D2.6.1

DEPLOYMENT OF WP2 ENABLERS ON FIC2LAB

May 2015

ABSTRACT

This document reports on status and plans for deployment of enablers of WP2 on FIC2Lab.

This document is a deliverable of the FI-CONTENT 2 integrated project supported by the European Commission under its FP7 research funding programme, and contributes to the FI-PPP (Future Internet Public Private Partnership) initiative.

SEVENTH FRAMEWORK PROGRAMME

FUTURE INTERNET PPP

DISCLAIMER

DELIVERABLE DETAILS

[Full project title]:	Future media Internet for large-scale CONTent experimENTation 2
[Short project title]:	FI-CONTENT 2
[Contract number]:	603662
[WP n°]:	WP2: Social Connected TV Plattform
[WP leader]:	Martin Gordon, RBB
[Deliverable n°]:	D2.6.1
[Deliverable title]:	Deployment of WP2 enablers on FIC2Lab
[Deliverable nature]:	Prototype (P) & Report (R)
[Dissemination level]:	Public (PU)
[Contractual delivery date]:	M26 - May 2015
[Actual delivery date]:	31.08.2015
[Editor]:	Robert SEELIGER, FhG/FOK
[Internal Reviewers]:	Martin Gordon, RBB; Jörn Berkefeld, BitTubes
[Suggested readers]:	Developers, SMEs, content producers/editors
[Keywords]:	Future Internet, Content, Media content, Use cases
[File name]:	FI-CONTENT 2_WP2-010_D2.6.1_V1.0.docx

EXECUTIVE SUMMARY

This deliverable presents the status of the WP2 enablers on FIC2Lab in conformance to the FIC2Lab operation rules and standards. It lays out both the already achieved tasks and the upcoming upgrades for each enabler.

LIST OF AUTHORS

Organisation	Author
FhG FOKUS	Robert Seeliger, Miggi Zwicklbauer
FhG IAIS	Heike Horstmann, Peter Muryshkin
IRT	Ralf Neudel, Christoph Ziegler
ULANC	Mu Mu, Yehia Elkhatib
RBB	Oliver Pidancet, Martin Gordon
VIVITnet	Pieter van der Linden[1]

[1] FIC2Lab assessment sections and conclusion section only.

TABLE OF CONTENTS

LIST OF FIGURES AND TABLES

LIST OF TABLES

ABBREVIATIONS

AR	Augmented Reality
CG	Computer Graphics
API	Application Programming Interface
SE	Specific Enabler
GE	Generic Enabler
FAQ	Frequently Answered Questions
XML3D	Three Dimensional Extensible Markup Language
POI	Point of Interest
GPU	Graphics Processing Unit
FI	Future Internet
FI-PPP	Future Internet – Public Private Partnership
GPS	Global Positioning System
DTV-S	Digital Video Broadcasting – Satellite
DTV-T	Digital Video Broadcasting – Terrestrial
EPG	Electronic programme guide

1 - OVERVIEW OF OBJECTIVES OF THE WP IN RELATION TO FIC2LAB SUPPORT

This deliverable documents the current status of the Social Connected TV Platform implementation of Specific Enablers and their relation to FIC2Lab support.

WP2 selected enablers on the basis of their deployment status, usefulness for TV developers and broadcasters, and suggestions made by the reviewers. For every enabler developed in the Social Connected TV Platform, we provide a short description of the reason/s for its inclusion in/exclusion from FIC2Lab. All partners have successfully provided the requirements for efficient integration. Some further WP2 updates and improvements will be made in the future.

The Social Connected TV Platform undertook the following effort in order to provide our enablers on FIC2Lab:

- We updated the relevant meta-structure and added missing content, including graphics/videos and documentation on how to run demons;
- We provided API description using Swagger;
- We deployed enablers on GitHub
    - Generated and supplied Readme files,
    - Used the GitHub bug tracking ;
- Whenever applicable, we provided playground integration;
- We created demo/enabler videos.

2 - ENABLERS SELECTED FOR FIC2LAB.

