



CoherentPaaS

Coherent and Rich PaaS with a
Common Programming Model

ICT FP7-611068

Integration of CEP operators with key-value cloud data store D7.3

September 2015

Document Information

| | |
|---------------------|------------|
| Scheduled delivery | 30.09.2015 |
| Actual delivery | 07.09.2015 |
| Version | 1.0 |
| Responsible Partner | FORTH |

Dissemination Level:

RE Restricted to a group specified by the consortium (including the Commission)

Revision History

| Date | Editor | Status | Version | Changes |
|------------|------------------|--------|---------|----------------------------|
| 01.07.2015 | Valerio Vianello | Draft | 0.1 | Table of contents |
| 12.07.2015 | Valerio Vianello | Draft | 0.2 | First internal draft |
| 23.07.2015 | Marta Patiño | Draft | 0.3 | Internal draft |
| 27.07.2015 | Valerio Vianello | Draft | 0.4 | Internal draft |
| 30.07.2015 | Valerio Vianello | Draft | 0.5 | Internal draft |
| 31.07.2015 | Marta Patiño | Draft | 0.6 | Internal draft |
| 04.08.2015 | Valerio Vianello | Draft | 0.7 | Version for peer review |
| 25.08.2015 | Ricardo Jiménez | Draft | 0.8 | Address reviewers comments |
| 28.08.2015 | Angelos Bilas | Draft | 0.85 | Comments and additions |
| 01.09.2015 | Valerio Vianello | Draft | 0.9 | Address reviewers comments |
| 02.09.2015 | Marta Patiño | Final | 1.0 | Address reviewers comments |

Contributors

Valerio Vianello, Marta Patiño (UPM)
Ricardo Jiménez (UPM-LeanXcale)

Internal Reviewers

Boyan Kolev (INRIA)
Dimitris Bouras (NEUROCOM)
Angelos Bilas (FORTH)

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 presents the interaction between the CoherentPaaS Complex Event Processing (CEP) and stored data. Originally, we targeted to integrate with the key-value data store due to efficiency reasons. Currently, it is clear that LeanXcale database is able to scale as much as needed. For this reason, we have decided to do the integration at a higher abstraction level, SQL. This has the advantage that now the correlation between events and stored data can be fully written in a declarative manner. In parallel, the project has widened the original goal of integration between CEP and stored data and now it is able to correlate streaming with any data store or combination of data stores. For this, we will leverage the ClouMdsQL query language and integrate it with the CEP together with the common query engine.