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### D9.8.3 Collaboration Plan

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## Revision history

Version	Date	Modified by	Comments
0.1	06/11/2015	Tomás Pariente, Ana Luiza Pontual (ATOS)	ToC, initial set of responsibilities and content
0.2	10/01/2016	Ricardo Jiménez (LeanXcale)	Major contributions
0.3	12/01/2016	Marc Simó (CA)	Commercial prospects
0.4.	12/01/2016	Tomás Pariente (ATOS)	Final draft for review
0.4	15/01/2016	Luigi Romano (SyncLab)	Internal review comments
1.0	22/01/2016	Tomás Pariente (ATOS)	Final deliverable

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## Executive Summary

This document presents the updated version of the collaboration plan and its respective progress report, which outlines the plan's implementation achievements.

The goal of the present deliverable is therefore to update the previous identification of initiatives and collaboration work of deliverable D9.8.2 and report the outcomes.

The collaboration plan and report results will be updated yearly always based on the initial plan. These yearly updates will modify the strategy if needed and include the progress report, encompassing the outcomes and achievements from the plan's implementation.

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## Abbreviations and acronyms

DoW	Description of Work
WP	Workpackage
tbd	To be defined
SOA	Service Oriented Architecture
PPP	Public Private Partnership
SN	Social Network

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## 1. Introduction

### 1.1. Purpose of the document

This document is the 2<sup>nd</sup> year Collaboration Plan and Report of the LeanBigData project. It contains the update of the plan defined on previous deliverable D9.8.2 Collaboration Plan, and will allow to update the project activities, stakeholders and concertation events to further strengthen the support to LeanBigData in order to maximise its results.

Also, this document contains the report of the reached activities, mentioned on previous deliverable.

This document is the third of a series of collaboration reports, related to M24. This is the last document regarding the setting and planning of collaboration activities that will take place during the project time. There will be one more report, due in M36, in which the main goal will be to report the collaborations achieved during the project time, and point out possible future actions, that will take place after project time.

### 1.2. Intended audience

As a public document the target readers are the project partners, general public, especially participants in sister initiatives and related research, and the EC Officers.

### 1.3. Structure of the document

This document contains the third report version of the Collaboration Plan and is structured as follows:

- Section 1 introduces the objectives and scope of the document.
- Section 2 provides an overview of the collaboration plan and the different projects, initiatives and stakeholders to be taking into account.
- Section 3 lists the potential projects, initiatives and events identified up to now, as well as the procedures to identify new ones in the future.
- Section 4 reports the activities undertaken so far.
- Section 5 concludes the document with a summary of the objectives in terms of collaboration and future work and deliverables.

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## 2. Collaboration Plan outline

### 2.1. Collaboration strategy

LeanBigData is keen to participate in a bigger picture to enhance the overall value and coherence of our RTD work, and the relevance to European and worldwide developments. In this respect, this document presents the strategy of LeanBigData towards achieving an effective collaboration with other EU projects and with other relevant activities.

The EC have already funded in FP7, and will set in motion in the scope of H2020 new Support Actions addressing e.g. best practices and standards work, technology transfer and cross-disciplinary training, research roadmaps and technology foresight, in areas especially relevant for the Objective. LeanBigData partners will undertake – when invited – to contribute to and participate in focused concertation actions, themed seminars, initiatives of interest (e.g. the PPP on Big Data) or special interest groups (e.g. the European Data Forum).

In order to achieve a good collaboration strategy, this document aims to set a few guidelines and the thoughts of the project partners on the specific projects and initiatives we already want to engage with, and the way to identify and communicate with other possible future projects and initiatives.

### 2.2. Collaboration with other projects

In order to carry out effectively the research and development to be done in LeanBigData, our project will need to reinforce its links with other existing and new European funded projects. The collaborations established with the CumuloNimbo, CoherentPaaS and Big projects within the first 6 months of work in LeanBigData are an important milestone that the project needs to further explore and integrate with other existing and new research activities. In this regard, a strategy for liaising with them has been drafted in order to start looking for synergies.

LeanBigData will keep its main focus on engage projects that are actually running from FP7 and identify in future months new projects from H2020 that are potentially important for LeanBigData.

