

**ARTIST**  
**FP7-317859**



*Advanced software-based seRvice provisioning and  
migraTion of legacy Software*

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**Deliverable D4.4**  
**Collaboration Plan**

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<b>Abstract:</b>	This deliverable details the specific plan for collaboration between ARTIST and relevant EC funded projects on technical topics that are of joint interest. Main focus will be the formation of specific working groups that will organize and execute the collaboration activities defined during projects lifecycle. The collaboration activities and revision of the plan will be reported in the due dissemination reports by period
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## Document Description

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## Terms and abbreviations

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EC	European Commission
FIA	Future Internet Assembly

## Executive Summary

Following EC's approach "*It is worthwhile to collaborate with others to amplify your work*", ARTIST is open to collaborate and support the liaison and co-operation activities with the other ICT projects under the WP2011/2012 Objective "Cloud Computing, Internet of Services and Advanced Software Engineering" as well as with other Frameworks (i.e. ITEA2, ARTEMIS) in the relevant scientific area.

The specific plan for collaboration, including the specific working groups ARTIST will participate to will be detailed in this deliverable. The cooperation aims at exploiting synergies between the projects and increasing the impact of the ICT initiative. ARTIST consortium members are willing to provide contributions to the following activities:

- Exploitation of synergies / technical concentration: participation to workshops, joint meetings with other projects
- Joint activities for exchange, dissemination and training.
- Production and dissemination of publications aimed for communication with the general public.
- Co-ordination of standardisation efforts.
- Contribution to Open Source repositories and projects

The main goal of this deliverable is to achieve a framework for a virtuous collaboration cycle between ARTIST and other related projects/initiatives and an upward spiral of performance that yields mutual benefits. This collaborative framework is based on sharing complementary goals, philosophy, purpose, decision making, and best practices between ARTIST and other European projects or initiatives for the dissemination of common results in an effective way and for encouraging new innovative ways of working. The strategy will be continuously updated along the project lifetime and will be focused on different issues or areas of common interest.

Finally, this document, which refers only to expectations and initial collaboration actions, and collaboration activities, will be reported through subsequent versions of the deliverable Dissemination Report (M12, M24 and M36) that will take into account the outcomes of all the actions carried out by ARTIST under the collaboration framework that is proposed here.



## 1 Introduction

Collaboration is a fundamental concept in terms of approaching and driving innovation. In this context, ARTIST focuses on cooperating with and contributing to other related European projects. This will thus ensure the wide diffusion and effective promotion of ideas and projects results to the target audience.

The specific plan for collaboration, including the specific working groups that this project will participate, is presented in this deliverable through the next sections. The cooperation aims at exploiting synergies between the projects and increasing the impact of the ICT initiative. Exploitation of synergies between ARTIST and the other projects will consist of participation in workshops, contributions to working groups, joint dissemination activities and production of joint dissemination materials.

The related consortium collaboration activities and plans per year will be reported at the end of each reporting period with related updated versions of this document. The consortium will report on the activities done and will be updating the plans for the next period.

### 1.1 Essential part of the dissemination strategy

Collaboration activities among projects are strongly encouraged. This has been the case since several years and has taken different forms. The basic idea behind collaboration is that projects working in the same areas can have synergies to exploit, can complement each other both in research and business, can join forces to reach their target audience, can reach the necessary critical mass to have a real impact, and so on<sup>1</sup>.

The following table (Table 1) summarizes the main characteristics of collaboration activities, presenting why they are an essential part of project's dissemination strategy.

