

***This document outlines the full scope of SteelTrace 4.0 and how it can bring value to your organization. It is aimed at Business Analysts and experienced IT Project Managers who want more detail on SteelTrace 4.0's functionality.***

SteelTrace offers the first requirements capture and project definition solution that both business and technical users 'get'. Projects start right and deliver fully on business needs, on time and budget.

SteelTrace merges the power of visualization with the weight of documented requirements; enabling multiple users, both online and offline to dynamically collaborate; automating documentation and test case generation and providing rich management capability throughout the application lifecycle. SteelTrace is a key strategic solution for driving project success.

Now offering full baseline support, advanced querying and filtering, full traceability and automatic suspect links, email notifications and sophisticated reports, SteelTrace, with its unique usability and ease of deployment is the ultimate collaboration and management tool for successful project definition.

SteelTrace Enterprise provides a comprehensive environment for capturing, viewing and managing structured requirements. It provides a rich graphical interface for building scenarios and linking them together, a document generation and round-tripping system, an interface with industry-standard testing and UML modeling tools, full audit tracking of changes, a sophisticated project merging system and fine-granularity implicit locking for collaborative working. SteelTrace Enterprise is designed for teams of people who need to generate and track requirements from the inception of an IT project right through to its conclusion.

SteelTrace gives unique usability and functionality to all stakeholders. Its interface is intuitive with very little training required. It can be used live or off-line with full functionality in customer meetings.

SteelTrace gives you successful project definition. Everytime.

## DEFINE

SteelTrace makes it really easy for you to capture, define and display your project requirements. Easy to deploy across your organization, SteelTrace can enrich project definition quickly, with minimal impact on other systems and no downtime. The system can be rapidly set up for multiple users and its ease of use ensures that non-technical users can access the system and track inclusion of their requirements directly in the project. Users can also customize their interaction so that they view only those elements of direct concern to themselves and are alerted when changes are made to these elements.

All stakeholders' needs can be captured and reflected in the way that suits each best, whether graphically or textually, in multiple formats. SteelTrace's structured definition of requirements and intuitive flow-charting simplify project definition as much as possible and maximize acceptance across stakeholders, easing project management, planning, reporting and, above all, communication. By being able to communicate in the manner that suits each user best, all requirements are included and buy-in is maximized among all stakeholders.

SteelTrace's unique off-line working mode enables project definition on the fly. In other words, your business analyst can take a full replica of the project on the road, to customer/end user sites and undertake the project definition process there and then. This hands-on involvement with business users speeds up the specification process and enhances their visibility of, and confidence in, the project definition process.

The easy and complete requirements capture and definition that SteelTrace brings is a critical success factor for project fulfillment. As well as assuring project success, re-work costs are reduced.

By structuring the requirements definition process within a natural framework, a logical flow is created for the project, ensuring that all aspects are catered for and that nothing is omitted. The adoption of a standard project look and feel across an organization also means that projects can be more easily understood by both business and IT.

*"Using SteelTrace is an easy and intuitive way to capture business requirements in a standard format. I believe SteelTrace strengths are in its power and simplicity in capturing processes and requirements"*

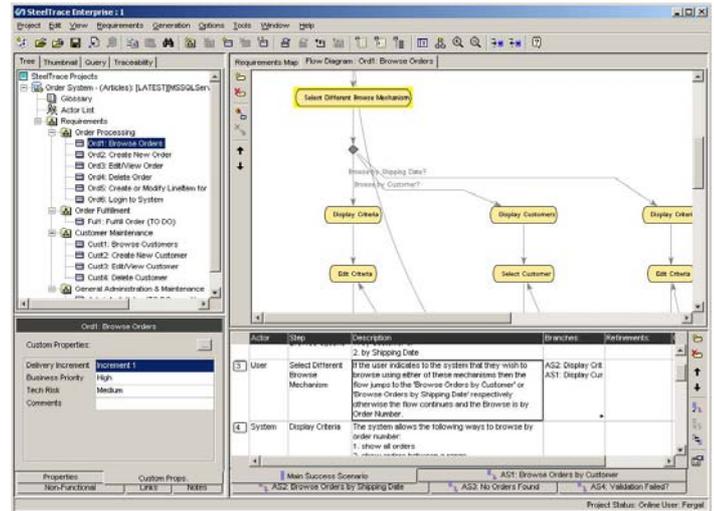
Cora Carmody, CIO,  
**Invensys**  
(one of the top 100 IT leaders in Computerworld's Premier 100)



As well as providing a standard project structure for the organization, SteelTrace also encourages the use of a Project Glossary – a set of standard and defined terms and phrases to ensure coherence and consistency and to avoid mis-understanding as a result of ambiguous terminology.

