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GENIVI Alliance

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4 MapViewer

5 Component Specification

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12 **Abstract:**

13 This document provides the Component Specification for the MapViewer

14 **Keywords:**

15 Navigation, MapViewer

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1 Change History

Version	Date	Author	Change
0.1	27 Feb 2012	Marco Residori (XS Embedded)	Document Created
0.2	19 Mar 2012	Marco Residori (XS Embedded)	Updated sequence diagrams. Updated <i>Interfaces</i> chapter.
0.3	21 Mar 2012	Marco Residori (XS Embedded)	Updated <i>Interfaces</i> chapter.
1.0	22 Mar 2012	Marco Residori (XS Embedded)	System Architecture Team (SAT) approval.
2.0 (beta)	07 Jun 2013	Marco Residori (XS Embedded)	Updated API description. API Version 2.0.
2.0	17 Jun 2013	Marco Residori (XS Embedded)	Updated API description. API fixes: GT-2651. API Version 2.0 (<i>4emini-final</i> tag)
3.0.0	21 Jan 2014	Marco Residori (XS Embedded)	Updated API description. API Version 3.0.0.
3.0.1	22 May 2014	Marco Residori (XS Embedded)	Updated copyright notes.
3.0.2	30 June 2014	Marco Residori (XS Embedded)	Updated contributors list.
4.0	7 Feb 2017	Philippe COLLIOT (PSA GROUPE)	Refine the document for Franca based API
4.1	21 Feb 2018	Philippe COLLIOT (Groupe PSA)	Align with new version of the API

2 Introduction

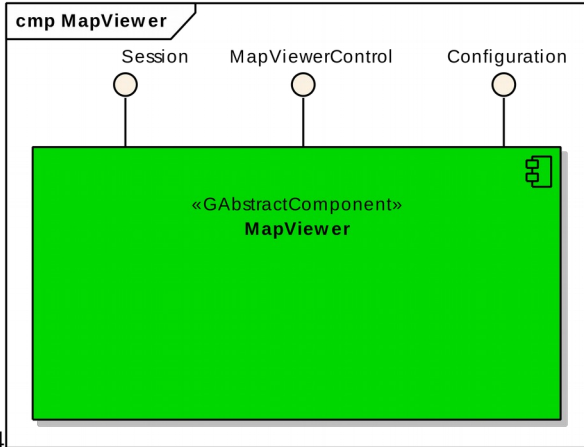
This document describes the MapViewer API.

3 Terminology

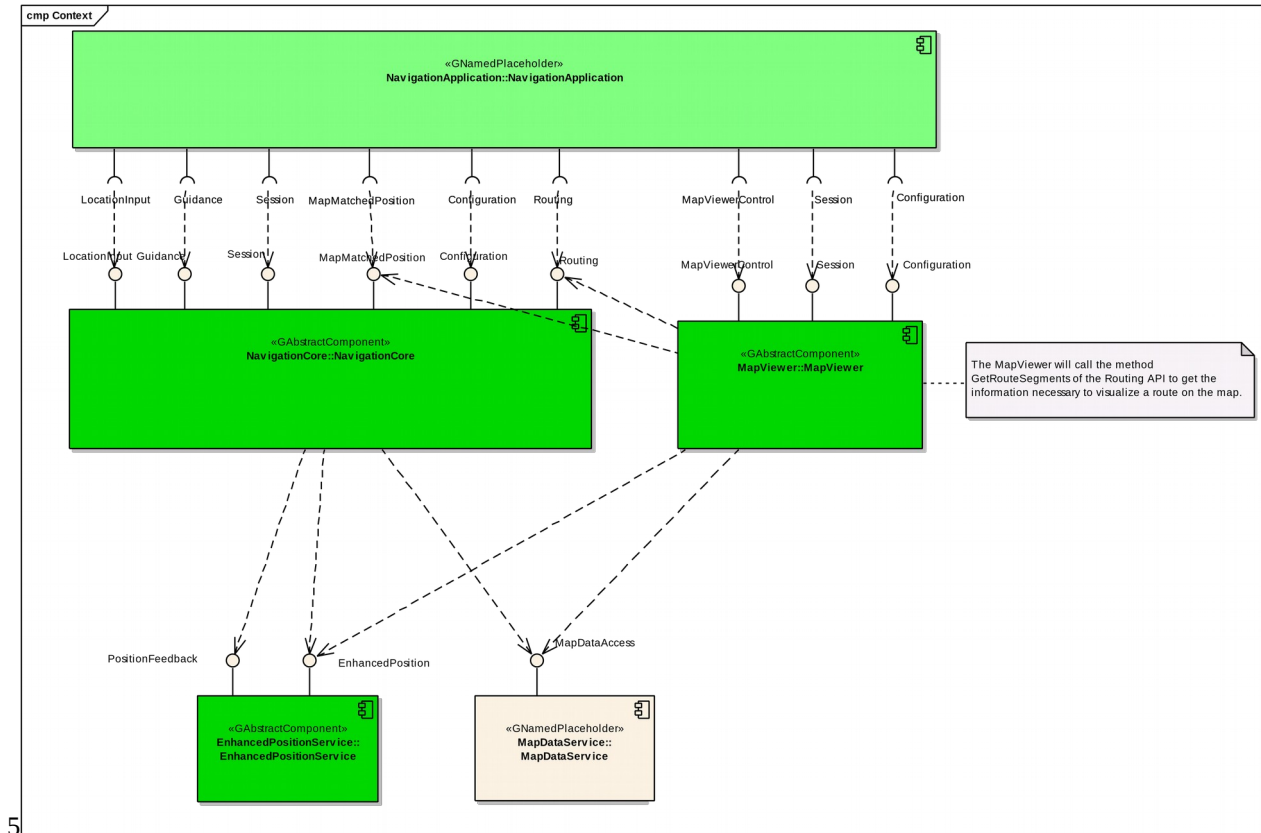
<i>Term</i>	<i>Description</i>
TargetPoint	Point the camera looks at. If the map viewer is set to follow the car position, it coincides with the vehicle position.

14 Architecture

24.1 Interfaces



3.4.2 Interaction with other Components



5 API

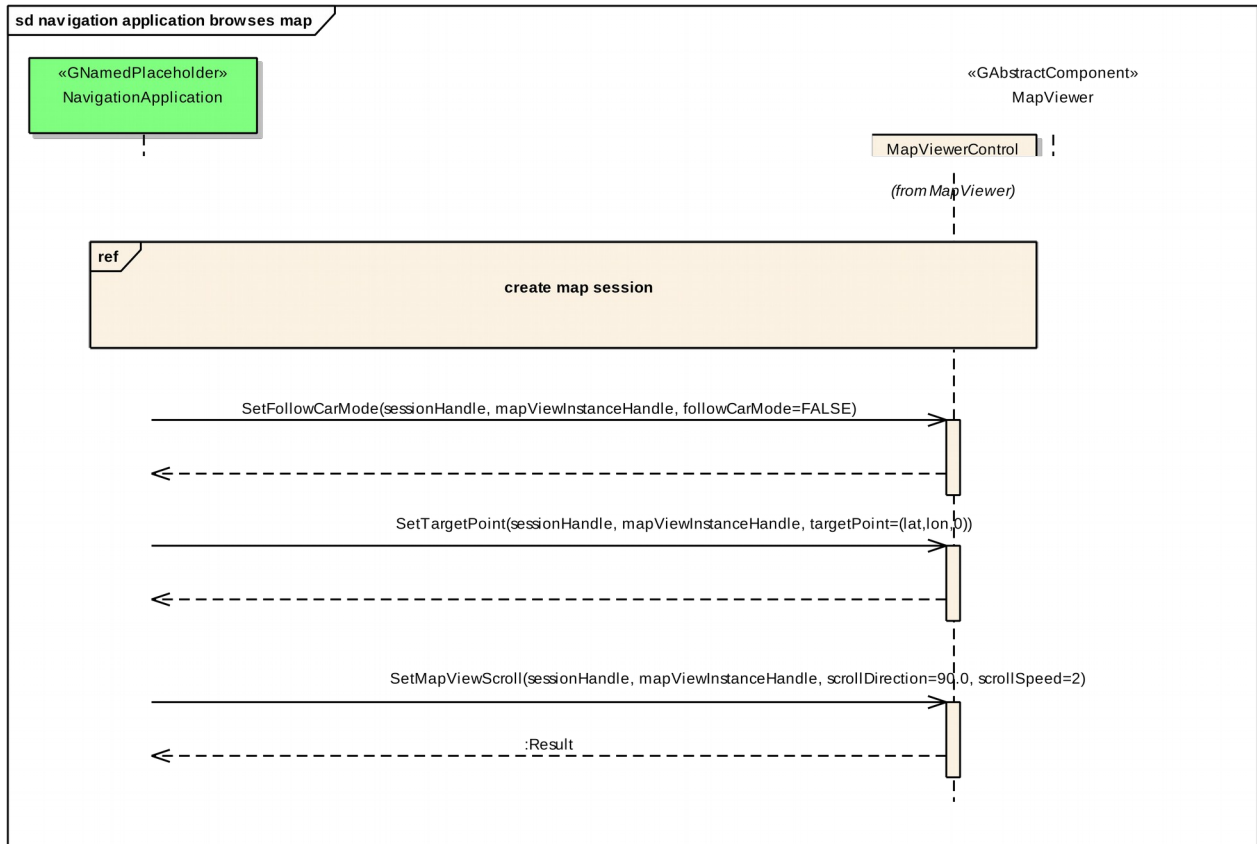
5.1 Git Repository

The MapViewer interfaces can be found in the GENIVI Git repository at:

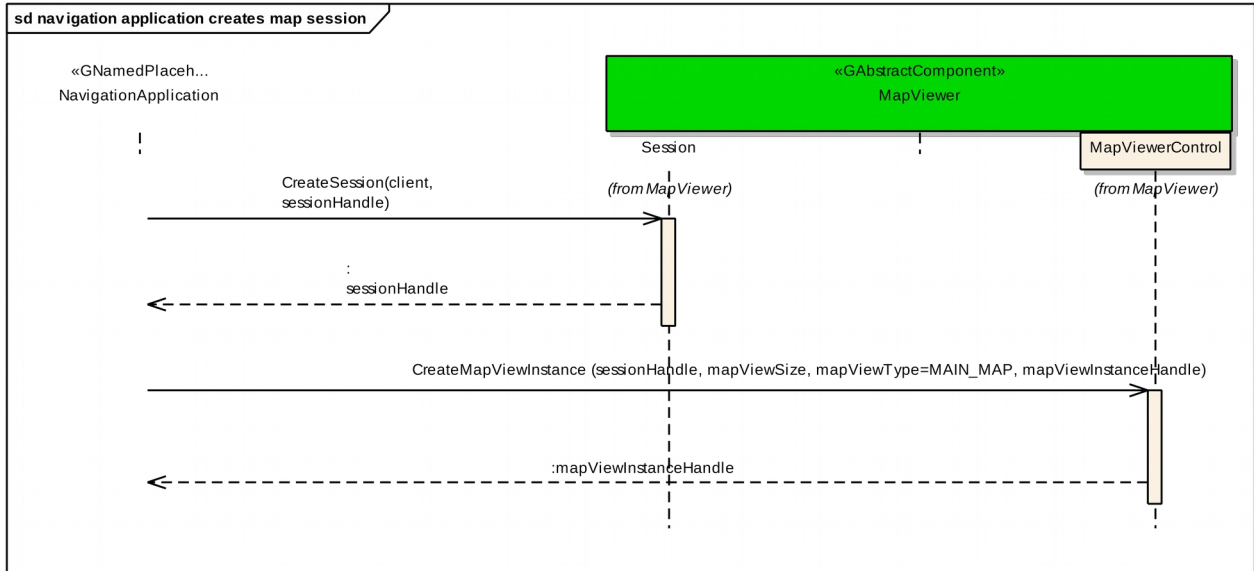
<https://github.com/GENIVI/navigation/tree/master/api/franca/navigation/mapviewer>

