

CYCLONE

Complete Dynamic Multi-cloud Application Management

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Change history

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0.1	14/10/2015	UvA	Initial version and placeholders for data collection
0.2	09/12/2015	UvA	Intermediate version with initial contribution
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Executive Summary

The project CYCLONE is an Innovation Action within the scope of H2020 EU framework. Therefore, the effective dissemination is of great importance in order to ensure the adoption (during and after the project) of the CYCLONE results and achievements.

In this report, we present the dissemination achievements of the CYCLONE project during the first year of the project. The plan for this year has been presented in the CYCLONE Dissemination and Communication Plan (DCP) documents [2, 3]. These documents emphasise the following dissemination activities:

- Specification of the general dissemination strategy
- Branding which results with a number of components that are used by the project members in all communications (internal/external) related to the project.
- Identification of the target audiences for the dissemination activity
- Implementation of the communication channels to the target audiences – website and social media
- Conference publications, events organisation
- Standardization activities

The general dissemination strategy is described in Dissemination and Communication Plan (DCP) [2]. This plan had a couple of minor revisions during the year in order to accommodate for the conclusions from the analysis of the first year activities. The branding strategy is described in [1] at the early stages of the project (M2). We designed the logo and other elements, such as the colour scheme, fonts that are embedded into published and web materials and are integrated into the project software.

We deployed the website <http://www.cyclone-project.eu> at GitHub and use LinkedIn (H2020 CYCLONE LinkedIn group) and Twitter (@H2020_CYCLONE) to reach the audience. We have published ten papers and posters and organized three workshops that are discussed in the document. We also gave three demos, and participated in activities of six different standardization bodies.

1. Introduction

The CYCLONE project aims to provide integrated service deployment and management platforms for application service providers and individual cloud based services developers, to simplify development, deployment and test of services and applications. The project targets integrating services from multiple providers and working with different stakeholders and user communities.

Effective dissemination and communication activities are especially important for the CYCLONE project as an Innovation Action to ensure adoption of the project developments and products during and after the project duration.

CYCLONE Dissemination and Communication Plan (DCP) has been delivered in M3 and has outlined all the major activities to make aware main target communities about the CYCLONE project, its activities and technologies. The DCP describes channels, mechanisms and activities to deliver the main project messages to different target groups identified by the project.

This document provides report on the CYCLONE dissemination and exploitation activity in the first year 2015 of the project. It is based on CYCLONE DCP [2] from M3 and its update [3] from M11, and quantifies (where applicable) dissemination activity. We also briefly describe challenges and decision made with respect to some aspects of the activities.

2. General Strategy Development and Implementation

This section outlines the project objectives and exploitable results that provide a context for all dissemination and communication activities and describe the main principles that guide the dissemination and exploitation of the CYCLONE activity.

2.1. Dissemination and communication strategy in the first project year

In the first year the CYCLONE project followed Dissemination and Communication Plan (DCP) presented in [2]. This plan had a couple of minor revisions during the year in order to accommodate for the conclusions from the analysis of the first year activities, there is still no need to change it significantly.

Although the CYCLONE Dissemination and Communication Plan has been delivered in M3 of the project, the actual dissemination activities started from the very beginning of the project. The CYCLONE project partners used their already established networks to work with target communities and stakeholders. This integration between the project network and the respective partner networks will continue till the end of the project.

2.2. Branding, co-branding and exploitation

The importance of well-defined branding strategy for effective dissemination and communication activity and building a consistent image of the project has been recognized in the project DOA. It is realized at the early stage of the project and we delivered the document about the branding strategy as early as in M2, see [1]. We designed the logo and other elements, such as the colour scheme, fonts that are embedded into the published and web materials and are integrated into the project software. The CYCLONE logo is shown in Figure 2-1.



Figure 2-1 CYCLONE Logo

The CYCLONE branding strategy has been consistently implemented in all dissemination materials and activities during the first project year. It started with the first events where the project members participated:

1. The IEEE Fourth International Workshop on Cloud Computing, Interclouds, Multiclouds, Federations, and Interoperability (Intercloud 2015) in March 2015, <http://www.intercloudtestbed.org/intercloud2015.html>,
2. The EGI Conference 2015 in May 2015, <http://conf2015.egi.eu>, and
3. The TNC15 Terena Conference in June 2015, <https://tnc15.terena.org>.