**Table 1:** Characteristics of collaboration activities

Characteristics	Description
<b>Objective</b>	Allow projects to know better each other in order to avoid spending time to do the same things Exploiting synergies between the projects and increasing the impact of the ICT initiative Raise awareness of the projects
<b>Key Message/Content</b>	Introduce the ARTIST system and components Introduce the topics, issues and technologies Introduce the project objectives
<b>Target Stakeholder</b>	All ARTIST target groups
<b>Information Required &amp; Level of Detail</b>	Content from project partners and especially the technical ones This info should be common to all the projects of the synergy
<b>Information Providers</b>	All Partners
<b>Activity Required for Production &amp; Delivery</b>	Members of the synergy to continuously communicate with each other
<b>Frequency &amp; Timing</b>	In response to key milestones and objectives achieved by each project

## 1.2 Structure of the document

This deliverable summarizes the collaboration plan of ARTIST project focusing on describing the potential synergies and liaison activities between ARTIST and other related projects and initiatives. The report is structured as follows:

Section 2, describes briefly the collaboration strategy of ARTIST focusing on the principles and guidelines provided by the EC,

Section 3 provides a brief introduction of the projects and initiatives that have been identified so far as potential sources of establishing cooperation activities during the lifetime of ARTIST, taking as reference goals, scope, and common challenges,

Section 4, presents the Working Groups relevant to ARTIST topics and potential initiatives of collaboration,

Section 5, mentions briefly the initial collaboration plan and activities undertaken by ARTIST during the last 6 months and

Section 6, concludes the document.

## 2 ARTIST collaboration strategy and plan

### 2.1 Overview

ARTIST is open to collaborate with other EC funded projects on technical topics that are of joint interest. This means that ARTIST will actively seek collaboration with other projects with the aim to enhance the best practices in open source development methodologies and to promote better the joint open source software results of Objective 1.2 towards a wider community of open source developers. To this end, all partners will contribute and especially the ones who actually carry out the technical work, the collaboration will not only be addressed at a management level but at a technical as well and ARTIST will aim co-operation activities with other EC funded projects in Objective 1.2.

A detailed description of the collaboration activities can only be compiled when intensive bilateral and multilateral discussions between projects are organized beforehand. These discussions will lead to agreements and synchronization only if ARTIST consortium will define early in the project:

- all the ARTIST's technologies that can be shared with external parties,
- an availability timeplan for those and
- the research, technological and business areas that can have synergies to exploit, can complement to and join forces to reach the target audience.

Diverse collaboration activities will be addressed in the context of the project, such as, joint publications, organization of joint event or workshops, collaboration with Working Groups (CWG), etc.

### 2.2 EC guidelines

According to the EC guidelines, the following activities should be considered and if possible adopted as potential collaboration between ARTIST and other initiatives:

- **Exploitation of synergies / technical concertation.**
  - This may be setting up a forum for discussion on technical grounds. The aim is to allow projects to know better each other activities in order to avoid spending time to do the same things, but rather to join forces, wherever possible and sound.
  - It is expected that the projects will find out by themselves the most relevant common issues that are worth discussing among other projects.
- **Joint activities for exchange, dissemination and training.** Some ideas of the possible activities, which can include both “inward exchange between projects” and “outward dissemination”, are:
  - A yearly dissemination, exchange, collaboration event (with the support action HOLA! in 2012, described in Section 2.3.3). Projects can join forces to prepare sessions on specific topics. These events could combine an external dissemination event with a concertation type meeting on the next day for FP7 projects. Other events like industry fora, etc. may also be linked to this event.
  - Project participants can help each other in developing dissemination material that can be used for communication, including the general public. For instance, by developing a video demonstrating the results of the projects, joint publications in journals or books, or by writing articles about the projects, featuring the benefits of the research carried out for the community, that address the general public.

- Joint conferences or workshops.
- Joint training events, like e.g. the yearly Summer School, organised by the S-Cube project with the support of others. Projects that want to do training can become involved in this.
- **Standardisation.**

There is a Collaboration Working Group trying to coordinate the activities done by the projects on standardisation. It would be useful if projects active on standardisation activities or planning to propose their results in standards body could join their forces with those already active on this. The idea behind this is that having an organised European approach to the relevant standardisation groups, could help achieving the needed critical mass to better represent European interest.

ARTIST consortium acknowledges and will adopt the guidelines provided by EC about collaboration activities, focusing on the basic principles that ensure the creation of a successful framework of collaboration.

