



## **GENIVI Alliance**

GENIVI Document CS00063

POIService

Component Specification

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**Keywords:**

Y

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# 1 Change History

Version	Date	Author	Change
0.1	24 Oct 2012	Marco Residori (XS Embedded)	Created empty template
0.2	19 Dec 2012	Marco Residori (XS Embedded)	Added architecture diagram. Added sequence Diagrams. Updated APIs, Added Cedric Ranson's use case descriptions.
1.0	19 Dec 2012	Marco Residori (XS Embedded)	Added architecture diagram. Corrected typos.
1.1	3 Feb 2017	Philippe COLLIOT (PSA GROUPE)	Refine the document for Franca based API

## 2 Introduction

This document describes the API of the POIService component.

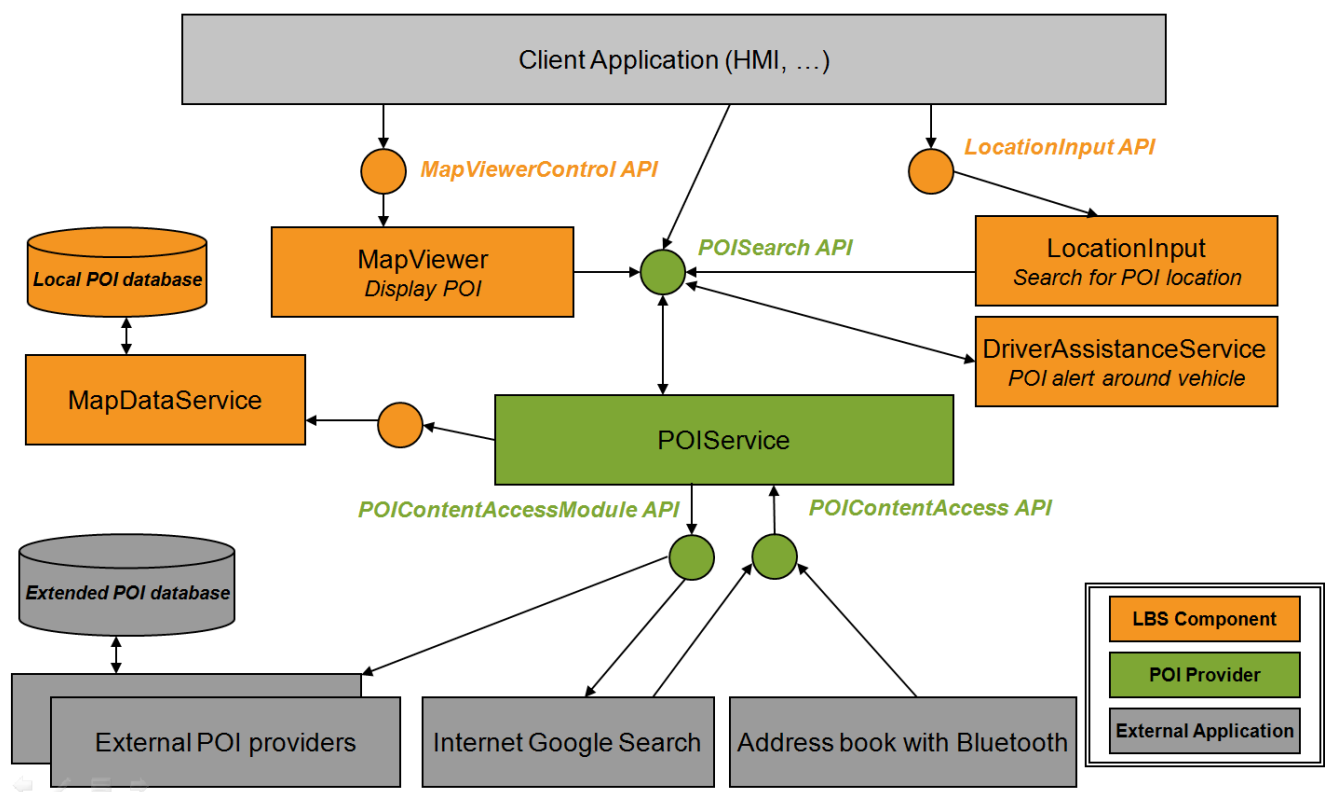
### 3 Terminology

<i>Term</i>	<i>Description</i>
POI	Point of Interest
CAM	Content Access Module

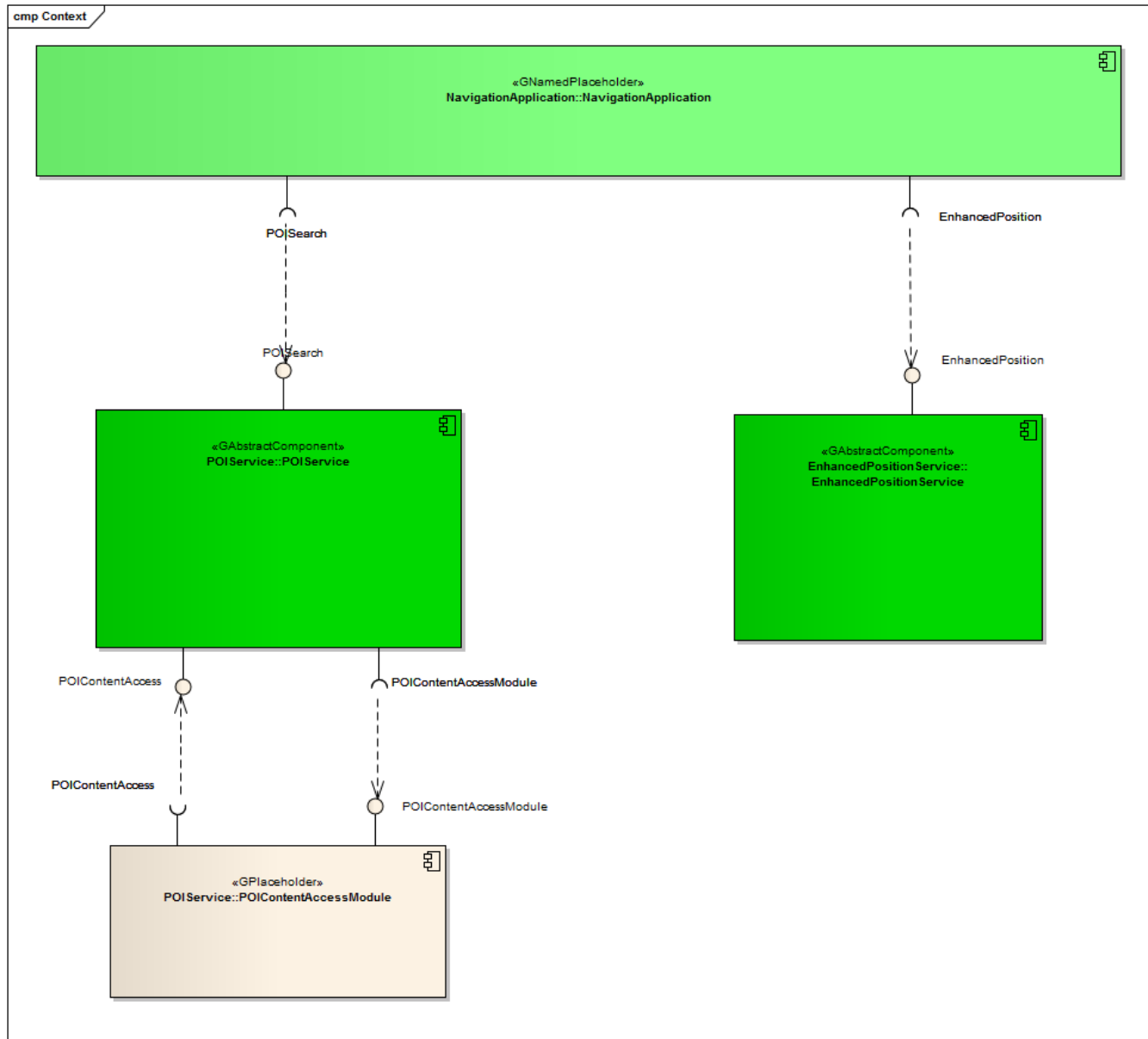
## 4 Architecture

### 4.1 Interfaces

- POISearch
- POIContentAccess
- POIContentAccessModule



## 4.2 Interaction with other Components





## 5 API

### 5.1 *Git Repository*

The POIService interfaces can be found in the GENIVI Git repository at:  
<https://github.com/GENIVI/navigation/tree/master/api/franca/navigation/poiservice>

### 5.2 *Use Cases*

#### 5.2.1 POI Search

##### 5.2.1.1 **The HMI displays the list of POI categories**

###### **Description**

The HMI retrieves the root category from the component (should be ALL\_CATEGORIES).  
The HMI retrieves the children categories of the root category.  
For each child category, the HMI retrieves its children:  
If there are no children, the HMI retrieves the category details from the component and displays its name as a searchable category.  
It can also display its visual icon.  
For each child found, the HMI retrieves the children again and then displays the category name if there are no children.

###### **Error Management**

Root category is not available.

###### **Sequence diagram**



## The user searches for a restaurants around his/her position

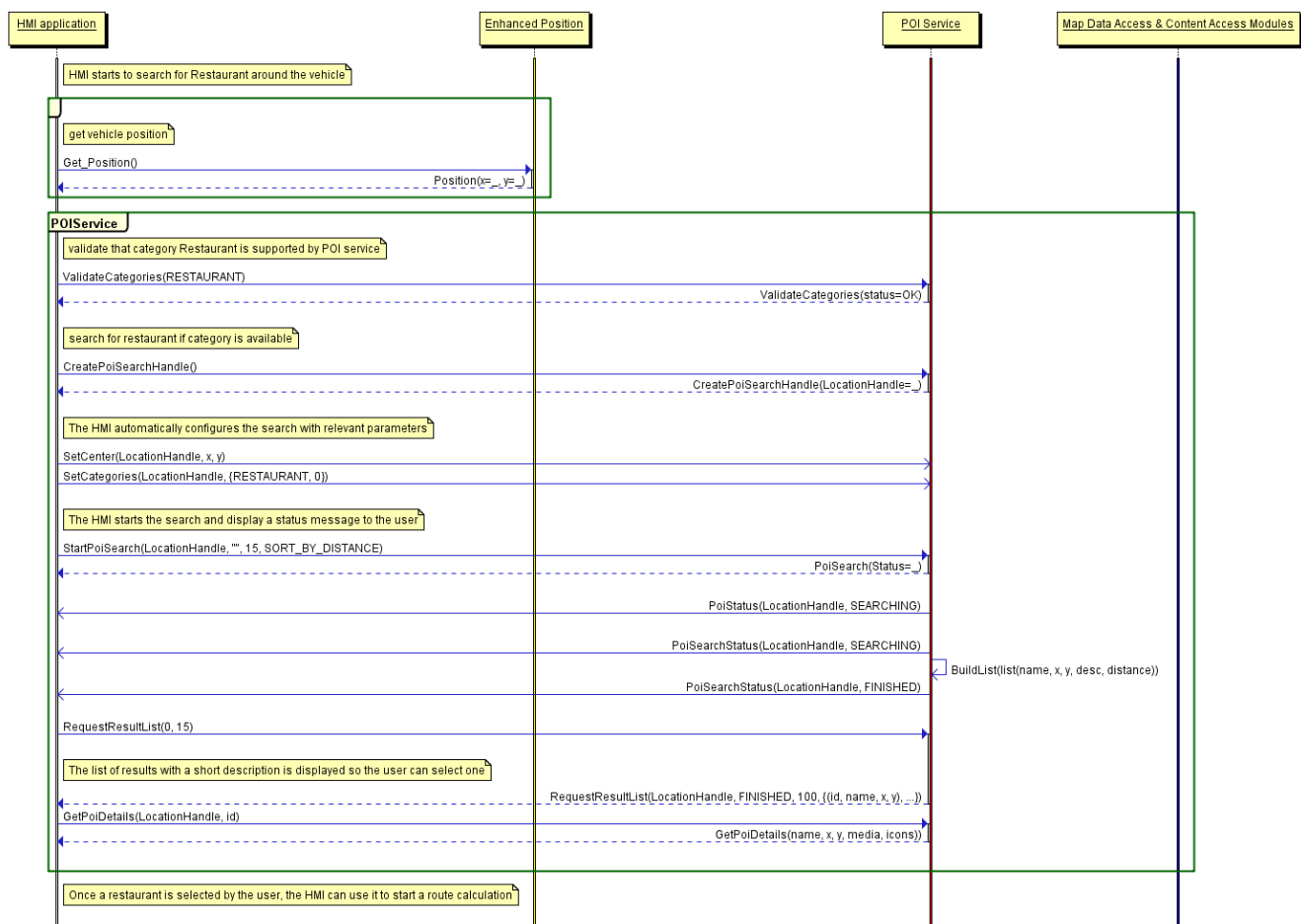
### Description

The HMI retrieves the list of POI categories from the **search POI** API.  
 The HMI retrieves the vehicle position from the **enhanced position** API.  
 The HMI selects restaurant as a category and searches for POI around the vehicle position. It does not provide a search radius.  
 The POIService component defines a default radius for the category *restaurant*.  
 The POIService component searches for restaurant around the vehicle position within the local database.  
 The POIService component provides the list of restaurants sorted by distance. It also provides basic details.  
 The HMI browses the list and ask for detailed information for one of the POI.  
 The POIService component gets detailed information from the local database.  
 The HMI decides to drive to this restaurant.  
 The POIService component provides the location of the restaurant.

### Error Management

If the local database access is down, the component returns an error.

### Sequence diagram



## The user is running out of fuel and therefore creates a proximity alert around his/her position to receive a sound alert in case a new fuel station is detected

### Preconditions

The fuel station is a category that is supported by the local database.

### Description

The HMI configures a new POI proximity alert for fuel station around the vehicle.

The HMI retrieves the vehicle position and the vehicle speed from the **enhanced position** API.

The POIService component defines the search radius of 500 meters.

The POIService component gets the list of fuel stations around the current position from the local database using **map data access** API.

A new list of POI is sent to the HMI with all the fuel station that match the alert configuration.

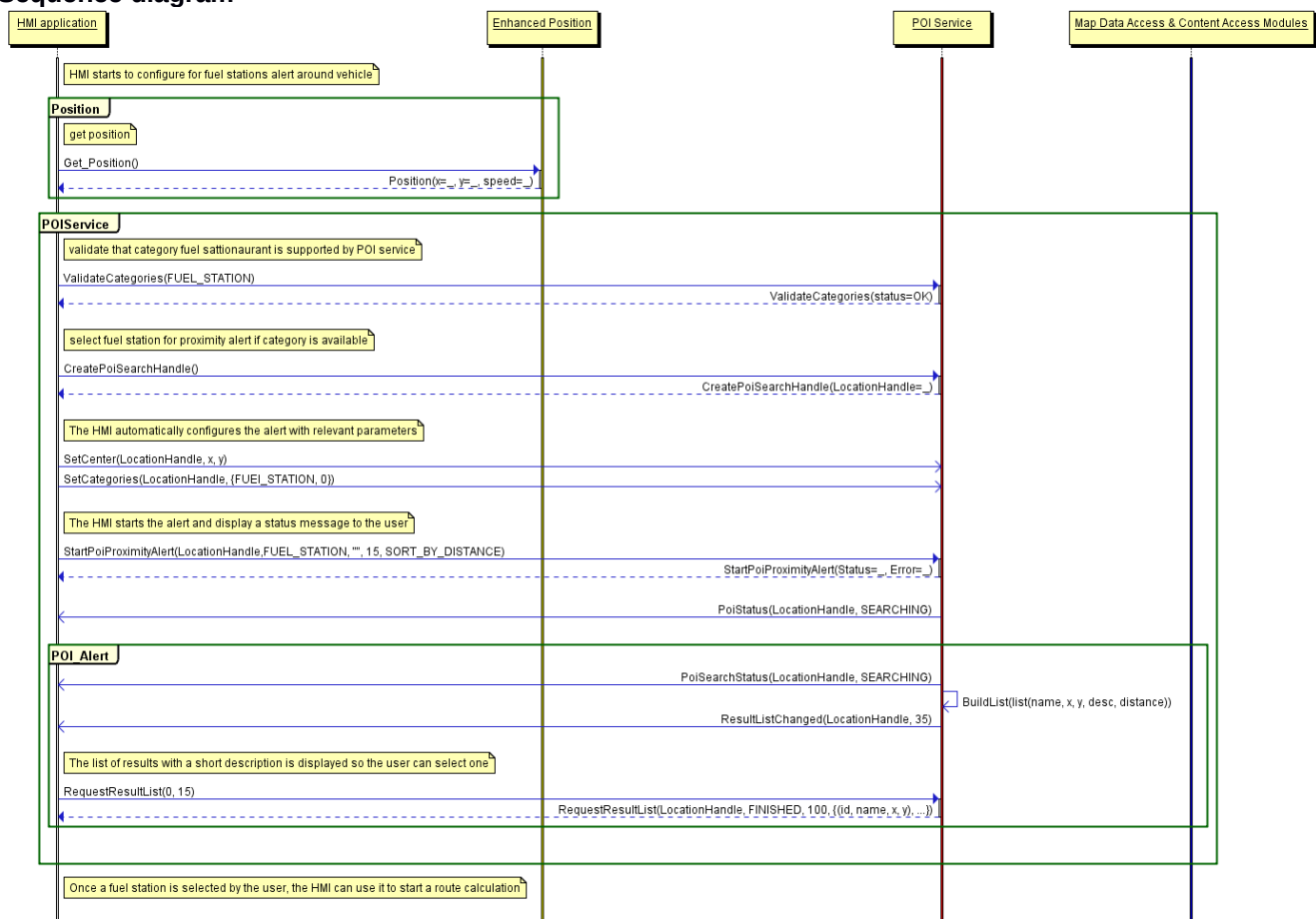
The HMI plays a sound when a new (non-empty) list of POI is received.

