

EFFECTSPPLUS CONSORTIUM

Waterford Institute Of Technology



ATOS ORIGIN



Hewlett-Packard Limited (HPLB)



SAP (AG)



Universita Degli Studi Di Trento



REPORT AUTHOR

Frances Cleary , Waterford Institute
Of technology (fcleary@tssg.org)

REPORT CONTRIBUTORS

Nick Wainwright (HP) , Jim Clarke
(WIT) , Keith Howker (WIT) , Michele
Bezzi (SAP) , Volkmar Lotz (SAP),
Isabel Vinagre Torres (ATOS) ,
Pedro Soria Rodriguez(ATOS), Nick
Papanikolaou (HP), Roland Rieke ,
Fabio Martinelli, workshop atten-
dees.



Effectsplus 1st Cluster Event

March 29th & 30th 2011

DIAMANT Conference Centre,
Brussels, Belgium

EFFECTSPPLUS CONSORTIUM

Waterford institute Of Technology



ATOS ORIGIN



Hewlett-Packard Limited (HPLB)



SAP (AG)



Universita Degli Studi Di Trento



Table Of Contents

Table Of Contents

<i><u>Guest Speaker : Jesus Villasante</u></i>	3
<i><u>Objectives of 1st cluster Meeting</u></i>	5
<i><u>Trust and Security Research Roadmap for FP8</u></i>	7
<i><u>Knowledge Transfer Session Report</u></i>	8
<i><u>Services and Clouds Cluster Report</u></i>	12
<i><u>Systems and Networks Cluster Report</u></i>	14
<i><u>Networking and Co-ordination (Non-technical) Cluster Report</u></i>	17
<i><u>Day 2 Trust and security research roadmap for FP8 Report</u></i>	19
<i><u>Effectsplus Future Events</u></i>	22
<i><u>Appendix A Agenda</u></i>	23
<i><u>Appendix B Registered Attendees</u></i>	25
<i><u>Appendix C Cluster Participants</u></i>	26
<i><u>Appendix D Cluster Communication</u></i>	28

Introductory Guest Speaker : Jesus Villasante

Mr Jesus Villasante, Head of Unit F5 Trust and Security Research, opened the second day of Effectsplus 1st Clustering event.

He emphasised that he wanted to open the event for two reasons:

- To express importance of Effectsplus project objectives for Unit F5 and for the participants themselves.
- To use this as an opportunity to introduce the expectations that Unit F5 have with regard to Effectsplus.

In his opening, Mr Villasante highlighted the three 3 main activities of Effectsplus:

Collaboration and clustering of projects – *projects are not just operating as singular projects, but are working in the context of a programme. The Commission does not just fund individual projects; the projects' research is also contributing to a larger programme. This collaboration will be more emphasised in the future and will raise the impact of the projects.*

Strategic Research Agenda - *Analysing the results of the projects in a holistic way. The funding for Trust and Security in the 7th Framework Programme was in the order of 290M Euros. The FP8 funding for trust and security should also be substantial. However, it will be difficult to convince the decision makers that the money was well spent without giving the evidence that results had maximum impact. We need to prove collectively as a programme that we have delivered good results with high impact potential.*

Future Internet activities– *The projects have been active and been integrating well within activities such as the Future Internet assembly. The Commission wants to state clearly that the weight of trust and security elements will need to continue to be embedded there. Unit F5 clearly intends to make the trust and security area very visible in the Future Internet area.*

Mr Villasante highlighted that the work that Unit F5 is doing has an impact on trust and security both in the EU and worldwide. We need to work together to show how our work is relevant to the digital agenda, which is promoting issues such as: improved security, broadband deployment, skills, etc. Technology is changing the world and is changing the policy and regulation. We need to demonstrate how ICT trust and security communities are contributing to that. Are we delivering solutions? Are we giving them anything worthwhile? The Effectsplus project through its early analysis and clustering activities has already started to provide a good synthesis on what we are doing collectively and this must continue with the support of the individual projects carrying out the RTD work.

Jesus Villasante
European Commission
Head of Trust & security
Unit F5



Introductory speech : Jesus Villasante , Contd

Mr Villasante reiterated that Unit F5 will support Effectsplus, as much as possible, in a number of ways:

1. Unit F5 will work closely together with Effectsplus to see that the work is useful to all trust and security projects.
2. Unit F5 will encourage participation of other projects to the collaboration/clustering and FI activities. As far as the Commission is concerned, projects have an obligation to work with other projects in a collaborative fashion.
3. We can explore the possibility of making trust and security events more explicit (and larger) with its own brand, in the future. The Commission wants to explore ways for increasing the potential of the collaboration. In the present policy context with a stronger focus on trust and security, we can make the ICT trust and security research community considerably more influential.

The proposal for FP8 will be ready by the end of the year, and therefore the Commission would appreciate to engage in a discussion of these activities for the future. Effectsplus provides an excellent forum to see how we can work together and outreach to other initiatives as appropriate.

Objectives of 1st Cluster Meeting

Effectsplus 1st cluster event took place at DIAMANT conference centre , Brussels , March 29th and 30th 2011. Ms Frances Cleary the coordinator of Effectsplus opened the event with an overview of the projects represented at the cluster meeting and a run through of the scheduled agenda and objectives.