## **2.3 Collaboration policy and timeplan**

With respect to the EC guidelines, this section will detail the activities defined by the ARTIST consortium, which will pave the way for formulating efficient collaborations with other initiative. Specific deadlines are scheduled for these activities in order to ensure that they will be undertaken and completed by the partners as soon as possible.

### **2.3.1 Identify ARTIST assets that can be shared with external parties**

The first step is to identify the ARTIST assets that could be shared with external parties. This activity will be an on-going one, since at the time of the compilation of the specific report only a few technical and contextual aspects have been addressed by the ARTIST consortium.

The following table (Table 2) presents the ARTIST assets/technologies that have been identified at this early phase of the project as potential areas of collaboration with other projects and working groups. This table will be continuously updated according to ARTIST technological progress.

Table 2: Artist assets that can be shared

Asset – Technology - Achievements	WP	ARTIST approach	Areas of collaboration	Responsible partner	Project contact person
Maturity Assessment Tool (MAT)	WP5	This tool will analyse, at a very high level, the application to be migrated as – is in the current situation and the application to –be, that is, the desired situation in terms of technology (architecture, programming language, cloud provider, etc) and business (business model and organizational processes)	Projects, working groups or other initiatives that deal with MAT analysis	TECNALIA	Coordinator: <a href="#">Clara Pezuela</a> Diss. Manager: <a href="#">Ilias Spais</a>
A guide for migrating a legacy application Overall ARTIST methodology	WP6	A guide to ARTIST methodology process framework tool. This tool, based on EPF (Eclipse Process Framework) and standards such as SPEM2.0, will guide ARTIST users in the migration process	Projects, working groups or other initiatives that deal with EPF (Eclipse Process Framework)	ICCS	Coordinator: <a href="#">Clara Pezuela</a> Diss. Manager: <a href="#">Ilias Spais</a>
CloudML section of PIM4Cloud	WP7	The main baseline is expected to be the PIM4Cloud metamodel from <a href="#">REMICS</a> project (mentioned in Section 3), so ARTIST extensions will be made available once finalized and published. These extensions are mainly related to performance aspects of the cloud resources, thus focusing more on the CloudML section of PIM4Cloud but also in later stages in the PaaS and SaaS layers that are envisioned to be added	Projects, working groups or other initiatives that deal with PIM4Cloud metamodel	ICCS	Coordinator: <a href="#">Clara Pezuela</a> Diss. Manager: <a href="#">Ilias Spais</a>
<a href="#">Utilize and enhance MoDisco (Model Discovery) technology</a>	WP8	Model Driven Reverse Engineering platform dealing notably with the Model Discovery activities (Eclipse-MDT MoDisco project)	Building of new model discoverers to be then contributed to and/or plugged into the framework	INRIA	Coordinator: <a href="#">Clara Pezuela</a> Diss. Manager: <a href="#">Ilias Spais</a>
Utilize and enhance ATL model-to-model transformation tool	WP8	ATL, as the model-to-model transformation tool is going to be largely used in ARTIST in general and in WP8 in particular (Eclipse M2M ATL project)	Improving model-to-model transformations techniques in general or ATL in particular	INRIA	Coordinator: <a href="#">Clara Pezuela</a> Diss. Manager: <a href="#">Ilias Spais</a>
Cloud Modeling Language	WP9	Migration techniques such as optimization patterns, Cloud-specific modeling languages and transformations to source code by using model-to-text transformation languages	Cloud Modeling Language	TUWIEN	Coordinator: <a href="#">Clara Pezuela</a> Diss. Manager: <a href="#">Ilias Spais</a>
ARTIST repository	WP10	For storing and retrieving the artefacts relevant to the migration process. Key part of ARTIST that acts as knowledge base in several instantiations of the ARTIST methodology	Projects, working groups or other initiatives that deal with model storage, artefact / model management or (horizontal) artefact traceability	Fraunhofer	Coordinator: <a href="#">Clara Pezuela</a> Diss. Manager: <a href="#">Ilias Spais</a>
A model-based testing framework for functional and non-functional requirements	WP11	Will allow the generation of test cases both on model and on source-code level based on abstract representations of the systems behaviors (i.e., UML activity diagrams). Based on those test cases the behavioral equivalence of two systems (i.e., legacy system and cloud-based systems) can be evaluated. By annotating the behavior models with statistics about the runtime (e.g., how long a method call will take), non-functional requirements can also be evaluated	Technologies ARTIST will use include the <a href="#">fUML standard</a> , and the <a href="#">MARTE UML profile</a>  Model-based testing methods to generate testing frameworks	TUWIEN	Coordinator: <a href="#">Clara Pezuela</a> Diss. Manager: <a href="#">Ilias Spais</a>