As soon as new fuel stations are available or current fuel stations are out the search radius, a new list is provided.

### Error Management

If the local database access is down, the component returns an error.

### Sequence diagram



## 5.2.2 POI Content Access

5.2.2.1

### **The user wants to get a list of car parks with free places around the current position sorted by price**

#### **Preconditions**

A plug-in was already installed in the POI Service component to access an identified online service that provides car park information (price and places left) from the name and coordinates of a car park.

#### **Description**

The HMI retrieves the vehicle position from the **enhanced position** API.

The HMI retrieves the list of car parks with free places sorted by price around the position from the **search POI** API.

The POIService component get the list of car parks around the current position from the local database using **map data access** API.

For each car park name and location found, the POI Service uses **POI content access** API to get free places available and the park price from the plug-in (described below).

The POIService component stores the result (all POI found with dynamic content) into the persistent storage to manage the 'connection-down' error. This content is deleted when it gets too old.

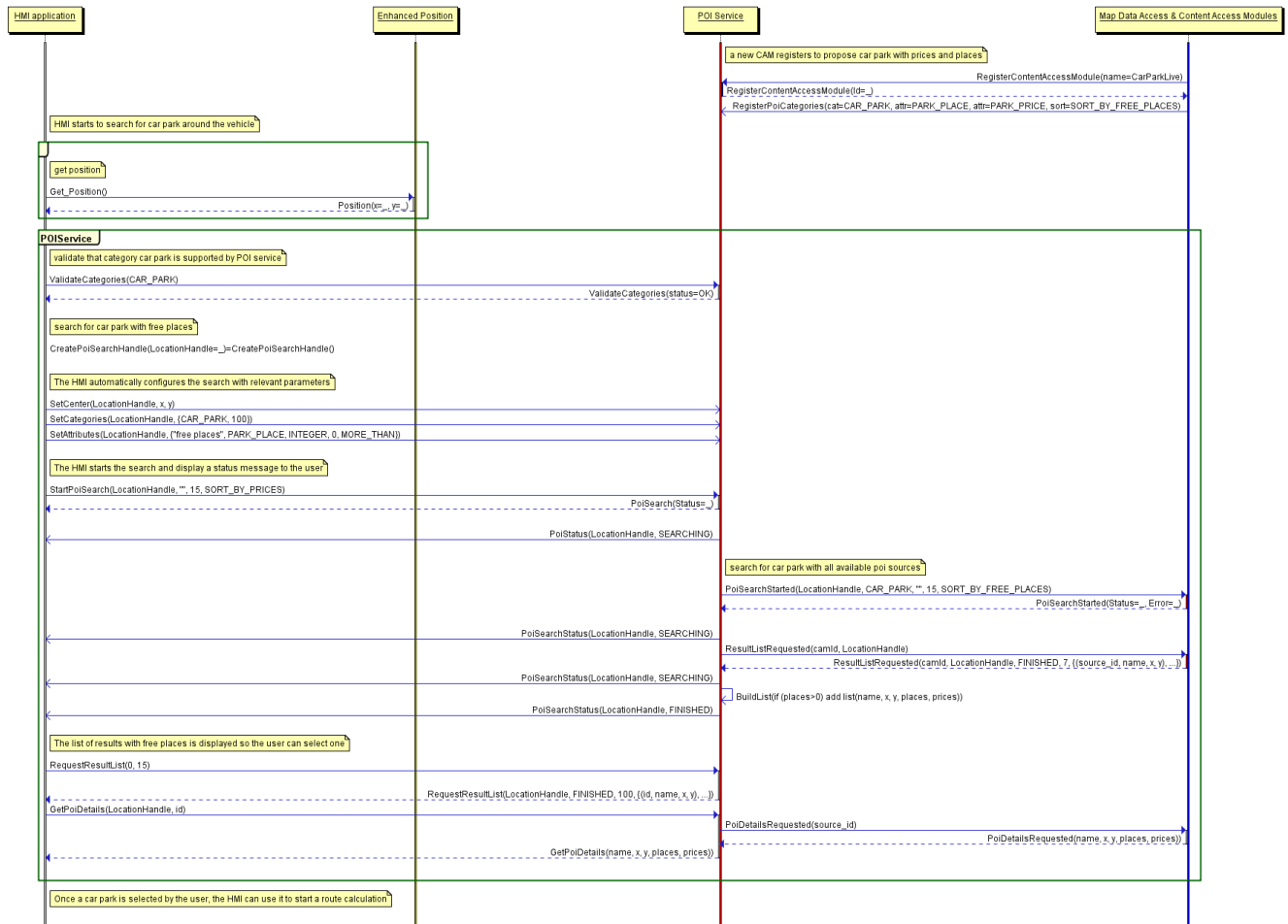
The POIService component updates each car park attribute with available places and sorts the list by price.

#### **Error Management**

If the local database access is down, the component returns an error.

If the network connection to the online provider is down, the content access module tries to retrieve latest content from its persistent storage (if any). If this content is too old (depends on CAM policy), it returns an error.

#### **Sequence diagram**



## **The user wants to display on the map the location of all his/her Facebook friends around the vehicle position (the profile picture is used to mark a friend's position)**

### **Preconditions**

A plug-in was already installed in the POI Service component to access Facebook services and extract the profile picture and the current address from a list of friends.

This plug-in also registered a new POI category called **Facebook friends** and sub-category of predefined **User contact**.

The MapViewer API provides a way to create a custom location on the map with coordinates, name and icons.

### **Description**

The HMI retrieves the vehicle position from the **enhanced position** API.

The HMI retrieves the list of Facebook friends from the **search POI** API around the vehicle position.

POI Service components gets the list of Facebook friends (with photo, name and coordinates) around the current position from the Facebook plug-in **POI content access** API.

The POI Service component stores the result into the persistent storage to manage the 'connection-down' error.

This content is deleted when it gets too old.

For each friend, the POI Service uses **MapViewer** API to update the map with icons.

### **Error Management**

If the network connection to the online provider is down, the content access module tries to retrieve latest content from its persistent storage (if any). If this content is too old (1 hour), it returns an error.

## **The user wants to navigate to his/her doctor (the one listed in his/her phone contact book) if the office is open**

### **Preconditions**

A plug-in was already installed in the POI Service component to access a doctor's web site. The plug-in extracts the opening times and the doctor's office address.

A plug-in was already installed in the POI Service component to access the user's smartphone. The plug-in extracts a contact list from a group of names (friend, family, doctor, ...).

This plug-in created a new POI category called **My Phone Groups** with sub-categories like **friend** or **doctor**.

### **Description**

The HMI retrieves the doctor's office coordinates and opening times from the user's phone POI group doctor with the **search POI** API.

The POIService component gets the doctor's office opening time and coordinates from the smartphone contacts plug-in using the **POI content access** API.

The HMI validates that the opening times match current time and start a route calculation.

The POIService component gets the doctor's office coordinates from previously stored data.

The POIService uses **NavigationCore** API to start a route calculation from vehicle position to doctor's office.

### **Error Management**

If the network connection to the online provider is down, the content access module returns an error.



## **The user wants to watch a movie. The user requests a list of movies projected in nearby cinemas with description, cinema name and price, all sorted by start time**

### **Preconditions**

A plug-in was already installed in the POI Service component to access an identified online service that provides cinema information (list of movies, opening times, prices and movies information like review and trailer link) from the name and coordinates of a cinema.

### **Description**

The HMI retrieves the vehicle position from the **enhanced position** API.

The HMI retrieves the list of cinema with movies that starts in less than 1 hour around the current position from the **search POI** API. The list is sorted by start time.

The POIService component gets the list of cinemas around the current position from the local database using the **map data access** API. For each cinema name and location found, the POI Service uses **POI content access** API to get list of movies available with start time, movie information and price from the plug-in (described below).

The HMI display the list of movies sorted by start time (the sooner the first) with a quick description, a review, the price and the cinema name.

The rear seat HMI downloads a video from movie trailer link and displays it.

Depending upon the selected film, the POIServicecomponent gets the cinema coordinates from previously stored data.

The POIService uses **NavigationCore** API to start a route calculation from vehicle position to the cinema.

### **Error Management**

If the local database access is down, the component returns an error

If the network connection to the online provider is down, the content access module tries to retrieve latest content from its persistent storage (if any). If this content is too old (20 minutes), it returns an error.

## The user creates a proximity alert along its route to receive a sound in case of dangerous area

### Preconditions

A plug-in was already installed in the POI Service component to access an identified online service that provides dangerous area content (road conditions, weather, traffic jam, men at work) around a location.

The dangerous area is a category that is supported by the local database.

### Description

The HMI configures a new POI proximity alert for dangerous events in front of the vehicle.

The HMI retrieves the vehicle position and speed from the **enhanced position** API.

The POI component defines the search radius in front of vehicle position depending on the category and the vehicle speed.

The POIService component gets the list of dangerous areas around the current position from the local database using the **map data access** API.

The POIService component gets the list of dangerous events around the position from content access module according to its defined radius and criteria.

The POIService component updates local events with dynamic contents if necessary.

A new list of POI is sent to the HMI with all the events (from local and from CAM) that match the alert configuration.

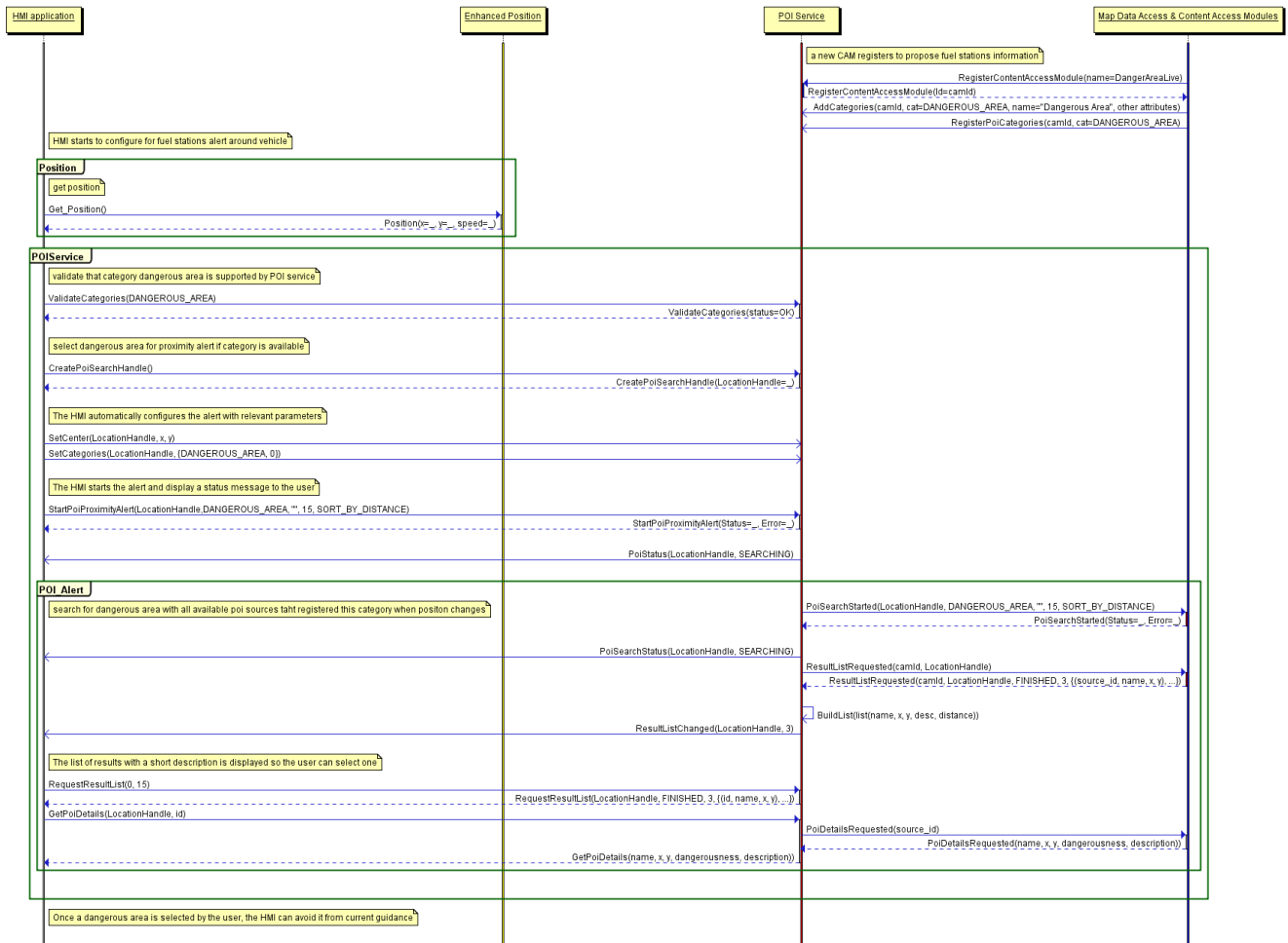
The HMI plays a sound when a new (non-empty) list of POI is received.

### Error Management

If the local database access is down, the component returns an error.

If the network connection to the online provider is down, the content access module tries to retrieve latest content from its persistent storage (if any). If this content is too old (more than 2 minutes), it returns an error.

### Sequence diagram



## 5.3 Interfaces

The following pages describe the interfaces of the POIService API.

