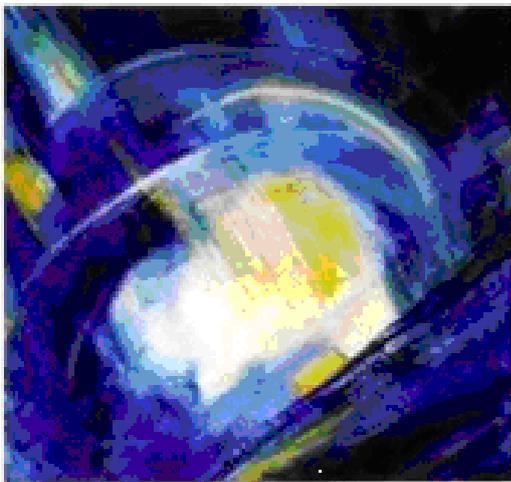


SemTalk®

SEM TATION



# SemTalk 3

---

## FACT SHEET

Semtation GmbH,  
Phone: +49 (0)331 581 39 36  
email: [info@semtalk.com](mailto:info@semtalk.com),  
Internet: [www.semtation.de](http://www.semtation.de)

**Microsoft**  
**GOLD CERTIFIED**  
*Partner*

1/10



## **SEM TALK 3 - TECHNICAL INFORMATION**

SemTalk 3 is an object-oriented modelling tool for business processes and knowledge 100% compatible with MS Office.

### **Minimum Requirements**

MS Visio 2003 or MS Visio 2007 or MS Visio 2010. MS Office 2003 or MS Office 2007 for reporting functions.

DotNet Framework 3.5

512 MB RAM

40 MB HD for installation.

### **Operating Systems**

SemTalk 3 requires MS Windows 2000/XP/Vista/Windows 7.

### **Databases**

SemTalk does not need a database for the administration of models and objects. These can be saved as Microsoft Visio and XML files. For more functionality MS SharePoint 2007 / 2010 Lists are used as Object Repositories.

### **Data Export/Import (See section Interfaces)**

Object data can be migrated to into XML based formats, WSS3.0 web services, MS Office for documentation and MS Project (bi-directional). Unrestricted external data source thru ODBC.

100% .NET → Compatible with Unicode.

### **Publication, version management and user account administration (See section Interfaces)**

Additionally to the functionalities mentioned before, SemTalk can generate HTML versions of models (IE 6.0 or later, Firefox, etc.)

By the use of MS SharePoint Services (not included) version management and user administration features are available for SemTalk.

### **Licensing**

Individual user license.



## **ABOUT US – SEMTATION GMBH**

Formed in 2001, based in Potsdam, Germany, close to Berlin

More than 100 clients worldwide, most of them are global players

Product SemTalk released in 2001 is the result of almost 20 years of experience and research in process modeling and modeling tools.

### **Industries and applications:**

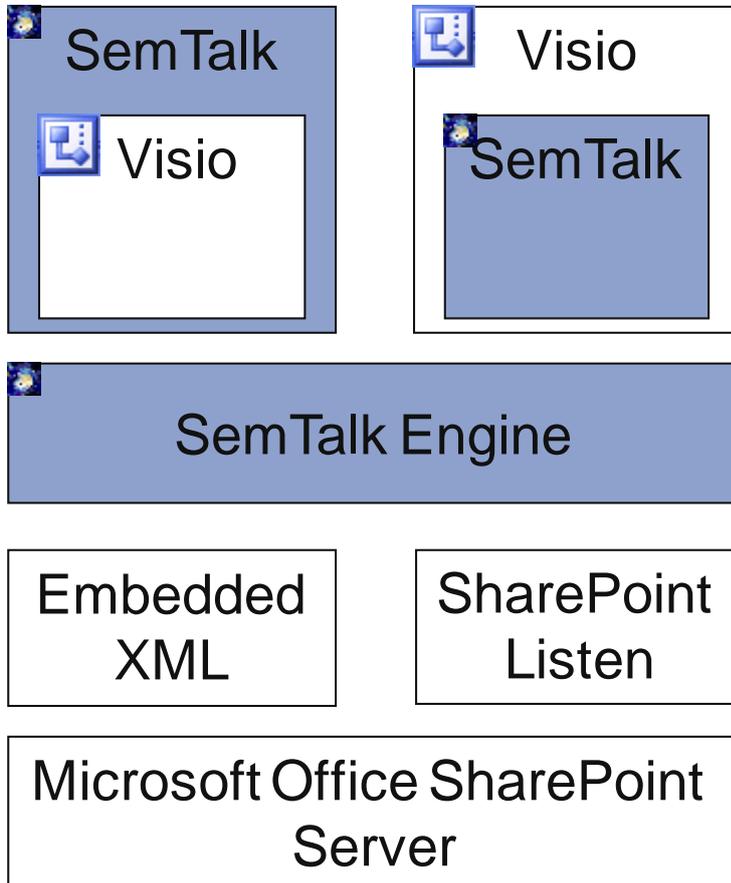
- Health services
- Utilities
- Financial services
- Chemical
- Government and NGO
- Defense
- Retail
- Consulting
- Food
- Transport
- Mechanical engineering
- Education

