SEVENTH FRAMEWORK PROGRAMME

Information & Communication Technologies
Trustworthy ICT

NETWORK OF EXCELLENCE

A European Network of Excellence in Managing Threats and
Vulnerabilities in the Future Internet: *Europe for the World*

D3.1: Framework for Researcher Exchanges [†]

Abstract: In this deliverable, we outline the framework for researcher exchanges.

Contractual Date of Delivery	February 2011
Actual Date of Delivery	February 2011
Deliverable Security Class	Public
Editor	Herbert Bos
Contributors	All *SysSec* partners

The *SysSec* consortium consists of:

FORTH-ICS	Coordinator	Greece
Politecnico Di Milano	Principal Contractor	Italy
Vrije Universiteit Amsterdam	Principal Contractor	The Netherlands
Institut Eurécom	Principal Contractor	France
IPP-BAS	Principal Contractor	Bulgaria
Technical University of Vienna	Principal Contractor	Austria
Chalmers University	Principal Contractor	Sweden
TUBITAK-UEKAE	Principal Contractor	Turkey

Contents

1

Introduction

To work towards *SysSec*'s goal to create a center of academic excellence, we should improve the mobility and cross-fertilisation of European researchers in the field of system security. For this reason, one of the three pillars supporting *SysSec*'s Education and Training Work Package comprises a funding scheme to finance short term visits of researchers and staff. Enabling and promoting such visits is the core objective of task WP3.3. The other two tasks in the work package concern the common curriculum (WP3.2) and summer schools (WP3.1).

SysSec envisions a virtual center of excellence where people move freely from one lab to another, focusing on the up-to-date research areas and collaborating with the expert scientists on the problem. In this framework, *SysSec* will encourage two types of short-term visits funded through appropriate scholarships:

Student Scholarships offered to young students in order to allow them to visit a core *SysSec* partner and work on a project.

Senior Researcher Scholarships offered to senior researchers for visiting one of the core partners and collaborate on a pre-defined project.

Students and senior researchers may come from core partners, from associated partners, or from other universities as well. The funding for exchanges will take place in the form of competitive scholarships after an open call for scholarship application. The scholarships are aimed to cover much of the living and travel expenses, thus lowering the threshold for researcher and student exchanges.

In this short deliverable, we outline the framework we established for the exchange scheme. In Section 2, we start by discussing related activities in other projects. Section 3 explains the general procedure, rules and reimbursement process. Next, we outline the way in which we will advertise the

scheme, by discussing our call for proposals (Section 4). We summarise and conclude in Section 5.

2

Related activities

Like *SysSec*, a variety of other European initiatives is or has been undertaking efforts to stimulate researcher mobility. Examples include HiPEAC[1], CoreGRID[2], and S-Cube[3]. We have studied these initiatives before creating our own scholarship framework.

HiPEAC focuses on industrial internships and funds several industrial internships for PhD students in Europe in order to increase industry-academia collaboration. The programme encourages PhD students who are doing their PhDs at one of the HiPEAC industrial institutions in Europe to gain industrial experience. The internships cover a 3-month period, with either 55€ per diem or 5000€ for 3 months, plus travel expenses.

CoreGRID has three different programmes to stimulate researcher mobility: (1) mobility of researchers for short visits, (2) a fellowship programme for longer stays, between 6 to 12 months in 2 different Core-GRID partners, and (3) a career development module:

1. The *mobility for the researchers* programme allows researchers working in one of the CoreGRID institutes to visit another institute for duration ranging from 2 weeks to 6 months. Specifically, this programme consists of scientific visits and research stays between members of different CoreGRID institutions, as for example those involved in the same WP research task. Typical stays will be of one month, although other durations could be considered.

---

[1] http://www.hipeac.net/node/2133
[2] http://www.coregrid.net/mambo/content/view/149/155
[3] http://www.s-cube-network.eu/about-s-cube-pages/mobility-of-researchers-wp-ia-2.1

For each stay a joint proposal from the visitor and hosting institutions should be presented, describing a project summary about the interest of the stay.

2. The *fellowship programme* is inspired by the *Marie Curie Actions*[4] and the *ERCIM* Fellowship Programme[5]. Young researchers, hosted by one or two research facilities for two distinct 6, 9 or 12 months periods, are funded to closely interact with major researchers and leading scientific communities. The programmer is intended for postgraduate students who want to work in research groups involved in CoreGRID activities. Fellows participate in regular in-house discussions and seminars and contribute to the CoreGRID effort in order to integrate scientific activities and dissemination across Europe. The successful fellows must agree to engage in the research topic proposed by one or both of the hosting institutions. The programme is advertised via a call for proposals that is approximately yearly. The *industrial* fellowship programme consists in spending time at a CoreGRID partner's institution and at an industrial company (member of the IAB or external industrial partners).

3. The *career development* module consists mainly of a website that helps institutions to advertise vacancies and researchers to find positions, ideally within the network to preserve excellence in the research environment.

S-Cube Mobility for Researchers initiative aims to (1) create suitable scientific, administrative, financial, social and practical conditions for scientific stays of researchers, post-doc and PhD students, (2) identify researcher mobility and re-location opportunities by analyzing dependencies, overlaps, and possible synergies among beneficiaries as an outcome of the collaborations within the JRAs, (3) to establish a transparent method and criteria for selection for mobility candidates, (4) to define and enact a suitable mobility plan of researchers, post-doc and PhD students within the network, (5) to establish sustainable agreements between the beneficiaries for recurrent mobility whose duration goes beyond the duration of the network.