## NavigationCore

Generated by Doxygen 1.8.11

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## 1 Namespace Documentation

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#### Modules

- [genivi](#)

### 1.2 org::genivi Module Reference

#### Modules

- [navigation](#)

### 1.3 org::genivi::navigation Module Reference

#### Modules

- module [navigationcore](#)

### 1.4 org::genivi::navigation::navigationcore Module Reference

#### Classes

- interface [Configuration](#)
- interface [Configuration\\_client](#)
- interface [Guidance](#)
- interface [Guidance\\_client](#)
- interface [LocationInput](#)
- interface [LocationInput\\_client](#)
- interface [MapMatchedPosition](#)
- interface [MapMatchedPosition\\_client](#)
- interface [NavigationCoreTypes](#)
- interface [Routing](#)
- interface [Routing\\_client](#)
- interface [Session](#)
- interface [Session\\_client](#)

## 2 Class Documentation

### 2.1 org::genivi::navigation::navigationcore::MapMatchedPosition::AddressItemValue Union Reference

#### Public Attributes

- String [addressField](#)
- Int16 [offset](#)
- Timestamp [timestamp](#)
- [MatchMode](#) [matchMode](#)
- RoadShield[] [roadShields](#)

#### 2.1.1 Member Data Documentation

2.1.1.1 String org::genivi::navigation::navigationcore::MapMatchedPosition::AddressItemValue::addressField

2.1.1.2 [MatchMode](#) org::genivi::navigation::navigationcore::MapMatchedPosition::AddressItemValue::matchMode

2.1.1.3 Int16 org::genivi::navigation::navigationcore::MapMatchedPosition::AddressItemValue::offset

2.1.1.4 RoadShield [ ] org::genivi::navigation::navigationcore::MapMatchedPosition::AddressItemValue::roadShields

2.1.1.5 Timestamp org::genivi::navigation::navigationcore::MapMatchedPosition::AddressItemValue::timestamp

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

- [MapMatchedPosition.fidl](#)

### 2.2 org::genivi::navigation::navigationcore::LocationInput::AddressValue Union Reference

#### Public Attributes

- Int32 [intValue](#)
- Double [doubleValue](#)
- String [stringValue](#)
- Coordinate3D [coordinate3DValue](#)
- UInt8[] [internalData](#)
- RoadShield[] [roadShields](#)

#### 2.2.1 Member Data Documentation

2.2.1.1 Coordinate3D org::genivi::navigation::navigationcore::LocationInput::AddressValue::coordinate3DValue

2.2.1.2 Double org::genivi::navigation::navigationcore::LocationInput::AddressValue::doubleValue

2.2.1.3 UInt8 [ ] org::genivi::navigation::navigationcore::LocationInput::AddressValue::internalData

2.2.1.4 Int32 org::genivi::navigation::navigationcore::LocationInput::AddressValue::intValue

2.2.1.5 RoadShield [ ] org::genivi::navigation::navigationcore::LocationInput::AddressValue::roadShields

2.2.1.6 String org::genivi::navigation::navigationcore::LocationInput::AddressValue::stringValue

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

- [LocationInput.fidl](#)

## 2.3 org::genivi::navigation::navigationcore::Routing::BlockedRouteElement Struct Reference

### Public Attributes

- UInt32 [offset](#)
- UInt32 [length](#)

### 2.3.1 Member Data Documentation

2.3.1.1 UInt32 org::genivi::navigation::navigationcore::Routing::BlockedRouteElement::length

2.3.1.2 UInt32 org::genivi::navigation::navigationcore::Routing::BlockedRouteElement::offset

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

- [Routing.fidl](#)

## 2.4 org::genivi::navigation::navigationcore::Routing::ConditionPreference Struct Reference

### Public Attributes

- [PreferenceMode mode](#)
- [ConditionPreferenceSource source](#)

### 2.4.1 Member Data Documentation

2.4.1.1 [PreferenceMode](#) org::genivi::navigation::navigationcore::Routing::ConditionPreference::mode

2.4.1.2 [ConditionPreferenceSource](#) org::genivi::navigation::navigationcore::Routing::ConditionPreference::source

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

- [Routing.fidl](#)

## 2.5 org::genivi::navigation::navigationcore::Configuration Interface Reference

### Public Types

- enum [Settings](#) {  
  [INVALID](#) = 0, [UNITS\\_OF\\_MEASUREMENT](#) = 48, [LOCALE](#) = 37, [TIME\\_FORMAT](#) = 3,  
  [COORDINATES\\_FORMAT](#) = 6 }
- enum [UnitsOfMeasurementAttribute](#) { [INVALID](#) = 0, [LENGTH](#) = 49 }
- enum [UnitsOfMeasurementValue](#) {  
  [METER](#) = 50, [MILE](#) = 51, [KM](#) = 52, [YARD](#) = 53,  
  [FOOT](#) = 54 }
- enum [CoordinatesFormat](#) { [INVALID](#) = 0, [DEGREES](#) = 1, [MINUTES](#) = 2, [SECONDS](#) = 3 }
- typedef [UnitsOfMeasurementValue](#)[] [UnitsOfMeasurementListValue](#)

## Public Member Functions

- void [getVersion](#) (out Version version)
- void [setLocale](#) (in String languageCode, in String countryCode, in String scriptCode)
- void [getLocale](#) (out String languageCode, out String countryCode, out String scriptCode)
- void [getSupportedLocales](#) (out Locale localeList)
- void [setTimeFormat](#) (in TimeFormat format)
- void [getTimeFormat](#) (out TimeFormat format)
- void [getSupportedTimeFormats](#) (out TimeFormat timeFormatList)
- void [setCoordinatesFormat](#) (in [CoordinatesFormat](#) coordinatesFormat)
- void [getCoordinatesFormat](#) (out [CoordinatesFormat](#) coordinatesFormat)
- void [getSupportedCoordinatesFormat](#) (out [CoordinatesFormat](#) coordinatesFormatList)
- void [setUnitsOfMeasurement](#) (in UnitsOfMeasurement unitsOfMeasurement)
- void [getUnitsOfMeasurement](#) (out UnitsOfMeasurement unitsOfMeasurement)
- void [getSupportedUnitsOfMeasurement](#) (out UnitsOfMeasurementList unitsOfMeasurementList)

## Public Attributes

- map\_UnitsOfMeasurement [UnitsOfMeasurementAttribute](#) => [UnitsOfMeasurementValue](#)
- map\_UnitsOfMeasurementList [UnitsOfMeasurementAttribute](#) => [UnitsOfMeasurementListValue](#)

## 2.5.1 Detailed Description

#comment : This interface offers methods that implement the navigation core configuration functionality of a navigation system.

## 2.5.2 Member Typedef Documentation

2.5.2.1 typedef UnitsOfMeasurementValue [ ] org::genivi::navigation::navigationcore::Configuration::UnitsOfMeasurementListValue

## 2.5.3 Member Enumeration Documentation

2.5.3.1 enum org::genivi::navigation::navigationcore::Configuration::CoordinatesFormat

Enumerator

**INVALID**  
**DEGREES**  
**MINUTES**  
**SECONDS**

2.5.3.2 enum org::genivi::navigation::navigationcore::Configuration::Settings

Enumerator

**INVALID**  
**UNITS\_OF\_MEASUREMENT**  
**LOCALE**  
**TIME\_FORMAT**  
**COORDINATES\_FORMAT**

### 2.5.3.3 enum org::genivi::navigation::navigationcore::Configuration::UnitsOfMeasurementAttribute

Enumerator

**INVALID**  
**LENGTH**

### 2.5.3.4 enum org::genivi::navigation::navigationcore::Configuration::UnitsOfMeasurementValue

Enumerator

**METER**  
**MILE**  
**KM**  
**YARD**  
**FOOT**

## 2.5.4 Member Function Documentation

2.5.4.1 void org::genivi::navigation::navigationcore::Configuration::getCoordinatesFormat ( out CoordinatesFormat *coordinatesFormat* )

#comment : Get the coordinates format .

2.5.4.2 void org::genivi::navigation::navigationcore::Configuration::getLocale ( out String *languageCode*, out String *countryCode*, out String *scriptCode* )

#comment : Get the current language set .

2.5.4.3 void org::genivi::navigation::navigationcore::Configuration::getSupportedCoordinatesFormat ( out CoordinatesFormat *coordinatesFormatList* )

#comment : Get the supported set of coordinates format .

2.5.4.4 void org::genivi::navigation::navigationcore::Configuration::getSupportedLocales ( out Locale *localeList* )

#comment : Get the supported set of locales .

2.5.4.5 void org::genivi::navigation::navigationcore::Configuration::getSupportedTimeFormats ( out TimeFormat *timeFormatList* )

#comment : Get the supported set of time format .

2.5.4.6 void org::genivi::navigation::navigationcore::Configuration::getSupportedUnitsOfMeasurement ( out UnitsOfMeasurementList *unitsOfMeasurementList* )

#comment : Get the supported set of units of measurement .

2.5.4.7 void org::genivi::navigation::navigationcore::Configuration::getTimeFormat ( out TimeFormat *format* )

#comment : Get the current time format .

2.5.4.8 void org::genivi::navigation::navigationcore::Configuration::getUnitsOfMeasurement ( out UnitsOfMeasurement *unitsOfMeasurement* )

#comment : Get the units of measurement .

2.5.4.9 void org::genivi::navigation::navigationcore::Configuration::getVersion ( out Version *version* )

#comment : This method returns the API version .

2.5.4.10 void org::genivi::navigation::navigationcore::Configuration::setCoordinatesFormat ( in CoordinatesFormat *coordinatesFormat* )

#comment : Set the coordinates format.

2.5.4.11 void org::genivi::navigation::navigationcore::Configuration::setLocale ( in String *languageCode*, in String *countryCode*, in String *scriptCode* )

#comment : Set the current language set. If the language is not supported, the default details will be returned in the native language.

2.5.4.12 void org::genivi::navigation::navigationcore::Configuration::setTimeFormat ( in TimeFormat *format* )

#comment : Set the time format.

2.5.4.13 void org::genivi::navigation::navigationcore::Configuration::setUnitsOfMeasurement ( in UnitsOfMeasurement *unitsOfMeasurement* )

#comment : Set the units of measurement .

## 2.5.5 Member Data Documentation

2.5.5.1 map\_UnitsOfMeasurement org::genivi::navigation::navigationcore::Configuration::UnitsOf↔  
MeasurementAttribute =>UnitsOfMeasurementValue

2.5.5.2 map\_UnitsOfMeasurementList org::genivi::navigation::navigationcore::Configuration::UnitsOf↔  
MeasurementAttribute =>UnitsOfMeasurementListValue

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

- [Configuration.fidl](#)

## 2.6 org::genivi::navigation::navigationcore::Configuration\_client Interface Reference

### Public Member Functions

- void [configurationChanged](#) (in Settings changedSettings)

## 2.6.1 Member Function Documentation

2.6.1.1 `void org::genivi::navigation::navigationcore::Configuration_client::configurationChanged ( in Settings changedSettings )`

broadcast #comment : ConfigurationChanged = This signal is sent to the clients when one or more configuration settings changes

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

- [Configuration.fidl](#)

## 2.7 org::genivi::navigation::navigationcore::Guidance Interface Reference

### Classes

- struct [LaneInfo](#)
- struct [Maneuver](#)
- union [ManeuverDataValue](#)
- struct [ManeuverItem](#)
- struct [WaypointStruct](#)

### Public Types

- enum [Side](#) : BasicEnum { [LEFT](#) = 128, [RIGHT](#) = 131, [NOT\\_AVAILABLE](#) = 2 }
- enum [LaneType](#) : BasicEnum { [LANE\\_INFO\\_BITMASK\\_STRAIGHT](#) = 1, [LANE\\_INFO\\_BITMASK\\_SLIGHTRIGHT](#) = 2, [LANE\\_INFO\\_BITMASK\\_SHARPRIGHT](#) = 4, [LANE\\_INFO\\_BITMASK\\_SHARPLEFT](#) = 128, [LANE\\_INFO\\_BITMASK\\_RIGHTUTURN](#) = 16, [LANE\\_INFO\\_BITMASK\\_SLIGHTLEFT](#) = 32, [LANE\\_INFO\\_BITMASK\\_LEFTUTURN](#) = 256 }
- enum [PromptMode](#) : BasicEnum { [DISABLED\\_PROMPT](#) = 65, [AUTOMATIC\\_PROMPT](#) = 66, [MANUAL\\_PROMPT](#) = 67 }
- enum [ManeuverPhase](#) : BasicEnum { [CRUISE](#) = 80, [MANEUVER\\_APPEARED](#) = 81, [PRE\\_ADVICE](#) = 82, [ADVICE](#) = 83, [PASSED](#) = 84 }
- enum [GuidanceStatus](#) : BasicEnum { [ACTIVE](#) = 96, [INACTIVE](#) = 97 }
- enum [ManeuverType](#) : BasicEnum { [STRAIGHT\\_ON](#) = 112, [CROSSROAD](#) = 113, [ROUNDAABOUT](#) = 114, [HIGHWAY\\_ENTER](#) = 115, [HIGHWAY\\_EXIT](#) = 116, [FOLLOW\\_SPECIFIC\\_LANE](#) = 117, [DESTINATION](#) = 118, [WAYPOINT\\_TURN](#) = 120, [BIFURCATION](#) = 121 }
- enum [ManeuverDirection](#) : BasicEnum { [STRAIGHT](#) = 127, [LEFT](#) = 128, [SLIGHT\\_LEFT](#) = 129, [HARD\\_LEFT](#) = 130, [RIGHT](#) = 131, [SLIGHT\\_RIGHT](#) = 132, [HARD\\_RIGHT](#) = 133, [UTURN\\_RIGHT](#) = 134, [UTURN\\_LEFT](#) = 135 }
- enum [CalculationMode](#) : BasicEnum { [ALL\\_MANUAL](#) = 144, [ALL\\_AUTOMATIC](#) = 145, [TRAFFIC\\_MANUAL](#) = 146, [OFF\\_ROUTE\\_MANUAL](#) = 147 }
- enum [RoadProperty](#) : BasicEnum { [DEFAULT](#) = 65534, [TOLL\\_ROADS](#) = 369 }
- enum [RouteChangedCause](#) : BasicEnum { [TRAFFIC](#) = 528, [OFF\\_ROUTE](#) = 529, [MANUAL](#) = 530 }
- enum [ManeuverDirectionType](#) : BasicEnum { [DIRECTION](#) = 576, [EXIT\\_NUMBER](#) = 577, [ROAD\\_FORM](#) = 578, [LANE\\_INFO](#) = 579 }

- enum [LaneDivider](#) : BasicEnum {  
[DIVIDER\\_UNDEFINED](#) = 592, [DIVIDER\\_INTERRUPTEDLONG](#) = 593, [DIVIDER\\_INTERRUPTEDSHORT](#) = 594, [DIVIDER\\_SOLID\\_SINGLE](#) = 595,  
[DIVIDER\\_SOLID\\_DOUBLE](#) = 596, [DIVIDER\\_SOLID\\_INTERRUPTED](#) = 597, [DIVIDER\\_INTERRUPTED\\_SOLID](#) = 598 }
- enum [RoadForm](#) : BasicEnum { [ROAD\\_REGULAR](#) = 561, [ROAD\\_HIGHWAY\\_MOTORWAY](#) = 562, [ROAD\\_FERRY](#) = 563 }
- enum [ManeuverDataAttribute](#) : BasicEnum {  
[LENGTH](#) = 608, [DIRECTION](#) = 576, [EXIT\\_NUMBER](#) = 577, [ROAD\\_FORM](#) = 578,  
[LANE\\_INFO](#) = 579, [COORDINATE](#) = 613 }

#### Public Member Functions

- void [getVersion](#) (out Version version)
- void [startGuidance](#) (in Handle sessionHandle, in Handle routeHandle)
- void [stopGuidance](#) (in Handle sessionHandle)
- void [setVoiceGuidance](#) (in Boolean activate, in String voice)
- void [getGuidanceDetails](#) (out Boolean voiceGuidance, out Boolean vehicleOnTheRoad, out Boolean isDestinationReached, out [ManeuverPhase](#) maneuver)
- void [playVoiceManeuver](#) ()
- void [getWaypointInformation](#) (in UInt16 requestedNumberOfWaypoints, out UInt16 numberOfWaypoints, out [WaypointStruct](#) waypointsList)
- void [getDestinationInformation](#) (out UInt32 offset, out UInt32 travelTime, out Int32 direction, out [Side](#) side, out Int16 timeZone, out Int16 daylightSavingTime)
- void [getManeuversList](#) (in UInt16 requestedNumberOfManeuvers, in UInt32 maneuverOffset, out UInt16 numberOfManeuvers, out [Maneuver](#) maneuversList)
- void [setRouteCalculationMode](#) (in Handle sessionHandle, in [CalculationMode](#) routeCalculationMode)
- void [skipNextManeuver](#) (in Handle sessionHandle)
- void [getGuidanceStatus](#) (out [GuidanceStatus](#) guidanceStatus, out Handle routeHandle)
- void [setVoiceGuidanceSettings](#) (in [PromptMode](#) promptMode)
- void [getVoiceGuidanceSettings](#) (out [PromptMode](#) promptMode)

