

CoherentPaaS

Coherent and Rich PaaS with a Common Programming Model

ICT FP7-611068

Use Cases Implementation (final version)

D9.4 (Prototype)

March 2016





Document Information

Scheduled delivery 30.03.2016 Actual delivery 26.03.2016

Version 3.0

Responsible Partner Neurocom

Dissemination Level:

RE Restricted

Nature:

Prototype

Revision History

Date	Editor	Status	Version	Changes
15.06.2015	V. Spitadakis	Draft	0.1	Draft Table of Contents
31.7.2015	R. Pau	Draft	0.2	Sparsity contribution
31.7.2015	P. Valduriez	Draft	0.3	INRIA contribution
27.8.2015	V. Spitadakis	Draft	0.4	NEUROCOM Contribution –
				Section 2
5.9.2015	V. Spitadakis, G. Kotsis	Draft	0.5	NEUROCOM Contribution –
				Section 3
5.9.2015	L. Cortesão	Draft	0.6	PT contribution
15.9.2015	V.Spitadakis, D.Bouras	Draft	1.0	Review by NEUROCOM
17.9.2015	R.Jimenez	Draft	1.1	1 st peer review by FORTH
21.9.2015	A.Chambille, F.Savary	Draft	1.2	2nd peer Review by QuartetFS
24.9.2015	V.Spitadakis	Final	2.0	Final document for the initial
		(initial		version of the deliverable
		version)		
10.3.2016	R. Pau	Draft	2.1	Updated by Sparsity
10.3.2016	P. Valduriez	Draft	2.2	Updated by INRIA
11.3.2016	L. Cortesão	Draft	2.3	Updated by PTIN
17.3.2016	V.Spitadakis	Draft	2.4	Updated by NEUROCOM
18.3.2016	V.SPitadakis	Draft	2.5	Internal review
22.3.2016	R. Jimenez	Final	3.0	Peer review

Contributors

NEUROCOM, SPARSITY, PTIN, INRIA

Luis Cortesão, Vassilis Spitadakis, George Kotsis, Raquel Pau, Patrick Valduriez

Internal Reviewers

LeanXcale, PTIN Ricardo Jimenez, Luis Cortesão

Acknowledgements

Research partially funded by EC 7th Framework Programme FP7/2007-2013 under grant agreement n° 611068.

More information

Additional information and public deliverables of CoherentPaaS can be found at: http://coherentpaas.eu

1 Executive Summary

This deliverable is a prototype, comprising of five software implementations for the corresponding five use cases which utilize CoherentPaaS in order to implement a desired functionality over a multi datastore environment, and prepare the necessary interfaces for the forthcoming validation that will take place at the ending phase of the project..

The prototype includes:

- a. The CDR analytics use case which involves 8 queries that require 4 different data stores: Monetdb, Activepivot, LeanXcale, SparkSee. A user interface is facilitating user's interaction, synthesis and execution of queries, and visualization of results
- b. The Vehicle telematics use case which involves CEP and 4 queries. Here, real-time (low latency) and high throughput are the main challenges over a high volume and rate of events. Again, a user interface is visualizing a dashboard to view results and alarming situations. Monetdb and LeanXcale are utilized.
- c. The media planning use cases which involve CEP and 2 queries, as well as 4 data stores: LeanXcale, MongoDB, Sparksee and key-value store (Eutropia)
- d. The network monitoring platform adapted over CoherentPaaS to CEP, LeanXcale and Monetdb; various types of queries including drill-to-detail, aggregates and collection queries are implemented.
- e. The media planning use cases which involves 2 queries that require 4 data stores: LeanXcale, MongoDB, Sparksee and key-value store (Eutropia)

All CoherentPaaS components have been in use in order to realise the implementation.