



Participants

1st Name Last Name (Organization)	Initials
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• Benoit Pelletier (Bull)	BP
• Bruno Bompar (Ingres)	BB
• Cedric Carbone (Talend)	CC
• Charles Souillard (BonitaSoft)	CS
• Christophe Gravier (Telecom St Etienne)	CG
• Davide Zerbetto (Engineering)	DZ
• Denis Caromel (Inria)	DC
• Fabienne Boyer (Inria)	FB
• François Exertier (Bull)	FE
• Frédéric Dang Tran (Orange Labs)	FDT
• Gabriele Ruffati (Engineering)	GR
• Hailong Sun (Buaa)	HS
• Jean-Claude Bourhis (Bull)	JCB
• Jean-Marc Morel (Bull)	JMM
• Jean-Pierre Dion (Bull)	JPD
• Jean-Pierre Laisné (Bull)	JPL
• Jean-Pierre Lorre (Petalslink)	JPLo
• Junfeng Zhao (PKU)	JZ
• Lionel Seinturier (Inria)	LS
• Mathieu Schnoor (Inria)	MS
• Minghui Zhou (Pku)	MZ
• Patrick Moreau (Inria)	PM
• Stephano Scamuzzo (Engineering)	SS
• Thomas Debru (UshareSoft)	TD
• Wei Wang (Iscas)	WW
• Yuri Glickman (Fraunhofer Fokus)	YG
• Ziyou Wang (Pku)	ZW



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Reminder: OSCi mailing list

- cloud-initiative@ow2.org
- To subscribe: email to sympa@ow2.org with the following subject: SUBscribe cloud-initiative <name>
- To consult archives, login to <http://mail.ow2.org/www> (a password will be delivered when asked to Sympa) and go to cloud-initiative

Introduction policy on mailing list:

1. Subscribe to the mailing list
2. Introduce your activities in cloud computing, eventually your road map and introduce your contribution to OSCi

Note

OSCI mailing list is open to any subscriber
All emails regarding OSCi are circulating via this list.



Agenda:

Introduction **10:00**

- OSCi Vision by Jean-Pierre Laisné (Bull) JPL
- State of the Art by Lionel Seinturier (Inria) LS

Domain Presentation and discussion: 1st part **11:00**

- 1) Self-sizing and green PaaS by Benoit Pelletier (Bull) BP and Denis Caromel (Inria) DC
- 2) Distributed interoperability architecture by Jean-Pierre Lorré (PetalsLink) JPLo

Lunch Break **12:00**

Domain Presentation and discussion: 1st part **14:00**

- 3) BI 4 Cloud by Cédric Carbone (Talend) CC
- 4) Massively distributed clouds by Jean-Pierre Laisné (Bull) JPL

Open Discussion **15:00**

- Competitiveness Analysis by Patrick Moreau (Inria) PM
- Synergies (All)
- Funded project
 - Jean-Pierre Laisné (Bull) JPL
 - Christophe Gravier (Institut Telecom) CG
- Miscellaneous

Conclusion **16:30**

Wrap Up / Next Steps (ALL)



Report

29 OSCi participants at INRIA Paris in Green room for 1st OSCi workshop

1) Introduction

JPL introduces the agenda and time frame.

The goal is to have a complete idea of the content of OSCi R&D Agenda and to converge how to achieve it.

This OSCi R&D Agenda has to be considered as a tool for marketing and lobbying: it must show what OSCi is and where OSCi aims to go.

2) OSCi vision

In this presentation, JPL introduces the context of cloud computing, the fundamental definitions and drivers for OSCi. Finally he introduces the different typologies of cloud computing which are covered by the 4 existing OSCi domains

OSCi vision slides can be found on

<http://www.ow2.org/xwiki/bin/download/Cloud/WebHome/OSCiWorkshop2010Vision.pdf>

3) State of the art

In his presentation, LS opens the debate about the content of such a document: what kind of SotA? Is OSCi a standards organization? Should it be treated per domain?

LS proposes also a glossary and a matrix for comparison including 3rd party projects.

OSCi partners agree that this SotA should be an OW2 oriented SotA (centered on OW2 and OW2's projects) and that each domain will provide with 1 contact to LS in order to establish a SotA per domain.

