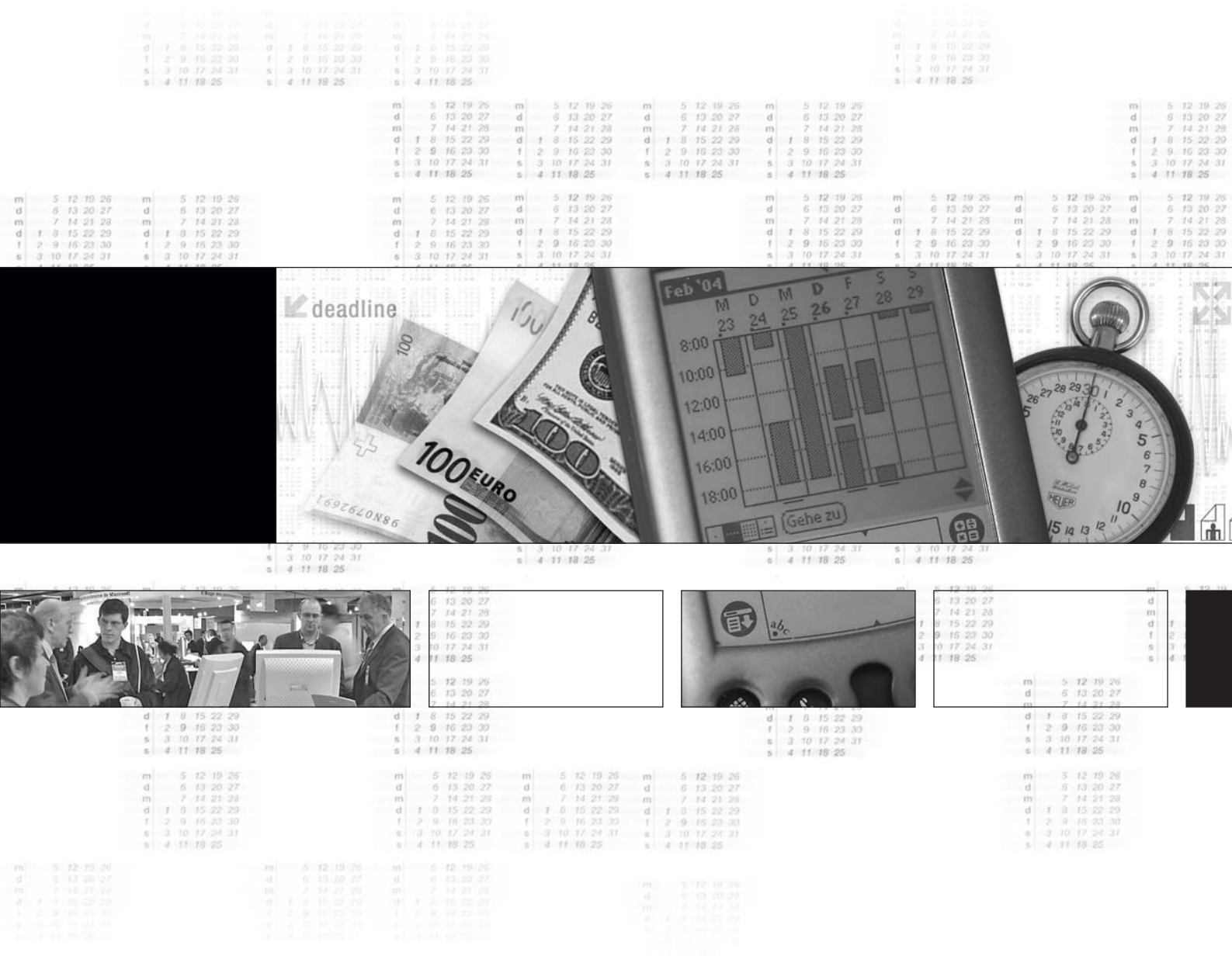# STAR James

Open-Source Workflow Solutions
for Automated Translation Processes

STAR James ...

The challenge:
translation project management

Project managers in translation departments and agencies are faced with the same challenges:

Language diversity

The increasing globalisation of products and product documentation (such as operating instructions, advertising brochures, technical specifications, etc.) leads to a corresponding increase in the diversity of languages in which product documentation has to be produced. New markets demand reliable and comprehensible documentation and translations in the appropriate languages – in some markets they even have to meet legal requirements and defined standards.
Every language that is added to a multilingual project multiplies the number of tasks to be performed and sets the project team new challenges.