#### Public Attributes

- map\_ManeuverData [ManeuverDataAttribute](#) => [ManeuverDataValue](#)

#### 2.7.1 Detailed Description

#comment : [Guidance](#) = This interface offers functions that implement the route-guidance functionality of a navigation system

#### 2.7.2 Member Enumeration Documentation

##### 2.7.2.1 enum org::genivi::navigation::navigationcore::Guidance::CalculationMode : BasicEnum

Enumerator

**[ALL\\_MANUAL](#)**  
**[ALL\\_AUTOMATIC](#)**  
**[TRAFFIC\\_MANUAL](#)**  
**[OFF\\_ROUTE\\_MANUAL](#)**



2.7.2.2 enum org::genivi::navigation::navigationcore::Guidance::GuidanceStatus : BasicEnum

Enumerator

**ACTIVE**

**INACTIVE**

2.7.2.3 enum org::genivi::navigation::navigationcore::Guidance::LaneDivider : BasicEnum

Enumerator

**DIVIDER\_UNDEFINED**

**DIVIDER\_INTERRUPTEDLONG**

**DIVIDER\_INTERRUPTEDSHORT**

**DIVIDER\_SOLIDSSINGLE**

**DIVIDER\_SOLIDDOUBLE**

**DIVIDER\_SOLIDINTERRUPTED**

**DIVIDER\_INTERRUPTEDSOLID**

2.7.2.4 enum org::genivi::navigation::navigationcore::Guidance::LaneType : BasicEnum

Enumerator

**LANE\_INFO\_BITMASK\_STRAIGHT**

**LANE\_INFO\_BITMASK\_SLIGHTRIGHT**

**LANE\_INFO\_BITMASK\_RIGHT**

**LANE\_INFO\_BITMASK\_SHARPRIGHT**

**LANE\_INFO\_BITMASK\_RIGHTUTURN**

**LANE\_INFO\_BITMASK\_SLIGHTLEFT**

**LANE\_INFO\_BITMASK\_LEFT**

**LANE\_INFO\_BITMASK\_SHARPLEFT**

**LANE\_INFO\_BITMASK\_LEFTUTURN**

2.7.2.5 enum org::genivi::navigation::navigationcore::Guidance::ManeuverDataAttribute : BasicEnum

Enumerator

**LENGTH**

**DIRECTION**

**EXIT\_NUMBER**

**ROAD\_FORM**

**LANE\_INFO**

**COORDINATE**

2.7.2.6 enum org::genivi::navigation::navigationcore::Guidance::ManeuverDirection : BasicEnum

Enumerator

***STRAIGHT***  
***LEFT***  
***SLIGHT\_LEFT***  
***HARD\_LEFT***  
***RIGHT***  
***SLIGHT\_RIGHT***  
***HARD\_RIGHT***  
***UTURN\_RIGHT***  
***UTURN\_LEFT***

2.7.2.7 enum org::genivi::navigation::navigationcore::Guidance::ManeuverDirectionType : BasicEnum

Enumerator

***DIRECTION***  
***EXIT\_NUMBER***  
***ROAD\_FORM***  
***LANE\_INFO***

2.7.2.8 enum org::genivi::navigation::navigationcore::Guidance::ManeuverPhase : BasicEnum

Enumerator

***CRUISE***  
***MANEUVER\_APPEARED***  
***PRE\_ADVICE***  
***ADVICE***  
***PASSED***

2.7.2.9 enum org::genivi::navigation::navigationcore::Guidance::ManeuverType : BasicEnum

Enumerator

***STRAIGHT\_ON***  
***CROSSROAD***  
***ROUNDABOUT***  
***HIGHWAY\_ENTER***  
***HIGHWAY\_EXIT***  
***FOLLOW\_SPECIFIC\_LANE***  
***DESTINATION***  
***WAYPOINT***  
***TURN***  
***BIFURCATION***

2.7.2.10 enum org::genivi::navigation::navigationcore::Guidance::PromptMode : BasicEnum

Enumerator

***DISABLED\_PROMPT***  
***AUTOMATIC\_PROMPT***  
***MANUAL\_PROMPT***

2.7.2.11 enum org::genivi::navigation::navigationcore::Guidance::RoadForm : BasicEnum

Enumerator

***ROAD\_REGULAR***  
***ROAD\_HIGHWAY\_MOTORWAY***  
***ROAD\_FERRY***

2.7.2.12 enum org::genivi::navigation::navigationcore::Guidance::RoadProperty : BasicEnum

Enumerator

***DEFAULT***  
***TOLL\_ROADS***

2.7.2.13 enum org::genivi::navigation::navigationcore::Guidance::RouteChangedCause : BasicEnum

Enumerator

***TRAFFIC***  
***OFF\_ROUTE***  
***MANUAL***

2.7.2.14 enum org::genivi::navigation::navigationcore::Guidance::Side : BasicEnum

Enumerator

***LEFT***  
***RIGHT***  
***NOT\_AVAILABLE***

## 2.7.3 Member Function Documentation

2.7.3.1 void org::genivi::navigation::navigationcore::Guidance::getDestinationInformation ( out UInt32 *offset*, out UInt32 *travelTime*, out Int32 *direction*, out Side *side*, out Int16 *timeZone*, out Int16 *daylightSavingTime* )

#comment : This method retrieves the information on the final destination

2.7.3.2 void org::genivi::navigation::navigationcore::Guidance::getGuidanceDetails ( out Boolean *voiceGuidance*, out Boolean *vehicleOnTheRoad*, out Boolean *isDestinationReached*, out ManeuverPhase *maneuver* )

#comment : getGuidanceDetails = This method retrieves guidance information

2.7.3.3 void org::genivi::navigation::navigationcore::Guidance::getGuidanceStatus ( out GuidanceStatus *guidanceStatus*, out Handle *routeHandle* )

#comment : getGuidanceStatus = This method retrieves the guidance status

2.7.3.4 void org::genivi::navigation::navigationcore::Guidance::getManeuversList ( in UInt16 *requestedNumberOfManeuvers*, in UInt32 *maneuverOffset*, out UInt16 *numberOfManeuvers*, out Maneuver *maneuversList* )

#comment : getManeuversList = This method retrieves the list of next maneuvers

2.7.3.5 void org::genivi::navigation::navigationcore::Guidance::getVersion ( out Version *version* )

#comment : getVersion = This method returns the API version implemented by the server application

2.7.3.6 void org::genivi::navigation::navigationcore::Guidance::getVoiceGuidanceSettings ( out PromptMode *promptMode* )

#comment : getVoiceGuidanceSettings = This method returns the used voice guidance settings

2.7.3.7 void org::genivi::navigation::navigationcore::Guidance::getWaypointInformation ( in UInt16 *requestedNumberOfWaypoints*, out UInt16 *numberOfWaypoints*, out WaypointStruct *waypointsList* )

#comment : getWaypointInformation = This method retrieves the information on the remaining way points of the route. A point can be the final destination as well as a stage defined by the user. The returned waypoints are ordered by their 'number'.

2.7.3.8 void org::genivi::navigation::navigationcore::Guidance::playVoiceManeuver ( )

#comment : playVoiceManeuver = This method plays or repeats the last voice guidance

2.7.3.9 void org::genivi::navigation::navigationcore::Guidance::setRouteCalculationMode ( in Handle *sessionHandle*, in CalculationMode *routeCalculationMode* )

#comment : setRouteCalculationMode = This method configures the way the navigation application wants the navigation core to behave of reroute trigger

2.7.3.10 void org::genivi::navigation::navigationcore::Guidance::setVoiceGuidance ( in Boolean *activate*, in String *voice* )

#comment : setVoiceGuidance = This method switch on/off the voice guidance

2.7.3.11 void org::genivi::navigation::navigationcore::Guidance::setVoiceGuidanceSettings ( in PromptMode *promptMode* )

#comment : setVoiceGuidanceSettings = This method sets the voice guidance settings

2.7.3.12 void org::genivi::navigation::navigationcore::Guidance::skipNextManeuver ( in Handle *sessionHandle* )

#comment : skipNextManeuver = This method allows to jump behind the current maneuver

2.7.3.13 void org::genivi::navigation::navigationcore::Guidance::startGuidance ( in Handle *sessionHandle*, in Handle *routeHandle* )

#comment : startGuidance = This method starts the guidance for a given route The guidanceStatus will change to ACTIVE

2.7.3.14 void org::genivi::navigation::navigationcore::Guidance::stopGuidance ( in Handle *sessionHandle* )

#comment : stopGuidance = This method stops the guidance The guidanceStatus will change to INACTIVE

## 2.7.4 Member Data Documentation

2.7.4.1 map\_ManeuverData org::genivi::navigation::navigationcore::Guidance::ManeuverDataAttribute  
=>ManeuverDataValue

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

- [Guidance.fidl](#)

## 2.8 org::genivi::navigation::navigationcore::Guidance\_client Interface Reference

### Public Member Functions

- void [vehicleLeftTheRoadNetwork](#) ()
- void [guidanceStatusChanged](#) (in GuidanceStatus guidanceStatus, in Handle routeHandle)
- void [waypointReached](#) (in Boolean isDestination)
- void [maneuverChanged](#) (in ManeuverPhase maneuver)
- void [positionOnRouteChanged](#) (in UInt32 offsetOnRoute)
- void [vehicleLeftTheRoute](#) ()
- void [positionToRouteChanged](#) (in UInt32 distance, in Int32 direction)
- void [activeRouteChanged](#) (in RouteChangedCause changeCause)

### 2.8.1 Member Function Documentation

2.8.1.1 void org::genivi::navigation::navigationcore::Guidance\_client::activeRouteChanged ( in RouteChangedCause *changeCause* )

broadcast #comment : activeRouteChanged = This signal is emitted when the active route changes

2.8.1.2 void org::genivi::navigation::navigationcore::Guidance\_client::guidanceStatusChanged ( in GuidanceStatus *guidanceStatus*, in Handle *routeHandle* )

broadcast #comment : guidanceStatusChanged = This signal is emitted when the guidance status changes

2.8.1.3 void org::genivi::navigation::navigationcore::Guidance\_client::maneuverChanged ( in ManeuverPhase *maneuver* )

broadcast #comment : This signal is emitted each time a maneuver event is going

2.8.1.4 void org::genivi::navigation::navigationcore::Guidance\_client::positionOnRouteChanged ( in UInt32 *offsetOnRoute* )

broadcast #comment : positionOnRouteChanged = This signal is emitted when the position on the route changes

2.8.1.5 void org::genivi::navigation::navigationcore::Guidance\_client::positionToRouteChanged ( in UInt32 *distance*, in Int32 *direction* )

broadcast #comment : positionToRouteChanged = This signal is emitted when the vehicle is off-the-road network and either the heading or the distance (or both) to the closest point on the active route changes

2.8.1.6 void org::genivi::navigation::navigationcore::Guidance\_client::vehicleLeftTheRoadNetwork ( )

broadcast #comment : vehicleLeftTheRoadNetwork = This signal is emitted when the vehicle exits from the road network

2.8.1.7 void org::genivi::navigation::navigationcore::Guidance\_client::vehicleLeftTheRoute ( )

broadcast #comment : vehicleLeftTheRoute = This signal is emitted when the vehicle has left the route

2.8.1.8 void org::genivi::navigation::navigationcore::Guidance\_client::waypointReached ( in Boolean *isDestination* )

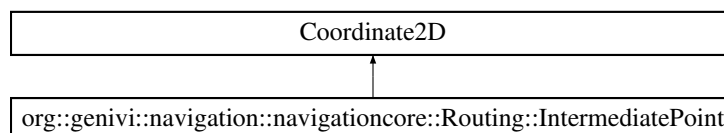
broadcast #comment : waypointReached = This signal is emitted when the destination is reached

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

- [Guidance.fidl](#)

## 2.9 org::genivi::navigation::navigationcore::Routing::IntermediatePoint Struct Reference

Inheritance diagram for org::genivi::navigation::navigationcore::Routing::IntermediatePoint:



### Public Attributes

- [WayPointType](#) type

### 2.9.1 Member Data Documentation

#### 2.9.1.1 WayPointType org::genivi::navigation::navigationcore::Routing::IntermediatePoint::type

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

- [Routing.fidl](#)

## 2.10 org::genivi::navigation::navigationcore::Guidance::LaneInfo Struct Reference

### Public Attributes

- UInt32 [laneIndex](#)
- ByteBuffer [laneDirections](#)
- LaneType [directionToFollow](#)
- LaneDivider [divider](#)

### 2.10.1 Member Data Documentation

#### 2.10.1.1 LaneType org::genivi::navigation::navigationcore::Guidance::LaneInfo::directionToFollow

#### 2.10.1.2 LaneDivider org::genivi::navigation::navigationcore::Guidance::LaneInfo::divider

#### 2.10.1.3 ByteBuffer org::genivi::navigation::navigationcore::Guidance::LaneInfo::laneDirections

#### 2.10.1.4 UInt32 org::genivi::navigation::navigationcore::Guidance::LaneInfo::laneIndex

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

- [Guidance.fidl](#)

## 2.11 org::genivi::navigation::navigationcore::LocationInput Interface Reference

### Classes

- union [AddressValue](#)

### Public Types

- enum [SearchStatus](#) : BasicEnum { [SEARCHING](#) = 193, [FINISHED](#) = 194 }
- enum [ValidationType](#) : BasicEnum { [OK](#) = 208, [UNKNOWN](#) = 209, [AMBIGUOUS](#) = 210, [INCONSISTENT](#) = 211 }
- enum [AddressAttribute](#) : GeoLocalizedEnum {  
[COUNTRY](#) = 166, [COUNTRYCODE](#) = 179, [STATE](#) = 167, [CITY](#) = 168,  
[STREET](#) = 170, [ROAD\\_NUMBER](#) = 182, [HOUSENUMBER](#) = 171, [HOUSENAME](#) = 180,  
[CROSSING](#) = 172, [DISTRICT](#) = 173, [PHONENUMBER](#) = 174, [POINAME](#) = 175,  
[TOWNCENTER](#) = 176, [LOCATION\\_INPUT](#) = 177, [FULL\\_ADDRESS](#) = 178, [POSTAL\\_CODE](#) = 181,  
[ROADSHIELDS](#) = 182 }
- typedef [AddressAttribute](#)[] [AddressAttributeList](#)

## Public Member Functions

- void [getVersion](#) (out Version version)
- void [createLocationInput](#) (in Handle sessionHandle, out LocationHandle locationInputHandle)
- void [deleteLocationInput](#) (in Handle sessionHandle, in LocationHandle locationInputHandle)
- void [getSupportedAddressAttributes](#) (out [AddressAttributeList](#) addressAttributesList)
- void [setAddress](#) (in Handle sessionHandle, in LocationHandle locationInputHandle, in Address address)
- void [setSelectionCriterion](#) (in Handle sessionHandle, in LocationHandle locationInputHandle, in [AddressAttribute](#) selectionCriterion)
- void [spell](#) (in Handle sessionHandle, in LocationHandle locationInputHandle, in String inputCharacter, in UInt16 maxWindowSize)
- void [search](#) (in Handle sessionHandle, in LocationHandle locationInputHandle, in String inputString, in UInt16 maxWindowSize)
- void [requestListUpdate](#) (in Handle sessionHandle, in LocationHandle locationInputHandle, in UInt16 offset, in UInt16 maxWindowSize)
- void [selectEntry](#) (in Handle sessionHandle, in LocationHandle locationInputHandle, in UInt16 index)
- void [getEntry](#) (in LocationHandle locationInputHandle, in UInt16 index, out Address address)
- void [validateAddress](#) (in Handle sessionHandle, in LocationHandle locationInputHandle, in Address inputAddress)
- void [reverseGeocode](#) (in Handle sessionHandle, in LocationHandle locationInputHandle, in Coordinate2D coordinate)