The complete lists of the publications and corresponding events in 2015 are given in subsections 4.3 and 4.4, respectively.

The co-branding strategy is very important for projects like CYCLONE as this project builds the novel platform by integrating a number of components contributed by the project partners, but without supplanting the identity, utility, or existing communities of the individual components. Co-branding provides a basis for the future CYCLONE results exploitation once the project ends.

Planning for the second year

The second year will require an update of the existing dissemination materials and the development of the new materials to present new results and products or services. All materials will use the main elements of the CYCLONE brand such as logo, templates, and styles. Herewith we will consider reaching the respective target communities with specifically crafted messages.

Some of the planned activities are:

- An update of the CYCLONE leaflet to include a short project overview and any new developments. Additional leaflets will focus on CYCLONE products and will be prepared for the major events (conferences) that the project members will attend.
- At least twice a year we will provide CYCLONE newsletters with an overview of the ongoing activities and available products
- We plan to prepare the CYCLONE posters when applicable for conferences and events. At the moment, we plan to display the posters at Cloudscape2016, EGI Conference 2016, and TNC16.
- We will consider other branding materials such as CYCLONE folder, stickers, bags, T-shirts for such events, especially those events with wide attendance, e.g. EGI conference, TNC16, Supercomputing SC16.

The project will use different channels to deliver necessary messages where important roles will belong to social media and network, first of all LinkedIn and Twitter where the project has created accounts and will work on growing community of followers.

2.3.Key Performance Indicators

We briefly show the statistics of the dissemination activity results, which are specified in [D2.2] as the Key Performance Indicators (KPI). The main KPI values are:

- Number of unique visitors to the CYCLONE website: On average, there are three to twelve unique visitors per day. However, the statistics related to the website activity are incomplete due to a pending decision on legal terms for the usage of website and associated monitoring tools.
- Social media statistics (Twitter): The project has 51 followers. We average a 0.5% engagement rate, which is relatively good for Twitter, especially considering the technical nature of the subject. To put this in context, the average Twitter engagement for the top 25 brands is 0.7%.
- Social media statistics (LinkedIn): The LinkedIn group has 14 members.
- Number of scientific publications per year: In total, there were ten publications. A complete list of publications is given in subsection 4.3.
- Number of conferences and events attended: 11. A complete list of events is given in subsection 4.4.

We give a more detailed analysis of the KPI in Sections 4.1, 4.2, 4.3 and 4.4 for website, social media, publications and conferences, respectively.

3. Target Communities and Technology Focus

The following audiences were focus of dissemination activities for the main project products during the first year [D2.2]: Application Service Providers and Managed Service Providers. The fact that the project proposes tools and platforms for development of cloud-based applications makes CYCLONE results potentially interesting to other audiences and developers who create and operate applications on cloud infrastructures. The most prominent communities here are European Grid Initiative (EGI) and the pan-European data network for the research and education community, GEANT.

In particular, the project identified two new target application domains for CYCLONE tools:

- Networking community (vendors and operators) that widely adopts Software Defined Networking (SDN) and Network Function Virtualization (NFV) which are becoming predominantly software and VM-based and use cloud deployment automation tools.
- Intercloud and multi-cloud infrastructures provisioning and management that is demanded by the emerging Big Data and Internet of Thing (IoT) applications. In addition to the general cloud based services provisioning, the deployment and bootstrapping of these complex infrastructures and applications requires incorporating additional intercloud control and management functionality.

The above-mentioned application domains are currently being actively developed and targeting them in the future DCP activities will potentially increase the project results exploitation. When working with target communities and searching for new applications domains, the project will refer to successful cooperation and achieved results in already defined and explored domains.

3.1. EUCloudClusters

The Clusters of European Projects on Cloud is an initiative that aims to create an environment for projects funded by the European Community in order to let them interact and find synergies among them. Currently there are four clusters defined for specific topics and goals but each of these clusters is focused on cooperation among members on technical aspects, on identification of market trends and on dissemination and exploitation activities.