Once identified, the strategy to contact new projects is based in the steps defined on the initial Collaboration Plan:

- Step 1: List projects, including their profile and a contact person from that project and assign a contact person from LeanBigData.
- Step 2: Initiate the contact in case a LeanBigData partner is involved or knows partners of the other project, and/or prepare an introductory email describing briefly what we want to do.
- Step 3: Prepare a detailed email describing what LeanBigData will offer to them, what we are asking from them
- Step 4: If needed, prepare an agreement to share information and best practices
- Step 5: Organisation of activities and tracking of the communication (to be reported in future versions of this document)

This strategy, segmented in actions, will be executed by the following partners:

Step of the strategy	Action	Partner	Deadline
Step 1	Provide updated list of projects to be contacted. Ask if they have it with contact addresses of ALL the 126 projects of the EC list.	ALL – Coordinated by ATOS	M12 (Update in new releases)
Step 1	Review the list and contact partners of LeanBigData consortium that are participating in other target projects	ALL PARTNERS	M12
Step 2	Ask to the PO for a list of Project Managers with contact emails.	UPM (as coordinator)	M14
Step 2	Get more emails by looking the contact addresses in the project websites.	ATOS	M14-M16
Step 2	Provide a mailing list facility, introduce the email addresses and launch the message.	UPM	M14-M16
Step 2	Take advantage of existing contacts between project partners to ease the process of contact.  Prepare a very short email easy to read (2 paragraphs) for the very first contact. (what LeanBigData is, who we are, LeanBigData and its role in your exploitation and dissemination, Best practices...)	ATOS, UPM, ICCS (as responsible of dissemination)	M14-M16
Step 2	Act as a contact point for the first reply to projects.	ATOS, UPM	Started in M8
Step 2	Excel file to track contacts updated and success rate.	ATOS	Started in M8
Step 2	Track what is introducing on the website each project contacted, (Report to the same excel file than previous action)	ATOS, UPM	Started in M8
Step 3	Prepare a longer email for a second contact (only projects that have not replied the first time)	ATOS, UPM, ICCS (as responsible of dissemination)	Done in M6 – update in Y2
Step 4	If needed, prepare agreements with projects – (non-disclosure agreements or similar)	UPM	M13 – M15
Step 5	Register and track activities in a working document	All, ATOS coordinate	Start on M9 to the end of the project
Step 5	Review the track list and prepare synergy activities, contact projects to organize activities and detect needs for future activities	All	Start on M9 to the end of the project

*Table 2.1: Collaboration strategy*

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### **2.3. Collaboration with existing and future initiatives**

LeanBigData will seek actively the collaboration or engagement with related initiatives besides EU funded projects in the scope of FP7 or H2020. Project partners will identify potential initiatives and programmes of interest and with relation with LeanBigData tools and best practices, not limited to public funding but to private funding as well. In this sense, this task will be further elaborated under the exploitation plans.

At this stage, the new PPP on Big Data that the EC is launching is of outmost interest for LeanBigData.

### **2.4. Presence in collaboration events**

LeanBigData partners will contribute to and participate in focused concertation actions, seminars, or special interest groups in order to enhance and enlarge the value of our RTD. In this regards the project will send representatives to concertation events when required by the EC and identify potential events of interest. The European Data Forum is a clear example where LeanBigData should be represented.

### 3. Identification of related projects

#### 3.1. Existing projects

Table 3.1 presents the updated list of candidate projects for collaboration with LeanBigData.