5.2 Sequence Diagrams

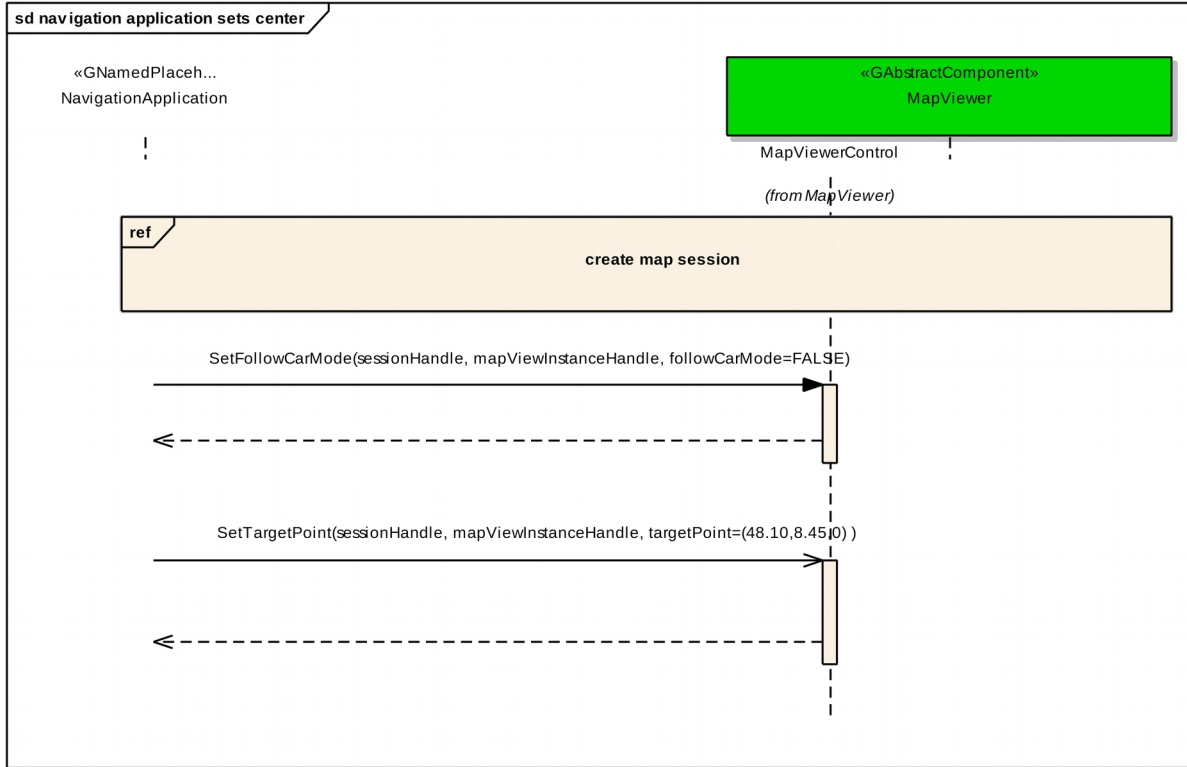
5.2.1 navigation application browses map



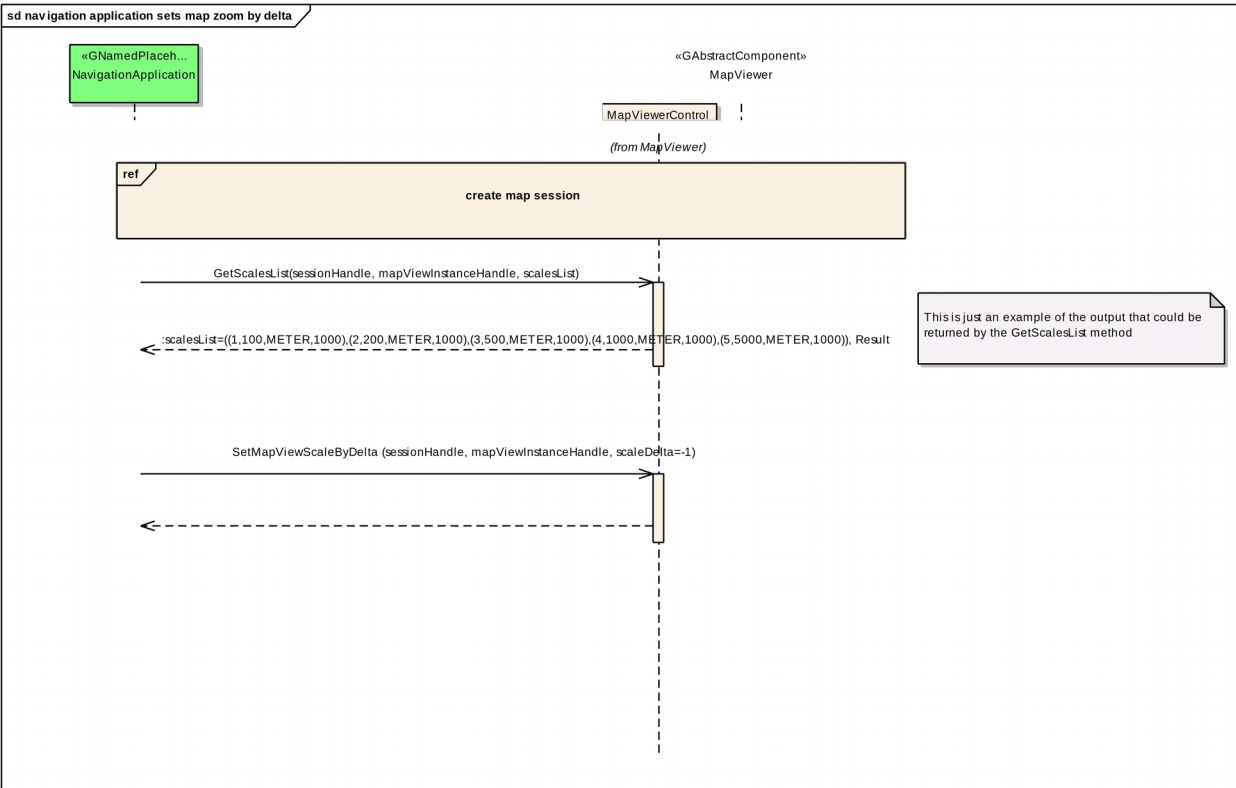
5.2.2 navigation application creates map session



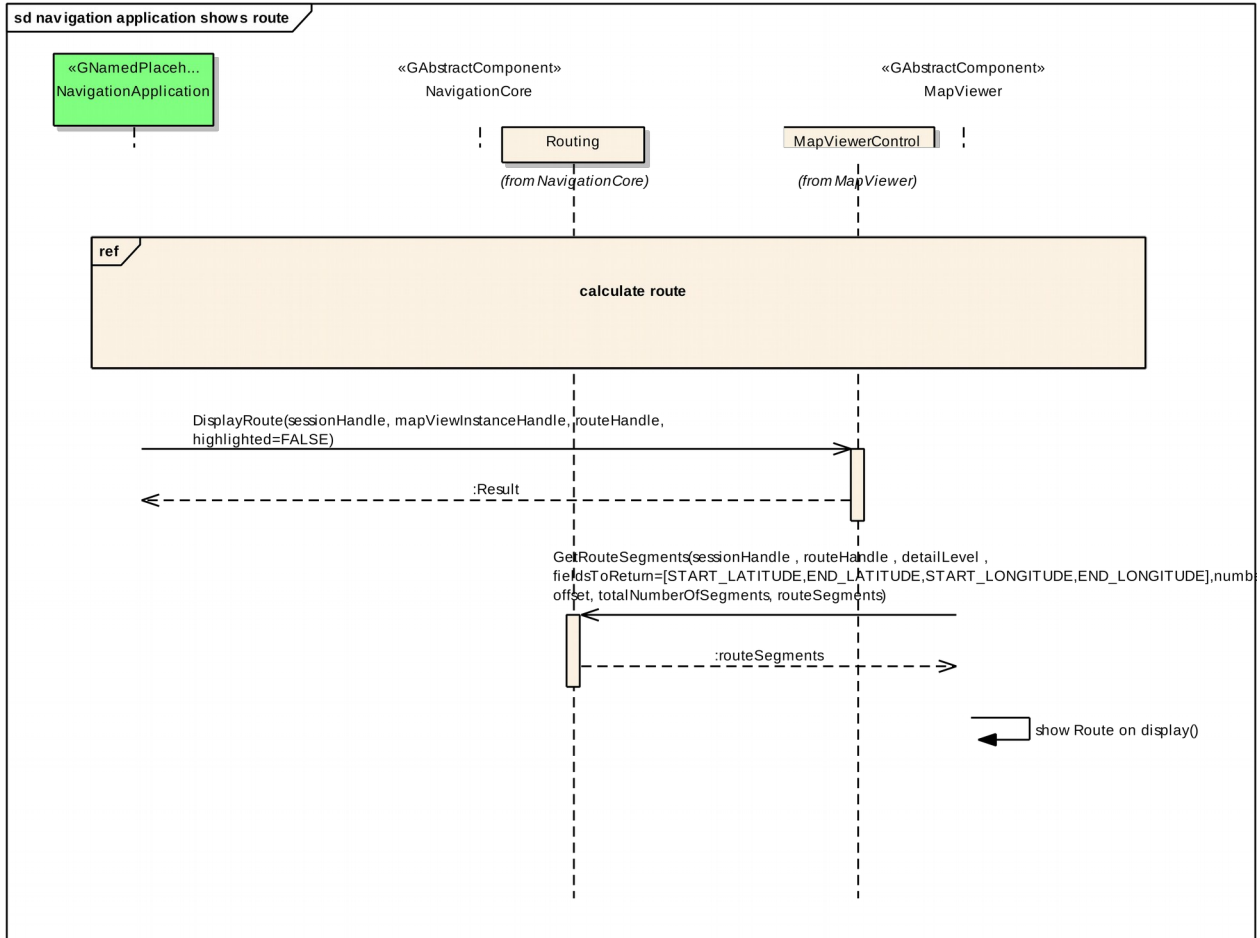
5.2.3 navigation application sets center



5.2.4 navigation application sets map zoom by delta



5.2.5 navigation application shows route



15.3 Interfaces

25.4 The following pages describe the interfaces of the MapViewer API.

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MapView

Generated by Doxygen 1.8.13

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1 Namespace Documentation

1.1 org Module Reference

Modules

- [genivi](#)