SteelTrace's open-standards based architecture stores project data in a standard SQL relational database (e.g. MySQL, Microsoft SQL Server, Oracle 9i). This gives users easy access to extensive valuable project data housed in the project database, enriching other projects and commercial activities. It also makes SteelTrace easy to integrate with other tools (such as all standard testing, project management and application development environments) and supports scaling to large numbers of users and volumes of data.

SteelTrace's main project definition page (see right) has a standard requirements tree allowing navigation through the project structure (top left hand corner), a graphical flow chart that automatically shows the natural chain of events – the steps, branches and alternate flows with which the Project must deal (top right hand corner), detailed text describing each step that makes up the project requirements (bottom right hand corner) and (bottom left) standard and custom properties and characteristics associated with each requirement outlining any operational requirements that must be met e.g. scalability, distribution, infrastructure, etc.



SteelTrace also offers a number of features that make it particularly easy and quick to define your project requirements:

- ❑ **Easy creation of requirements and their scenarios.** Multiple scenarios can be created consisting of steps. Scenarios and steps can be re-ordered, moved, linked or deleted with an intuitive set of GUI-based actions.
- ❑ **Easy grouping of similar requirements.** Requirements can be packaged into logical groupings while still being able to reference requirements in other packages via branches or refinements.
- ❑ **Textual and flow-diagram representation of scenarios.** The intuitive, graphical flow-diagram representation of scenarios automatically updates when the textual representation is altered, requiring no user knowledge of standard diagramming notations.
- ❑ **Easy editing of project artifacts across multiple projects.** Several projects can be opened simultaneously within a single SteelTrace Enterprise session; artifacts can be moved between projects via the clipboard.
- ❑ **Connection of different requirements via branches.** Requirements can jump to other requirements, allowing the sharing of specific requirements (such as Login) across the project.
- ❑ **Decomposition of requirements via refinements.** High-level requirements can be broken down fully, thereby allowing the creation of a hierarchy of requirements showing differing levels of detail.

## DOCUMENT

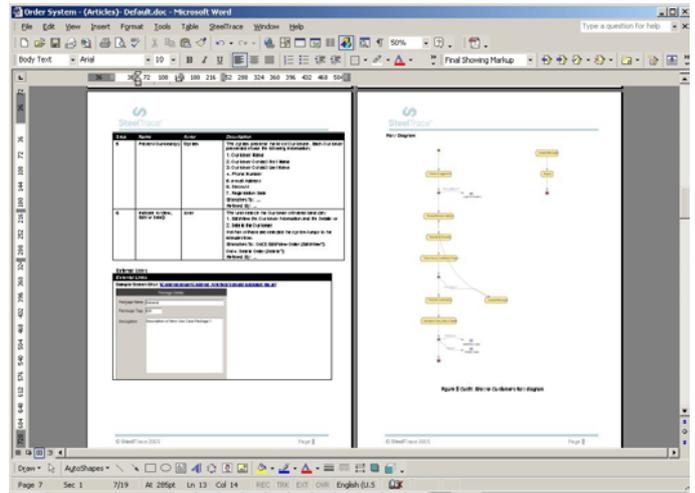
SteelTrace's automatic document generation and round-tripping system turns the production of high-quality, accurate requirements documents into a simple task. Multiple formats are available so that stakeholders can communicate in the way that suits each best (i.e. Word, Excel, Charts, etc.). Edits and changes can also be incorporated directly back into the main project – making it really easy to

*“Using SteelTrace has allowed us provide our customers with very structured process and detailed requirements documentation. This ensures that we have consistent representations of our solutions across our customer base. SteelTrace has made a significant impact on the speed and success of customer implementations”*

Patrick Diamond,  
Deputy Managing  
Director, **AIB**  
**International**  
**Financial Services**



manage and control the edit process. The versioning nightmare associated with multiple requirements specification documents is eliminated. SteelTrace also makes it a simple matter to generate detailed documents and reports outlining specific project parameters based on a wide selection of pre-canned templates or on customized reports using company-specific branding and styles. Multiple output formats are available so that stakeholders can communicate in the way that suits each best (i.e. Word, Excel, Charts, etc.). Their edits and changes can also be incorporated directly back into the main project – making it simple to manage and control the edit process. A sample document is shown (see right) outlining a set of requirements associated with a particular project.