The main purpose of this 1st cluster meeting was

- First official kick off of clustering activities, with active participation of trust and security project participants, to identify topics of interest, plan and start work on common collaborative cluster objectives.
- Contribution by Trust and Security attendees to the T&S aspect of the FIA research Roadmapping activity. The FIA Research Roadmapping Activity aims to deliver an integrated, comprehensive roadmap for the Future Internet. The roadmap will detail a vision for the Future Internet, namely, how it will integrate into the fabric of society to enable a whole range of new products, services and even business models, from around 2020 onwards. During the Effectsplus kick off meeting a dedicated session to gather specific trust and security challenges will be included, this is a valuable opportunity for attendees to contribute towards FP8

The initial clustering activities that kicked off at the event were as follows:

Technical Clusters

- Services and Clouds Cluster
- Systems and Networks Cluster

Non-Technical Cluster

- Networking and Coordination Cluster

Agenda and list of registered participants Of the event can be viewed in [Appendix A](#) and [Appendix B](#) and cluster participants can be found in [Appendix C](#) of this Report.

Figure 1 below provides an overview of the suggested alignment of projects based on the initial Effectsplus analysis phase and interview process. Effectsplus outreach activities also focus on interaction with external trust and security and future internet initiatives, providing valuable links in this main thematic area. Table 1 also provides projects with an overview of the tangible outputs of their participation to such a clustering event.

Supporting presentations from this event can be found at the following Effectsplus Website link : <http://www.effectsplus.eu/reports-and-presentations-1st-effectsplus-cluster-meeting/>

Frances Cleary
Effectsplus Coordinator
Waterford Institute Of
Technology - TSSG



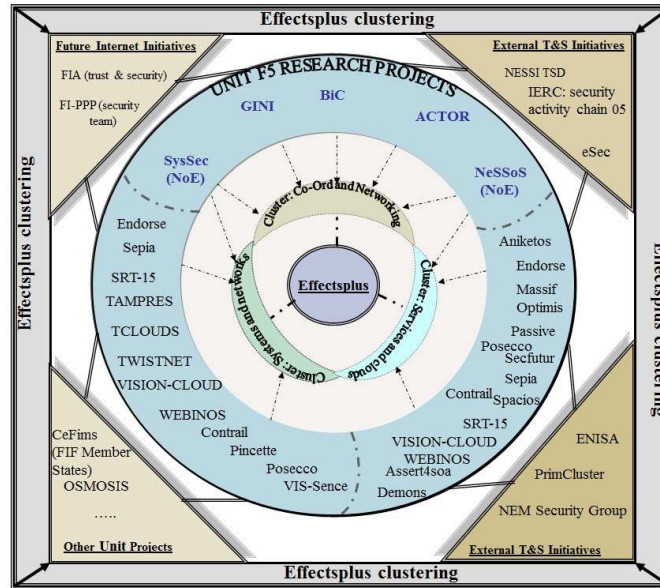


Figure 1 : Effectsplus Clustering

Benefits/Tangible Outputs for project participation	Achieved
Dissemination of your projects objectives/innovations to the wider T&S research area.	YES (project presentations Day 1)
Your project actively contributed to the direction the clustering activities take from the start, placing your project at the core of these activities.	YES
Provided a channel to identify future possible collaborations with other projects in your cluster (Collaborative joint papers, workshops, links between projects)	YES(Identify workshops and common topics)
During each project review phase, you can confidently report about your participation and contribution to the trust and security clustering activities.	YES (ongoing)
Your project has actively contributed to the Trust and Security research roadmap.	YES
Through research roadmapping session participation you have contributed towards the identification of issues/ challenges in the research area you work in being input to FP8, hence working to continue and push for future funding within this space.	YES
Via your participation to the roadmapping session you will be provided with a roadmapping session report following the event. Through such a report you will gain knowledge of the main trust and security roadmapping issues and challenges identified by the clusters, providing you with a vision of future challenges that may need to be addressed in this thematic space.	YES (Version 1 available in this report)

Table 1 : Tangible Outputs for project participation

Opening presentation can be

viewed at the following Effectsplus Website

Link: <http://www.effectsplus.eu/files/2011/04/Day-1-Opening- Frances-Cleary.pdf>

Nick Wainwright (HP)
Hewlett Packard Ltd



Trust and Security Research Roadmap for FP8

Mr Nick Wainwright (HP) proceeded to provide a detailed presentation on the current research roadmapping activities ongoing towards FP8 and a prelude to planned interactive roadmapping sessions on Day 2 of the Effectsplus cluster meeting.

Mr Wainwright detailed the research roadmap building framework, to work towards attaining the trust and security input, which in turn would contribute towards the overall roadmapping activity and be inputted to FP8. Referring back to the Effectsplus Open communications event on February 1st 2011, where this roadmapping building framework was first executed. He summarised that following an interactive session at this event based on the 4 main key questions, the output was then assessed based on general consensus, if such challenges/ gaps exist in the short/medium/long term. Following this example, Mr Wainwright proceeded to give an overview of expectations and objectives for the specific trust and security roadmapping sessions planned for day 2 of the Effectsplus clustering event. The following schedule was planned for the morning of Day2 of the event.

Parallel sessions in cluster groups

- Map Presentations and ideas for contribution to the roadmap.
- Roadmap building interactively.
- Review roadmap, discuss priorities, create summary.

Joint session of both cluster groups

- Present and review the roadmap results coming from the sessions.

Mr Wainwright commented that all contributions will be captured in a mind map with a corresponding report supporting this mindmap view. He also stated his intentions to present a summary view of the trust and security roadmap at the FIA Roadmap Open Meeting on 31st March 2011 in Brussels.

Following this the report and mind map will be circulated for review by the attendees of this meeting, then more widely in the trust & Security research community. The roadmap will be submitted to EC, as a contribution towards FP8, the Effectsplus Strategic Research agenda and the Future Internet Assembly Research Roadmap.