1.2 org::genivi Module Reference

Modules

- [navigation](#)

1.3 org::genivi::navigation Module Reference

Modules

- module [mapviewer](#)

1.4 org::genivi::navigation::mapviewer Module Reference

Classes

- interface [Configuration](#)
- interface [Configuration_client](#)
- interface [MapViewControl](#)
- interface [MapViewControl_client](#)
- interface [Session](#)
- interface [Session_client](#)

2 Class Documentation

2.1 org::genivi::navigation::mapviewer::MapViewControl::AnchorPoint Struct Reference

Public Attributes

- [Int16 x](#)
- [Int16 y](#)

2.1.1 Member Data Documentation

2.1.1.1 x

`Int16 org::genivi::navigation::mapviewer::MapViewControl::AnchorPoint::x`

2.1.1.2 y

`Int16 org::genivi::navigation::mapviewer::MapViewControl::AnchorPoint::y`

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

- [MapViewControl.fidl](#)

2.2 org::genivi::navigation::mapviewer::MapViewControl::CategoryVisibility Struct Reference

Public Attributes

- CategoryID [poiCategoryId](#)
- Boolean [visible](#)
- UInt8 [minScaleID](#)
- UInt8 [maxScaleID](#)

2.2.1 Member Data Documentation

2.2.1.1 maxScaleID

UInt8 org::genivi::navigation::mapviewer::MapViewControl::CategoryVisibility::maxScaleID

2.2.1.2 minScaleID

UInt8 org::genivi::navigation::mapviewer::MapViewControl::CategoryVisibility::minScaleID

2.2.1.3 poiCategoryId

CategoryID org::genivi::navigation::mapviewer::MapViewControl::CategoryVisibility::poi↔
CategoryId

2.2.1.4 visible

Boolean org::genivi::navigation::mapviewer::MapViewControl::CategoryVisibility::visible

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

- [MapViewControl.fidl](#)

2.3 org::genivi::navigation::mapviewer::Configuration Interface Reference

Public Types

- enum [Settings](#) : BasicEnum { [UNITS_OF_MEASUREMENT](#) = 48, [LOCALE](#) = 37, [TIME_FORMAT](#) = 3, [CO↔
ORDINATES_FORMAT](#) = 6 }
- enum [UnitsOfMeasurementAttribute](#) : BasicEnum { [LENGTH](#) = 49 }
- enum [UnitsOfMeasurementValue](#) {
[METER](#) = 50, [MILE](#) = 51, [KM](#) = 52, [YARD](#) = 53,
[FOOT](#) = 54 }
- enum [CoordinatesFormat](#) { [INVALID](#) = 0, [DEGREES](#) = 7, [MINUTES](#) = 8, [SECONDS](#) = 9 }
- 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](#)

2.3.1 Detailed Description

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

2.3.2 Member Typedef Documentation

2.3.2.1 UnitsOfMeasurementListValue

```
typedef UnitsOfMeasurementValue [ ] org::genivi::navigation::mapviewer::Configuration::UnitsOfMeasurementListValue
```

2.3.3 Member Enumeration Documentation

2.3.3.1 CoordinatesFormat

```
enum org::genivi::navigation::mapviewer::Configuration::CoordinatesFormat
```

Enumerator

INVALID	
DEGREES	
MINUTES	
SECONDS	

2.3.3.2 Settings

```
enum org::genivi::navigation::mapviewer::Configuration::Settings : BasicEnum
```

Enumerator

UNITS_OF_MEASUREMENT	
LOCALE	
TIME_FORMAT	
COORDINATES_FORMAT	

2.3.3.3 UnitsOfMeasurementAttribute

```
enum org::genivi::navigation::mapviewer::Configuration::UnitsOfMeasurementAttribute : BasicEnum
```

Enumerator

LENGTH	
--------	--

2.3.3.4 UnitsOfMeasurementValue

```
enum org::genivi::navigation::mapviewer::Configuration::UnitsOfMeasurementValue
```

Enumerator

METER	
MILE	
KM	
YARD	
FOOT	

2.3.4 Member Function Documentation

2.3.4.1 getCoordinatesFormat()

```
void org::genivi::navigation::mapviewer::Configuration::getCoordinatesFormat (
    out CoordinatesFormat coordinatesFormat )
```

#comment : Get the coordinates format .

2.3.4.2 getLocale()

```
void org::genivi::navigation::mapviewer::Configuration::getLocale (
    out String languageCode,
    out String countryCode,
    out String scriptCode )
```

#comment : Get the current language set .

2.3.4.3 getSupportedCoordinatesFormat()

```
void org::genivi::navigation::mapviewer::Configuration::getSupportedCoordinatesFormat (
    out CoordinatesFormat coordinatesFormatList )
```

#comment : Get the supported set of coordinates format .

2.3.4.4 getSupportedLocales()

```
void org::genivi::navigation::mapviewer::Configuration::getSupportedLocales (
    out Locale localeList )
```

#comment : Get the supported set of locales .

2.3.4.5 getSupportedTimeFormats()

```
void org::genivi::navigation::mapviewer::Configuration::getSupportedTimeFormats (
    out TimeFormat timeFormatList )
```

#comment : Get the supported set of time format .

2.3.4.6 getSupportedUnitsOfMeasurement()

```
void org::genivi::navigation::mapviewer::Configuration::getSupportedUnitsOfMeasurement (
    out UnitsOfMeasurementList unitsOfMeasurementList )
```

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

2.3.4.7 getTimeFormat()

```
void org::genivi::navigation::mapviewer::Configuration::getTimeFormat (
    out TimeFormat format )
```

#comment : Get the current time format .

2.3.4.8 getUnitsOfMeasurement()

```
void org::genivi::navigation::mapviewer::Configuration::getUnitsOfMeasurement (
    out UnitsOfMeasurement unitsOfMeasurement )
```

#comment : Get the units of measurement .

2.3.4.9 getVersion()

```
void org::genivi::navigation::mapviewer::Configuration::getVersion (
    out Version version )
```

#comment : This method returns the API version .

2.3.4.10 setCoordinatesFormat()

```
void org::genivi::navigation::mapviewer::Configuration::setCoordinatesFormat (
    in CoordinatesFormat coordinatesFormat )
```

#comment : Set the coordinates format.

2.3.4.11 setLocale()

```
void org::genivi::navigation::mapviewer::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.

2.3.4.12 setTimeFormat()

```
void org::genivi::navigation::mapviewer::Configuration::setTimeFormat (
    in TimeFormat format )
```

#comment : Set the time format.

2.3.4.13 setUnitsOfMeasurement()

```
void org::genivi::navigation::mapviewer::Configuration::setUnitsOfMeasurement (
    in UnitsOfMeasurement unitsOfMeasurement )
```

#comment : Set the units of measurement .

2.3.5 Member Data Documentation

2.3.5.1 UnitsOfMeasurementAttribute [1/2]

```
map_UnitsOfMeasurement org::genivi::navigation::mapviewer::Configuration::UnitsOfMeasurement←
Attribute =>UnitsOfMeasurementValue
```

2.3.5.2 UnitsOfMeasurementAttribute [2/2]

```
map_UnitsOfMeasurementList org::genivi::navigation::mapviewer::Configuration::UnitsOfMeasurement↔
Attribute =>UnitsOfMeasurementListValue
```

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

- [Configuration.fidl](#)

2.4 org::genivi::navigation::mapviewer::Configuration_client Interface Reference

Public Member Functions

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

2.4.1 Member Function Documentation

2.4.1.1 configurationChanged()

```
void org::genivi::navigation::mapviewer::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](#)

2.5 org::genivi::navigation::mapviewer::MapViewControl::CustomElement Struct Reference

Public Attributes

- String [name](#)
- String [iconUri](#)
- Coordinate2D [coordinate](#)
- AnchorPoint [elem4](#)

2.5.1 Member Data Documentation

2.5.1.1 coordinate

```
Coordinate2D org::genivi::navigation::mapviewer::MapViewControl::CustomElement::coordinate
```


2.5.1.2 elem4

`AnchorPoint` org::genivi::navigation::mapviewer::MapViewControl::CustomElement::elem4

2.5.1.3 iconUri

`String` org::genivi::navigation::mapviewer::MapViewControl::CustomElement::iconUri

2.5.1.4 name

`String` org::genivi::navigation::mapviewer::MapViewControl::CustomElement::name

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

- [MapViewControl.fidl](#)

2.6 org::genivi::navigation::mapviewer::MapViewControl::Dimension Struct Reference

Public Attributes

- `UInt16` [horizontalSize](#)
- `UInt16` [verticalSize](#)

2.6.1 Member Data Documentation

2.6.1.1 horizontalSize

`UInt16` org::genivi::navigation::mapviewer::MapViewControl::Dimension::horizontalSize

2.6.1.2 verticalSize

`UInt16` org::genivi::navigation::mapviewer::MapViewControl::Dimension::verticalSize

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

- [MapViewControl.fidl](#)

2.7 org::genivi::navigation::mapviewer::MapViewControl::DisplayedRoute Struct Reference

Public Attributes

- `Handle` [routeHandle](#)
- `Boolean` [highlighted](#)

2.7.1 Member Data Documentation

2.7.1.1 highlighted

Boolean `org::genivi::navigation::mapviewer::MapViewControl::DisplayedRoute::highlighted`

2.7.1.2 routeHandle

`Handle` `org::genivi::navigation::mapviewer::MapViewControl::DisplayedRoute::routeHandle`

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

- [MapViewControl.fidl](#)

2.8 `org::genivi::navigation::mapviewer::MapViewControl::ElementValue` Union Reference

Public Attributes

- `Int32` [trafficIncident](#)
- `Handle` [handle](#)
- `CustomElement` [element](#)
- `WayPointValue` [wayPointValue](#)

2.8.1 Member Data Documentation

2.8.1.1 element

`CustomElement` `org::genivi::navigation::mapviewer::MapViewControl::ElementValue::element`

2.8.1.2 handle

`Handle` `org::genivi::navigation::mapviewer::MapViewControl::ElementValue::handle`

2.8.1.3 trafficIncident

`Int32` `org::genivi::navigation::mapviewer::MapViewControl::ElementValue::trafficIncident`

2.8.1.4 wayPointValue

`WayPointValue` org::genivi::navigation::mapviewer::MapViewControl::ElementValue::wayPoint↔
Value

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

- [MapViewControl.fidl](#)

2.9 org::genivi::navigation::mapviewer::MapViewControl::MapScale Struct Reference

Public Attributes

- `UInt8` [scaleId](#)
- `UInt16` [scaleValue](#)
- `MapScaleUnit` [unit](#)
- `UInt32` [millimetersPerPixel](#)

2.9.1 Member Data Documentation

2.9.1.1 millimetersPerPixel

`UInt32` org::genivi::navigation::mapviewer::MapViewControl::MapScale::millimetersPerPixel

2.9.1.2 scaleId

`UInt8` org::genivi::navigation::mapviewer::MapViewControl::MapScale::scaleId

2.9.1.3 scaleValue

`UInt16` org::genivi::navigation::mapviewer::MapViewControl::MapScale::scaleValue

2.9.1.4 unit

`MapScaleUnit` org::genivi::navigation::mapviewer::MapViewControl::MapScale::unit