*“SteelTrace helped us achieve our objectives in a very short timeframe. The ability to document the processes, determine the generic process, and then pass the SteelTrace project onto BaaN for them to carry out a gap analysis was critical to the level and speed of communication on the project”*

Ian Boylan, Lead Analyst, **SOLECTRON**



Other project documentation and reports can be easily generated and circulated in the format most suitable to the individual stakeholders. Requirements can be sorted and prioritized based on any metric provided (cost, urgency, etc.), with advanced queries and associated reports generated.

All reports and documents include associated artifacts (e.g. sample screen shots) and any other custom properties associated with the requirements concerned, ensuring completeness and accuracy.

As well as outputting project data to documentation and reports, projects can also be exported intact for other uses such as MS Project, CSV files and other formats.

SteelTrace enables:

- ❑ **Automated Generation of requirements documents** in Microsoft Word 2003, Word 2002 and Word 2000 formats.
- ❑ **Reversal of requirements documents into main project.** A customer can edit a Word format document and their changes can be quickly reversed back into the original requirements specification, keeping the repository and documents in sync. and helping the customer make their inputs easily and comprehensively.
- ❑ **Management of document templates.** Document Templates allow customization of generated documents, changing the layout, content and branding to suit individual projects, customers and company standards.
- ❑ **Publication to Web.** SteelTrace ships with a number of pre-canned web reports that allow the entire project to be published to an internal or external web server. Developers, QA and other stakeholders can easily review the project requirements online in an easily digestible format.

Enabling all stakeholders to review and edit the project in the most suitable way for them, on-line or off-line, is the most powerful way to secure accuracy and buy-in throughout the project life-cycle.

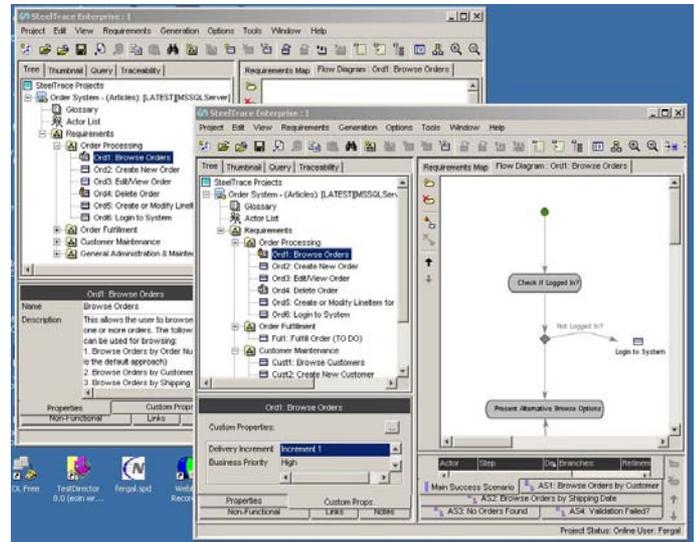
## COLLABORATE

SteelTrace is the ultimate collaboration tool. Distributed teams of any size can work on projects in real-time while on-line. Live visibility of changes for all SteelTrace users speeds up the definition process and ensures that the central project is the reference baseline. All changes and inputs are accurately tracked maintaining an accurate audit trail. Maximum participation is ensured, with users working on the most current version of the project every time.

SteelTrace works at a finely granular level. While an individual requirement is being edited, it and its dependencies are automatically locked to all but the user performing the edit. Other users can still view

the requirement in question, but cannot make changes to it until the lock is released. This means that no two users can interfere with each other's work in progress, but everyone can always see an entire project and its context and work independently on sections of that project. This allows efficient collaborative working, where every change is immediately visible to all interested parties.

