SeaClouds Project

D1.7.2

1st SeaClouds Industrial Workshop

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PU	Public	X
PP	Restricted to other programme participants (including the Commission)	
RE	Restricted to a group specified by the consortium (including the Commission)	
CO	Confidential, only for members of the consortium (including the Commission)	

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Executive Summary

The first Industrial workshop of the SeaClouds project took place under the framework of the **Cloud World Forum**, held on June 24th and 25th, 2015 in London, United Kingdom.

The objective was to present the first outcomes of SeaClouds to a business oriented audience, fostering adoption and potential collaboration with other organizations. These outcomes included a demo of the **first integrated platform[1]** which is available at **SeaClouds´ repository[2] on Github**. Additionally, the feedback and insights obtained during the venue also became an important tool to validate project results as well as its alignment with current market needs.

In a nutshell, major objectives of the workshop were:

- Raise awareness about SeaClouds among key market players.
- Establish connections with potential customers and/or collaborators.
- Showcase SeaClouds demo to the above mentioned groups and get feedback about their current needs while validating/evaluating how SeaClouds addresses them.
- Identify exploitation opportunities to ensure the project sustainability beyond the funding period.

1. Introduction

1.1 Objectives

Attendance to industrial events such as **Cloud World Forum [1]** (or CWF) is an important part of SeaClouds strategy for the **dissemination** of the project and for its **sustainability**.

This strategy, which includes four different but closely related branches (engagement of open source communities, contribution to industry-driven cloud standards, contributions to Apache Brooklyn and partner´s individual exploitation plans) aims to raise awareness about the project and ensure that project´s outcomes reach the appropriate audiences, creating impact and fostering adoption of the SeaClouds solution.

With that goal in mind, the **SeaClouds** consortium selected the Cloud World Forum as an ideal scenario to present the first version of its integrated platform to industry.

While the first SeaClouds workshop aimed to provide a forum to discuss problems, solutions and perspectives of ongoing research activities from a scientific point of view, this workshop had a totally business-oriented perspective. Because of that, **Cloud World Forum**

Figure 1: CWF Logo

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[1] https://drive.google.com/drive/u/0/folders/0B3na
[2] https://github.com/SeaCloudsEU/SeaCloudsPlatform/releases/tag/0.7.0-M19

represented a unique opportunity at European level, to get in touch with thousands of potential customers who could, at the same time, evaluate our first software release and provide feedback that could be of vital importance for the final prototype.

Therefore, our idea for the workshop was:

- To attract as many visitors as possible to our stand, evaluating their needs and expectations to determine if SeaClouds could fit them.
- Explain SeaClouds and its advantages
- Showcase a demo of our first integrated prototype, testing it with a qualified audience
- Evaluate their feedback and suggestions, in order to measure the project´s alignment with market´s needs.
- Establish links with potential customers and/or collaborators, setting the basis for future actions.

1.2 Why CWF?

The 7th annual **Cloud World Forum** was held on June 24th and 25th, 2015 in London, in conjunction for third year in a row, with the **Enterprise Apps World**. This conjunction, which benefits the SeaClouds objectives for this workshop in terms of the size and profile of the audience, responds to the growing importance acquired by Enterprise Apps, as stated by a research leaded by the Centre for Economics and Business Research, that shows how the European enterprise cloud app market is set to generate **3,82 billion euros in revenue**, an increase of 206% by 2018.

With 8.000+ visitors and 200+ sponsors and exhibitors, **Cloud World Forum** is one of the Europe´s largest expos for C-level decision makers, gathering CIOs, CTOs, DevOps Team Leads, Engineers, Software Architects, Developers, Administrators and Tech Entrepreneurs.

The large audience of the **Cloud World Forum**, supported by the important figures above mentioned and the good reputation of this event at European level, led SeaClouds Consortium to choose it as an **ideal scenario** for the celebration of the first industrial workshop.