OSCi State of the art' slides can be found on

<http://www.ow2.org/xwiki/bin/download/Cloud/WebHome/OSCIWorkshop2010stateofheartLS.pdf>

4) Domain 1: Self-sizing and green PaaS

In their presentation, BP and DC introduce the principal objectives and the general architecture of domain 1.

They introduce the work in progress concerning interactions with other projects, e.g. OpenStack and the work in progress on "cluster scaler".



They open the floor to WW to expose potential synergies with ISCAS in a 3 steps process.

In the following Q&A session, the idea of a “**general API for elasticity**” (Java and Rest) emerges from the audience. CG suggests that this API should be “context oriented” i.e. to take into account not only workloads but also geographic localization, etc. This could be an interesting topics for a proposal to a collaborative project funded by FUI, ANR, FP7 or you name it.

OSCi Domain 1 slides can be found on

<http://www.ow2.org/xwiki/bin/download/Cloud/WebHome/OSCIWorkshop2010Domain1.pdf>

5) Domain 2: Massively distributed services

In his presentation of Massively distributed services, JPLo exposes cloud services and the challenges to be addressed such as elasticity, interoperability, governance and security. JPLo introduces a new graphical representation of Domain 2's architecture including all components. Finally JPLo presents Domain 2's roadmap and potential collaborative projects to achieve it.

During Q&A session, JPLo insists also on the importance of identity management in such an environment. All participants agree this is a common issue and could be a transverse project to all OSCi domains.

While new titles are proposed such as “distributed and federated SOA for cloud” or “federated cloud services”, JPLo decides to keep the original one.

OSCi Domain 2' slides can be found on

<http://www.ow2.org/xwiki/bin/download/Cloud/WebHome/OSCIWorkshop2010Domain2.pdf>

6) Domain 3: BI4Cloud

In his presentation of BI4Cloud, CC insists on the 1st goal of this BI4Cloud stack: it has to be something easy to install and to run.

CC insists on the convenience of UShareSoft's tools in this perspective and announces for December 2010 the availability of all images in 1 appliance.

During Q&A session, it appears that features such as multi-tenancy and capacity management may be topics for the next roadmap of Domain 3 i.e. once the 1st goal is reached.

OSCi Domain 3'slides can be found on

<http://www.ow2.org/xwiki/bin/download/Cloud/WebHome/OSCIWorkshop2010Domain3.pdf>



7) Domain 4: Massively distributed cloud

Regretting the absence of Jean-Bernard Stefani (INRIA) to enrich or challenge this presentation, JPL introduces the basic ideas governing this new domain.

FB exposes what she was aware of JBS research in this area and confirms there was some obvious synergies. This needs to be at least better defined by JBS and JPL in a face to face meeting.

During Q&A session (and also in other previous public presentations), this domain is considered as both the most innovative but also the longest term project.

YG point to one Fraunhofer's project named eSafe (document/data splitting and storing) including security (encryption) which sounds related to Domain 4

OSCi Domain 4'slides can be found on

<http://www.ow2.org/xwiki/bin/download/Cloud/WebHome/OSCIWorkshop2010Domain4.pdf>

8) Competitiveness analysis

In his presentation which launched the open discussion, PM makes a proposal approach to perform a competitive analysis and announces he is looking to contribute.

PM's proposal is based on 3 dimensions:

1- Motivation to adopt open source solutions for the cloud i.e. identify the features and qualities that users are interested in.

2- Comparison of OSCi stacks with other cloud stacks.

This opens the following questions / answers:

Q: Does OSCi provide complete stacks for cloud operators?

A: Participants agree that the term "stack" may not be the best one.

Q: Are OSCi stacks (if any) comparable to existing work on the market?

Q: Do we really want to compare ourselves with Amazon ?

A: Participants agree that a list of the functions / qualities / features needs to be established in order to process such a comparison.

3- Brick by brick comparison

This comparison needs to be performed for each domain.

During Q&A session, it is established that OSCi competitiveness analysis shares common ground with OSCi state of the art and that both must share the same comparison criteria. Another aspect to be considered in this analysis is innovation.

