

**Private Public Partnership Project (PPP)**

Large-scale Integrated Project (IP)



#### **D.6.2.3: FI-WARE SW Release**

**Project acronym:** FI-WARE

**Project full title:** Future Internet Core Platform

**Contract No.:** 285248

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## 1.1 Executive Summary

This version of the deliverable provides the details of the third software release of FI-WARE.

The software releases take place following three standard methods:

- **Publicly:** under the tool [Files](#) of the project called [FI-WARE](#) under the [FI-WARE forge](#)
- **Restricted to PPP members and the EC:** under the tool [Files](#) of the project called [FI-WARE PPP Restricted](#) under the [FI-WARE forge](#)
- **Offered as a service:** exceptionally, a few partners host their software delivery themselves on their private infrastructures. They can supply access to the PPP members or the EC (password protected location) if requested.

## 1.2 About This Document

The original purpose of this document (associated to the official deliverable D.6.2.3), is to accompany the official deliverable, marked as "P". The EC requires a report with each one of the deliverables of such nature and the present document satisfies such request by giving a succinct account of the software delivered for Release 3 for the respective chapter.

## 1.3 Intended Audience

This document and the sw deliverables described are mainly oriented to provide an orderly report to the EC but it could also be used by anyone who has interest in installing the GEi or who wants to gain knowledge of the actual software delivered in the 3rd Release of FI-WARE.

## 1.4 Chapter Context

Fi-WARE will enable smarter, more customized/personalized and context-aware applications and services by the means of a set of Generic Enablers (GEs) able to gather, publish, exchange, process and analyze massive data in a fast and efficient way.

Nowadays, several well-known free Internet services are based on business models that exploit massive data provided by end users. This data is exploited in advertising or offered to 3rd parties so that they can build innovative applications. Twitter, Facebook, Amazon, Google and many others are examples of this.

The Data/Context Management FI-WARE chapter aims at providing outperforming and platform-like GEs that will ease development and the provisioning of innovative Applications that require management, processing and exploitation of context information as well as data streams in real-time and at massive scale. Combined with GEs coming from the Applications and Services Delivery Framework Chapters, application providers will be able to build innovative business models such as those of the companies mentioned above and beyond.

FI-WARE Data/Context Management GEs will enable to:

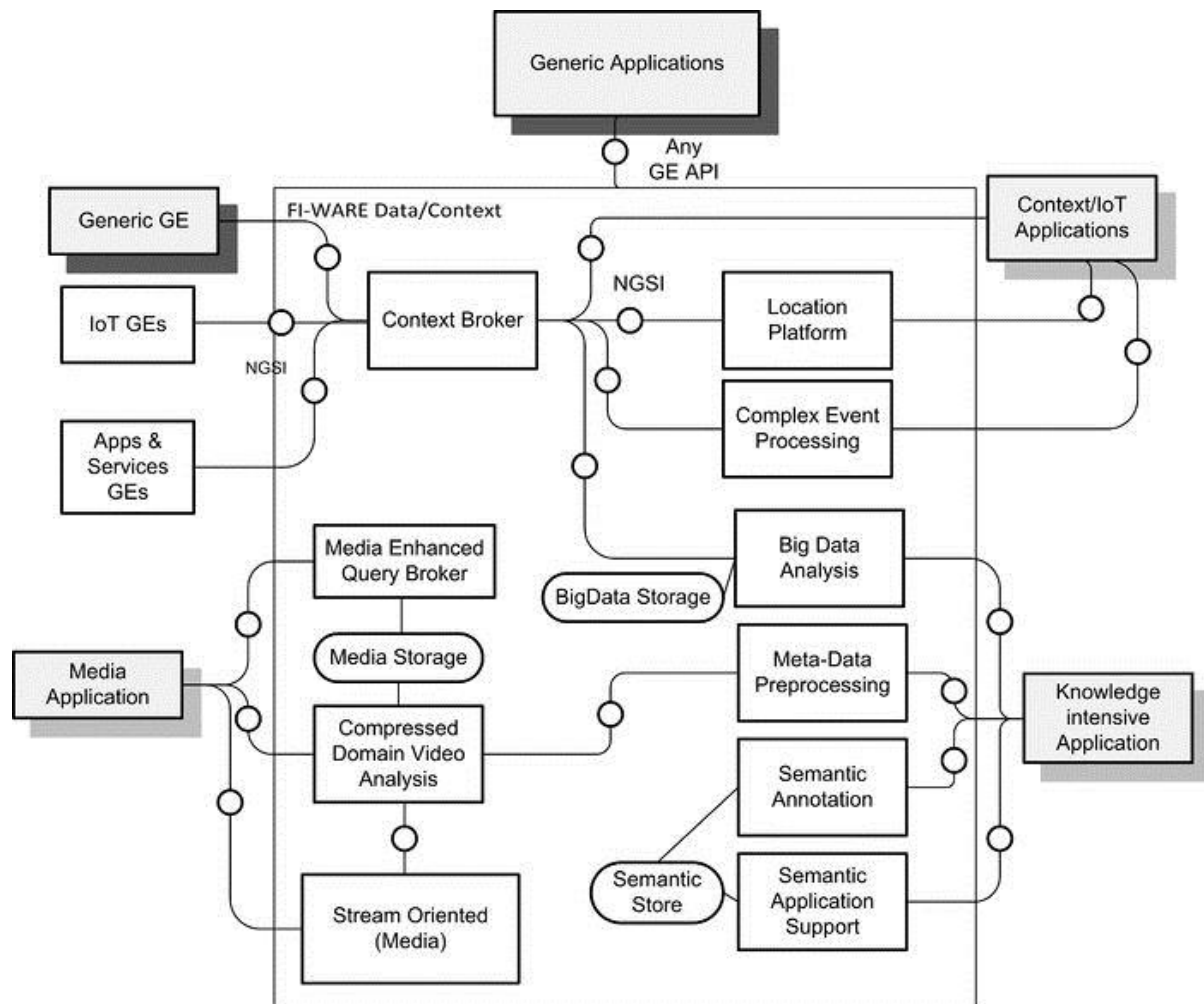
- Generate, subscribe for being notified about and query for context information coming from different sources.
- Model changes in context as events that can be processed to detect complex situations that will lead to generation of actions or the generation of new context information (therefore, leading to changes in context also treatable as events).
- Processing large amounts of context information in an aggregated way, using BigData Map&Reduce techniques, in order to generate new knowledge.

