 of file mysql_wrapper.py.

6.38.3.16 `def mysql_wrapper.MySQLdbWrapper.createNewPlatformUser (self, req)`

Implements the createNewPlatformUser service main function.

Parameters

<i>req</i>	[rapp_platform_ros_communications::createNewPlatformUserSrvRequest::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::createNewPlatformUserSrvResponse::Response&] The ROS service response

Exceptions

<i>Exception</i>	IndexError
<i>Exception</i>	IOError
<i>Exception</i>	mdbError

Definition at line 402 of file mysql_wrapper.py.

6.38.3.17 `def mysql_wrapper.MySQLdbWrapper.createNewPlatformUserDataHandler (self, req)`

The createNewPlatformUserSrv service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::createNewPlatformUserSrvResponse::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::createNewPlatformUserSrvRequest::Response&] The ROS service response

Definition at line 892 of file mysql_wrapper.py.

6.38.3.18 def mysql_wrapper.MySQLdbWrapper.getCloudAgentServiceTypeAndHostPort (*self*, *req*)

Implements the getCloudAgentServiceTypeAndHostPort service main function.

Parameters

<i>req</i>	[rapp_platform_ros_communications::getCloudAgentServiceTypeAndHostPortSrvRequest::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::getCloudAgentServiceTypeAndHostPortSrvResponse::Response&]
The ROS service response

Exceptions

<i>Exception</i>	IndexError
<i>Exception</i>	IOError
<i>Exception</i>	mdbError

Definition at line 759 of file mysql_wrapper.py.

6.38.3.19 def mysql_wrapper.MySQLdbWrapper.getCloudAgentServiceTypeAndHostPortDataHandler (*self*, *req*)

The getCloudAgentServiceTypeAndHostPortSrv service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::getCloudAgentServiceTypeAndHostPortSrvRequest::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::getCloudAgentServiceTypeAndHostPortSrvResponse::Response&]
The ROS service response

Definition at line 972 of file mysql_wrapper.py.

6.38.3.20 def mysql_wrapper.MySQLdbWrapper.getLogin (*self*)

Loads login details from file.

Returns

db_username [string] the login username
db_password [string] the login password

Definition at line 811 of file mysql_wrapper.py.

6.38.3.21 `def mysql_wrapper.MySQLdbWrapper.getTableColumnNames (self, tblName)`

Gets the columns of the table.

Parameters

<i>tblName</i>	[string] the name of the table
----------------	--------------------------------

Returns

Columns [list] the columns of the table

Definition at line 794 of file mysql_wrapper.py.

6.38.3.22 `def mysql_wrapper.MySQLdbWrapper.getUserLanguage (self, req)`

Implements the getUserLanguage service main function.

Parameters

<i>req</i>	[rapp_platform_ros_communications::getUserLanguageSrvRequest::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::getUserLanguageSrvResponse::Response&] The ROS service response

Exceptions

<i>Exception</i>	IndexError
<i>Exception</i>	IOError
<i>Exception</i>	mdbError

Definition at line 252 of file mysql_wrapper.py.

6.38.3.23 `def mysql_wrapper.MySQLdbWrapper.getUserLanguageDataHandler (self, req)`

The getUserLanguage service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::getUserLanguageSrvResponse::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::getUserLanguageSrvRequest::Response&] The ROS service response

Definition at line 852 of file mysql_wrapper.py.

6.38.3.24 `def mysql_wrapper.MySQLdbWrapper.getUsernameAssociatedWithApplicationToken (self, req)`

Implements the getUsernameAssociatedWithApplicationToken service main function.

Parameters

<i>req</i>	[rapp_platform_ros_communications::getUsernameAssociatedWithApplicationTokenSrvRequest::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::getUsernameAssociatedWithApplicationTokenSrvResponse::Response&] The ROS service response

Exceptions

<i>Exception</i>	IndexError
<i>Exception</i>	IOError
<i>Exception</i>	mdbError

Definition at line 365 of file mysql_wrapper.py.

6.38.3.25 def mysql_wrapper.MySQLdbWrapper.getUsernameAssociatedWithApplicationTokenDataHandler (self, req)

The getUsernameAssociatedWithApplicationTokenSrv service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::getUsernameAssociatedWithApplicationTokenSrvResponse::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::getUsernameAssociatedWithApplicationTokenSrvRequest::Response&] The ROS service response

Definition at line 884 of file mysql_wrapper.py.

6.38.3.26 def mysql_wrapper.MySQLdbWrapper.getUserOntologyAlias (self, req)

Implements the getUserOntologyAlias service main function.

Parameters

<i>req</i>	[rapp_platform_ros_communications::getUserOntologyAliasSrvRequest::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::getUserOntologyAliasSrvResponse::Response&] The ROS service response

Exceptions

<i>Exception</i>	IndexError
<i>Exception</i>	IOError
<i>Exception</i>	mdbError

Definition at line 179 of file mysql_wrapper.py.

6.38.3.27 def mysql_wrapper.MySQLdbWrapper.getUserOntologyAliasDataHandler (self, req)

The getUserOntologyAlias service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::getUserOntologyAliasSrvResponse::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::getUserOntologyAliasSrvRequest::Response&] The ROS service response

Definition at line 836 of file mysql_wrapper.py.

6.38.3.28 `def mysql_wrapper.MySQLdbWrapper.getUserPassword (self, req)`

Implements the `getUserPassword` service main function.

Parameters

<i>req</i>	[rapp_platform_ros_communications::getUserPasswordSrvRequest::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::getUserPasswordSrvResponse::Response&] The ROS service response

Exceptions

<i>Exception</i>	IndexError
<i>Exception</i>	IOError
<i>Exception</i>	mdbError

Definition at line 328 of file `mysql_wrapper.py`.

6.38.3.29 `def mysql_wrapper.MySQLdbWrapper.getUserPasswordDataHandler (self, req)`

The `getUserPasswordSrv` service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::getUserPasswordSrvResponse::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::getUserPasswordSrvRequest::Response&] The ROS service response

Definition at line 876 of file `mysql_wrapper.py`.

6.38.3.30 `def mysql_wrapper.MySQLdbWrapper.registerNewTokenDataHandler (self, req)`

The `registerNewTokenSrv` service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::registerNewTokenSrvResponse::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::registerNewTokenSrvRequest::Response&] The ROS service response

Definition at line 860 of file `mysql_wrapper.py`.

6.38.3.31 `def mysql_wrapper.MySQLdbWrapper.registerUserOntologyAlias (self, req)`

Implements the `registerUserOntologyAlias` service main function.

Parameters

<i>req</i>	[rapp_platform_ros_communications::registerUserOntologyAliasSrvRequest::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::registerUserOntologyAliasSrvResponse::Response&] The ROS service response

Exceptions

<i>Exception</i>	IndexError
<i>Exception</i>	IOError
<i>Exception</i>	mdbError

Definition at line 216 of file mysql_wrapper.py.

6.38.3.32 `def mysql_wrapper.MySQLdbWrapper.registerUserOntologyAliasDataHandler (self, req)`

The registerUserOntologyAliasSrv service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::registerUserOntologyAliasSrvResponse::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::registerUserOntologyAliasSrvRequest::Response&] The ROS service response

Definition at line 844 of file mysql_wrapper.py.

6.38.3.33 `def mysql_wrapper.MySQLdbWrapper.removePlatformUser (self, req)`

Implements the removePlatformUser service main function.

Parameters

<i>req</i>	[rapp_platform_ros_communications::removePlatformUserSrvRequest::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::removePlatformUserSrvResponse::Response&] The ROS service response

Exceptions

<i>Exception</i>	IndexError
<i>Exception</i>	IOError
<i>Exception</i>	mdbError

Definition at line 437 of file mysql_wrapper.py.

6.38.3.34 `def mysql_wrapper.MySQLdbWrapper.removePlatformUserDataHandler (self, req)`

The removePlatformUserSrv service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::removePlatformUserSrvRequest::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::removePlatformUserSrvResponse::Response&] The ROS service response

Definition at line 948 of file mysql_wrapper.py.

6.38.3.35 `def mysql_wrapper.MySQLdbWrapper.validateExistingPlatformDeviceToken (self, req)`

Implements the validateExistingPlatformDeviceToken service main function.

Parameters

<i>req</i>	[rapp_platform_ros_communications::validateExistingPlatformDeviceTokenSrvRequest::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::validateExistingPlatformDeviceTokenSrvResponse::Response&]
The ROS service response

Exceptions

<i>Exception</i>	IndexError
<i>Exception</i>	IOError
<i>Exception</i>	mdbError

Definition at line 650 of file mysql_wrapper.py.

6.38.3.36 `def mysql_wrapper.MySQLdbWrapper.validateExistingPlatformDeviceTokenDataHandler (self, req)`

The validateExistingPlatformDeviceTokenSrv service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::validateExistingPlatformDeviceTokenSrvRequest::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::validateExistingPlatformDeviceTokenSrvResponse::Response&]
The ROS service response

Definition at line 940 of file mysql_wrapper.py.

6.38.3.37 `def mysql_wrapper.MySQLdbWrapper.validateUserRole (self, req)`

Implements the validateUserRole service main function.

Parameters

<i>req</i>	[rapp_platform_ros_communications::validateUserRoleSrvRequest::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::validateUserRoleSrvResponse::Response&] The ROS service response

Exceptions

<i>Exception</i>	IndexError
<i>Exception</i>	IOError
<i>Exception</i>	mdbError

Definition at line 543 of file mysql_wrapper.py.

6.38.3.38 `def mysql_wrapper.MySQLdbWrapper.validateUserDataHandler (self, req)`

The validateUserRoleSrv service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::validateUserRoleSrvRequest::Request&] The ROS service request
------------	--

Returns

res [rapp_platform_ros_communications::validateUserRoleSrvResponse::Response&] The ROS service response

Definition at line 932 of file mysql_wrapper.py.

6.38.4 Member Data Documentation

6.38.4.1 `mysql_wrapper.MySQLdbWrapper.serv`

Definition at line 89 of file mysql_wrapper.py.

6.38.4.2 `mysql_wrapper.MySQLdbWrapper.serv_topic`

Definition at line 86 of file mysql_wrapper.py.

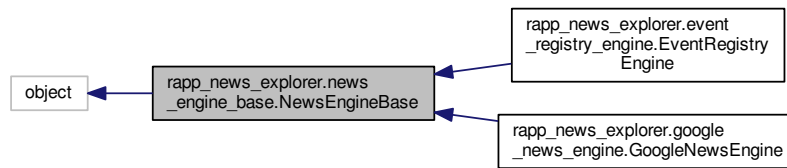
The documentation for this class was generated from the following file:

- /home/travis/rapp_temp/rapp-platform/rapp_mysql_wrapper/src/mysql_wrapper.py

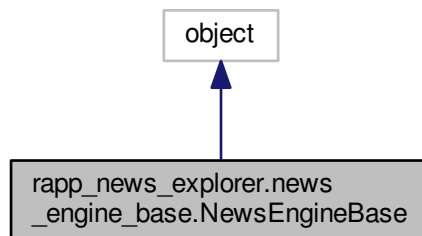
6.39 rapp_news_explorer.news_engine_base.NewsEngineBase Class Reference

Base class for news engines.

Inheritance diagram for `rapp_news_explorer.news_engine_base.NewsEngineBase`:



Collaboration diagram for `rapp_news_explorer.news_engine_base.NewsEngineBase`:



Public Member Functions

- `def __init__`
Constructor.
- `def fetch_news`
Abstract method to fetch news from news engine.

Public Attributes

- `rapp_http_json_parser`
Strips html tags from strings.

Private Attributes

- `_accepted_status`
The value of valid response status code.
- `_http_request`
Perform http requests to servers.
- `_url`
The base news engine url.

Static Private Attributes

- `__metaclass__` = abc.ABCMeta

6.39.1 Detailed Description

Base class for news engines.

Definition at line 32 of file news_engine_base.py.

6.39.2 Constructor & Destructor Documentation

6.39.2.1 `def rapp_news_explorer.news_engine_base.NewsEngineBase.__init__(self)`

Constructor.

Definition at line 37 of file news_engine_base.py.

6.39.3 Member Function Documentation

6.39.3.1 `def rapp_news_explorer.news_engine_base.NewsEngineBase.fetch_news(self, req)`

Abstract method to fetch news from news engine.

Definition at line 52 of file news_engine_base.py.

6.39.4 Member Data Documentation

6.39.4.1 `rapp_news_explorer.news_engine_base.NewsEngineBase.__metaclass__ = abc.ABCMeta` [static], [private]

Definition at line 34 of file news_engine_base.py.

6.39.4.2 `rapp_news_explorer.news_engine_base.NewsEngineBase._accepted_status` [private]

The value of valid response status code.

Definition at line 42 of file news_engine_base.py.

6.39.4.3 `rapp_news_explorer.news_engine_base.NewsEngineBase._http_request` [private]

Perform http requests to servers.

Definition at line 45 of file news_engine_base.py.

6.39.4.4 `rapp_news_explorer.news_engine_base.NewsEngineBase._url` [private]

The base news engine url.

Definition at line 39 of file news_engine_base.py.

6.39.4.5 rapp_news_explorer.news_engine_base.NewsEngineBase.rapp_http_json_parser

Strips html tags from strings.

Definition at line 48 of file news_engine_base.py.

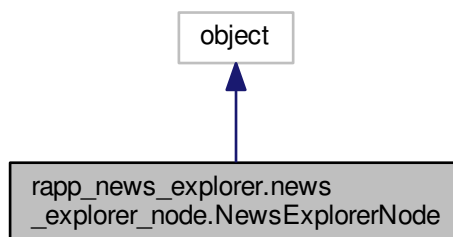
The documentation for this class was generated from the following file:

- /home/travis/rapp_temp/rapp-platform/rapp_news_explorer/src/rapp_news_explorer/[news_engine_base.py](#)

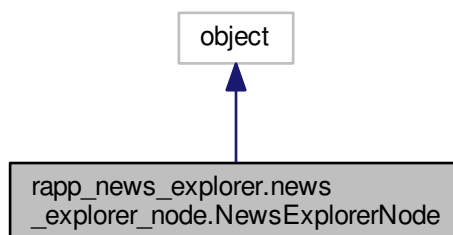
6.40 rapp_news_explorer.news_explorer_node.NewsExplorerNode Class Reference

Fetches news from various News sites' APIs.

Inheritance diagram for rapp_news_explorer.news_explorer_node.NewsExplorerNode:



Collaboration diagram for rapp_news_explorer.news_explorer_node.NewsExplorerNode:



Public Member Functions

- def [__init__](#)
Constructor.
- def [fetch_news_srv_callback](#)
The callback to fetch news.

Private Member Functions

- [def _create_service_response](#)

The callback to fetch news.

Private Attributes

- [_engine_factory](#)

Factory that returns proper news engine.

6.40.1 Detailed Description

Fetches news from various News sites' APIs.

Definition at line 38 of file news_explorer_node.py.

6.40.2 Constructor & Destructor Documentation

6.40.2.1 `def rapp_news_explorer.news_explorer_node.NewsExplorerNode.__init__(self)`

Constructor.

Definition at line 41 of file news_explorer_node.py.

6.40.3 Member Function Documentation

6.40.3.1 `def rapp_news_explorer.news_explorer_node.NewsExplorerNode._create_service_response(self, results)`
[private]

The callback to fetch news.

Parameters

<i>results</i>	[list<dict>] The server results containing the stories
----------------	--

Returns

res [rapp_platform_ros_communications::NewsExplorer::NewsExplorerSrvResponse] The service response

Definition at line 88 of file news_explorer_node.py.

6.40.3.2 `def rapp_news_explorer.news_explorer_node.NewsExplorerNode.fetch_news_srv_callback(self, req)`

The callback to fetch news.

Parameters

<i>req</i>	[rapp_platform_ros_communications::NewsExplorer::NewsExplorerSrv] The service request
------------	---

Returns

res [rapp_platform_ros_communications::NewsExplorer::NewsExplorerSrvResponse] The service response

Definition at line 65 of file news_explorer_node.py.

6.40.4 Member Data Documentation

6.40.4.1 rapp_news_explorer.news_explorer_node.NewsExplorerNode._engine_factory [private]

Factory that returns proper news engine.

Definition at line 43 of file news_explorer_node.py.

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

- /home/travis/rapp_temp/rapp-platform/rapp_news_explorer/src/rapp_news_explorer/news_explorer_node.py

6.41 ontology_class_bridge.OntologyClassBridge Class Reference

Contains the necessary functions for translating caffe classes to ontology classes.

Public Member Functions

- def [getOntologyClassEquivalent](#)
Implements the getOntologyClassEquivalent service main function.
- def [loadMappingIntoDictionary](#)
Loads the caffeToOntologyClasses file into a dictionary.

6.41.1 Detailed Description

Contains the necessary functions for translating caffe classes to ontology classes.

Definition at line 31 of file ontology_class_bridge.py.

6.41.2 Member Function Documentation

6.41.2.1 def ontology_class_bridge.OntologyClassBridge.getOntologyClassEquivalent (self, req)

Implements the getOntologyClassEquivalent service main function.

Parameters

<i>req</i>	[rapp_platform_ros_communications::ontologyClassBridgeSrvRequest::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::ontologyClassBridgeSrvResponse::Response&] The ROS service response

Exceptions

<i>Exception</i>	KeyError
------------------	----------

Definition at line 38 of file ontology_class_bridge.py.

6.41.2.2 def ontology_class_bridge.OntologyClassBridge.loadMappingIntoDictionary (self, mapFilePath)

Loads the caffeToOntologyClasses file into a dictionary.

Parameters

<i>mapFilePath</i>	[string] The path to the file containing the caffe to ontology classes equivalencies
--------------------	--

Returns

caffeToOntologyClassesDict [dictionary] The dictionary containing the caffe to ontology classes

Definition at line 61 of file ontology_class_bridge.py.

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

- /home/travis/rapp_temp/rapp-platform/rapp_caffe_wrapper/src/ontology_class_bridge.py

6.42 PathPlanner Class Reference

Class that implements a path planning algorithm based on global_planner and [map_server](#) ROS nodes.

```
#include <path_planner.h>
```

Public Member Functions

- [PathPlanner](#) (void)
Default constructor.
- bool [configureSequence](#) (std::string seq_nr, std::string map_path, std::string robot_type, std::string algorithm, ros::NodeHandle &nh_)
Configures sequence. Sets map, appropriate costmap parameters for specified robot type, sets global_planner to use determined algorithm.
- std::string [setSequenceNR](#) (ros::NodeHandle &nh_, int pathPlanningThreads_)
Determines next planning sequence (which global_planner and [map_server](#) should be used)
- navfn::MakeNavPlanResponse [startSequence](#) (std::string seq_nr, geometry_msgs::PoseStamped request_start, geometry_msgs::PoseStamped request_goal, ros::NodeHandle &nh_)
Starts planning service of determined planning sequence.

6.42.1 Detailed Description

Class that implements a path planning algorithm based on global_planner and [map_server](#) ROS nodes.

Definition at line 12 of file path_planner.h.

6.42.2 Constructor & Destructor Documentation

6.42.2.1 PathPlanner::PathPlanner (void)

Default constructor.

Definition at line 4 of file path_planner.cpp.

6.42.3 Member Function Documentation

6.42.3.1 bool PathPlanner::configureSequence (std::string seq_nr, std::string map_path, std::string robot_type, std::string algorithm, ros::NodeHandle & nh_)

Configures sequence. Sets map, appropriate costmap parameters for specified robot type, sets global_planner to use determined algorithm.

Parameters

<i>seq_nr</i>	[std::string] ID of current sequence,
<i>map_path</i>	[std::string] Path to the map that should be passed to global_planner,
<i>robot_type</i>	[std::string] Name of robot_type. It is used to configure costmap,
<i>algorithm</i>	[std::string] Name of algorithm that should be used by global_planner,
<i>&nh_</i>	[ros::NodeHandle] node handler for getParam() method,

Returns

[bool] Returns if sequence was configured correctly. Returns false if [PathPlanner](#) could not configure sequence in 5 sec.

Definition at line 26 of file path_planner.cpp.

6.42.3.2 std::string PathPlanner::setSequenceNR (ros::NodeHandle & nh_, int pathPlanningThreads_)

Determines next planning sequence (which global_planner and [map_server](#) should be used)

Parameters

<i>&nh_</i>	[ros::NodeHandle] node handler for getParam() method,
<i>pathPlanning-Threads_</i>	[int] Number of planning sequences,

Returns

[std::string] Next sequence nr.

Definition at line 9 of file path_planner.cpp.

6.42.3.3 navfn::MakeNavPlanResponse PathPlanner::startSequence (std::string seq_nr, geometry_msgs::PoseStamped request_start, geometry_msgs::PoseStamped request_goal, ros::NodeHandle & nh_)

Starts planning service of determined planning sequence.

Parameters

<i>start</i>	[geometry_msgs::PoseStamped] Robot start pose,
<i>finish</i>	[geometry_msgs::PoseStamped] Robot goal pose.

Returns

[navfn::MakeNavPlanResponse]: -> plan_found: 0 : path cannot be planned. 1 : path found 2 : wrong map name 3 : wrong robot type 4 : wrong algorithm -> error_message : error explanation -> path : if plan_found is true, this is an array of waypoints from start to goal, where the first one equals start and the last one equals goal vector of PoseStamped objects

Definition at line 137 of file path_planner.cpp.

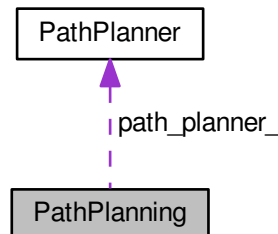
The documentation for this class was generated from the following files:

- /home/travis/rapp_temp/rapp-platform/rapp_path_planning/rapp_path_planning/include/path_planning/[path_planner.h](#)
- /home/travis/rapp_temp/rapp-platform/rapp_path_planning/rapp_path_planning/src/[path_planner.cpp](#)

6.43 PathPlanning Class Reference

```
#include <path_planning.h>
```

Collaboration diagram for PathPlanning:



Public Member Functions

- [PathPlanning](#) (void)
Default constructor.
- [~PathPlanning](#) (void)
- bool [pathPlanningCallback](#) (rapp_platform_ros_communications::PathPlanningRosSrv::Request &req, rapp_platform_ros_communications::PathPlanningRosSrv::Response &res)
Determines next planning sequence (which global_planner and [map_server](#) should be used)
- bool [uploadMapCallback](#) (rapp_platform_ros_communications::MapServerUploadMapRosSrv::Request &req, rapp_platform_ros_communications::MapServerUploadMapRosSrv::Response &res)
Upload map to RAPP Platform.

Private Attributes

- std::vector< pid_t > [GP_pIDs](#)
- const char * [homedir](#)
- std::vector< pid_t > [MS_pIDs](#)
- std::vector
< geometry_msgs::PoseStamped > [new_path](#)
- ros::NodeHandle [nh_](#)
- [PathPlanner](#) [path_planner_](#)
- ros::ServiceServer [pathPlanningService_](#)
- int [pathPlanningThreads_](#)
- std::vector< ros::ServiceServer > [pathPlanningThreadServices_](#)
- std::string [pathPlanningTopic_](#)
- double [pose_dist_](#)
- pid_t [TP_pID](#)
- ros::ServiceServer [uploadMapService_](#)
- std::string [uploadMapTopic_](#)

6.43.1 Detailed Description

Definition at line 23 of file path_planning.h.

6.43.2 Constructor & Destructor Documentation

6.43.2.1 PathPlanning::PathPlanning (void)

Default constructor.

Definition at line 181 of file path_planning.cpp.

6.43.2.2 PathPlanning::~~PathPlanning (void)

Definition at line 31 of file path_planning.cpp.