Increasing number of project types

The diversity of project types increases to the same degree that the demand for information grows. Every new type of project (new type of publication, source file, etc.), demands adaptations to the workflow and, therefore, results in more administrative work. Project managers are confronted more and more frequently with new tasks for which no suitable solution model yet exists.

Management of additional data volumes

The increase in the number of languages and project types – combined with the use of translation tools and document management systems – leads, on the one hand, to an exponential growth in the number of projects and the data volume to be handled. On the other hand, however, the projects themselves are becoming smaller and smaller. Innumerable small files are sent back and forth between customers and suppliers (translators, proof-readers, etc.). Consequently, more

and more time has to be spent on project management and organisation instead of on the actual job of translating.

Capacity shortages

In translation project management, it is often the case that the greatest proportion of time is spent receiving, checking, preparing, copying and sending files. All those tasks are extremely susceptible to errors and problems. Impossibly tight deadlines, higher costs and staffing shortages are the result. Project managers thus have less and less time to concentrate on their core business and optimise the process itself.

Many errors and problems can, however, be avoided if staff have more time for actual project management and are not constantly occupied with sending, receiving and managing files.

STAR James –
The Client/Server Solution

In STAR James we can offer a workflow solution that incorporates all the experience and expertise we have gathered in the areas of information management, translation and process automation over many years in the business.
The technology and system architecture of STAR James have been carefully chosen so that simple as well as complex workflows can be depicted, automated and modified at any time and can be easily and adaptably linked to other systems.

STAR James is the workflow solution for optimum processing of projects in information handling. Whether you are dealing with editorial tasks, translation and localisation projects or the management and publication of information, STAR's workflow solution controls, co-ordinates, automates and oversees your work processes.

Project data is usually managed centrally but processed locally. With this technology, project managers, translators, proof-readers and other people involved in the project can work in different places on different computers. STAR James automatically sends them the project data appropriate to them because it accesses the data held centrally at the business and passes it to the workflow process.

STAR James guarantees:

▲ Optimum organisation
▲ Automation and standardisation of routine processes
▲ Increased productivity
▲ Control at every stage of the project
▲ Straightforward control of the entire project sequence
▲ Deadline monitoring
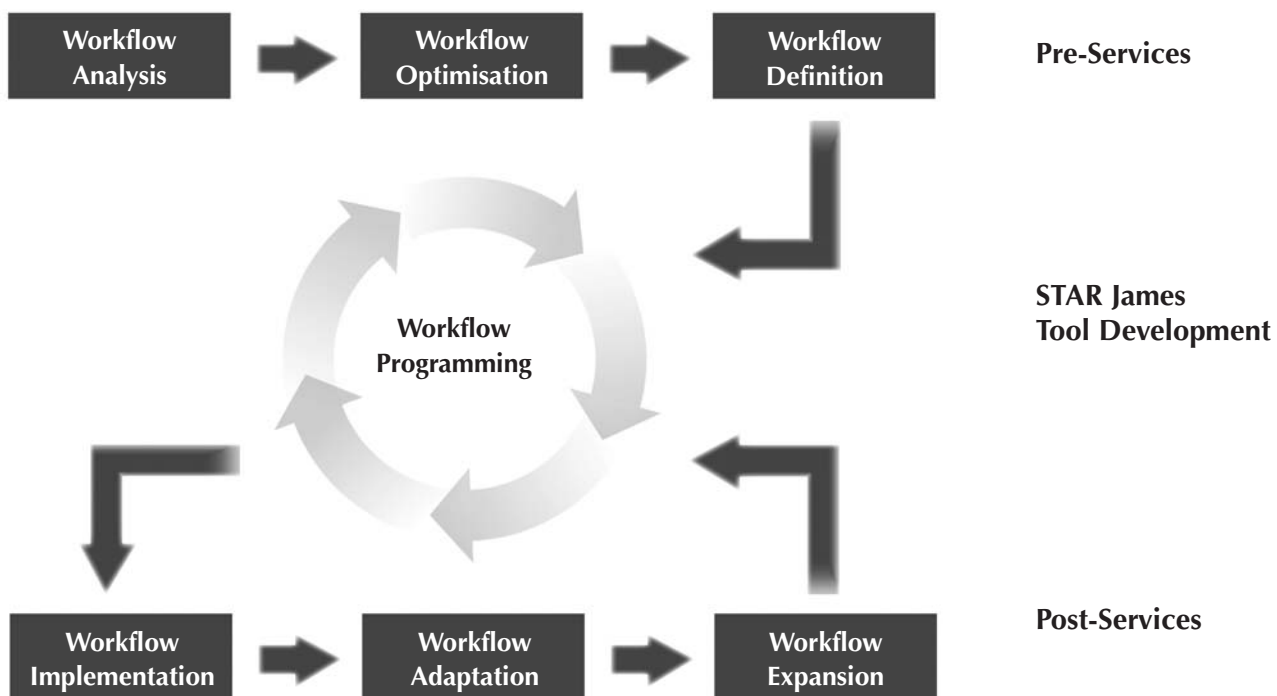▲ Efficient data management
▲ Quality management