### **Takeaways:**

- Give more meaning to **any** Visio drawing
- A collection of unique solutions connecting Visio to BizTalk, SharePoint, SAP etc. Diverse use cases in areas as EAI, QM, ERP and Compliance
- Replacement for legacy BPM tools using an intelligent Visio.
- Main focus in Europe, but with customers as well as solution and service partners in North & South America, Eastern Europe and Asia.



### SEM TALK 3 ARCHITECTURE



### SEM TALK 3 META MODELLING CONCEPT

The great majority of modelling tools offer only a small number of modelling methods with limited possibilities of customizing and usually at an excessive cost. Instead, SemTalk is based on the concept of meta modelling being independent of the modelling method itself. This allows a full customizing of the modelling methods without a great effort. In SemTalk you can choose working with predefined internationally standard methods, extend them or you may define your own. SemTalk checks on runtime the semantic consistency of your models.

In SemTalk 3 you will find predefined methods for business process modelling, Web services orchestration modelling and knowledge modelling. In the following pages you will find a brief description of some of the best well known methods included in SemTalk 3.



## BPMN (BPMN.VST)

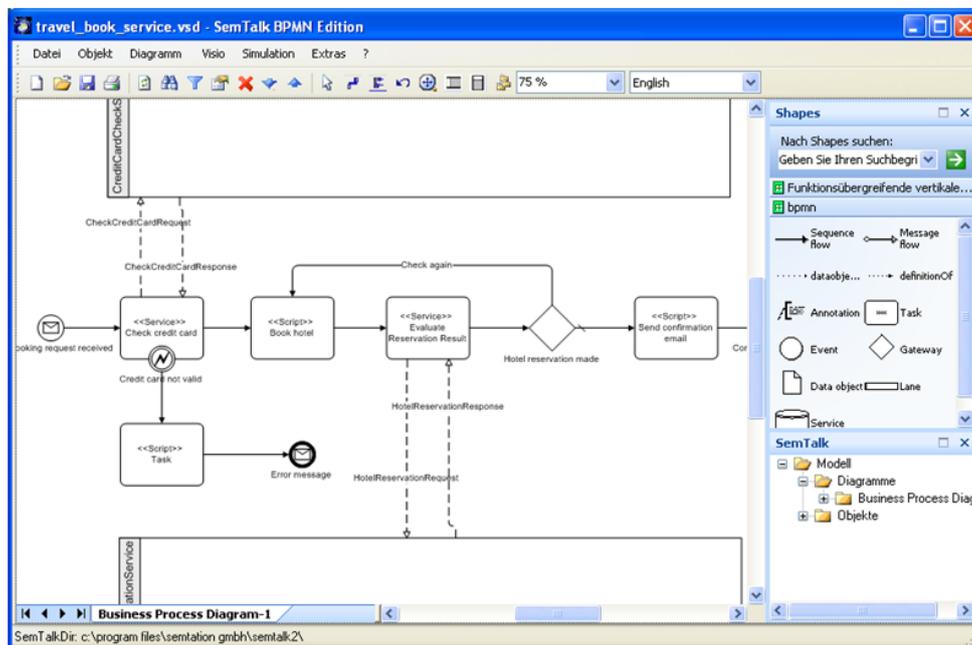
The BPMN method (Business Process Modelling Notation) was created to serve as a bridge notation between business process experts and system engineers in charge of automating business processes. Furthermore, BPMN can be mapped to the execution language WS-BPEL for the orchestration of web services. BPMN was developed by the Business Process Management Initiative (BPMI) and BPMN v1.0 was published in May 2004.