## Public Attributes

- map\_Address [AddressAttribute](#) => [AddressValue](#)
- map\_ValidationStatus [AddressAttribute](#) => [ValidationType](#)

## 2.11.1 Detailed Description

#comment : [LocationInput](#) = This interface offers functions that implement the location-input functionality of a navigation system

## 2.11.2 Member Typedef Documentation

2.11.2.1 typedef [AddressAttribute](#) [ ] org::genivi::navigation::navigationcore::LocationInput::AddressAttributeList

## 2.11.3 Member Enumeration Documentation

2.11.3.1 enum org::genivi::navigation::navigationcore::LocationInput::AddressAttribute : GeoLocalizedEnum

## Enumerator

**COUNTRY**  
**COUNTRYCODE**  
**STATE**  
**CITY**  
**STREET**  
**ROAD\_NUMBER**  
**HOUSENUMBER**



**HOUSENAME**  
**CROSSING**  
**DISTRICT**  
**PHONENUMBER**  
**POINAME**  
**TOWNCENTER**  
**LOCATION\_INPUT**  
**FULL\_ADDRESS**  
**POSTAL\_CODE**  
**ROADSHIELDS**

2.11.3.2 enum org::genivi::navigation::navigationcore::LocationInput::SearchStatus : BasicEnum

Enumerator

**SEARCHING**  
**FINISHED**

2.11.3.3 enum org::genivi::navigation::navigationcore::LocationInput::ValidationType : BasicEnum

Enumerator

**OK**  
**UNKNOWN**  
**AMBIGUOUS**  
**INCONSISTENT**

#### 2.11.4 Member Function Documentation

2.11.4.1 void org::genivi::navigation::navigationcore::LocationInput::createLocationInput ( in Handle *sessionHandle*, out LocationHandle *locationInputHandle* )

#comment : createLocationInput = This method creates a new location input and retrieves a handle

2.11.4.2 void org::genivi::navigation::navigationcore::LocationInput::deleteLocationInput ( in Handle *sessionHandle*, in LocationHandle *locationInputHandle* )

#comment : deleteLocationInput = This method deletes a location input and its associated resources

2.11.4.3 void org::genivi::navigation::navigationcore::LocationInput::getEntry ( in LocationHandle *locationInputHandle*, in UInt16 *index*, out Address *address* )

#comment : getEntry = This method synchronously gets the address for the given result list entry

2.11.4.4 void org::genivi::navigation::navigationcore::LocationInput::getSupportedAddressAttributes ( out AddressAttributeList *addressAttributesList* )

#comment : getSupportedAddressAttributes = This method retrieves the supported address attributes

2.11.4.5 void org::genivi::navigation::navigationcore::LocationInput::getVersion ( out Version *version* )

#comment : getVersion = This method returns the API version implemented by the server application

2.11.4.6 void org::genivi::navigation::navigationcore::LocationInput::requestListUpdate ( in Handle *sessionHandle*, in LocationHandle *locationInputHandle*, in UInt16 *offset*, in UInt16 *maxWindowSize* )

#comment : requestListUpdate = This method sends a request for more list elements for the current session

2.11.4.7 void org::genivi::navigation::navigationcore::LocationInput::reverseGeocode ( in Handle *sessionHandle*, in LocationHandle *locationInputHandle*, in Coordinate2D *coordinate* )

#comment : reverseGeocode = This method transforms a geocoordinate into an address Note: the update of the input content will be notified in signal ContentUpdated

2.11.4.8 void org::genivi::navigation::navigationcore::LocationInput::search ( in Handle *sessionHandle*, in LocationHandle *locationInputHandle*, in String *inputString*, in UInt16 *maxWindowSize* )

#comment : search = This method sends the search input for the current session Note: when a search is started the entries of the spell input are removed

2.11.4.9 void org::genivi::navigation::navigationcore::LocationInput::selectEntry ( in Handle *sessionHandle*, in LocationHandle *locationInputHandle*, in UInt16 *index* )

#comment : selectEntry = This method triggers selection of a result list entry by index Note: the update of the input content will be notified in signal ContentUpdated

2.11.4.10 void org::genivi::navigation::navigationcore::LocationInput::setAddress ( in Handle *sessionHandle*, in LocationHandle *locationInputHandle*, in Address *address* )

#comment : setAddress = This method sets the address to start with for the [LocationInput](#) identified by the given handle

2.11.4.11 void org::genivi::navigation::navigationcore::LocationInput::setSelectionCriterion ( in Handle *sessionHandle*, in LocationHandle *locationInputHandle*, in AddressAttribute *selectionCriterion* )

#comment : setSelectionCriterion = This method sets the selection criterion for the current speller, search input and the corresponding result-lists for the current session

2.11.4.12 void org::genivi::navigation::navigationcore::LocationInput::spell ( in Handle *sessionHandle*, in LocationHandle *locationInputHandle*, in String *inputCharacter*, in UInt16 *maxWindowSize* )

#comment : spell = This method sends the next spell input for the current session Note: when a spell is started the entries of the search are removed

2.11.4.13 void org::genivi::navigation::navigationcore::LocationInput::validateAddress ( in Handle *sessionHandle*, in LocationHandle *locationInputHandle*, in Address *inputAddress* )

#comment : validateAddress = This method validates an address from different sources than Navigation

### 2.11.5 Member Data Documentation

2.11.5.1 `map_Address` `org::genivi::navigation::navigationcore::LocationInput::AddressAttribute`  
=>`AddressValue`

2.11.5.2 `map_ValidationStatus` `org::genivi::navigation::navigationcore::LocationInput::AddressAttribute`  
=>`ValidationType`

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

- [LocationInput.fidl](#)

## 2.12 `org::genivi::navigation::navigationcore::LocationInput_client` Interface Reference

### Public Member Functions

- void [currentSelectionCriterion](#) (in `LocationHandle locationInputHandle`, in `AddressAttribute selectionCriterion`)
- void [searchStatus](#) (in `LocationHandle locationInputHandle`, in `SearchStatus statusValue`)
- void [spellResult](#) (in `LocationHandle locationInputHandle`, in `String uniqueString`, in `String validCharacters`, in `Boolean fullMatch`)
- void [searchResultList](#) (in `LocationHandle locationInputHandle`, in `UInt16 totalSize`, in `UInt16 windowOffset`, in `UInt16 windowSize`, in `Address resultListWindow`)
- void [searchResultListSizeChanged](#) (in `LocationHandle locationInputHandle`, in `UInt16 totalSize`)
- void [contentUpdated](#) (in `LocationHandle locationInputHandle`, in `Boolean guidable`, in `AddressAttribute availableSelectionCriteria`, in `Address address`)
- void [addressValidationResult](#) (in `LocationHandle locationInputHandle`, in `Address validatedAddressList`, in `ValidationStatus validationStatusList`)

### 2.12.1 Member Function Documentation

2.12.1.1 void `org::genivi::navigation::navigationcore::LocationInput_client::addressValidationResult` ( in `LocationHandle locationInputHandle`, in `Address validatedAddressList`, in `ValidationStatus validationStatusList` )

broadcast #comment : `addressValidationResult` = This signal notifies the validation result of a former `Validate`↔`Address` call

2.12.1.2 void `org::genivi::navigation::navigationcore::LocationInput_client::contentUpdated` ( in `LocationHandle locationInputHandle`, in `Boolean guidable`, in `AddressAttribute availableSelectionCriteria`, in `Address address` )

broadcast #comment : `contentUpdated` = This signal updates the input content data for the specified session

2.12.1.3 void `org::genivi::navigation::navigationcore::LocationInput_client::currentSelectionCriterion` ( in `LocationHandle locationInputHandle`, in `AddressAttribute selectionCriterion` )

broadcast #comment : `currentSelectionCriterion` = This signal notifies the `SelectionCriterion` for the current speller input or search.

2.12.1.4 void org::genivi::navigation::navigationcore::LocationInput\_client::searchResultList ( in LocationHandle *locationInputHandle*, in UInt16 *totalSize*, in UInt16 *windowOffset*, in UInt16 *windowSize*, in Address *resultListWindow* )

broadcast #comment : searchResultList = This signal updates the address result list (e.g. after a Search/Spell/Scroll call)

2.12.1.5 void org::genivi::navigation::navigationcore::LocationInput\_client::searchResultListSizeChanged ( in LocationHandle *locationInputHandle*, in UInt16 *totalSize* )

broadcast #comment : searchResultListSizeChanged = This signal updates the size of the address result list

2.12.1.6 void org::genivi::navigation::navigationcore::LocationInput\_client::searchStatus ( in LocationHandle *locationInputHandle*, in SearchStatus *statusValue* )

broadcast #comment : searchStatus = This signal updates the search status of the specified session

2.12.1.7 void org::genivi::navigation::navigationcore::LocationInput\_client::spellResult ( in LocationHandle *locationInputHandle*, in String *uniqueString*, in String *validCharacters*, in Boolean *fullMatch* )

broadcast #comment : spellResult = This signal notifies the result of the previous Spell method

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

- [LocationInput.fidl](#)

## 2.13 org::genivi::navigation::navigationcore::Guidance::Maneuver Struct Reference

### Public Attributes

- RoadShield[] [roadShieldsAfterManeuver](#)
- String [countryCodeAfterManeuver](#)
- String [stateCodeAfterManeuver](#)
- String [roadNumberAfterManeuver](#)
- String [roadNameAfterManeuver](#)
- RoadProperty [roadPropertyAfterManeuver](#)
- Side [drivingSide](#)
- UInt32 [offsetOfNextManeuver](#)
- ManeuverItem[] [items](#)

### 2.13.1 Member Data Documentation

2.13.1.1 String org::genivi::navigation::navigationcore::Guidance::Maneuver::countryCodeAfterManeuver

2.13.1.2 Side org::genivi::navigation::navigationcore::Guidance::Maneuver::drivingSide

2.13.1.3 ManeuverItem [ ] org::genivi::navigation::navigationcore::Guidance::Maneuver::items

2.13.1.4 UInt32 org::genivi::navigation::navigationcore::Guidance::Maneuver::offsetOfNextManeuver

2.13.1.5 String org::genivi::navigation::navigationcore::Guidance::Maneuver::roadNameAfterManeuver

2.13.1.6 String org::genivi::navigation::navigationcore::Guidance::Maneuver::roadNumberAfterManeuver

2.13.1.7 RoadProperty org::genivi::navigation::navigationcore::Guidance::Maneuver::roadPropertyAfterManeuver

2.13.1.8 RoadShield [ ] org::genivi::navigation::navigationcore::Guidance::Maneuver::roadShieldsAfterManeuver

2.13.1.9 String org::genivi::navigation::navigationcore::Guidance::Maneuver::stateCodeAfterManeuver

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

- [Guidance.fidl](#)

## 2.14 org::genivi::navigation::navigationcore::Guidance::ManeuverDataValue Union Reference

### Public Attributes

- [ManeuverDirection](#) enumValue
- [UInt16](#) uint16Value
- [String](#) stringValue
- [RoadForm](#) roadFormValue
- [LaneInfo\[\]](#) laneInfoValue
- [Coordinate3D](#) coordinate3DValue

### 2.14.1 Member Data Documentation

2.14.1.1 [Coordinate3D](#) org::genivi::navigation::navigationcore::Guidance::ManeuverDataValue::coordinate3DValue

2.14.1.2 [ManeuverDirection](#) org::genivi::navigation::navigationcore::Guidance::ManeuverDataValue::enumValue

2.14.1.3 [LaneInfo \[\]](#) org::genivi::navigation::navigationcore::Guidance::ManeuverDataValue::laneInfoValue

2.14.1.4 [RoadForm](#) org::genivi::navigation::navigationcore::Guidance::ManeuverDataValue::roadFormValue

2.14.1.5 [String](#) org::genivi::navigation::navigationcore::Guidance::ManeuverDataValue::stringValue

2.14.1.6 [UInt16](#) org::genivi::navigation::navigationcore::Guidance::ManeuverDataValue::uint16Value

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

- [Guidance.fidl](#)

## 2.15 org::genivi::navigation::navigationcore::Guidance::ManeuverItem Struct Reference

### Public Attributes

- [UInt32](#) offsetOfManeuver
- [UInt32](#) travelTime
- [ManeuverDirectionType](#) direction
- [ManeuverType](#) maneuver
- [ManeuverData](#) maneuverData

### 2.15.1 Member Data Documentation

2.15.1.1 [ManeuverDirectionType](#) org::genivi::navigation::navigationcore::Guidance::ManeuverItem::direction

2.15.1.2 [ManeuverType](#) org::genivi::navigation::navigationcore::Guidance::ManeuverItem::maneuver

2.15.1.3 [ManeuverData](#) org::genivi::navigation::navigationcore::Guidance::ManeuverItem::maneuverData

2.15.1.4 [UInt32](#) org::genivi::navigation::navigationcore::Guidance::ManeuverItem::offsetOfManeuver

2.15.1.5 [UInt32](#) org::genivi::navigation::navigationcore::Guidance::ManeuverItem::travelTime

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

- [Guidance.fidl](#)

## 2.16 org::genivi::navigation::navigationcore::MapMatchedPosition Interface Reference

## Classes

- union [AddressItemValue](#)
- union [PositionItemValue](#)
- union [PositionOnSegmentValue](#)
- union [PositionStatusValue](#)

## Public Types

- enum [PositionItemKey](#) : PositionStatus { [HEADING](#) = 163, [SPEED](#) = 164, [CLIMB](#) = 165 }
- enum [AddressItemKey](#) : TimeStampedEnum { [TIMEZONE\\_OFFSET](#) = 17, [DAYLIGHT\\_OFFSET](#) = 18, [COUNTRY](#) = 166, [STATE](#) = 167, [CITY](#) = 168, [STREET](#) = 170, [HOUSENUMBER](#) = 171, [CROSSING](#) = 172, [DISTRICT](#) = 173, [PHONENUMBER](#) = 174, [POINAME](#) = 175, [TOWNCENTER](#) = 176, [LOCATION\\_INPUT](#) = 177, [FULL\\_ADDRESS](#) = 178, [COUNTRYCODE](#) = 179, [HOUSENAME](#) = 180, [POSTAL\\_CODE](#) = 181, [ROAD\\_NUMBER](#) = 334, [MATCH\\_TYPE](#) = 240, [ROADSHIELDS](#) = 182 }
- enum [PositionStatus](#) : GeoLocalizedEnum { [GNSS\\_FIX\\_STATUS](#) = 224, [DR\\_STATUS](#) = 225, [MM\\_STATUS](#) = 226, [SIMULATION\\_MODE](#) = 227 }
- enum [MatchMode](#) { [MATCH\\_TYPE](#) = 240, [ON\\_ROAD](#) = 241, [OFF\\_ROAD](#) = 242, [ON\\_FERRY](#) = 243, [IN\\_TUNNEL](#) = 244, [ON\\_CARPARK](#) = 245 }
- enum [GnssFixStatus](#) : BasicEnum { [NO\\_FIX](#) = 256, [TIME\\_FIX](#) = 257, [FIX\\_2D](#) = 258, [FIX\\_3D](#) = 259 }
- enum [PositionOnSegmentKey](#) : TimeStampedEnum { [SEGMENT\\_ID](#) = 272, [DIRECTION\\_ON\\_SEGMENT](#) = 274, [DISTANCE\\_ON\\_SEGMENT](#) = 275 }
- enum [SimulationStatus](#) : BasicEnum { [SIMULATION\\_STATUS\\_NO\\_SIMULATION](#) = 544, [SIMULATION\\_STATUS\\_RUNNING](#) = 545, [SIMULATION\\_STATUS\\_PAUSED](#) = 546, [SIMULATION\\_STATUS\\_FIXED\\_POSITION](#) = 547 }