---

[4]http://ec.europa.eu/research/mariecurieactions/
[5]http://fellowship.ercim.eu/

3

The scholarship framework

The *SysSec* scholarships is primarily aimed at PhD students and research staff working in system security, although excellent master students doing their thesis projects will be considered as well. All projects must be related to system security.

The objective of the scholarship framework is to stimulate the mobility of research scholars between European research organizations and the *SysSec* core members in either direction.

3.1   Overview

The goals of the visits are exchange of knowledge, network building, and collaboration. The *SysSec* scholarship framework is *not* meant to fund long-term research project. Specifically, the *SysSec* exchanges should not exceed a duration of four months.

The scholarship scheme intends to lower the threshold for meaningful exchanges. To this end, the *SysSec* scholarship framework is designed with the following characteristics in mind:

Simplicity — The procedure should be *simple*: the less paperwork the better.

Significance — The scholarships should be *significant*: it should cover much of the actual expenses of the exchange (but not necessarily all).

Usefulness — The exchange should be *useful*: each application should be judged on its merits and only the most interesting/best exchanges should be funded.

In the remainder of this chapter, we describe how the *SysSec* Scholarships Committee implemented the above characteristics in the funding scheme.

3.2 A simple procedure and a significant scholarship

The funding scheme is simple both in the *application* phase and in *administration* during the exchange, once the application has been accepted.

3.2.1 Application procedure

The application process is deliberately lightweight. Indeed, unlike the researcher mobility programmes in other NoEs, the application procedure runs throughout the year. There is no deadline, and no yearly call, and applications will be considered on (at least) a bi-monthly basis. We believe that this makes it easier to apply at a time that suits the researchers.

To apply for a scholarship, the applicant should submit only the following items to the *SysSec* Scholarship Committee:

- a motivation letter explaining the purpose of the visit,

- up-to-date CV,

- duration of the visit.

In addition, applicants should provide evidence that a staff member of the hosting organisation is willing to receive them for the indicated period of time.

3.2.2 Administration of the expenses

To minimize paperwork during the visit, there will be no micro-management of expenses. Instead, the student or researcher is funded with a fixed amount of 900€/month (or 30€/day) for a maximum duration of 4 months, or 3600€ total. While the payment is not expected to cover the full living expenses, it should cover a substantial part. Limiting the funding in this way will (1) allow *SysSec* to fund more exchanges, (2) lead to motivated researchers and meaningful exchanges.

To receive payments, candidates (once at the host institution) should provide the chair of the *SysSec* Scholarship Committee with a statement by the host institution vouching for the candidates presence in their research group. All reimbursement will be handled by the work package leader of WP3 (Education and Training). This procedure has been approved and signed by the VU University Faculty of Exact Sciences.

3.3 A meaningful exchange

The fund is primarily aimed at PhD students and research staff, but master students doing their thesis projects will also be considered. The purpose of the visit should always be related to system security.

The *SysSec* scholarship is competitive and a committee of at least three members of the consortium will select the most useful and interesting application from among the submitted applications.

The *SysSec* call for scholarship proposals

Below we include a verbatim copy of the call for scholarship proposals. This text will be circulated on mailing lists and advertised on the *SysSec* website.

```
Funding for research visits related to system security

To stimulate the mobility of researchers and strengthen the community
of European system security groups, the European Commission provides
scholarships for short-term exchanges. The scholarships cover travel
and living expenses (for a maximum of 3600 euros) for visits to one of
the research organisations that constitute the 'SysSec' Network of
Excellence in System Security:

- FORTH-ICS (GR),
- Vrije Universiteit Amsterdam (NL),
- Institut Eurecom (FR),
- IPP - Bulgarian Academy of Sciences (BG),
- TU Vienna (AT),
- Chalmers University (SE)
- Politecnico di Milano (IT)

The scholarships are available to researchers of European universities
and research organizations. The fund is primarily aimed at
Ph.D. students and research staff, but master students doing their
thesis projects will also be considered. The purpose of the visit
should be related to system security.

The application process is deliberately kept lightweight. To apply for
a scholarship, the applicant should submit only the following items to
the SysSec Scholarship Committee:

- motivation letter explaining the purpose of the visit
- uptodate CV
- duration of visit

In addition, applicants should provide evidence that a staff member of
the hosting organisation is willing to receive them for the indicated
```

period of time.

The scholarship comes in the form of a fixed amount of at most 900
euros per month which should cover all expenses. The maximum funded
duration of the visit is four months. Thus, the total maximum amount
covered by the SysSec Scholarship should not exceed 3600 euros.

Applicants should submit their applications to
scholarships@syssec-project.eu. The application procedure runs
continuously throughout the year -- there is no deadline and
applications will be considered on (at least) a bi-monthly basis. The
scholarships are competitive; after evaluation by the SysSec
scholarship committee, only the best applications will be funded.

5
Summary and outlook

In this document, we have described the *SysSec* exchange scholarship scheme, its objectives, procedures, and implementation. It is the belief of the *SysSec* consortium that more mobility and exchanges between the various research centers will create a stronger European research community in system security.

We will advertise the scholarship scheme aggressively among our European colleagues. In addition, we will evaluate the perceived usefulness of the exchange by means of a brief questionnaire. The questionnaire contains multiple choice questions to score the perceived usefulness of the exchange for both the host and the guest, as well as an open question to allow both parties to motivate the scores in a short statement.

We consider the scholarship scheme to be a success if at least 20 exchanges take place during the project's life time and the overall rathing of the scheme by the participants (and the consortium) is positive.