

## Company Profile Osthus GmbH

### Excellence in R&D systems

#### Company facts

Company	Osthus GmbH
Foundation	1996
Number of employees	37
Service profil	IT-service provider focused on <ul style="list-style-type: none"><li>• Consulting: business architecture and business process modelling, requirements engineering und -modelling, IT-strategy and conception of IT-architecture</li><li>• software development</li><li>• system integration</li><li>• support and maintenance</li><li>• functional and technical training especially for the implemented systems, technology and infrastructure</li></ul>
Staff qualification	chemists, physicist, computer scientist, engineers and mathematicians, that act as consultant, project manager, system architect, system designer and developer
Apprenticeship company since 1999	IT technician for application development
Business sector focus	LifeScience industry focused on R&D (Life Science, Material Science, mechanical engineering): We support our customers to deliver new products at first to the market.

#### Company description

The Osthus GmbH stands for consulting, development and systems integration of business critical applications of agile enterprises, so called Real-Time Enterprise (for RTE, see Gartner Group, 2003).

We are specialists for R&D, especially for the LifeScience industry, the MaterialScience industry, the chemical industry and mechanical engineering. Our services are:

- Modelling of business models and architectures
- Reorganisation and optimization of business processes
- Process-oriented systems integration of system silos

- System development based on our RTE development model, that ensures the accomplishment of projects in quality, time and budget.
- Support and maintenance of systems, based on a continuous integration infrastructure, that connects customer network with Osthus network via VPN.

By the use of state-of-the art standards, methods and technologies, we support our customers with the alignment of business and information technology (IT), so that the IT can play its role as business innovator and transformer:

- Modelling of business (Business Motivation Model (BMM) of OMG),
- Business Process Modelling (Business Process Modelling Notation (BPMN) of OMG and Event-Driven Process Chain (EPK) of IDS Scheer),
- System modelling (Business Process Execution Language (BPEL) Service Oriented Architecture (SOA)),
- Model Driven Architecture (MDA) and Unified Modelling Language (UML))

Based on our R&D-process specialised consulting- and project- management know how, we help our customers to build the requirements of R&D-users into future-robust business workflows. With our RTE-process model (that contains elements of the development models RUP, V-model and the agile manifest) we integrate, in compliance with the project requirements, systems into a process-oriented system landscape.

The usage of SOA guarantees our customers flexibility by extending their applications and by using services of different origin. As system integrator we adept the technology and methodology of service-oriented architecture (SOA) for the implementation of complex, enterprise-wide business processes, interfacing such different systems like storage management systems, robotic systems, customized R&D test systems, ERP, and so on. In addition we integrate products and enterprise services (Enterprise SOA) of different vendors into an enterprise system.

Concerning software development we support our customers with efficient methods of software implementation (e.g. MDA, SOA) for the technologies J2EE/EJB and .NET. This is an essential ingredient for the project cornerstones quality, time and budget. This allows also the incorporation of new customer requirements during the development process.

Our customers benefit from our excellent know how in R&D and information technology by transferring our know-how to their R&D- and IT-departments and by training of other third party IT-service providers.

## Overview services

Service	Description
Consulting	Modelling of business, Business process Modelling, consulting in strategy, project management and technology
Software development	Implementation of process-oriented systems based on our own meta-frameworks JEDI which integrates J2EE/EJB (e.g.Spring) and also Microsoft .NET.
System integration	System integration based on service-oriented architecture (SOA) and on enterprise service bus (ESB) technology. We possess experience in the integration of third party products: Documentum, OpenText, SAP, Cognos, Corticon, Ontoprise, Lotus Notes, Accelrys, SAS, Scitegic, Spotfire ACD, MDL, InfoChem, Beckman, REMP, Tecan
Coaching/Training	Coaching and training for the following subjects: Technology (J2EE/EJB, Spring, .NET), architecture, methods and tools, project management, knowledge management in projects
Technologies	Development platform: J2EE/EJB, Spring, .NET, PHP, XML/XSLT, Cocoon, PowerBuilder Sharepoint, Silverlight, Oracle ADF Application servers: Oracle, Apache, Netweaver Databases: Oracle, Microsoft SQLServer, MySQL
Methods and tools	BMM, BPMN, BPEL, UML, MDA, SOA, EAI, Eclipse, Sybase PowerDesigner, Oracle BPA Suite, ARIS

**Service****Description**

XDoclet, Ant, Maven, Mantis, XML/XLST  
RTE-Development model

**Customer value****Extraordinary consulting skills**

We connect competence in communication in complex teams with a structured project approach and a well established methodology in business process modelling. We incorporate supplement requirements coming from organisation, technology and infrastructure.

So we form with our customer a project body which is the necessary condition for well-suited solutions, that are accepted by all stakeholders: Decision makers, project leaders and users of the business departments.

With the implementation of business processes into a „smart system“, the business saves money and gains time for business activities. This enables the project team to build efficient and effective business processes which facilitate the daily business work and act as motivation.

**Well-structured system integration- and software development process**

With standardised development models, technologies and methods we economise the development process. Our ambition is to do no work twice, as well as to identify, to use and to enhance business and technology patterns.

At this, we focus on a high level of automation in code-generation, using advanced technologies.