- Process data streams (particularly, multimedia video streams) coming from different sources in order to generate new data streams as well as context information that can be further exploited.
- Process metadata that may be linked to context information, using standard semantic support technologies.
- Manage some context information, such as location information, presence, user or terminal profile, etc., in a standard way.

A cornerstone concept within this chapter is the structural definition of Data Elements enclosing its "Data Type", a number of "Data Element attributes" (which enclose the following: Name, Type, Value) and, optionally, a set of "Metadata Elements" (which have also in turn Data-like attributes: Name, Type, Value). However, this precise definition remains unbound to any specific type of representation and enables the usage of "Data Element" structures to represent "Context Elements" and "Events".

#### 1.4.1 Architecture Overview

The following diagram shows the main components (Generic Enablers) that comprise the third release of FI-WARE Data/Context chapter architecture.



**Figure 1: Data Architecture Overview**

More information about the Data Chapter and FI-WARE in general can be found within the following pages:

<http://wiki.fi-ware.eu>

[Data/Context Management Architecture](#)

## 1.5 Structure of this Document

The document is generated out of an ad hoc wiki page.

The following resources were used to generate this document:

**D.6.2.3 FI-WARE SW Release front page**

[D.6.2.3 FI-WARE SW Release report](#)

## 1.6 Acknowledgements

The current document has been elaborated using a number of collaborative tools, with the participation of the Working Package Leader and Architect as well as those partners in their teams acting as GEi owners.

## 1.7 Keyword list

FI-WARE, PPP, FI-CoDE, Future Internet, Collaboration, Development, FusionForge, ICT, Living Lab, OIL, Steering Board, Roadmap, Reference Architecture, Generic Enabler, Implementation, GEi, GE, Open Specifications, I2ND, Cloud, IoT, Data/Context Management, Applications/Services Ecosystem, Security, Developers Community and Tools , ICT, es.Internet, Latin American Platforms, Cloud Edge, Cloud Proxy, Use Cases.

## 1.8 Changes History

Release	Major changes description	Date	Editor
<b>v1</b>	First version	2014-07-09	TID

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## 2 D 6 2 3 FI-WARE SW Release report

The following table provides a summary of the GEi's delivered for Release 3 in this chapter.

GE Name	GE implementation	Partner	Repository	Release Code	Optional notes
Context Broker	Orion Context Broker	TID	<a href="#">FI-WARE</a>	DATA&IOT-OrionContextBroker 3.4.3	
Context Broker	Context Awareness Platform	TI	<a href="#">FI-WARE</a>	DATA-ContextAwarenessPlatform 3.2.3	
Publish Subscribe Semantic Context	FLOD	ORANGE	<a href="#">FI-WARE</a>	DATA-FLOD 3.2	
Complex Event Processing	IBM Proactive Technology Online	IBM-IL	<a href="#">FI-WARE</a> <a href="#">PPP</a> <a href="#">Restricted</a>	DATA-CEP 3.3.1	
BigData	Cosmos	TID	<a href="#">FI-WARE</a>	DATA-CosmosBigData 3.3	
Compressed Domain Video Analysis	Codoan	Siemens	<a href="#">FI-WARE</a> <a href="#">PPP</a> <a href="#">Restricted</a>	DATA-Codoan 3.2.2.1.2	
Media-enhanced Query Broker	QueryBroker	Siemens	<a href="#">FI-WARE</a> <a href="#">PPP</a> <a href="#">Restricted</a>	DATA-QueryBroker 3.2.3	
Location Platform	LOCS	Thales	<a href="#">FI-WARE</a> <a href="#">PPP</a> <a href="#">Restricted</a>	DATA-LOCS 3.2.0	
Semantic Application Support	SAS	ATOS	<a href="#">FI-WARE</a>	DATA-SemanticApplicationSupport 3.4.2	

Meta-data Pre-processing	Meta-data Pre-processor	Siemens	<a href="#">FI-WARE PPP Restricted</a>	DATA-MetadDataProcessor 3.2.405.971	
Stream Oriented	Kurento	URJC, NAEVATEC	<a href="#">FI-WARE</a>	DATA-Kurento 3.4.3	
Unstructured Data Analysis	UDA	ATOS	<a href="#">FI-WARE</a>	DATA-UnstructuredDataAnalysis 3.3.3	

## Notes:

- The field "Repository" has three possible values ("FI-WARE", "FI-WARE PPP Restricted" or "SaaS"), depending on the standard delivery method chosen.
- An empty GEi column means that the name of the GEi is the same as the GE name(only for GEi with a single implementation)