### 2.3.2 ARTIST and Future Internet Assembly (FIA)

The second step is to investigate if ARTIST is willing to join [Future Internet Assembly](#) (FIA) process and what can bring to the discussion about the Future Internet. This activity is requested by the EC:

*“FIA is an optional part of the collaboration activities. Key question for participating in FIA is what the project and its participants could bring into a discussion about the Future Internet. The detailed issues are well elaborated in the Bled Declaration. If a project wants to join the FIA process, it must indicate in the DoW its willingness to adhere to the Bled Declaration.”*

FIA focuses on 4 specific issues related to future internet assemblies:

- Management and governance
- Trust at scale and high granularity
- Architectures and infrastructures
- Lifecycle engineering for Future Internet Applications

Currently FIA brings together around 150 research projects that are part of Challenge 1 of the ICT programme of FP7. These projects are advancing the state of the art in:

- The network of the future.
- Cloud Computing, Internet of Services and Advanced Software Engineering.
- Internet-connected objects.
- Trustworthy ICT.
- Networked Media and Search Systems.
- Socio-economic considerations for the Future Internet.
- Application domains for the Future Internet.
- Future Internet Research and Experimentation (FIRE).

The Assembly is structured to permit open interactions and cross-fertilization across technical domains, reaching out to whoever has talent in Europe's Future Internet research community.

It works towards:

- Vision, challenges, scenarios and roadmaps for FI research.
- The development of pre-normative principles, concepts, design, architectures, recommendations and functional specifications of key FI system components and their interfaces.
- The development and maintenance of a consolidated calendar of events.
- Steering the FIA community towards a higher degree of coordination and integration of the FI research actions by improving communication and collaboration between participating communities and improving the visibility of research results.

The ARTIST project is willing to join FIA by participating in its activities with respect to what it will bring into a discussion. Indicative activities are:

- Participate in FIA Conferences.
- Take part in developing Future Internet systems, technologies and architectures through working groups and projects, possibly leading to contributions to standards.
- Draft high quality publications, such as the FIA Book.
- Contribute if possible to FI open repository ARTIST assets as potential solutions and experiments for wide scale use.

### 2.3.3 ARTIST and HOLA! Portal

Another similar to the previous step is to investigate which of the [Collaboration Working Groups](#) of the [HOLA! Portal](#) can be approached with the ultimate goal to join them and contribute respectively.

HOLA! is an ICT collaboration portal with more than 400 members. It is a trustworthy community of experts from the academic and private sectors willing to cooperate on various levels. It supports and holds the so-called CWGs (Collaboration Working Groups). It is a place to find members, ideas and initiatives within scientific areas of expertise and interest, and it represents an opportunity to meet with experts from other ICT areas, other project coordinators and proposal developers. This represents a rather useful and productive resource for any EU-funded project.

ARTIST is already a [member](#) of the HOLA! Portal. The members of the consortium have started seeking for similar to ARTIST collaboration working groups to join. This is again an on-going activity throughout projects lifecycle.