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

- [MapViewControl.fidl](#)

2.10 org::genivi::navigation::mapviewer::MapViewControl::MapViewArea Struct Reference

Public Attributes

- Double [left](#)
- Double [right](#)
- Double [top](#)
- Double [bottom](#)

2.10.1 Member Data Documentation

2.10.1.1 bottom

Double org::genivi::navigation::mapviewer::MapViewControl::MapViewArea::bottom

2.10.1.2 left

Double org::genivi::navigation::mapviewer::MapViewControl::MapViewArea::left

2.10.1.3 right

Double org::genivi::navigation::mapviewer::MapViewControl::MapViewArea::right

2.10.1.4 top

Double org::genivi::navigation::mapviewer::MapViewControl::MapViewArea::top

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

- [MapViewControl.fidl](#)

2.11 org::genivi::navigation::mapviewer::MapViewControl Interface Reference

Classes

- struct [AnchorPoint](#)
- struct [CategoryVisibility](#)
- struct [CustomElement](#)
- struct [Dimension](#)
- struct [DisplayedRoute](#)
- union [ElementValue](#)
- struct [MapScale](#)
- struct [MapViewArea](#)
- struct [Pixel](#)
- struct [SelectedMapElement](#)
- struct [WayPointValue](#)

Public Types

- enum `MapViewType` : BasicEnum { `MAIN_MAP` = 16, `SPLIT_SCREEN` = 17, `GUIDING_MAP` = 18 }
- enum `MapScaleMode` : BasicEnum { `AUTOMATIC` = 272, `MANUAL` = 273, `HYBRID` = 274 }
- enum `MapPerspective` : BasicEnum { `PERSPECTIVE_2D` = 32, `PERSPECTIVE_3D` = 33 }
- enum `MapObject` : BasicEnum {
`BUILDINGS` = 128, `TERRAIN` = 129, `DET_POI`, `DET_TTI`,
`DET_ONE_WAY_STREET_ARROW`, `DET_CITY_NAME`, `DET_ROAD_NAME`, `DET_MOTORWAY_EXIT`↵
`_MARKER`,
`DET_TRAFFIC_LIGHT`, `DET_TRAFFIC_LIGHTS_ALONG_ROUTE`, `DET_ROAD_ICON`, `DET_DTM`,
`DET_LANDMARKS_3D`, `DET_FAVORITES`, `DET_ROUTE_BLOCKING`, `DET_ROAD`,
`DET_POLYGON`, `DET_DESTINATION`, `DET_MANOEUVRE_MARKER`, `DET_LANE_GUIDANCE_MARK`↵
`ER`,
`DET_ROUTE`, `DET_MANOEUVRE_ARROW`, `DET_TREKKING_TOUR`, `DET_TTI_EDGE_HIGHLIGHTING`,
`DET_CITY_MARKER`, `DET_VEHICLE`, `DET_POLYGON_NAME`, `DET_OFF_ROAD_ROUTE`,
`DET_TTI_ARROW`, `DET_POI_NAME`, `DET_RASTER_MAP`, `DET_BREAD_CRUMB_TRAIL`,
`DET_EDGE_HIGHLIGHTING`, `DET_DIRECTION_ARROW`, `DET_CITY_BUILDINGS`, `DET_FPS_DISPLAY`,
`DET_CROSSHAIR`, `DET_DEVDROP_BANNER`, `DET_FRAME_AROUND_MAP`, `DET_CORONA`,
`DET_WATEREFFECT`, `DET_TREES`, `DET_RAIN`, `DET_CITYMODEL_ROUTE_TRANSPARENCY`,
`DET_ROUTE_DESTINATION`, `DET_RANGE_DISPLAY`, `DET_POI_BRANDS`, `DET_WEATHER_MARKER`,
`DET_WEATHER_OVERLAY`, `DET_WAYPOINT_ROUTE`, `DET_WAYPOINT_ROUTE_MARKER`, `DET_ST`↵
`ENCIL` }
- enum `PanAction` : BasicEnum { `PAN_START` = 256, `PAN_TO` = 257, `PAN_END` = 258 }
- enum `Visibility` : BasicEnum { `VISIBLE` = 67, `INVISIBLE` = 68, `FROZEN` = 69 }
- enum `Level` : BasicEnum {
`LEVEL_1` = 80, `LEVEL_2` = 81, `LEVEL_3` = 82, `LEVEL_4` = 83,
`LEVEL_5` = 84 }
- enum `HeadingType` : BasicEnum { `CONSTANT_ANGLE` = 112, `TRACK_UP` = 113, `TOWARDS_TARGET` = 114 }
- enum `MapTheme` : BasicEnum {
`THEME_1` = 96, `THEME_2` = 97, `THEME_3` = 98, `THEME_I_CLASSIC_DAY`,
`THEME_I_CLASSIC_NIGHT`, `THEME_I_CLASSIC_TRAFFIC_DAY`, `THEME_I_CLASSIC_TRAFFIC_NIG`↵
`HT`, `THEME_I_ALTERNATIVE_DAY`,
`THEME_I_ALTERNATIVE_NIGHT`, `THEME_I_ALTERNATIVE_TRAFFIC_DAY`, `THEME_I_ALTERNATIV`↵
`E_TRAFFIC_NIGHT`, `THEME_I_GUIDING` }
- enum `MapScaleUnit` : BasicEnum {
`METER` = 50, `MILE` = 51, `KM` = 52, `YARD` = 53,
`FOOT` = 54 }
- enum `MapScaleType` : BasicEnum { `MIN` = 64, `MAX` = 65, `MID` = 66 }
- enum `SelectableMapType` : BasicEnum {
`MET_POI` = 2, `MET_POLYGON` = 3, `MET_EDGE` = 4, `MET_ROAD` = 5,
`MET_ROAD_ICON` = 6, `MET_TTI_ICON` = 7, `MET_TTI_EDGE` = 8, `MET_CITY_MARKER` = 9,
`MET_ROUTE` = 10, `MET_TREKKING_ROUTE` = 11, `MET_POSITION` = 12, `MET_LANDMARK` = 13,
`MET_DESTINATION` = 14, `MET_FAVORITE` = 15, `MET_PICTURE` = 16, `MET_GENERIC_MARKER` = 17,
`CUSTOM_ELEMENT` = 288, `CURRENT_POSITION` = 289, `WAYPOINT` = 290, `POI` = 291,
`TRAFFIC_INCIDENT` = 292, `ROUTE` = 293, `GEOCOORDINATES` = 294 }

Public Member Functions

- void `getVersion` (out Version version)
- void `createMapViewInstance` (in Handle sessionHandle, in Dimension mapViewSize, in MapViewType map↵
 ViewType, out Handle mapViewInstanceHandle)
- void `releaseMapViewInstance` (in Handle sessionHandle, in Handle mapViewInstanceHandle)
- void `getMapViewType` (in Handle mapViewInstanceHandle, out MapViewType mapViewType)
- void `getSupportedMapViewTypes` (out MapViewType mapViewTypeList)

- void [setTargetPoint](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [Coordinate3D](#) targetPoint)
- void [getTargetPoint](#) (in [Handle](#) mapViewInstanceHandle, out [Coordinate3D](#) targetPoint)
- void [setFollowCarMode](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [Boolean](#) followCarMode)
- void [getFollowCarMode](#) (in [Handle](#) mapViewInstanceHandle, out [Boolean](#) followCarMode)
- void [setCameraPosition](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [Coordinate3D](#) position)
- void [getCameraPosition](#) (in [Handle](#) mapViewInstanceHandle, out [Coordinate3D](#) position)
- void [setCameraHeadingAngle](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [Int32](#) heading)
- void [setCameraHeadingToTarget](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [Coordinate2D](#) target)
- void [setCameraHeadingTrackUp](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle)
- void [getCameraHeading](#) (in [Handle](#) mapViewInstanceHandle, out [HeadingType](#) headingType, out [Int32](#) headingAngle, out [Coordinate2D](#) target)
- void [setCameraTiltAngle](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [Int32](#) tilt)
- void [getCameraTiltAngle](#) (in [Handle](#) mapViewInstanceHandle, out [Int32](#) tilt)
- void [setCameraRollAngle](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [Int32](#) roll)
- void [getCameraRollAngle](#) (in [Handle](#) mapViewInstanceHandle, out [Int32](#) roll)
- void [setCameraDistanceFromTargetPoint](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [UInt32](#) distance)
- void [getCameraDistanceFromTargetPoint](#) (in [Handle](#) mapViewInstanceHandle, out [UInt32](#) distance)
- void [setMapViewScaleMode](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [MapScaleMode](#) scaleMode)
- void [getMapViewScaleMode](#) (in [Handle](#) mapViewInstanceHandle, out [MapScaleMode](#) scaleMode)
- void [getSupportedMapViewScaleModes](#) (in [Handle](#) mapViewInstanceHandle, out [MapScaleMode](#) scaleModeList)
- void [setCameraHeight](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [UInt32](#) height)
- void [getCameraHeight](#) (in [Handle](#) mapViewInstanceHandle, out [UInt32](#) height)
- void [setMapViewPerspective](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [MapPerspective](#) perspective)
- void [getMapViewPerspective](#) (in [Handle](#) mapViewInstanceHandle, out [MapPerspective](#) perspective)
- void [getSupportedMapViewPerspectives](#) (out [MapPerspective](#) perspectiveList)
- void [setMapViewObjectVisibility](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [MapObjectVisibility](#) objectVisibilityList)
- void [getMapViewObjectVisibility](#) (in [Handle](#) mapViewInstanceHandle, out [MapObjectVisibility](#) objectVisibilityList)
- void [getSupportedMapViewObjectVisibilities](#) (in [Handle](#) mapViewInstanceHandle, out [MapObject](#) objectVisibilityList)
- void [getScaleList](#) (in [Handle](#) mapViewInstanceHandle, out [MapScale](#) scaleList)
- void [setMapViewScale](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [UInt8](#) scaleID)
- void [setMapViewScaleByDelta](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [Int16](#) scaleDelta)
- void [setMapViewScaleByMetersPerPixel](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [Double](#) metersPerPixel)
- void [getMapViewScale](#) (in [Handle](#) mapViewInstanceHandle, out [UInt8](#) scaleID, out [MapScaleType](#) isMinMax)
- void [setMapViewBoundingBox](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [Rectangle](#) boundingBox)
- void [getMapViewBoundingBox](#) (in [Handle](#) mapViewInstanceHandle, out [Rectangle](#) boundingBox)
- void [setMapViewSaveArea](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [MapViewArea](#) saveArea)
- void [getMapViewSaveArea](#) (in [Handle](#) mapViewInstanceHandle, out [MapViewArea](#) saveArea)
- void [setMapViewPan](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [PanAction](#) panningAction, in [Pixel](#) pixelCoordinates)