Relevance of such events is increasing due to the continuous growth of Cloud
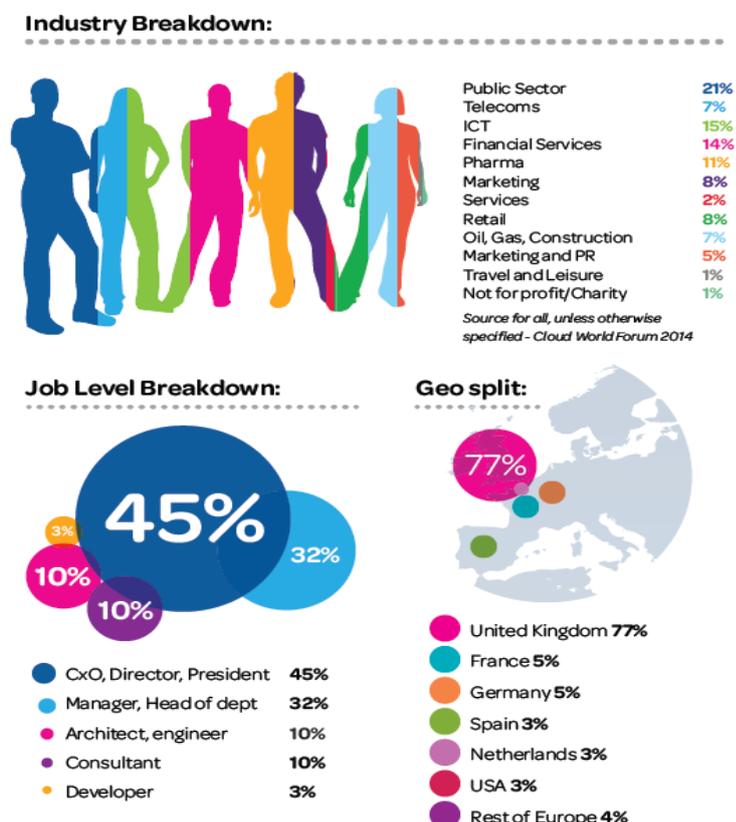
Figure 2: Cloud World Forum stats

Computing, which nowadays is at the centre of organizations´ digital transformation, powering the Internet of things and enabling decision makers to adopt a **DevOps approach**, creating a culture of automation and continuous delivery.

Although the vast majority of the audience proceeded from the UK, as shown in **Figure 1**, there were many representatives from other European countries and also the USA. A small group of visitors from other parts of the world, like Malaysia or New Zealand, was also present.

Among them, almost 80% correspond to decision makers (Directors, Managers and Head of departments) which give us an idea of the relevance of this event for projects like SeaClouds.

1.3 Agenda

The Cloud World Forum program was full of presentations, talk sessions, networking opportunities, etc. These opportunities were possible due to both the speakers attending the conference as well as the type of audience that they attract.
If the profile **(IBM, Salesforce, Google, SAP, MongoDB, Sohonet, Ormuco, NTT Communications)** and position **(VPs, CIO, CTOs, etc.)** of the invited speakers is not evidence enough of the potential relevance of the CWF for SeaClouds, the topics treated during the two-days sessions (related to **hybrid clouds, innovation in the cloud, DevOps and agility at scale, etc.)** will clarify any doubts on this regard.

This relevance led indeed one of our partners, Aled Sage from CloudSoft, to participate on a panel discussion titled **"Docker Domination – Technology Fad or Development Dream?"** This round table generated an interesting discussion in which prominent figures from companies like IBM, Google and PayPal participated. This was also useful to introduce SeaClouds to a qualified audience and to redirect more visitors to our stand.

Therefore, the main agenda of this two-day event was the following:

DAY 1 AGENDA	
Time	**Plan**
09:25	**Chair´s Welcome** Helen Kelisky Vice President IBM Cloud UK
09:30	**Amanda Brooks** Director of Innovation Department for Business, Innovation and Skills
09:50	**Presentation: Remaking Enterprise IT for the Era of Cloud** Robert J. LeBlanc Senior Vice President, Cloud IBM