Efficient project management

Like all other STAR solutions, STAR James has been developed on the basis of proven principles:
▲ Improvement of information structure and data quality
▲ Creation of lasting information
▲ Re-use of quality-checked information
▲ Delta principle – only the changes are new
▲ Optimisation of interaction between professional staff and technological processes

In order that STAR James is able to fully exploit its capabilities within a business, our workflow specialists first of all carry out an overall analysis of the existing information handling process. That is because the consistent structuring of all information processes is the precondition for optimum automation of project workflow.
The client/server solution, STAR James, is based on the expertise of professional developers and workflow analysts, and the use of appropriate principles and proven technology.

Workflow Analysis → Workflow Optimisation → Workflow Definition	Pre-Services
Workflow Programming	STAR James Tool Development
Workflow Implementation → Workflow Adaptation → Workflow Expansion	Post-Services

STAR James ...

Development of automated translation workflows

The creation of an optimum workflow involves a number of phases during which the STAR team develops a bespoke information process solution in collaboration with the client's own specialists.

▲	Phase 1	Workflow Analysis
▲	Phase 2	Workflow Optimisation
▲	Phase 3	Workflow Definition
▲	Phase 4	Workflow Programming
▲	Phase 5	Workflow Implementation
▲	Phase 6	Workflow Adaptation
▲	Phase 7	Workflow Extension

1 – Workflow Analysis

In collaboration with the client, our workflow specialists first of all analyse the existing workflow within the business. That involves the detailed examination and time analysis of every individual stage of the information handling process.

The existing working parameters surrounding the workflow within the business are documented:

Routines
▲ Sequences that are constantly repeated
▲ Identical or very similar tasks and processes

Technical and system-related conditions
▲ Software used
▲ Interfaces with existing systems
▲ Work environment
▲ Manual process stages

Staffing parameters
▲ Persons involved in the workflow
▲ Interfaces with other departments and people
▲ Structure of responsibilities and authorities

Work formats and filing system
▲ File formats for workflow input
▲ File formats for workflow output (results, data for archiving, etc.)
▲ Data sources
▲ Data storage location

2 – Workflow Optimisation

In the next phase, the client defines the desired requirements and the future procedure and, consequently, the resulting aims. In that way, our team of developers can adapt the STAR James workflow solution precisely to suit the expectations and requirements of the client.

The next stage is the adaptation and optimisation of the existing workflow by the STAR specialists. That ensures a smooth process when the workflow solution is subsequently technically implemented and automated.

In order to enable logical workflow structuring, time sequences or the order of individual process stages are altered, for instance. As a result, time savings or important quality checks can be implemented at the earliest possible time. And error checks that were previously carried out manually can be automated.

3 – Workflow Definition

Following the adaptation and optimisation of the client's existing workflow, the standard workflow (including all of its modules) to be automated by STAR James is defined.
That process description is tested out manually using various specimen projects from the business. That ensures that the defined workflow is genuinely adapted to the routine projects that arise within the business. Extension and further adaptations can be made at any time.

4 – Workflow Programming

On completion of those preparatory stages, STAR starts the actual programming of the workflow solution itself and its constituent modules.