- void [getMapViewPan](#) (in [Handle](#) mapViewInstanceHandle, in [PanAction](#) valueToReturn, out [Pixel](#) pixel↔ Coordinates)
- void [mapViewRotateBegin](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [Pixel](#) anchor↔ Point)
- void [mapViewRotateUpdate](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [Pixel](#) anchor↔ Point, in [Int16](#) rotationAngle)
- void [mapViewRotateEnd](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [UInt16](#) velocity)
- void [mapViewPinchBegin](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [Pixel](#) anchor↔ Point)
- void [mapViewPinchUpdate](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [Pixel](#) anchor↔ Point, in [Double](#) scaleFactor)
- void [mapViewPinchEnd](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [Double](#) velocity)
- void [mapViewTiltBegin](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [Pixel](#) anchorPoint)
- void [mapViewTiltUpdate](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [Int32](#) translation)
- void [mapViewTiltEnd](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [UInt32](#) velocity)
- void [setMapViewRotation](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [Int32](#) rotation↔ Angle, in [Int32](#) rotationAnglePerSecond)
- void [getMapViewRotation](#) (in [Handle](#) mapViewInstanceHandle, out [Int32](#) rotationAngle, out [Int32](#) rotation↔ AnglePerSecond)
- void [setMapViewVisibilityMode](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [Visibility](#) visibilityMode)
- void [getMapViewVisibilityMode](#) (in [Handle](#) mapViewInstanceHandle, out [Visibility](#) visibilityMode)
- void [getSupportedMapViewVisibilityModes](#) (out [Visibility](#) visibilityModeList)
- void [setMapViewPerformanceLevel](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [Level](#) performanceLevel)
- void [getMapViewPerformanceLevel](#) (in [Handle](#) mapViewInstanceHandle, out [Level](#) performanceLevel)
- void [getSupportedMapViewPerformanceLevels](#) (out [Level](#) performanceLevelList)
- void [displayRoute](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [Handle](#) routeHandle, in [Boolean](#) highlighted)
- void [hideRoute](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [Handle](#) routeHandle)
- void [getDisplayedRoutes](#) (in [Handle](#) mapViewInstanceHandle, out [DisplayedRoute](#) displayedRoutes)
- void [getPoiCategoriesVisible](#) (in [Handle](#) mapViewInstanceHandle, out [CategoryID](#) poiCategoryIds)
- void [setPoiCategoriesVisible](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [CategoryID](#) poiCategoryIds)
- void [setPoiCategoriesVisibleWithinLimits](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [CategoryID](#) poiCategoryIds, in [UInt8](#) minScaleID, in [UInt8](#) maxScaleID)
- void [setPoiCategoriesNotVisible](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [CategoryID](#) poiCategoryIds)
- void [setTrafficIncidentsVisibility](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [Boolean](#) visible)
- void [setMapViewTheme](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [MapTheme](#) map↔ ViewTheme)
- void [getMapViewTheme](#) (in [Handle](#) mapViewInstanceHandle, out [MapTheme](#) mapViewTheme)
- void [getSupportedMapViewThemes](#) (out [MapTheme](#) mapViewThemeList)
- void [convertPixelCoordsToGeoCoords](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [Pixel](#) pixelCoordinates, out [Coordinate2D](#) geoCoordinates)
- void [convertGeoCoordsToPixelCoords](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [Coordinate2D](#) geoCoordinates, out [Pixel](#) pixelCoordinates)
- void [displayCustomElements](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [Custom↔ Element](#) customElements, out [Handle](#) customElementHandles)
- void [hideCustomElements](#) (in [Handle](#) sessionHandle, in [Handle](#) mapViewInstanceHandle, in [Handle](#) customElementHandles)
- void [getDisplayedCustomElements](#) (in [Handle](#) mapViewInstanceHandle, out [CustomElementDict](#) custom↔ Elements)
- void [selectElementsOnMap](#) (in [Handle](#) mapViewInstanceHandle, in [Pixel](#) pixelCoordinate, in [Selectable↔ MapType](#) selectableTypes, in [UInt16](#) maxNumberOfSelectedElements, out [SelectedMapElement](#) selected↔ Elements)

Public Attributes

- map_MapObjectVisibility [MapObject](#) => Boolean
- map_CustomElementDict [Handle](#) => [CustomElement](#)

2.11.1 Detailed Description

#comment : [MapViewControl](#) = This interface offers functions to control the MapViewer

2.11.2 Member Enumeration Documentation

2.11.2.1 HeadingType

```
enum org::genivi::navigation::mapviewer::MapViewControl::HeadingType : BasicEnum
```

Enumerator

CONSTANT_ANGLE	
TRACK_UP	
TOWARDS_TARGET	

2.11.2.2 Level

```
enum org::genivi::navigation::mapviewer::MapViewControl::Level : BasicEnum
```

Enumerator

LEVEL↔ _1	
LEVEL↔ _2	
LEVEL↔ _3	
LEVEL↔ _4	
LEVEL↔ _5	

2.11.2.3 MapObject

```
enum org::genivi::navigation::mapviewer::MapViewControl::MapObject : BasicEnum
```


Enumerator

BUILDINGS
TERRAIN
DET_POI
DET_TTI
DET_ONE_WAY_STREET_ARROW
DET_CITY_NAME
DET_ROAD_NAME
DET_MOTORWAY_EXIT_MARKER
DET_TRAFFIC_LIGHT
DET_TRAFFIC_LIGHTS_ALONG_ROUTE
DET_ROAD_ICON
DET_DTM
DET_LANDMARKS_3D
DET_FAVORITES
DET_ROUTE_BLOCKING
DET_ROAD
DET_POLYGON
DET_DESTINATION
DET_MANOEUVRE_MARKER
DET_LANE_GUIDANCE_MARKER
DET_ROUTE
DET_MANOEUVRE_ARROW
DET_TREKKING_TOUR
DET_TTI_EDGE_HIGHLIGHTING
DET_CITY_MARKER
DET_VEHICLE
DET_POLYGON_NAME
DET_OFF_ROAD_ROUTE
DET_TTI_ARROW
DET_POI_NAME
DET_RASTER_MAP
DET_BREAD_CRUMB_TRAIL
DET_EDGE_HIGHLIGHTING
DET_DIRECTION_ARROW
DET_CITY_BUILDINGS
DET_FPS_DISPLAY
DET_CROSSHAIR
DET_DEVDROP_BANNER
DET_FRAME_AROUND_MAP
DET_CORONA
DET_WATEREFFECT
DET_TREES
DET_RAIN
DET_CITYMODEL_ROUTE_TRANSPARENCY
DET_ROUTE_DESTINATION
DET_RANGE_DISPLAY
DET_POI_BRANDS
DET_WEATHER_MARKER
DET_WEATHER_OVERLAY

Enumerator

DET_WAYPOINT_ROUTE	
DET_WAYPOINT_ROUTE_MARKER	
DET_STENCIL	

2.11.2.4 MapPerspective

enum `org::genivi::navigation::mapviewer::MapViewControl::MapPerspective` : BasicEnum

Enumerator

PERSPECTIVE_2D	
PERSPECTIVE_3D	

2.11.2.5 MapScaleMode

enum `org::genivi::navigation::mapviewer::MapViewControl::MapScaleMode` : BasicEnum

Enumerator

AUTOMATIC	
MANUAL	
HYBRID	

2.11.2.6 MapScaleType

enum `org::genivi::navigation::mapviewer::MapViewControl::MapScaleType` : BasicEnum

Enumerator

MIN	
MAX	
MID	

2.11.2.7 MapScaleUnit

enum `org::genivi::navigation::mapviewer::MapViewControl::MapScaleUnit` : BasicEnum

Enumerator

METER	
MILE	
KM	
YARD	
FOOT	

2.11.2.8 MapTheme

```
enum org::genivi::navigation::mapviewer::MapViewControl::MapTheme : BasicEnum
```

Enumerator

THEME_1	
THEME_2	
THEME_3	
THEME_I_CLASSIC_DAY	
THEME_I_CLASSIC_NIGHT	
THEME_I_CLASSIC_TRAFFIC_DAY	
THEME_I_CLASSIC_TRAFFIC_NIGHT	
THEME_I_ALTERNATIVE_DAY	
THEME_I_ALTERNATIVE_NIGHT	
THEME_I_ALTERNATIVE_TRAFFIC_DAY	
THEME_I_ALTERNATIVE_TRAFFIC_NIGHT	
THEME_I_GUIDING	

2.11.2.9 MapViewType

```
enum org::genivi::navigation::mapviewer::MapViewControl::MapViewType : BasicEnum
```

Enumerator

MAIN_MAP	
SPLIT_SCREEN	
GUIDING_MAP	

2.11.2.10 PanAction

```
enum org::genivi::navigation::mapviewer::MapViewControl::PanAction : BasicEnum
```

Enumerator

PAN_START	
PAN_TO	
PAN_END	

2.11.2.11 SelectableMapType

enum `org::genivi::navigation::mapviewer::MapViewControl::SelectableMapType` : BasicEnum

Enumerator

MET_POI	
MET_POLYGON	
MET_EDGE	
MET_ROAD	
MET_ROAD_ICON	
MET_TTI_ICON	
MET_TTI_EDGE	
MET_CITY_MARKER	
MET_ROUTE	
MET_TREKKING_ROUTE	
MET_POSITION	
MET_LANDMARK	
MET_DESTINATION	
MET_FAVORITE	
MET_PICTURE	
MET_GENERIC_MARKER	
CUSTOM_ELEMENT	
CURRENT_POSITION	
WAYPOINT	
POI	
TRAFFIC_INCIDENT	
ROUTE	
GEOCOORDINATES	

2.11.2.12 Visibility

enum `org::genivi::navigation::mapviewer::MapViewControl::Visibility` : BasicEnum

Enumerator

VISIBLE	
INVISIBLE	
FROZEN	

2.11.3 Member Function Documentation

2.11.3.1 convertGeoCoordsToPixelCoords()

```
void org::genivi::navigation::mapviewer::MapViewControl::convertGeoCoordsToPixelCoords (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in Coordinate2D geoCoordinates,
    out Pixel pixelCoordinates )
```

#comment : convertGeoCoordsToPixelCoords = This method converts geographical coordinates into pixel coordinates

2.11.3.2 convertPixelCoordsToGeoCoords()

```
void org::genivi::navigation::mapviewer::MapViewControl::convertPixelCoordsToGeoCoords (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in Pixel pixelCoordinates,
    out Coordinate2D geoCoordinates )
```

#comment : convertPixelCoordsToGeoCoords = This method converts pixel coordinates to geographical coordinates

2.11.3.3 createMapViewInstance()

```
void org::genivi::navigation::mapviewer::MapViewControl::createMapViewInstance (
    in Handle sessionHandle,
    in Dimension mapViewSize,
    in MapViewType mapViewType,
    out Handle mapViewInstanceHandle )
```

#comment : createMapViewInstance = This method creates a new map instance

2.11.3.4 displayCustomElements()

```
void org::genivi::navigation::mapviewer::MapViewControl::displayCustomElements (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in CustomElement customElements,
    out Handle customElementHandles )
```

#comment : displayCustomElements = This method visualizes a set of custom elements on the map

2.11.3.5 displayRoute()

```
void org::genivi::navigation::mapviewer::MapViewControl::displayRoute (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in Handle routeHandle,
    in Boolean highlighted )
```

#comment : displayRoute = This method visualizes one of the calculated routes

2.11.3.6 `getCameraDistanceFromTargetPoint()`

```
void org::genivi::navigation::mapviewer::MapViewControl::getCameraDistanceFromTargetPoint (
    in Handle mapViewInstanceHandle,
    out UInt32 distance )
```