The CYCLONE project has joined the “Inter-cloud Challenges, Expectations and Issues” cluster together with twelve other EU-funded cloud-relating projects. These projects are either the recipients of ICT7 or H2020 grants. This Cluster groups together those Project mainly focused on the Inter-Cloud and Multi-Cloud approach, addressing topics and challenges from different perspective regarding interoperability between heterogeneous private and public clouds, services’ comparability, portability, migration, and networking. Apart from providing a forum on technical discussion, the Cluster offers to the CYCLONE project the opportunity to participate in the organization of workshops and exploitation events with academic and industrial partners, as well as dissemination of the outcomes through the release of whitepapers and position papers. Currently the Cluster activities are carried out in the form of biweekly conference calls with the goal to release a Position Paper as a first step towards the collaboration among all the involved projects.

4. Building the CYCLONE network and raising the project awareness

The main goal of the initial stage of the project development was to raise the awareness of the project, project activities, planned products and the timeline for the identified communities and stakeholders. The following are the main milestones in realising this approach:

- Creation of the CYCLONE website using the GitHub platform which enabled each partner to fill in the content with information, and allowed flawless information flow from the early beginning of the project.
- Creation of the CYCLONE social media accounts that were used to deliver the project news and the updates on activities and new developments. It also facilitated collection of the feedback from the communities.
- Versatile partner networks and channels were inventoried and we developed the coordinated plan how to use them for project dissemination. These networks and channels comprise of professional, national and international contacts, conferences, exhibitions, and the social media.
- The project members gave well-accepted project-relating presentations at different conferences, technical events and concertation meetings. These conferences and events were not specifically sponsored by the CYCLONE project but were relevant to it. Project members used their presence at these conferences to distribute the CYCLONE flyer.
- We established cooperative and coordinating contacts with other H2020 cloud projects (part of EC Unit E2 Software Services and Cloud) as well as other projects, namely GEANT4 and ELIXIR. In particular, this goal was realised in organising the joint network session on “Cloud SWOT” at the ICT2015 event in Lisbon on 22nd November 2015 in cooperation with the SWITCH project.
- We organised workshops, special sessions and demos at the EU ICT events, TNC and EGI conferences that provide access to target communities and stakeholders.

4.1. Public Website

The project website <http://www.cyclone-project.eu/> is operational from the very beginning of the project. It played important role in increasing awareness about the CYCLONE activities and results by providing regular updates and related news items. It also integrates the CYCLONE Twitter activity at the home page and provides links to CYCLONE-related social media pages at LinkedIn and Twitter and a link to project repositories at GitHub.

The website activity is monitored via a private Piwik (<http://www.piwik.org/>) installation at TU Berlin. The installation of this tool was delayed due to pending decision on the legal terms for use of website and associated monitoring tools, in particular Google Analytics. Due to the invalidation of the Safe Harbor by the European Court of Justice in October 2015, the website may have to be moved from public hosting at GitHub to an operator in Europe.

In general, the website activity is very low. On average, there are three to twelve unique visitors per day. Therefore, we will focus on improvement of the general information architecture in order to create a

content strategy which can raise the number of both unique and returning visitors. In addition, a number of activities to improve the CYCLONE web site visibility has been identified and described in [3].

It was decided there is no need for “the internal project website”. CYCLONE project members use a shared OneDrive folder for document collaboration and the capabilities of the GitHub to manage the overall SCRUM process for CYCLONE project management and development. Next to these tools, CYCLONE project members use Slack for internal communication.

4.2.Social Media

A social media presence and active interaction with followers’ network is an important channel to disseminate information about the project goals, developments and events. Using social networks allows the project to reach a larger group of people nearly instantly while support constant awareness about CYCLONE among created groups of followers and subscribers. The maintenance of the social media accounts serves the branding purposes as well since the CYCLONE logo is used which ensures the consistency with the rest of the project’s communications.

Based on the partners’ experiences and the evaluation of impact of different social media, the project has decided to limit the number of social media accounts and activities to LinkedIn and Twitter:

- **H2020 CYCLONE LinkedIn group**

LinkedIn represents the professional community and allows creation of the interest groups. Due to the low dissemination activity during the first year of the project LinkedIn has not been used as an open discussion tool. Most of the discussions and decisions have been carried out internally, in order to satisfy the preliminary development CYCLONE software components. Hence, there was a limited opportunity for open discussions with general public. During the second year of the project we plan to initiate more public discussions in order to promote project developments and to enhance and maintain CYCLONE user and the follower groups. We expect that the cross-posting at other relevant groups will trigger the group’s growth and result in more active discussions.