6.43.3 Member Function Documentation

6.43.3.1 bool PathPlanning::pathPlanningCallback (rapp_platform_ros_communications::PathPlanningRosSrv::Request & req, rapp_platform_ros_communications::PathPlanningRosSrv::Response & res)

Determines next planning sequence (which global_planner and [map_server](#) should be used)

Parameters

<i>[navfn::MakeNavPlan-Request]</i>	&req: [std::string] req.user_name - Determine user name - owner of the environment map [std::string] req.map_name - Contains path to the desired map [std::string] req.robot_type - Contains type of the robot. It is required to determine it's parameters (footprint etc.) [std::string] req.algorithm - Contains path planning algorithm name [geometry_msgs/PoseStamped] req.start - Contains start pose of the robot [geometry_msgs/PoseStamped] req.goal - Contains goal pose of the robot
<i>[navfn::MakeNavPlan-Response]</i>	&res: [uint8] res.plan_found: 0 : path cannot be planned. 1 : path found 2 : wrong map name 3 : wrong robot type 4 : wrong algorithm [std::string] res.error_message : error explanation [geometry_msgs/PoseStamped[]] res.path : if plan_found is true, this is an array of waypoints from start to goal, where the first one equals start and the last one equals goal vector of PoseStamped objects

Definition at line 302 of file path_planning.cpp.

6.43.3.2 bool PathPlanning::uploadMapCallback (rapp_platform_ros_communications::MapServerUploadMapRosSrv::Request & req, rapp_platform_ros_communications::MapServerUploadMapRosSrv::Response & res)

Upload map to RAPP Platform.

Parameters

<i>&req</i>	[std::string] user_name, [std::string] map_name, [float32] resolution, [float32[]] origin, int16 negate, [float32] occupied_thresh, [float32] free_thresh, [uint32] file_size, [char[]] data,
<i>&res</i>	[byte] status ,

Returns

[bool] true-> success, false-> failure.

Definition at line 242 of file path_planning.cpp.

6.43.4 Member Data Documentation

6.43.4.1 std::vector<pid_t> PathPlanning::GP_pIDs [private]

Definition at line 74 of file path_planning.h.

6.43.4.2 `const char* PathPlanning::homedir` `[private]`

Definition at line 69 of file `path_planning.h`.

6.43.4.3 `std::vector<pid_t> PathPlanning::MS_pIDs` `[private]`

Definition at line 75 of file `path_planning.h`.

6.43.4.4 `std::vector<geometry_msgs::PoseStamped> PathPlanning::new_path` `[private]`

Definition at line 82 of file `path_planning.h`.

6.43.4.5 `ros::NodeHandle PathPlanning::nh_` `[private]`

Definition at line 67 of file `path_planning.h`.

6.43.4.6 `PathPlanner PathPlanning::path_planner_` `[private]`

Definition at line 83 of file `path_planning.h`.

6.43.4.7 `ros::ServiceServer PathPlanning::pathPlanningService_` `[private]`

Definition at line 71 of file `path_planning.h`.

6.43.4.8 `int PathPlanning::pathPlanningThreads_` `[private]`

Definition at line 80 of file `path_planning.h`.

6.43.4.9 `std::vector<ros::ServiceServer> PathPlanning::pathPlanningThreadServices_` `[private]`

Definition at line 73 of file `path_planning.h`.

6.43.4.10 `std::string PathPlanning::pathPlanningTopic_` `[private]`

Definition at line 78 of file `path_planning.h`.

6.43.4.11 `double PathPlanning::pose_dist_` `[private]`

Definition at line 81 of file `path_planning.h`.

6.43.4.12 `pid_t PathPlanning::TP_pid` `[private]`

Definition at line 76 of file `path_planning.h`.

6.43.4.13 `ros::ServiceServer PathPlanning::uploadMapService_` `[private]`

Definition at line 72 of file `path_planning.h`.

6.43.4.14 `std::string PathPlanning::uploadMapTopic_` [private]

Definition at line 79 of file `path_planning.h`.

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

- `/home/travis/rapp_temp/rapp-platform/rapp_path_planning/rapp_path_planning/include/path_planning/path_planning.h`
- `/home/travis/rapp_temp/rapp-platform/rapp_path_planning/rapp_path_planning/src/path_planning.cpp`

6.44 QrCode Class Reference

Structure holding the essential info for a QR code.

```
#include <qr_detector.h>
```

Public Attributes

- `cv::Point` `center`
- `std::string` `message`

6.44.1 Detailed Description

Structure holding the essential info for a QR code.

Definition at line 35 of file `qr_detector.h`.

6.44.2 Member Data Documentation

6.44.2.1 `cv::Point` `QrCode::center`

Definition at line 37 of file `qr_detector.h`.

6.44.2.2 `std::string` `QrCode::message`

Definition at line 38 of file `qr_detector.h`.

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

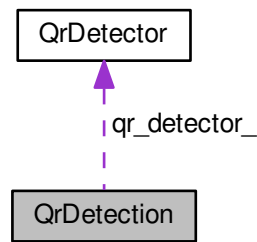
- `/home/travis/rapp_temp/rapp-platform/rapp_qr_detection/include/qr_detection/qr_detector.h`

6.45 QrDetection Class Reference

Uptakes the task of setting up the ROS service callbacks towards qr detection.

```
#include <qr_detection.h>
```

Collaboration diagram for QrDetection:



Public Member Functions

- [QrDetection](#) (void)
Default constructor.
- bool [qrDetectionCallback](#) (rapp_platform_ros_communications::QrDetectionRosSrv::Request &req, rapp_platform_ros_communications::QrDetectionRosSrv::Response &res)
The qr detection ROS service callback.

Private Attributes

- ros::NodeHandle [nh_](#)
- [QrDetector](#) [qr_detector_](#)
- ros::ServiceServer [qrDetectionService_](#)
- std::string [qrDetectionTopic_](#)

6.45.1 Detailed Description

Uptakes the task of setting up the ROS service callbacks towards qr detection.

Definition at line 31 of file qr_detection.h.

6.45.2 Constructor & Destructor Documentation

6.45.2.1 QrDetection::QrDetection (void)

Default constructor.

Definition at line 23 of file qr_detection.cpp.

6.45.3 Member Function Documentation

6.45.3.1 bool QrDetection::qrDetectionCallback (rapp_platform_ros_communications::QrDetectionRosSrv::Request & req, rapp_platform_ros_communications::QrDetectionRosSrv::Response & res)

The qr detection ROS service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::QrDetectionRosSrv::Request&] The service request
<i>res</i>	[rapp_platform_ros_communications::QrDetectionRosSrv::Response&] The service response

Returns

bool - The success status of the call

Definition at line 40 of file qr_detection.cpp.

6.45.4 Member Data Documentation**6.45.4.1** `ros::NodeHandle QrDetection::nh_` `[private]`

< The ROS node handle The service server

Definition at line 53 of file qr_detection.h.

6.45.4.2 `QrDetector QrDetection::qr_detector_` `[private]`

Definition at line 62 of file qr_detection.h.

6.45.4.3 `ros::ServiceServer QrDetection::qrDetectionService_` `[private]`

Topic nomeclarure. Holds the qr detection ROS service topic URI

Definition at line 56 of file qr_detection.h.

6.45.4.4 `std::string QrDetection::qrDetectionTopic_` `[private]`

Object of [QrDetection](#) type

Definition at line 59 of file qr_detection.h.

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

- /home/travis/rapp_temp/rapp-platform/rapp_qr_detection/include/qr_detection/[qr_detection.h](#)
- /home/travis/rapp_temp/rapp-platform/rapp_qr_detection/src/[qr_detection.cpp](#)

6.46 QrDetector Class Reference

Provides the QR detection functionality.

```
#include <qr_detector.h>
```

Public Member Functions

- [QrDetector](#) (void)
Default constructor.
- `std::vector< QrCode > detectQrs` (const cv::Mat &img)
Detects QRs in a cv::Mat.
- `std::vector< QrCode > findQrs` (std::string file_name)
Detects QRs in an image file.

Private Member Functions

- `cv::Mat loadImage (std::string file_name)`
Loads an image into a cv::Mat structure.

6.46.1 Detailed Description

Provides the QR detection functionality.

Definition at line 45 of file qr_detector.h.

6.46.2 Constructor & Destructor Documentation

6.46.2.1 QrDetector::QrDetector (void)

Default constructor.

Definition at line 23 of file qr_detector.cpp.

6.46.3 Member Function Documentation

6.46.3.1 std::vector< QrCode > QrDetector::detectQrs (const cv::Mat & input_frame)

Detects QRs in a cv::Mat.

Parameters

<i>img</i>	[const cv::Mat&] The input image in cv::Mat form
------------	--

Returns

std::vector<QrCode> The detected QR codes

< [QrCode](#) scanner

Definition at line 43 of file qr_detector.cpp.

6.46.3.2 std::vector< QrCode > QrDetector::findQrs (std::string file_name)

Detects QRs in an image file.

Parameters

<i>file_name</i>	[std::string] The input image URI
------------------	-----------------------------------

Returns

std::vector<QrCode> The detected QR codes

Definition at line 101 of file qr_detector.cpp.

6.46.3.3 cv::Mat QrDetector::loadImage (std::string file_name) [private]

Loads an image into a cv::Mat structure.

Parameters

<i>file_name</i>	[std::string] The file URI
------------------	----------------------------

Returns

cv::Mat

Definition at line 32 of file qr_detector.cpp.

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

- /home/travis/rapp_temp/rapp-platform/rapp_qr_detection/include/qr_detection/qr_detector.h
- /home/travis/rapp_temp/rapp-platform/rapp_qr_detection/src/qr_detector.cpp

6.47 caffe_wrapper.RappCaffeWrapper Class Reference

The [RappCaffeWrapper](#) ros node.

Public Member Functions

- def [__init__](#)
Default contructor.
- def [imageClassificationDataHandler](#)
The imageClassificationSrv service callback.
- def [ontologyClassBridgeDataHandler](#)
The ontologyClassBridgeSrv service callback.
- def [registerImageToOntologyDataHandler](#)
The registerImageToOntologySrv service callback.

Public Attributes

- [serv](#)
- [serv_topic](#)

6.47.1 Detailed Description

The [RappCaffeWrapper](#) ros node.

Definition at line 47 of file caffe_wrapper.py.

6.47.2 Constructor & Destructor Documentation

6.47.2.1 def caffe_wrapper.RappCaffeWrapper.__init__(self)

Default contructor.

Waits for services the node depends on and declares the callbacks of the node's services

Definition at line 52 of file caffe_wrapper.py.

6.47.3 Member Function Documentation

6.47.3.1 `def caffe_wrapper.RappCaffeWrapper.imageClassificationDataHandler (self, req)`

The `imageClassificationSrv` service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::imageClassificationSrvRequest::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::imageClassificationSrvResponse::Response&] The ROS service response

Definition at line 84 of file caffe_wrapper.py.

6.47.3.2 `def caffe_wrapper.RappCaffeWrapper.ontologyClassBridgeDataHandler (self, req)`

The ontologyClassBridgeSrv service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::ontologyClassBridgeSrvRequest::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::ontologyClassBridgeSrvResponse::Response&] The ROS service response

Definition at line 93 of file caffe_wrapper.py.

6.47.3.3 `def caffe_wrapper.RappCaffeWrapper.registerImageToOntologyDataHandler (self, req)`

The registerImageToOntologySrv service callback.

Parameters

<i>req</i>	[rapp_platform_ros_communications::registerImageToOntologySrvRequest::Request&] The ROS service request
------------	---

Returns

res [rapp_platform_ros_communications::registerImageToOntologySrvResponse::Response&] The ROS service response

Definition at line 102 of file caffe_wrapper.py.

6.47.4 Member Data Documentation

6.47.4.1 `caffe_wrapper.RappCaffeWrapper.serv`

Definition at line 69 of file caffe_wrapper.py.

6.47.4.2 `caffe_wrapper.RappCaffeWrapper.serv_topic`

Definition at line 55 of file caffe_wrapper.py.

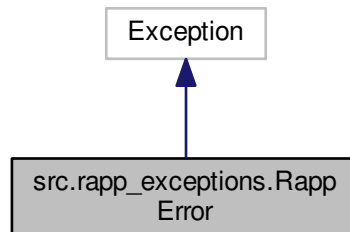
The documentation for this class was generated from the following file:

- [/home/travis/rapp_temp/rapp-platform/rapp_caffe_wrapper/src/caffe_wrapper.py](#)

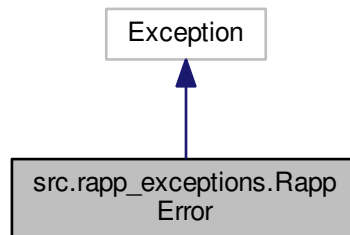
6.48 src.rapp_exceptions.RappError Class Reference

Provides a RAPP specific exception.

Inheritance diagram for src.rapp_exceptions.RappError:



Collaboration diagram for src.rapp_exceptions.RappError:



Public Member Functions

- [def __init__](#)
- [def __str__](#)

Public Attributes

- [value](#)

6.48.1 Detailed Description

Provides a RAPP specific exception.

Error handling in RAPP

Definition at line 19 of file rapp_exceptions.py.

6.48.2 Constructor & Destructor Documentation

6.48.2.1 `def src.rapp_exceptions.RappError.__init__(self, value)`

Definition at line 22 of file `rapp_exceptions.py`.

6.48.3 Member Function Documentation

6.48.3.1 `def src.rapp_exceptions.RappError.__str__(self)`

Definition at line 25 of file `rapp_exceptions.py`.

6.48.4 Member Data Documentation

6.48.4.1 `src.rapp_exceptions.RappError.value`

Definition at line 23 of file `rapp_exceptions.py`.

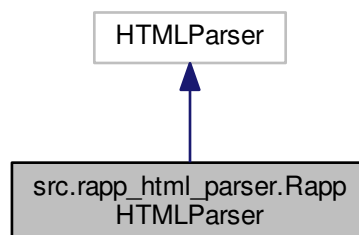
The documentation for this class was generated from the following file:

- `/home/travis/rapp_temp/rapp-platform/rapp_utilities/src/rapp_exceptions.py`

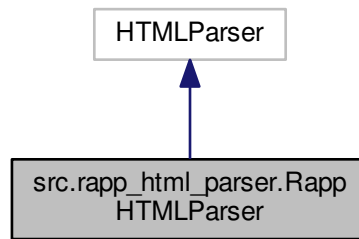
6.49 `src.rapp_html_parser.RappHTMLParser` Class Reference

Strips html from input string.

Inheritance diagram for `src.rapp_html_parser.RappHTMLParser`:



Collaboration diagram for src.rapp_html_parser.RappHTMLParser:



Public Member Functions

- `def __init__`
Constructor.
- `def get_data`
Returns the processed string.
- `def handle_data`
Handles the provided string.

Public Attributes

- `fed`

6.49.1 Detailed Description

Strips html from input string.

Definition at line 27 of file `rapp_html_parser.py`.

6.49.2 Constructor & Destructor Documentation

6.49.2.1 `def src.rapp_html_parser.RappHTMLParser.__init__(self)`

Constructor.

Definition at line 30 of file `rapp_html_parser.py`.

6.49.3 Member Function Documentation

6.49.3.1 `def src.rapp_html_parser.RappHTMLParser.get_data(self)`

Returns the processed string.

Returns

`final_str [string]` The string without the html tags

Definition at line 44 of file `rapp_html_parser.py`.

6.49.3.2 `def src.rapp_html_parser.RappHTMLParser.handle_data (self, input_str)`

Handles the provided string.

Parameters

<i>input_str</i>	[string] The string containing html tags
------------------	--

Definition at line 38 of file `rapp_html_parser.py`.

6.49.4 Member Data Documentation

6.49.4.1 `src.rapp_html_parser.RappHTMLParser.fed`

Definition at line 33 of file `rapp_html_parser.py`.

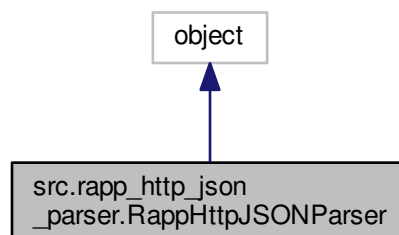
The documentation for this class was generated from the following file:

- `/home/travis/rapp_temp/rapp-platform/rapp_utilities/src/rapp_html_parser.py`

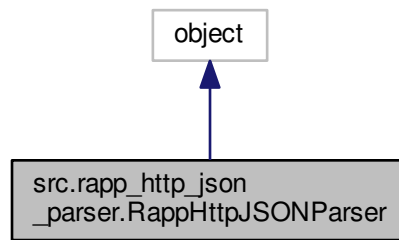
6.50 `src.rapp_http_json_parser.RappHttpJSONParser` Class Reference

Retrieves key:value pairs from JSON responses.

Inheritance diagram for `src.rapp_http_json_parser.RappHttpJSONParser`:



Collaboration diagram for src.rapp_http_json_parser.RappHttpJSONParser:



Public Member Functions

- `def __init__`
Constructor.
- `def find_values`
Creates key:value pairs from JSON responses.

Private Attributes

- `_html_parser`

6.50.1 Detailed Description

Retrieves key:value pairs from JSON responses.

Definition at line 26 of file `rapp_http_json_parser.py`.

6.50.2 Constructor & Destructor Documentation

6.50.2.1 `def src.rapp_http_json_parser.RappHttpJSONParser.__init__(self)`

Constructor.

Definition at line 29 of file `rapp_http_json_parser.py`.

6.50.3 Member Function Documentation

6.50.3.1 `def src.rapp_http_json_parser.RappHttpJSONParser.find_values (self, key_dict, json_data)`

Creates key:value pairs from JSON responses.

Accepts a `json_key:final_key` dictionary and returns a dictionary with values `final_key[i]:value[i]` where `json_key[i]:final_key[i]` and `json_key[i]:value[i]`

Parameters

<i>key_dict</i>	[dictionary] The keys dictionary
<i>json_data</i>	[dictionary] The JSON data dictionary

Returns

result [dictionary] The final dictionary

Definition at line 42 of file `rapp_http_json_parser.py`.

6.50.4 Member Data Documentation

6.50.4.1 `src.rapp_http_json_parser.RappHttpJSONParser._html_parser` [private]

Definition at line 30 of file `rapp_http_json_parser.py`.

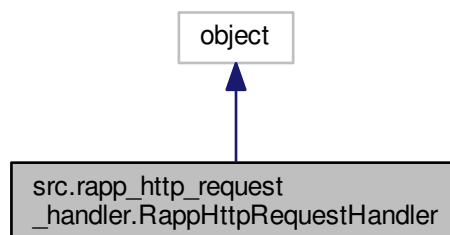
The documentation for this class was generated from the following file:

- [/home/travis/rapp_temp/rapp-platform/rapp_utilities/src/rapp_http_json_parser.py](#)

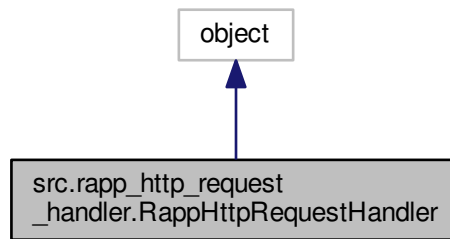
6.51 `src.rapp_http_request_handler.RappHttpRequestHandler` Class Reference

Performs http requests.

Inheritance diagram for `src.rapp_http_request_handler.RappHttpRequestHandler`:



Collaboration diagram for src.rapp_http_request_handler.RappHttpRequestHandler:



Public Member Functions

- `def __init__`
- `def perform_request`
Execute the request and verify response.

Private Member Functions

- `def _modify_response`
Return the proper response format.

Private Attributes

- `_accepted_status`
The value of valid response status code.
- `_headers`
The request additional headers.
- `_params`
The request parameters.
- `_response_format`
The required response format.
- `_server_timeout`
Seconds to wait for any server response.
- `_url`
The server url.

6.51.1 Detailed Description

Performs http requests.

Definition at line 30 of file `rapp_http_request_handler.py`.

6.51.2 Constructor & Destructor Documentation

6.51.2.1 `def src.rapp_http_request_handler.RappHttpRequestHandler.__init__(self)`

Definition at line 32 of file `rapp_http_request_handler.py`.

6.51.3 Member Function Documentation

6.51.3.1 `def src.rapp_http_request_handler.RappHttpRequestHandler._modify_response(self, response, form=None)`
[private]

Return the proper response format.

Parameters

<i>response</i>	[request module response] The servers response
<i>form</i>	[string] The required response format

RappError Format transformation error

Definition at line 97 of file `rapp_http_request_handler.py`.

6.51.3.2 `def src.rapp_http_request_handler.RappHttpRequestHandler.perform_request(self, url_add=None, params_dict=None, headers_dict=None)`

Execute the request and verify response.

Parameters

<i>url_add</i>	[string] The server url
<i>params_dict</i>	[dict] The request's parameters
<i>headers_dict</i>	[dict] The request's additional headers dictionary

Returns

response [request module response] The servers response

RappError Request error

Definition at line 60 of file `rapp_http_request_handler.py`.

6.51.4 Member Data Documentation

6.51.4.1 `src.rapp_http_request_handler.RappHttpRequestHandler._accepted_status` [private]

The value of valid response status code.

Definition at line 46 of file `rapp_http_request_handler.py`.

6.51.4.2 `src.rapp_http_request_handler.RappHttpRequestHandler._headers` [private]

The request additional headers.

Definition at line 38 of file `rapp_http_request_handler.py`.

6.51.4.3 `src.rapp_http_request_handler.RappHttpRequestHandler._params` [private]

The request parameters.

Definition at line 36 of file `rapp_http_request_handler.py`.

6.51.4.4 `src.rapp_http_request_handler.RappHttpRequestHandler._response_format` [private]

The required response format.

Definition at line 41 of file `rapp_http_request_handler.py`.

6.51.4.5 `src.rapp_http_request_handler.RappHttpRequestHandler._server_timeout` [private]

Seconds to wait for any server response.

Definition at line 44 of file `rapp_http_request_handler.py`.

6.51.4.6 `src.rapp_http_request_handler.RappHttpRequestHandler._url` [private]

The server url.

Definition at line 34 of file `rapp_http_request_handler.py`.

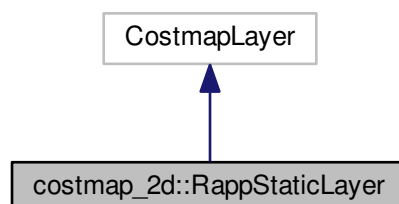
The documentation for this class was generated from the following file:

- [/home/travis/rapp_temp/rapp-platform/rapp_utilities/src/rapp_http_request_handler.py](#)

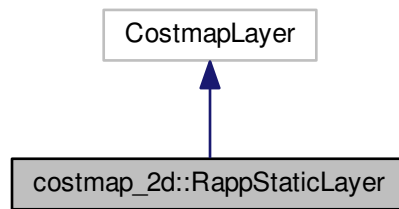
6.52 costmap_2d::RappStaticLayer Class Reference

```
#include <rapp_static_layer.h>
```

Inheritance diagram for `costmap_2d::RappStaticLayer`:



Collaboration diagram for `costmap_2d::RappStaticLayer`:



Public Member Functions

- [RappStaticLayer](#) ()
- virtual [~RappStaticLayer](#) ()
- virtual void [activate](#) ()
- virtual void [deactivate](#) ()
- virtual void [matchSize](#) ()
- virtual void [onInitialize](#) ()
- virtual void [reset](#) ()
- virtual void [updateBounds](#) (double robot_x, double robot_y, double robot_yaw, double *min_x, double *min_y, double *max_x, double *max_y)
- virtual void [updateCosts](#) (costmap_2d::Costmap2D &master_grid, int min_i, int min_j, int max_i, int max_j)

Private Member Functions

- void [incomingMap](#) (const nav_msgs::OccupancyGridConstPtr &new_map)
Callback to update the costmap's map from the [map_server](#).
- void [incomingUpdate](#) (const map_msgs::OccupancyGridUpdateConstPtr &update)
- bool [incomingUpdateService](#) (rapp_platform_ros_communications::Costmap2dRosSrvRequest &req, rapp_platform_ros_communications::Costmap2dRosSrvResponse &res)
- unsigned char [interpretValue](#) (unsigned char value)
- void [reconfigureCB](#) (costmap_2d::GenericPluginConfig &config, uint32_t level)

Private Attributes

- ros::ServiceServer [costmap_update_service](#)
- dynamic_reconfigure::Server
 < costmap_2d::GenericPluginConfig > * [dsrv_](#)
- std::string [global_frame_](#)
The global frame for the costmap.
- bool [has_updated_data_](#)
- unsigned int [height_](#)
- unsigned char [lethal_threshold_](#)
- boost::recursive_mutex [lock_](#)
- bool [map_received_](#)
- ros::Subscriber [map_sub_](#)
- ros::Subscriber [map_update_sub_](#)

- bool [subscribe_to_updates_](#)
- bool [track_unknown_space_](#)
- bool [trinary_costmap_](#)
- unsigned char [unknown_cost_value_](#)
- bool [use_maximum_](#)
- unsigned int [width_](#)
- unsigned int [x_](#)
- unsigned int [y_](#)

6.52.1 Detailed Description

Definition at line 57 of file `rapp_static_layer.h`.

