



Project Update

Issue 1, April 2007

STASIS Overview

I would like to take the opportunity to welcome you to the first edition of the STASIS project newsletter. The project started on the 1st September 2006 and lasts for 3 years. The overall goal of STASIS (SoftWare for Ambient Semantic Interoperable Services) is to provide semantic utilities which facilitate the trading of enterprises electronically.

Stuart Campbell (Project Manager)



The STASIS Team

During the first 6 months of the project much activity has taken place including fixing the depth of the STASIS Vision, examining the 'market' from both a user and a technical viewpoint (STASIS WIKI), and specifying the requirements. Also during this period, the website was launched (www.stasis-project.net) and initial activity has taken place on defining the scope of the main research topics. These topics are presented in this newsletter.

STASIS—What is it?

Both within Europe and internationally there is a need for enterprises to trade electronically – from Corporates to SMEs. One of the biggest limiting factors in achieving this is the differences in language and terminology between the different trading partners – the "semantic interoperability" problem. Current techniques are complex and currently there is no easy way of overcoming this barrier.

Consider the following statement:-

"If I have information in my format, and it is integrated into my systems, I want to put minimal effort into mapping this into any format to do electronic business with another party"

This is where the STASIS project fits in. It aims to enable SMEs and enterprises to fully participate in the eEconomy, by offering semantic services and applications based on the open SEEM registry and repository network (www.seemseed.net). These will allow easy access to analyse, view, compare and distil semantics in an efficient environment to more effectively relate the business concepts of one organisation with that of another.



How will STASIS help you?

The aim of STASIS is to provide a set of software tools that will help businesses and organisations search, transform and share semantic information in order to allow them to communicate electronically faster and more cost effectively.

The STASIS user partners from the Automotive and Furniture sectors will provide, as exemplar industries, feedback and use cases for the development of requirements analysis, testing and validation to be performed throughout the lifecycle of the project. The ultimate aim is for STASIS to become a generic solution, applicable to all business sectors.

Supply Chain co-operations worldwide call for internationally developed solutions. An example would be Chinese and Eastern European countries who now contribute significantly to the global economy. As a result of this four partners are from China and Bulgaria.

STASIS project manager and TIE CTO Stuart Campbell, noted that: *"By the cooperation of a full range of stakeholders from a range of nations, STASIS can make a significant step from technical syntax based transformation into the business based semantic communications which will reduce costs and make eBusiness more attractive to all partners"*.

About the Project

STASIS is a Research and Development project sponsored under the European Commission's 6th Framework programme as well as the project's partners. Its objective is for Research, Development and Validation of open webServices based distributed semantic services for SME empowerment within the Automotive, Furniture and other sectors. 13 Partners are involved



including Commercial Companies (TIE, Porthus, iSoft), Academics (Universities of Sunderland, Oldenburg, Modena & Reggio Emilia, Tsinghua), User Organisations (AIDIMA, TANET) and Industrial Partners (Mariner, Shanghai Sunline, Foton, ZF Friedrichshafen AG). The partners are spread across Europe and China and led by the managing partner TIE.

Positioning the Project

The first public deliverable for the project, the Vision and Technical Consensus Statement, was released towards the start of the project. This document builds on the initial ideas and expands and refines the projects objectives. Key aspects of the project are:

- ◆ A facility to broaden the scope of trading for SMEs, allowing them to trade internationally with lower costs
- ◆ A technology demonstrator to set new interface and other standards and functions for eBusiness including transactions, marketplaces, databases etc
- ◆ An environment where an approach to semantics interoperability can be concluded from real business cases
- ◆ A mechanism for negotiating an "accepted language" (between individual trading partners) for conducting transactions to support the business of sourcing/vending of goods and services and other information flows from other sectors
- ◆ An opportunity to create a set of tools that will make semantic interoperability easier to implement and use

The vision document and other information is available as a download on the STASIS website.

WIKI

A relatively novel approach has been taken for editing and delivering data for the STASIS State of the Art. We have used a WIKI to store and arrange information and throughout the course of the project this will be kept up to date with new technologies/research/projects. The WIKI is located at <http://wiki.stasis-project.net>.

Research Areas

The research activities of the project are now underway. We are currently researching three areas that are relevant to STASIS. These areas are:

- ◆ **Semantic and Ontology Languages**
This area will define the language that will be used to implement the vision. Different languages will be considered (for example, OWL; RDF/RDFS; KIF) to verify their

suitability for use within the project. Following on from this the structures used within the project will be defined. Other areas of interest within this topic are handling semantic clashes, and the creation of a basic upper level ontology.

- ◆ **Techniques for Semantic Extraction and Integration**

This section of the research will be investigating methods of extracting metadata (semi-automatically) and annotating data sources.

- ◆ **Methodologies for Semantic Mapping**

STASIS will be built on multi-peer technology, which will result in semantics being dispersed. This research will specify procedures and methodologies that will efficiently produce and use semantic mapping across the nodes.

Deliverables

The following deliverables are already available to download from the website:

- ◆ Vision and Technical Consensus Statement
- ◆ Target Market Sector Report
- ◆ Use Case Report
- ◆ Legal, Security and Trust Report
- ◆ Requirements Report
- ◆ State of the Art (including the WIKI)

Flyer

A flyer is available for download from the website that highlights the key elements of STASIS.



STASIS Flyer

Comments are Welcome

If you have any comments/feedback about the areas covered in this newsletter please get in touch using info@stasis-project.net.

Stop Press: STASIS Review

The first STASIS review took place earlier this month and all released deliverables were approved.