#comment : `getCameraDistanceFromTargetPoint` = This method gets the mode and the camera distance from the target point

2.11.3.7 `getCameraHeading()`

```
void org::genivi::navigation::mapviewer::MapViewControl::getCameraHeading (
    in Handle mapViewInstanceHandle,
    out HeadingType headingType,
    out Int32 headingAngle,
    out Coordinate2D target )
```

#comment : `getCameraHeading` = This method returns the current camera heading

2.11.3.8 `getCameraHeight()`

```
void org::genivi::navigation::mapviewer::MapViewControl::getCameraHeight (
    in Handle mapViewInstanceHandle,
    out UInt32 height )
```

#comment : `getCameraHeight` = This method gets the camera height

2.11.3.9 `getCameraPosition()`

```
void org::genivi::navigation::mapviewer::MapViewControl::getCameraPosition (
    in Handle mapViewInstanceHandle,
    out Coordinate3D position )
```

#comment : `getCameraPosition` = This method returns the coordinates of the point at which the camera is positioned

2.11.3.10 `getCameraRollAngle()`

```
void org::genivi::navigation::mapviewer::MapViewControl::getCameraRollAngle (
    in Handle mapViewInstanceHandle,
    out Int32 roll )
```

#comment : `getCameraRollAngle` = This method returns the camera roll angle

2.11.3.11 `getCameraTiltAngle()`

```
void org::genivi::navigation::mapviewer::MapViewControl::getCameraTiltAngle (
    in Handle mapViewInstanceHandle,
    out Int32 tilt )
```

#comment : `getCameraTiltAngle` = This method returns the camera tilt angle

2.11.3.12 getDisplayedCustomElements()

```
void org::genivi::navigation::mapviewer::MapViewControl::getDisplayedCustomElements (
    in Handle mapViewInstanceHandle,
    out CustomElementDict customElements )
```

#comment : getDisplayedCustomElements = This method retrieves the visualized custom elements on the map

2.11.3.13 getDisplayedRoutes()

```
void org::genivi::navigation::mapviewer::MapViewControl::getDisplayedRoutes (
    in Handle mapViewInstanceHandle,
    out DisplayedRoute displayedRoutes )
```

#comment : getDisplayedRoutes = This method returns a list of displayed routes

2.11.3.14 getFollowCarMode()

```
void org::genivi::navigation::mapviewer::MapViewControl::getFollowCarMode (
    in Handle mapViewInstanceHandle,
    out Boolean followCarMode )
```

#comment : getFollowCarMode = This method returns the current FollowCar-mode

2.11.3.15 getMapViewBoundingBox()

```
void org::genivi::navigation::mapviewer::MapViewControl::getMapViewBoundingBox (
    in Handle mapViewInstanceHandle,
    out Rectangle boundingBox )
```

#comment : getMapViewBoundingBox = This method returns the bounding box of a given map instance

2.11.3.16 getMapViewObjectVisibility()

```
void org::genivi::navigation::mapviewer::MapViewControl::getMapViewObjectVisibility (
    in Handle mapViewInstanceHandle,
    out MapObjectVisibility objectVisibilityList )
```

#comment : getMapViewObjectVisibility = This method gets the type of objects shown on the map.

2.11.3.17 getMapViewPan()

```
void org::genivi::navigation::mapviewer::MapViewControl::getMapViewPan (
    in Handle mapViewInstanceHandle,
    in PanAction valueToReturn,
    out Pixel pixelCoordinates )
```

#comment : getMapViewPan

2.11.3.18 getMapViewPerformanceLevel()

```
void org::genivi::navigation::mapviewer::MapViewControl::getMapViewPerformanceLevel (
    in Handle mapViewInstanceHandle,
    out Level performanceLevel )
```

#comment : getMapViewPerformanceLevel = This method returns the performance level of a given map instance

2.11.3.19 getMapViewPerspective()

```
void org::genivi::navigation::mapviewer::MapViewControl::getMapViewPerspective (
    in Handle mapViewInstanceHandle,
    out MapPerspective perspective )
```

#comment : getMapViewPerspective = This method returns the current map perspective

2.11.3.20 getMapViewRotation()

```
void org::genivi::navigation::mapviewer::MapViewControl::getMapViewRotation (
    in Handle mapViewInstanceHandle,
    out Int32 rotationAngle,
    out Int32 rotationAnglePerSecond )
```

#comment : getMapViewRotation = This method is particularly interesting for debugging purposes

2.11.3.21 getMapViewSaveArea()

```
void org::genivi::navigation::mapviewer::MapViewControl::getMapViewSaveArea (
    in Handle mapViewInstanceHandle,
    out MapViewArea saveArea )
```

#comment : getMapViewSaveArea = This methods defines the area that the HMI guarantees not to cover with other windows or user interface elements

2.11.3.22 getMapViewScale()

```
void org::genivi::navigation::mapviewer::MapViewControl::getMapViewScale (
    in Handle mapViewInstanceHandle,
    out UInt8 scaleID,
    out MapScaleType isMinMax )
```

#comment : getMapViewScale = This method returns the currently used map scale

2.11.3.23 getMapViewScaleMode()

```
void org::genivi::navigation::mapviewer::MapViewControl::getMapViewScaleMode (
    in Handle mapViewInstanceHandle,
    out MapScaleMode scaleMode )
```

#comment : getMapViewScaleMode = This method gets the scaling mode.

2.11.3.24 getMapViewTheme()

```
void org::genivi::navigation::mapviewer::MapViewControl::getMapViewTheme (
    in Handle mapViewInstanceHandle,
    out MapTheme mapViewTheme )
```

#comment : getMapViewTheme = This method returns the current theme of a given map view instance

2.11.3.25 getMapViewType()

```
void org::genivi::navigation::mapviewer::MapViewControl::getMapViewType (
    in Handle mapViewInstanceHandle,
    out MapViewType mapViewType )
```

#comment : getMapViewType = This method returns the map type of a map instance as it was set using Create↔
MapViewInstance

2.11.3.26 getMapViewVisibilityMode()

```
void org::genivi::navigation::mapviewer::MapViewControl::getMapViewVisibilityMode (
    in Handle mapViewInstanceHandle,
    out Visibility visibilityMode )
```

#comment : getMapViewVisibilityMode = This method returns the current visibility mode

2.11.3.27 getPoiCategoriesVisible()

```
void org::genivi::navigation::mapviewer::MapViewControl::getPoiCategoriesVisible (
    in Handle mapViewInstanceHandle,
    out CategoryID poiCategoryIds )
```

#comment : getPoiCategoriesVisible = Get the set of POI categories displayed on the map.

2.11.3.28 getScaleList()

```
void org::genivi::navigation::mapviewer::MapViewControl::getScaleList (
    in Handle mapViewInstanceHandle,
    out MapScale scaleList )
```

#comment : getScaleList = This method returns a list of supported map scales

2.11.3.29 getSupportedMapViewObjectVisibilities()

```
void org::genivi::navigation::mapviewer::MapViewControl::getSupportedMapViewObjectVisibilities (
    (
        in Handle mapViewInstanceHandle,
        out MapObject objectVisibilityList )
```

#comment : getSupportedMapViewObjectVisibilities = This method gets the supported object visibilities.

2.11.3.30 getSupportedMapViewPerformanceLevels()

```
void org::genivi::navigation::mapviewer::MapViewControl::getSupportedMapViewPerformance↔  
Levels (
    out Level performanceLevelList )
```

#comment : getSupportedMapViewPerformanceLevels = This method retrieves the supported performance levels

2.11.3.31 getSupportedMapViewPerspectives()

```
void org::genivi::navigation::mapviewer::MapViewControl::getSupportedMapViewPerspectives (
    out MapPerspective perspectiveList )
```

#comment : getSupportedMapViewPerspectives = This method retrieves the supported mapview perspectives

2.11.3.32 getSupportedMapViewScaleModes()

```
void org::genivi::navigation::mapviewer::MapViewControl::getSupportedMapViewScaleModes (
    in Handle mapViewInstanceHandle,
    out MapScaleMode scaleModeList )
```

#comment : getSupportedMapViewScaleModes = This method gets the supported scaling modes.

2.11.3.33 getSupportedMapViewThemes()

```
void org::genivi::navigation::mapviewer::MapViewControl::getSupportedMapViewThemes (
    out MapTheme mapViewThemeList )
```

#comment : getSupportedMapViewThemes = This method retrieves the supported mapview themes

2.11.3.34 getSupportedMapViewTypes()

```
void org::genivi::navigation::mapviewer::MapViewControl::getSupportedMapViewTypes (
    out MapViewType mapViewTypeList )
```

#comment : getSupportedMapViewTypes = This method retrieves the supported map view types

2.11.3.35 getSupportedMapViewVisibilityModes()

```
void org::genivi::navigation::mapviewer::MapViewControl::getSupportedMapViewVisibilityModes (
    out Visibility visibilityModeList )
```

#comment : getSupportedMapViewVisibilityModes = This method retrieves the supported mapview visibility modes

2.11.3.36 getTargetPoint()

```
void org::genivi::navigation::mapviewer::MapViewControl::getTargetPoint (
    in Handle mapViewInstanceHandle,
    out Coordinate3D targetPoint )
```

#comment : getTargetPoint = This method retrieves the target point position

2.11.3.37 getVersion()

```
void org::genivi::navigation::mapviewer::MapViewControl::getVersion (
    out Version version )
```

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

2.11.3.38 hideCustomElements()

```
void org::genivi::navigation::mapviewer::MapViewControl::hideCustomElements (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in Handle customElementHandles )
```

#comment : hideCustomElements = This method hides a set of custom elements which were visualized by Display↔ CustomElements

2.11.3.39 hideRoute()

```
void org::genivi::navigation::mapviewer::MapViewControl::hideRoute (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in Handle routeHandle )
```

#comment : hideRoute = This method hides one of the visible routes

2.11.3.40 mapViewPinchBegin()

```
void org::genivi::navigation::mapviewer::MapViewControl::mapViewPinchBegin (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in Pixel anchorPoint )
```

#comment : mapViewPinchBegin = Begin a pinch gesture.

2.11.3.41 mapViewPinchEnd()

```
void org::genivi::navigation::mapviewer::MapViewControl::mapViewPinchEnd (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in Double velocity )
```

#comment : mapViewPinchEnd = End the pinch gesture.

2.11.3.42 mapViewPinchUpdate()

```
void org::genivi::navigation::mapviewer::MapViewControl::mapViewPinchUpdate (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in Pixel anchorPoint,
    in Double scaleFactor )
```

#comment : mapViewPinchUpdate = Provide an update for the pinch gesture.

2.11.3.43 mapViewRotateBegin()

```
void org::genivi::navigation::mapviewer::MapViewControl::mapViewRotateBegin (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in Pixel anchorPoint )
```

#comment : mapViewRotateBegin = Begin a rotation gesture.

2.11.3.44 mapViewRotateEnd()

```
void org::genivi::navigation::mapviewer::MapViewControl::mapViewRotateEnd (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in UInt16 velocity )
```

#comment : mapViewRotateEnd = End the rotation gesture.