## Business Process Diagram (BPD)

The BPD is the central diagram of this method. A BPD combines "flow objects" (Task, Event, Gateway and Participant), "connecting objects" (Sequence Flow, Message Flow and Association) and "artefacts". SemTalk 3 imports the document definitions (XML Schema) and web service definitions (WSDL) files needed for a web service orchestration. The modeller uses the information contained in these files to create an ad-hoc model.

SemTalk 3 generates BPEL code from BPMN models for web service orchestration engines like MS BizTalk Server, SAP NetWeaver, BEA Logics and others. It also imports BPEL code and translates it into BPMN models. This reduces significantly implementation costs and time of web services.

With SemTalk 3 you can relate BPMN models to business process models using a different notation as a technical description of a business process.



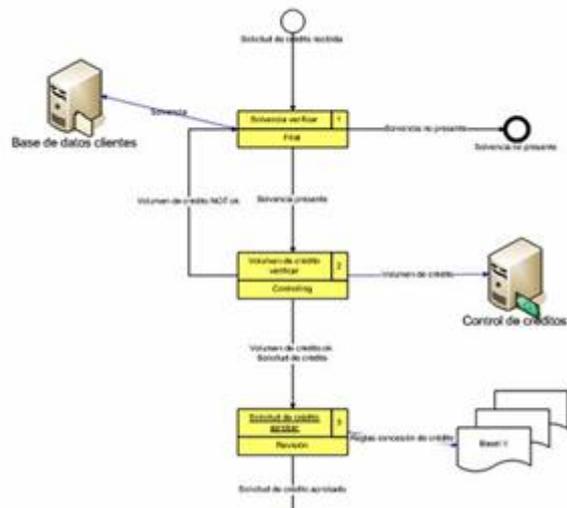


## CSA (KSA.VST)

The CSA (Communication Structure Analysis) method is based on the analysis of the flow of communication between organization units, people and systems. The CSA method includes different diagram types for the design and optimization of business processes and organizational structures. Next some of these diagram types will be explained briefly.

### Process diagrams

Process diagrams are the central part of business process modelling. They describe the communication flows between organization units, individuals and IT-systems. In them processes are described as sequences of activities. In addition to activities and other process elements (entry and exit points, systems, human and material resources) the associations between these elements reflect realistically the flows of information in the organization processes (sequences, forks, loops, etc.).



### Organizational charts

The organizational charts describe the company's structure: organizational units, employees and roles. This type of model combines with process models to assure that each activity has an assigned organizational element, which is a precondition for the analysis, simulation and evaluation of business processes.

### Information diagrams

The information diagrams are a repository of all the terms and concepts related to a process model. In them relations between concepts are defined to restrict their context and so relate them precisely with the business processes and the structure of an organization.

### System and material resources diagrams

These diagrams serve to model attributes for and relationships between systems or materials. For example, you may use these diagrams to formulate requirements for future IT solutions in a clear and precise way.

Relevant documents (informative texts, forms, spreadsheets, websites, etc.) can be attached to each object in a model.



## EPC (EPC.VST)

The EPC (Event-driven Process Chain) method uses "Events" and "Functions" to describe processes in a formal and systematic way. An EPC model includes various diagram types. Next, some of these diagram types will be explained briefly.

## eEPC diagrams

eEPC diagrams are the main element in event-driven process chain models. "e" means extended in the sense that the original EPC notation has been complemented with organizational, data and output elements. An "Event" represents the precondition for a "Function" or the result of the latter. A "Function" represents an activity within a process.

## Organizational charts

The organizational charts describe the company's structure: organizational units, employees and roles. This type of model combines with process models to assure that each activity has an assigned organizational element, which is a precondition for the analysis, simulation and evaluation of business processes.

## Added-value chains

The added-value chains represent an integral view of processes. In them you can group related processes with a higher degree of aggregation. Therefore, these diagrams can be used to navigate through big and complex models or as the most abstract model level in the hierarchy of business process models.