10:15	**Presentation: Mobilizing the enterprise through Hybrid Cloud** Anthony Headlam CTO, Jaguar Land Rover
10:40	**Presentation: Softlayer Case Study – Sohonet** Harold Smith Director of Sales Engineering Softlayer, an IBM Company Ben Roeder Chief of Technology Officer Sohonet
11:05	**Presentation: Innovating in the Cloud with SAP** Marc Geall Sr. VP SAP HANA Cloud Partner Innovation
11:30	**Networking & Refreshment Break**
12:10	**Presentation: Digital View from one of the UKTech50** Chi Onwurah MP for Newcastle upon Tyne Central
12:30	**Presentation: Which apps? Which cloud? Why?** Len Padilla Vice President Product Strategy – NTT Communications
15:55	**Presentation: The Digital Social Enterprise and Collaboration** John Finch CIO - Bank of England
14:05	**Presentation: A transformational journey – implementing DevOps & Agility at Scale** Fin Goulding CIO – Paddy Power
14:30	**Presentation: Tackling the Public Cloud Integration Journey** David Trice Director of Business Solutions, British Gas
14:50	**Panel Discussion: Cloud the disruptor, transforming businesses with cloud infrastructure** Michalis Moraitis CIO, Nissan Greece Paul Clarke Director of Technology, Ocado Helen Kelisky Vice President, IBM Cloud UK

	Dieter May Senior VP Digital Business Models, BMW Chily Fachler Executive VP Technology, Green Man Gaming Darren Smith Senior Director, Solution Engineering, EMEA. Salesforce
15:25	Networking & Refreshment Break
16:05	**Presentation: How cloud-based monetisation platforms can rejuvenate traditional service models. A case study: Roadside Assistance** Mike Gerardi Aria Systems
16:30	**Panel Discussion: Docker Domination – Technology Fad or Development Dream?** Ajay Dankar Senior Director, Product and Program Manager, PayPal Phil Jackson Lead Technology Evangelist – Softlayer, an IBM company Aled Sage An Apache Brooklyn and Clocker Commiter, CloudSoft Craig Box Technical Architect, Google Cloud Platform Chris Swan CTO, Cohesive Networks David Glideh Founder and CEO, Dataloop.IO
17:00	**Presentation: Implementing a container-based application strategy** Bernard Golden Author "Cloud for Dummies"

DAY 2 AGENDA	
Time	**Speaker**
09:25	**Chair´s Welcome** Jacqueline Davey

	Vice President IBM Enterprise and Mid-Market
09:30	*Presentation: The database of you – How wearables and fitness need to evolve in the changing world of the IoT* *Andy Caddy* *CIO, Virgin Active*
09:50	*Presentation: Five game-changing ways cloud innovations help you to transform your business* *Sandy Carter* *General Manager, Ecosystem Development and Social Business Evangelist, IBM*
10:15	**Adventures of a CIO at ARM** Andy Smith CIO, ARM
10:35	**Presentation: Escaping Cloud Cuckoo Land: 5 tips for making success a reality in the cloud** Kelly Stirman VP of Strategy, MongoDB
11:00	**Networking and Refreshment Break**
11:40	**Presentation: Cloud computing and Charting Cyber** Dr. David Bray 2015 Eissenhower Fellow & CIO, FCC
12:25	**Panel Discussion: Working to capacity in the cloud – Delivering a seamless customer experience under pressure** Simon Reed Head of Bus Systems & Technology, Transport of London Ameer Badri Senior Manager of Sales Engineering, Twilio Doug Clark UKI Cloud Lead, IBM Jim Odell Partner, Kemp Little Consulting Orlando Bayter CEO and Founder, Ormuco
13:00	**Lunch & networking**
14:00	**Presentation: Creating IP not IT- Agile and DevOps in transition** CTO, BMJ

14:25	**Presentation: Information Security and Risk – a European Perspective** Paul Costelloe CIO/Programme Director, CIPROS International
14:45	**Presentation: Lessons learned from moving to the cloud** John O´Donovan CTO for Consumer Technologies and Platforms, Dow Jones
15:05	**Networking & Refreshment break**
15:35	**Presentation: Cloud Camp - Lightening Talk Round** Phil Wainewright Co-Founder/Chair - Diginomica/EuroCloud Chris Swan CTO – Cohesive Networks Joe Baguley CTO EMEA, VMWare Dough Clark UKI Cloud Leader, IBM

2. Outcomes analysis

This section focuses on analysing the results of the workshop, including the profile of the visitors of our stand and their needs, the feedback they provided, etc.

2.1 A warm welcome

In general terms, the SeaClouds project was very well received by the **Cloud World Forum** audience that visited our stand in multiple occasions. During the two days of the show, more than **40 people** from different companies and organizations stopped by and got interested about what SeaClouds was and what it could offer. The profile of the visitors varied from SMEs to Government organizations, including cloud providers, ISVs, etc.