OSCi Competitiveness analysis' slides can be found on

<http://www.ow2.org/xwiki/bin/download/Cloud/WebHome/OSCIWorkshop2010CompetitivenessPM.pdf>

List of volunteers to participate to Competitiveness analysis and State of the Art:

- LS (leads State of the Art)
- PM (lead Competitiveness analysis)
- JP Dion (for Domain 1)
- AL (interface for Orange)
- JP Lo (for Domain 2)
- CC (for Domain 3)
- JPL (for Domain 4)
- HS
- WW

9) Open discussion: Synergies

9.1) *How to establish efficient collaboration of ISCAS with JOnAS and CLIF?*

CLIF:

AL states Orange will supports ISCAS, and will look at integrating their fluctuation injection.

JonAS:

- 1) MZ will organize with FE a hands-on workshop about JOnAS/JO2nAS cooperation in PKU and will invite ISCAS, BUAA and CVIC to participate
- 2) WW provides technical details about what ISCAS has done
- 3) WW will discuss about the integration, with the help of MZ
- 4) BP invites WW to join the JOnAS team

9.2) *How INRIA Sardes will participate to Domain 1?*

FB states that Inria Sardes will participate on work about deployment (thanks to links with JASMINe through Jade and thanks to links with Orange Labs).

9.3) *BUAA focuses on virtual machine with a project named iVic: How to collaborate to OSCi?*

On OSCi Domain 1 and concerning virtual machine, we find Entropy at the placement level, JASMINe VMM about APIs and multi-hypervisers, ProActive similar to VMM

iVic team being not represented in this workshop, AL will improve links between Tianyu Wo

(iVic) and JM Menaud (Entropy), will re-circulate link to iVic's presentation and launch discussion with DC, JM Menaud, FDT and HS/Tianyu Wo.

9.4) BUAA has strong expertise on SOA: how can this be shared with OSCi?

HS states that BUAA's expertise is fitting more with Domain 2. HS and JPLo will discuss together about what solution can be provided by BUAA to Domain 2.

10) Open Discussion: Cooperative research projects:

10.1) OSCi co-founders' statements:

The 3 OSCi co-leaders express their interest in this topic of the discussion:

- JPL states that Bull has 3 collaborative projects in progress targeting cloud computing: 4Caast (FP7), EasyClouds (Eureka ITEA) and Compatible One (FUI10)
- AL states that Orange Labs is also part of 4Caast and have other projects in progress
- PM states that INRIA is very active on these topics

They all agree these projects are fundamental for exploring cloud computing potentials and identifying locks and challenges. And they all questioned about future projects to be set up, JPL reminding the lobbying effort these 3 co-leaders are able to put in place.

During wrap up session, some participants agree also that it will be difficult for OSCi partners to provide a time frame without a dedicated OSCi collaborative funded project. So we need to set up such an OSCi project.

10.2) Institut Telecom (St Etienne) proposal

Here CG introduces his thoughts about cooperative research which may fit with OSCi.

One idea would be to focus on domain 4 because it is less mature and requires more research effort. Plus it focuses more on end users.

Another idea is to make applications in the cloud aware of the context "on ground" for pervasive applications.

CG exposes the use case of increasing demand in a stadium for video streaming. Here we may have 2 (complementary) approaches:

- adapt the cloud capacities (adapt the infrastructure → QoS)
- adapt the application (e.g. lower bandwidth) → QoE

We need to take both QoS and Quality of Experience (end-user satisfaction) into account.

CG states that the end user is NOT in the cloud and uses the following metaphor : users

have oceans of data, and only some part of the data "evaporate" to the cloud.

According to CG, it is crucial for the application to take into account context such as the device, localization, social aspects. In his on-going work at TSE, CG includes Context Awareness as part of the application (at the same level as the business logic).

Q FB: does it modify the programming model?

A CG: yes, the developer is the best to add Context Awareness information to the application.

This brings the idea of pluggable clouds (multiple clouds) for the same user, depending on contextual parameters.

CG's proposal can be found on

<http://www.ow2.org/xwiki/bin/download/Cloud/WebHome/OSCIWorkshop2010BrainstormingCG.pdf>

10.3) Which programs?