2.1 - List of enablers selected

Table 1 List of SEs

Name	Supplier	Type	Comment
Content Enrichment	FhG / FOKUS	SaaS	SaaS for interactive media
HbbTV Application Toolkit	FhG / FOKUS; IRT; RBB	HbbTV, HTML5 Web App Editor	Web-based authoring of SCTV applications
Audio Mining	FhG / IAIS	SaaS with RESTful-API	
Content Optimisation	FhG / IAIS	SaaS with RESTful-API	
TV Application Layer	ULANC	Open source development library	an open source library for building applications for Connected TV devices
Second Screen Framework	IRT	SaaS + JavaScript Libraries	Enables creation of apps for connected TVs that communicate with second screens.

2.2 - Discussion of non selected enablers

The WP2 decided not to port the following enablers to FIC2Lab for the following reasons:

Table 2 Non selected SEs

Name	Reason
Audio Fingerprinting	It was decided that the scope of this enabler was too specific. Initial talks with SMEs showed that interest was low - FhG / IAIS therefore concentrated on their other two SEs.
Search and Discover	This enabler is no longer part of the catalogue, following reviewers' earlier comments.

3 - STATUS OF PORT TO FIC2LAB OF SELECTED ENABLERS

3.1 - Status of port of enablers to FIC2Lab

Table 3 Status of SEs

Enabler	Status on 25/08/2015	Further actions planned	Projected date for finalization
Content Enrichment	Deployment completed	Support only	Deployment completed
HbbTV Application Toolkit	Deployment completed	Support only	Deployment completed
Audio Mining	Deployment completed	Support only	Deployment completed
Content Optimisation	Deployment completed	Support only	Deployment completed
TV Application Layer	Deployment completed	Support only	Deployment completed
Second Screen Framework	Deployment completed	Support; Additional improvements and means to ease integration	Deployment completed, enhancements in line with requests from interested third parties

Per enabler discussion of status:

3.1.1 - Enabler Content Enrichment

We selected this enabler for use on FIC2Lab because it provides a RESTful-API with the use of the Object Storage GE.

3.1.1.1 - Current status reported by Enabler supplier (FOKUS)

Table 4 Status of Content Enrichment SE

Criteria	**Status**	**Expected date for update**
Availability of Presentation	Done	
Availability of Visual/Photo	Done	
Availability of validated Docker Image OR Availability of production SaaS instance (Hosted on FIC2Lab or elsewhere).	Done	
Availability of T&C for FI-PPP and beyond	Done	
Availability of Programming guide	Done	
Availability of Installation guide	Not applicable	
Availability of API description (via swagger)	Done	
Availability of Bug tracking (infrastructure will be provided by FIC2Lab, but contact people and deputy shall be provided per enabler)	Done	
Availability of Demo instance endpoint (on FIC2Lab or elsewhere)	Demo at cenr.fokus.fraunhofer.de/play	
Availability of Test and or Demo script	The CENR SE does not support a demo script. Users should use the demo instance.	

3.1.1.2 - Assessment of status by FIC2Lab Task Force

- Content Enrichment API is licensed and available on cenr.fokus.fraunhofer.de and on Github https://github.com/fraunhoferfokus/fic2-cenr
- Documentation about installing, using and developing the Content Enrichment is available under Github https://github.com/fraunhoferfokus/fic2-cenr/blob/master/README.md#content-enrichment-se-api-specification
- There is a demo endpoint at http://cenr.fokus.fraunhofer.de/play/
- The meta structure about the CENR in the wiki successfully passes the sanity checks
- Swagger files are also located at Github https://github.com/fraunhoferfokus/fic2-cenr/tree/master/swagger

3.1.2 - Enabler HbbTV Application Toolkit

We selected this enabler because HAT is very well tested and was also used on-air in German HbbTV. The enabler is also a good example of how simple interactive HbbTV apps can be implemented.