At this point, all documented and defined process stages are divided into three categories:

1. **Standard modules** that already exist in STAR James

2. **Standard modules that are configurable**; these are adapted according to the requirements and specifications of the client (e.g. monitoring and information systems)

3. **Client-specific modules**; these are developed and adapted as required (e.g. interfaces with client-specific systems)

5 – Workflow Implementation

The completed programmed workflow solution is implemented. All projects that proceed according to the new standardised workflow are automatically handled by STAR James.

6 – Workflow Adaptation

Following implementation, practical operation of the system reveals areas where fine adjustments are required. If, for example, additional proof-reading and quality control stages are required for translations in a particular language, the STAR workflow specialists can make appropriate modifications to the system.

7 – Workflow Extension

The existing workflow can be extended at any time by the addition of extra modules or workflows, for example for new types of document. Modifications of this type have no effect on the existing workflow modules.

CMS/DMS

Supplier

XML Postman

Job Ticket

Service

Accountancy

Project Manager

Client
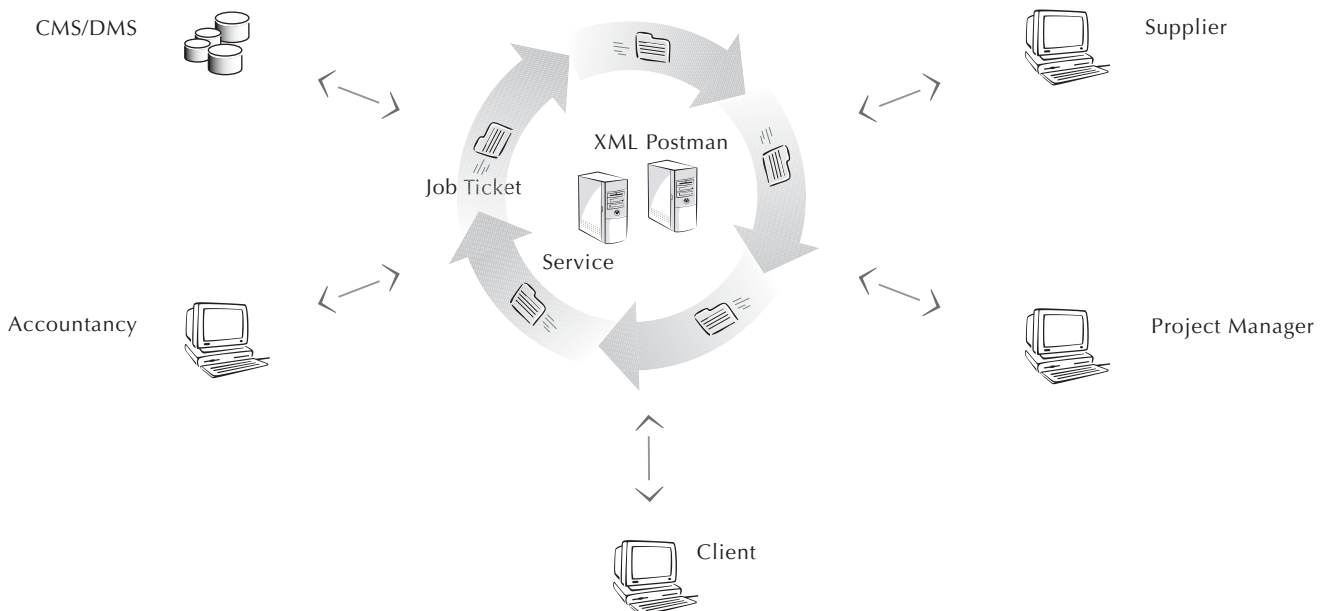
Integration of STAR James in the business

STAR James ...

From Manual Routines to Automated Workflow

Automation

Work sequence tasks that can usefully be automated are automated:

▲ Routine tasks in project management
▲ Data preparation
▲ Compilation of statistics
▲ Communication with suppliers
▲ Information exchange between all parties to the process

Interface compatibility

An intelligently conceived and open-source concept enables interfacing with other systems and results in seamless integration with all STAR products. Furthermore, clients' existing third-party systems (e.g. translation and terminology software, document or content management systems) can be incorporated in the workflow as modular components.

Flexibility

STAR James is a versatile and adaptable workflow solution. Every process stage can be defined as a service according to the necessary requirements and integrated in the workflow. The defined services can run on different systems. And, of course, several different workflow processes can be operated alongside one another.

