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NavigationCore

Component Specification

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**Abstract:**

This document provides the Component Specification for the NavigationCore

**Keywords:**

Navigation, LocationInput, Routing, Guidance

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GENIVI Alliance

2400 Camino Ramon, Suite 375

San Ramon, CA 94583, USA

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# 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 *Interfaces* chapter. |
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| 2.0 | 17 Jun 2013 | Marco Residori (XS Embedded) | Updated API description.  API fixes: GT-2691, GT-2689, GT-2651.  API Version 2.0 (*gemini-final* tag) |
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| 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 |

# Introduction

This document describes the NavigationCore API.

# Terminology

|  |  |
| --- | --- |
| ***Term*** | ***Description*** |
| Link-ID | Identifier of a route segment in a database |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

# Architecture

## Interfaces



## Interaction with other Components



# API

## Git Repository

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

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

## Sequence Diagrams

### navigation application creates route



### navigation application starts route calculation



### navigation application gets list of segments



### navigation application enters destination



### two clients try to change route preferences of the same route



### navigation application sets route preferences



### navigation application sets starting point



### navigation application sets transportation means



### navigation application changes waypoints order



## 

### navigation application enables voice guidance



### navigation application starts a simulation



### navigation application starts guidance



### navigation application stops guidance



### HMI requests voice instruction



## 

### navigation application creates location input session



### navigation application enters location



### navigation application enters location using speller



### navigation application enters full address



## 

## Interfaces

* 1. The following pages describe the interfaces of the NavigationCore API.