6.52.2 Constructor & Destructor Documentation

6.52.2.1 `costmap_2d::RappStaticLayer::RappStaticLayer ()`

Definition at line 50 of file `rapp_static_layer.cpp`.

6.52.2.2 `costmap_2d::RappStaticLayer::~~RappStaticLayer ()` `[virtual]`

Definition at line 52 of file `rapp_static_layer.cpp`.

6.52.3 Member Function Documentation

6.52.3.1 `void costmap_2d::RappStaticLayer::activate ()` `[virtual]`

Definition at line 257 of file `rapp_static_layer.cpp`.

6.52.3.2 `void costmap_2d::RappStaticLayer::deactivate ()` `[virtual]`

Definition at line 262 of file `rapp_static_layer.cpp`.

6.52.3.3 `void costmap_2d::RappStaticLayer::incomingMap (const nav_msgs::OccupancyGridConstPtr & new_map)` `[private]`

Callback to update the costmap's map from the [map_server](#).

Parameters

<i>new_map</i>	The map to put into the costmap. The origin of the new map along with its size will determine what parts of the costmap's static map are overwritten.
----------------	---

Definition at line 194 of file `rapp_static_layer.cpp`.

6.52.3.4 `void costmap_2d::RappStaticLayer::incomingUpdate (const map_msgs::OccupancyGridUpdateConstPtr & update)` `[private]`

Definition at line 238 of file `rapp_static_layer.cpp`.

6.52.3.5 `bool costmap_2d::RappStaticLayer::incomingUpdateService (rapp_platform_ros_communications::Costmap2dRosSrvRequest & req, rapp_platform_ros_communications::Costmap2dRosSrvResponse & res)` [private]

Definition at line 148 of file `rapp_static_layer.cpp`.

6.52.3.6 `unsigned char costmap_2d::RappStaticLayer::interpretValue (unsigned char value)` [private]

Definition at line 180 of file `rapp_static_layer.cpp`.

6.52.3.7 `void costmap_2d::RappStaticLayer::matchSize ()` [virtual]

Definition at line 173 of file `rapp_static_layer.cpp`.

6.52.3.8 `void costmap_2d::RappStaticLayer::onInitialize ()` [virtual]

Definition at line 58 of file `rapp_static_layer.cpp`.

6.52.3.9 `void costmap_2d::RappStaticLayer::reconfigureCB (costmap_2d::GenericPluginConfig & config, uint32_t level)` [private]

Definition at line 161 of file `rapp_static_layer.cpp`.

6.52.3.10 `void costmap_2d::RappStaticLayer::reset ()` [virtual]

Definition at line 269 of file `rapp_static_layer.cpp`.

6.52.3.11 `void costmap_2d::RappStaticLayer::updateBounds (double robot_x, double robot_y, double robot_yaw, double * min_x, double * min_y, double * max_x, double * max_y)` [virtual]

Definition at line 275 of file `rapp_static_layer.cpp`.

6.52.3.12 `void costmap_2d::RappStaticLayer::updateCosts (costmap_2d::Costmap2D & master_grid, int min_i, int min_j, int max_i, int max_j)` [virtual]

Definition at line 296 of file `rapp_static_layer.cpp`.

6.52.4 Member Data Documentation

6.52.4.1 `ros::ServiceServer costmap_2d::RappStaticLayer::costmap_update_service` [private]

Definition at line 96 of file `rapp_static_layer.h`.

6.52.4.2 `dynamic_reconfigure::Server<costmap_2d::GenericPluginConfig>* costmap_2d::RappStaticLayer::dsrv_` [private]

Definition at line 100 of file `rapp_static_layer.h`.

6.52.4.3 `std::string costmap_2d::RappStaticLayer::global_frame_ [private]`

The global frame for the costmap.

Definition at line 87 of file rapp_static_layer.h.

6.52.4.4 `bool costmap_2d::RappStaticLayer::has_updated_data_ [private]`

Definition at line 90 of file rapp_static_layer.h.

6.52.4.5 `unsigned int costmap_2d::RappStaticLayer::height_ [private]`

Definition at line 91 of file rapp_static_layer.h.

6.52.4.6 `unsigned char costmap_2d::RappStaticLayer::lethal_threshold_ [private]`

Definition at line 97 of file rapp_static_layer.h.

6.52.4.7 `boost::recursive_mutex costmap_2d::RappStaticLayer::lock_ [mutable], [private]`

Definition at line 99 of file rapp_static_layer.h.

6.52.4.8 `bool costmap_2d::RappStaticLayer::map_received_ [private]`

Definition at line 89 of file rapp_static_layer.h.

6.52.4.9 `ros::Subscriber costmap_2d::RappStaticLayer::map_sub_ [private]`

Definition at line 95 of file rapp_static_layer.h.

6.52.4.10 `ros::Subscriber costmap_2d::RappStaticLayer::map_update_sub_ [private]`

Definition at line 95 of file rapp_static_layer.h.

6.52.4.11 `bool costmap_2d::RappStaticLayer::subscribe_to_updates_ [private]`

Definition at line 88 of file rapp_static_layer.h.

6.52.4.12 `bool costmap_2d::RappStaticLayer::track_unknown_space_ [private]`

Definition at line 92 of file rapp_static_layer.h.

6.52.4.13 `bool costmap_2d::RappStaticLayer::trinary_costmap_ [private]`

Definition at line 94 of file rapp_static_layer.h.

6.52.4.14 `unsigned char costmap_2d::RappStaticLayer::unknown_cost_value_ [private]`

Definition at line 97 of file rapp_static_layer.h.

6.52.4.15 `bool costmap_2d::RappStaticLayer::use_maximum_` [private]

Definition at line 93 of file `rapp_static_layer.h`.

6.52.4.16 `unsigned int costmap_2d::RappStaticLayer::width_` [private]

Definition at line 91 of file `rapp_static_layer.h`.

6.52.4.17 `unsigned int costmap_2d::RappStaticLayer::x_` [private]

Definition at line 91 of file `rapp_static_layer.h`.

6.52.4.18 `unsigned int costmap_2d::RappStaticLayer::y_` [private]

Definition at line 91 of file `rapp_static_layer.h`.

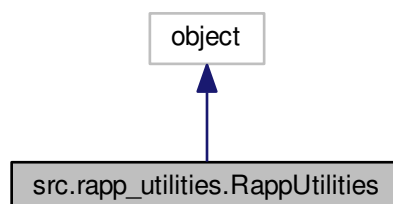
The documentation for this class was generated from the following files:

- `/home/travis/rapp_temp/rapp-platform/rapp_path_planning/rapp_costmap2d/include/rapp_costmap_2d/rapp-static_layer.h`
- `/home/travis/rapp_temp/rapp-platform/rapp_path_planning/rapp_costmap2d/plugins/rapp_static_layer.cpp`

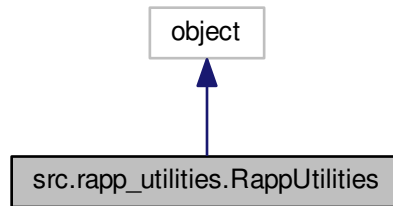
6.53 `src.rapp_utilities.RappUtilities` Class Reference

Provides various utility functionalities.

Inheritance diagram for `src.rapp_utilities.RappUtilities`:



Collaboration diagram for src.rapp_utilities.RappUtilities:



Public Member Functions

- def [__init__](#)

Static Public Member Functions

- def [rapp_print](#)
Prints ROS log messages with the specified verbosity.

6.53.1 Detailed Description

Provides various utility functionalities.

Definition at line 26 of file `rapp_utilities.py`.

6.53.2 Constructor & Destructor Documentation

6.53.2.1 `def src.rapp_utilities.RappUtilities.__init__(self)`

Definition at line 28 of file `rapp_utilities.py`.

6.53.3 Member Function Documentation

6.53.3.1 `def src.rapp_utilities.RappUtilities.rapp_print(var, verbosity = 'DEBUG') [static]`

Prints ROS log messages with the specified verbosity.

Definition at line 33 of file `rapp_utilities.py`.

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

- `/home/travis/rapp_temp/rapp-platform/rapp_utilities/src/rapp_utilities.py`

6.54 rapp_audio_processing.rapp_set_noise_profile.SetNoiseProfile Class Reference

Evaluates the noise profile for an audio file.

Public Member Functions

- `def __init__`
Performs initializations.
- `def setNoise_profile`
Evaluates the audio profile.

Public Attributes

- `utilities`

6.54.1 Detailed Description

Evaluates the noise profile for an audio file.

Definition at line 31 of file `rapp_set_noise_profile.py`.

6.54.2 Constructor & Destructor Documentation

6.54.2.1 `def rapp_audio_processing.rapp_set_noise_profile.SetNoiseProfile.__init__(self)`

Performs initializations.

Definition at line 34 of file `rapp_set_noise_profile.py`.

6.54.3 Member Function Documentation

6.54.3.1 `def rapp_audio_processing.rapp_set_noise_profile.SetNoiseProfile.setNoise_profile (self, user, noise_audio_file, audio_file_type)`

Evaluates the audio profile.

Handles service callback `rapp_audio_processing.AudioProcessing::setNoiseProfileCallback`

Parameters

<i>user</i>	[string] The system user, for environmental variable access
<i>noise_audio_file</i>	[string] Noise audio file path
<i>audio_type</i>	[string] Noise audio file's type

Definition at line 45 of file `rapp_set_noise_profile.py`.

6.54.4 Member Data Documentation

6.54.4.1 `rapp_audio_processing.rapp_set_noise_profile.SetNoiseProfile.utilities`

Definition at line 35 of file `rapp_set_noise_profile.py`.

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

- `/home/travis/rapp_temp/rapp-platform/rapp_audio_processing/src/rapp_audio_processing/rapp_set_noise_profile.py`

6.55 rapp_audio_processing.rapp_sox_denoise.SoxDenoise Class Reference

Performs denoising on an audio file employing Sox application.

Public Member Functions

- def [soxDenoise](#)
Performs denoising employing Sox application.

6.55.1 Detailed Description

Performs denoising on an audio file employing Sox application.

Definition at line 29 of file rapp_sox_denoise.py.

6.55.2 Member Function Documentation

6.55.2.1 `def rapp_audio_processing.rapp_sox_denoise.SoxDenoise.soxDenoise (self, user, audio_type, audio_file, denoised_audio_file, scale)`

Performs denoising employing Sox application.

Handles service callback [rapp_audio_processing.AudioProcessing::denoiseCallback](#)

Parameters

<i>user</i>	[string] The system user, for environmental variable access
<i>audio_file</i>	[string] Audio file path
<i>audio_type</i>	[string] Audio file's type
<i>denoised_audio_file</i>	[string] Path to write denoised audio file
<i>scale</i>	[float] Energy denoise scale

Definition at line 41 of file rapp_sox_denoise.py.

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

- /home/travis/rapp_temp/rapp-platform/rapp_audio_processing/src/rapp_audio_processing/[rapp_sox_denoise.py](#)

6.56 rapp_speech_detection_sphinx4.speech_recognition_sphinx4.SpeechRecognition-Sphinx4 Class Reference

Provides a complete Rapp Sphinx Entity.

Public Member Functions

- def [__init__](#)
Constructor performing initializations.
- def [getConfigurationHash](#)
Requests the configuration's sha1 hash.
- def [speechRecognitionBatch](#)
Performs [Sphinx4](#) configuration and speech recognition.

Private Member Functions

- [def _configureSpeechRecognition](#)
Performs [Sphinx4](#) configuration.
- [def _createPreconfiguration](#)
Create the requested preconfiguration.
- [def _createSupportConfiguration](#)
Get Sphinx configuration paths from Language Support.
- [def _selectLanguageSupport](#)
Choose the language support based on the request language.
- [def _speechRecognition](#)
Performs [Sphinx4](#) speech recognition.

Private Attributes

- [_configuration_params](#)
The Sphinx configuration parameters.
- [_english_support](#)
English creates necessary files for english speech recognition.
- [_globalParams](#)
Contains global Sphinx parameters.
- [_greek_support](#)
Greek_support creates necessary files for Greek speech recognition.
- [_sphinx4](#)
The sphinx wrapper communicates with the actual Sphinx.java process.
- [_word_mapping](#)
A dictionary to transform the englified greek words to actual greek words.

6.56.1 Detailed Description

Provides a complete Rapp Sphinx Entity.

Maintains a complete Rapp Sphinx Entity for the [speech_recognition_sphinx4_handler_node.SpeechRecognitionSphinx4HandlerNode](#) to perform the speech recognition.

Definition at line 61 of file `speech_recognition_sphinx4.py`.

6.56.2 Constructor & Destructor Documentation

6.56.2.1 `def rapp_speech_detection_sphinx4.speech_recognition_sphinx4.SpeechRecognitionSphinx4.__init__(self, configurationName=None)`

Constructor performing initializations.

Definition at line 64 of file `speech_recognition_sphinx4.py`.

6.56.3 Member Function Documentation

6.56.3.1 `def rapp_speech_detection_sphinx4.speech_recognition_sphinx4.SpeechRecognitionSphinx4._configureSpeechRecognition(self, req) [private]`

Performs [Sphinx4](#) configuration.

Parameters

<i>req</i>	[rapp_platform_ros_communications::SpeechDetectionSphinx4Wrapper::SpeechRecognitionSphinx4ConfigureSrvRequest] The sphinx configuration request
------------	---

Returns

res [rapp_platform_ros_communications::SpeechDetectionSphinx4Wrapper::SpeechRecognitionSphinx4ConfigureSrvRequest] The sphinx configuration response

Definition at line 189 of file speech_recognition_sphinx4.py.

6.56.3.2 `def rapp_speech_detection_sphinx4.speech_recognition_sphinx4.SpeechRecognitionSphinx4._createPreconfiguration (self, configurationName) [private]`

Create the requested preconfiguration.

Creates the configuration via the name requested from rapp_speech_detection_sphinx4::cfg::sphinx4_wrapper_params.yaml

Parameters

<i>configuration-Name</i>	[string] The preconfiguration name
---------------------------	------------------------------------

Definition at line 112 of file speech_recognition_sphinx4.py.

6.56.3.3 `def rapp_speech_detection_sphinx4.speech_recognition_sphinx4.SpeechRecognitionSphinx4._createSupportConfiguration (self, support, res) [private]`

Get Sphinx configuration paths from Language Support.

Parameters

<i>support</i>	[language_support::LanguageSupport] A child class of the LanguageSupport depending on the requested language
<i>req</i>	[rapp_platform_ros_communications::SpeechDetectionSphinx4Wrapper::SpeechRecognitionSphinx4ConfigureSrvRequest] The sphinx configuration request

Returns

conf [dictionary] The Sphinx configuration files' paths

Definition at line 229 of file speech_recognition_sphinx4.py.

6.56.3.4 `def rapp_speech_detection_sphinx4.speech_recognition_sphinx4.SpeechRecognitionSphinx4._selectLanguageSupport (self, req) [private]`

Choose the language support based on the request language.

Parameters

<i>req</i>	[rapp_platform_ros_communications::SpeechDetectionSphinx4Wrapper::SpeechRecognitionSphinx4ConfigureSrvRequest] The sphinx configuration request
------------	---

Returns

support [[language_support::LanguageSupport](#)] A child class of the LanguageSupport depending on the requested language

Definition at line 175 of file speech_recognition_sphinx4.py.

6.56.3.5 `def rapp_speech_detection_sphinx4.speech_recognition_sphinx4.SpeechRecognitionSphinx4._speechRecognition (self, req) [private]`

Performs [Sphinx4](#) speech recognition.

Parameters

<i>req</i>	[rapp_platform_ros_communications::SpeechDetectionSphinx4Wrapper::SpeechRecognitionSphinx4SrvRequest] The speech recognition request
------------	--

Returns

`res` [rapp_platform_ros_communications::SpeechDetectionSphinx4Wrapper::SpeechRecognitionSphinx4SrvResponse] The speech recognition response

Definition at line 152 of file `speech_recognition_sphinx4.py`.

6.56.3.6 `def rapp_speech_detection_sphinx4.speech_recognition_sphinx4.SpeechRecognitionSphinx4.getConfigurationHash (self)`

Requests the configuration's sha1 hash.

Hash is used to identify common request configurations for proper subprocess selection. (Requests with common requests do not require reconfiguration reducing computation time)

Returns

`hexdigest` [string] The hash digest containing only hexadecimal digits

Definition at line 103 of file `speech_recognition_sphinx4.py`.

6.56.3.7 `def rapp_speech_detection_sphinx4.speech_recognition_sphinx4.SpeechRecognitionSphinx4.speechRecognitionBatch (self, req)`

Performs [Sphinx4](#) configuration and speech recognition.

Parameters

<i>req</i>	[rapp_platform_ros_communications::SpeechDetectionSphinx4Wrapper::SpeechRecognitionSphinx4TotalSrvRequest] The speech recognition request
------------	---

Returns

`res` [rapp_platform_ros_communications::SpeechDetectionSphinx4Wrapper::SpeechRecognitionSphinx4TotalSrvResponse] The speech recognition response

Definition at line 128 of file `speech_recognition_sphinx4.py`.

6.56.4 Member Data Documentation

6.56.4.1 `rapp_speech_detection_sphinx4.speech_recognition_sphinx4.SpeechRecognitionSphinx4._configuration_params [private]`

The Sphinx configuration parameters.

(see [sphinx4_configuration_params.SphinxConfigurationParams](#))

Definition at line 86 of file `speech_recognition_sphinx4.py`.

6.57 rapp_speech_detection_sphinx4.speech_recognition_sphinx4_handler_node.SpeechRecognitionSphinx4HandlerNode Class

Reference

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6.56.4.2 rapp_speech_detection_sphinx4.speech_recognition_sphinx4.SpeechRecognitionSphinx4_english_support
[private]

English creates necessary files for english speech recognition.

(see [english_support.EnglishSupport](#))

Definition at line 82 of file speech_recognition_sphinx4.py.

6.56.4.3 rapp_speech_detection_sphinx4.speech_recognition_sphinx4.SpeechRecognitionSphinx4_globalParams
[private]

Contains global Sphinx parameters.

(see [global_parameters.GlobalParams](#))

Definition at line 69 of file speech_recognition_sphinx4.py.

6.56.4.4 rapp_speech_detection_sphinx4.speech_recognition_sphinx4.SpeechRecognitionSphinx4_greek_support
[private]

Greek_support creates necessary files for Greek speech recognition.

(see [greek_support.GreekSupport](#))

Definition at line 78 of file speech_recognition_sphinx4.py.

6.56.4.5 rapp_speech_detection_sphinx4.speech_recognition_sphinx4.SpeechRecognitionSphinx4_sphinx4 [private]

The sphinx wrapper communicates with the actual Sphinx.java process.

(see [sphinx4_wrapper.Sphinx4Wrapper](#))

Definition at line 74 of file speech_recognition_sphinx4.py.

6.56.4.6 rapp_speech_detection_sphinx4.speech_recognition_sphinx4.SpeechRecognitionSphinx4_word_mapping
[private]

A dictionary to transform the englified greek words to actual greek words.

Definition at line 89 of file speech_recognition_sphinx4.py.

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

- /home/travis/rapp_temp/rapp-platform/rapp_speech_detection_sphinx4/src/rapp_speech_detection_sphinx4/[speech_recognition_sphinx4.py](#)

6.57 rapp_speech_detection_sphinx4.speech_recognition_sphinx4_handler_node.-SpeechRecognitionSphinx4HandlerNode Class Reference

Maintains Sphinx instances to perform speech recognition.

Public Member Functions

- def [__init__](#)
Initializes the subprocesses and the services (constructor)
- def [handleSpeechRecognitionCallback](#)

The callback to perform speech recognition.

Private Member Functions

- [def _calculateRequestHash](#)
Calculates the service request sha1 hash for process handling purposes.
- [def _getPreconfigurationNames](#)
Specifies the requested preconfiguration names.

Private Attributes

- [_availableProcesses](#)
The subprocesses structure that contains information used for the subprocess handling.
- [_lock](#)
Thread conditional variable used for the subprocess scheduling.
- [_speech_recognition_batch_service](#)
Ros service server for sphinx speech recognition.
- [_threadCounter](#)
Total service callback threads waiting to execute.
- [_threads](#)
The number of child subprocesses.

6.57.1 Detailed Description

Maintains Sphinx instances to perform speech recognition.

Maintains a number of child processes to perform speech recognition utilizing [Sphinx4](#) ([rapp_speech_detection_sphinx4.speech_recognition_sphinx4.SpeechRecognitionSphinx4](#)). Provides ros services and handles the requests according to the child processes' status.

Definition at line 47 of file `speech_recognition_sphinx4_handler_node.py`.

6.57.2 Constructor & Destructor Documentation

6.57.2.1 `def rapp_speech_detection_sphinx4.speech_recognition_sphinx4_handler_node.SpeechRecognitionSphinx4HandlerNode.__init__(self)`

Initializes the subprocesses and the services (constructor)

Definition at line 50 of file `speech_recognition_sphinx4_handler_node.py`.

6.57.3 Member Function Documentation

6.57.3.1 `def rapp_speech_detection_sphinx4.speech_recognition_sphinx4_handler_node.SpeechRecognitionSphinx4HandlerNode._calculateRequestHash(self, req) [private]`

Calculates the service request sha1 hash for process handling purposes.

Hash is used to identify common request configurations for proper subprocess selection. (Requests with common requests do not require reconfiguration reducing computation time)

<i>req</i>	[rapp_platform_ros_communications::SpeechDetectionSphinx4Wrapper::SpeechRecognitionSphinx4TotalSrvRequest] The service request
------------	--

Returns

hexdigest [string] The hash digest containing only hexadecimal digits

Definition at line 198 of file speech_recognition_sphinx4_handler_node.py.

6.57.3.2 `def rapp_speech_detection_sphinx4.speech_recognition_sphinx4_handler_node.SpeechRecognitionSphinx4HandlerNode._getPreconfigurationNames (self) [private]`

Specifies the requested preconfiguration names.

Reads and creates a matrix with the configuration name requested from rapp_speech_detection_sphinx4::cfg::sphinx4_wrapper_params.yaml

Returns

preconf [list<string>] The preconfiguration names for all subprocesses

Definition at line 96 of file speech_recognition_sphinx4_handler_node.py.

6.57.3.3 `def rapp_speech_detection_sphinx4.speech_recognition_sphinx4_handler_node.SpeechRecognitionSphinx4HandlerNode.handleSpeechRecognitionCallback (self, req)`

The callback to perform speech recognition.

Parameters

<i>req</i>	[rapp_platform_ros_communications::SpeechDetectionSphinx4Wrapper::SpeechRecognitionSphinx4TotalSrvRequest] The service request
------------	--

Returns

res [rapp_platform_ros_communications::SpeechDetectionSphinx4Wrapper::SpeechRecognitionSphinx4TotalSrvResponse] The service response

Definition at line 138 of file speech_recognition_sphinx4_handler_node.py.