SteelTrace User Collaboration with an associated locked requirement is shown (see right). Teams and individual users can also work in "off-line" mode with full system functionality and with the ability to merge their work back into the main project in a fully controlled way when back on-line. This means that staff can work remotely on the project, including at a customer site where on-line access may not be available. Off-line users work off a complete version of the project, which means that they have full functionality and are able to create new projects, generate documents and reports and work as normal.



- ❑ **Instant modification visibility.** As soon as any user modifies a project entity, the change is immediately visible to all users working on a project. There is no wasting of time working on out-of-date information.
- ❑ **Fine-granularity locking.** When a user is editing part of a project, only the requirements actually involved in the edit (and those that depend on them) are locked; other users of the system can continue to work on the rest of the project.

*Using SteelTrace we've reduced project development costs by being able to quickly document and share information between everyone involved in a project, making sure that important information doesn't slip through the cracks.*

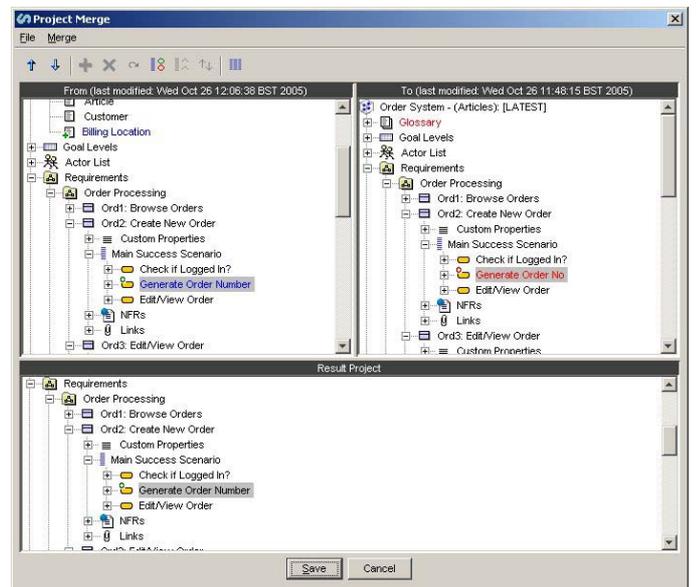
Michael New, Senior Project Manager, AMP Bank



All changes to the project can be immediately incorporated into the main project through a powerful visual merge capability when the user comes back onto the network. Conflicts are detected automatically and flagged for action: a conflict dialog displays the list of conflicts and allows a user to specify which cases should prevail. (See right).

SteelTrace is unique in offering this important and unrestricted off-line/merge-back capability.

With SteelTrace, all projects are held in a central database available for live work online while connected or for offline usage when away from the network. The repository also manages references to associated files, sample screenshots etc. associated with the project(s) and links with any other project-related documents (e.g. Excel spreadsheets etc.).



This structure delivers accurate and live project data for all users. It allows access to all projects in the organization - a one-stop-shop for all project requirements, templates and records. SteelTrace's central search facility means that project set-up can be accelerated by using/adapting similar requirements

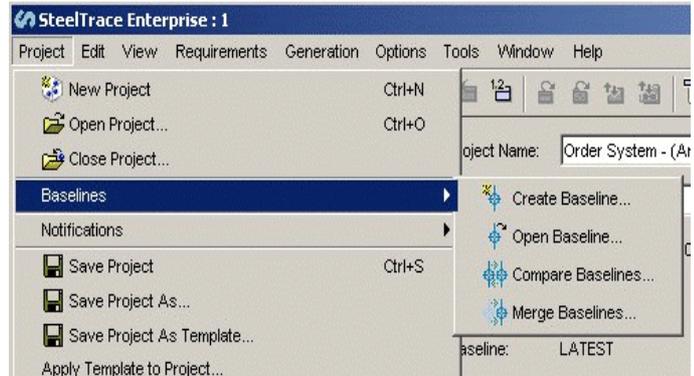
*SteelTrace allows us work in real-time with our clients to understand issues, deal with unresolved conflicts, etc - right up front. There is nothing like going step-by-step through a transaction and asking "what next?" It gets our clients rapidly to a level of thinking that otherwise might take weeks of work/review cycles".*

Jon Karpoff,  
Senior Partner,  
Information  
Architecture  
Director, **Ogilvy  
Interactive**

OgilvyInteractive  
worldwide

from other projects that can be easily found with the search function, enhancing the benefits of re-working.