### 2.3.4 Standards

The mission of [Standards](#) Working Group is to “Support and foster the collaboration, coordination and dissemination of standardisation efforts for ICT Service and Software Architecture, Infrastructures and Engineering projects within the Framework Programme 7” and as such nicely fits in with the dissemination and collaboration activities of ARTIST.

### 2.3.5 Success criteria

The following table presents ARTIST success indicators regarding its collaboration activities throughout projects lifecycle. This is an initial list and will be updated by the end of the first reporting period (M12).

**Table 3:** ARTIST collaboration success indicators

Indicators	Technological collaboration	Events co-organized	Joint dissemination and training	Standardization <sup>1</sup>	Working Groups (WG)
Cloud computing	Join forces in enhancing and developing at least one technological asset	At least 3 workshops and/or satellite events and/or joint sessions	-	Join forces to contribute to one standardization body	Participate in more than 5 WG (FIA, Standards and HOLA included)
Advanced Software Engineering	-		At least 2 joint papers and/or articles Creation of dissemination material	-	Participate in more than 3 WG (HOLA and Standards included)

### 2.3.6 Timeplan

An initial timeplan has been formulated until the end of the 1<sup>st</sup> reporting period (M12) to ensure project’s engagement to collaboration activities. An updating of this timeplan will be done in the Dissemination Report at M12 for the next period.

<sup>1</sup> Deliverable 2.1 will detail ARTIST standardization activities

**Table 4:** Time – schedule collaborating activities (1<sup>st</sup> reporting period)



Activities	M6	M7	M8	M9	M10	M11	M12
Collaboration plan							
Identify ARTIST's technologies that can be shared with external parties							
Investigate if ARTIST is willing to join FIA process, HOLA! portal							
Check the Standards Working Group and define ARTIST's engagement respectively							
Investigate which of the Collaboration WG of the HOLA! Portal can be approached							
Update the list of ICT projects that can join forces							
Update the list of WG that can be approached							
Communicate in bi-monthly intervals with the list of projects and WG							
Report the outcomes and constantly update the collaboration plan							









### 3 Collaboration with ICT EU funded projects and beyond








The following table (Table 5) presents in details a list of European projects that are most related to ARTIST and subsequently potential projects for collaboration. This list will be continuously updated according to project collaboration achievements.

*Explanation symbols*

	Already approached
	To be considered

**Table 5:** Candidate projects for collaboration


Project	Overview	Objective and scope	Potential areas for collaboration	Status
	<p>MModel-Driven Approach for design and execution of applications on multiple Clouds - MODAClouds (FP7-ICT-2011-8)</p> <p>Duration: 01/10/2012 – 30/09/2015</p>	<p>The main goal of MODAClouds is to provide methods, a decision support system, an open source IDE and run-time environment for the high-level design, early prototyping, semi-automatic code generation, and automatic deployment of applications on multi-Clouds with guaranteed QoS.</p>	<p>Model-driven approach Modeling of applications Cost/Risks analysis model</p>	
	<p>PaaSAGE: Model Based Cloud Platform Upperware – PaaSAGE (FP7-ICT-2011-8)</p> <p>Duration: 01/10/2012 - 30/09/2016</p>	<p>PaaSAGE delivers an open and integrated platform to support model based lifecycle management of Cloud applications.</p> <p>The platform and the accompanying methodology allow model-based development, configuration, optimisation, and deployment of existing and new applications independently of the existing Cloud infrastructures.</p>	<p>Cloud modeling Code optimization</p>	
	<p>REuse and Migration of legacy applications to Interoperable Cloud Services - REMICS (FP7-ICT-2010-5)</p> <p>Duration: 1/9/2010 – 31/8/2013</p>	<p>The goal of REMICS is to develop advanced model driven methodology and tools for Reuse and Migration of legacy applications to Interoperable Cloud Services. Service Cloud paradigm stands for combination of cloud computing and Service Oriented Architecture (SOA) for development of Software as a Service (SaaS) systems.</p>	<p>Extending REMICS PIM4CLOUD metamodel thus focusing more on the CloudML section</p>	