Modular teamwork

The four central modular components of STAR James are:

▲ Job Ticket
▲ Core Modules
▲ Services (operations)
▲ Interface Services

Job Ticket

The details of a project are recorded on the Job Ticket. It provides a summary of the necessary process stages and the content and sequence of the individual operations. The Job Ticket accompanies the project throughout the workflow process and logs the completion of all stages and their results – in other words, who has done what, when and how. That information is used to measure standards for the purpose of project quality assurance and remains available as a project history even after archiving.

Core Modules

The Core Modules control and monitor STAR James:

▲ XML Postman
▲ DB Updater
▲ Error Handler
▲ Deadline Controller
▲ Project Manager Portal
▲ Watchdog

XML Postman – the delivery man that keeps the system running

The XML Postman activates Services by sending them a copy of the Job Ticket.
When a process stage has been completed and the result is known, the XML Postman – and he alone – updates the original Job Ticket accordingly and forwards a new copy from that service to the next.

```
          <filetarget>E:\james\Grips\Back\2004-11-02-000</filetarget>
        </output-files>
      </files>                               Verzeichnisse in Klartext
    - <customerInfo>
        <TOPIC>STAR-www-2004-11-02-000</TOPIC>
      </customerInfo>
    </jobheader>
  - <workflow>
    + <nextStep ID="10">
    + <workflow-steps>
    - <processing>
      + <process-step ID="1" name="Transit Import">
      + <process-step ID="2" name="Transit Stat">
      + <process-step ID="3" name="Transit Send">    Die Geschichte des Auftrags
      - <process-step ID="4" name="Select Supplier">
          <name>Select Supplier</name>
          <service>selectsupplier</service>
          <action>select</action>
          <language>CHS</language>
          <status>ok</status>
          <start>20041102T154542Z</start>
        - <stepResult>
          - <pm>                             Wer hat wann was gemacht?
              <pmID>30</pmID>
              <endtime>20041102T154545Z</endtime>
            </pm>
            <endtime />
          - <supplier>
              <s_ID_Supplier>14</s_ID_Supplier>
              <s_s_ShortName>Supplier</s_s_ShortName>
              <s_fk_Address>141</s_fk_Address>
              <s_fk_AutoContact>396</s_fk_AutoContact>
              <target>CHS</target>
              <source>ENG</source>
              <service>Translate</service>
              <pmID>30</pmID>
              <endtime>20041102T154545Z</endtime>
            </pm>
            <endtime />
          - <supplier>
              <s_ID_Supplier>14</s_ID_Supplier>
              <s_s_ShortName>Supplier</s_s_ShortName>
              <s_fk_Address>141</s_fk_Address>
              <s_fk_AutoContact>396</s_fk_AutoContact>
              <target>CHS</target>
              <source>ENG</source>
              <service>Translate</service>    Resultate in Klartext
            </supplier>
          </stepResult>
          <endtime>20041102T154545Z</endtime>
        </process-step>
      + <process-step ID="5" name="Supplier Portal">
      + <process-step ID="6" name="Transit Receive">
      + <process-step ID="7" name="Transit Export">
      + <process-step ID="8" name="Supplier Portal">
      + <process-step ID="9" name="Grips 2 James">
      - <process-step ID="10" name="Join">
          <name>Join</name>
          <service>cleanup</service>
          <action>join</action>
          <language>CHS</language>
          <status>ok</status>
          <start>20041102T154720Z</start>
          <stepResult />
          <endtime>20041102T154721Z</endtime>
        </process-step>
      </processing>
    </workflow>
  </twsjob>
```

Job Ticket

DB Updater – ensures project status is transparent and up to date

The DB Updater (DB = database) receives all the Job Tickets from the XML Postman as the individual operations are completed. It ensures that the database, which only contains information about project statuses and suppliers, is always completely up to date.

The results can be viewed by the project manager in the Project Manager Portal.

Error Handler – the error identification and handling function

If the result of the completion of an action is negative, the information is passed to the Error Handler, which automatically processes error sources. If it succeeds in rectifying the error, a notification of success is sent back to the XML Postman. If it does not succeed, an appropriate error message is generated. The project manager then has the option of intervening manually.