- **@H2020_CYCLONE Twitter account**

Twitter is actively used to publish regular project news and additional coverage of events where the project is involved. Twitter offers the most dynamic way of communicating project news and cross-posting relevant news items building in this way wider awareness of the CYCLONE project. The project Twitter account is linked with partners’ individual accounts and in some cases organizational accounts, which extends the audience reached by tweets.

The LinkedIn group has 14 members. The post on LinkedIn (see Figure 4-1) regarding the November meeting in Geneva had 654 impressions, which is very good.

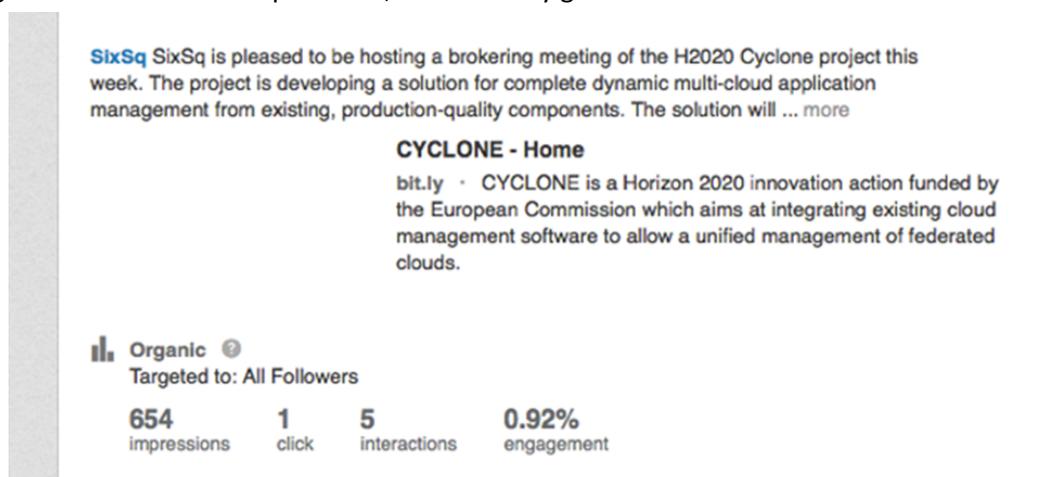


Figure 4-1. A post at the LinkedIn CYCLONE group about the November meeting in Geneva.

An overview of the CYCLONE Twitter activity over three periods of three months duration is shown in Figure 4-2, 4-3 and 4-4. The Figures represent periods March thru May, Jun thru August and September thru November, respectively. From the figures we can see there is quite an increase in the audience engagement. We average a 0.5% engagement rate, which is relatively good for Twitter, especially considering the technical nature of the subject. To put this in context, the average Twitter engagement for the top 25 brands is 0.7%.

The CYCLONE project has 51 followers on Twitter, and an action point should be to increase this in the second year, but it will require engagement from other project members as well.



Figure 4-2. An overview of the CYCLONE Tweeter activity for the period 2nd March-31st May 2015.



Figure 4-3. An overview of the CYCLONE Tweeter activity for the period 2nd June-31st August 2015.



Figure 4-4. An overview of the CYCLONE Tweeter activity for the period 1st September-30th November.

4.3.Publications

Ten papers, whereof nine conference papers and posters were published during the first year of the CYCLONE project. This was the most productive dissemination activity, and, taking into account the project is still in its early stage, a result above expectations. It is important to notice that paper [8] from the list is a joint paper with GEANT4 and that paper [9] from the list is a joint paper with IEEE Intercloud testbed initiative.