## Public Member Functions

- void [getVersion](#) (out Version version)
- void [setSimulationMode](#) (in Handle sessionHandle, in Boolean activate)
- void [getSimulationStatus](#) (out [SimulationStatus](#) simulationStatus)
- void [setSimulationSpeed](#) (in Handle sessionHandle, in UInt8 speedFactor)
- void [getSimulationSpeed](#) (out UInt8 speedFactor)
- void [startSimulation](#) (in Handle sessionHandle)
- void [pauseSimulation](#) (in Handle sessionHandle)
- void [getPosition](#) (in [PositionItemKey](#) valuesToReturn, out PositionItemDict position)
- void [setPosition](#) (in Handle sessionHandle, in PositionItemDict position)
- void [getCurrentAddress](#) (in [AddressItemKey](#) valuesToReturn, out AddressItemDict address)
- void [getPositionOnSegment](#) (in [PositionOnSegmentKey](#) valuesToReturn, out PositionOnSegmentDict positionOnSegment)
- void [getStatus](#) (in [PositionStatus](#) valuesToReturn, out PositionStatusDict status)

## Public Attributes

- map\_PositionItemDict [PositionItemKey](#) => [PositionItemValue](#)
- map\_AddressItemDict [AddressItemKey](#) => [AddressItemValue](#)
- map\_PositionOnSegmentDict [PositionOnSegmentKey](#) => [PositionOnSegmentValue](#)
- map\_PositionStatusDict [PositionStatus](#) => [PositionStatusValue](#)

### 2.16.1 Detailed Description

#comment : [MapMatchedPosition](#) = This interface offers functions to retrieve the map matched position and to simulate positioning

### 2.16.2 Member Enumeration Documentation

2.16.2.1 enum org::genivi::navigation::navigationcore::MapMatchedPosition::AddressItemKey : TimeStampedEnum

Enumerator

**TIMEZONE\_OFFSET**  
**DAYLIGHT\_OFFSET**  
**COUNTRY**  
**STATE**  
**CITY**  
**STREET**  
**HOUSENUMBER**  
**CROSSING**  
**DISTRICT**  
**PHONENUMBER**  
**POINAME**  
**TOWNCENTER**  
**LOCATION\_INPUT**  
**FULL\_ADDRESS**  
**COUNTRYCODE**  
**HOUSENAME**  
**POSTAL\_CODE**  
**ROAD\_NUMBER**  
**MATCH\_TYPE**  
**ROADSHIELDS**

2.16.2.2 enum org::genivi::navigation::navigationcore::MapMatchedPosition::GnnsFixStatus : BasicEnum

Enumerator

**NO\_FIX**  
**TIME\_FIX**  
**FIX\_2D**  
**FIX\_3D**

## 2.16.2.3 enum org::genivi::navigation::navigationcore::MapMatchedPosition::MatchMode

Enumerator

***MATCH\_TYPE***  
***ON\_ROAD***  
***OFF\_ROAD***  
***ON\_FERRY***  
***IN\_TUNNEL***  
***ON\_CARPARK***

## 2.16.2.4 enum org::genivi::navigation::navigationcore::MapMatchedPosition::PositionItemKey : PositionStatus

Enumerator

***HEADING***  
***SPEED***  
***CLIMB***

## 2.16.2.5 enum org::genivi::navigation::navigationcore::MapMatchedPosition::PositionOnSegmentKey : TimeStampedEnum

Enumerator

***SEGMENT\_ID***  
***DIRECTION\_ON\_SEGMENT***  
***DISTANCE\_ON\_SEGMENT***

## 2.16.2.6 enum org::genivi::navigation::navigationcore::MapMatchedPosition::PositionStatus : GeoLocalizedEnum

Enumerator

***GNSS\_FIX\_STATUS***  
***DR\_STATUS***  
***MM\_STATUS***  
***SIMULATION\_MODE***

## 2.16.2.7 enum org::genivi::navigation::navigationcore::MapMatchedPosition::SimulationStatus : BasicEnum

Enumerator

***SIMULATION\_STATUS\_NO\_SIMULATION***  
***SIMULATION\_STATUS\_RUNNING***  
***SIMULATION\_STATUS\_PAUSED***  
***SIMULATION\_STATUS\_FIXED\_POSITION***



### 2.16.3 Member Function Documentation

2.16.3.1 `void org::genivi::navigation::navigationcore::MapMatchedPosition::getCurrentAddress ( in AddressItemKey valuesToReturn, out AddressItemDict address )`

#comment : getCurrentAddress = This method returns the current address

2.16.3.2 `void org::genivi::navigation::navigationcore::MapMatchedPosition::getPosition ( in PositionItemKey valuesToReturn, out PositionItemDict position )`

#comment : getPosition = This method returns the current position

2.16.3.3 `void org::genivi::navigation::navigationcore::MapMatchedPosition::getPositionOnSegment ( in PositionOnSegmentKey valuesToReturn, out PositionOnSegmentDict positionOnSegment )`

#comment : positionOnSegment = This method returns the vehicle position on a route segment

2.16.3.4 `void org::genivi::navigation::navigationcore::MapMatchedPosition::getSimulationSpeed ( out UInt8 speedFactor )`

#comment : getSimulationSpeed = returns the speed factor for the simulation mode

2.16.3.5 `void org::genivi::navigation::navigationcore::MapMatchedPosition::getSimulationStatus ( out SimulationStatus simulationStatus )`

#comment : getSimulationStatus = This method retrieves the simulation status

2.16.3.6 `void org::genivi::navigation::navigationcore::MapMatchedPosition::getStatus ( in PositionStatus valuesToReturn, out PositionStatusDict status )`

#comment : getStatus = This method returns the current status

2.16.3.7 `void org::genivi::navigation::navigationcore::MapMatchedPosition::getVersion ( out Version version )`

#comment : getVersion = This method returns the API version implemented by the server application

2.16.3.8 `void org::genivi::navigation::navigationcore::MapMatchedPosition::pauseSimulation ( in Handle sessionHandle )`

#comment : pauseSimulation = This method freezes the current location

2.16.3.9 `void org::genivi::navigation::navigationcore::MapMatchedPosition::setPosition ( in Handle sessionHandle, in PositionItemDict position )`

#comment : setPosition = This method sets the position to a specific location

2.16.3.10 `void org::genivi::navigation::navigationcore::MapMatchedPosition::setSimulationMode ( in Handle sessionHandle, in Boolean activate )`

#comment : setSimulationMode = This method activates or deactivates the simulation mode

2.16.3.11 void org::genivi::navigation::navigationcore::MapMatchedPosition::setSimulationSpeed ( in Handle *sessionHandle*, in UInt8 *speedFactor* )

2.16.3.12 void org::genivi::navigation::navigationcore::MapMatchedPosition::startSimulation ( in Handle *sessionHandle* )

#comment : startSimulation = This method starts, or resumes, a Follow Active Route simulation

#### 2.16.4 Member Data Documentation

2.16.4.1 map\_AddressItemDict org::genivi::navigation::navigationcore::MapMatchedPosition::AddressItemKey =>AddressItemValue

2.16.4.2 map\_PositionItemDict org::genivi::navigation::navigationcore::MapMatchedPosition::PositionItemKey =>PositionItemValue

2.16.4.3 map\_PositionOnSegmentDict org::genivi::navigation::navigationcore::MapMatchedPosition::PositionOnSegmentKey =>PositionOnSegmentValue

2.16.4.4 map\_PositionStatusDict org::genivi::navigation::navigationcore::MapMatchedPosition::PositionStatus =>PositionStatusValue

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

- [MapMatchedPosition.fidl](#)

## 2.17 org::genivi::navigation::navigationcore::MapMatchedPosition\_client Interface Reference

### Public Member Functions

- void [simulationStatusChanged](#) (in SimulationStatus *simulationStatus*)
- void [simulationSpeedChanged](#) (in UInt8 *speedFactor*)
- void [positionUpdate](#) (in PositionItemKey *changedValues*)
- void [addressUpdate](#) (in AddressItemKey *changedValues*)
- void [positionOnSegmentUpdate](#) (in PositionOnSegmentKey *changedValues*)
- void [statusUpdate](#) (in PositionStatus *changedValues*)
- void [offRoadPositionChanged](#) (in UInt32 *distance*, in Int32 *direction*)

#### 2.17.1 Member Function Documentation

2.17.1.1 void org::genivi::navigation::navigationcore::MapMatchedPosition\_client::addressUpdate ( in AddressItemKey *changedValues* )

broadcast #comment : addressUpdate = This signal is called to notify a client application that the current address changed

2.17.1.2 void org::genivi::navigation::navigationcore::MapMatchedPosition\_client::offRoadPositionChanged ( in UInt32 *distance*, in Int32 *direction* )

broadcast #comment : offroadPositionChanged = This signal is emitted when the heading and the distance to the closest point on the road network changes

2.17.1.3 void org::genivi::navigation::navigationcore::MapMatchedPosition\_client::positionOnSegmentUpdate ( in PositionOnSegmentKey *changedValues* )

broadcast #comment : positionOnSegmentUpdate = This signal is called to notify the client that the vehicle position on the route segment changed

2.17.1.4 void org::genivi::navigation::navigationcore::MapMatchedPosition\_client::positionUpdate ( in PositionItemKey *changedValues* )

broadcast #comment : positionUpdate = This signal is called to notify a client application of a position change. The update frequency is implementation specific. The maximal allowed frequency is 10Hz

2.17.1.5 void org::genivi::navigation::navigationcore::MapMatchedPosition\_client::simulationSpeedChanged ( in UInt8 *speedFactor* )

broadcast #comment : simulationSpeedChanged = This signal is emitted when the simulation speed factor has changed

2.17.1.6 void org::genivi::navigation::navigationcore::MapMatchedPosition\_client::simulationStatusChanged ( in SimulationStatus *simulationStatus* )

broadcast #comment : simulationStatusChanged = This signal is emitted when the Simulation Status has changed

2.17.1.7 void org::genivi::navigation::navigationcore::MapMatchedPosition\_client::statusUpdate ( in PositionStatus *changedValues* )

broadcast #comment : statusUpdate = This signal is emitted to notify a client application that the current status changed

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

- [MapMatchedPosition.fidl](#)

## 2.18 org::genivi::navigation::navigationcore::NavigationCoreTypes Interface Reference

### Classes

- struct [RoadShield](#)
- struct [RoadShieldAffix](#)

### Public Types

- enum [TimeStampedEnum](#) : BasicEnum { [TIMESTAMP](#) = 16 }
- enum [GeoLocalizedEnum](#) : TimeStampedEnum { [LATITUDE](#) = 160, [LONGITUDE](#) = 161, [ALTITUDE](#) = 162 }
- enum [RoadShieldAffixType](#) { [NONE](#) = 700, [NORTH](#) = 701, [EAST](#) = 702, [SOUTH](#) = 703, [WEST](#) = 704, [ALTERNATE](#) = 705, [BYPASS](#) = 706, [BUSINESS\\_LOOP](#) = 707, [BUSINESS\\_ROUTE](#) = 708, [BUSINESS\\_SPUR](#) = 709, [EXTENDED](#) = 710, [COLLECTOR](#) = 711, [EXPRESS](#) = 712 }

### 2.18.1 Member Enumeration Documentation

#### 2.18.1.1 enum org::genivi::navigation::navigationcore::NavigationCoreTypes::GeoLocalizedEnum : TimeStampedEnum

Enumerator

***LATITUDE***  
***LONGITUDE***  
***ALTITUDE***

#### 2.18.1.2 enum org::genivi::navigation::navigationcore::NavigationCoreTypes::RoadShieldAffixType

Enumerator

***NONE***  
***NORTH***  
***EAST***  
***SOUTH***  
***WEST***  
***ALTERNATE***  
***BYPASS***  
***BUSINESS\_LOOP***  
***BUSINESS\_ROUTE***  
***BUSINESS\_SPUR***  
***EXTENDED***  
***COLLECTOR***  
***EXPRESS***

#### 2.18.1.3 enum org::genivi::navigation::navigationcore::NavigationCoreTypes::TimeStampedEnum : BasicEnum

Enumerator

***TIMESTAMP***

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

- [NavigationCoreTypes.fidl](#)

## 2.19 org::genivi::navigation::navigationcore::MapMatchedPosition::PositionItemValue Union Reference

Public Attributes

- Timestamp [timestamp](#)
- Boolean [status](#)
- GnssFixStatus [fix](#)
- Double [doubleValue](#)
- Int32 [intValue](#)

### 2.19.1 Member Data Documentation

2.19.1.1 Double `org::genivi::navigation::navigationcore::MapMatchedPosition::PositionItemValue::doubleValue`

2.19.1.2 GnnsFixStatus `org::genivi::navigation::navigationcore::MapMatchedPosition::PositionItemValue::fix`

2.19.1.3 Int32 `org::genivi::navigation::navigationcore::MapMatchedPosition::PositionItemValue::intValue`

2.19.1.4 Boolean `org::genivi::navigation::navigationcore::MapMatchedPosition::PositionItemValue::status`

2.19.1.5 Timestamp `org::genivi::navigation::navigationcore::MapMatchedPosition::PositionItemValue::timestamp`

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

- [MapMatchedPosition.fidl](#)

## 2.20 `org::genivi::navigation::navigationcore::MapMatchedPosition::PositionOnSegmentValue` Union Reference

### Public Attributes

- Boolean [directionOnSegment](#)
- Double [distanceOnSegment](#)
- ByteBuffer [segment](#)
- Timestamp [timestamp](#)

### 2.20.1 Member Data Documentation

2.20.1.1 Boolean `org::genivi::navigation::navigationcore::MapMatchedPosition::PositionOnSegmentValue::directionOnSegment`

2.20.1.2 Double `org::genivi::navigation::navigationcore::MapMatchedPosition::PositionOnSegmentValue::distanceOnSegment`

2.20.1.3 ByteBuffer `org::genivi::navigation::navigationcore::MapMatchedPosition::PositionOnSegmentValue::segment`

2.20.1.4 Timestamp `org::genivi::navigation::navigationcore::MapMatchedPosition::PositionOnSegmentValue::timestamp`

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

- [MapMatchedPosition.fidl](#)

## 2.21 `org::genivi::navigation::navigationcore::MapMatchedPosition::PositionStatusValue` Union Reference

### Public Attributes

- Boolean [statusValue](#)
- GnnsFixStatus [fixStatus](#)
- Timestamp [timestamp](#)

### 2.21.1 Member Data Documentation

2.21.1.1 **GnnsFixStatus** org::genivi::navigation::navigationcore::MapMatchedPosition::PositionStatusValue::fixStatus

2.21.1.2 **Boolean** org::genivi::navigation::navigationcore::MapMatchedPosition::PositionStatusValue::statusValue

2.21.1.3 **Timestamp** org::genivi::navigation::navigationcore::MapMatchedPosition::PositionStatusValue::timestamp

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

- [MapMatchedPosition.fidl](#)

## 2.22 org::genivi::navigation::navigationcore::Routing::RoadPreference Struct Reference

### Public Attributes

- [PreferenceMode](#) mode
- [RoutePreferenceSource](#) source

### 2.22.1 Member Data Documentation

2.22.1.1 **PreferenceMode** org::genivi::navigation::navigationcore::Routing::RoadPreference::mode

2.22.1.2 **RoutePreferenceSource** org::genivi::navigation::navigationcore::Routing::RoadPreference::source

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

- [Routing.fidl](#)

## 2.23 org::genivi::navigation::navigationcore::NavigationCoreTypes::RoadShield Struct Reference

### Public Attributes

- String [roadNumber](#)
- [RoadShieldAffix](#) [ ] affixes
- String [iconSetId](#)

### 2.23.1 Member Data Documentation

2.23.1.1 **RoadShieldAffix** [ ] org::genivi::navigation::navigationcore::NavigationCoreTypes::RoadShield::affixes

2.23.1.2 **String** org::genivi::navigation::navigationcore::NavigationCoreTypes::RoadShield::iconSetId

2.23.1.3 **String** org::genivi::navigation::navigationcore::NavigationCoreTypes::RoadShield::roadNumber

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

- [NavigationCoreTypes.fidl](#)