6.57.4 Member Data Documentation

6.57.4.1 `rapp_speech_detection_sphinx4.speech_recognition_sphinx4_handler_node.SpeechRecognitionSphinx4HandlerNode._availableProcesses [private]`

The subprocesses structure that contains information used for the subprocess handling.

Definition at line 60 of file speech_recognition_sphinx4_handler_node.py.

6.57.4.2 `rapp_speech_detection_sphinx4.speech_recognition_sphinx4_handler_node.SpeechRecognitionSphinx4HandlerNode._lock [private]`

Thread conditional variable used for the subprocess scheduling.

Definition at line 75 of file speech_recognition_sphinx4_handler_node.py.

6.57.4.3 `rapp_speech_detection_sphinx4.speech_recognition_sphinx4_handler_node.SpeechRecognitionSphinx4Handler-Node.speech_recognition_batch_service` [private]

Ros service server for sphinx speech recognition.

Definition at line 85 of file `speech_recognition_sphinx4_handler_node.py`.

6.57.4.4 `rapp_speech_detection_sphinx4.speech_recognition_sphinx4_handler_node.SpeechRecognitionSphinx4Handler-Node.threadCounter` [private]

Total service callback threads waiting to execute.

Definition at line 77 of file `speech_recognition_sphinx4_handler_node.py`.

6.57.4.5 `rapp_speech_detection_sphinx4.speech_recognition_sphinx4_handler_node.SpeechRecognitionSphinx4Handler-Node.threads` [private]

The number of child subprocesses.

Definition at line 53 of file `speech_recognition_sphinx4_handler_node.py`.

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

- `/home/travis/rapp_temp/rapp-platform/rapp_speech_detection_sphinx4/src/rapp_speech_detection_sphinx4/speech_recognition_sphinx4_handler_node.py`

6.58 `speech_recognition_google.SpeechToTextGoogle` Class Reference

Implements calls the Google ASR API.

Public Member Functions

- `def __init__`
Default constructor.
- `def speech_to_text`
Performs the call to Google API.
- `def speech_to_text_callback`
The service callback.

Public Attributes

- `serv`
- `serv_topic`

6.58.1 Detailed Description

Implements calls the Google ASR API.

Definition at line 52 of file `speech_recognition_google.py`.

6.58.2 Constructor & Destructor Documentation

6.58.2.1 `def speech_recognition_google.SpeechToTextGoogle.__init__(self)`

Default constructor.

Declares the service callback

Definition at line 55 of file `speech_recognition_google.py`.

6.58.3 Member Function Documentation

6.58.3.1 `def speech_recognition_google.SpeechToTextGoogle.speech_to_text(self, file_path, user, audio_file_type, language)`

Performs the call to Google API.

Parameters

<i>file_path</i>	[string] The audio file
<i>user</i>	[string] The username
<i>audio_type</i>	[string] Used to check if denoising is needed. Can be one of headset, nao_ogg, nao_wav_1-ch, nao_wav_4_ch
<i>language</i>	[string] The language in which the ASR will be performed

Returns

The transcript from Google

Definition at line 122 of file `speech_recognition_google.py`.

6.58.3.2 `def speech_recognition_google.SpeechToTextGoogle.speech_to_text_callback(self, req)`

The service callback.

Parameters

<i>req</i>	[SpeechToTextSrvRequest] The ROS service request
------------	--

Definition at line 66 of file `speech_recognition_google.py`.

6.58.4 Member Data Documentation

6.58.4.1 `speech_recognition_google.SpeechToTextGoogle.serv`

Definition at line 61 of file `speech_recognition_google.py`.

6.58.4.2 `speech_recognition_google.SpeechToTextGoogle.serv_topic`

Definition at line 57 of file `speech_recognition_google.py`.

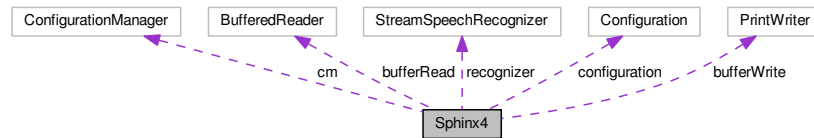
The documentation for this class was generated from the following file:

- `/home/travis/rapp_temp/rapp-platform/rapp_speech_detection_google/src/speech_recognition_google.py`

6.59 Sphinx4 Class Reference

Performs speech recognition employing Sphinx.

Collaboration diagram for Sphinx4:



Static Public Member Functions

- static void [main](#) (String[] args) throws IOException
The main function.
- static void [updateConfiguration](#) () throws IOException
Updates the Sphinx configuration.

Static Public Attributes

- static String [acoustic_model_path](#) = ""
- static String [acoustic_model_path_prev](#) = ""
- static BufferedReader [bufferRead](#)
- static PrintWriter [bufferWrite](#)
- static ConfigurationManager [cm](#)
- static Configuration [configuration](#) = new Configuration()
- static String [configuration_model_path](#) = ""
- static String [configuration_model_path_prev](#) = ""
- static String [dictionary_path](#) = ""
- static String [dictionary_path_prev](#) = ""
- static boolean [grammar_enabled](#) = false
- static boolean [grammar_enabled_prev](#) = false
- static String [grammar_model_file_path](#) = ""
- static String [grammar_model_file_path_prev](#) = ""
- static String [grammar_model_folder_path](#) = ""
- static String [grammar_model_folder_path_prev](#) = ""
- static String [language_path](#) = ""
- static String [language_path_prev](#) = ""
- static StreamSpeechRecognizer [recognizer](#)

6.59.1 Detailed Description

Performs speech recognition employing Sphinx.

Communicates with [rapp_speech_detection_sphinx4.sphinx4_wrapper.Sphinx4Wrapper](#) via socket to configure Sphinx and perform the speech recognition and returns the result.

Definition at line 49 of file `Sphinx4.java`.

6.59.2 Member Function Documentation

6.59.2.1 `static void Sphinx4.main (String[] args) throws IOException` `[inline], [static]`

The main function.

Creates the Sphinx process and awaits commands from [rapp_speech_detection_sphinx4.sphinx4_wrapper.Sphinx4Wrapper](#) to update the cconfiguration or perform the recognition.

Definition at line 134 of file Sphinx4.java.

6.59.2.2 `static void Sphinx4.updateConfiguration () throws IOException` `[inline], [static]`

Updates the Sphinx configuration.

Definition at line 79 of file Sphinx4.java.

6.59.3 Member Data Documentation

6.59.3.1 `String Sphinx4.acoustic_model_path = ""` `[static]`

Definition at line 57 of file Sphinx4.java.

6.59.3.2 `String Sphinx4.acoustic_model_path_prev = ""` `[static]`

Definition at line 58 of file Sphinx4.java.

6.59.3.3 `BufferedReader Sphinx4.bufferRead` `[static]`

Definition at line 72 of file Sphinx4.java.

6.59.3.4 `PrintWriter Sphinx4.bufferWrite` `[static]`

Definition at line 73 of file Sphinx4.java.

6.59.3.5 `ConfigurationManager Sphinx4.cm` `[static]`

Definition at line 69 of file Sphinx4.java.

6.59.3.6 `Configuration Sphinx4.configuration = new Configuration()` `[static]`

Definition at line 68 of file Sphinx4.java.

6.59.3.7 `String Sphinx4.configuration_model_path = ""` `[static]`

Definition at line 65 of file Sphinx4.java.

6.59.3.8 `String Sphinx4.configuration_model_path_prev = ""` `[static]`

Definition at line 66 of file Sphinx4.java.

6.59.3.9 `String Sphinx4.dictionary_path = ""` `[static]`

Definition at line 51 of file Sphinx4.java.

6.59.3.10 `String Sphinx4.dictionary_path_prev = ""` `[static]`

Definition at line 52 of file Sphinx4.java.

6.59.3.11 `boolean Sphinx4.grammar_enabled = false` `[static]`

Definition at line 75 of file Sphinx4.java.

6.59.3.12 `boolean Sphinx4.grammar_enabled_prev = false` `[static]`

Definition at line 76 of file Sphinx4.java.

6.59.3.13 `String Sphinx4.grammar_model_file_path = ""` `[static]`

Definition at line 60 of file Sphinx4.java.

6.59.3.14 `String Sphinx4.grammar_model_file_path_prev = ""` `[static]`

Definition at line 61 of file Sphinx4.java.

6.59.3.15 `String Sphinx4.grammar_model_folder_path = ""` `[static]`

Definition at line 62 of file Sphinx4.java.

6.59.3.16 `String Sphinx4.grammar_model_folder_path_prev = ""` `[static]`

Definition at line 63 of file Sphinx4.java.

6.59.3.17 `String Sphinx4.language_path = ""` `[static]`

Definition at line 54 of file Sphinx4.java.

6.59.3.18 `String Sphinx4.language_path_prev = ""` `[static]`

Definition at line 55 of file Sphinx4.java.

6.59.3.19 `StreamSpeechRecognizer Sphinx4.recognizer` `[static]`

Definition at line 70 of file Sphinx4.java.

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

- [/home/travis/rapp_temp/rapp-platform/rapp_speech_detection_sphinx4/src/Sphinx4.java](#)

6.60 rapp_speech_detection_sphinx4.sphinx4_wrapper.Sphinx4Wrapper Class Reference

Contains the Sphinx subprocess and is responsible for configuring Sphinx and performing the recognition request.

Public Member Functions

- def [__init__](#)
Constructor Initiates service clients.
- def [configureSphinx](#)
Perform [Sphinx4](#) configuration.
- def [performSpeechRecognition](#)
Performs the speech recognition and returns a list of words.

Private Member Functions

- def [_callSphinxJava](#)
Communicate with Sphinx subprocess to initiate recognition and fetch results.
- def [_createProcessingProfile](#)
Creates audio profile based on the audio type for processing purposes.
- def [_createSocket](#)
Creates socket IPC between self and Sphinx subprocess Creates the socket server with a system provided port, which is pass as an argument to the created subprocess.
- def [_initializeSphinxProcess](#)
Perform [Sphinx4](#) initialization Initiates Sphinx subprocess, sets up socket IPC and configures Sphinx subprocess.
- def [_performEnergyDenoising](#)
Perform energy denoise.
- def [_readLine](#)
Helper function for getting input from IPC with Sphinx subprocess.
- def [_respawnSphinx](#)
Respawns Sphinx subprocess, if it terminates abruptly.

Private Attributes

- [_audio_transform_srv](#)
Transform audio service client.
- [_conf](#)
Sphinx configuration.
- [_denoise_service](#)
Denoise service client.
- [_detect_silence_service](#)
Detect silence service client.
- [_energy_denoise_service](#)
Energy denoise service client.
- [_globalParams](#)
Contains global Sphinx parameters.
- [_jar_path](#)
Contains the absolute path for the Sphinx jar file.
- [_sphinx_socket](#)
The IPC socket.

- [_sphinx_socket_PORT](#)
The IPC socket port.
- [_sphinxDied](#)
Sphinx status flag.
- [_sphinxSubprocess](#)
The Sphinx subprocess.

6.60.1 Detailed Description

Contains the Sphinx subprocess and is responsible for configuring Sphinx and performing the recognition request. Initializes a Sphinx.java subprocess and creates an IPC using sockets. It is responsible for interacting with Sphinx via the socket to send configuration params/instructions and initialize a recognition procedure.

Definition at line 48 of file sphinx4_wrapper.py.

6.60.2 Constructor & Destructor Documentation

6.60.2.1 `def rapp_speech_detection_sphinx4.sphinx4_wrapper.Sphinx4Wrapper.__init__(self)`

Constructor Initiates service clients.

Definition at line 52 of file sphinx4_wrapper.py.

6.60.3 Member Function Documentation

6.60.3.1 `def rapp_speech_detection_sphinx4.sphinx4_wrapper.Sphinx4Wrapper.callSphinxJava(self, audio_file)` [private]

Communicate with Sphinx subprocess to initiate recognition and fetch results.

Parameters

<i>audio_file</i>	[string] The audio file path
-------------------	------------------------------

Returns

words [list::string] The Sphinx result

Definition at line 410 of file sphinx4_wrapper.py.

6.60.3.2 `def rapp_speech_detection_sphinx4.sphinx4_wrapper.Sphinx4Wrapper.createProcessingProfile(self, audio_type)` [private]

Creates audio profile based on the audio type for processing purposes.

Defines a set of audio processing procedures (i.e. denoising) to be performed on the audio file and the parameters of the procedures. Aims to improve to audio file quality to improve speech recognition results.

Parameters

<i>audio_type</i>	[string] The audio type
-------------------	-------------------------

Returns

processingProfile [dictionary] The profile attributes

Definition at line 211 of file sphinx4_wrapper.py.

6.60.3.3 `def rapp_speech_detection_sphinx4.sphinx4_wrapper.Sphinx4Wrapper.createSocket (self) [private]`

Creates socket IPC between self and Sphinx subprocess Creates the socket server with a system provided port, which is pass as an argument to the created subprocess.

Definition at line 169 of file sphinx4_wrapper.py.

6.60.3.4 `def rapp_speech_detection_sphinx4.sphinx4_wrapper.Sphinx4Wrapper.initializeSphinxProcess (self, conf = None) [private]`

Perform [Sphinx4](#) initialization Initiates Sphinx subprocess, sets up socket IPC and configures Sphinx subprocess.

Parameters

<i>conf</i>	[dictionary] Contains the configuration parameters
-------------	--

Definition at line 136 of file sphinx4_wrapper.py.

6.60.3.5 `def rapp_speech_detection_sphinx4.sphinx4_wrapper.Sphinx4Wrapper._performEnergyDenoising (self, next_audio_file, audio_file, scale) [private]`

Perform energy denoise.

Calls energy denoise service `rapp_audio_processing.rapp_audio_processing.AudioProcessing::energy_denoise` (see also [rapp_audio_processing.rapp_energy_denoise.EnergyDenoise::energyDenoise](#))

Parameters

<i>audio_file</i>	[string] The audio file path
<i>scale</i>	[float] The scale parameter for the denoising procedure

Returns

`file_path` [string] The path of the denoised file

Definition at line 397 of file sphinx4_wrapper.py.

6.60.3.6 `def rapp_speech_detection_sphinx4.sphinx4_wrapper.Sphinx4Wrapper.readLine (self) [private]`

Helper function for getting input from IPC with Sphinx subprocess.

Returns

`line` [string] A buffer read from socket

Definition at line 126 of file sphinx4_wrapper.py.

6.60.3.7 `def rapp_speech_detection_sphinx4.sphinx4_wrapper.Sphinx4Wrapper.respawnSphinx (self) [private]`

Respawns Sphinx subprocess, if it terminates abruptly.

Definition at line 437 of file sphinx4_wrapper.py.

6.60.3.8 `def rapp_speech_detection_sphinx4.sphinx4_wrapper.Sphinx4Wrapper.configureSphinx (self, conf)`

Perform [Sphinx4](#) configuration.

Parameters

<i>conf</i>	[dictionary] Contains the configuration parameters
-------------	--

Definition at line 182 of file sphinx4_wrapper.py.

6.60.3.9 `def rapp_speech_detection_sphinx4.sphinx4_wrapper.Sphinx4Wrapper.performSpeechRecognition (self, audio_file, audio_type, user)`

Performs the speech recognition and returns a list of words.

Parameters

<i>audio_file</i>	[string] The audio file's name
<i>audio_type</i>	[string] The audio file's type

Returns

words [list::string] The result words

Exceptions

<i>RappError</i>	Audio transformation error
------------------	----------------------------

Definition at line 271 of file sphinx4_wrapper.py.

6.60.4 Member Data Documentation

6.60.4.1 `rapp_speech_detection_sphinx4.sphinx4_wrapper.Sphinx4Wrapper._audio_transform_srv` [private]

Transform audio service client.

`rapp_audio_processing.rapp_audio_processing.AudioProcessing::transform_audio`

Definition at line 113 of file sphinx4_wrapper.py.

6.60.4.2 `rapp_speech_detection_sphinx4.sphinx4_wrapper.Sphinx4Wrapper._conf` [private]

Sphinx configuration.

Definition at line 59 of file sphinx4_wrapper.py.

6.60.4.3 `rapp_speech_detection_sphinx4.sphinx4_wrapper.Sphinx4Wrapper._denoise_service` [private]

Denoise service client.

`rapp_audio_processing.rapp_audio_processing.AudioProcessing::denoise`

Definition at line 95 of file sphinx4_wrapper.py.

6.60.4.4 `rapp_speech_detection_sphinx4.sphinx4_wrapper.Sphinx4Wrapper._detect_silence_service` [private]

Detect silence service client.

`rapp_audio_processing.rapp_audio_processing.AudioProcessing::detect_silence`

Definition at line 107 of file sphinx4_wrapper.py.

6.60.4.5 `rapp_speech_detection_sphinx4.sphinx4_wrapper.Sphinx4Wrapper._energy_denoise_service` `[private]`

Energy denoise service client.

`rapp_audio_processing.rapp_audio_processing.AudioProcessing::energy_denoise`

Definition at line 101 of file `sphinx4_wrapper.py`.

6.60.4.6 `rapp_speech_detection_sphinx4.sphinx4_wrapper.Sphinx4Wrapper._globalParams` `[private]`

Contains global Sphinx parameters.

(see [global_parameters.GlobalParams](#))

Definition at line 56 of file `sphinx4_wrapper.py`.

6.60.4.7 `rapp_speech_detection_sphinx4.sphinx4_wrapper.Sphinx4Wrapper._jar_path` `[private]`

Contains the absolute path for the Sphinx jar file.

Definition at line 117 of file `sphinx4_wrapper.py`.

6.60.4.8 `rapp_speech_detection_sphinx4.sphinx4_wrapper.Sphinx4Wrapper._sphinx_socket` `[private]`

The IPC socket.

Definition at line 64 of file `sphinx4_wrapper.py`.

6.60.4.9 `rapp_speech_detection_sphinx4.sphinx4_wrapper.Sphinx4Wrapper._sphinx_socket_PORT` `[private]`

The IPC socket port.

Definition at line 66 of file `sphinx4_wrapper.py`.

6.60.4.10 `rapp_speech_detection_sphinx4.sphinx4_wrapper.Sphinx4Wrapper._sphinxDied` `[private]`

Sphinx status flag.

Definition at line 61 of file `sphinx4_wrapper.py`.

6.60.4.11 `rapp_speech_detection_sphinx4.sphinx4_wrapper.Sphinx4Wrapper._sphinxSubprocess` `[private]`

The Sphinx subprocess.

Definition at line 69 of file `sphinx4_wrapper.py`.

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

- `/home/travis/rapp_temp/rapp-platform/rapp_speech_detection_sphinx4/src/rapp_speech_detection_sphinx4/sphinx4-_wrapper.py`

6.61 rapp_speech_detection_sphinx4.sphinx4_configuration_params.SphinxConfigurationParams Class Reference

Contains the parameters required for the Sphinx configuration.

Public Member Functions

- def `__init__`
Initializes an empty configuration (constructor)
- def `equalsRequest`
Checks if a `SphinxConfigurationParams` instance equals self.
- def `getHash`
Calculates the configuration's sha1 hash.
- def `makeEqualToInstance`
Change attributes to those specified by the Class instance.
- def `makeEqualToRequest`
Change attributes to those specified by the request.

Private Member Functions

- def `_readConfigurationYaml`
Read the configuration from configuration yaml.

Private Attributes

- `_globalParams`
Contains global Sphinx parameters.
- `_grammar`
Sphinx grammar attribute.
- `_language`
The language of the request.
- `_sentences`
Sphinx sentence attribute.
- `_words`
The words to be identified.

6.61.1 Detailed Description

Contains the parameters required for the Sphinx configuration.

Definition at line 30 of file `sphinx4_configuration_params.py`.

6.61.2 Constructor & Destructor Documentation

6.61.2.1 `def rapp_speech_detection_sphinx4.sphinx4_configuration_params.SphinxConfigurationParams.__init__(self, configuration = None)`

Initializes an empty configuration (constructor)

Definition at line 33 of file `sphinx4_configuration_params.py`.

6.61.3 Member Function Documentation

6.61.3.1 `def rapp_speech_detection_sphinx4.sphinx4_configuration_params.SphinxConfigurationParams._readConfigurationYaml(self, confName) [private]`

Read the configuration from configuration yaml.

Parameters

<i>confName</i>	[string] The name of the requested configuration
-----------------	--

Definition at line 73 of file sphinx4_configuration_params.py.

6.61.3.2 `def rapp_speech_detection_sphinx4.sphinx4_configuration_params.SphinxConfigurationParams.equalsRequest (self, params)`

Checks if a [SphinxConfigurationParams](#) instance equals self.

Parameters

<i>params</i>	[SphinxConfigurationParams] The class instance
<i>status</i>	[bool] True if configurations match

Definition at line 134 of file sphinx4_configuration_params.py.

6.61.3.3 `def rapp_speech_detection_sphinx4.sphinx4_configuration_params.SphinxConfigurationParams.getHash (self)`

Calculates the configuration's sha1 hash.

Hash is used to identify common request configurations for proper subprocess selection. (Requests with common requests do not require reconfiguration reducing computation time)

Returns

hexdigest [string] The hash digest containing only hexadecimal digits

Definition at line 152 of file sphinx4_configuration_params.py.

6.61.3.4 `def rapp_speech_detection_sphinx4.sphinx4_configuration_params.SphinxConfigurationParams.makeEqualToInstance (self, instance)`

Change attributes to those specified by the Class instance.

Parameters

<i>params</i>	[SphinxConfigurationParams] The class instance
---------------	--

Definition at line 64 of file sphinx4_configuration_params.py.

6.61.3.5 `def rapp_speech_detection_sphinx4.sphinx4_configuration_params.SphinxConfigurationParams.makeEqualToRequest (self, params)`

Change attributes to those specified by the request.

Parameters

<i>params</i>	[rapp_platform_ros_communications::SpeechDetectionSphinx4Wrapper::SpeechRecognitionSphinx4TotalSrvRequest] The service request
---------------	--

Definition at line 55 of file sphinx4_configuration_params.py.

6.61.4 Member Data Documentation

6.61.4.1 `rapp_speech_detection_sphinx4.sphinx4_configuration_params.SphinxConfigurationParams._globalParams`
[private]

Contains global Sphinx parameters.

(see [global_parameters.GlobalParams](#))

Definition at line 38 of file sphinx4_configuration_params.py.

6.61.4.2 `rapp_speech_detection_sphinx4.sphinx4_configuration_params.SphinxConfigurationParams._grammar` [private]

Sphinx grammar attribute.

Definition at line 45 of file sphinx4_configuration_params.py.

6.61.4.3 `rapp_speech_detection_sphinx4.sphinx4_configuration_params.SphinxConfigurationParams._language` [private]

The language of the request.

Definition at line 41 of file sphinx4_configuration_params.py.

6.61.4.4 `rapp_speech_detection_sphinx4.sphinx4_configuration_params.SphinxConfigurationParams._sentences` [private]

Sphinx sentence attribute.

Definition at line 47 of file sphinx4_configuration_params.py.

6.61.4.5 `rapp_speech_detection_sphinx4.sphinx4_configuration_params.SphinxConfigurationParams._words` [private]

The words to be identified.

Definition at line 43 of file sphinx4_configuration_params.py.

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

- `/home/travis/rapp_temp/rapp-platform/rapp_speech_detection_sphinx4/src/rapp_speech_detection_sphinx4/sphinx4-configuration_params.py`

6.62 `text_to_speech_espeak.TextToSpeechEspeak` Class Reference

Public Member Functions

- `def __init__`
- `def text_to_speech_callback`

Public Attributes

- `serv`
- `serv_topic`

6.62.1 Detailed Description

Definition at line 33 of file text_to_speech_espeak.py.