Deadline Controller – continually monitors time frames

The Deadline Controller receives all the information sent to a Service. In that way, it monitors whether the scheduled operations are completed on time. If a stage of a process is not completed on time, the Deadline Controller issues a message.

STAR James informs (by e-mail, SMS, message window or other configured communication channel) those responsible whenever an error occurs or a task is behind schedule.

Project Manager Portal – global teamwork facilitator

Projects are controlled and monitored via a web portal. This method of access enables projects to be processed with optimum efficiency within a team because the information relevant to the project is available to all team members anywhere and any time. Access permissions can be individually defined.

Watchdog – reliable system monitor

The Watchdog is a monitoring program and periodically sends test orders to the system. By continually querying the system in that way, it is able to detect errors at an early stage and alert those responsible in good time. This routine can run on an external system and thus check functional capability "from outside".
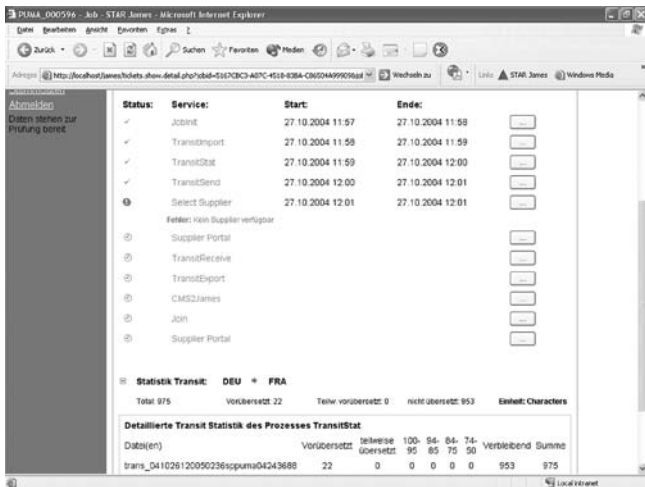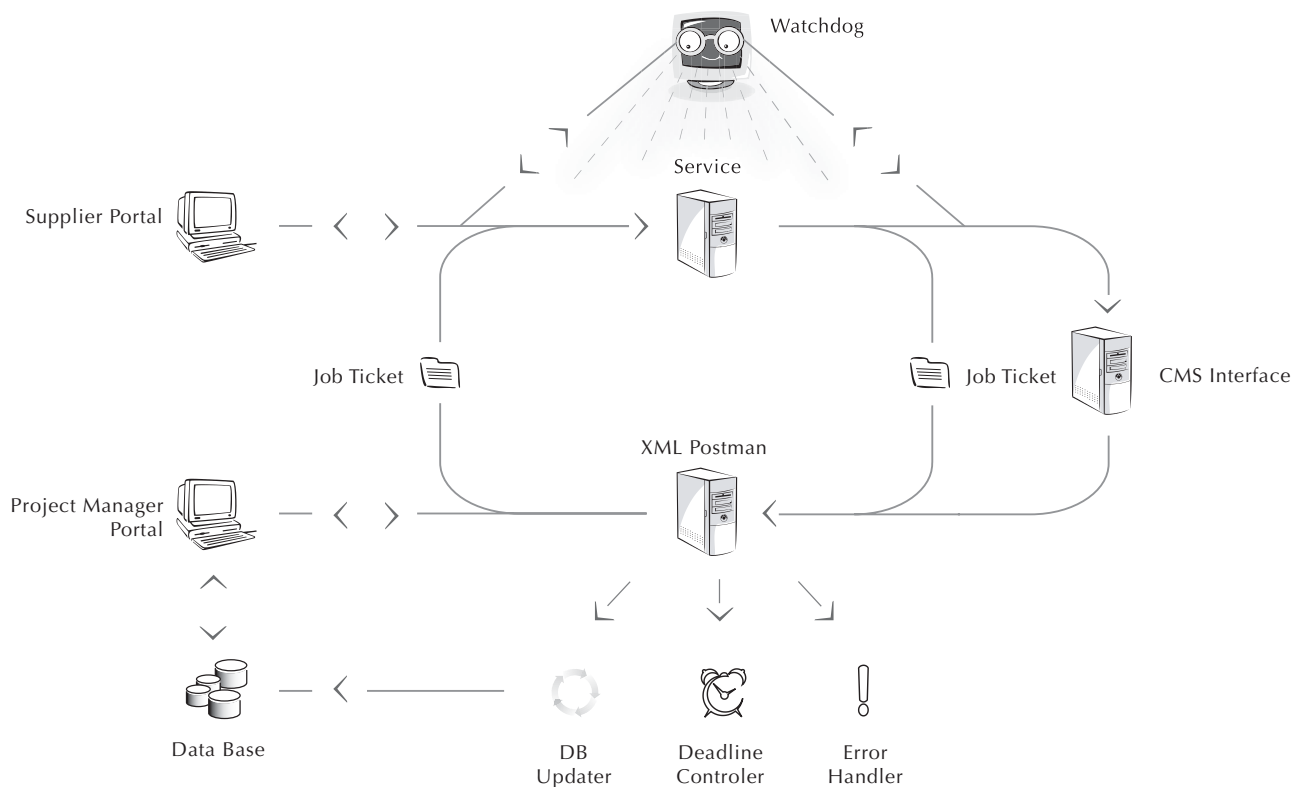
STAR James ...