More information on the overall FIA research Roadmap activities can be found at the following link. http://fisa.future-internet.eu/index.php/FIA_Research_Roadmap

Mr Wainwrights Research Roadmapping Overview presentation can be viewed at the following Effectsplus Website

Link : http://www.effectsplus.eu/files/2011/04/FIA-Research-Roadmapping-Overview_Nick-wainwright.pdf

Knowledge Transfer Session Report

Knowledge Transfer
Session Presenters

TAS³ Project

David Chadwick
University of Kent



A dedicated knowledge transfer session took place involving presentations of recommendations and results coming from mature and finished projects. The projects that participated included the following

- TAS³ - David Chadwick
- PICOS — Christian Kahl
- SWIFT - Ronald Marx
- Primelife - Michele Bezzi
- Session Moderator - Jim Clarke WIT– TSSG

The main objective of this session was the dissemination of results coming from these projects and the identification of gaps for future work in this thematic area. Based on the level of commitment and interest, the question of participants willingness to initiate a specific new stream of clustering activity around privacy and identity was also raised, with the scope being to examine the privacy and identity related issues emerging from services and cloud, systems and networks clusters, and how old and new projects can address and continue work in this area.

TAS³ Project ‘*Research Objectives and Technologies*’ David Chadwick

The TAS³ Integrated Project (*Trusted Architecture for Securely Shared Services*) aims to have a European-wide impact on services based upon personal information, which is typically generated over a human lifetime and therefore is collected & stored at distributed locations and used in a multitude of business processes.

The TAS³ project researches & develops a **trusted architecture** and set of **adaptive security services** which will preserve personal privacy and confidentiality in dynamic environments. Specifically, TAS³ will provide a **next generation trust & security architecture** that is ready to:

1. meet the requirements of complex and highly versatile business processes,
2. enables the dynamic user-centric management of policies,
3. will ensure end-to-end secure transmission of personal information and user-controlled attributes between heterogeneous, context dependent and continuously changing systems.

This includes a trust and data protection infrastructure for managing & assessing the risks associated with identity authentication (level of assurance) and the trustworthiness of actors.

The architecture proposed by the TAS³ project can be instantiated in different contexts because the nature of this personal information is not specific to TAS³.

The TAS³ project validates & demonstrates its generic applicability in the domains of **e-Employability** and **e-Health**.

Link : <http://vds1628.sivit.org/tas3/>

During his presentation, Mr Chadwick provided an overview of the research components and technologies being used by the project, such as TAS³ project specific audit service, dashboard, Trust and Reputation service components to mention but some. For more indepth details please see the TAS³ presentation slideset.

Link to Mr Chadwicks presentation : <http://www.effectsplus.eu/files/2011/04/TAS3-Effects-Plus-Meeting.pdf>

Knowledge Transfer Session Report

Knowledge Transfer

Session Presenters

PICOS Project

Christian Kahl

Goethe University Frankfurt



***PICOS Project ‘Privacy and Identity Issues in Context-Rich Mobile Community Services’
Christian Kahl***

Mr Christian Kahl provided an introduction and approach of the work carried out in the PICOS project. PICOS meaning “Privacy and Identity Management for Community Services”. The objective of the project is to advance the state of the art in technologies that provide privacy-enhanced identity and trust management features within complex community-supporting services that are built on Next Generation Networks and delivered by multiple communication service providers. The approach taken by the project is to research, develop, build trial and evaluate an open, privacy-respecting, trust-enabling identity management platform that supports the provision of community services by mobile communication service providers.

Mr Kahl proceeded to provide an summary overview of the following main features of work within the PICOS project, such as Partial Identities , Sub-Communities, Blurring ,Private Site ,MyFiles ,Privacy Policies ,Privacy Advisor.

Mr Kahl then proceeded to convey his ideas on Aspects Of Future Research, these included the following.

Marketing/Advertising in Communities

- Location Based Advertising
- Addressing groups/communities instead of single users
- Users automatically being used as implicit “testifiers”

Mobile (Group) Recommender Systems

- Usage of community members’ profile information
- Context-related use of profile information
- Integration in (mobile) community services

Mobile (Device) Sensing

- Usage of (continuously) sensed data in e.g. communities
- Automatic (unconscious) delivery of data
- Pre-defined policies

PICOS web Link : <http://www.picos-project.eu/Home.75.0.html>

Link to Mr Kahls presentation : <http://www.effectsplus.eu/files/2011/04/PICOS-project-Christian-Kahl.pdf>

Knowledge Transfer Session Report

Knowledge Transfer

Session Presenters

SWIFT Project

Ronald Marx - Fraunhofer
Institute for Secure Information
Technology SIT



SWIFT Project *'Secure Widespread identities for federated Telecommunications'* **Roland Marx**

SWIFT leverages identity technology as a key to integrate service and transport infrastructures for the benefit of users and the providers. It focuses on extending identity functions and federation to the network while addressing usability and privacy concerns.

Mr Marx presented the key objectives of the SWIFT project

- Solve identity fragmentation of today and support privacy and minimize identity information disclosure
- Build a cross-layer identity framework for networks and services with identity as key convergence enabler to bridge existing platforms, protocols and solutions
- Use multiple personae and support identity-based privacy across layers and a data model supporting new and dynamic business.
- Support ubiquitous connectivity, user-centred roaming and mobility and single sign-on based on vertical and horizontal federation.