Refereed conference papers, conference posters, position papers

- [1] Y. Demchenko, C. Dumitru, R. Koning, C. de Laat, T. Matselyukh, S. Filiposka, M. de Vos, D. Arbel, D. Regvart, T. Karaliotas, K. Baumann. *Open Cloud eXchange (OCX): A Pivot for Intercloud Services Federation in Multi-provider Cloud Market Environment*. Proceedings of the 4th IEEE International Workshop on Cloud Computing Interclouds, Multiclouds, Federations, and Interoperability (Intercloud 2015), pp. 472-479.
- [2] Y. Demchenko, C. Loomis, E. Escalona, J. I. Aznar Baranda, M. Slawick, O. Lodygensky. *CYCLONE: Multi-cloud applications deployment and management platform and ecosystem*. Poster, EGI2015 Conference, 18-22 May 2015. [Available online] <https://indico.egi.eu/indico/contributionDisplay.py?contribId=29&confId=2443>.
- [3] Y. Demchenko. *CYCLONE: Multi-cloud applications deployment and management platform for research and academic community*. Poster, TNC15 Conference, 14-18 June 2015. [Available online] <https://tnc15.terena.org/core/poster/23>
- [4] B. I. Zilci, M. Slawik, A. Küpper. *Cloud Service Matchmaking using Constraint Programming*. Proceedings of the 24th IEEE International Conference on Enabling Technologies: Infrastructure for Collaborative Enterprises (WETICE 2015), pp. 63-68, 2015.
- [5] B. I. Zilci, M. Slawik, A. Küpper. *Cloud Service Matchmaking Approaches: A Systematic Literature Survey*. Proceedings of the First International Workshop on Knowledge Discovery and Cloud Computing Applications as part of 26th International Conference on Database and Expert Systems Applications (DEXA Workshop KDCloudApps 2015), 2015.
- [6] M. Slawik, B. I. Zilci, F. Knaack, A. Küpper. *The Open Service Compendium: Business-pertinent Cloud Service Discovery, Assessment, and Selection*. Proceedings of the 12th International Conference on Economics of Grids, Clouds, Systems and Services (GECON 2015). Springer. [Available online] <http://arxiv.org/abs/1508.06119>
- [7] M. Slawik, Y. Demchenko, J. I. Aznar Baranda, R. Branchat, C. Loomis, O. Lodygensky, C. Blanchet. *CYCLONE Unified Deployment and Management of Federated, Multi-Cloud Applications*. Proceedings of the 5th workshop on Network Infrastructure Services as part of Cloud Computing (NetCloud 2015). 7-10 December, 2015.
- [8] Y. Demchenko, S. Filiposka, R. Tuminauskas, A. Mishev, K. Baumann, D. Regvart, T. Breach. *Enabling Automated Network Services Provisioning for Cloud Based Applications Using the Zero Touch Provisioning*. Proceedings of the 5th workshop on Network Infrastructure Services as part of Cloud Computing (NetCloud 2015). 7-10 December, 2015.
- [9] P. Membrey, Y. Demchenko. *Intercloud Control and Management Plane with XMPP*. Proceedings of the 5th workshop on Network Infrastructure Services as part of Cloud Computing (NetCloud 2015), in conjunction with the 8th IEEE/ACM International Conference on Utility and Cloud Computing (UCC2015). 7-10 December, 2015.
- [10] J. I. Aznar Baranda. Contribution to the position paper of Inter-cloud Challenges, Expectations and Issues Cluster within the EUCloudClusters initiative.

4.4. Conferences and workshops

In this Section we give an overview of conferences, workshops EU research community and industry events attended and/or organized by the CYCLONE project members. This overview is given in Table 4-1. We provide more information on the Intercloud 2015 and NetCloud2015 workshops and ICT2015 networking session on Cloud SWOT in respective subsections.

Table 4-1 Conferences and events where CYCLONE project members participated and/or contributed in 2015.

Event	Responsible Partner	Contributions and references	Target community
Cloudscape VII Brussels, Belgium, 9-10 March.	C. Loomis (SixSq)	Demo [5]	EU cloud research community and industry, FP7/H2020 projects
Cloud Expo Europe 2015 London, UK, 11-12 March.	M-E Bégin (SixSq)	Exhibitor: SlipStream, Helix Nebula Marketplace [6]	European cloud industry
IEEE Workshop on Cloud Computing, Interclouds, Multiclouds, Federations, and Interoperability Tempe, Arizona, USA, 12 March. http://www.intercloudtestbed.org/intercloud2015.html	Y. Demchenko (UvA)	Paper [7] presented Participated in panel on Intercloud projects	Cloud services and infrastructure researchers and developers - Researchers and professionals from industry
3 rd CloudWATCH concentration meeting at NetFutures 2015 conference. Brussels, Belgium, 25 March. http://www.cloudwatchhub.eu/turning-cloud-research-innovative-software-services	E. Escalona, J.I. Aznar Baranda (I2CAT)	Participation	EU FP7 and H2020 cloud projects that are part of EC Unit E2 Software Services and Cloud
European Grid Initiative (EGI) Conference Lisbon, Portugal, 18-22 May. http://www.egi.eu/news-and-media/newsfeed/news_2015_005.html	J.-F. Gibrat, C. Blanchet (IFB) Y. Demchenko (UvA)	- Demo [8] - Poster [9] presented - CYCLONE materials distribution - networking with user groups from European research community	European Grid and cloud research community
TERENA Networking Conference (TNC15) Porto, Portugal, 15-18 June https://tnc15.terena.org/	Y. Demchenko (UvA)	- Poster [10] presented - CYCLONE materials distribution - networking with user groups from European research community	-European research networking community - GEANT and NREN cloud projects
Track: Convergence of Distributed Clouds, Grids and their Management (CDCGM2015), as part of the 24th IEEE WETICE 2015 Conference Larnaca, Cyprus, 15-17 June http://cdcgm.dieei.unict.it/	B.I. Zilci (TUB)	Paper [11] presented	Cloud and Grid Research community
First International Workshop on Knowledge Discovery and Cloud Computing Applications, 1-4 September as part of 26th	B.I. Zilci (TUB)	Paper [12] presented	International Knowledge Discovery and Cloud Application