In summary, our customer innovate their business, they save time and money by efficient and effective investments and benefit from our know how for their own strategies.

**Project management**

With the thread in hand we have the goal in mind: Planning has to anticipate foreseeable as well as unforeseeable occurrences and must be continuously adapted to new requirements and conditions. We live project management on the basis of a transparent and open communication. The customer is always up to date concerning the project status. We do not sell the project but we are looking proactively for project risks and do not avoid critical question, but address these on behalf of project needs.

Thereby we address the improvement and stability of the project assuring time, budget and quality requirements in the specific context of the enterprise.

### **Technology competence**

It is not our goal to be a leader in technology but this is the result of our daily project work. It is our objective to implement for our customers a system which is maintainable, which can be flexible enhanced in an affordable manner and which uses a technology build on sustainable and proven standards.

With state-of-the art technology we assure the investments of our customers and save time and money for the maintenance and enhancement of the systems.

### **Project types**

#### **LifeScience and Material Science:**

Compound management and logistics, shipment, R&D business intelligence (data warehouse, operational data store), R&D process control, electronic laboratory notebook, compound catalogues, test systems (e.g. HTS), LIMS, biotechnological workflow systems

#### **Mechanical engineering:**

Product data management system, expert systems for machine configuration, product catalogs, economy software

#### **Other business sectors:**

(Enterprise-) portals, content management systems, intranets, extranets, picture databases, mechanisms of online-offline application synchronisation, web-based transaction systems

#### **Project size:**

From 10.000 Euro to 1.500.000 Euro

### **Business sector experience**

LifeScience, MaterialScience and mechanical engineering, public associations and syndicates

### **Customers**

We act worldwide as specialist for R&D systems for our global customers. To our clients belong "DAX-companies" as well as medium sized companies:

#### **LifeScience and MaterialScience:**

BASF, Bayer CropScience, Bayer HealthCare, Grünenthal, Nycomed, Roche Diagnostics

**Mechanical engineering:**

Oerlikon (Schlafhorst), Trütschler, Verband Deutscher Maschinen und Anlagenbauer (VDMA), Richter Chemie-Technik

**Other business sectors:**

German Federal Ministry of Economy and Work, Lufthansa Cargo, German Federal Ministry of Work and Social, Qualifikation and Technology of the federal state NRW, RWE Systems

**System integration Partner**

We implement systems based on products of the following (system integration-) partners:

- Oracle, Microsoft, SAP
- ontoprise
- Sybase, IDS Scheer, Corticon
- MDL, SAS, Spotfire, Accelrys/Scitegic, InfoChem, IDBS, Advanced Chemistry Development
- REMP, Tecan, Beckman
- Cognos, Documentum, Opentext

**Research Partner**

Our research partners are:

- RWTH Aachen University
- University of Koblenz
- TH Karlsruhe University (AIFB)

**Publications (in german, titles here translated)**

[Col04a]	W. Colsman and A. Oswald, From ER-Model to MDA: A way to a practical usage of the Model Driven Architecture in larger projects, in OBJEKTspektrum 1/2004
[Col04b]	W. Colsman, A J2EE development concept, in JAVAspektrum 4/2004
[Col05]	W. Colsman and T. Osthus, Usage of a web-framework in a MDA-application development system, in OBJEKTspektrum 4/2005
[Osw05a]	A. Oswald, Knowledge – The elixir of successful projects, in Wissensmanagement 5/2005
[Osw05b]	A. Oswald and T. Osthus, Model driven software solutions for „real-time enterprises“, in OBJEKTspektrum 1/2005
[Osw06]	A. Oswald, Systems with principle, Meta knowledge generates

	sustainable systems with controlled risks, in OBJEKTSpektrum 3/2006
[Osw07]	A. Oswald, Model-oriented thinking: SOA management, an example, in OBJEKTSpektrum 3/2007
[Web07]	T. Weber und A. Oswald, Synchronous und asynchronous webservices in heterogeneous environments, in JAVASpektrum 6/2007 (to be published)
[Osw08]	A. Oswald, Systemic IT: A model of business-IT alignment, presented on the conference MKWI 2008, Munich.
[Osw09a]	Alfred Oswald, Jens Köhler, Projectdesign: The metrisation, using the example of types of projects und project manager, in OBJEKTSpektrum 01/2009
[Osw09b]	Alfred Oswald, Jens Köhler, Collective mind method, the strong influence of soft skills on the success of IT-projects, in Karl-Heinz Dorn et. al., Projekte als Kulturerlebnis, Buch, dpunkt Verlag 2009
[Koe09c]	Jens Köhler, Alfred Oswald, The collective mind method, book, Springer Verlag 2009

### Assurance of quality

The Osthus GmbH has installed a quality management-system and is certified by DIN EN ISO 9001 2000 for 'consulting, software development and systems integration' for the locations Aachen and Mannheim. The employees of the Osthus GmbH have a long-term lasting experience in the field of GxP.

### Challenge us!

In order to experience why to work with Osthus and to see the worth of a collaboration with us, we like to invite you to challenge us by:

- discussion with experts
- prototyping of systems (Proof of concept)
- trial workshops (payment by approval)

### Contact us!

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