The following figures show the approximated distribution of the contacts made during the venue. This includes both the visitors to the SeaClouds stand as well as the links established with other exhibitors on their stands.

Table 1 provides an overview of the different types of visitors we had. The largest group was the one formed by the small and medium-sized enterprises.

As described on section 2.2, the most interesting opportunities for future collaboration/exploitation revolve around this group.

Another interesting group is the one

Type	Amount
SMEs	17
Cloud providers	5
Government organizations	1
Monitoring tools	5
Other / Not Relevant	14
TOTAL	42

Table 1: Visitors profile

of the cloud monitoring solutions that were present on the venue. Solutions like **App Dynamics**[3] and **Dataloop.IO**[4] are the main examples of this category.

SeaClouds also sparked the interest of government organizations like the Malaysian National ICT Initiative.
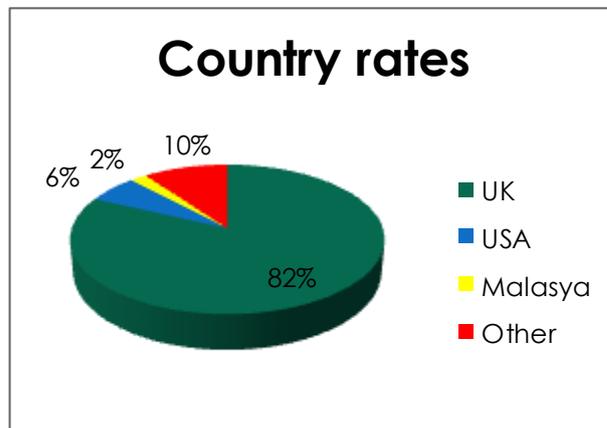
Figure 3: Visitors per country

In terms of visitors per country, the venue was clearly dominated by visitors from the **United Kingdom**, hogging around 80-85% of the audience.

Second place in this ranking is occupied by visitors from the United States (6%), in which **SMEs** were the main representatives.

Besides the visits of the Malaysian Government and an Indian company interested in offering services for quality of software validation, the rest of the visitors are grouped under the section "**Other**" of the pie chart, involving visitors from other European countries like Germany or France.

Our Methodology

The dissemination material prepared for the workshop (posters, flyers, etc.) and the catchy title of the project, **"Seamless Adaptive Management of cloud-based applications"** worked very well, arousing curiosity of the audience and attracting several visitors to our stand.

Once there, we explained what **SeaClouds** is and how it works, focusing on highlighting the unique selling points of the project. Our methodology consisted in providing examples in which a given customer wants to create/put an application on the cloud, with certain requirements to be fulfilled by the different cloud providers.

Then, we explained how SeaClouds searches for the best available offerings according to those requirements and generates a deployment plan.

Once that deployment plan was generated, the different modules of the application were deployed. An important remark on this point was that those modules could be deployed in multiple clouds, regardless of the underlying provider.

Then, our solution would keep monitoring the application performance and whenever a SLA violation occurred, a **repairing process** would be enforced, __automatically migrating__ that application module to another provider if needed.

In general terms, three concepts were specially appreciated among our visitors:

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[3] https://www.appdynamics.com/
[4] https://www.dataloop.io

- The **agility** and **dynamism** provided by a solution that from a definition of certain requirements can **automatically** deploy, monitor and manage an application on the cloud.
- The **independence of the underlying provider** and all the advantages it provides in terms of flexibility, cost reduction, etc.
- The **open source** approach of the solution, easing the integration of SeaClouds with already existing solutions.

Although some visitors were not interesting for the SeaClouds exploitation (some looking for specific solutions out of the scope of the project, others were merely offering a validation services for our software, etc.), there were others that have quite interesting potential from the exploitation point of view.

In these cases, we performed a demo of the SeaClouds solution and obtained requests for receiving extended information via email. Examples will be provided on the following section.

Some pictures of the stand visitors are shown below:

Figure 4: SeaClouds stand

Figure 5: Our first visitors

Figure 6: Explaining how SeaClouds works

Figure 7: Performing a demo

Figure 8: With representatives of the Malaysian Gov.