International Conference on Database and Expert Systems Applications			communities
Track 6 at GECON2015: Economics of Service Composition, Description, and Selection. Cluj, Romania, 15-17 September http://www.gecon-conference.org/gecon2015	M. Slawik (TUB)	- Organized track - Paper [13] presented	Researchers and Practitioners from Business Computing and Information Science
ICT2015 Conference Lisbon, 20-22 October.		Co-organized with EU SWITCH project the networking session on "Cloud SWOT"	Majority of EU funded projects
4th NetCloud2015 Workshop, in conjunction with UCC2015 Limassol, Cyprus, 7-10 December 2015. http://www.cyclone-project.eu/netcloud2015.html	C. Loomis (SixSq) Y. Demchenko (UvA)	- Workshop organization - CYCLONE position paper [14] presented. - Demonstration of SlipStream. - Joint paper [15] with GEANT4 - Joint paper [16] with IEEE Intercloud testbed initiative - Participated in panel on cloud deployment automation tools - CYCLONE materials distribution	- Cloud infrastructure and services researchers and developers - cloud industry - standardisation bodies

4.4.1. Intercloud 2015 workshop

The 4th IEEE Workshop on Cloud Computing, Interclouds, Multiclouds, Federations and Interoperability was held in conjunction with the IEEE International Conference on Cloud Engineering (IC2E) on 12th March 2015 in Tempe, Arizona, USA (<http://www.intercloudtestbed.org/intercloud2015.html>). The workshop is organized in cooperation with the IEEE Intercloud Testbed initiative and UvA was one of co-organizers. This allowed us to use the workshop as a dissemination and awareness-raising event at the very beginning of the project. We presented a paper [7] on one of practical developments for Intercloud and multi-cloud infrastructures that combines cloud technologies and inter-cloud networking infrastructure.

UvA also organized a panel on the Intercloud networking architecture integration problems and tools. It was recognized that deployment automation tools are key for building large scale Intercloud and multi-cloud infrastructures. Short CYCLONE introduction was presented and project flyers distributed.

4.4.2. NetCloud2015 workshop

The 5th NetCloud2015 Workshop, in conjunction with the 8th IEEE/ACM International Conference on Utility and Cloud Computing (UCC2015) was held on December 7, 2015 in Limassol, Cyprus. The organization of the workshop was sponsored by two EU projects, namely CYCLONE and GEANT4. The workshop included two sessions with paper presentations and panel discussion on Cloud deployment automation tools.

CYCLONE presented two papers: the position paper about the CYCLONE project [14] and the research paper on Intercloud infrastructure components development in cooperation with the IEEE Intercloud Testbed initiative [16].

The panel discussion included presentation by C. Loomis (SixSq) on SlipStream functionality and by Y. Demchenko (UvA) on cloud automation tools. This triggered a lot of interest with the audience and a number of questions, in particular related to the bioinformatics use case.

As a summary, the workshop and the panel discussion confirmed that the CYCLONE developments are interesting to scientific community and applications developers.

4.4.3. ICT2015 networking session on Cloud SWOT

CYCLONE and SWITCH projects co-organized and hosted a networking session during the European ICT2015 Conference on 22 October 2015 in Lisbon. The room was fully packed with more than 25 people representing EU funded projects, different research organizations, universities and cloud providers. The CYCLONE project representative took active and leading role in the discussion within the group of seven people including IBM and Flexiant. The outcome of discussion was reported to the session and identified the following key problems in Cloud Computing that can be opportunities for CYCLONE and any future H2020 projects: cloud services development and deployment automation; programmable network for cloud infrastructures and the last mile in delivering cloud services; agile networks for multi-cloud; data centric distributed applications in cloud; third party services for multi-cloud/Intercloud services integration and brokering such as federated marketplace.