## 2.24 org::genivi::navigation::navigationcore::NavigationCoreTypes::RoadShieldAffix Struct Reference

### Public Attributes

- [RoadShieldAffixType](#) `affixType`
- [String](#) `affixContent`

### 2.24.1 Member Data Documentation

2.24.1.1 [String](#) `org::genivi::navigation::navigationcore::NavigationCoreTypes::RoadShieldAffix::affixContent`

2.24.1.2 [RoadShieldAffixType](#) `org::genivi::navigation::navigationcore::NavigationCoreTypes::RoadShieldAffix::affixType`

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

- [NavigationCoreTypes.fidl](#)

## 2.25 org::genivi::navigation::navigationcore::Routing::RouteOverviewItem Union Reference

### Public Attributes

- [UInt32](#) `uValue`

### 2.25.1 Member Data Documentation

2.25.1.1 [UInt32](#) `org::genivi::navigation::navigationcore::Routing::RouteOverviewItem::uValue`

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

- [Routing.fidl](#)

## 2.26 org::genivi::navigation::navigationcore::Routing::RouteSegmentItem Union Reference

### Public Attributes

- [Double](#) `doubleValue`
- [IntermediatePoint\[\]](#) `intermediatePoints`
- [String](#) `stringValue`
- [UInt8\[\]](#) `linkId`
- [Int32](#) `int32Value`
- [Int16](#) `int16Value`
- [UInt32](#) `uint32Value`
- [UInt16](#) `uint16Value`

## 2.26.1 Member Data Documentation

2.26.1.1 Double org::genivi::navigation::navigationcore::Routing::RouteSegmentItem::doubleValue

2.26.1.2 Int16 org::genivi::navigation::navigationcore::Routing::RouteSegmentItem::int16Value

2.26.1.3 Int32 org::genivi::navigation::navigationcore::Routing::RouteSegmentItem::int32Value

2.26.1.4 IntermediatePoint [ ] org::genivi::navigation::navigationcore::Routing::RouteSegmentItem::intermediatePoints

2.26.1.5 UInt8 [ ] org::genivi::navigation::navigationcore::Routing::RouteSegmentItem::linkId

2.26.1.6 String org::genivi::navigation::navigationcore::Routing::RouteSegmentItem::stringValue

2.26.1.7 UInt16 org::genivi::navigation::navigationcore::Routing::RouteSegmentItem::uint16Value

2.26.1.8 UInt32 org::genivi::navigation::navigationcore::Routing::RouteSegmentItem::uint32Value

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

- [Routing.fidl](#)

## 2.27 org::genivi::navigation::navigationcore::Routing Interface Reference

## Classes

- struct [BlockedRouteElement](#)
- struct [ConditionPreference](#)
- struct [IntermediatePoint](#)
- struct [RoadPreference](#)
- union [RouteOverviewItem](#)
- union [RouteSegmentItem](#)
- union [WaypointItem](#)

## Public Types

- enum [CalculationStatus](#) : BasicEnum { [CALCULATION\\_OK](#) = 304, [NO\\_POSITION](#) = 305 }
- enum [CalculationError](#) : BasicEnum { [UNMATCHED\\_POSITION](#) = 306, [UNREACHABLE\\_DESTINATION](#) = 307, [UNFULFILLED\\_PREFERENCE\\_MODE](#) = 308 }
- enum [CostModel](#) : BasicEnum { [FASTEST](#) = 352, [SHORTEST](#) = 353, [ECOLOGICAL](#) = 354, [SCENIC](#) = 355, [EASY](#) = 356, [OFF\\_ROAD](#) = 357, [BALANCED](#) = 358, [CHEAPEST](#) = 359 }
- enum [RoutePreferenceSource](#) : BasicEnum { [FERRY](#) = 368, [TOLL\\_ROADS](#) = 369, [TUNNELS](#) = 370, [HIGHWAYS\\_MOTORWAYS](#) = 371, [VEHICLE\\_SIZE\\_LIMIT](#) = 372, [CRIME\\_AREAS](#) = 373 }
- enum [TransportationMeans](#) : BasicEnum { [BY\\_CAR](#) = 384, [ON\\_FOOT](#) = 385, [LONG\\_RANGE\\_TRAINS](#) = 386, [PUBLIC\\_TRANSPORTATION](#) = 387, [BY\\_BICYCLE](#) = 388, [BY\\_TRUCK](#) = 389 }
- enum [Schedule](#) : BasicEnum { [ARRIVAL\\_TIME](#) = 394, [ARRIVAL\\_DATE](#) = 395, [DEPARTURE\\_TIME](#) = 396, [DEPARTURE\\_DATE](#) = 397 }



- enum `PreferenceMode` : BasicEnum {  
`PROHIBIT` = 400, `AVOID` = 401, `USE` = 402, `PREFER` = 403,  
`IGNORE` = 404 }
- enum `ConditionPreferenceSource` : BasicEnum { `TRAFFIC_REALTIME` = 512 }
- enum `TimeStampedEnum` : BasicEnum { `TIMESTAMP` = 16 }
- enum `GeoLocalizedEnum` : TimeStampedEnum { `LATITUDE` = 160, `LONGITUDE` = 161, `ALTITUDE` = 162 }
- enum `WayPointType` { `HARD_POINT` = 290, `SOFT_POINT` = 291 }
- enum `RouteOverviewType` : Schedule { `TOTAL_TIME` = 398, `TOTAL_DISTANCE` = 399 }
- enum `WaypointElementType` {  
`LATITUDE` = 160, `LONGITUDE` = 161, `ALTITUDE` = 162, `LOCATION_INPUT` = 17,  
`WAYPOINT_TYPE` = 289 }
- enum `RouteSegmentType` : BasicEnum {  
`LINK_ID` = 320, `START_LATITUDE` = 321, `END_LATITUDE` = 322, `START_LONGITUDE` = 323,  
`END_LONGITUDE` = 324, `START_ALTITUDE` = 325, `END_ALTITUDE` = 326, `ROAD_NAME` = 327,  
`DISTANCE` = 328, `TIME` = 329, `MANEUVER` = 330, `INSTRUCTION` = 331,  
`BORDER_CROSSING` = 332, `ADDITIONAL_INFORMATION` = 333, `ROAD_NUMBER` = 334, `START_OF_FSET` = 335,  
`INTERMEDIATE_POINTS` = 288, `HIGHWAY_EXIT` = 116, `SPEED` = 164, `TIME_ZONE`,  
`DAYLIGHT_SAVING_TIME` }

#### Public Member Functions

- void `getVersion` (out Version version)
- void `createRoute` (in Handle sessionHandle, out Handle routeHandle)
- void `deleteRoute` (in Handle sessionHandle, in Handle routeHandle)
- void `setCostModel` (in Handle sessionHandle, in Handle routeHandle, in `CostModel` costModel)
- void `getCostModel` (in Handle routeHandle, out `CostModel` costModel)
- void `getSupportedCostModels` (out `CostModel` costModelsList)
- void `setRoutePreferences` (in Handle sessionHandle, in Handle routeHandle, in String countryCode, in `RoadPreference` roadPreferenceList, in `ConditionPreference` conditionPreferenceList)
- void `getRoutePreferences` (in Handle routeHandle, in String countryCode, out `RoadPreference` roadPreferenceList, out `ConditionPreference` conditionPreferenceList)
- void `getSupportedRoutePreferences` (out `RoadPreference` routePreferencesList, out `ConditionPreference` conditionPreferenceList)
- void `setRouteSchedule` (in Handle sessionHandle, in Handle routeHandle, in RouteSchedule routeSchedule)
- void `getRouteSchedule` (in Handle routeHandle, in `Schedule` valuesToReturn, out RouteSchedule routeSchedule)
- void `setTransportationMeans` (in Handle sessionHandle, in Handle routeHandle, in `TransportationMeans` transportationMeansList)
- void `getTransportationMeans` (in Handle routeHandle, out `TransportationMeans` transportationMeansList)
- void `getSupportedTransportationMeans` (out `TransportationMeans` transportationMeansList)
- void `setExcludedAreas` (in Handle sessionHandle, in Handle routeHandle, in Polygon excludedAreas)
- void `getExcludedAreas` (in Handle routeHandle, out Polygon excludedAreas)
- void `setWaypoints` (in Handle sessionHandle, in Handle routeHandle, in Boolean startFromCurrentPosition, in WayPoint waypointsList)
- void `getWaypoints` (in Handle routeHandle, out Boolean startFromCurrentPosition, out WayPoint waypointsList)
- void `calculateRoute` (in Handle sessionHandle, in Handle routeHandle)
- void `cancelRouteCalculation` (in Handle sessionHandle, in Handle routeHandle)
- void `calculateAlternativeRoutes` (in Handle sessionHandle, in Handle calculatedRoute, in UInt16 numberOfAlternativeRoutes, out Handle alternativeRoutesList)
- void `getRouteSegments` (in Handle routeHandle, in Int16 detailLevel, in `RouteSegmentType` valuesToReturn, in UInt32 numberOfSegments, in UInt32 offset, out UInt32 totalNumberOfSegments, out RouteSegment routeSegments)

- void [getRouteOverview](#) (in Handle routeHandle, in [RouteOverviewType](#) valuesToReturn, out RouteOverview routeOverview)
- void [getRouteBoundingBox](#) (in Handle routeHandle, out Rectangle boundingBox)
- void [getAllRoutes](#) (out Handle routesList)
- void [setBlockedRouteStretches](#) (in Handle sessionHandle, in Handle routeHandle, in [BlockedRouteElement](#) blockParameters)
- void [getBlockedRouteStretches](#) (in Handle routeHandle, out [BlockedRouteElement](#) blockParameters)

#### Public Attributes

- map\_UnfulfilledRoutePreference [PreferenceMode](#) => [RoutePreferenceSource](#)
- map\_RouteSchedule [Schedule](#) => UInt32
- map\_RouteOverview [RouteOverviewType](#) => [RouteOverviewItem](#)
- map\_WayPoint [WaypointElementType](#) => [WayPointItem](#)
- map\_RouteSegment [RouteSegmentType](#) => [RouteSegmentItem](#)

#### 2.27.1 Detailed Description

#comment : This interface offers functions that implement the routing functionality of a navigation system

#### 2.27.2 Member Enumeration Documentation

2.27.2.1 enum org::genivi::navigation::navigationcore::Routing::CalculationError : BasicEnum

##### Enumerator

**UNMATCHED\_POSITION**  
**UNREACHABLE\_DESTINATION**  
**UNFULFILLED\_PREFERENCE\_MODE**

2.27.2.2 enum org::genivi::navigation::navigationcore::Routing::CalculationStatus : BasicEnum

##### Enumerator

**CALCULATION\_OK**  
**NO\_POSITION**

2.27.2.3 enum org::genivi::navigation::navigationcore::Routing::ConditionPreferenceSource : BasicEnum

##### Enumerator

**TRAFFIC\_REALTIME**

2.27.2.4 enum org::genivi::navigation::navigationcore::Routing::CostModel : BasicEnum

Enumerator

***FASTEST***  
***SHORTEST***  
***ECOLOGICAL***  
***SCENIC***  
***EASY***  
***OFF\_ROAD***  
***BALANCED***  
***CHEAPEST***

2.27.2.5 enum org::genivi::navigation::navigationcore::Routing::GeoLocalizedEnum : TimeStampedEnum

Enumerator

***LATITUDE***  
***LONGITUDE***  
***ALTITUDE***

2.27.2.6 enum org::genivi::navigation::navigationcore::Routing::PreferenceMode : BasicEnum

Enumerator

***PROHIBIT***  
***AVOID***  
***USE***  
***PREFER***  
***IGNORE***

2.27.2.7 enum org::genivi::navigation::navigationcore::Routing::RouteOverviewType : Schedule

Enumerator

***TOTAL\_TIME***  
***TOTAL\_DISTANCE***

2.27.2.8 enum org::genivi::navigation::navigationcore::Routing::RoutePreferenceSource : BasicEnum

Enumerator

***FERRY***  
***TOLL\_ROADS***  
***TUNNELS***  
***HIGHWAYS\_MOTORWAYS***  
***VEHICLE\_SIZE\_LIMIT***  
***CRIME\_AREAS***

2.27.2.9 enum org::genivi::navigation::navigationcore::Routing::RouteSegmentType : BasicEnum

Enumerator

**LINK\_ID**  
**START\_LATITUDE**  
**END\_LATITUDE**  
**START\_LONGITUDE**  
**END\_LONGITUDE**  
**START\_ALTITUDE**  
**END\_ALTITUDE**  
**ROAD\_NAME**  
**DISTANCE**  
**TIME**  
**MANEUVER**  
**INSTRUCTION**  
**BORDER\_CROSSING**  
**ADDITIONAL\_INFORMATION**  
**ROAD\_NUMBER**  
**START\_OFFSET**  
**INTERMEDIATE\_POINTS**  
**HIGHWAY\_EXIT**  
**SPEED**  
**TIME\_ZONE**  
**DAYLIGHT\_SAVING\_TIME**

2.27.2.10 enum org::genivi::navigation::navigationcore::Routing::Schedule : BasicEnum

Enumerator

**ARRIVAL\_TIME**  
**ARRIVAL\_DATE**  
**DEPARTURE\_TIME**  
**DEPARTURE\_DATE**

2.27.2.11 enum org::genivi::navigation::navigationcore::Routing::TimeStampedEnum : BasicEnum

Enumerator

**TIMESTAMP**

2.27.2.12 enum org::genivi::navigation::navigationcore::Routing::TransportationMeans : BasicEnum

Enumerator

**BY\_CAR**  
**ON\_FOOT**  
**LONG\_RANGE\_TRAINS**  
**PUBLIC\_TRANSPORTATION**  
**BY\_BICYCLE**  
**BY\_TRUCK**

### 2.27.2.13 enum org::genivi::navigation::navigationcore::Routing::WaypointElementType

Enumerator

**LATITUDE**  
**LONGITUDE**  
**ALTITUDE**  
**LOCATION\_INPUT**  
**WAYPOINT\_TYPE**

### 2.27.2.14 enum org::genivi::navigation::navigationcore::Routing::WayPointType

Enumerator

**HARD\_POINT**  
**SOFT\_POINT**

## 2.27.3 Member Function Documentation

2.27.3.1 void org::genivi::navigation::navigationcore::Routing::calculateAlternativeRoutes ( in Handle *sessionHandle*, in Handle *calculatedRoute*, in UInt16 *numberOfAlternativeRoutes*, out Handle *alternativeRoutesList* )

#comment :#comment : calculateAlternativeRoutes = This method allows a client to calculate alternative routes of a route that already calculated.