6.62.2 Constructor & Destructor Documentation

6.62.2.1 def text_to_speech_espeak.TextToSpeechEspeak.__init__(self)

Definition at line 35 of file text_to_speech_espeak.py.

6.62.3 Member Function Documentation

6.62.3.1 def text_to_speech_espeak.TextToSpeechEspeak.text_to_speech_callback(self, req)

Definition at line 45 of file text_to_speech_espeak.py.

6.62.4 Member Data Documentation

6.62.4.1 text_to_speech_espeak.TextToSpeechEspeak.serv

Definition at line 41 of file text_to_speech_espeak.py.

6.62.4.2 text_to_speech_espeak.TextToSpeechEspeak.serv_topic

Definition at line 37 of file text_to_speech_espeak.py.

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

- /home/travis/rapp_temp/rapp-platform/rapp_text_to_speech_espeak/src/[text_to_speech_espeak.py](#)

6.63 rapp_audio_processing.rapp_transform_audio.TransformAudio Class Reference

Provides audio type tranformation functionalities.

Public Member Functions

- def [transform_audio](#)
Performs the audio transformation.

Private Member Functions

- def [_assertArgs](#)
Verifies the existence of the required arguments.
- def [_convertType](#)
Performs audio conversion.
- def [_validateSourceType](#)
Validates that the provided audio type match the file extension.

6.63.1 Detailed Description

Provides audio type tranformation functionalities.

Allows the transformation of an audio file to a different format. Supports the alteration of the type (i.e. headset, nao_wav_1_ch etc.), the sample rate, the audio channel number, the audio format and the audio name. Handles transform audio service callback (rapp_audio_processing.rapp_audio_processing.AudioProcessing::transform_audio)

Definition at line 32 of file rapp_transform_audio.py.

6.63.2 Member Function Documentation

6.63.2.1 `def rapp_audio_processing.rapp_transform_audio.TransformAudio._assertArgs (self, source_type, source_name, target_type, target_name, target_channels, target_rate) [private]`

Verifies the existence of the required arguments.

Parameters

<i>source_type</i>	[string] The source audio file's type
<i>source_name</i>	[string] The source audio file's name
<i>target_type</i>	[string] The target audio file's type
<i>target_name</i>	[string] The target audio file's name
<i>target_channels</i>	[string] The target audio's channel number
<i>target_rate</i>	[string] The target audio's sample rate

Exceptions

<i>Exception</i>	Arguments are invalid
------------------	-----------------------

Definition at line 76 of file `rapp_transform_audio.py`.

6.63.2.2 `def rapp_audio_processing.rapp_transform_audio.TransformAudio._convertType (self, source_type, source_name, target_type, target_name, target_channels, target_rate) [private]`

Performs audio conversion.

Parameters

<i>source_type</i>	[string] The source audio file's type
<i>source_name</i>	[string] The source audio file's name
<i>target_type</i>	[string] The target audio file's type
<i>target_name</i>	[string] The target audio file's name
<i>target_channels</i>	[string] The target audio's channel number
<i>target_rate</i>	[string] The target audio's sample rate

Exceptions

<i>Exception</i>	Conversion malfunction
------------------	------------------------

Definition at line 101 of file `rapp_transform_audio.py`.

6.63.2.3 `def rapp_audio_processing.rapp_transform_audio.TransformAudio._validateSourceType (self, source_type, name) [private]`

Validates that the provided audio type match the file extension.

Parameters

<i>source_type</i>	[string] The source audio file's type
<i>name</i>	[string] The source audio file's name

Exceptions

<i>Exception</i>	Audio type/file type mismatch
------------------	-------------------------------

Definition at line 139 of file `rapp_transform_audio.py`.

6.63.2.4 `def rapp_audio_processing.rapp_transform_audio.TransformAudio.transform_audio (self, source_type, source_name, target_type, target_name, target_channels, target_rate)`

Performs the audio transformation.

Parameters

<i>source_type</i>	[string] The source audio file's type
<i>source_name</i>	[string] The source audio file's name
<i>target_type</i>	[string] The target audio file's type
<i>target_name</i>	[string] The target audio file's name
<i>target_channels</i>	[string] The target audio's channel number
<i>target_rate</i>	[string] The target audio's sample rate

Returns

status [string] The status of the transformation procedure
 filename [string] The name of the produced file

Definition at line 45 of file rapp_transform_audio.py.

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

- /home/travis/rapp_temp/rapp-platform/rapp_audio_processing/src/rapp_audio_processing/[rapp_transform_audio.py](#)

6.64 userScoreHistoryForAllCategories.UserScoreHistoryForAllCategories Class Reference

Provides the necessary functions for returning the history of user scores.

Public Member Functions

- def [assignTestHistoryForTestCategoriesToSrv](#)
Retrieves the test history of the user for the provided test categories.
- def [returnUserHistory](#)
The callback function of the cognitive exercise user score history for all categories service.
- def [validateTimeRange](#)
Validates the fromTime and toTime variables.

6.64.1 Detailed Description

Provides the necessary functions for returning the history of user scores.

It implements the cognitive exercise return user score history for all categories service

Definition at line 39 of file userScoreHistoryForAllCategories.py.

6.64.2 Member Function Documentation

- 6.64.2.1 **def** userScoreHistoryForAllCategories.UserScoreHistoryForAllCategories.assignTestHistoryForTestCategoriesToSrv (
self, testTypesList, userOntologyAlias, fromTime, toTime, res)

Retrieves the test history of the user for the provided test categories.

Parameters

<i>testTypesList</i>	[list] The list of the available tests as they were read from the ontology
<i>userOntology-Alias</i>	[string] The user's ontology alias
<i>fromTime</i>	[long] The time from which the user's performance records are taken into account
<i>toTime</i>	[long] The time up to which the user's performance records are taken into account

Returns

res [rapp_platform_ros_communications::userScoreHistoryForAllCategoriesSrvResponse::Response&] The output arguments of the service as defined in the userScoreHistoryForAllCategoriesSrv

Definition at line 84 of file userScoreHistoryForAllCategories.py.

6.64.2.2 def userScoreHistoryForAllCategories.UserScoreHistoryForAllCategories.returnUserHistory (self, req)

The callback function of the cognitive exercise user score history for all categories service.

Parameters

<i>req</i>	[rapp_platform_ros_communications::userScoreHistoryForAllCategoriesSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::userScoreHistoryForAllCategoriesSrvResponse::Response&] The ROS service response

Exceptions

<i>Exception</i>	ValueError
<i>Exception</i>	IndexError
<i>Exception</i>	AppError

Definition at line 47 of file userScoreHistoryForAllCategories.py.

6.64.2.3 def userScoreHistoryForAllCategories.UserScoreHistoryForAllCategories.validateTimeRange (self, fromTime, toTime)

Validates the fromTime and toTime variables.

Parameters

<i>fromTime</i>	[long] The time from which the performance records are evaluated
<i>toTime</i>	[long] The time up to which the performance records are evaluated

Returns

fromTime [long] The time from which the performance records are evaluated
toTime [long] The time up to which the performance records are evaluated

Exceptions

<i>Exception</i>	AppError
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Definition at line 123 of file userScoreHistoryForAllCategories.py.

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

- /home/travis/rapp_temp/rapp-platform/rapp_cognitive_exercise/src/[userScoreHistoryForAllCategories.py](#)

6.65 userScoresForAllCategories.UserScoresForAllCategories Class Reference

Provides the necessary functions for returning the user scores.

Public Member Functions

- def [calculateUserScoresForCategories](#)
Calculates and returns the user's scores for the provided test types.
- def [returnUserScores](#)
The callback function of the cognitive exercise user scores for all categories service.

6.65.1 Detailed Description

Provides the necessary functions for returning the user scores.

It implements the user scores for all categories service

Definition at line 33 of file userScoresForAllCategories.py.

6.65.2 Member Function Documentation

6.65.2.1 `def userScoresForAllCategories.UserScoresForAllCategories.calculateUserScoresForCategories (self, testTypesList, userOntologyAlias, upToTime)`

Calculates and returns the user's scores for the provided test types.

Parameters

<i>testTypesList</i>	[list] The list of the available tests as they were read from the ontology
<i>userOntologyAlias</i>	[string] The user's ontology alias
<i>upToTime</i>	[long] The time up to which the user's performance records are taken into account

Returns

testScores [list] The test scores for each category

Definition at line 74 of file userScoresForAllCategories.py.

6.65.2.2 `def userScoresForAllCategories.UserScoresForAllCategories.returnUserScores (self, req)`

The callback function of the cognitive exercise user scores for all categories service.

Parameters

<i>req</i>	[rapp_platform_ros_communications::userScoresForAllCategoriesSrvRequest::Request&] The ROS service request
<i>res</i>	[rapp_platform_ros_communications::userScoresForAllCategoriesSrvResponse::-Response&] The ROS service response

Exceptions

<i>Exception</i>	ValueError
<i>Exception</i>	IndexError
<i>Exception</i>	AppError

Definition at line 41 of file userScoresForAllCategories.py.

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

- /home/travis/rapp_temp/rapp-platform/rapp_cognitive_exercise/src/[userScoresForAllCategories.py](#)

6.66 rapp_audio_processing.rapp_utilities.Utilities Class Reference

Provides audio processing utilities.

Public Member Functions

- def [cleanup](#)

Removes a number of files.

6.66.1 Detailed Description

Provides audio processing utilities.

Definition at line 27 of file rapp_utilities.py.

6.66.2 Member Function Documentation

6.66.2.1 def rapp_audio_processing.rapp_utilities.Utilities.cleanup (self, files)

Removes a number of files.

Parameters

<i>files</i>	[list::string] The to be deleted files' paths
--------------	---

Definition at line 32 of file rapp_utilities.py.

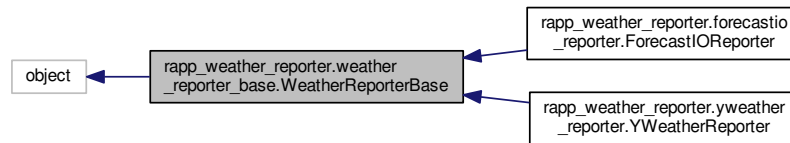
The documentation for this class was generated from the following file:

- /home/travis/rapp_temp/rapp-platform/rapp_audio_processing/src/rapp_audio_processing/[rapp_utilities.py](#)

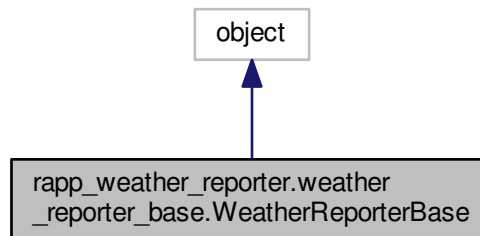
6.67 rapp_weather_reporter.weather_reporter_base.WeatherReporterBase Class Reference

Base class for weather reporters.

Inheritance diagram for `rapp_weather_reporter.weather_reporter_base.WeatherReporterBase`:



Collaboration diagram for `rapp_weather_reporter.weather_reporter_base.WeatherReporterBase`:



Public Member Functions

- `def __init__`
Constructor.
- `def fetch_current_weather`
Abstract method to fetch weather report.
- `def fetch_weather_forecast`
Abstract method to fetch weather forecast.

Public Attributes

- `rapp_http_json_parser`
Strips html tags from strings.

Private Attributes

- `_accepted_status`
The value of valid response status code.
- `_http_request`
Perform http requests to servers.
- `_url`
The base weather reporter url.

Static Private Attributes

- `__metaclass__` = `abc.ABCMeta`

6.67.1 Detailed Description

Base class for weather reporters.

Definition at line 32 of file `weather_reporter_base.py`.

6.67.2 Constructor & Destructor Documentation

6.67.2.1 `def rapp_weather_reporter.weather_reporter_base.WeatherReporterBase.__init__(self)`

Constructor.

Definition at line 37 of file `weather_reporter_base.py`.

6.67.3 Member Function Documentation

6.67.3.1 `def rapp_weather_reporter.weather_reporter_base.WeatherReporterBase.fetch_current_weather(self, req)`

Abstract method to fetch weather report.

Definition at line 52 of file `weather_reporter_base.py`.

6.67.3.2 `def rapp_weather_reporter.weather_reporter_base.WeatherReporterBase.fetch_weather_forecast(self, req)`

Abstract method to fetch weather forecast.

Definition at line 58 of file `weather_reporter_base.py`.

6.67.4 Member Data Documentation

6.67.4.1 `rapp_weather_reporter.weather_reporter_base.WeatherReporterBase.__metaclass__ = abc.ABCMeta` `[static]`, `[private]`

Definition at line 34 of file `weather_reporter_base.py`.

6.67.4.2 `rapp_weather_reporter.weather_reporter_base.WeatherReporterBase._accepted_status` `[private]`

The value of valid response status code.

Definition at line 42 of file `weather_reporter_base.py`.

6.67.4.3 `rapp_weather_reporter.weather_reporter_base.WeatherReporterBase._http_request` `[private]`

Perform http requests to servers.

Definition at line 45 of file `weather_reporter_base.py`.

6.67.4.4 `rapp_weather_reporter.weather_reporter_base.WeatherReporterBase._url` [private]

The base weather reporter url.

Definition at line 39 of file `weather_reporter_base.py`.

6.67.4.5 `rapp_weather_reporter.weather_reporter_base.WeatherReporterBase.rapp_http_json_parser`

Strips html tags from strings.

Definition at line 48 of file `weather_reporter_base.py`.

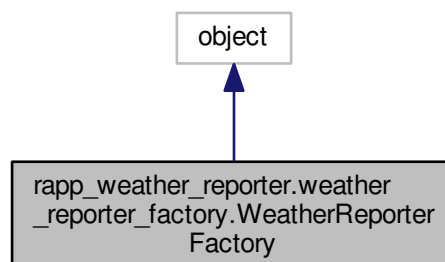
The documentation for this class was generated from the following file:

- [/home/travis/rapp_temp/rapp-platform/rapp_weather_reporter/src/rapp_weather_reporter/weather_reporter_base.py](#)

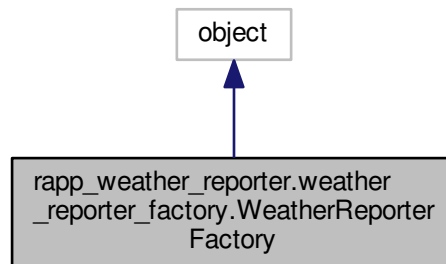
6.68 `rapp_weather_reporter.weather_reporter_factory.WeatherReporterFactory` Class Reference

Creates and returns the class of the weather reporter requested.

Inheritance diagram for `rapp_weather_reporter.weather_reporter_factory.WeatherReporterFactory`:



Collaboration diagram for rapp_weather_reporter.weather_reporter_factory.WeatherReporterFactory:



Public Member Functions

- def [select_weather_reporter](#)
Select proper weather reporter according to request.

6.68.1 Detailed Description

Creates and returns the class of the weather reporter requested.

Implements a factory pattern.

Definition at line 31 of file `weather_reporter_factory.py`.

6.68.2 Member Function Documentation

6.68.2.1 def `rapp_weather_reporter.weather_reporter_factory.WeatherReporterFactory.select_weather_reporter (self, weather_reporter = '')`

Select proper weather reporter according to request.

Parameters

<i>weather_reporter</i>	[string] The name of the weather reporter
-------------------------	---

Returns

res [`rapp_weather_reporter.rapp_weather_reporter.WeatherReporterBase`] The weather reporter

RappError Wrong weather reporter provided by user

Definition at line 42 of file `weather_reporter_factory.py`.

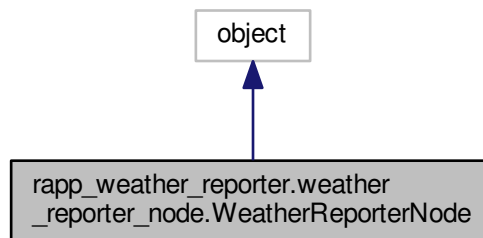
The documentation for this class was generated from the following file:

- `/home/travis/rapp_temp/rapp-platform/rapp_weather_reporter/src/rapp_weather_reporter/weather_reporter_factory.py`

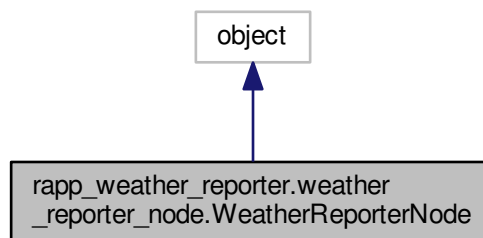
6.69 rapp_weather_reporter.weather_reporter_node.WeatherReporterNode Class Reference

Evaluates weather conditions.

Inheritance diagram for rapp_weather_reporter.weather_reporter_node.WeatherReporterNode:



Collaboration diagram for rapp_weather_reporter.weather_reporter_node.WeatherReporterNode:



Public Member Functions

- [def `__init__`](#)
Constructor.
- [def `fetch_current_weather_srv_callback`](#)
The callback to fetch current weather.
- [def `fetch_forecast_srv_callback`](#)
The callback to fetch weather forecast.

Private Member Functions

- [def `_create_current_service_response`](#)
Creates proper response.
- [def `_create_forecast_service_response`](#)

Private Attributes

- [_weather_reporter_factory](#)
Factory that returns proper weather_reporter.

6.69.1 Detailed Description

Evaluates weather conditions.

Definition at line 40 of file weather_reporter_node.py.

6.69.2 Constructor & Destructor Documentation

6.69.2.1 `def rapp_weather_reporter.weather_reporter_node.WeatherReporterNode.__init__(self)`

Constructor.

Definition at line 43 of file weather_reporter_node.py.

6.69.3 Member Function Documentation

6.69.3.1 `def rapp_weather_reporter.weather_reporter_node.WeatherReporterNode._create_current_service_response(self, result) [private]`

Creates proper response.

Parameters

<i>results</i>	[dict] The server results containing the weather information
----------------	--

Returns

res [rapp_platform_ros_communications::WeatherReporter::WeatherReporterCurrentSrvResponse] The service response

Definition at line 129 of file weather_reporter_node.py.

6.69.3.2 `def rapp_weather_reporter.weather_reporter_node.WeatherReporterNode._create_forecast_service_response(self, result) [private]`

Definition at line 144 of file weather_reporter_node.py.

6.69.3.3 `def rapp_weather_reporter.weather_reporter_node.WeatherReporterNode.fetch_current_weather_srv_callback(self, req)`

The callback to fetch current weather.

Parameters

<i>req</i>	[rapp_platform_ros_communications::WeatherReporter::WeatherReporterCurrentSrv] The service request
------------	--

Returns

res [rapp_platform_ros_communications::WeatherReporter::WeatherReporterCurrentSrvResponse] The service response

Definition at line 78 of file weather_reporter_node.py.

6.69.3.4 `def rapp_weather_reporter.weather_reporter_node.WeatherReporterNode.fetch_forecast_srv_callback (self, req)`

The callback to fetch weather forecast.

Parameters

<i>req</i>	[rapp_platform_ros_communications::WeatherReporter::WeatherReporterForecastSrv] The service request
------------	---

Returns

`res [rapp_platform_ros_communications::WeatherReporter::WeatherReporterCurrentSrvResponse]` The service response

Definition at line 104 of file `weather_reporter_node.py`.

6.69.4 Member Data Documentation

6.69.4.1 `rapp_weather_reporter.weather_reporter_node.WeatherReporterNode._weather_reporter_factory` [private]

Factory that returns proper `weather_reporter`.

Definition at line 45 of file `weather_reporter_node.py`.

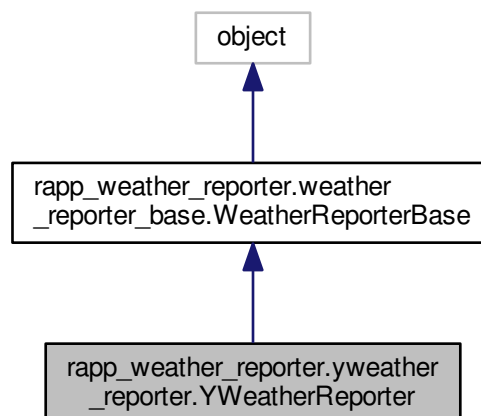
The documentation for this class was generated from the following file:

- [/home/travis/rapp_temp/rapp-platform/rapp_weather_reporter/src/rapp_weather_reporter/weather_reporter_node.py](#)

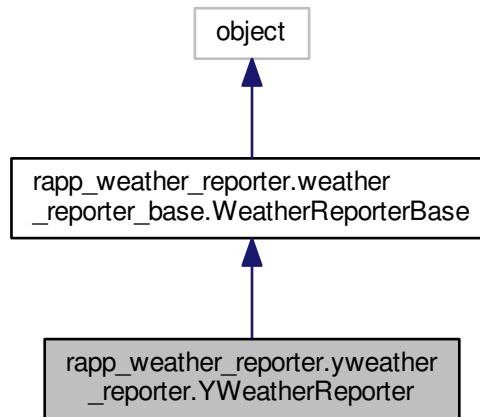
6.70 rapp_weather_reporter.yweather_reporter.YWeatherReporter Class Reference

Yweather weather reporter.

Inheritance diagram for `rapp_weather_reporter.yweather_reporter.YWeatherReporter`:



Collaboration diagram for rapp_weather_reporter.yweather_reporter.YWeatherReporter:



Public Member Functions

- `def __init__`
Constructor.
- `def fetch_current_weather`
Fetch the current weather.
- `def fetch_weather_forecast`
Fetch the current weather.

Private Member Functions

- `def _fetch_city_id`
- `def _fetch_yweather_report`
- `def _handle_current_weather_report`
Handles the server's response.
- `def _handle_weather_forecast_report`

Private Attributes

- `_client`

Additional Inherited Members

6.70.1 Detailed Description

Yweather weather reporter.

Definition at line 34 of file `yweather_reporter.py`.

6.70.2 Constructor & Destructor Documentation

6.70.2.1 `def rapp_weather_reporter.yweather_reporter.YWeatherReporter.__init__(self)`

Constructor.

Definition at line 37 of file `yweather_reporter.py`.

6.70.3 Member Function Documentation

6.70.3.1 `def rapp_weather_reporter.yweather_reporter.YWeatherReporter.fetch_city_id(self, city_str) [private]`

Definition at line 42 of file `yweather_reporter.py`.

6.70.3.2 `def rapp_weather_reporter.yweather_reporter.YWeatherReporter.fetch_yweather_report(self, city_id, param_metric = 'True') [private]`

Definition at line 67 of file `yweather_reporter.py`.

6.70.3.3 `def rapp_weather_reporter.yweather_reporter.YWeatherReporter.handle_current_weather_report(self, report) [private]`

Handles the server's response.

Parameters

<i>response</i>	[] The server's response to the request module.
-----------------	---

Returns

values [dict] The final values

Definition at line 104 of file `yweather_reporter.py`.

6.70.3.4 `def rapp_weather_reporter.yweather_reporter.YWeatherReporter.handle_weather_forecast_report(self, report) [private]`

Definition at line 119 of file `yweather_reporter.py`.

6.70.3.5 `def rapp_weather_reporter.yweather_reporter.YWeatherReporter.fetch_current_weather(self, req)`

Fetch the current weather.

Parameters

<i>req</i>	[rapp_platform_ros_communications::WeatherReporter::WeatherReporterCurrentSrv] The service request
------------	--

Returns

[dict] The server results

Definition at line 81 of file `yweather_reporter.py`.

6.70.3.6 `def rapp_weather_reporter.yweather_reporter.YWeatherReporter.fetch_weather_forecast(self, req)`

Fetch the current weather.

Parameters

<i>req</i>	[rapp_platform_ros_communications::WeatherReporter::WeatherReporterCurrentSrv] The service request
------------	--

Returns

[dict] The server results

Definition at line 94 of file yweather_reporter.py.

6.70.4 Member Data Documentation

6.70.4.1 rapp_weather_reporter.yweather_reporter.YWeatherReporter_client [private]

Definition at line 39 of file yweather_reporter.py.

