

Private Public Partnership Project (PPP)
Large-scale Integrated Project (IP)



D.3.2.3: FI-WARE SW Release

Project acronym: FI-WARE

Project full title: Future Internet Core Platform

Contract No.: 285248

Strategic Objective: FI.ICT-2011.1.7 Technology foundation: Future Internet Core Platform

Project Document Number: ICT-2011-FI-285248-WP3-D.3.2.3

Project Document Date: 2014-04-30

Deliverable Type and Security: PP

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1.1. Executive Summary

This version of the deliverable provides the details of the third software release of FI-WARE for the work package "Apps and Services".

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 or within the Testbed, available for FI-PPP members. 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.3.2.3), 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

The Generic Enablers for the Apps Chapter together can be used to build the core infrastructure for enabling a sustainable ecosystem of applications and services of future internet application domains, which foster innovation as well as cross-fertilization. In particular the Apps Generic Enablers supports unified description and publishing of services, offering of services in a store, matching demand and offering via marketplace capabilities, creating composed value added services and service networks, and monetization and revenue sharing, all in a complementary and harmonized business framework.

The concept of the Generic Enabler implies that there can be several possible implementations. There are various degrees of flexibility in the non-functional properties or functional profile of the Generic Enabler description. For example the Mediator GE has 2 different implementations. Not every GE has a RESTful Web interface. Especially the composition editors expose their functionality mainly through a User Interface. This case requires the interface to be described in an abstract way (e.g. what a user can do) and illustrated by screenshots of specific enabler implementations.

A number of basic enablers are important to realize the vision of such a service business framework which enables new business models in an agile and flexible way:

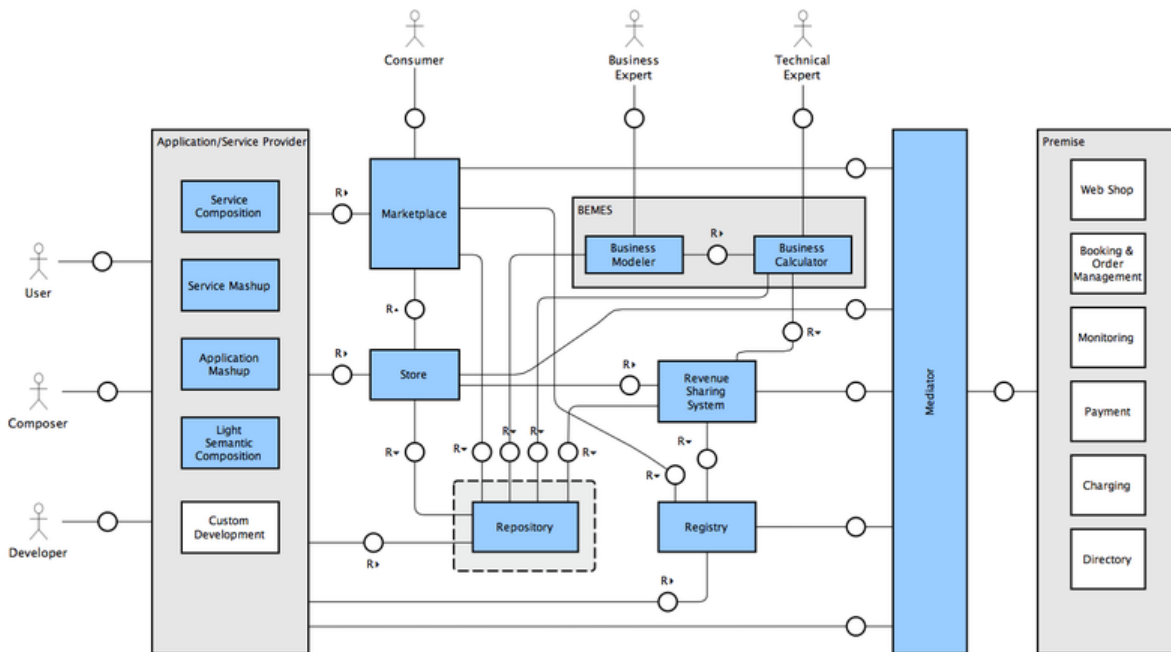
- **Repository** - defines a standard way of publishing service description in the Web in a scalable way.
- **Registry** - serves as a common database layer for run-time configuration and defines a common model and access interface.
- **Store** - allows to offer services for consumers as well as developers of future internet applications.
- **Marketplace** - defines a standard way to access market places in order to find and compare offerings from different stores and provides further functionality to foster the market for future internet applications and services in a specific domain.
- **Revenue Sharing System** - provides a common scheme and protocols for the calculation and distribution of revenues according to the agreed business models. It also offers the functionality to RSS and Store administrators for consult reports regarding the CDRs received and the functionality to manage expenditure limits for final customers.
- **Composition** - to allow or to perform light semantic composition, furthermore composition of existing services to value added composite services and applications, which can be monetized in the Business Framework.
- **Mediator** - enables the interoperability between future internet services and applications and also allow to interface to existing enterprise systems.

This set of self-contained enablers represents only an initial starting point for a future business framework. It is expected that supplemental enablers (e.g. for contracting, quotation ...) will be developed outside the FI-WARE projects.

The Business Framework has been designed to inter operate with each other relying on Linked USDL as common uniform description format for services, which does not only focus on technical aspects of service but also covers business aspects as well as functional and non-functional service attributes. Linked USDL itself is not a Generic Enabler, since it is a data format and vocabulary specification. Nevertheless, it will be introduced as an Open Specification, which is used by different enablers in their provided and consumed APIs.

The Applications and Services Generic Enablers are named according to their main functionality. While the role names, introduced in the FI-WARE Vision (Aggregator, Gateway ...), are used to describe the stakeholders of the service ecosystem in an abstract way, the enablers names now are referring to concrete software components.

The following diagram gives an example of how the Generic Enablers can be combined to form a concrete architecture for a Service Business Framework.



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

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

[Architecture of Applications and Services Ecosystem and Delivery Framework](#)

[Materializing Applications/Services Ecosystem and Delivery Framework in FI-WARE](#)

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.3.2.3 FI-WARE SW Release front page

[D.3.2.3 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
v1	First version	2014-06-25	E-IIS
V2	Second version	2014-07-02	E-IIS

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2 D 3.2.3 FI-WARE SW Release report

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

GE Name	GE implementation	Partner	Repository	Release Code	Optional Notes
Application Mashup	Wirecloud	UPM	FIWARE	APPS-Wirecloud 3.4.2	
Light Semantic Composition	COMPEL	ATOS	FIWARE	APPS-LightSemanticComposition 3.3.3	
Marketplace	Marketplace SAP RI	SAP	FIWARE	APPS-Marketplace-RI 3.2.1	
Mediator	Mediator	TI	FIWARE FI-PPP Restricted	APPS-Mediator 3.2.2_patch01	
Registry	Registry – SAP RI	SAP	FIWARE	APPS-Registry-RI 3.3.2	
Repository - RI	Repository – SAP RI	SAP	FIWARE	APPS-Repository-RI 3.2.1	
Revenue Settlement and Sharing System	RSS	TID	FIWARE	APPS-RSS 3.3.3	
Store	W Store	UPM	FIWARE	APPS-WStore 3.3.0	
Business Modeler	Business Modeler	iMinds	FIWARE PPP Restricted	APPS-BusinessModeler 3.3.3	
Business Calculator	Business Calculator	iMinds	FIWARE PPP Restricted	APPS-BusinessCalculator 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)