Mr Marx then proceeded to detail an overview of SWIFT key achievements and providing an overview of SWIFTS distributed IdM architecture.

Mr Marx concluded with an overview of New challenges within this space.

Internet of things

- Pseudonymised or anonymised personal data
- Identities lifecycle

Cloud computing

- Distributed and hierarchical identity and access management

Future Internet

- Privacy protection across layers by using virtual/partial identities.

SWIFT web Link : <http://www.ist-swift.org/>

Knowledge Transfer Session Report

[Knowledge Transfer
Session Presenters](#)

[Primelife Project](#)
Michele Bezzi (SAP)



Primelife Project ‘Overview and examples of reusable results’ Michele Bezzi

In his presentation Mr Bezzi focused on two main reusable results of PrimeLife

1. Identity Mixer (Idemix)
2. PrimeLife Policy Language (PPL)

Both together enable a system to allow users to access services of service providers in a privacy-enhanced way.

The identity mixer allows the user to mix existing certified credentials or to extract a single piece of them. Therefore, the user can release the minimal number of (certified) personal information, according to the data minimization principle.

The PrimeLife Policy Language (PPL) supports the automatic handling of privacy policy. Users and service providers can express their privacy policies or privacy preferences using a machine-readable language. Whenever users have to release their personal data, for example for subscribing to a social network site, the service provider privacy policy is compared with the user privacy preferences. In case the policies do not agree, the user can visualize, using a graphic interface, possible conflicts, and decide to release or not the personal information.

Mr Bezzi proceeded to detail further the Identity Mixer and how to authenticate in a privacy-enhanced way and the availability of the Open source Identity mixer Toolbox via following links <http://idemix.wordpress.com/> or <http://prime.inf.tu-dresden.de/idemix/>

Mr Bezzi then continued to provide an overview of Primelife Policy Language (PPL), detailing the main feature of PPL, the structure of PPL, and example interaction overviews. He stated that the PPL language and engine will receive one more iteration before final.

Beyond Idemix and the policy language presented here, Primelife developed other privacy-enhancing tools addressing, for example, social networks, wikis, online scheduling.

The main message Mr Bezzi wanted to convey is the availability of Primelife building blocks for future systems, with parts being available as open source and all being available as open specification.

The availability of such building blocks will simplify tasks for future projects, enabling them to have strong identity protection for service access and data management.

Primelife web Link : <http://www.primelife.eu/>

Results: <http://www.primelife.eu/results/documents>

Open source: <http://www.primelife.eu/results/opensource>

Link to Mr Bezzi presentation : <http://www.effectsplus.eu/files/2011/04/Primelife-project-Michele-Bezzi.pdf>

Services and Clouds Cluster Report

Services and Clouds

cluster Lead

Fabio Martinelli (CNR)



Services and Cloud cluster first meeting had two main objectives:

- Introducing the participating projects
- Identify common research interests and themes for cross-projects technical workshops.

Mr Fabio Martinelli, supported by Mr Michele Bezzi lead the activities of the services and clouds cluster breakout group

On the first day, the following participating projects, had the chance to introduce themselves, shortly presenting the main objectives, vision and results of the projects.

- ANIKETOS (Richard Sanders)
- ASSERT4SOA (Ernesto Damiani)
- MASSIF (Roland Rieke)
- NESSoS (Carmen Fernandez Gago)
- PASSIVE (Panagiotis Rizomilitios)
- POSECCO (Olivier Bettan)

These project presentations can be viewed at the following link <http://www.effectsplus.eu/reports-and-presentations-1st-effectsplus-cluster-meeting/>

Based on the presentations and the discussions that followed during the second day, the cluster leads proceeded to identify a set of topics which are addressed by multiple projects. A summary is reported in the table below.

	Assurance	Policy	Trust	Secure Service Composition	Semantics/ Ontology	Others
Aniketos	✓	✓	✓	✓		Threat analysis
Assert4SOA	✓			✓	✓	Testing, Formal Models
Massif			✓			Complex event management Compliance
NESSoS	✓	✓	✓	✓	✓	Security Metrics
PASSIVE	✓	✓	✓			
POSECCO	✓	✓			✓	Secure Configuration
TAS3	✓	✓	✓	✓	✓	Audit
PrimeLife		✓	✓			Privacy

Services and Clouds Cluster Report

Services and Clouds
cluster

This initial set is clearly not exhaustive, but it constitutes a first common ground on which further activities can be built on.

In particular, *Security policy and Software Assurance* were selected as the initial subjects for a deeper discussions.

Summary Wrap up of cluster break out session Day 1 can be viewed at the following link : <http://www.effectsplus.eu/files/2011/04/Services-and-Cloud-Fabio-Martinelli-Michele-Bezzi.pdf>

Two technical workshops will be organized in the following months, inviting the projects to share their works and results:

- The *Software Assurance and Certification* workshop will be held during the 2nd Effectsplus Cluster meeting (July 4th & 5th at Vrije University , Amsterdam), Next steps and information regarding the initial planning and organization of this workshop, will be distributed to projects in early may.
- For *Security Policy*, it was proposed to leverage on the presence of the major players in policy research for the *IEEE International Symposium on Policies for Distributed Systems and Networks* <http://www.ieee-policy.org/> , and co-locating a specific technical workshop on the activities of EU projects on security policy on June 9th at CNR premises. Further details on this event will be made available in early May.