3.1.2.1 - Current status reported by Enabler supplier (FOKUS, IRT, RBB)

Table 5 Status of HbbTV Application Toolkit SE

Criteria	**Status**	**Expected date for update**
Availability of Presentation	Done	
Availability of Visual/Photo	Done	
Availability of validated Docker Image OR Availability of production SaaS instance (Hosted on FIC2Lab or elsewhere).	Done, SaaS instance hosted at Fraunhofer FOKUS server	
Availability of T&C for FI-PPP and beyond	Done	
Availability of Programming guide	Done	
Availability of Installation guide	Not needed. HAT is a tool, deployed at a Fraunhofer server and ready to use (WYSIWYC editor)	
Availability of API description (via swagger)	Done	
Availability of Bug tracking (infrastructure will be provided by FIC2Lab, but contact people and deputy shall be provided per enabler)	Done	
Availability of Demo instance endpoint (on FIC2Lab or elsewhere)	Done	
Availability of Test and or Demo script	The HAT SE does not support a demo script. Users should use demo instance.	

3.1.2.2 - Assessment of status by FIC2Lab Task Force

- The HbbTV Application Toolkit is open source and available at .
- Documentation and licensing about HAT is available at https://github.com/fraunhoferfokus/fic2-hat.
- There is a demo endpoint at hat.fokus.fraunhofer.de.
- A short video presentation introducing the enabler is available at https://www.youtube.com/watch?v=GVIwee-p2qY.
- The meta structure about HAT in the wiki successfully passes the sanity checks.
- Bug tracking available at https://github.com/fraunhoferfokus/fic2-hat/issues

3.1.3 - Enabler Audio Mining

We selected this enabler because of the interest of SMEs in automatic speech recognition. We enhanced our offer by providing not only a German but also an English version of our SE.

3.1.3.1 - Current status reported by Enabler supplier (FhG / IAIS)

Table 6 Status of Audio Mining SE

Criteria	**Status**	**Expected date for update**
Availability of Presentation	Done	
Availability of Visual/Photo	Done	
Availability of validated Docker Image OR Availability of production SaaS instance (Hosted on FIC2Lab or elsewhere).	Done - SaaS instances for German and English are available.	
Availability of T&C for FI-PPP and beyond	Done	
Availability of Programming guide	Done	
Availability of Installation guide	Done	
Availability of API description (via swagger)	Done	
Availability of Bug tracking (infrastructure will be provided by FIC2Lab, but contact people and deputy shall be provided per enabler)	Done	
Availability of Demo instance endpoint (on FIC2Lab or elsewhere)	Done	
Availability of Test and or Demo script	Service can be directly tested.	

3.1.3.2 - Assessment of status by FIC2Lab Task Force

- Deployment of Audio Mining SE on FIC2Lab is completed (German and English versions available).
- Presentation on FIC2Lab is available.
- Documentation of usage, T&C and development is available on http://lab.mediafi.org.
- There is a demo endpoint at https://fi-content.iais.fraunhofer.de/fc/index.html .
- The meta structure about Audio Mining SE in the wiki successfully passes the sanity checks.
- Swagger files are provided.

3.1.4 - Enabler Content Optimisation

We selected this enabler because of the interest of SMEs in semantic enrichment of textual content. We enhanced our offer by providing not only a German but also an English version of our SE.

3.1.4.1 - Current status reported by Enabler supplier (FhG / IAIS)

Table 7 Status of Content Optimisation SE

Criteria	**Status**	**Expected date for update**
Availability of Presentation	Done	
Availability of Visual/Photo	Done	
Availability of validated Docker Image OR Availability of production SaaS instance (Hosted on FIC2Lab or elsewhere).	SaaS instance is available.	
Availability of T&C for FI-PPP and beyond	Done	
Availability of Programming guide	Done	
Availability of Installation guide	Done	
Availability of API description (via swagger)	Done	
Availability of Bug tracking (infrastructure will be provided by FIC2Lab, but contact people and deputy shall be provided per enabler)	Done	
Availability of Demo instance endpoint (on FIC2Lab or elsewhere)	Done	
Availability of Test and or Demo script	Service can be directly tested.	