4.4.4. Additional forms of contributions and publications

IFB presented the bioinformatics use cases and the current progress to the ELIXIR Technical Coordinators group, <https://www.elixir-europe.org/about/groups>. The presentation admitted the use of the federation provider to authenticate the VMs access and the use of SlipStream for deploying complex applications. This attracted great interest from the ELIXIR infrastructure and community.

4.5. Standardization activity

Standardization activities can be seen as a way to promote project results and secure products adoption on a longer time period. Standardization bodies typically involve industry experts and representatives from the provider community, developers, and the major industry vendors. The adopted standards have strong impact on the technology roadmaps for all involved parties. Table 4.2 summarizes the main contributions to standardization bodies by project partners. One of the important achievements for CYCLONE project was contribution to the IETF Draft [4]. This draft defines the Intercloud Architecture Framework (ICAF) including Intercloud Federation Framework (ICFF).

Table 4-2 Contribution to standardisation activity in 2015

SDO	Committee, Working group	Partner	Contribution	Impact/ community
NIST	Cloud Computing Architecture WG Big Data WG	UvA	Cloud architecture Cloud services management, Cloud infrastructure for data centric services	Whole cloud industry other IT sectors
IETF	IETF Draft	UvA	Internet Draft [4] submitted	The Internet community, and related industry
IEEE	IEEE P2302 Intercloud Standards Working Group	UvA	Multi-cloud, Intercloud services federation Intercloud Testbed Initiative	Industry and developers community
DMTF	Cloud CIMI	SixSq	Implementation and feedback on cloud services description format for management purposes	Industry and developers community
TM Forum	Multiple standards development	UvA	Following activities with respect to: Cloud/multi-cloud services deployment, management	Telecom industry Emerging cloud IaaS providers

			and operation Zero Touch services provisioning model	
CSA	Follow Best Practices documents, contribute where applicable	SixSq, TUB, UvA	Cloud security Big Data security Federated security services	Cloud industry Research community

5. Conclusions

This report provides an overview of the major dissemination and exploitation activities for the first year of the CYCLONE project. The project CYCLONE is an Innovation Action within the scope of H2020 EU framework. Therefore, the effective dissemination is of great importance in order to ensure the adoption (during and after the project) of the CYCLONE results and achievements.

Our dissemination and exploitation activities are based on the general dissemination strategy described in Dissemination and Communication Plan (DCP) and the branding strategy described in respective CYCLONE deliverable. We designed the logo and other elements, such as the colour scheme, fonts that are embedded into the published and web materials and are integrated into the project software.

We deployed the website <http://www.cyclone-project.eu> at GitHub and use LinkedIn (H2020 CYCLONE LinkedIn group) and Twitter (@H2020_CYCLONE) to reach the audience. In total, we have published ten papers and posters and organized three workshops that are discussed in the document. Finally, we gave two demos, and participated in activities of six different standardization bodies.

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7. Abbreviations and Definitions

7.1. Definitions

No specific definitions are introduced in this document.

7.2. Abbreviations

CSA	Cloud Security Alliance
DC	Data Centre
DMTF	Distributed Management Task Force
DOA	
E2E	End-to-End
EGI	European Grid Initiative
IaaS	Infrastructure-as-a-Service
ICAF	Intercloud Architecture Framework
ICFF	Intercloud Federation Framework
IPR	Intellectual Property Rights
IT	Information Technology
IEEE	Institute of Electrical and Electronic Engineers
IETF	Internet Engineering Task Force
NaaS	Network-as-a-Service
NFV	Network Function Virtualization
NIST	National Institute of Standards and Technology
OGF	Open Grid Forum
PaaS	Platform-as-a-Service
PoP	Point of Presence
RDA	Research Data Alliance
SaaS	Software-as-a-Service
SDN	Software Defined Networking
SDO	Standard Development Organisations
SP	Service Provider
TCTP	Trusted Cloud Transfer Protocol
TM Forum	Tele Management Forum
TNC	TERENA Networking Conference

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