## Knowledge/object diagrams

Knowledge/object diagrams are a repository of all the terms and concepts related to a process model. In them, relations between concepts are defined to restrict their context and so relate them precisely with the business processes and the structure of an organization.

Relevant documents (informative texts, forms, spreadsheets, websites, etc.) can be attached to each object in a model.



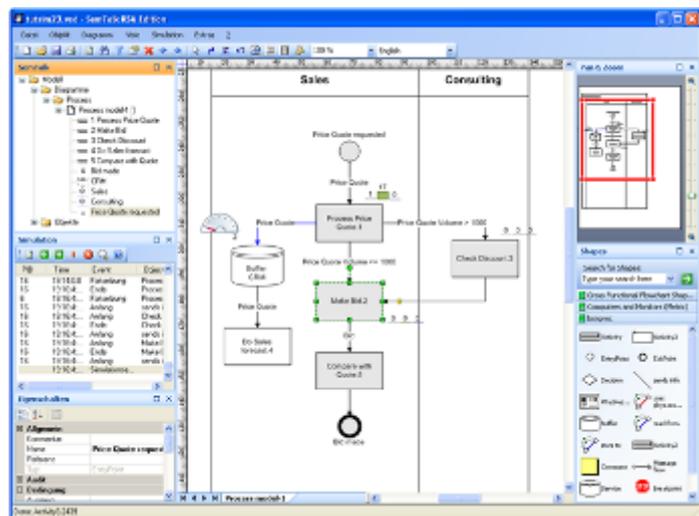


## SIMULATION

The simulation toolkit of SemTalk 3 offers a flexible platform to study the dynamic behaviour of business process models. Simulation helps you understand the dynamic structure of the process, identify bottlenecks, find weaknesses, locate interruptions in the communication flows generates a more reliable process trace to compute activity based costing.

In addition, simulation data can be used to support a variety of business processes activities such as using SemTalk in conjunction with the Microsoft Accelerator for Six Sigma.

During the simulation Process threads are interpreted by a colored Petri-Nets discrete simulation engine. Simulated processes can be analyzed in a single stepping mode or by running multiple processes at once. Object instances such as an order object are created and their attribute values can be manipulated while the process is being executed. VBScript Macros can be attached to every process step in order to program sophisticated computations or to open custom dialogs in a Rapid Prototyping use case. The SemTalk Simulation Toolkit may be used with SemTalk KSA Edition and all other related BPM methods which have a compatible meta model such as SemTalk for BPMN, SemTalk Flowchart Edition, , SemTalk for E-Government or with BCP (SemTalk IBW Edition). The simulation functionality for EPC is limited by the restricted expressiveness of the language.



The SemTalk Simulation Toolkit may be used with SemTalk KSA Edition and all other related BPM methods which have a compatible meta model such as SemTalk for BPMN, SemTalk Flowchart Edition, , SemTalk for E-Government or with BCP (SemTalk IBW Edition). The simulation functionality for EPC is limited by the restricted expressiveness of the language.

## Simulation reports

The result data of simulated processes can be used to generate the following reports:

- Activities report: A list of process steps plus working times, waiting times (simulation) and costs taken from the resources.
- Tasks report: A list of process steps aggregated by activity class (task) with working times, waiting times (simulation) and costs taken from the resources.
- Resources report: Process steps by resource with activities, working times, waiting times (simulation) and costs.
- Information report: A list of the information objects with their attribute values.