3.1.4.2 - Assessment of status by FIC2Lab Task Force

- Deployment of Content Optimisation SE on FIC2Lab is completed (German and English version).
- Presentation on FIC2Lab is available.
- Documentation of usage, T&C and development is available on http://mediafi.org/?portfolio=content-optimisation.
- There is a demo endpoint at https://fi-content.iais.fraunhofer.de/fc/index.html.
- The meta structure about Content Optimisation SE in the wiki successfully passes the sanity checks.
- Swagger files are provided.

3.1.5 - Enabler TV Application Layer

The Television Application Layer (TAL) provides an open source library that creates an abstraction layer to enable vendor-agnostic development of HTML-based TV applications. TAL enables third-party developers to easily develop and deploy a TV application on a myriad of platforms such as smart TVs and gaming consoles.

3.1.5.1 - Current status reported by Enabler supplier (ULANC)

Table 8 Status of TV Application Layer SE

Criteria	**Status**	**Expected date for update**
Availability of Presentation	Done	
Availability of Visual/Photo	Done	
Availability of validated Docker Image OR Availability of production SaaS instance (Hosted on FIC2Lab or elsewhere).	Done	
Availability of T&C for FI-PPP and beyond	Done	
Availability of Programming guide	Done	
Availability of Installation guide	Done	
Availability of API description (via swagger)	Done (JSDoc)	
Availability of Bug tracking (infrastructure will be provided by FIC2Lab, but contact people and deputy shall be provided per enabler)	Done	
Availability of Demo instance endpoint (on FIC2Lab or elsewhere)	Done	
Availability of Test and or Demo script	Test can be initiated via provided Docker image.	

3.1.5.2 - Assessment of status by FIC2Lab Task Force

- Documentation of usage, T&C and development is available on http://mediafi.org/?portfolio=tv-application-layer .
- Git repository is available at "https://github.com/ULANCFIC/tal" and Docker image is available on docker at ulancfic/tal.
- The meta structure about TV Application Layer SE in the wiki successfully passes the sanity checks.
- The enabler will be listed on FIC2Lab after completing qualification of the demonstration link provided by ULANC.

3.1.6 - Enabler Second Screen Framework

Technical and market viability of this enabler has been demonstrated with publicly available applications such as the ARD-EPG and ARD Mediathek. This created substantial interest by others. We are aware of a number of submissions to the Accelerator calls in relation to the Second Screen Framework Enabler.

3.1.6.1 - Current status reported by Enabler supplier (IRT)

Table 9 Status of Second Screen Framework SE

Criteria	Status	Expected date for update
Availability of Presentation	Done	
Availability of Visual/Photo	Done	
Availability of validated Docker Image OR Availability of production SaaS instance (Hosted on FIC2Lab or elsewhere).	Done	
Availability of T&C for FI-PPP and beyond	Done	
Availability of Programming guide	Done	
Availability of Installation guide	Done	
Availability of API description (via swagger)	Not applicable	
Availability of Bug tracking (infrastructure will be provided by FIC2Lab, but contact people and deputy shall be provided per enabler)	Done	
Availability of Demo instance endpoint (on FIC2Lab or elsewhere)	Done	
Availability of Test and or Demo script	Done	

3.1.6.2 - Assessment of status by FIC2Lab Task Force

- Presentation on FIC2Lab is available.
- Documentation of usage, T&C, development guidelines and programmer's guide are available.
- There is a demo endpoint and a playground example available.
- The meta structure about Second Screen Framework SE in the wiki successfully passes the sanity checks.

4 - SUMMARY AND CONCLUSION

The Social Connected TV Platform has submitted 6 enablers for FIC2Lab.
FIC2Lab TF: At the date of submission 5 enablers are listed on the discover page, and one is being qualified in relation to the provided Demo link.

Each partner is committed to supporting Phase 3 activities and to improving their integration with a clear roadmap. SMEs and third parties can now easily and seamlessly access the technologies, deploy them, tweak some of them and contact the responsible partners.