Day 2 Services and Cloud summary Wrap up presentation can be found at the following link : <http://www.effectsplus.eu/files/2011/04/services-and-cloud-cluster-wrap-up-Michele-Bezzi.pdf>

Systems and Networks Cluster Report

Systems and Networks
cluster Lead

Roland Rieke - Fraun-
hofer SIT



Mr Roland Rieke , the Systems and Network cluster lead officially kicked off the 1st session of this breakout cluster on March 29th during the Effectsplus event with a follow up cluster breakout session on March 30th.

The main objectives of the cluster meeting were as follows

1. Let the projects introduce themselves.
2. A short introductory presentation (5 to 10 minutes per project) of their main research objectives, as well as technologies used.
3. Focus: identification of common technical issues across projects in each cluster & possible collaborations. With the objective of identifying one particular common topic to have a technical workshop on at the next effectsplus cluster event in July in Amsterdam.

During the initial Systems and Networks Cluster , the following projects presented their objectives and innovative aspects.

- MASSIF – Roland Rieke
- DEMONS project - Roland Rieke (S Rao)
- VIKING – Gunnar Bjorkman
- ENDORSE - Mark McLaughlin
- TWISNET - Mike Ludwig
- SYSSEC - Evangelos Markartos
- TECOM – Trusted Embedded Computing - Klaus Michael Koch
- TClouds - Klaus Michael Koch
- WSAN4CIP – Peter Langendoerfer
- TAMPRES - Peter Langendoerfer
- POSECCO - Antonio Lioy
- VIS-SENSE – James Davey

For detailed project presentations for this cluster group , they can be accessed via the following link <http://www.effectsplus.eu/reports-and-presentations-1st-effectsplus-cluster-meeting/>

Following the initial introductory presentations, the focus of the meeting was then to work to identify the main project cross topical areas. The following table conveys the initial areas highlighted by participating projects to this cluster group.

Systems and Networks Cluster Report

Systems and Networks
cluster

Relationships between projects in Network and Systems cluster

	high-level commonalities				shared interests			unique interests
	red	blue	green	purple	orange	light blue	yellow	
MASSIF	✓				scalable sec. CEP	trusted resilient arch. & TC	cross-layer sec. events	privacy in SIEM cross-domain(P2P)
DEMONS	✓							
VIKING	✓	✓			SCADA security + test-bed			attack models (bayesian) society models
ENDORSE			✓					priv. rules def lang + XAMCL certify compliance & legal
TWISNet						sensor net auth n		light-weight sec. critical infrastructures, smart grid
SysSec		✓						predict threats virtual centre of excellence
TECOM				✓		trusted computing		
TClouds				✓	smart grid	trusted computing		trusted clouds of clouds
WSAN4CIP					critical infrastructures		sensor IDs	
TAMPRES							security by design (of HW)	
PoSecCo			✓				ontology reasoner	
VIS-SENSE		✓						malware analysis network analysis

Discussion around Joint Workshops

It was commented at the cluster session that most projects have some commitment to hold one or more workshops based on their work. The suggestion was made (by MASSIF) that it could be beneficial if several projects could join together to hold a combined workshop with some common core themes and topics.

The idea was developed further into a more extensive event that could include more F5 projects. It would be different from a cluster meeting in being open/invitational. It could provide the basis for an ongoing, regular workshop: not merely to act as a shop window, but to be a working meeting. In this it would differ by being concerned with developing common ideas and working on common problems.

Effectsplus could help with organisation and logistics, but the main funding would come from the projects' budgets for their committed workshops.

This whole possibility is being explored further by Effectsplus with the Commission.

Networking and Coordination Non-Technical Cluster Report

Networking & Coordination cluster

Cluster Lead:

Jim Clarke—WIT-TSSG



Mr Jim Clarke , cluster leader of the networking and coordination Cluster, held the first session for this cluster on the evening of March 29th of the effectsplus 1st clustering event. This clustering activity is aimed at CSA's, CA's, NoE's, SA's and external trust and security initiatives.

The main participants to this cluster can be seen in [Appendix C](#) of this report. Participating projects to date : BiC, Effectsplus, ACTOR,GINI-SA, SysSec, NeSSoS,OSMOSIS, SeServ.

The main aim of this session was as follows

- ✦ Identify synergies
- ✦ Scoping activities together
- ✦ Calendar coordination/alignments
- ✦ Converge on what is meant by 'roadmapping'
- ✦ Outreach to other initiatives/units when appropriate.

Prior to the March 29th & 30th event Mr Clarke gathered and compiled relevant project information from each of the main interested participants to the cluster meeting. The main topics of information gathered included the following

- Project (Name, main contact point)
- Core objectives
- Roadmapping activities
- Events (first 12 months)
- Deliverables (first 12 months)
- Foreseen linkages

From this valuable information gathered from all contributors, this enables this cluster group to have a broad view on activities ongoing in the trust and security space, and help projects limit any clashes, increasing collaboration and opportunities for identifying possible fruitful linkages.

Mr Clarke commenced the session by reviewing the content supplied by the participants of each project, in order to highlight the main events and activities underway currently, so all participants have a common understanding.

A general discussion ensued about the various roadmapping activities underway by each of the participants. As roadmapping activities were important tasks that contributed towards future funding streams (eg FP8),and also towards strategic research agendas. There was common agreement that a more detailed common framework or approach to roadmapping may be beneficial to such activities. The following main points highlight the main items raised during the event, as a possible actions coming from the meeting that this cluster group could address.

Action Items, to follow up on for next cluster Meeting in July.