		The main objective of the REMICS project is to “specify, develop and evaluate a tool-supported model driven methodology for migrating legacy applications to interoperable Service Cloud platforms”.		
	Building service testbeds on FIRE (Future Internet Research and Experimentation)  Duration: 01/06/2010 – 30/11/2013	BonFIRE will design, build and operate a multi-site Cloud prototype FIRE facility to support research across applications, services and systems at all stages of the R&D lifecycle, targeting the services research community on Future Internet.	With regard to this project, ICCS has an informal (at the moment) contact with key people (former associates in other projects) that were involved in similar research efforts. The related task of this project has been completed, however ICCS is in contact in order to share the results and conclusions. BONFIRE also offers access to its infrastructure for testing and experimentation purposes. We will pursue this access potentially for the benchmarking task of WP7. ATOS, as coordinator of this project also, will foster this collaboration,	
	A cloud interoperability framework and platform for user-centric, semantically-enhanced service-oriented applications design, deployment and distributed execution  Duration: 2010/09/01 – 2013/08/31	Cloud4SOA focuses on resolving the semantic interoperability issues that exist in current Clouds platforms and infrastructures and on introducing a user-centric approach for applications which are built upon and deployed using Cloud resources.	Semantic interoperability between competitive PaaS offerings, supporting the discovery of offerings based on the semantic profiles that describe applications to be delivered.	-
	Virtualized Storage Services Foundation for the Future Internet  Duration: October 2010 – September 2013	VISION Cloud aims at combining all types of metadata and information characterizing different parts / “elements” of the system (data objects, resources, services, requirements) into a Unified Model, which will allow for optimum decision making, data movement, as well as resource and service management, also leading to enhanced Quality of Service.	The VISION unified model can be a starting point for the richness of information that is needed from a modelling point of view.	
	Advanced Security Service cERTificate for SOA  Duration: 2010/10/01 – 2013/09/30	ASSERT4SOA will fill this gap by producing novel techniques and tools – fully integrated within the SOA lifecycle – for expressing, assessing and certifying security properties for complex service-oriented applications, composed of distributed software services that may dynamically be selected, assembled and replaced, and running within complex and continuously evolving software ecosystems.	The ASSERT4SOA abstract models may inform the meta-modelling and characterisation of IaaS and PaaS. Moreover the ASSERT4SOA Security Ontology may inform the requirements and architecture of the ARTIST repository.	







## 4 Identification of other collaboration Working Groups




The following table (Table 6) presents in details a list of Working Groups that have identified so far as potential candidates for collaboration. This list will be continuously updated according to project collaboration achievements.

### *Explanation symbols*

	Already approached
	To be considered

**Table 6:** Candidate Working Groups for collaboration

Working Group	Overview	Potential areas for collaboration	Responsible WP/partner	Status
<a href="#">Mcloud Spanish project</a>	It works on a Maturity Assessment Tool (MAT)	Maturity Assessment Tool (MAT)	WP5 – TECNALIA	
<a href="#">Mcloud Spanish project</a>	It works on a methodology of migrating a legacy application to the cloud	Methodology of migrating a legacy application to the cloud	WP6 – TECNALIA	
<a href="#">Eclipse-MDT MoDisco project</a>	Dealing notably with the Model Discovery activities	Improving the provided Model Driven Reverse Engineering support	WP8 – INRIA	
<a href="#">Eclipse M2M ATL Project</a>	Model-to-model transformation	Improving model-to-model transformations techniques in general or ATL in particular	WP8 – INRIA	
<a href="#">Christian-Albrechts-University of Kiel</a>	A research group working on “Cloud Modeling Language”	Cloud Modeling Language Already in contact with Prof. Dr. Wilhelm Hasselbring	WP9 – TUWIEN	
<a href="#">University of Paderborn</a>	A research group working on “Cloud Modeling Language”	Cloud Modeling Language Already in contact with Prof. Dr. Gregor Engels	WP9 – TUWIEN	