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

- /home/travis/rapp_temp/rapp-platform/rapp_weather_reporter/src/rapp_weather_reporter/[yweather_reporter.py](#)

Chapter 7

File Documentation

7.1 /home/travis/rapp_temp/rapp-platform/rapp_application_authentication_manager/src/rapp_application_authentication_manager/__init__.py File Reference

Namespaces

- [rapp_application_authentication_manager](#)

7.2 /home/travis/rapp_temp/rapp-platform/rapp_audio_processing/src/rapp_audio_processing/__init__.py File Reference

Namespaces

- [rapp_audio_processing](#)

7.3 /home/travis/rapp_temp/rapp-platform/rapp_email/src/rapp_email/__init__.py File Reference

Namespaces

- [rapp_email](#)

7.4 /home/travis/rapp_temp/rapp-platform/rapp_geolocator/src/rapp_geolocator/__init__.py File Reference

Namespaces

- [rapp_geolocator](#)

7.5 /home/travis/rapp_temp/rapp-platform/rapp_news_explorer/src/rapp_news_explorer/__init__.py File Reference

Namespaces

- [rapp_news_explorer](#)

7.6 /home/travis/rapp_temp/rapp-platform/rapp_speech_detection_sphinx4/src/rapp_speech_detection_sphinx4/__init__.py File Reference

Namespaces

- [rapp_speech_detection_sphinx4](#)

7.7 /home/travis/rapp_temp/rapp-platform/rapp_utilities/src/__init__.py File Reference

Namespaces

- [src](#)

7.8 /home/travis/rapp_temp/rapp-platform/rapp_weather_reporter/src/rapp_weather_reporter/__init__.py File Reference

Namespaces

- [rapp_weather_reporter](#)

7.9 /home/travis/rapp_temp/rapp-platform/rapp_application_authentication_manager/src/rapp_application_authentication_manager/application_authentication_node.py File Reference

Classes

- class [rapp_application_authentication_manager.application_authentication_node.ApplicationAuthenticationManager](#)
Provides user management features.

Namespaces

- [rapp_application_authentication_manager.application_authentication_node](#)

Variables

- tuple [rapp_application_authentication_manager.application_authentication_node.application_authentication_ros_node](#) = [ApplicationAuthenticationManager\(\)](#)

7.10 [/home/travis/rapp_temp/rapp-platform/rapp_application_authentication_manager/src/rapp_application_authentication_manager/database_handler.py](#) File

Reference

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7.10 [/home/travis/rapp_temp/rapp-platform/rapp_application_authentication_manager/src/rapp_application_authentication_manager/database_handler.py](#) File Reference

Classes

- class [rapp_application_authentication_manager.database_handler.DatabaseHandler](#)
Handles database functions for authentication manager.

Namespaces

- [rapp_application_authentication_manager.database_handler](#)

7.11 [/home/travis/rapp_temp/rapp-platform/rapp_audio_processing/src/rapp_audio_processing/rapp_audio_processing.py](#) File Reference

Classes

- class [rapp_audio_processing.rapp_audio_processing.AudioProcessing](#)
Provides audio processing utilities.

Namespaces

- [rapp_audio_processing.rapp_audio_processing](#)

Variables

- tuple [rapp_audio_processing.rapp_audio_processing.AudioProcessingNode](#) = [AudioProcessing\(\)](#)

7.12 [/home/travis/rapp_temp/rapp-platform/rapp_audio_processing/src/rapp_audio_processing/rapp_detect_silence.py](#) File Reference

Classes

- class [rapp_audio_processing.rapp_detect_silence.DetectSilence](#)
Performs silence detection on an audio file.

Namespaces

- [rapp_audio_processing.rapp_detect_silence](#)

7.13 [/home/travis/rapp_temp/rapp-platform/rapp_audio_processing/src/rapp_audio_processing/rapp_energy_denoise.py](#) File Reference

Classes

- class [rapp_audio_processing.rapp_energy_denoise.EnergyDenoise](#)
Performs energy denoising on an audio file.

Namespaces

- [rapp_audio_processing.rapp_energy_denoise](#)

7.14 /home/travis/rapp_temp/rapp-platform/rapp_audio_processing/src/rapp_audio_processing/rapp_set_noise_profile.py File Reference

Classes

- class [rapp_audio_processing.rapp_set_noise_profile.SetNoiseProfile](#)
Evaluates the noise profile for an audio file.

Namespaces

- [rapp_audio_processing.rapp_set_noise_profile](#)

7.15 /home/travis/rapp_temp/rapp-platform/rapp_audio_processing/src/rapp_audio_processing/rapp_sox_denoise.py File Reference

Classes

- class [rapp_audio_processing.rapp_sox_denoise.SoxDenoise](#)
Performs denoising on an audio file employing Sox application.

Namespaces

- [rapp_audio_processing.rapp_sox_denoise](#)

7.16 /home/travis/rapp_temp/rapp-platform/rapp_audio_processing/src/rapp_audio_processing/rapp_transform_audio.py File Reference

Classes

- class [rapp_audio_processing.rapp_transform_audio.TransformAudio](#)
Provides audio type tranformation functionalities.

Namespaces

- [rapp_audio_processing.rapp_transform_audio](#)

7.17 /home/travis/rapp_temp/rapp-platform/rapp_audio_processing/src/rapp_audio_processing/rapp_utilities.py File Reference

Classes

- class [rapp_audio_processing.rapp_utilities.Utilities](#)
Provides audio processing utilities.

Namespaces

- [rapp_audio_processing.rapp_utilities](#)

7.18 /home/travis/rapp_temp/rapp-platform/rapp_utilities/src/rapp_utilities.py File Reference

Classes

- class [src.rapp_utilities.RappUtilities](#)
Provides various utility functionalities.

Namespaces

- [src.rapp_utilities](#)

7.19 /home/travis/rapp_temp/rapp-platform/rapp_caffe_wrapper/src/app_error_exception.py File Reference

Classes

- class [app_error_exception.AppError](#)
Exception compliant with the ros error and trace srvs.

Namespaces

- [app_error_exception](#)

7.20 /home/travis/rapp_temp/rapp-platform/rapp_cognitive_exercise/src/app_error_exception.py File Reference

Classes

- class [app_error_exception.AppError](#)
Exception compliant with the ros error and trace srvs.

Namespaces

- [app_error_exception](#)

7.21 /home/travis/rapp_temp/rapp-platform/rapp_caffe_wrapper/src/caffe_wrapper.py File Reference

Classes

- class [caffe_wrapper.RappCaffeWrapper](#)
The [RappCaffeWrapper](#) ros node.

Namespaces

- [caffe_wrapper](#)

7.22 /home/travis/rapp_temp/rapp-platform/rapp_caffe_wrapper/src/caffe_wrapper_main.py File Reference

Namespaces

- [caffe_wrapper_main](#)

Variables

- tuple [caffe_wrapper_main.RappCaffeWrapperNode](#) = RappCaffeWrapper()
The main function that initiates the rapp_caffe_wrapper ROS Node.

7.23 /home/travis/rapp_temp/rapp-platform/rapp_caffe_wrapper/src/image_classification.py File Reference

Classes

- class [image_classification.ImageClassification](#)
Contains the necessary functions for classifying an images and requesting registration to the ontology.

Namespaces

- [image_classification](#)

7.24 /home/travis/rapp_temp/rapp-platform/rapp_caffe_wrapper/src/image_registration_to_ontology.py File Reference

Classes

- class [image_registration_to_ontology.ImageRegistrationToOntology](#)
Contains the necessary functions for registering images to the ontology.

Namespaces

- [image_registration_to_ontology](#)

7.25 /home/travis/rapp_temp/rapp-platform/rapp_caffe_wrapper/src/ontology_class_bridge.py File Reference

Classes

- class [ontology_class_bridge.OntologyClassBridge](#)
Contains the necessary functions for translating caffe classes to ontology classes.

Namespaces

- [ontology_class_bridge](#)

7.26 /home/travis/rapp_temp/rapp-platform/rapp_cognitive_exercise/src/cognitive_exercise.py File Reference

Classes

- class [cognitive_exercise.CognitiveExercise](#)
The Cognitive exercise ros node.

Namespaces

- [cognitive_exercise](#)

7.27 /home/travis/rapp_temp/rapp-platform/rapp_cognitive_exercise/src/cognitive_exercise_main.py File Reference

Namespaces

- [cognitive_exercise_main](#)

Variables

- tuple [cognitive_exercise_main.CognitiveExerciseNode](#) = [CognitiveExercise\(\)](#)
The main function that initiates the CognitiveExercise ROS Node.

7.28 /home/travis/rapp_temp/rapp-platform/rapp_cognitive_exercise/src/helper_functions.py File Reference

Classes

- class [helper_functions.CognitiveExerciseHelperFunctions](#)

Namespaces

- [helper_functions](#)

7.29 /home/travis/rapp_temp/rapp-platform/rapp_cognitive_exercise/src/userScoreHistoryForAllCategories.py File Reference

Classes

- class [userScoreHistoryForAllCategories.UserScoreHistoryForAllCategories](#)
Provides the necessary functions for returning the history of user scores.

Namespaces

- [userScoreHistoryForAllCategories](#)

7.30 /home/travis/rapp_temp/rapp-platform/rapp_cognitive_exercise/src/userScoresFor-AllCategories.py File Reference

Classes

- class [userScoresForAllCategories.UserScoresForAllCategories](#)
Provides the necessary functions for returning the user scores.

Namespaces

- [userScoresForAllCategories](#)

7.31 /home/travis/rapp_temp/rapp-platform/rapp_email/src/rapp_email/email_node.py File Reference

Namespaces

- [rapp_email.email_node](#)

Variables

- tuple [rapp_email.email_node.emailReceiver](#) = EmailReceiver()
- tuple [rapp_email.email_node.emailSender](#) = EmailSender()

7.32 /home/travis/rapp_temp/rapp-platform/rapp_email/src/rapp_email/email_receiver.py File Reference

Classes

- class [rapp_email.email_receiver.EmailReceiver](#)
Fetches emails from user's email account.

Namespaces

- [rapp_email.email_receiver](#)

7.33 /home/travis/rapp_temp/rapp-platform/rapp_email/src/rapp_email/email_sender.py File Reference

Classes

- class [rapp_email.email_sender.EmailSender](#)

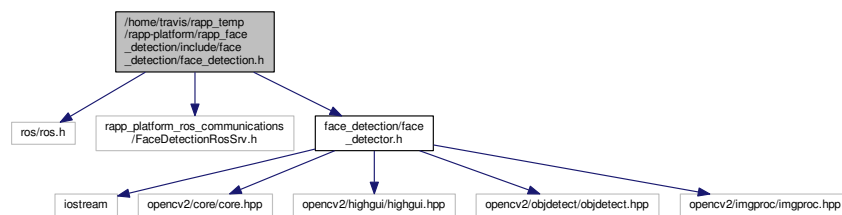
Namespaces

- [rapp_email.email_sender](#)

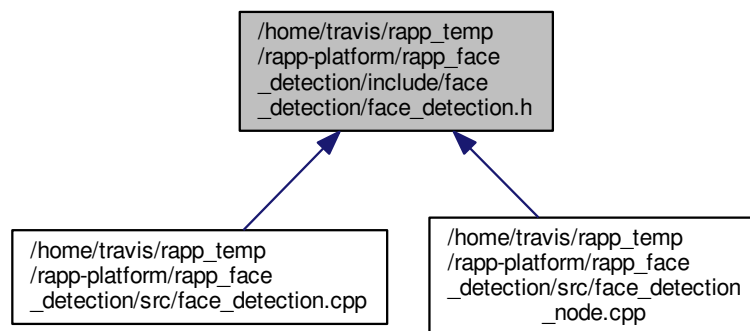
7.34 /home/travis/rapp_temp/rapp-platform/rapp_face_detection/include/face_detection/face- _detection.h File Reference

```
#include "ros/ros.h"
#include <rapp_platform_ros_communications/FaceDetectionRosSrv.h>
#include <face_detection/face_detector.h>
```

Include dependency graph for face_detection.h:



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



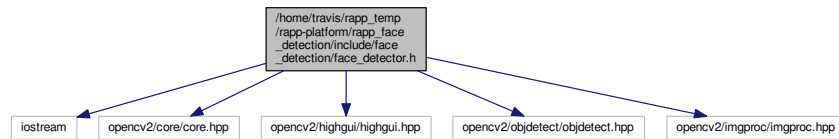
Classes

- class [FaceDetection](#)
Class [FaceDetection](#) uptakes the task of handling the ROS service callbacks.

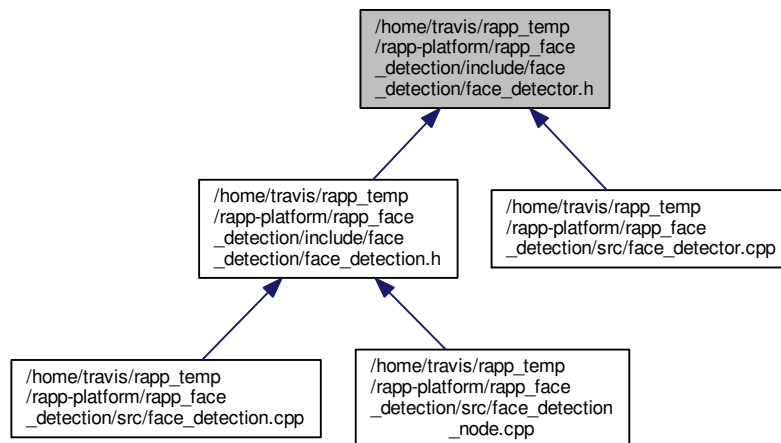
7.35 /home/travis/rapp_temp/rapp-platform/rapp_face_detection/include/face_detection/face- _detector.h File Reference

```
#include <iostream>
```

```
#include <opencv2/core/core.hpp>
#include <opencv2/highgui/highgui.hpp>
#include <opencv2/objdetect/objdetect.hpp>
#include <opencv2/imgproc/imgproc.hpp>
Include dependency graph for face_detector.h:
```



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



Classes

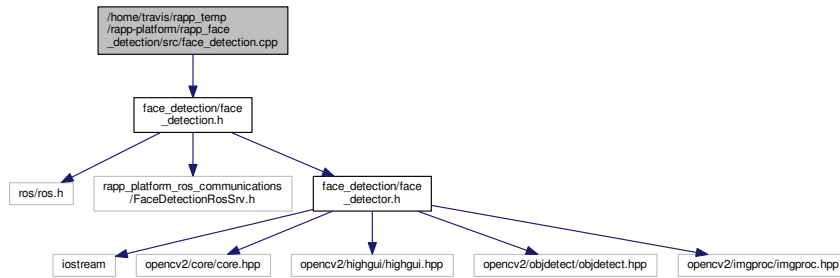
- class [FaceDetector](#)

Class that implements a face detection algorithm based on a Haar cascade classifier.

7.36 /home/travis/rapp_temp/rapp-platform/rapp_face_detection/src/face_detection.cpp File Reference

```
#include <face_detection/face_detection.h>
```

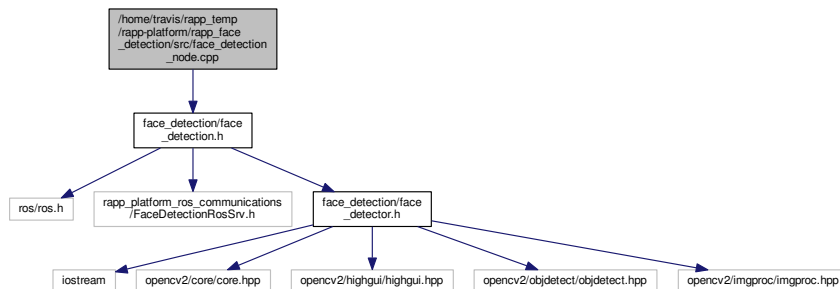
Include dependency graph for face_detection.cpp:



7.37 /home/travis/rapp_temp/rapp-platform/rapp_face_detection/src/face_detection_node.cpp File Reference

```
#include <face_detection/face_detection.h>
```

Include dependency graph for face_detection_node.cpp:



Functions

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

The executable's main function. Creates a ROS multispinner to enable concurrent requests and declares a [Face-Detection](#) object.

7.37.1 Function Documentation

7.37.1.1 int main (int argc, char ** argv)

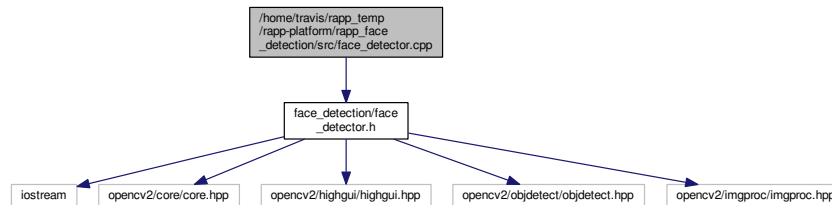
The executable's main function. Creates a ROS multispinner to enable concurrent requests and declares a [Face-Detection](#) object.

Definition at line 24 of file face_detection_node.cpp.

7.38 /home/travis/rapp_temp/rapp-platform/rapp_face_detection/src/face_detector.cpp File Reference

```
#include <face_detection/face_detector.h>
```

Include dependency graph for face_detector.cpp:



7.39 /home/travis/rapp_temp/rapp-platform/rapp_geolocator/src/rapp_geolocator/geolocator_base.py File Reference

Classes

- class [rapp_geolocator.geolocator_base.GeolocatorBase](#)
Base class for geolocators.

Namespaces

- [rapp_geolocator.geolocator_base](#)

7.40 /home/travis/rapp_temp/rapp-platform/rapp_geolocator/src/rapp_geolocator/geolocator_factory.py File Reference

Classes

- class [rapp_geolocator.geolocator_factory.GeolocatorFactory](#)

Namespaces

- [rapp_geolocator.geolocator_factory](#)

7.41 /home/travis/rapp_temp/rapp-platform/rapp_geolocator/src/rapp_geolocator/geolocator_node.py File Reference

Classes

- class [rapp_geolocator.geolocator_node.GeolocatorNode](#)
Calculates geolocation via IP.

Namespaces

- [rapp_geolocator.geolocator_node](#)

Variables

- tuple [rapp_geolocator.geolocator_node.geolocator_node](#) = GeolocatorNode()

7.42 /home/travis/rapp_temp/rapp-platform/rapp_geolocator/src/rapp_geolocator/ip_api_locator.py File Reference

Classes

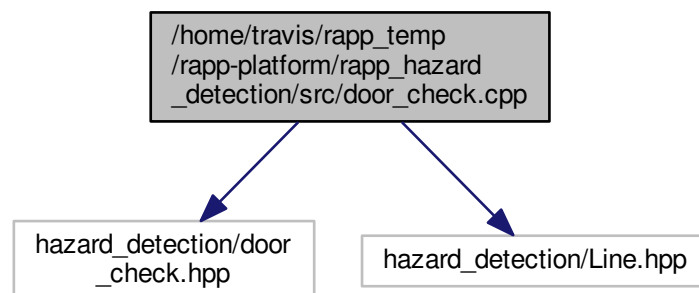
- class [rapp_geolocator.ip_api_locator.IpAPILocator](#)
IP-API locator.

Namespaces

- [rapp_geolocator.ip_api_locator](#)

7.43 /home/travis/rapp_temp/rapp-platform/rapp_hazard_detection/src/door_check.cpp File Reference

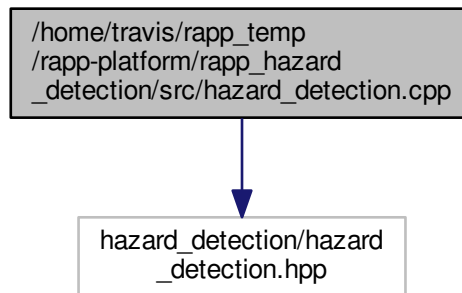
```
#include <hazard_detection/door_check.hpp>
#include <hazard_detection/Line.hpp>
Include dependency graph for door_check.cpp:
```



7.44 /home/travis/rapp_temp/rapp-platform/rapp_hazard_detection/src/hazard_detection.cpp File Reference

```
#include <hazard_detection/hazard_detection.hpp>
```

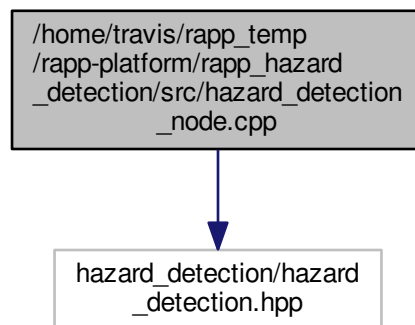
Include dependency graph for hazard_detection.cpp:



7.45 /home/travis/rapp_temp/rapp-platform/rapp_hazard_detection/src/hazard_detection_node.cpp File Reference

```
#include <hazard_detection/hazard_detection.hpp>
```

Include dependency graph for hazard_detection_node.cpp:



Functions

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

The executable's main function. Creates a ROS multispinner to enable concurrent requests and declares a Hazard-Detection object.

7.45.1 Function Documentation

7.45.1.1 `int main (int argc, char ** argv)`

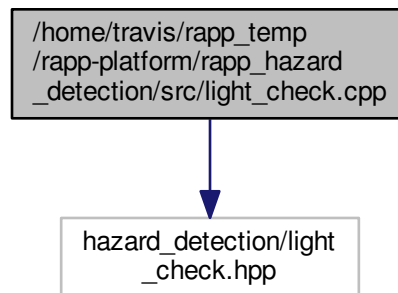
The executable's main function. Creates a ROS multispinner to enable concurrent requests and declares a Hazard-Detection object.

Definition at line 24 of file `hazard_detection_node.cpp`.

7.46 /home/travis/rapp_temp/rapp-platform/rapp_hazard_detection/src/light_check.cpp File Reference

```
#include <hazard_detection/light_check.hpp>
```

Include dependency graph for `light_check.cpp`:



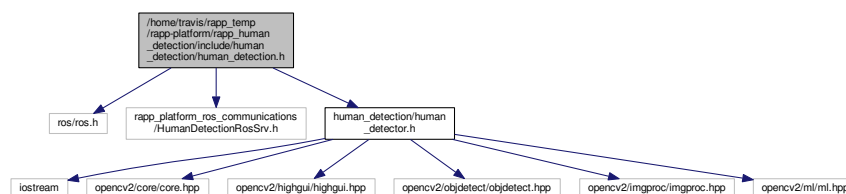
7.47 /home/travis/rapp_temp/rapp-platform/rapp_human_detection/include/human_detection/human_detection.h File Reference

```
#include "ros/ros.h"
```

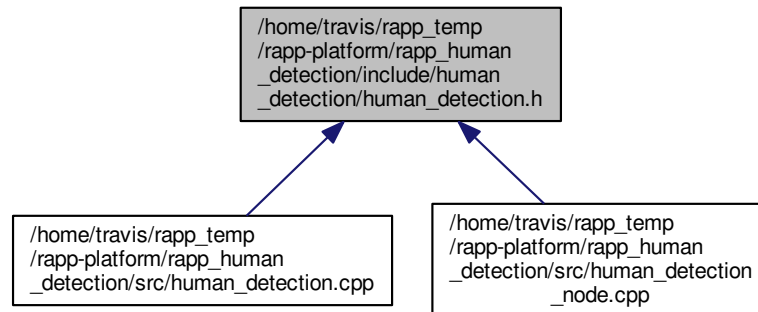
```
#include <rapp_platform_ros_communications/HumanDetectionRosSrv.h>
```

```
#include <human_detection/human_detector.h>
```

Include dependency graph for `human_detection.h`:



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



Classes

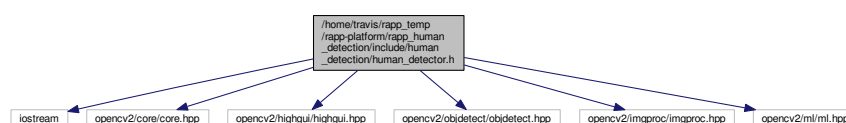
- class [HumanDetection](#)

Class [HumanDetection](#) uptakes the task of handling the ROS service callbacks.