Figure 9: SeaClouds at IBM cloud stand

2.2 Potential Collaborations

The nature of a project like SeaClouds, which uses open source, based on cloud standards and integrated with well-recognized tools like **Apache Brooklyn [2],** resulted quite appealing for some of our visitors.

The talk given by one of our partners, Aled Sage from CloudSoft, about *"An Apache Brooklyn and Clocker committer"* also contributed to generate expectations about SeaClouds.

As mentioned in the previous sections, the SMEs were the main group of visitors on our stand. In our particular case, it's interesting that different SMEs from both sides of the Atlantic Ocean requested more info about SeaClouds.

An example of this is **OrionVM[5],** a San Francisco based cloud platform for IT Service Providers (IaaS). It's VP Marketing and Partnerships, David Pfeiffer, seemed quite interested after attending one of the demos, and requested more info via email.

Since the business focus of OrionVM revolves around Infrastructures as a Service and SeaClouds is able to easily adapt and work with multiple providers at IaaS level, SeaClouds resulted very appealing for this American company.
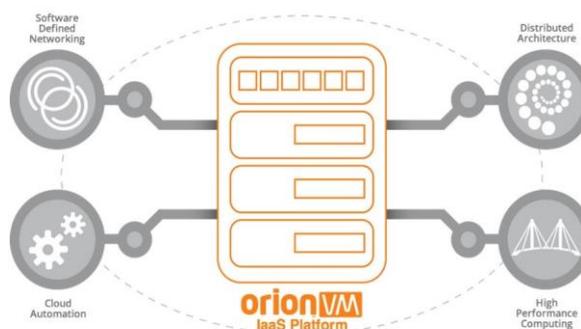
Figure 10: OrionVM IaaS Platform

Another example from the other side of the Atlantic is **365force**[6], a provider of cloud technology, cloud strategy and cloud consulting that provides full lifecycle technology support, advisory services, cloud migration services, etc.

365force works at the three layers of the cloud stack and uses a platform agnostic approach, leveraging leading platforms like Microsoft, Windows Azure or Amazon EC2 to deliver their wide portfolio of services, including BPaaS, SaaS, PaaS and IaaS.

The provider-agnostic approach and the adaptive capacity of SeaClouds focused the interest of 365force´s founder, Vivek J. Agarwal, who also visited our stand. Although no specific agreements were made, he also requested more information via email and committed to get back to us after reviewing it.

Additionally, different providers of monitoring tools like **New Relic [3]**, **App Dynamics [4], DataLoop [5]**, etc. were also present at the Cloud World Forum.
In particular **App Dynamics** and **DataLoop** showed their interest in SeaClouds.

DataLoop.IO is a London-based SME that basically provides a monitoring service for DevOps and Operation teams running online services. Designed for today´s dynamic

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[5] http://www.orionvm.com/
[6] http://www.365force.com/

cloud environments, DevOps and Micro-services, it runs on all major operating systems, and collects metrics via Nagios check scripts executed with their agents, Graphite or StatsD.

App Dynamics was founded in San Francisco in 2008 under the name of Singularity and launched out of stealth mode as AppDynamics in 2010. Named a Gartner Magic Quadrant Leader[7] for Application Performance Monitoring in 2012, the company provides a wide range of services among which we can highlight Application Performance Management, Monitoring Services and Application Analytics.

Although neither of them are open source solutions (which will harden the integration with our solution); they show us the wide range of possibilities and available combinations that a modular solution like SeaClouds could have.

Another singular visit to the SeaClouds stand was the one of two **representatives from the Malaysian Government**[8], who showed their interest in both SeaClouds and the funding initiative of the EC. The two members of the Account Management & Development Department – Infotech Division, seemed impressed by the maturity level of SeaClouds, taking into account that it arises from a research project. Their idea was to organize a similar program in their country and to establish links with specific projects for potential future collaborations.

Although this specific collaboration is not directly related with exploitation, it could extend the scope of SeaClouds beyond the boundaries of the European Union, opening new gates for future opportunities in that country.

All the opportunities identified during the workshop will go through a follow-up process which has already started by contacting the visitors via email and providing additional information about the project. Upcoming dissemination and exploitation deliverables will include any updates worth mentioning.