2.11.3.45 mapViewRotateUpdate()

```
void org::genivi::navigation::mapviewer::MapViewControl::mapViewRotateUpdate (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in Pixel anchorPoint,
    in Int16 rotationAngle )
```

#comment : mapViewRotateUpdate = Provide an update for the rotation gesture.

2.11.3.46 mapViewTiltBegin()

```
void org::genivi::navigation::mapviewer::MapViewControl::mapViewTiltBegin (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in Pixel anchorPoint )
```

#comment : mapViewTiltBegin = Begin a tilt gesture.

2.11.3.47 mapViewTiltEnd()

```
void org::genivi::navigation::mapviewer::MapViewControl::mapViewTiltEnd (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in UInt32 velocity )
```

#comment : mapViewTiltEnd = End the tilt gesture.

2.11.3.48 mapViewTiltUpdate()

```
void org::genivi::navigation::mapviewer::MapViewControl::mapViewTiltUpdate (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in Int32 translation )
```

#comment : mapViewTiltUpdate = Provide an update for the tilt gesture.

2.11.3.49 releaseMapViewInstance()

```
void org::genivi::navigation::mapviewer::MapViewControl::releaseMapViewInstance (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle )
```

#comment : releaseMapViewInstance = This method releases (i.e. destroys) a given map instance. Only invisible map instances can be released

2.11.3.50 selectElementsOnMap()

```
void org::genivi::navigation::mapviewer::MapViewControl::selectElementsOnMap (
    in Handle mapViewInstanceHandle,
    in Pixel pixelCoordinate,
    in SelectableMapType selectableTypes,
    in UInt16 maxNumberOfSelectedElements,
    out SelectedMapElement selectedElements )
```

#comment : selectElementsOnMap = This method selects elements on the map view which are at the position specified by user input

2.11.3.51 setCameraDistanceFromTargetPoint()

```
void org::genivi::navigation::mapviewer::MapViewControl::setCameraDistanceFromTargetPoint (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in UInt32 distance )
```

#comment : setCameraDistanceFromTargetPoint = This method sets the mode and the camera distance from the target point

2.11.3.52 setCameraHeadingAngle()

```
void org::genivi::navigation::mapviewer::MapViewControl::setCameraHeadingAngle (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in Int32 heading )
```

#comment : setCameraHeadingAngle = This method sets the map view heading angle Note: the camera position will be automatically set in such a way, that it looks at the currently selected target point

2.11.3.53 setCameraHeadingToTarget()

```
void org::genivi::navigation::mapviewer::MapViewControl::setCameraHeadingToTarget (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in Coordinate2D target )
```

#comment : setCameraHeadingToTarget = This method sets the camera heading in such a way, that the camera always looks at a given target

2.11.3.54 setCameraHeadingTrackUp()

```
void org::genivi::navigation::mapviewer::MapViewControl::setCameraHeadingTrackUp (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle )
```

#comment : setCameraHeadingTrackUp = This method sets the camera heading in such a way, that the camera always looks in the direction in which the car is moving

2.11.3.55 setCameraHeight()

```
void org::genivi::navigation::mapviewer::MapViewControl::setCameraHeight (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in UInt32 height )
```

#comment : setCameraHeight = This method sets the camera height

2.11.3.56 setCameraPosition()

```
void org::genivi::navigation::mapviewer::MapViewControl::setCameraPosition (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in Coordinate3D position )
```

#comment : setCameraPosition = This method sets the coordinates of the point at which the camera must be positioned Note: the camera heading will be automatically set in such a way, that the camera is aimed at the view point

2.11.3.57 setCameraRollAngle()

```
void org::genivi::navigation::mapviewer::MapViewControl::setCameraRollAngle (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in Int32 roll )
```

#comment : setCameraRollAngle = This method sets the camera roll angle

2.11.3.58 setCameraTiltAngle()

```
void org::genivi::navigation::mapviewer::MapViewControl::setCameraTiltAngle (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in Int32 tilt )
```

#comment : setCameraTiltAngle = This method sets the camera tilt angle

2.11.3.59 setFollowCarMode()

```
void org::genivi::navigation::mapviewer::MapViewControl::setFollowCarMode (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in Boolean followCarMode )
```

#comment : setFollowCarMode = This method sets the FollowCar mode

2.11.3.60 setMapViewBoundingBox()

```
void org::genivi::navigation::mapviewer::MapViewControl::setMapViewBoundingBox (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in Rectangle boundingBox )
```

#comment : setMapViewBoundingBox = This method sets the map bounding box

2.11.3.61 setMapViewObjectVisibility()

```
void org::genivi::navigation::mapviewer::MapViewControl::setMapViewObjectVisibility (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in MapObjectVisibility objectVisibilityList )
```

#comment : setMapViewObjectVisibility = This method specifies the type of objects to show on the map.

2.11.3.62 setMapViewPan()

```
void org::genivi::navigation::mapviewer::MapViewControl::setMapViewPan (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in PanAction panningAction,
    in Pixel pixelCoordinates )
```

#comment : setMapViewPan = This method pans a given map instance

2.11.3.63 setMapViewPerformanceLevel()

```
void org::genivi::navigation::mapviewer::MapViewControl::setMapViewPerformanceLevel (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in Level performanceLevel )
```

#comment : setMapViewPerformanceLevel = This method sets the performance level of a given map instance

2.11.3.64 setMapViewPerspective()

```
void org::genivi::navigation::mapviewer::MapViewControl::setMapViewPerspective (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in MapPerspective perspective )
```

#comment : setMapViewPerspective = This method sets the map perspective

2.11.3.65 setMapViewRotation()

```
void org::genivi::navigation::mapviewer::MapViewControl::setMapViewRotation (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in Int32 rotationAngle,
    in Int32 rotationAnglePerSecond )
```

#comment : setMapViewRotation = This method rotates the map

2.11.3.66 setMapViewSaveArea()

```
void org::genivi::navigation::mapviewer::MapViewControl::setMapViewSaveArea (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in MapViewArea saveArea )
```

#comment : setMapViewSaveArea = This methods defines the area that the HMI guarantees not to cover with other windows or user interface elements

2.11.3.67 setMapViewScale()

```
void org::genivi::navigation::mapviewer::MapViewControl::setMapViewScale (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in UInt8 scaleID )
```

#comment : setMapViewScale = This method sets the map scale by specifying a ScaleID

2.11.3.68 setMapViewScaleByDelta()

```
void org::genivi::navigation::mapviewer::MapViewControl::setMapViewScaleByDelta (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in Int16 scaleDelta )
```

#comment : setMapViewScaleByDelta = This method sets the map scale by specifying a delta value with respect to the currently set ScaleID

2.11.3.69 setMapViewScaleByMetersPerPixel()

```
void org::genivi::navigation::mapviewer::MapViewControl::setMapViewScaleByMetersPerPixel (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in Double metersPerPixel )
```

#comment : setMapViewScaleByMetersPerPixel = This method sets the map scale by specifying the number of meters that a pixel represents

2.11.3.70 setMapViewScaleMode()

```
void org::genivi::navigation::mapviewer::MapViewControl::setMapViewScaleMode (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in MapScaleMode scaleMode )
```

#comment : setMapViewScaleMode = This method sets the scaling mode.

2.11.3.71 setMapViewTheme()

```
void org::genivi::navigation::mapviewer::MapViewControl::setMapViewTheme (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in MapTheme mapViewTheme )
```

#comment : setMapViewTheme = This method configures the theme of a given map view instance

2.11.3.72 setMapViewVisibilityMode()

```
void org::genivi::navigation::mapviewer::MapViewControl::setMapViewVisibilityMode (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in Visibility visibilityMode )
```

#comment : setMapViewVisibilityMode = This method sets the current visibility mode

2.11.3.73 setPoiCategoriesNotVisible()

```
void org::genivi::navigation::mapviewer::MapViewControl::setPoiCategoriesNotVisible (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in CategoryID poiCategoryIds )
```

#comment : setPoiCategoriesNotVisible = Remove POI categories from the set of POI categories displayed on the map.

2.11.3.74 setPoiCategoriesVisible()

```
void org::genivi::navigation::mapviewer::MapViewControl::setPoiCategoriesVisible (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in CategoryID poiCategoryIds )
```

#comment : setPoiCategoriesVisible = Add POI categories to the set of POI categories displayed on the map. Any specified category that until now was displayed with scale limits is now displayed without limits.

2.11.3.75 setPoiCategoriesVisibleWithinLimits()

```
void org::genivi::navigation::mapviewer::MapViewControl::setPoiCategoriesVisibleWithinLimits
(
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in CategoryID poiCategoryIds,
    in UInt8 minScaleID,
    in UInt8 maxScaleID )
```

#comment : setPoiCategoriesVisible = Add POI categories to the set of POI categories displayed on the map, where the POI's are only displayed in a specific range of scales. Any specified category that until now was displayed without scale limits is now displayed with limits.

2.11.3.76 setTargetPoint()

```
void org::genivi::navigation::mapviewer::MapViewControl::setTargetPoint (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in Coordinate3D targetPoint )
```

#comment : setTargetPoint = This method sets the position of the point the camera is aimed at

2.11.3.77 setTrafficIncidentsVisibility()

```
void org::genivi::navigation::mapviewer::MapViewControl::setTrafficIncidentsVisibility (
    in Handle sessionHandle,
    in Handle mapViewInstanceHandle,
    in Boolean visible )
```

#comment : setTrafficIncidentsVisibility = Set the visibility of Traffic Incidents on the map.

2.11.4 Member Data Documentation

2.11.4.1 Handle

map_CustomElementDict org::genivi::navigation::mapviewer::MapViewControl::Handle =>[Custom↔Element](#)

2.11.4.2 MapObject

map_MapObjectVisibility org::genivi::navigation::mapviewer::MapViewControl::MapObject =>Boolean

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

- [MapViewControl.fidl](#)

2.12 org::genivi::navigation::mapviewer::MapViewControl_client Interface Reference

Public Member Functions

- void [followCarModeChanged](#) (in Handle mapViewInstanceHandle, in Boolean followCarMode)
- void [cameraPositionChanged](#) (in Handle mapViewInstanceHandle, in Coordinate3D targetPoint)
- void [cameraHeadingChanged](#) (in Handle mapViewInstanceHandle, in HeadingType headingType, in Int32 headingAngle)
- void [cameraTiltAngleChanged](#) (in Handle mapViewInstanceHandle, in Int32 tilt)
- void [cameraDistanceFromTargetPointChanged](#) (in Handle mapViewInstanceHandle, in UInt32 distance)
- void [mapViewScaleChanged](#) (in Handle mapViewInstanceHandle, in UInt8 scaleID, in MapScaleType isMin↔Max)
- void [mapViewPerspectiveChanged](#) (in Handle mapViewInstanceHandle, in MapPerspective perspective)
- void [mapViewObjectVisibilityChanged](#) (in Handle mapViewInstanceHandle, in MapObjectVisibility object↔VisibilityList)
- void [mapViewScaleByMetersPerPixelChanged](#) (in Handle mapViewInstanceHandle, in Double metersPer↔Pixel)
- void [mapViewBoundingBoxChanged](#) (in Handle mapViewInstanceHandle, in Rectangle boundingBox)
- void [mapViewSaveAreaChanged](#) (in Handle mapViewInstanceHandle, in MapViewArea saveArea)
- void [mapViewVisibilityChanged](#) (in Handle mapViewInstanceHandle, in Visibility visibilityMode)
- void [mapViewPerformanceLevelChanged](#) (in Handle mapViewInstanceHandle, in Level performanceLevel)
- void [displayedRoutes](#) (in Handle mapViewInstanceHandle, in DisplayedRoute displayedRoutes)
- void [poiCategoriesVisibilityChanged](#) (in Handle mapViewInstanceHandle, in CategoryVisibility poiCategory↔Visibilities)
- void [mapViewThemeChanged](#) (in Handle mapViewInstanceHandle, in MapTheme mapViewTheme)
- void [mapViewRotated](#) (in Handle mapViewInstanceHandle)