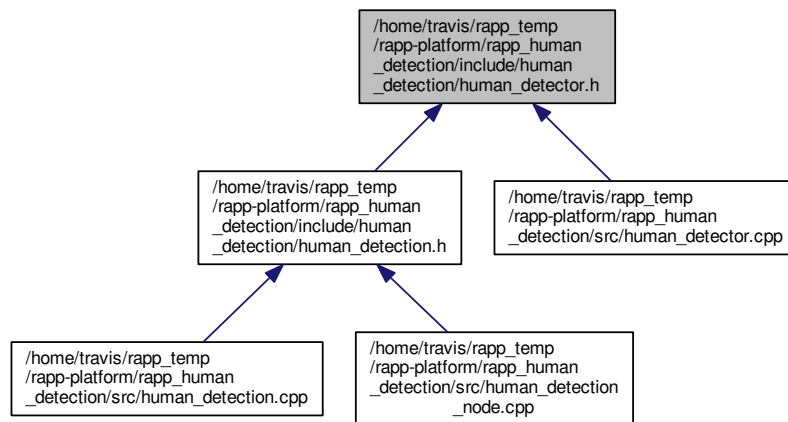
7.48 /home/travis/rapp_temp/rapp-platform/rapp_human_detection/include/human_detection/human_detector.h File Reference

```
#include <iostream>
#include <opencv2/core/core.hpp>
#include <opencv2/highgui/highgui.hpp>
#include <opencv2/objdetect/objdetect.hpp>
#include <opencv2/imgproc/imgproc.hpp>
#include <opencv2/ml/ml.hpp>
```

Include dependency graph for `human_detector.h`:



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



Classes

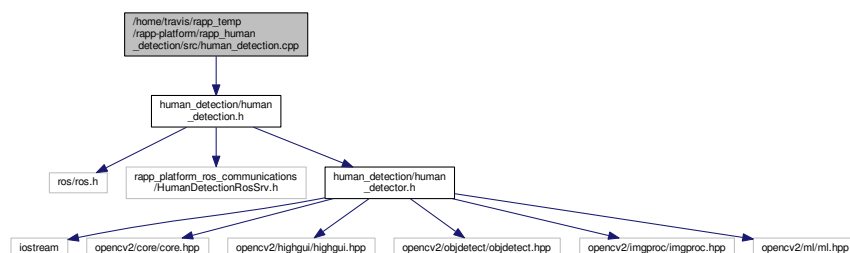
- class [HumanDetector](#)

Class that implements a human detection algorithm based on a Haar cascade classifier.

7.49 /home/travis/rapp_temp/rapp-platform/rapp_human_detection/src/human_detection.cpp File Reference

```
#include <human_detection/human_detection.h>
```

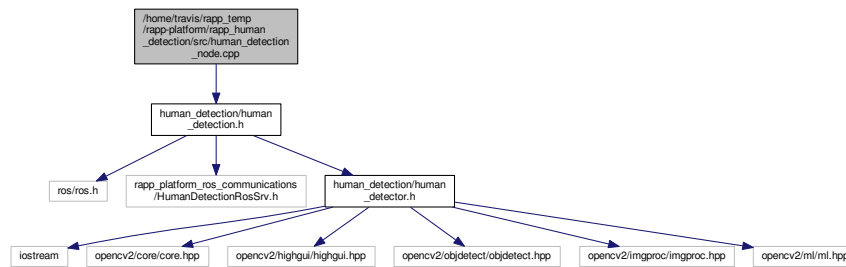
Include dependency graph for human_detection.cpp:



7.50 /home/travis/rapp_temp/rapp-platform/rapp_human_detection/src/human_detection_node.cpp File Reference

```
#include <human_detection/human_detection.h>
```

Include dependency graph for `human_detection_node.cpp`:



Functions

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

The executable's main function. Creates a ROS multispinner to enable concurrent requests and declares a [Human-Detection](#) object.

7.50.1 Function Documentation

7.50.1.1 `int main (int argc, char ** argv)`

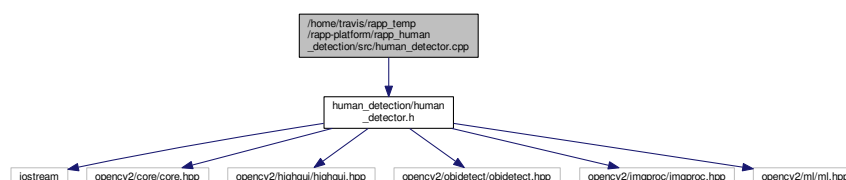
The executable's main function. Creates a ROS multispinner to enable concurrent requests and declares a [Human-Detection](#) object.

Definition at line 24 of file `human_detection_node.cpp`.

7.51 /home/travis/rapp_temp/rapp-platform/rapp_human_detection/src/human_detector.cpp File Reference

```
#include <human_detection/human_detector.h>
```

Include dependency graph for `human_detector.cpp`:



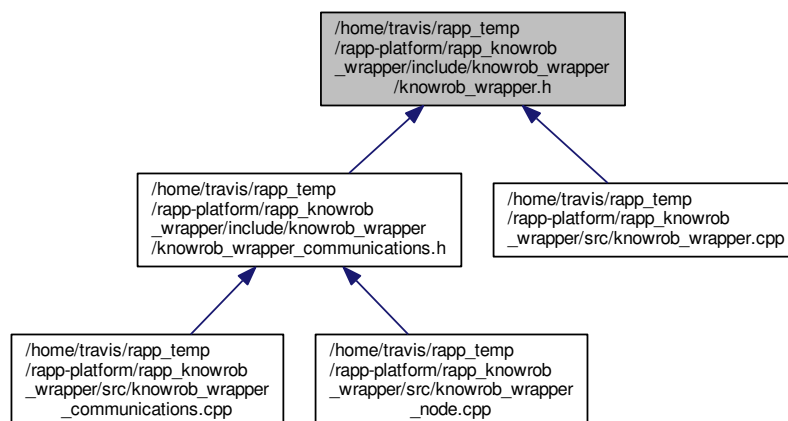
7.52 /home/travis/rapp_temp/rapp-platform/rapp_knowrob_wrapper/include/knowrob_wrapper/knowrob_wrapper.h File Reference

```
#include <string>
```

```
#include <iostream>
#include <json_prolog/prolog.h>
#include <rapp_platform_ros_communications/registerUserOntologyAliasSrv.h>
#include <rapp_platform_ros_communications/getUserOntologyAliasSrv.h>
#include <rapp_platform_ros_communications/StringArrayMsg.h>
#include <rapp_platform_ros_communications/createInstanceSrv.h>
#include <rapp_platform_ros_communications/ontologyInstancesOfSrv.h>
#include <rapp_platform_ros_communications/ontologyLoadDumpSrv.h>
#include <rapp_platform_ros_communications/ontologySubSuperClassesOfSrv.h>
#include <rapp_platform_ros_communications/assertRetractAttributeSrv.h>
#include <rapp_platform_ros_communications/ontologyIsSubSuperClassOfSrv.h>
#include <rapp_platform_ros_communications/returnUserInstancesOfClassSrv.h>
#include <rapp_platform_ros_communications/createOntologyAliasSrv.h>
#include <rapp_platform_ros_communications/userPerformanceCognitiveTests-
Srv.h>
#include <rapp_platform_ros_communications/createCognitiveExerciseTestSrv.-
h>
#include <rapp_platform_ros_communications/cognitiveTestsOfTypeSrv.h>
#include <rapp_platform_ros_communications/recordUserPerformanceCognitive-
TestsSrv.h>
#include <rapp_platform_ros_communications/clearUserPerformanceCognitive-
TestsSrv.h>
#include <rapp_platform_ros_communications/registerImageObjectToOntology-
Srv.h>
#include <rapp_platform_ros_communications/retractUserOntologyAliasSrv.h>
Include dependency graph for knowrob_wrapper.h:
```



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



Classes

- class [KnowrobWrapper](#)

Class [KnowrobWrapperCommunications](#) contains all the necessary knowrob wrapper functions.

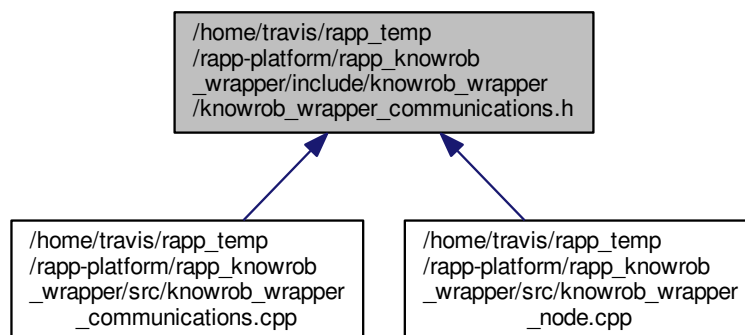
7.53 /home/travis/rapp_temp/rapp-platform/rapp_knowrob_wrapper/include/knowrob_wrapper/knowrob_wrapper_communications.h File Reference

```
#include <knowrob_wrapper/knowrob_wrapper.h>
#include <ros/ros.h>
```

Include dependency graph for knowrob_wrapper_communications.h:



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



Classes

- class [KnowrobWrapperCommunications](#)

Class [KnowrobWrapperCommunications](#) uptakes the task of handling the ROS service callbacks.

7.54 /home/travis/rapp_temp/rapp-platform/rapp_knowrob_wrapper/src/knowrob_wrapper.cpp File Reference

```
#include <knowrob_wrapper/knowrob_wrapper.h>
#include <sys/stat.h>
#include <unistd.h>
#include <sstream>
#include <ros/package.h>
#include <fstream>
```

Include dependency graph for knowrob_wrapper.cpp:



Functions

- bool [checkIfFileExists](#) (const char *fileName)
Checks if path exists.
- bool [checkIfStringContainsString](#) (std::string a, std::string b)
Checks if the second string is contained within the first string.
- bool [checkIfStringVectorContainsString](#) (std::vector< std::string > vec, std::string a)
Check if a string is contained in a vector string.
- std::string [intToString](#) (int a)
Converts integer to string.
- std::vector< std::string > [split](#) (std::string str, std::string sep)
Splits string by delimiter.
- std::string [SplitFilename](#) (const std::string &str)
Keeps only the final folder or file from a path.

7.54.1 Function Documentation

7.54.1.1 bool checkIfFileExists (const char * fileName)

Checks if path exists.

Parameters

<i>fileName</i>	[char*] The input path
-----------------	------------------------

Returns

out [bool] True if file exists

Definition at line 103 of file knowrob_wrapper.cpp.

7.54.1.2 bool checkIfStringContainsString (std::string a, std::string b)

Checks if the second string is contained within the first string.

Parameters

<i>a</i>	[string] The first string
----------	---------------------------

Returns

b [string] The second String

Definition at line 68 of file knowrob_wrapper.cpp.

7.54.1.3 bool checkIfStringVectorContainsString (std::vector< std::string > vec, std::string a)

Check if a string is contained in a vector string.

Parameters

<i>vec</i>	[vector<string>] The vector containing strings
------------	--

Returns

a [string] The string to check if it is contained

Definition at line 52 of file knowrob_wrapper.cpp.

7.54.1.4 `std::string intToString (int a)`

Converts integer to string.

out [string] The output string

7.54.1.5 `std::vector<std::string> split (std::string str, std::string sep)`

Parameters

<i>str</i>	[string] The input string
<i>sep</i>	[string] The delimiter

`arr [vector<string>]` A vector with the string parts as splitted by the delimiter

7.54.1.6 `std::string SplitFilename (const std::string & str)`

Parameters

<i>str</i>	[string&] The input path
------------	--------------------------

out [string] The output filename

7.55 /home/travis/rapp_temp/rapp-platform/rapp-knowrob-wrapper/src/knownrob_wrapper-
_communications.cpp File Reference

```

graph TD
    A[Proposed Framework for the Detection of Malware] --> B[Malware Detection]
    A --> C[Malware Classification]
    B --> D[Signature-based Detection]
    B --> E[Behavior-based Detection]
    D --> F[Signature-based Detection using Static Analysis]
    D --> G[Signature-based Detection using Dynamic Analysis]
    E --> H[Behavior-based Detection using Static Analysis]
    E --> I[Behavior-based Detection using Dynamic Analysis]
    F --> J[Adware]
    F --> K[Spyware]
    F --> L[Trojan]
    F --> M[Ransomware]
    F --> N[Worm]
    F --> O[Virus]
    F --> P[Rootkit]
    F --> Q[Botnet]
    F --> R[Malware]
    G --> J
    G --> K
    G --> L
    G --> M
    G --> N
    G --> O
    G --> P
    G --> Q
    G --> R
    H --> J
    H --> K
    H --> L
    H --> M
    H --> N
    H --> O
    H --> P
    H --> Q
    H --> R
    I --> J
    I --> K
    I --> L
    I --> M
    I --> N
    I --> O
    I --> P
    I --> Q
    I --> R
  
```

7.56 /home/travis/rapp_temp/rapp-platform/rapp_knowrob_wrapper/src/knowrob_wrapper_node.cpp File Reference

```
#include <knowrob_wrapper/knowrob_wrapper_communications.h>
```

Include dependency graph for knowrob_wrapper_node.cpp:



Functions

- `int main (int argc, char **argv)`
The executable's main function. Creates a ROS multispinner to enable concurrent requests and declares a [KnowrobWrapperCommunications](#) object.

7.56.1 Function Documentation

7.56.1.1 `int main (int argc, char ** argv)`

The executable's main function. Creates a ROS multispinner to enable concurrent requests and declares a [KnowrobWrapperCommunications](#) object.

Definition at line 27 of file knowrob_wrapper_node.cpp.

7.57 /home/travis/rapp_temp/rapp-platform/rapp_mysql_wrapper/src/mysql_wrapper.py File Reference

Classes

- class `mysql_wrapper.MySQLdbWrapper`
The mysql wrapper ros node.

Namespaces

- `mysql_wrapper`

7.58 /home/travis/rapp_temp/rapp-platform/rapp_mysql_wrapper/src/mysql_wrapper_main.py File Reference

Namespaces

- `mysql_wrapper_main`

Variables

- tuple `mysql_wrapper_main.MySQLWrapperNode = MySQLdbWrapper()`
The main function that initiates the rapp mysql wrapper ROS Node.

7.59 /home/travis/rapp_temp/rapp-platform/rapp_mysql_wrapper/src/mysql_wrapper_old.py File Reference

Classes

- class [mysql_wrapper_old.MySQLdbWrapper](#)
The mysql wrapper ros node.

Namespaces

- [mysql_wrapper_old](#)

7.60 /home/travis/rapp_temp/rapp-platform/rapp_news_explorer/src/rapp_news_explorer/engine_factory.py File Reference

Classes

- class [rapp_news_explorer.engine_factory.EngineFactory](#)
Creates and returns the class of the news engine requested.

Namespaces

- [rapp_news_explorer.engine_factory](#)

7.61 /home/travis/rapp_temp/rapp-platform/rapp_news_explorer/src/rapp_news_explorer/event_registry_engine.py File Reference

Classes

- class [rapp_news_explorer.event_registry_engine.EventRegistryEngine](#)
EventRegistry news engine hndler.

Namespaces

- [rapp_news_explorer.event_registry_engine](#)

7.62 /home/travis/rapp_temp/rapp-platform/rapp_news_explorer/src/rapp_news_explorer/google_news_engine.py File Reference

Classes

- class [rapp_news_explorer.google_news_engine.GoogleNewsEngine](#)
Google news engine hndler.

Namespaces

- [rapp_news_explorer.google_news_engine](#)

7.63 /home/travis/rapp_temp/rapp-platform/rapp_news_explorer/src/rapp_news_explorer/news_engine_base.py File Reference

Classes

- class [rapp_news_explorer.news_engine_base.NewsEngineBase](#)
Base class for news engines.

Namespaces

- [rapp_news_explorer.news_engine_base](#)

7.64 /home/travis/rapp_temp/rapp-platform/rapp_news_explorer/src/rapp_news_explorer/news_explorer_node.py File Reference

Classes

- class [rapp_news_explorer.news_explorer_node.NewsExplorerNode](#)
Fetches news from various News sites' APIs.

Namespaces

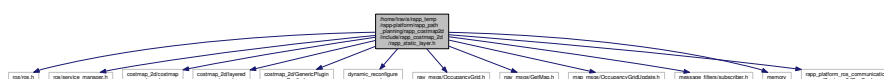
- [rapp_news_explorer.news_explorer_node](#)

Variables

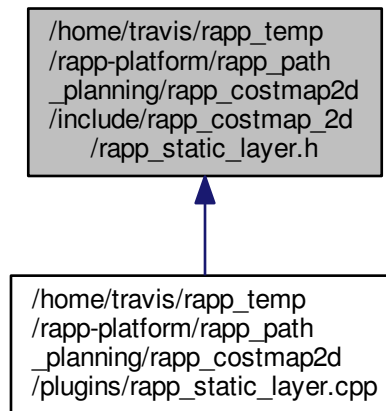
- tuple [rapp_news_explorer.news_explorer_node.news_explorer_node](#) = [NewsExplorerNode\(\)](#)

7.65 /home/travis/rapp_temp/rapp-platform/rapp_path_planning/rapp_costmap2d/include/rapp_costmap_2d/rapp_static_layer.h File Reference

```
#include <ros/ros.h>
#include <ros/service_manager.h>
#include <costmap_2d/costmap_layer.h>
#include <costmap_2d/layered_costmap.h>
#include <costmap_2d/GenericPluginConfig.h>
#include <dynamic_reconfigure/server.h>
#include <nav_msgs/OccupancyGrid.h>
#include <nav_msgs/GetMap.h>
#include <map_msgs/OccupancyGridUpdate.h>
#include <message_filters/subscriber.h>
#include <memory>
#include <rapp_platform_ros_communications/Costmap2dRosSrv.h>
Include dependency graph for rapp_static_layer.h:
```



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



Classes

- class `costmap_2d::RappStaticLayer`

Namespaces

- costmap_2d

7.66 /home/travis/rapp_temp/rapp-platform/rapp_path_planning/rapp_costmap2d/plugins/rapp-
_static_layer.cpp File Reference

```
#include <rapp_costmap_2d/rapp_static_layer.h>
```

```
#include <costmap_2d/costmap_math.h>
```

```
#include <pluginlib/class_list_macros.h>
```

Include dependency graph for rapp_static_layer.cpp:



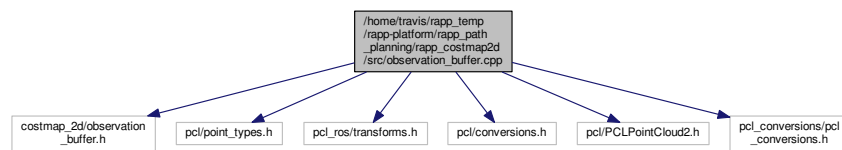
Namespaces

- costmap_2d

7.67 /home/travis/rapp_temp/rapp-platform/rapp_path_planning/rapp_costmap2d/src/observation_buffer.cpp File Reference

```
#include <costmap_2d/observation_buffer.h>
#include <pcl/point_types.h>
#include <pcl_ros/transforms.h>
#include <pcl/conversions.h>
#include <pcl/PCLPointCloud2.h>
#include <pcl_conversions/pcl_conversions.h>
```

Include dependency graph for observation_buffer.cpp:



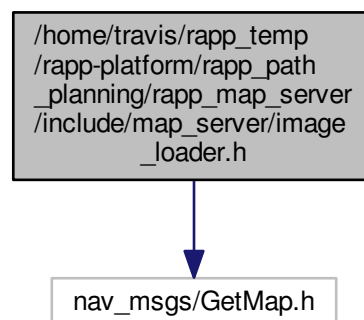
Namespaces

- [costmap_2d](#)

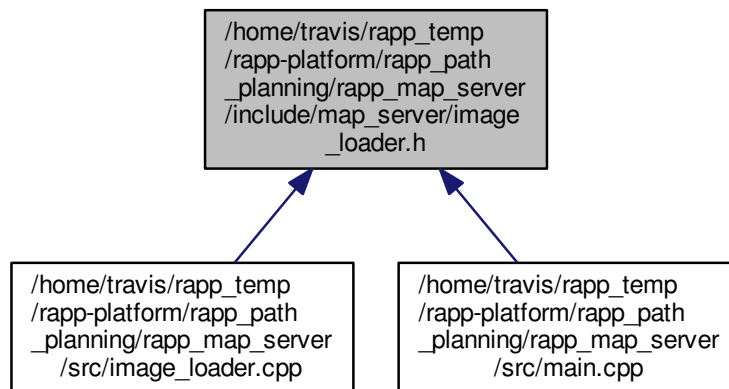
7.68 /home/travis/rapp_temp/rapp-platform/rapp_path_planning/rapp_map_server/include/map_server/image_loader.h File Reference

```
#include "nav_msgs/GetMap.h"
```

Include dependency graph for image_loader.h:



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



Namespaces

- [map_server](#)

Functions

- void [map_server::loadMapFromFile](#) (nav_msgs::GetMap::Response *resp, const char *fname, double res, bool negate, double occ_th, double free_th, double *origin, bool trinary=true)

7.69 /home/travis/rapp_temp/rapp-platform/rapp_path_planning/rapp_map_server/scripts/crop_map.py File Reference

Namespaces

- [crop_map](#)

Functions

- def [crop_map.computed_cropped_origin](#)
- def [crop_map.find_bounds](#)

Variables

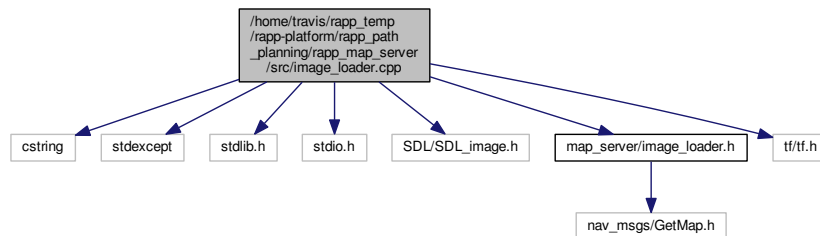
- tuple [crop_map.bounds](#) = [find_bounds](#)(map_image)
- string [crop_map.crop_image](#) = crop_name+".pgm"
- list [crop_map.crop_name](#) = sys.argv[2]
- string [crop_map.crop_yaml](#) = crop_name+".yaml"
- tuple [crop_map.cropped_image](#) = map_image.crop((bounds[0], bounds[2], bounds[1] + 1, bounds[3] + 1))
- tuple [crop_map.map_data](#) = yaml.safe_load(f)
- tuple [crop_map.map_image](#) = Image.open(map_image_file)

- list `crop_map.map_image_file` = `map_data["image"]`
- list `crop_map.origin` = `map_data["origin"]`
- list `crop_map.resolution` = `map_data["resolution"]`

7.70 /home/travis/rapp_temp/rapp-platform/rapp_path_planning/rapp_map_server/src/image_loader.cpp File Reference

```
#include <cstring>
#include <stdexcept>
#include <stdlib.h>
#include <stdio.h>
#include <SDL/SDL_image.h>
#include "map_server/image_loader.h"
#include <tf/tf.h>
```

Include dependency graph for image_loader.cpp:



Namespaces

- `map_server`

Macros

- `#define MAP_IDX(sx, i, j) ((sx) * (j) + (i))`

Functions

- void `map_server::loadMapFromFile` (`nav_msgs::GetMap::Response *resp`, `const char *fname`, `double res`, `bool negate`, `double occ_th`, `double free_th`, `double *origin`, `bool trinary=true`)

7.70.1 Macro Definition Documentation

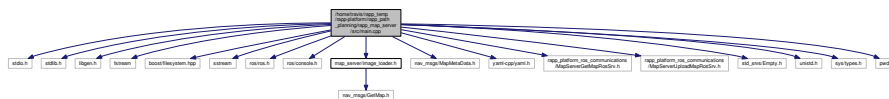
7.70.1.1 `#define MAP_IDX(sx, i, j) ((sx) * (j) + (i))`

Definition at line 49 of file `image_loader.cpp`.