2.27.3.2 void org::genivi::navigation::navigationcore::Routing::calculateRoute ( in Handle *sessionHandle*, in Handle *routeHandle* )

#comment : calculateRoute = This method starts a route calculation

2.27.3.3 void org::genivi::navigation::navigationcore::Routing::cancelRouteCalculation ( in Handle *sessionHandle*, in Handle *routeHandle* )

#comment : cancelRouteCalculation = This method cancels a route calculation

2.27.3.4 void org::genivi::navigation::navigationcore::Routing::createRoute ( in Handle *sessionHandle*, out Handle *routeHandle* )

#comment : This method creates a route

2.27.3.5 void org::genivi::navigation::navigationcore::Routing::deleteRoute ( in Handle *sessionHandle*, in Handle *routeHandle* )

#comment : This method deletes a route and its associated resources

2.27.3.6 void org::genivi::navigation::navigationcore::Routing::getAllRoutes ( out Handle *routesList* )

#comment : getAllRoutes = This method retrieves the handles of all created routes

2.27.3.7 void org::genivi::navigation::navigationcore::Routing::getBlockedRouteStretches ( in Handle *routeHandle*, out **BlockedRouteElement** *blockParameters* )

#comment : getBlockedRouteStretches = This method retrieves all blocked streches on a given route

2.27.3.8 void org::genivi::navigation::navigationcore::Routing::getCostModel ( in Handle *routeHandle*, out **CostModel** *costModel* )

#comment : This method retrieves the selected cost model

2.27.3.9 void org::genivi::navigation::navigationcore::Routing::getExcludedAreas ( in Handle *routeHandle*, out Polygon *excludedAreas* )

#comment : getExcludedAreas = This method retrieves the areas to be excluded when calculating a route

2.27.3.10 void org::genivi::navigation::navigationcore::Routing::getRouteBoundingBox ( in Handle *routeHandle*, out Rectangle *boundingBox* )

#comment : getRouteBoundingBox = This method retrieves the bounding box containing a calculated route

2.27.3.11 void org::genivi::navigation::navigationcore::Routing::getRouteOverview ( in Handle *routeHandle*, in **RouteOverviewType** *valuesToReturn*, out RouteOverview *routeOverview* )

#comment : getRouteOverview = This method retrieves general information about a given route

2.27.3.12 void org::genivi::navigation::navigationcore::Routing::getRoutePreferences ( in Handle *routeHandle*, in String *countryCode*, out **RoadPreference** *roadPreferenceList*, out **ConditionPreference** *conditionPreferenceList* )

#comment : This method retrieves a list of selected route preferences

2.27.3.13 void org::genivi::navigation::navigationcore::Routing::getRouteSchedule ( in Handle *routeHandle*, in **Schedule** *valuesToReturn*, out RouteSchedule *routeSchedule* )

#comment : This method gets the time schedule for the route to be calculated

2.27.3.14 void org::genivi::navigation::navigationcore::Routing::getRouteSegments ( in Handle *routeHandle*, in Int16 *detailLevel*, in **RouteSegmentType** *valuesToReturn*, in UInt32 *numberOfSegments*, in UInt32 *offset*, out UInt32 *totalNumberOfSegments*, out RouteSegment *routeSegments* )

#comment : getRouteSegments = This method retrieves a list of segments for a given route starting from the one closest to the current position to the one closest to the destination

2.27.3.15 void org::genivi::navigation::navigationcore::Routing::getSupportedCostModels ( out **CostModel** *costModelsList* )

#comment : This method retrieves a list of supported cost models

2.27.3.16 void org::genivi::navigation::navigationcore::Routing::getSupportedRoutePreferences ( out **RoadPreference** *routePreferencesList*, out **ConditionPreference** *conditionPreferenceList* )

#comment : This method retrieves a list of supported route preferences

2.27.3.17 void org::genivi::navigation::navigationcore::Routing::getSupportedTransportationMeans ( out **TransportationMeans** *transportationMeansList* )

#comment : getSupportedTransportationMeans = This method retrieves a list of supported means of transportation

2.27.3.18 void org::genivi::navigation::navigationcore::Routing::getTransportationMeans ( in Handle *routeHandle*, out **TransportationMeans** *transportationMeansList* )

#comment : getTransportationMeans = This method retrieves the selected means of transportation

2.27.3.19 void org::genivi::navigation::navigationcore::Routing::getVersion ( out **Version** *version* )

#comment : This method returns the API version implemented by the server application

2.27.3.20 void org::genivi::navigation::navigationcore::Routing::getWaypoints ( in Handle *routeHandle*, out Boolean *startFromCurrentPosition*, out **WayPoint** *waypointsList* )

#comment : getWaypoints = This method retrieves a list of waypoints

2.27.3.21 void org::genivi::navigation::navigationcore::Routing::setBlockedRouteStretches ( in Handle *sessionHandle*, in Handle *routeHandle*, in **BlockedRouteElement** *blockParameters* )

#comment : setBlockedRouteStretches = This method sets blocked stretches on a given route

2.27.3.22 void org::genivi::navigation::navigationcore::Routing::setCostModel ( in Handle *sessionHandle*, in Handle *routeHandle*, in **CostModel** *costModel* )

#comment : This method sets the cost model

2.27.3.23 void org::genivi::navigation::navigationcore::Routing::setExcludedAreas ( in Handle *sessionHandle*, in Handle *routeHandle*, in **Polygon** *excludedAreas* )

#comment : setExcludedAreas = This method sets the areas to be excluded when calculating a route

2.27.3.24 void org::genivi::navigation::navigationcore::Routing::setRoutePreferences ( in Handle *sessionHandle*, in Handle *routeHandle*, in String *countryCode*, in **RoadPreference** *roadPreferenceList*, in **ConditionPreference** *conditionPreferenceList* )

#comment : This method sets a list of route preferences

2.27.3.25 void org::genivi::navigation::navigationcore::Routing::setRouteSchedule ( in Handle *sessionHandle*, in Handle *routeHandle*, in **RouteSchedule** *routeSchedule* )

#comment : This method sets the time schedule for the route to be calculated

2.27.3.26 void org::genivi::navigation::navigationcore::Routing::setTransportationMeans ( in Handle *sessionHandle*, in Handle *routeHandle*, in **TransportationMeans** *transportationMeansList* )

#comment : This method sets a list of means of transportation that must be considered when calculating a route

2.27.3.27 void org::genivi::navigation::navigationcore::Routing::setWaypoints ( in Handle *sessionHandle*, in Handle *routeHandle*, in Boolean *startFromCurrentPosition*, in WayPoint *waypointsList* )

#comment : setWaypoints = This method sets a list of waypoints

#### 2.27.4 Member Data Documentation

2.27.4.1 map\_UnfulfilledRoutePreference org::genivi::navigation::navigationcore::Routing::PreferenceMode =>RoutePreferenceSource

2.27.4.2 map\_RouteOverview org::genivi::navigation::navigationcore::Routing::RouteOverviewType =>RouteOverviewItem

2.27.4.3 map\_RouteSegment org::genivi::navigation::navigationcore::Routing::RouteSegmentType =>RouteSegmentItem

2.27.4.4 map\_RouteSchedule org::genivi::navigation::navigationcore::Routing::Schedule =>UInt32

2.27.4.5 map\_WayPoint org::genivi::navigation::navigationcore::Routing::WaypointElementType =>WayPointItem

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

- [Routing.fidl](#)

## 2.28 org::genivi::navigation::navigationcore::Routing\_client Interface Reference

### Public Member Functions

- void [routeDeleted](#) (in Handle *routeHandle*)
- void [routeCalculationCancelled](#) (in Handle *routeHandle*)
- void [routeCalculationSuccessful](#) (in Handle *routeHandle*, in UnfulfilledRoutePreference *unfulfilledPreferences*)
- void [routeCalculationFailed](#) (in Handle *Handle*, in CalculationError *errorCode*, in UnfulfilledRoutePreference *unfulfilledPreferences*)
- void [routeCalculationProgressUpdate](#) (in Handle *routeHandle*, in CalculationStatus *status*, in UInt8 *percentage*)
- void [alternativeRoutesAvailable](#) (in Handle *routeHandlesList*)

#### 2.28.1 Member Function Documentation

2.28.1.1 void org::genivi::navigation::navigationcore::Routing\_client::alternativeRoutesAvailable ( in Handle *routeHandlesList* )

broadcast #comment : alternativeRoutesAvailable = This signal is emitted when alternative routes have been computed in the background and are available for guidance.

2.28.1.2 void org::genivi::navigation::navigationcore::Routing\_client::routeCalculationCancelled ( in Handle *routeHandle* )

broadcast #comment : routeCalculationCancelled = This signal informs a client that a route calculation was cancelled



2.28.1.3 void org::genivi::navigation::navigationcore::Routing\_client::routeCalculationFailed ( in Handle *Handle*, in CalculationError *errorCode*, in UnfulfilledRoutePreference *unfulfilledPreferences* )

broadcast #comment : routeCalculationFailed = This signal informs a client that a route calculation failed

2.28.1.4 void org::genivi::navigation::navigationcore::Routing\_client::routeCalculationProgressUpdate ( in Handle *routeHandle*, in CalculationStatus *status*, in UInt8 *percentage* )

broadcast #comment : routeCalculationProgressUpdate = This signal informs a client about a route calculation progress

2.28.1.5 void org::genivi::navigation::navigationcore::Routing\_client::routeCalculationSuccessful ( in Handle *routeHandle*, in UnfulfilledRoutePreference *unfulfilledPreferences* )

broadcast #comment : routeCalculationSuccessful = This signal informs a client that a route calculation was successful

2.28.1.6 void org::genivi::navigation::navigationcore::Routing\_client::routeDeleted ( in Handle *routeHandle* )

broadcast #comment : routeDeleted = This signal is emitted to inform clients that the current route has been deleted

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

- [Routing.fidl](#)

## 2.29 org::genivi::navigation::navigationcore::Session Interface Reference

### Public Member Functions

- void [getVersion](#) (out Version *version*)
- void [createSession](#) (in String *clientApp*, out Handle *sessionHandle*)
- void [deleteSession](#) (in Handle *sessionHandle*)
- void [getSessionStatus](#) (in Handle *sessionHandle*, out SessionStatus *sessionStatus*)
- void [getAllSessions](#) (out [Session](#) *sessionsList*)

### 2.29.1 Detailed Description

#comment : This interface offers methods that implement the navigation core session functionality of a navigation system.

### 2.29.2 Member Function Documentation

2.29.2.1 void org::genivi::navigation::navigationcore::Session::createSession ( in String *clientApp*, out Handle *sessionHandle* )

#comment : createSession = This method creates a new session and retrieves a handle .

2.29.2.2 void org::genivi::navigation::navigationcore::Session::deleteSession ( in Handle *sessionHandle* )

#comment : deleteSession = This method deletes a session and its associated resources .

2.29.2.3 void org::genivi::navigation::navigationcore::Session::getAllSessions ( out Session *sessionsList* )

#comment : This method returns a list of all available sessions .

2.29.2.4 void org::genivi::navigation::navigationcore::Session::getSessionStatus ( in Handle *sessionHandle*, out SessionStatus *sessionStatus* )

#comment : This method returns whether a given session handle is available or not (for example because it was deleted) .

2.29.2.5 void org::genivi::navigation::navigationcore::Session::getVersion ( out Version *version* )

#comment : This method returns the API version .

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

- [Session.fidl](#)

## 2.30 org::genivi::navigation::navigationcore::Session\_client Interface Reference

### Public Member Functions

- void [sessionDeleted](#) (in Handle *sessionHandle*)

### 2.30.1 Member Function Documentation

2.30.1.1 void org::genivi::navigation::navigationcore::Session\_client::sessionDeleted ( in Handle *sessionHandle* )

broadcast #comment : sessionDeleted = This signal is emitted when a session is deleted

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

- [Session.fidl](#)

## 2.31 org::genivi::navigation::navigationcore::Routing::WayPointItem Union Reference

### Public Attributes

- Double [coordinateValue](#)
- [WayPointType](#) *waypointValue*
- UInt8[] [metaData](#)

### 2.31.1 Member Data Documentation

2.31.1.1 `Double org::genivi::navigation::navigationcore::Routing::WayPointItem::coordinateValue`

2.31.1.2 `UInt8 [ ] org::genivi::navigation::navigationcore::Routing::WayPointItem::metaData`

2.31.1.3 `WayPointType org::genivi::navigation::navigationcore::Routing::WayPointItem::waypointValue`

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

- [Routing.fidl](#)

## 2.32 `org::genivi::navigation::navigationcore::Guidance::WaypointStruct` Struct Reference

### Public Attributes

- `UInt32` [waypointOffset](#)
- `UInt32` [travelTime](#)
- `Int32` [direction](#)
- `Side` [side](#)
- `Int16` [timeZone](#)
- `Int16` [daylightSavingTime](#)
- `Boolean` [isDestination](#)
- `UInt16` [number](#)

### 2.32.1 Member Data Documentation

2.32.1.1 `Int16 org::genivi::navigation::navigationcore::Guidance::WaypointStruct::daylightSavingTime`

2.32.1.2 `Int32 org::genivi::navigation::navigationcore::Guidance::WaypointStruct::direction`

2.32.1.3 `Boolean org::genivi::navigation::navigationcore::Guidance::WaypointStruct::isDestination`

2.32.1.4 `UInt16 org::genivi::navigation::navigationcore::Guidance::WaypointStruct::number`

2.32.1.5 `Side org::genivi::navigation::navigationcore::Guidance::WaypointStruct::side`

2.32.1.6 `Int16 org::genivi::navigation::navigationcore::Guidance::WaypointStruct::timeZone`

2.32.1.7 `UInt32 org::genivi::navigation::navigationcore::Guidance::WaypointStruct::travelTime`

2.32.1.8 `UInt32 org::genivi::navigation::navigationcore::Guidance::WaypointStruct::waypointOffset`

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

- [Guidance.fidl](#)

## 3 File Documentation

### 3.1 Configuration.fidl File Reference

#### Classes

- interface [org::genivi::navigation::navigationcore::Configuration](#)
- interface [org::genivi::navigation::navigationcore::Configuration\\_client](#)

#### Modules

- module [org::genivi::navigation::navigationcore](#)

### 3.2 Guidance.fidl File Reference

#### Classes

- interface [org::genivi::navigation::navigationcore::Guidance](#)
- union [org::genivi::navigation::navigationcore::Guidance::ManeuverDataValue](#)
- struct [org::genivi::navigation::navigationcore::Guidance::LaneInfo](#)
- struct [org::genivi::navigation::navigationcore::Guidance::WaypointStruct](#)
- struct [org::genivi::navigation::navigationcore::Guidance::ManeuverItem](#)
- struct [org::genivi::navigation::navigationcore::Guidance::Maneuver](#)
- interface [org::genivi::navigation::navigationcore::Guidance\\_client](#)

#### Modules

- module [org::genivi::navigation::navigationcore](#)

### 3.3 LocationInput.fidl File Reference

#### Classes

- interface [org::genivi::navigation::navigationcore::LocationInput](#)
- union [org::genivi::navigation::navigationcore::LocationInput::AddressValue](#)
- interface [org::genivi::navigation::navigationcore::LocationInput\\_client](#)

#### Modules

- module [org::genivi::navigation::navigationcore](#)

### 3.4 MapMatchedPosition.fidl File Reference

#### Classes

- interface [org::genivi::navigation::navigationcore::MapMatchedPosition](#)
- union [org::genivi::navigation::navigationcore::MapMatchedPosition::PositionItemValue](#)
- union [org::genivi::navigation::navigationcore::MapMatchedPosition::AddressItemValue](#)
- union [org::genivi::navigation::navigationcore::MapMatchedPosition::PositionOnSegmentValue](#)
- union [org::genivi::navigation::navigationcore::MapMatchedPosition::PositionStatusValue](#)
- interface [org::genivi::navigation::navigationcore::MapMatchedPosition\\_client](#)

## Modules

- module [org::genivi::navigation::navigationcore](#)

## 3.5 NavigationCoreTypes.fidl File Reference

### Classes

- interface [org::genivi::navigation::navigationcore::NavigationCoreTypes](#)
- struct [org::genivi::navigation::navigationcore::NavigationCoreTypes::RoadShieldAffix](#)
- struct [org::genivi::navigation::navigationcore::NavigationCoreTypes::RoadShield](#)

## Modules

- module [org::genivi::navigation::navigationcore](#)

## 3.6 Routing.fidl File Reference

### Classes

- interface [org::genivi::navigation::navigationcore::Routing](#)
- struct [org::genivi::navigation::navigationcore::Routing::RoadPreference](#)
- struct [org::genivi::navigation::navigationcore::Routing::ConditionPreference](#)
- struct [org::genivi::navigation::navigationcore::Routing::IntermediatePoint](#)
- union [org::genivi::navigation::navigationcore::Routing::RouteOverviewItem](#)
- union [org::genivi::navigation::navigationcore::Routing::WayPointItem](#)
- union [org::genivi::navigation::navigationcore::Routing::RouteSegmentItem](#)
- struct [org::genivi::navigation::navigationcore::Routing::BlockedRouteElement](#)
- interface [org::genivi::navigation::navigationcore::Routing\\_client](#)

## Modules

- module [org::genivi::navigation::navigationcore](#)

## 3.7 Session.fidl File Reference

### Classes

- interface [org::genivi::navigation::navigationcore::Session](#)
- interface [org::genivi::navigation::navigationcore::Session\\_client](#)

## Modules

- module [org::genivi::navigation::navigationcore](#)

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