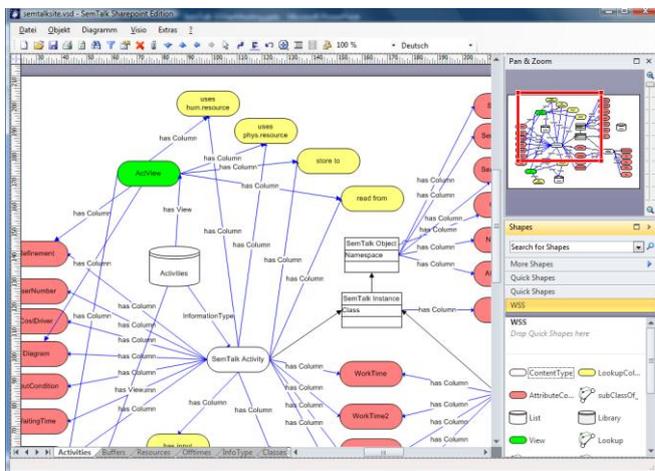
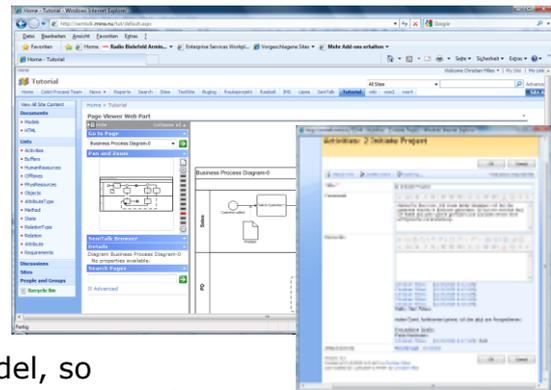
## SHAREPOINT INTERFACE & SEMTALK SITE BUILDER

The SharePoint - SemTalk interface is not only the basis for managing process relevant documentation in SharePoint, but also for creating the appropriate storage structures. All these without installing of any server-side components.

SemTalk makes use of Windows SharePoint Services 3.0 to upload, open, check-in and check-out SemTalk models directly from SemTalk. All these document management functions are possible without installing any server-side components. Moreover, the metadata (descriptive information about data and documents) in the process library is also ready for use/processing within a model.

In addition to DM functionalities, SemTalk uses SharePoint lists as object repositories. In other words, SemTalk can import/export model objects from/to lists in SharePoint. Relations between model objects are mapped as Lookups, and object methods, states and attributes are managed as lookup lists. To help users organize their SharePoint content in a more meaningful way SemTalk creates appropriate SharePoint Content Types for the model objects. The Content Types enable you to manage the metadata and behaviours of a document or a model object in a centralized, reusable way.

Finally, SemTalk can generate and automatically upload in a SharePoint library a HTML version of a model. Additionally, a SharePoint dialogue can be assigned to each object representation in the HTML model, so that users can e.g. enter improvement suggestions and comments. In this way everyone in the organisation plays a role in the process improvement.



As mentioned before, SemTalk can be used to graphically design and modify the structure of SharePoint sites. In SemTalk you can define, export and import directly the central SharePoint elements, i.e. libraries, lists, columns, content types, lookups, views, folders and content. Thus, SemTalk can be used as a true Case Tool for SharePoint solutions. This functionality is not part of the usual SemTalk licence and has to be obtained separately.



## INTERFACES

SemTalk 3 offers various interfaces to different software applications.

### **Interface MS Office 2003/2007 (MS Office 2010 coming soon)**

MS PowerPoint: Generation of presentation slides from models.

MS Word: Generation of handbooks from process models.

MS Excel: Generation of various specific reports. Bi-directional communication.

MS Project: Bi-directional communication with process models using the CSA, EPC or other similar methods.

### **Interface SAP**

SAP Solution Composer: Import of solution maps and other models from the SAP Solution Composer. SAP Solution Composer is a library of best-practice models for SAP NetWeaver.

Import of SAP objects (Business Objects, Roles, KPIs, WSDL files and others) from SAP Solution Composer.

SAP Solution Manager: Import of solution maps, scenarios and process in a business process models. The result is a consistent graphic documentation, which is comprehensible to even non-SAP experts

SAP R/3 4.6c: Import of best-practice models (EPC notation).

### **Other interfaces (excerpt)**

WSS 3.0 (MOSS): Full integration with WSS 3.0 (MOSS 2007). Ideal collaboration platform for SemTalk models. Full integration with WSS 4.0 (SharePoint 2010) planned for 3rd quarter 2010.

BPEL4WS: Generation of BPEL4WS code for web service orchestration servers from BPMN models. (e.g. MS BizTalk 2006, SAP NetWeaver)

AML/EPML /BPMC (ARIS): Export / import of EPC models from/to other EPC modelling tools, such as ARIS via XML.

XPDL (WfMC): Generation of XPDL code from BPMN, CSA and similar models.

XTM Topic Map: Import of ISO Topic Maps using the XTM format for Topic Maps.