Project Manager Portal

Services (operations)

The Services are the actual active operators in STAR James. Each Service is a separate, self-contained process. The various Services are invoked and run one after another by means of the Job Ticket according to the workflow definition. The results of the operations are recorded on the Job Ticket.

Possible Services:

▲ Transit Module
▲ Supplier Portal
▲ Quality Control
▲ Translation Memory Management
▲ Data Compression/Decompression
▲ Working Data Cleanup

Modular teamwork between the main elements of STAR James

Transit Module

The Transit Module starts Transit, prepares the data on the basis of defined project parameters, generates data packages for translation and receives the data afterwards. This module also compiles the statistics for the Job Ticket.

Supplier Portal

The Supplier Portal notifies the suppliers when there are new jobs. It provides the data to be translated and takes delivery of it afterwards. It monitors user permissions so that orders always reach the right supplier and they only have access to the data intended for them.

Quality Control

Quality control is performed by check routines. The data is checked for correctness before and/or after processing and a results log is sent to the project manager or supplier. The routines are user-definable.

Translation Memory Management

This involves updating the translation memory (reference material) as soon as the quality control criteria are met. The translation memory is then immediately available to the suppliers via the Supplier Portal, thus improving translation consistency and quality.

Challenges	STAR James solutions
Time and cost savings	Optimisation of existing workflows within a business
	Standardisation of projects in the information handling process
	Automation of constantly repeated tasks and routine operations
Quality improvement	Integration of all types of error and quality check
Flexibility	Adaptation and expansion of the existing workflow
	Introduction of additional workflows for new projects with different document types
Interfaces	Interface modules for linking the workflow to existing systems
	Complete compatibility with all STAR Tools: Transit, TermStar, WebTerm, FormatChecker, GRIPS, SPIDER
Single source	All-round workflow service, consultation, information analysis and software development from a single source

STAR James ...

Data Compression/Decompression

This Service handles the compression and decompression of files for despatch or subsequent processing.

Working Data Cleanup

After successful completion of a project, all files no longer required are either deleted or archived.

In addition to the above examples, other project-related tasks can also be defined as Services. Due to its flexible architecture, STAR James can perform every operation if required, such as automating process stages that are routinely part of the processing of a project. And even if process stages are automated, there is nevertheless always the option of performing them manually. As a result, the system is always under control.

Interface Services

Interface Services are functions that enable the existing translation, document/content management, cost control and accounting systems to communicate with STAR James.

Optional Modules

In addition to the four main elements (Job Ticket, Core Modules, Service and Interface Services) the following optional modules are also available for STAR James:

▲ **WebTransit** – for translators (as floating licence or add-on for existing Transit licences)

▲ **Web Dispatcher** – for translation agencies

▲ **Customer Portal**

WebTransit

WebTransit is a stand alone tool that handles communication between the customer and the project manager. It forms the link between STAR James and the actual translation tool – Transit.
WebTransit is in constant communication with the server. That means that whenever a translator saves something (e.g. new or changed terminology, translated sections), the data is transferred directly to the server and is thus immediately available to other translators in the project team. In that way, the consistency of translation can be assured when dealing with large projects, and translators and clients benefit from immediate availability of interim results.