Project	Description and URL	Why is important	Project Contact	LeanBigData Contact	Notes
PHEME	<a href="http://www.pHEME.eu/">http://www.pHEME.eu/</a> Detection of rumors in Social Networks	Social Networks (SN) case study shares some technology	ATOS - Tomás Pariente	Tomás Pariente	
BIG	<a href="http://www.big-project.eu/">http://www.big-project.eu/</a>	Looking at the technology and sector roadmap for Big Data uptake in Europe	ATOS – Tomás Pariente	Tomás Pariente	Contacted. We are following the reports to search for the applicability for LeanBigData
Cumulo Nimbo	<a href="http://cumulonimbo.eu">http://cumulonimbo.eu</a>	LeanBigData leverages the core results of CumuloNimbo on ultra-scalable transactional processing	UPM – Marta Patiño	Ricardo Jimenez	
CoherentPaaS	<a href="http://coherentpaas.eu">http://coherentpaas.eu</a>	CoherentPaaS extends the transactional processing to NoSQL technologies what can be combined with the outcome of LeanBigData dealing with the extension of analytical capabilities	UPM – Marta Patiño	Ricardo Jimenez	
Cloud4BigData		Regional research programme that co-funds the research of UPM-LSD in the area of BigData and Cloud	UPM – Marta Patiño	Ricardo Jimenez	
BigDataPaaS		National research project that extends LeanBigData results for its use in cloud environments	Marta Patiño UPM	Ricardo Jimenez	

Table 3.1: Table of candidate existing projects for collaboration

This table will serve as a basis for future contacts. The table will be extended with extra columns to report on the dates and the results of the contacts.

### 3.2. Future projects

Horizon 2020 is the biggest EU Research and Innovation programme ever with nearly €80 billion of funding available over 7 years (2014 to 2020), aimed at securing Europe's global competitiveness.

By coupling research and innovation, Horizon 2020 is helping to achieve this with its emphasis on excellent science, industrial leadership and tackling societal challenges. The goal is to ensure Europe produces world-class science, removes barriers to innovation and makes it easier for the public and private sectors to work together in delivering innovation.

Within H2020, especial attention will be paid to projects funded under the objectives 15 (Big data and Open Data Innovation and take-up, closed in 2014) and 16 (Big data – research, closed in April 2015) of the work programme. Those objectives are funded by the Data Value Chain Unit of DG-Connect, the same unit behind LeanBigData. We will actively monitor - in collaboration with the EC Officers - the projects funded under these objectives and check which ones are more suitable to engage with. We will report on the findings and candidate projects in the yearly reports and follow the same approach to engage them as explained in the previous section.

### 3.3. Identification of existing initiatives

This section tries to identify existing initiatives where LeanBigData could potentially collaborate or follow closely.

Of especial interest is also the Big Data PPP launched by the EC. The PPP starts in 2015 and will run until 2020. The first projects are expected in 2016. LeanBigData partners will follow closely the development of the PPP and engage in the PPP activities (some of the partners such as UPM and ATOS are relevant stakeholders in the PPP launch).

Table 3.2 presents the updated list of initiatives that LeanBigData should follow or collaborate.

Initiative	Description	Why is important	Initiative main Contact	LeanBigData Contact	Notes
PPP on Big Data	PPP on Big Data technologies. Call launched due in April 2016	Potential usage of LeanBigData technology in the scope of the PPP	Nuria de Lama (ATOS)	Tomás Pariente (ATOS)	Potential funding opportunity for LeanBigData partners
BigDataValue	<a href="http://www.bigdatavalue.eu/">http://www.bigdatavalue.eu/</a>	Input to the future PPP	Nuria de Lama (ATOS)	Tomás Pariente (ATOS)	
EIT ICT Labs Future Cloud	Action line from EIT ICT Labs that includes Big Data as one of the main innovation lines	Bridging the RTD results with the market			

Table 3.2: Table of candidate existing initiatives for collaboration

### 3.4. Identification of collaboration events

This section lists the existing events where LeanBigData could maximise the engagement with stakeholders, such as concertation meetings fostered by the EC or major events on the topics related to LeanBigData research.

Table 3.3 presents the updated list of events that LeanBigData should follow or collaborate.