<a href="#">The ModelBus team</a>	ModelBus is a model-driven tool integration framework which allows you to build a seamlessly integrated tool environment for your system engineering process.	Model repositories	WP10 – Fraunhofer	
<a href="#">EMFTrace team</a>	EMFTrace extends the EMFStore repository by dependencies and traceability links between related models of different modeling languages. The explicit modeling of dependencies and traceability links of different types shall support evolutionary changes by impact analysis, early evaluation of quality flaws, and better comprehension. It is an open source project to support the practical application of research results regarding development methods for evolution of software architectures and for software reengineering.	Model repositories	WP10 – Fraunhofer	
<a href="#">FShell</a>	FShell is a testing tool that was initially developed as part of the DFG funded project FORTAS (Formal Timing Analysis Suite for Real Time Programs) and will be further improved within the WWTF funded project " <a href="#">PROSEED: Proof Seeding for Software Verification</a> "	The plan is to extend FShell in ARTIST model-based testing approach to generate test cases. The collaboration partner is the group of "Formal Methods in Systems Engineering" of the TU Vienna	WP11 – TUWIEN	

## 5 Collaboration activities so far

Collaboration for the Internet of Services (IoS) projects has been traditionally structured in working groups, but can also take different forms. Since many years, all projects meet yearly during a two-day collaboration event. The latest Collaboration Event was scheduled for October 16-17, 2012. Moreover, in the last years the Future Internet Assembly has encouraged collaboration among projects of different areas, all contributing to the Future Internet. The FIA has met twice per year until now. However, no events beside the one in Aalborg in May were planned for 2012 (before ARTIST's official kick off).

ARTIST project participated in the IoS ([Internet of Services](#)) collaboration event (16<sup>th</sup> – 17<sup>th</sup> of October). On 16<sup>th</sup> evening, a private meeting between ARTIST, REMICS, ModaClouds and PaaSage was held. The meeting was productive and straight to the point. Several collaborations actions were agreed in this meeting:

- Setting up a joint task force about Cloud Modelling. Basically the idea is to join forces in enhancing and developing cloud modeling languages. Every project would have cleared their frontiers and what is needed for everyone. In this way we would avoid to develop the same items in two projects at the same time and we can offer at the end of the projects a most complete cloud modeling language.
- Produced joint publications about the result of this task force. Some preliminary paper can be submitted in short presenting the work to be done and at the end a scientific publication with the whole work done.
- Joint session in Summer School (13-15<sup>th</sup> July, 2013, Crete). The project will be presented there in a complementary way.
- ARTIST Newsletter will include joint news about three projects.
- Joint workshop about cloud modeling in IPEC 2013, 22<sup>nd</sup> April, organized by ModaClouds, PaaSage and ARTIST.

Additionally a meeting with a Spanish national project was held to start exploring the synergies between two projects and how they can feed each other. It is envisaged a possible reusability of some project results in WP8. At the moment both projects have exchanged information and they are studying future steps.

Finally, ARTIST is being considered in one of the analysis performed by CIRRUS, a Support Action of Objective 1.4 about Security in the Cloud. This project will analyse the treatment of the security in the cloud in diverse projects to generate a state of the art about the current status of the topic and the gap areas.

## 6 Conclusions

The ARTIST consortium believes that the collaboration between several projects can generate more relevant impact and better performance than individual projects. This document summarises the collaboration plan for ARTIST as foreseen at month 6 of the project.

All projects and initiatives considered by ARTIST as sources for contributions and collaboration have been selected based on the degree of compatibility as perceived at this stage. Our aim is to keep the flow of information open to other European projects/initiatives to facilitate the identification of new synergies to exploit.

Finally, it should be mentioned that the collaboration plan will be updated by the consortium and the related involved partners in WP4, per project period. The document will be revised with information about activities carried out and updated plans for the following periods.

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<sup>1</sup> EC guidelines, “Negotiation checklist for the Internet of Services projects D3 – External”