2.3 Canopy

Another important visit received at the SeaClouds stand, at least from the exploitation point of view, was the one of the Canopy team.

Canopy [6], brand involving the whole cloud offering of **Atos**, is an end-to-end provider of cloud services with enterprise grade Service Level Agreements guaranteeing the security of business systems.

This visit involved three important roles within the Canopy organigram:

- Chris Byrne, Business Development Director PaaS
- Adam Jackson, from the Office of the CTO – Director of Research, Innovation and Incubation.
- Nick Roberts, Global Head of Pre-sales, PaaS

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[7] http://www.appdynamics.com/press-release/appdynamics-positioned-in-the-leaders-quadrant-of-the-magic-quadrant-for-application-performance-management/
[8] http://mdec.com.my/

Canopy is at the core of Atos´ exploitation plan for the SeaClouds project, and this meeting was very useful in order to boost interactions previously initiated among involved players.

As already mentioned in the previous exploitation deliverables, one of the Atos (and in particular, Canopy) main exploitation interest revolves around one of the components being developed, the SLA.

The maturity level and the potential applications to the Canopy portfolio derived in a request from the Canopy team for scheduling a meeting which would allow them to delve into the advantages of SeaClouds.

If the potential synergies between Canopy and SeaClouds consolidate, the latter could join the Canopy incubation program, thus ensuring the sustainability/endurance of SeaClouds beyond the funding period.

2.4 Cloud providers

Thanks to CWF, we had the chance to present our solution to some big and well established cloud providers like **Salesforce Heroku [7]** or **IBM** [8] and also to reach some SMBs like **Ormuco [9]**.

Salesforce and IBM are two well established providers and Ormuco, which was originally based in Canada, is a relatively new provider in Europe. In a nutshell, it provides public, private and hybrid cloud hosting in one unified cloud.

Although no specific actions or collaborations derived from this, the interaction of with first level providers was important not only to publicize the SeaClouds brand among them, but to get their insights about what we do and what could be improved or extended.

3. Conclusion and next steps

In general terms the feeling from the first industrial workshop is positive.

On one hand, the SeaClouds stand attracted many visitors, even surpassing our initial expectations. Although many people walked around during the two days of the venue, the important fact is that more than **40 people** showed their interest in the project and its outcomes.

The SeaClouds solution had quite good acceptance among the stand visitors. The dynamism and flexibility provided by such a solution was appreciated by the general audience. Features provided by SeaClouds like the **automated management** of cloud applications, the use of **standards**, the deployment on **multiple clouds** and its **open source** nature, resulted very appealing for the audience.

The availability of the code on the **Github** repository for them to download and to test it seemed to **generate trust** about the SeaClouds level of maturity. All these factors, together with the **demo performed of the first integrated platform**, have contributed to **raise awareness** about SeaClouds, which was one of the objectives initially set for this workshop.

Additionally, the **connections established** with some specific customers and potential collaborators, the monitoring tools, cloud providers, other SMEs, etc., have been positive for the project development.

Furthermore, although there has been only initial contacts and no specific agreements have been made, some potential **exploitation opportunities**, like the one previously explained with OrionVM or 365force aroused. It is vital for the project sustainability to continue moving forward on this direction and to get tangible results. The boost of the internal collaboration with Canopy is also important from the exploitation point of view. Therefore, the corresponding actions have been already initiated. Managers from both sides are already in contact and near future meetings are being scheduled. The idea of these meetings is to present the project in depth, analysing its functionalities, the benefits it provides and elucidating how they could fit into the Canopy business.

If we try to find a potential downside of the event, it could be that some of these visitors were maybe expecting a **commercial product**, a mature solution that could be fully exploited. Although research projects are sometimes far from becoming a commercial solution, the SeaClouds consortium, will continue its hard work to evolve current solution towards a final integrated prototype.

Another important requirement would be to increase the number of PaaS providers supported by SeaClouds. The fact of currently supporting a leader as Cloud Foundry is important but in order to maximize the impact of the solution we need to widen this list. SeaClouds team is currently working to add Heroku and OpenShift to this portfolio.