Event	Description	Why is important	When and Where	LeanBigData Contact	Notes
European Data Forum	<a href="http://2015.data-forum.eu/">http://2015.data-forum.eu/</a> Main event from the Data Value Chain unit on Big Data	Essential to ensure the awareness on LeanBigData technologies and to meet other stakeholders	November 16-17, 2015 / Luxembourg	Ricardo Jimenez (LeanXcale)	LeanBigData had a booth and presentations during the event
ICT Conference	Event organized by the EU every 2-3 years	Exhibit the results from LeanBigData to stakeholders	October 20-22, 2015 / Lisbon	Marta Patiño (UPM)	LeanBigData was present in sessions / stand
Data Value Chain InfoDays	InfoDays organized by the EC for H2020 calls	Contact with other stakeholders. Spreading the word and new funding opportunities	Jan. 2016	Several partners	
Strata Hadoop conferences	<a href="http://strataconf.com">strataconf.com</a> Conferences around Hadoop ecosystem organized by o'really and cloudera	Contact stakeholders of Hadoop and potential users	19-21 Nov 2014, Barcelona 17-20 Feb. 2015 San Jose CA 28-29 Mar. , 2016 San Jose CA	Ricardo Jimenez (LeanXcale)	
Hadoop Summit	<a href="http://hadoopsummit.org/">hadoopsummit.org/</a>	Create awareness about project results among Hadoop Community. Contact stakeholders of Hadoop and potential users	15-16 April, 2015 Brussels 13-14 April, 2016 Dublin 28-30 June 2016 San Jose CA	Ricardo Jimenez (LeanXcale)	
Big Data Spain	<a href="http://www.bigdataspain.org">www.bigdataspain.org</a>	Create awareness about project results among Spanish companies interested in Big Data	17-18 Nov 2014, Madrid 2016 – To be announced	Ricardo Jimenez (LeanXcale)	

<p>Cloud Expo conferences (track big data/analytics)</p>	<p><a href="http://www.cloudcomputingexpo.com">www.cloudcomputingexpo.com</a></p>	<p>Create awareness about project results among cloud big data community</p>	<p>11-12 March 2015 Cloud Expo Europe, London 9-11 June 2015 Cloud Expo NY, New York, NY 3-5 Nov 2015 Cloud Expo Sta Clara, CA 7-9 June 2016, New York</p>	<p>Ricardo Jimenez (LeanXcale)</p>	
<p>NoSQL matters conferences</p>	<p><a href="https://www.nosql-matters.org">https://www.nosql-matters.org</a></p>	<p>Create awareness about project results among NoSQL community</p>	<p>27 March 2015 Paris June 2015 Dublin 19 Sep 2015 Berlin 18-19 Nov 2015 Berlin 20-21 Nov Barcelona 15 Sep 2016 Berlin</p>	<p>Ricardo Jimenez (LeanXcale)</p>	

Table 3.3: Table of events

## 4. Collaboration Progress Report

### 4.1. Collaboration Activities accomplished

This section aims to report the collaboration activities carried out until now, related to projects, initiatives and events listed in the previous sections and also new ones.

#### 4.1.1 Collaboration with other projects

Table 4.1 presents the list of projects contacted for collaboration with LeanBigData.

Project	Description and URL	Date of contact	of Project Contact	LeanBigData Contact	Results
BIG	<a href="http://big-project.eu/">http://big-project.eu/</a> Big Data Public-Private forum	EDF 2014	ATOS	Tomás Pariente	Contacted. Big ended, but we are following the reports to search for the applicability for LeanBigData
PHEME	<a href="http://www.pHEME.eu/">http://www.pHEME.eu/</a> Detection of rumors in Social Networks	Several contacts	ATOS	Tomás Pariente	The data PHEME acquisition framework and the LeanBigData SN case study share partially the software.
CoherentPaaS	<a href="http://coherentpaas.eu">http://coherentpaas.eu</a>	Several contacts	UPM – Marta Patiño	Ricardo Jimenez	Full integration of core components is being performed between both projects
Cumulo Nimbo	<a href="http://cumulonimbo.eu">http://cumulonimbo.eu</a>	LeanBigData leverages the core results of CumuloNimbo on ultra-scalable transactional processing	UPM – Marta Patiño	Ricardo Jimenez	LeanBigData has taken the core results from CumuloNimbo and improving their efficiency in scaling, making them “lean”
Cloud4BigData		Regional research programme that co-funds the research of UPM-LSD in the area of BigData and Cloud	UPM – Marta Patiño	Ricardo Jimenez	Cloud4BigData research program includes LeanBigData as associated project.