2.12.1 Member Function Documentation

2.12.1.1 cameraDistanceFromTargetPointChanged()

```
void org::genivi::navigation::mapviewer::MapViewControl_client::cameraDistanceFromTarget↔
PointChanged (
    in Handle mapViewInstanceHandle,
    in UInt32 distance )
```

broadcast #comment : cameraDistanceFromTargetPointChanged = This signal is emitted when the camera distance from the target point changes

2.12.1.2 cameraHeadingChanged()

```
void org::genivi::navigation::mapviewer::MapViewControl_client::cameraHeadingChanged (
    in Handle mapViewInstanceHandle,
    in HeadingType headingType,
    in Int32 headingAngle )
```

broadcast #comment : cameraHeadingChanged = This signal is emitted when the heading angle of the camera changes

2.12.1.3 cameraPositionChanged()

```
void org::genivi::navigation::mapviewer::MapViewControl_client::cameraPositionChanged (
    in Handle mapViewInstanceHandle,
    in Coordinate3D targetPoint )
```

broadcast #comment : cameraPositionChanged = This signal is emitted when the position of the camera changes

2.12.1.4 cameraTiltAngleChanged()

```
void org::genivi::navigation::mapviewer::MapViewControl_client::cameraTiltAngleChanged (
    in Handle mapViewInstanceHandle,
    in Int32 tilt )
```

broadcast #comment : cameraTiltAngleChanged = This signal is emitted when the camera tilt angle changes

2.12.1.5 displayedRoutes()

```
void org::genivi::navigation::mapviewer::MapViewControl_client::displayedRoutes (
    in Handle mapViewInstanceHandle,
    in DisplayedRoute displayedRoutes )
```

broadcast #comment : displayedRoutes = This signal is emitted when the list of displayed routes change

2.12.1.6 followCarModeChanged()

```
void org::genivi::navigation::mapviewer::MapViewControl_client::followCarModeChanged (
    in Handle mapViewInstanceHandle,
    in Boolean followCarMode )
```

broadcast #comment : followCarModeChanged = This signal is emitted when the follow-car-mode changes

2.12.1.7 mapViewBoundingBoxChanged()

```
void org::genivi::navigation::mapviewer::MapViewControl_client::mapViewBoundingBoxChanged (
    in Handle mapViewInstanceHandle,
    in Rectangle boundingBox )
```

broadcast #comment : mapViewBoundingBoxChanged = This signal is emitted when the bounding box of a map instance changes

2.12.1.8 mapViewObjectVisibilityChanged()

```
void org::genivi::navigation::mapviewer::MapViewControl_client::mapViewObjectVisibility↔
Changed (
    in Handle mapViewInstanceHandle,
    in MapObjectVisibility objectVisibilityList )
```

broadcast #comment : mapViewObjectVisibilityChanged = This signal is emitted when the type of objects shown on the map changes

2.12.1.9 mapViewPerformanceLevelChanged()

```
void org::genivi::navigation::mapviewer::MapViewControl_client::mapViewPerformanceLevel↔
Changed (
    in Handle mapViewInstanceHandle,
    in Level performanceLevel )
```

broadcast #comment : mapViewPerformanceLevelChanged = This signal is emitted when the performance level of a map instance changes

2.12.1.10 mapViewPerspectiveChanged()

```
void org::genivi::navigation::mapviewer::MapViewControl_client::mapViewPerspectiveChanged (
    in Handle mapViewInstanceHandle,
    in MapPerspective perspective )
```

broadcast #comment : mapViewPerspectiveChanged = This signal is emitted when the map perspective changes

2.12.1.11 mapViewRotated()

```
void org::genivi::navigation::mapviewer::MapViewControl_client::mapViewRotated (
    in Handle mapViewInstanceHandle )
```

broadcast #comment : mapViewRotated = This signal is emitted when the rotation is achieved This signal is meant for debugging purposes

2.12.1.12 mapViewSaveAreaChanged()

```
void org::genivi::navigation::mapviewer::MapViewControl_client::mapViewSaveAreaChanged (
    in Handle mapViewInstanceHandle,
    in MapViewArea saveArea )
```

broadcast #comment : mapViewSaveAreaChanged = This signal is emitted when the area that the HMI guarantees not to cover with other windows or user interface elements changes

2.12.1.13 mapViewScaleByMetersPerPixelChanged()

```
void org::genivi::navigation::mapviewer::MapViewControl_client::mapViewScaleByMetersPer↔
PixelChanged (
    in Handle mapViewInstanceHandle,
    in Double metersPerPixel )
```

broadcast #comment : mapViewScaleByMetersPerPixelChanged = This signal is emitted when the mapview scale ByMetersPerPixel changes

2.12.1.14 mapViewScaleChanged()

```
void org::genivi::navigation::mapviewer::MapViewControl_client::mapViewScaleChanged (
    in Handle mapViewInstanceHandle,
    in UInt8 scaleID,
    in MapScaleType isMinMax )
```

broadcast #comment : mapViewScaleChanged = This signal is emitted when the mapview scale changes

2.12.1.15 mapViewThemeChanged()

```
void org::genivi::navigation::mapviewer::MapViewControl_client::mapViewThemeChanged (
    in Handle mapViewInstanceHandle,
    in MapTheme mapViewTheme )
```

broadcast #comment : mapViewThemeChanged = This signal is emitted when the theme of a map view instance changed

2.12.1.16 mapViewVisibilityChanged()

```
void org::genivi::navigation::mapviewer::MapViewControl_client::mapViewVisibilityChanged (
    in Handle mapViewInstanceHandle,
    in Visibility visibilityMode )
```

broadcast #comment : mapViewVisibilityChanged = This signal is emitted when the MapView visibility changes

2.12.1.17 poiCategoriesVisibilityChanged()

```
void org::genivi::navigation::mapviewer::MapViewControl_client::poiCategoriesVisibility↔
Changed (
    in Handle mapViewInstanceHandle,
    in CategoryVisibility poiCategoryVisibilities )
```

broadcast #comment : poiCategoriesVisibilityChanged = This signal is emitted when the visibility of POI categories on a map instance changes

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

- [MapViewControl.fidl](#)

2.13 org::genivi::navigation::mapviewer::MapViewControl::Pixel Struct Reference

Public Attributes

- UInt16 *x*
- UInt16 *y*

2.13.1 Member Data Documentation

2.13.1.1 x

```
UInt16 org::genivi::navigation::mapviewer::MapViewControl::Pixel::x
```

2.13.1.2 y

UInt16 org::genivi::navigation::mapviewer::MapViewControl::Pixel::y

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

- [MapViewControl.fidl](#)

2.14 org::genivi::navigation::mapviewer::MapViewControl::SelectedMapElement Struct Reference

Public Attributes

- [SelectableMapType](#) type
- [Coordinate2D](#) position
- [ElementValue](#) value

2.14.1 Member Data Documentation

2.14.1.1 position

Coordinate2D org::genivi::navigation::mapviewer::MapViewControl::SelectedMapElement::position

2.14.1.2 type

[SelectableMapType](#) org::genivi::navigation::mapviewer::MapViewControl::SelectedMapElement↔
::type

2.14.1.3 value

[ElementValue](#) org::genivi::navigation::mapviewer::MapViewControl::SelectedMapElement::value

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

- [MapViewControl.fidl](#)

2.15 org::genivi::navigation::mapviewer::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)

2.15.1 Detailed Description

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

2.15.2 Member Function Documentation

2.15.2.1 createSession()

```
void org::genivi::navigation::mapviewer::Session::createSession (
    in String clientApp,
    out Handle sessionHandle )
```

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

2.15.2.2 deleteSession()

```
void org::genivi::navigation::mapviewer::Session::deleteSession (
    in Handle sessionHandle )
```

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

2.15.2.3 getAllSessions()

```
void org::genivi::navigation::mapviewer::Session::getAllSessions (
    out Session sessionsList )
```

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

2.15.2.4 getSessionStatus()

```
void org::genivi::navigation::mapviewer::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) .

2.15.2.5 getVersion()

```
void org::genivi::navigation::mapviewer::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](#)

2.16 org::genivi::navigation::mapviewer::Session_client Interface Reference

Public Member Functions

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

2.16.1 Member Function Documentation

2.16.1.1 sessionDeleted()

```
void org::genivi::navigation::mapviewer::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](#)

2.17 org::genivi::navigation::mapviewer::MapViewControl::WayPointValue Struct Reference

Public Attributes

- [Handle routeHandle](#)
- UInt16 [waypointIndex](#)

2.17.1 Member Data Documentation

2.17.1.1 routeHandle

```
Handle org::genivi::navigation::mapviewer::MapViewControl::WayPointValue::routeHandle
```

2.17.1.2 waypointIndex

```
UInt16 org::genivi::navigation::mapviewer::MapViewControl::WayPointValue::waypointIndex
```

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

- [MapViewControl.fidl](#)

3 File Documentation

3.1 Configuration.fidl File Reference

Classes

- interface [org::genivi::navigation::mapviewer::Configuration](#)
- interface [org::genivi::navigation::mapviewer::Configuration_client](#)

Modules

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

3.2 MapViewerControl.fidl File Reference

Classes

- interface [org::genivi::navigation::mapviewer::MapViewerControl](#)
- struct [org::genivi::navigation::mapviewer::MapViewerControl::Dimension](#)
- struct [org::genivi::navigation::mapviewer::MapViewerControl::MapScale](#)
- struct [org::genivi::navigation::mapviewer::MapViewerControl::MapViewArea](#)
- struct [org::genivi::navigation::mapviewer::MapViewerControl::Pixel](#)
- struct [org::genivi::navigation::mapviewer::MapViewerControl::DisplayedRoute](#)
- struct [org::genivi::navigation::mapviewer::MapViewerControl::CategoryVisibility](#)
- struct [org::genivi::navigation::mapviewer::MapViewerControl::AnchorPoint](#)
- struct [org::genivi::navigation::mapviewer::MapViewerControl::CustomElement](#)
- struct [org::genivi::navigation::mapviewer::MapViewerControl::SelectedMapElement](#)
- struct [org::genivi::navigation::mapviewer::MapViewerControl::WayPointValue](#)
- union [org::genivi::navigation::mapviewer::MapViewerControl::ElementValue](#)
- interface [org::genivi::navigation::mapviewer::MapViewerControl_client](#)

Modules

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

3.3 Session.fidl File Reference

Classes

- interface [org::genivi::navigation::mapviewer::Session](#)
- interface [org::genivi::navigation::mapviewer::Session_client](#)

Modules

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

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