10.3.1) ANR

For a 2011 ANR project, CG states that he could be part of the SelfXL follow-up project.

ANR's new program can be found here

<http://www.ow2.org/xwiki/bin/download/Cloud/WebHome/aap%2Db Blanc%2DANR%2DNSFC%2D2010.pdf>

ANR's dates for proposal can be found here

<http://www.ow2.org/xwiki/bin/download/Cloud/WebHome/Calendrier2011ANR%2DAge....pdf>

10.3.2) FP7

JPL reminds that FP7 will open a bigger budget for cloud computing (including open source criteria) in July 2011 (which will include funding for Chinese, Japanese partners).

SC states that Engineering is targeting FP7.

YG states that Fraunhofer Fokus is targeting FP7 and also national projects.

Open discussion about "EC Support Actions": can it support OSCi ? Note that support actions do not support development but this could include financing trips with China, organizing meetings, ... JPL+PM+AL agree that is a good idea.

10.3.3) Co-Funded projects between Europe and China

MZ: it needs a high level coordination. At the moment, details have not been determined.

HS: we need to show a very clear objective to convince the government for joint funding.

MZ: not sure why it has already failed in the past.



10.4) What ideas for collaborative projects?

Trustworthiness, access control, identity management for cloud computing:

YG: it looks like identity for clouds could be a good idea project

AL: check what Odissea is about?

JPLo: There is an European project about security and thrust for cloud: <http://www.tclouds-project.eu/> managed by IBM

10.5) Open Issues:

What does OSCi do with all transverse issues?

Should we setup a dedicated work group for collaborative projects?

11) Wrap up:

Round table based on 2 questions: what did you get from today? what are the next steps for OSCi?

General feedback:

- good material
- good interactions
- good introduction to all partners

Good understanding/introduction of OSCi

- Even though we are not able to define what cloud is, we all have a vision and we are sharing it, we are targeting clear objectives.

This meeting helps sharing these goals and definitions.

Good introduction to all domains and OSCi as a whole

- Presentations have shown that it may be very complex to propose software bricks that could be integrated in several domains.
- It is important to ensure integration at the level of each domain, with code contribution integrated at the code level.
- It would be difficult to integrate all domains and this shall not be the goal of OSCi.
- It is important to have both a global view (all domains), as well as detailed focus on technical points. Therefore the agenda should also include more detailed technical



points for discussion.

Common points between domains:

- Some common points between domains need to be identified.
- How do we make sure that these points are addressed in common, and are not forgotten e.g. elasticity, security ? These points should be reviewed regularly.
- Progress to be done e.g. Domain 3 currently has little interaction with other Domains, but hopes to have more interaction with other domains next year.

OSCi Organization:

- Workshop (F2F meetings) are definitely complementary to OSCi Conference Calls i.e. conference calls are not enough to understand each other and work together, physical meetings are good to increase cooperation.
1. Each OSCi domain has to do its homework. Each OSCi Domain has a spokesperson/representative/director/dictator who is in charge of organizing the Domain phone calls and relevant meetings in order to achieve domain's road map. These calls and meeting have to be focused on domain's issues (shorter meetings with a stronger focus).
 2. OSCi monthly conference (for the time being) calls are set up for an overview of the progress done by domain and to follow up with common issues, projects, events and workshops.
 3. Yearly (or bi-yearly – to be discussed) OSCi workshop are set up for enabling face to face meetings and in depth discussions. OSCi may alternate Europe / China / America for the physical meetings.

New item:

- Legal aspects: OSCi should look at differences between countries (eg data localization).

12) Next steps

As stated by YG we now have slides but we need texts as well: we have to document what we are doing. OSCi R&D Agenda (including vision, state of the art, competitive analysis, detailed description of each Domain) is part of the expected OSCi deliverable.

As mentioned earlier, this will help when we meet decision makers at EU, in China, in companies, etc.

OW2 Open Source Cloudware initiative
1st Workshop: 23 November 2010, Paris



To do:

- Vision
- State of the Art
- Competitiveness Analysis
- Each Domain to produce a 3-4 pages paper

Dead line:

- End January 2011.