- Understand what roadmaps there are already (e.g.. Inco-Trust, Think-Trust, ...)
- Understand what stages projects are at.
- Populate common event calendar on effectsplus website.
- Understand who is doing roadmaps, who is doing research agendas, ..recommendations, etc.
- Sort of a menu of what will be available and when .
- Try to converge on what we mean by road-mapping for each individual projects.
- Sharing of roadmaps or components thereof as required .
 - Framework needed for sharing
 - Framework of reducing to the level of details required.

Mr Clarke also raised the question regarding outreach activities.

Outreach – what do we mean by this, who to outreach to?

Some samples of such outreach to External Bodies and Initiatives identified: IERC, ENISA, eTPS Trust & Security Activities (NESSI TSD, NEM, ..), FIA T&S (via Effects+), FI-PPPs T&S activities (TBD), Member States FI Forum (ceFIMS), OECD, Other DG Units CSA's, NOE's (D, G, etc.), Others TBD

In the coming weeks future events from participants will be uploaded to the Networking and Coordination Cluster Events calendar on the main Effectsplus website, helping to promote all events in the trust and security space.

The following main events from participating attendees were highlighted during the session.

BiC

May 2011: EU – Brazil bilateral Workshop;
 July 2011: BiC INCO session during SysSec WS 2011;
 Sept 2011: EU – India bi-lateral workshop;Dec.
 2011: EU – South Africa bi-lateral workshop

Effectsplus

4th/5th July, Amsterdam – Second cluster meeting

ACTOR

June 15th working group meeting Helsinki

SysSec

July 6th 2011: First SysSec Workshop, Amsterdam.

NeSSoS

Security Policies for Future Internet (PoFI) Pisa June 2011
 Oslo NESSoS plenary meeting (June 2011)
 Trento NESSoS plenary meeting (August 2011) collocated with RE
 International Workshop in Formal Aspects in Security and Trust FAST (collocated with ESORICS 2011) Sep 2011.

OSMOSIS

May 2011: First OSMOSIS International Event

Day 2: Trust and Security Research Roadmap for FP8 Report

Roadmapping interactive session Day 2 Summary Report

The Effectsplus project is working with the Trust and Security research community to develop a research roadmap with the intention of identifying key topics and approaches that require further research in the timeframe of Framework 8, i.e. for research in the 2014-2020 timeframe with potential for impact in the mid-long term. Towards this objective, the Effectsplus team held a research roadmap workshops at the cluster meetings on 30th March. Each of the cluster groups participated in sessions that included both presentations from participants and an interactive roadmap activity.

The framework for gathering inputs is the framework that Effectsplus developed for gathering contributions to the Future Internet Assembly research roadmap which is structured around four key questions

- What are **significant changes** between now and 2020+ that impact this topic area? What are the drivers of this change?
- What is your **vision** for 2020+ in this topic/area? How will we make a difference?
- What are the **hard challenges, big gaps**, what will be difficult, what are the significant barriers to achieving this vision?
- What radical approaches, disruptive technologies, new ideas might be **solutions** to these challenges?

The material from the presentations and interactive sessions has been integrated into a mind-map and the broad headings that were identified during the workshops are given in the table below. These will form the starting point for the final report from the workshop (although it should be noted that the final heading may differ substantially from those identified below after further analysis and feedback).

A first draft of the roadmap session outputs is available for review, feedback, and elaboration, for more details see page 21 of this report .

Effectsplus held a Future Internet Research Roadmap on the 31st March at which researchers and participants in the Future Internet Assembly presented and discussed a broader research roadmap addressing the whole of the space covered by Challenge 1 ICT Framework Programme. Over 20 speakers presented summaries of their fields and over 100 participants contributed to an active discussion and debate. The Trust and Security research road mapping outputs were presented in summary by Nick Papanikolaou of HP Labs and Effectsplus alongside inputs from other support action projects engaged in FIA and individual contributions from researchers. The final report of the FIA roadmap activity will be presented at FIA in Budapest in May.

Day 2: Trust and Security Research Roadmap for FP8 Report

Effectsplus Attendees Roadmapping presentations can be viewed at the following Effectsplus Website : <http://www.effectsplus.eu/reports-and-presentations-1st-effectsplus-cluster-meeting/>

- F.Martinelli—Nessos
- E.Marketos—SysSec
- P.Langendoerfer—IHP
- M.Surridge—IT Innovation
- R.Rieke—MASSIF
- R.Sanders—Aniketos
- G.Bjoerkman—Viking

Initial broad headings topics addressed in the road mapping workshop			
What is changing?	What is our vision (for)	What are the challenges, gaps?	What are the solutions?
<ul style="list-style-type: none"> • Devices • Personalisation • Services • threats/crime • Privacy • Attitudes • scale of the internet • physical connects to digital world • socio-economic • Infrastructures • increase in data • use in critical infrastructures • increase in internet use in sectors 	<ul style="list-style-type: none"> • Privacy • Services • tools and development • Risk • socio-economic • enforcement and accountability • Energy • enabling new things • the internet • Security • end users 	<ul style="list-style-type: none"> • user-friendly • security / usability • situation awareness • tools and development • Metrics • Assurance • Policies • Identity • Cloud • transparency • privacy • services • models • resilience • socio-economic • risk assessment • systems • availability • devices 	<ul style="list-style-type: none"> • languages / interoperability • tools • assurance • privacy • cooperation • identity • models • enforcement • socio-economic • education • technologies • critical infrastructure • approaches and architectures • data

Summary Report of Input to the Trust and Security Roadmapping session

The first draft of this roadmapping report document , summarizing the discussions and contributing input from the dedicated interactive Trust and Security roadmapping session at the cluster meeting on Day 2, has since been populated and categorized.

