

Network of Excellence on Engineering Secure Future Internet Software Services and Systems (NESSoS)

Resumen:

The Network of Excellence on Engineering Secure Future Internet Software Services and Systems (NESSoS) aims at constituting and integrating a long lasting research community on engineering secure software-based services and systems. The NESSoS engineering of secure software services is based on the principle of addressing security concerns from the very beginning in system analysis and design, thus contributing to reduce the amount of system and service vulnerabilities and enabling the systematic treatment of security needs through the engineering process. In light of the unique security requirements the Future Internet will expose, new results will be achieved by means of an integrated research, as to improve the necessary assurance level and to address risk and cost during the software development cycle in order to prioritize and manage investments.

Objetivos:

The Network of Excellence on Engineering Secure Future Internet Software Services and Systems (NESSoS) aims at constituting and integrating a long lasting research community on engineering secure software-based services and systems. The NESSoS engineering of secure software services is based on the principle of addressing security concerns from the very beginning in system analysis and design, thus contributing to reduce the amount of system and service vulnerabilities and enabling the systematic treatment of security needs through the engineering process. In light of the unique security requirements the Future Internet will expose, new results will be achieved by means of an integrated research, as to improve the necessary assurance level and to address risk and cost during the software development cycle in order to prioritize and manage investments.

Objetivos contribución:

UMA is responsible for strengthening the European excellence in the area of secure software services and systems by reducing the fragmentation of communities and defining an integration strategy, enhancing synergies among communities, bridging existing gaps and integrating research agendas, producing thus research roadmaps. Regarding the research activities, UMA is involved in the definition, modeling and refinement of security requirements for Future Internet services. Also, UMA is taking part in the development of model-based, compositionality design approaches to leverage new architectures for the Future Internet applications. UMA chairs the Networking and Liaison Advisory Board (NaLAB) of NESSoS which aims at strengthening the cooperation with other communities for achieving the NoE goals of integrating research communities. A Network Activity Board (NAB) has been created for monitoring and assessing the overall scientific and technological progress of the NoE. As leaders of the integration activities block UMA is also part of this board.

Entregables:

The main output of the NESSoS project will be the creation of a long lasting research community in the area of secure software engineering that aims at producing secure software-based services considering the life cycle of software. Besides the research outputs NESSoS aims at creating specific workshops, conferences, summer schools in the area as well as the production of a number of PhD thesis and Master Thesis.

Impacto:

NESSoS will integrate the research communities interested in the topic; NESSoS will re-address, integrate, harmonize and foster the research activities in the necessary areas, and will increase and spread the research excellence. NESSoS will also impact training and education activities in Europe to grow a new generation of skilled researchers and practitioners in the area. NESSoS will collaborate with industrial stakeholders to improve the industry best practices and support a rapid growth of software-based service systems in the Future Internet. The research excellence of NESSoS will contribute to increase the trustworthiness of the Future Internet by improving the overall security of software services and systems. This will support European competitiveness in this vital area.

13 Participantes

- Consiglio Nazionale delle Ricerche
- Atos Origin Sociedad Anonima Espanola
- Eidgenössische Technische Hochschule Zürich
- Fundacion Imdea Software
- Institut National de Recherche en Informatique et en Automatique
- Katholieke Universiteit Leuven
- Ludwig-Maximilians-Universitaet Muenchen
- Siemens AG
- Stiftelsen Sintef
- Universitaet Duisburg-Essen
- Universita degli Studi di Trent
- Universidad De Málaga

Presupuesto: 5,247,432.00

Equipo de investigación

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Descripción: <p>GISUM is composed of professors and researchers of the Department of Languages and Computer Sciences of UMA. It has its quarters in the Technical Informatics School and has laboratories in the Technological Park of Andalusia. The group's activities are orientated towards both basic and applied research, along with a significant dedication to technology transfer. The research is supported by important financing obtained through projects with both public and private subsidising, and the participation in European projects. The considerable growth of the group has led to a diversification and deepening of new lines of work, making it possible to create subgroups encompassing highly diverse fields related to the development of software.</p>

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Presupuesto del equipo: 391,560.00

Universidad: Universidad de Málaga

Enlace: <http://www.nessos-project.eu>

Estado: published

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