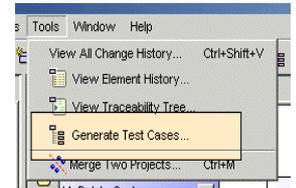
SteelTrace provides unparalleled baseline functionality. (See right). Whether for cloning a project to enable divergence or for establishing a point of sign off within a project or even for enabling the use of an existing project to kick off a new one, Baselines save a lot of time by making it easy to get project sign-off and by safely tracking and reporting project change. SteelTrace's baselines also offer the ability to merge changes back or forth that may be needed in another project, avoiding re-work. Locking down specific baselines and project phases also eases final sign-off of the project definition and specification.



Project Templates support corporate standards in terms of project structure, terminology and levels of structured requirements. With SteelTrace's pre-canned and customizable project templates, sets of pre-configured properties can be used for all your projects. Corporate standards can be encouraged and sets of useful information introduced from project inception across the enterprise. Project Templates also contain specific pre-built project elements. These can include glossary items, templated common flows such as login etc. that can tend to recur across projects.

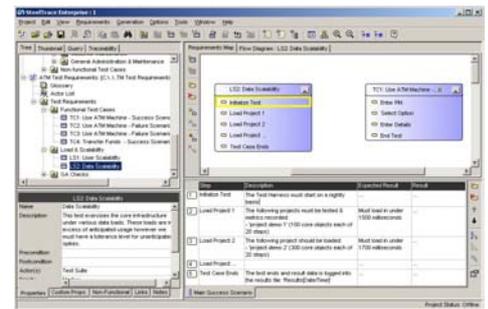
## VALIDATE

SteelTrace ensures that all project requirements are included in the test plan. With its automatic test case generation capability, all requirements links and dependencies – whether business, operational, visual etc. – are mapped to the test plan, ensuring complete coverage of the project's ability to deliver. (See right, top). The automatic generation of test cases for every requirement defined in the project assures that the testing process is based on the actual requirements and that the final project will deliver specifically on these requirements. (See right, middle). A full set of test documentation can also be automatically generated to support the test planning process and to speed the process along.



By having QA involved earlier in the project definition process, quality is radically improved – as is the potential of the project to be successful. An immediate effect of this is the reduction in re-work requirements and project risk.

SteelTrace also integrates smoothly with all leading Testing tools (e.g. Mercury Test Director and Compuware QA Center; See right, bottom), in some case bi-directionally, allowing a seamless transition of the automatically generated test cases into the actual test environment when appropriate.



As well as providing for the direct mapping of requirements to testing tools, SteelTrace also provides a way to translate requirements into design artifacts such as UML (e.g. Compuware OptimalJ, IBM Rational Rose and Borland Together) so that developers can understand them clearly.

Arbitrary notes, files and links can be included with a project so that they can be tracked along with the requirements and included in any transitions to test or development. In this way, ALL business needs can be included and referenced throughout the project lifecycle.



## MANAGE

SteelTrace's extensive functionality makes it possible for all stakeholders to manage and track what is happening in the project in real-time. Customized views and documentation as well as the power to cut and slice the data in any way means that the value of the project data can be fully exploited – whether for ongoing progress reports and analysis or for setting up whole new projects.

Full traceability and automatic suspect links, the ability to set up complex queries and notifications take project definition and impact analysis to a new level. With SteelTrace, organizations can now make accurate estimates and deliver projects with greater predictability and control.

Project success depends on complete and reliable **traceability**. SteelTrace projects are comprised of Structured Requirements with scenarios, steps, branches, refinements and links to SteelTrace or non-SteelTrace elements. An automatically generated 'Traceability Tree' enables tracing to all dependent elements either within or across packages and projects. (See right).