The first draft of the Trust and Security Roadmapping report document is currently available at the following link:

<http://www.effectsplus.eu/files/2011/04/Trust-and-Security-Research-Roadmap-Draft-1.pdf>

The xmind (<http://www.xmind.net/>) mindmap to support this has been stored in the Effectsplus cluster subversion repository at the following link.

<http://svn.clustering.effectsplus.eu/svn/clusteringeffectsplus.eu/March 29th and 30th cluster meeting/Trust and security Roadmapping Report/T&S-Merged-Processed.xmind>

[*Note if you do not currently have access to this effectsplus clustering subversion repository, login and password details can be requested by contacting Frances Cleary (fcleary@tssg.org)]

All comments or initial feedback on this first draft T&S Roadmapping document can be provided to Nick Wainwright (nick.wainwright@hp.com) Or Nick Papanikolaou (nick.papanikolaou@hp.com).

Next Steps

1. Following initial feedback phase, a new updated draft will be completed, this version of the document will be a translation from draft 1 (bullet point text) to draft 2 (full text version of the document)
2. Once draft 2 is complete it will also be distributed to the cluster participants, and a summary presentation of the trust and security roadmapping document will be provided at the next Effectsplus July cluster meeting in Amsterdam.

Effectsplus Future Events

Effectsplus Next Clustering Event Will take place July 4th & 5th at Vrije University , Amsterdam.

More details on agenda , location, travel details etc will be available on the Effectsplus website <http://www.effectsplus.eu/effectsplus-2nd-clustering-event-july-4th-5th-2011/> in advance of the event.

This July clustering event will encompass 2 main workshops

1. Services and Cloud cluster : ‘‘software assurance and certification workshop’’
2. Systems and Networks cluster : ‘‘ Modelling workshop’’

Other workshop: Dedicated Security Policy (Policies for the Future), co-located with *IEEE International Symposium on Policies for Distributed Systems and Networks* on June 9th , 2011.

Location : CNR - National Research Council, Area della Ricerca di Pisa, Via G. Moruzzi, 156124 - ITALY . Link: <http://www.ieee-policy.org/> , <http://www.effectsplus.eu/workshop-policies-for-the-future-june-9th-pisa/>

For more information

Please see Effectsplus Website <http://www.effectsplus.eu/>

For further details please
contact Effectsplus coordinator
Frances Cleary
(fcleary@tssg.org)

APPENDIX A Agenda

Tuesday, March 29th, 2011

12:30 am - 13:00 pm	<i>Registration</i>	
13:00 pm - 13:30 pm	<p>Welcome & Agenda : Frances Cleary (Coordinator of Effectsplus)</p> <p>FIA Research Roadmapping Overview: Speaker: Nick Wainwright (Room: Darwin)</p>	
13:30 pm - 14:30 pm	<p>Transfer of Knowledge (Results /Recommendations) Session Speakers from projects TAS3, SWIFT, PICOS, Primelife, GINI-SA Session Moderator : Lefteris Leontaridis (GINI-SA) (Room: Darwin)</p>	
14:30 pm - 15:00 pm	<i>Teal Coffee Break</i>	
15:05 pm - 15:10 pm	<p>Short introduction on clustering activities : Michele Bezzi (Room: Darwin)</p>	
15:10 pm - 17:00 pm Cluster breakout sessions	<p>Systems & Networks (Room: Huygens)</p>	<p>Services & Cloud (Room: Galilei)</p>
	<i>Day 1 sessions Finish</i>	
17:00 pm - 19:00 pm	<p>Networking & Coordination Non-technical cluster (For CSA's, NoEs and External Trust and security Initiatives) (Room: Darwin)</p>	

APPENDIX A Agenda

Wednesday, March 30th, 2011

8:30 am - 9:00 am	<i>Tea/coffee on arrival</i>	
9:00 am - 9:30 am	<p>Introductory speech : Head of Unit F5 Jesus Villasante</p> <p>Cluster Leads : Short overview of Tuesday cluster breakout sessions</p> <p>Plenary: Roadmapping interactive session Intro : Nick Wainwright (Room: Darwin)</p>	
9:30 am - 11:00 am	<p>Roadmapping group 1 (Systems & Networks) (Room: Huygens) <u>Lead: Nick Wainwright</u></p>	<p>Roadmapping group 2 (services & Cloud/ networking & coordination) (Room : Darwin) <u>Lead : Nick Panikoloau</u></p>
10:30 am - 11:00 am	<i>Tea/coffee break</i>	
11:00 am - 11:45 pm	<p>Roadmapping group 1 (Systems & Networks) (Room: Huygens) <u>Lead: Nick Wainwright</u></p>	<p>Roadmapping group 2 (services & Cloud/ networking & coordination) (Room : Darwin) <u>Lead : Nick Panikoloau</u></p>
11:45 am - 12:30 pm	<p>Two groups merge: For overall Roadmapping discussion (Room Darwin)</p>	
12:30 pm - 13:30 pm	<i>lunch Break</i>	
13:30 pm - 15:00 pm Cluster breakout sessions	<p>Systems & Networks (Room: Huygens)</p>	<p>Services & Cloud (Room: Galilei)</p>
15:00 pm - 15:30 pm	<i>Tea/coffee break</i>	
15:30 pm - 16:30 pm	<p><u>Plenary and wrap Up</u> Summary of Output from roadmapping sessions/next steps : Speaker : Nick Wainwright (HP) Reports from cluster breakout session leads/next steps Speakers : Cluster Leads Next clustering event , follow on activities Speaker : Michele Bezzi (SAP)</p>	
	<i>Close of Event</i>	