Our intention is that this final solution, closer to what can be considered a commercial product, will be ready before the end of the year, being presented on the **Second Industrial Workshop.**

As happened with the first one, this second workshop will be held under the framework of a recognized industrial event at European level. The main venue being considered for this is the **Cloud Expo Europe**, to be held next November in Frankfurt.

This event represents an ideal scenario first due to its relevance, reputation and wide and expert audience, and second for its perfect timing within the project lifecycle, matching the venue and the release of the final integrated platform.

Annex: Additional Material

Additional material was used during the workshop for presentation of SeaClouds and its outcomes.

SeaClouds flyer:

Figure 11: SeaClouds flyer

SeaClouds poster:

Figure 12: SeaClouds poster

SeaClouds architecture poster:
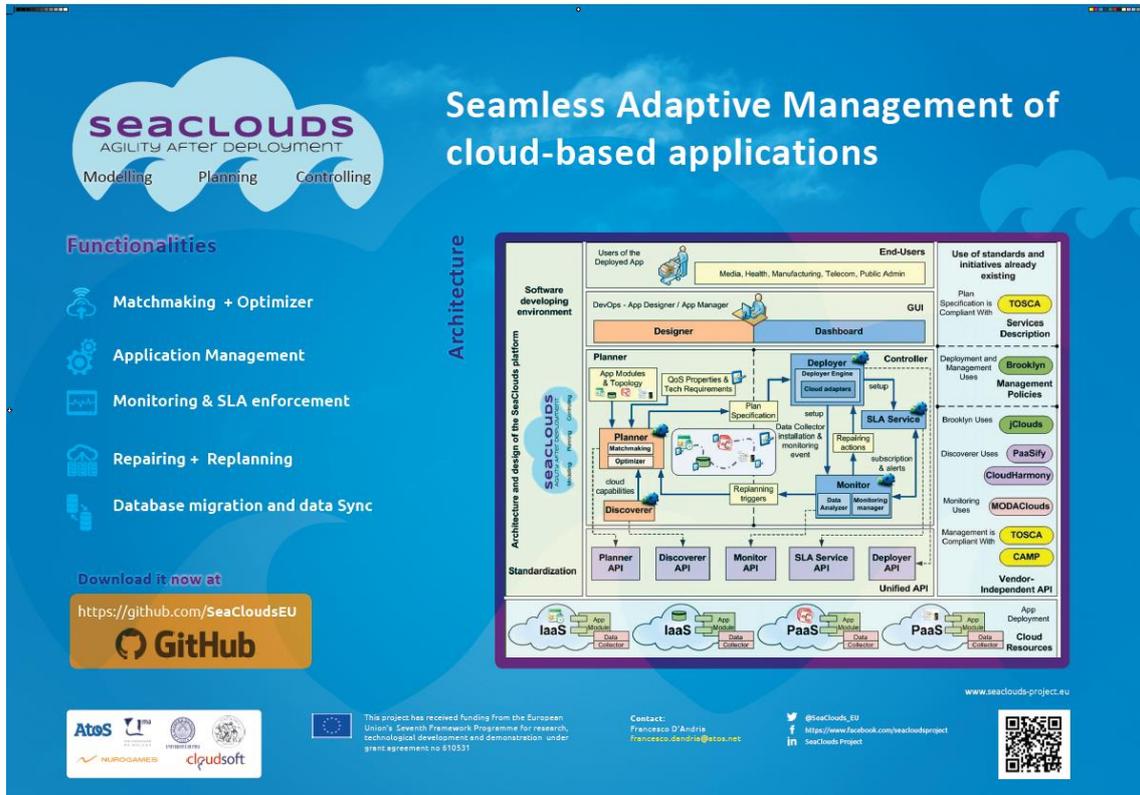
Figure 13: Architecture poster

References

[1] Cloud & DevOps World Forum. http://cloudwf.com/

[2] Apache Brooklyn. https://brooklyn.incubator.apache.org/

[3] New Relic, end to end monitoring. http://newrelic.com/

[4] App Dynamics. https://www.appdynamics.com/

[5] DataLoop.IO. https://www.dataloop.io/

[6] Canopy, the Atos cloud. http://canopy-cloud.com/

[7] Heroku. https://www.heroku.com

[8] IBM Cloud. http://www.ibmbluemix.net

[9] Ormuco. http://www.ormuco.com/