Web Dispatcher

The Web Dispatcher is the ideal tool for translation services and agencies that contract out work to external translators and are looking for a versatile system for actively distributing jobs to them.
The Web Dispatcher organises communication with the client's STAR James system and the suppliers' WebTransit systems.

Customer Portal

In similar fashion to the Supplier Portal, the Customer Portal provides for project workflow transparency. The client can use this web portal to track the progress of work at any time. Clients can also create and initiate jobs themselves.

Key Benefits of STAR James

Open-system architecture and scalability

All process stages can be defined to suit the requirements. The expansion possibilities are virtually limitless.

System flexibility

The STAR James Services can run on all commonly used operating systems. Access to existing software systems can be enabled by the creation of interfaces.

Control and transparency

All process stages are continually documented. That information is retrievable at any time in a structured format. Thus the project manager has absolute control over projects.

Efficient data management

Duplication of data is avoided as a fundamental principle. Data is only moved or copied if it is necessary for the for the purposes of processing.

Increased productivity

Efficiency and economy is achieved by the re-use of existing, quality-checked material. By constant synchronisation between server and supplier, current work results are always available to all parties.

Quality assurance

Check routines constantly monitor the project data. Errors detected at an early stage can be corrected immediately. As a result, the data held is always completely up to date and of the best possible quality.

**STAR James standardises, simplifies and automates project management.**

STAR software solutions

As an established service provider in the information and translation management business, we constantly set ourselves the challenge of optimising processes by the use of appropriate tools.

The development of all our software solutions has always been a response to a need – in our own or our clients' businesses. The everyday use of those solutions all over the world – by clients and throughout the STAR Group itself – ensures that they are continuously appraised and improved by a global team of testers.

For STAR, technology is not an end in itself. We use it when it is appropriate to the solution of a problem or when it effectively helps to improve a work process.

The result is a set of tools that seamlessly covers the entire information process – from the creation and structuring of information to multilingual publication and information management.
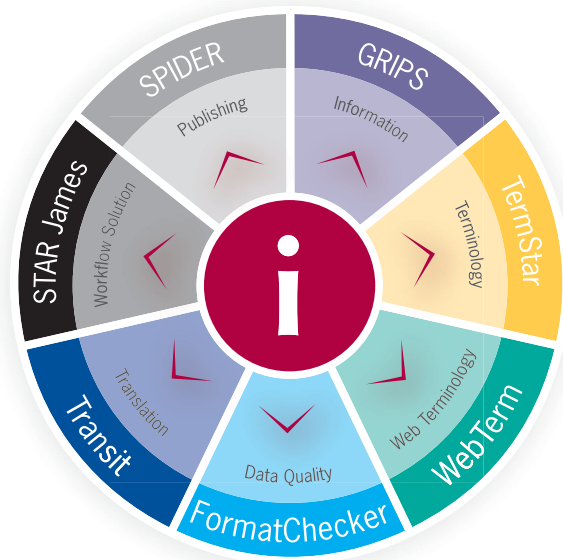
STAR software product portfolio

STAR

You can reach us anywhere in the world

We look forward to hearing from you.
Visit our website or simply call us.

STAR Group Headquarters

STAR AG
Wiesholz 35
8262 Ramsen
Switzerland

Phone: +41 52 742 92 00
Fax   +41 52 742 92 92

E-mail: info@star-group.net   **www.star-group.net**

STAR UK Ltd.
15-17 Bridge Street, Leatherhead,
Surrey, GB-KT22 8 BL
United Kingdom

Phone: +44 1372 37 73 00
Fax: +44 1372 37 33 55

E-mail: london@star-group.net

STAR Technology Solutions
Docklands Innovation Park
128-130 East Wall Road, Dublin 3
Ireland

Phone: +353 1 836 56 14
Fax: +353 1 836 46 44

E-mail: dublin@star-group.net

STAR Group America, LLC
5001 Mayfield Road, Suite 220
Lyndhurst, Ohio 44124
USA

Phone: +1 216 691 7827
Fax: +1 216 691 8910

E-mail: lyndhurst@star-group.net

STAR translitera AB
Kungsängsgatan 29
753 22 Uppsala
Sweden

Phone: +46 18 12 56 30
Fax: +46 18 12 44 54

E-mail: uppsala@star-group.net

Open-source Workflow Solutions
for Automated Translation Processes