Appendix B: Registered Attendees

<u>Name</u>	<u>Project/Other</u>
Frances Cleary	Effectsplus
Keith Howker	Effectsplus
Nick wainwright	EFFECTSPLUS
Martin Mühleck	PO, NESSOS, POSECCO, ASSERT4SOA
Evangelos Markatos	SysSec
Olivier BETTAN	PoSecCo
Panagiotis Rizomiliotis	PASSIVE
Roland Rieke	MASSIF
Mario Scillia	Project Officer Unit(F5)
Isabel Vinagre	Effects+ partner
Klaus-Michael KOCH	TCLOUDS (+TECOM)
DEMOSTHENES IKONOMOU	European Network and Information Security Agency
Antonio Lioy	Posecco Stork Tclouds Webinos
Ernesto Damiani	ASSERT4SOA
Nigel Jefferies	Effects+
Mike Surridge	Representing SESERV
James Davey	VIS-SENSE
Peter Langendoerfer	TAMPRS/WSAN4CIP
Francisco Moyano	NESSoS http://www.nessos-project.eu/
Domenico Presenza	ASSERT4SOA
Nick Papanikolaou	EFFECTSPLUS
Richard Sanders	257930 Aniketos
Mark McLaughlin	ENDORSE project
Michele Bezzi	Primelife, Assert4SOA
Fabio Massacci	EFFECTS+SecureChangeNESSOSMASTER
Antonio Ramos García	Proyecto Inno en Proteccion de Infraestructuras Críticas
David Chadwick	TAS3Privacy and Trust Cluster
Carmen Fernandez Gago	NESSoS
Christian Kahl	PICOS
Sathyanarayana Rao	DEMONS
James Clarke	BIC
Christina Hochleitner	uTRUSTit - Usable Trust in the Internet of Things
Volkmar Lotz	Effects+
Gunnar Björkman	Project Coordinator VIKING
Fabio Martinelli	NESSoS/ANIKETOS/CONTRAIL
Atta Badii	ELLIOT
David Fuschi	ELLIOT
Mike Ludwig	TwisNet
Gerardo Fernandez Navarrete	NESSoS
Cristian Olimid	Project officer EffectsPlus
Lefteris Leontaridis	GINI-SA
Cornelia Graf	uTRUSTit - Usable Trust in the Internet of Things

Appendix C: Cluster Participants

Services & Cloud Cluster Participants

<u>Name</u>	<u>Organisation</u>
Isabel Vinagre	ATOS
David chadwick	University Kent
Francisco Moyano	UMA
Gerardo Fernandez	UMA
Carmen Fernandez Gago	UMA
Cristian Kahl	GUF
Domenico Presenza	ENG
Ernesto Damiani	UNINI
Fabio martinelli	CNR
Antonio Ramos	AEI-SRSI
Nigel Jefferies	HUAWEI
Mike Surridge	IT Innovation
Nick Papanikolaou	HP Labs
Panos Rizomiliotis	Aegean Uni
Olivier Bettan	Thales
Michele Bezzi	SAP
Atta Badii	Uni if Reading
Jim Clarke	WIT-TSSG
Frances Cleary	WIT-TSSG
Volkmar lotz	SAP

Systems and Networks Cluster Participants

<u>Name</u>	<u>Organisation</u>
Keith howker	WIT-TSSG
Gunnar Bjorkman	ABB
Mark Mc Loughlin	WIT-TSSG
Mike Ludwig	Dresden elektronik
Fabio massacci	UNITN
Evangelos Markatos	syssec
Mario scillia	EC
Nick Wainwright	HP
Klaus Michael	TECHNIKON Forschungsgesellschaft mbH
Peter Langendoerfer	IHP
Antonio Lioy	Polito
James davey	Fraunhofer IGD
Ronald Marx	Fraunhofer SIT
Roland Reike	Fraunhofer SIT

Networking & coordination Cluster Participants

Frances Cleary
Jim Clarke
Fabio Martinelli
Keith Howker
Mike surridge
Antonio Ramos
Lefteris Leontardis
Nick Papanikolaou
Isabel Vinagre
Nick Wainwright
Volkmar Lotz
Evangelos markatos

Effectspluis
BIC
Nessos
Effectsplus
Seserv
AEI-SRSI
GINI-SA
HP
ATOS Origin
HP
SAP
Syssec

APPENDIX D Cluster Communication

Dedicated email lists and LinkedIn Groups have been setup to support the activities of the defined clusters.

Services and clouds cluster

Subscription to this cluster email list via the following link
http://listserv.tssg.org/mailman/listinfo/ts-services_cloud

Cluster LinkedIn Group: <http://www.linkedin.com/e/rdhgt3-gk6q5r9l-3e/vgh/3788378/>

Systems and networks cluster

Subscription to this cluster email list via the following link :
http://listserv.tssg.org/mailman/listinfo/ts-systems_networks

Cluster LinkedIn Group: <http://www.linkedin.com/e/rdhgt3-gk6qqejg-16/vgh/3788408/>

Networking and coordination cluster

Subscription to this cluster email list via the following link :
http://listserv.tssg.org/mailman/listinfo/ts-networking_coordination

Cluster LinkedIn Group: <http://www.linkedin.com/e/rdhgt3-gk6qxudg-3h/vgh/3788418/>

Cluster subversion repository.

<http://svn.clustering.effectsplus.eu/svn/clusteringeffectsplus.eu>

For access, please contact fcleary@tssg.org to request a pwd/login.