7.71 /home/travis/rapp_temp/rapp-platform/rapp_path_planning/rapp_map_server/src/main.cpp File Reference

```
#include <stdio.h>
#include <stdlib.h>
#include <libgen.h>
#include <fstream>
#include <boost/filesystem.hpp>
#include <sstream>
#include "ros/ros.h"
#include "ros/console.h"
#include "map_server/image_loader.h"
#include "nav_msgs/MapMetaData.h"
#include "yaml-cpp/yaml.h"
#include "rapp_platform_ros_communications/MapServerGetMapRosSrv.h"
#include "rapp_platform_ros_communications/MapServerUploadMapRosSrv.h"
#include "std_srvs/Empty.h"
#include <unistd.h>
#include <sys/types.h>
#include <pwd.h>
```

Include dependency graph for main.cpp:



Classes

- class [MapServer](#)

Macros

- `#define` [USAGE](#)

Functions

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

7.71.1 Macro Definition Documentation

7.71.1.1 `#define` [USAGE](#)

Value:

```
"\nUSAGE: map_server <map.yaml>\n" \
"  map.yaml: map description file\n" \
"DEPRECATED USAGE: map_server <map> <resolution>\n" \
"  map: image file to load\n" \
"  resolution: map resolution [meters/pixel]"
```

Definition at line 38 of file main.cpp.

7.71.2 Function Documentation

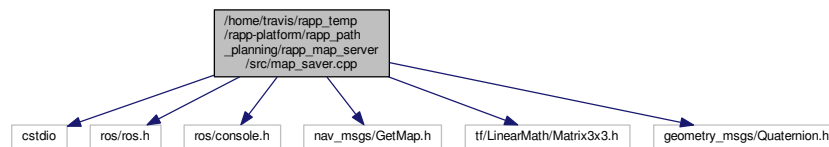
7.71.2.1 `int main (int argc, char ** argv)`

Definition at line 288 of file `main.cpp`.

7.72 `/home/travis/rapp_temp/rapp-platform/rapp_path_planning/rapp_map_server/src/map_saver.cpp` File Reference

```
#include <cstdio>
#include "ros/ros.h"
#include "ros/console.h"
#include "nav_msgs/GetMap.h"
#include "tf/LinearMath/Matrix3x3.h"
#include "geometry_msgs/Quaternion.h"
```

Include dependency graph for `map_saver.cpp`:



Classes

- class [MapGenerator](#)
Map generation node.

Macros

- `#define` [USAGE](#)

Functions

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

7.72.1 Macro Definition Documentation

7.72.1.1 `#define USAGE`

Value:

```
"Usage: \n" \
    "  map_saver -h\n" \
    "  map_saver [-f <mapname>] [ROS remapping args]"
```

Definition at line 124 of file `map_saver.cpp`.

7.72.2 Function Documentation

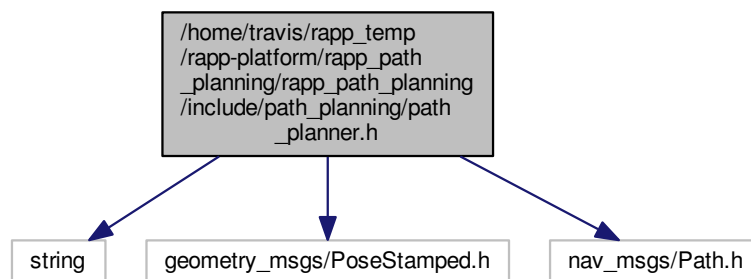
7.72.2.1 int main (int argc, char ** argv)

Definition at line 128 of file map_saver.cpp.

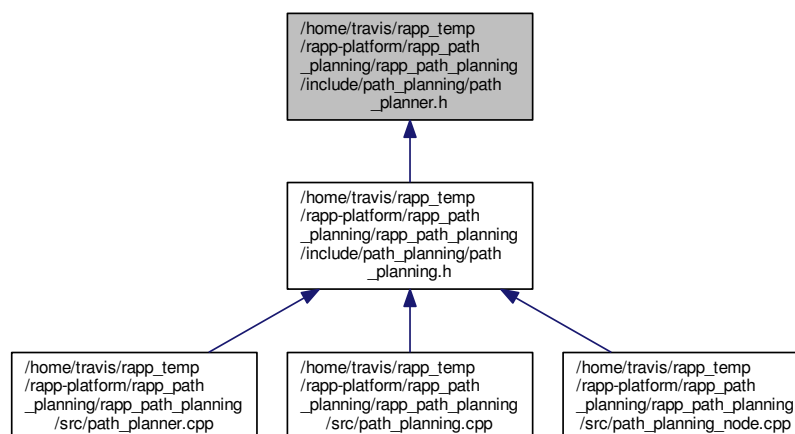
7.73 /home/travis/rapp_temp/rapp-platform/rapp_path_planning/rapp_path_planning/include/path_planning/path_planner.h File Reference

```
#include <string>
#include <geometry_msgs/PoseStamped.h>
#include <nav_msgs/Path.h>
```

Include dependency graph for path_planner.h:



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



Classes

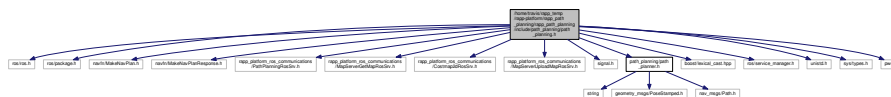
- class [PathPlanner](#)

Class that implements a path planning algorithm based on `global_planner` and `map_server` ROS nodes.

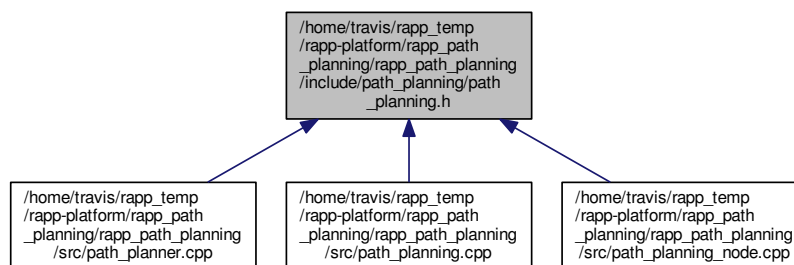
7.74 /home/travis/rapp_temp/rapp-platform/rapp_path_planning/rapp_path_planning/include/path_planning/path_planning.h File Reference

```
#include "ros/ros.h"
#include "ros/package.h"
#include <navfn/MakeNavPlan.h>
#include <navfn/MakeNavPlanResponse.h>
#include <rapp_platform_ros_communications/PathPlanningRosSrv.h>
#include "rapp_platform_ros_communications/MapServerGetMapRosSrv.h"
#include "rapp_platform_ros_communications/Costmap2dRosSrv.h"
#include "rapp_platform_ros_communications/MapServerUploadMapRosSrv.h"
#include <signal.h>
#include <path_planning/path_planner.h>
#include <boost/lexical_cast.hpp>
#include <ros/service_manager.h>
#include <unistd.h>
#include <sys/types.h>
#include <pwd.h>
```

Include dependency graph for `path_planning.h`:



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



Classes

- class [PathPlanning](#)

7.75 /home/travis/rapp_temp/rapp-platform/rapp_path_planning/rapp_path_planning/src/path_planner.cpp File Reference

```
#include <path_planning/path_planning.h>
```


7.77.2 Variable Documentation

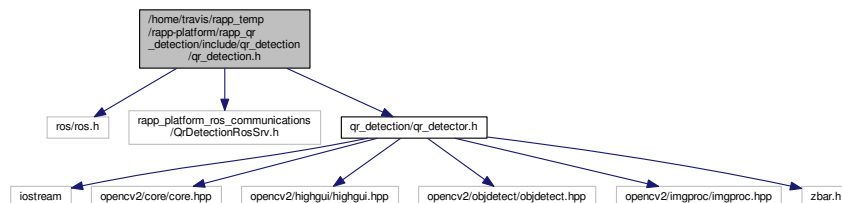
7.77.2.1 PathPlanning* path_planning_

Definition at line 3 of file path_planning_node.cpp.

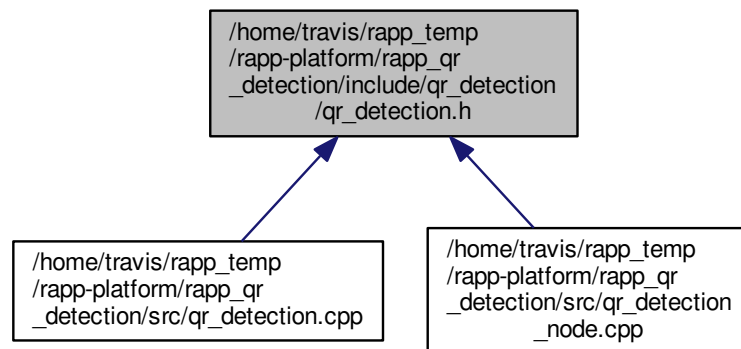
7.78 /home/travis/rapp_temp/rapp-platform/rapp_qr_detection/include/qr_detection/qr_detection.h File Reference

```
#include "ros/ros.h"
#include <rapp_platform_ros_communications/QrDetectionRosSrv.h>
#include <qr_detection/qr_detector.h>
```

Include dependency graph for qr_detection.h:



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



Classes

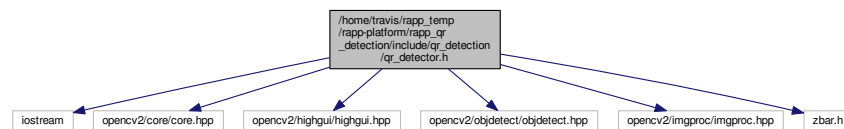
- class [QrDetection](#)

Uptakes the task of setting up the ROS service callbacks towards qr detection.

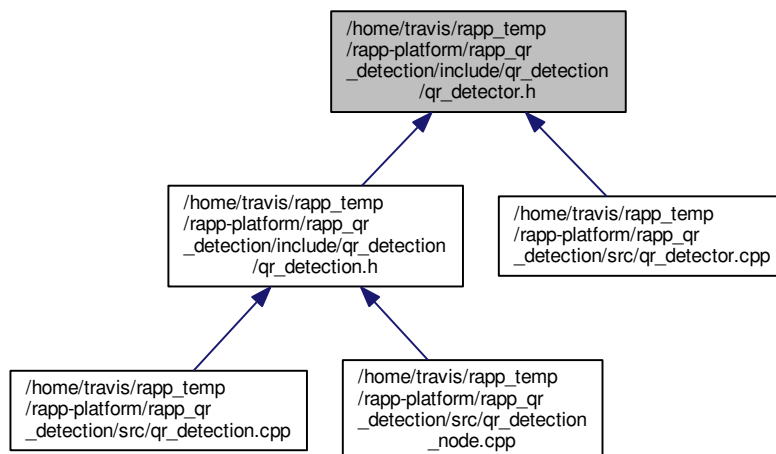
7.79 /home/travis/rapp_temp/rapp-platform/rapp_qr_detection/include/qr_detection/qr_detector.h File Reference

```
#include <iostream>
#include <opencv2/core/core.hpp>
#include <opencv2/highgui/highgui.hpp>
#include <opencv2/objdetect/objdetect.hpp>
#include <opencv2/imgproc/imgproc.hpp>
#include <zbar.h>
```

Include dependency graph for qr_detector.h:



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



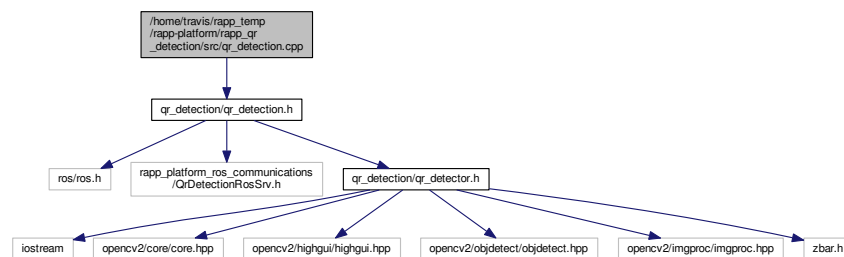
Classes

- class [QrCode](#)
Structure holding the essential info for a QR code.
- class [QrDetector](#)
Provides the QR detection functionality.

7.80 /home/travis/rapp_temp/rapp-platform/rapp_qr_detection/src/qr_detection.cpp File Reference

```
#include <qr_detection/qr_detection.h>
```

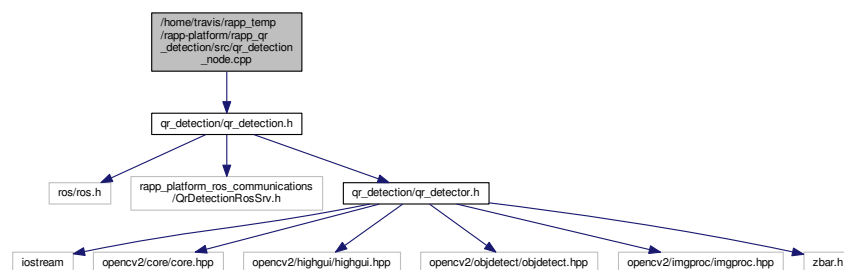

Include dependency graph for qr_detection.cpp:



7.81 /home/travis/rapp_temp/rapp-platform/rapp_qr_detection/src/qr_detection_node.cpp File Reference

```
#include <qr_detection/qr_detection.h>
```

Include dependency graph for qr_detection_node.cpp:



Functions

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

The main function. Retrieves the threads parameter in order to enable concurrent service invocation.

7.81.1 Function Documentation

7.81.1.1 int main (int argc, char ** argv)

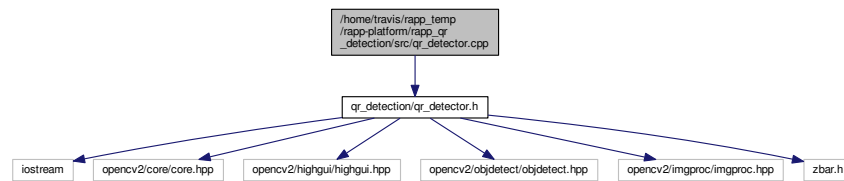
The main function. Retrieves the threads parameter in order to enable concurrent service invocation.

Definition at line 25 of file qr_detection_node.cpp.

7.82 /home/travis/rapp_temp/rapp-platform/rapp_qr_detection/src/qr_detector.cpp File Reference

```
#include <qr_detection/qr_detector.h>
```

Include dependency graph for qr_detector.cpp:



7.83 /home/travis/rapp_temp/rapp-platform/rapp_speech_detection_google/src/speech_recognition_google.py File Reference

Classes

- class [speech_recognition_google.SpeechToTextGoogle](#)
Implements calls the Google ASR API.

Namespaces

- [speech_recognition_google](#)

Variables

- tuple [speech_recognition_google.speech_to_text_node](#) = `SpeechToTextGoogle()`
The main function.

7.84 /home/travis/rapp_temp/rapp-platform/rapp_speech_detection_sphinx4/src/rapp_speech_detection_sphinx4/english_support.py File Reference

Classes

- class [rapp_speech_detection_sphinx4.english_support.EnglishSupport](#)
Allows the creation of configuration files for English Sphinx speech recognition.

Namespaces

- [rapp_speech_detection_sphinx4.english_support](#)

7.85 /home/travis/rapp_temp/rapp-platform/rapp_speech_detection_sphinx4/src/rapp_speech_detection_sphinx4/global_parameters.py File Reference

Classes

- class [rapp_speech_detection_sphinx4.global_parameters.GlobalParams](#)
Contains global Sphinx parameters.

Namespaces

- [rapp_speech_detection_sphinx4.global_parameters](#)

7.86 /home/travis/rapp_temp/rapp-platform/rapp_speech_detection_sphinx4/src/rapp_speech_detection_sphinx4/greek_english_support.py File Reference

Classes

- class [rapp_speech_detection_sphinx4.greek_english_support.GreekEnglishSupport](#)

Namespaces

- [rapp_speech_detection_sphinx4.greek_english_support](#)

7.87 /home/travis/rapp_temp/rapp-platform/rapp_speech_detection_sphinx4/src/rapp_speech_detection_sphinx4/greek_support.py File Reference

Classes

- class [rapp_speech_detection_sphinx4.greek_support.GreekSupport](#)
Allows the creation of configuration files for Greek Sphinx speech recognition.

Namespaces

- [rapp_speech_detection_sphinx4.greek_support](#)

7.88 /home/travis/rapp_temp/rapp-platform/rapp_speech_detection_sphinx4/src/rapp_speech_detection_sphinx4/language_support.py File Reference

Classes

- class [rapp_speech_detection_sphinx4.language_support.LanguageSupport](#)
Allows the creation of configuration files for Sphinx speech recognition.

Namespaces

- [rapp_speech_detection_sphinx4.language_support](#)

7.89 /home/travis/rapp_temp/rapp-platform/rapp_speech_detection_sphinx4/src/rapp_speech_detection_sphinx4/limited_vocabulary_creator.py File Reference

Classes

- class [rapp_speech_detection_sphinx4.limited_vocabulary_creator.LimitedVocabularyCreator](#)
Creates temporary configuration files for the input limited vocabulary.

Namespaces

- [rapp_speech_detection_sphinx4.limited_vocabulary_creator](#)

7.90 /home/travis/rapp_temp/rapp-platform/rapp_speech_detection_sphinx4/src/rapp_speech_detection_sphinx4/speech_recognition_sphinx4.py File Reference

Classes

- class [rapp_speech_detection_sphinx4.speech_recognition_sphinx4.SpeechRecognitionSphinx4](#)
Provides a complete Rapp Sphinx Entity.

Namespaces

- [rapp_speech_detection_sphinx4.speech_recognition_sphinx4](#)

Variables

- tuple [rapp_speech_detection_sphinx4.speech_recognition_sphinx4.SpeechRecognitionSphinx4Node](#) = [SpeechRecognitionSphinx4\(\)](#)

7.91 /home/travis/rapp_temp/rapp-platform/rapp_speech_detection_sphinx4/src/rapp_speech_detection_sphinx4/speech_recognition_sphinx4_handler_node.py File Reference

Classes

- class [rapp_speech_detection_sphinx4.speech_recognition_sphinx4_handler_node.SpeechRecognitionSphinx4HandlerNode](#)
Maintains Sphinx instances to perform speech recognition.

Namespaces

- [rapp_speech_detection_sphinx4.speech_recognition_sphinx4_handler_node](#)

Variables

- tuple [rapp_speech_detection_sphinx4.speech_recognition_sphinx4_handler_node.rospack](#) = [rospkg.RosPack\(\)](#)
- tuple [rapp_speech_detection_sphinx4.speech_recognition_sphinx4_handler_node.SpeechRecognitionSphinx4HandlerNode](#) = [SpeechRecognitionSphinx4HandlerNode\(\)](#)
- tuple [rapp_speech_detection_sphinx4.speech_recognition_sphinx4_handler_node.sphinx_class](#) = [rospack.get_path\('rapp_speech_detection_sphinx4'\)](#)

7.92 /home/travis/rapp_temp/rapp-platform/rapp_speech_detection_sphinx4/src/rapp_speech_detection_sphinx4/sphinx4_configuration_params.py File Reference

Classes

- class [rapp_speech_detection_sphinx4.sphinx4_configuration_params.SphinxConfigurationParams](#)
Contains the parameters required for the Sphinx configuration.

Namespaces

- [rapp_speech_detection_sphinx4.sphinx4_configuration_params](#)

7.93 /home/travis/rapp_temp/rapp-platform/rapp_speech_detection_sphinx4/src/rapp_speech_detection_sphinx4/sphinx4_wrapper.py File Reference

Classes

- class [rapp_speech_detection_sphinx4.sphinx4_wrapper.Sphinx4Wrapper](#)
Contains the Sphinx subprocess and is responsible for configuring Sphinx and performing the recognition request.

Namespaces

- [rapp_speech_detection_sphinx4.sphinx4_wrapper](#)

7.94 /home/travis/rapp_temp/rapp-platform/rapp_speech_detection_sphinx4/src/Sphinx4.java File Reference

Classes

- class [Sphinx4](#)
Performs speech recognition employing Sphinx.

7.95 /home/travis/rapp_temp/rapp-platform/rapp_text_to_speech_espeak/src/text_to_speech_espeak.py File Reference

Classes

- class [text_to_speech_espeak.TextToSpeechEspeak](#)

Namespaces

- [text_to_speech_espeak](#)

Variables

- tuple [text_to_speech_espeak.text_to_speech_espeak_ros_node](#) = [TextToSpeechEspeak\(\)](#)

7.96 /home/travis/rapp_temp/rapp-platform/rapp_utilities/src/rapp_exceptions.py File Reference

Classes

- class [src.rapp_exceptions.RappError](#)
Provides a RAPP specific exception.

Namespaces

- [src.rapp_exceptions](#)

7.97 /home/travis/rapp_temp/rapp-platform/rapp_utilities/src/rapp_html_parser.py File Reference

Classes

- class [src.rapp_html_parser.RappHTMLParser](#)
Strips html from input string.

Namespaces

- [src.rapp_html_parser](#)

7.98 /home/travis/rapp_temp/rapp-platform/rapp_utilities/src/rapp_http_json_parser.py File Reference

Classes

- class [src.rapp_http_json_parser.RappHttpJSONParser](#)
Retrieves key:value pairs from JSON responses.

Namespaces

- [src.rapp_http_json_parser](#)

7.99 /home/travis/rapp_temp/rapp-platform/rapp_utilities/src/rapp_http_request_handler.py File Reference

Classes

- class [src.rapp_http_request_handler.RappHttpRequestHandler](#)
Performs http requests.

Namespaces

- [src.rapp_http_request_handler](#)

7.100 /home/travis/rapp_temp/rapp-platform/rapp_weather_reporter/src/rapp_weather_reporter/forecastio_reporter.py File Reference

Classes

- class [rapp_weather_reporter.forecastio_reporter.ForecastIOReporter](#)
ForecastIO weather reporter.

Namespaces

- [rapp_weather_reporter.forecastio_reporter](#)

7.101 /home/travis/rapp_temp/rapp-platform/rapp_weather_reporter/src/rapp_weather_reporter/weather_reporter_base.py File Reference

Classes

- class [rapp_weather_reporter.weather_reporter_base.WeatherReporterBase](#)
Base class for weather reporters.

Namespaces

- [rapp_weather_reporter.weather_reporter_base](#)

7.102 /home/travis/rapp_temp/rapp-platform/rapp_weather_reporter/src/rapp_weather_reporter/weather_reporter_factory.py File Reference

Classes

- class [rapp_weather_reporter.weather_reporter_factory.WeatherReporterFactory](#)
Creates and returns the class of the weather reporter requested.

Namespaces

- [rapp_weather_reporter.weather_reporter_factory](#)

7.103 /home/travis/rapp_temp/rapp-platform/rapp_weather_reporter/src/rapp_weather_reporter/weather_reporter_node.py File Reference

Classes

- class [rapp_weather_reporter.weather_reporter_node.WeatherReporterNode](#)
Evaluates weather conditions.

Namespaces

- [rapp_weather_reporter.weather_reporter_node](#)

Variables

- tuple [rapp_weather_reporter.weather_reporter_node.weather_reporter_node](#) = WeatherReporterNode()

7.104 /home/travis/rapp_temp/rapp-platform/rapp_weather_reporter/src/rapp_weather_reporter/yweather_reporter.py File Reference

Classes

- class [rapp_weather_reporter.yweather_reporter.YWeatherReporter](#)
Yweather weather reporter.

Namespaces

- [rapp_weather_reporter.yweather_reporter](#)

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