BigDataPaaS		National research project that extends LeanBigData results for its use in cloud environments	Marta Patiño UPM	Ricardo Jimenez	BigDataPaaS
Capture	Social Network monitoring tool, e.g. Twitter.	May 2015	ATOS	Tomás Pariente	Possible BenchMark for the project results.
Vineyard	Hardware acceleration technologies	March. 2015	Ricardo Jimenez - LeanXcale	Marta Patiño	Integration of hardware acceleration techniques into LeanBigData

Table 4.1: Table of projects contacted for collaboration

### 4.1.2 Collaboration with events

Table 4.2 presents the list of events where LeanBigData collaborated or followed.

Initiative	Description	Why important	When and Where	LeanBig Data Contact	Results
European Data Forum	<a href="http://2015.data-forum.eu/">http://2015.data-forum.eu/</a> Main event from the Data Value Chain unit on Big Data	Essential to ensure the awareness on LeanBigData technologies and to meet other stakeholders	16-17 <sup>th</sup> Nov. 2015 Luxembourg	Marta Patiño (UPM) Several partners present	LeanBigData had a stand at EDF and disseminate the projects results among attendants
ICT Conference	Event organized by the EU every 2-3 years	Exhibit the results from LeanBigData to stakeholders Participate in the sessions	20-22 Oct. 2015 Lisbon	Ricardo Jimenez (LeanXcale)	Ricardo Jimenez participated in the session Innovation Ecosystems for European Big Data Economy as speaker presenting LeanXcale as an example of European startup in the Big Data field.  LeanBigData submitted a stand proposal for the exhibition at ICT Conference 2015 and was not accepted. However, CoherentPaaS got accepted its stand proposal and also showed LeanBigData results at the CoherentPaaS stand as a collaboration between the two projects

BDVA Summit <a href="http://www.bdva.eu/?q=summit">http://www.bdva.eu/?q=summit</a>	Event organized periodically by the BDV Association	Participate in the summit	17-19 June 2015, UPM.	Marta Patiño UPM	UPM and Atos participated actively in the summit
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Table 4.2: Events where LeanBigData collaborated or followed

## 4.2. Commercial collaboration between partners

Table 4.3 presents the list of commercial collaboration between partners.

Partnes	Description	Contacts	Results
LeanXcale, UPM and Atos	ATOS providing sales support to LeanXcale	Tomás Pariente (ATOS) and Ricardo Jiménez (LeanXcale)	Agreements signed between LeanXcale and ATOS. First business opportunities explored in the financial domain.
LeannXcale and Atos	ATOS and LeanXcale to provide a version of Capture (ATOS Social Network monitoring solution) with LeanXcale at the back-end	Tomás Pariente (ATOS) and Ricardo Jiménez (LeanXcale)	Initial discussions to provide a joint solution in the cloud of Capture using LeanXcale. To be shown to potential customers.
INESC and LeanXcale	Part of the team at INESC is moving to LeanXcale	Ricardo Jimenez (LeanXcale)	Contribution to LeanXcale
UPM and LeanXcale	Part of the team at UPM is moving to LeanXcale. UPM signed a technology transfer contract with LeanXcale providing exclusive rights to exploit the patents on scalable transactional processing and on scalable stream processing. Dr. Ricardo Jimenez quit his position in the university to become CEO of LeanXcale.	Ricardo Jimenez (LeanXcale)	Contribution to LeanXcale
CA & FORTH	CA has datacentre monitoring tools that could benefit from the novel visualization developed during this project.	Victor Muntés (CA) and George Margetis (FORTH)	Started conversations with interested CA business units to fund an agreement with FORTH for further visualization technology development.

Table 4.3: Table of commercial collaboration between partners.

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## 5. Conclusion

This document presents the collaboration plan and report of LeanBigData second year. It aims to update the previous Collaboration Plan and Report, reporting the collaborations done during this second year of the project, detailing if these collaborations are related with projects, initiatives or events. Also, on this deliverable are reported the commercial collaborations conducted between partners.

The strategy thought for the collaborations on the third year remains the same as the first and second ones, following the same line to detect current and future projects related with LeanBigData in order to identify potential synergies. Therefore the strategy to contact identified projects, and the well defined steps to promote effective collaborations are the same as defined on D9.8.1 Collaboration Plan and D9.8.2 Collaboration Plan and Report.

As stated on previous documents, collaboration is an ongoing task across the project, and the collaboration deliverables may be updated including more related information as needed.