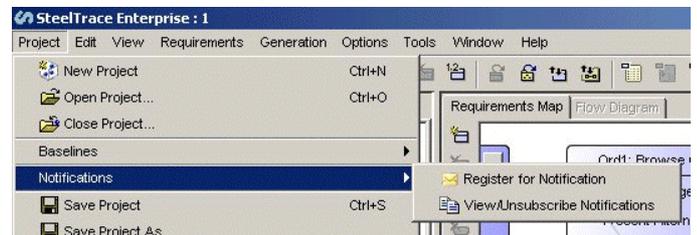
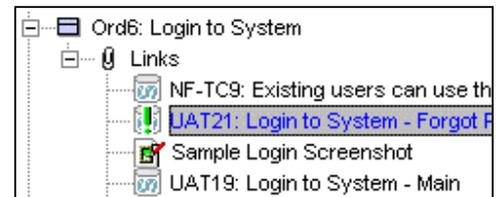
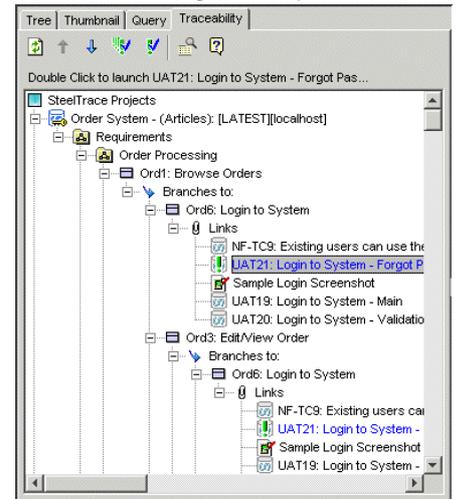
When elements are selected in the Tree, SteelTrace automatically selects the 'traced-to' element in the background display showing the full package context for the traced-to element. Where cross-project traces exist, the traced-to element (and project) can be automatically loaded by selecting the link in the Traceability Tree. Traces to external tools via links can also be displayed automatically. SteelTrace's auto-generated Trace Tree makes dependency checking and traceability navigation a simple process.

SteelTrace's deep traceability functionality ensures full visibility of the connections and interdependencies within and across projects and between elements of the project and external file artifacts. Dependency- and impact- analysis are made really easy, as is the highlighting of any changes that may have a knock-on effect on other project requirements. Being able to graphically show these links in a way that non-technical users can understand and buy into accelerates project definition and acceptance.

**Suspect Links** are automatically highlighted whenever a change to one element of the project may have a knock-on effect on another element, or file link or dependency. (See right). This makes certain that all requirements keep track of amendments to related requirements and ensures full visibility of all impacts on one element of the project when changes occur in another. As a result, stakeholders can understand the impact on the whole project of making changes. SteelTrace's Suspect Links functionality also serves as an early-warning system for potentially high-impact change.

Comprehensive **Change Analysis and Notification** is available so that users can mark specific project requirements, packages or elements. (See right). Any changes made subsequently to those elements will be automatically notified to them by email with a link to the element concerned, showing the details of the proposed change and who made it. In this way, stakeholders can monitor developments in the aspects of the project of most concern to them without having to review the entire project. This eases collaboration and ensures ongoing matching of requirements with the business needs of the project.

Projects with multiple users can become complex very quickly. The **Change History and Audit Trail** available from Steeltrace ensures that all project amendments and changes are tracked and logged so that a full history of changes is maintained. As a result, additions to and deviations from the project can



*“Innovation and time to market are critical in our business, which means marketing and engineering must work together closely. Now that we use SteelTrace to collect project requirements instead of Word documents, marketing, engineering and sales can have visibility into all of the requirements. We also use SteelTrace to prioritize requirements, trace the history of any changes and limit access control so that not everyone who views requirements can change them.”*

Rebecca Baum,  
Product Manager,  
**Crosswalk**



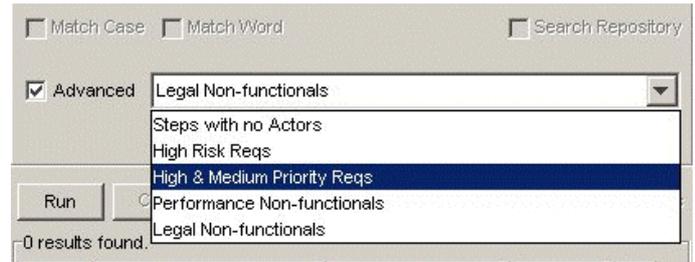
be tracked at all times, supporting project accountability and ensuring that the correct amendments are made at all times.

SteelTrace also enables the creation of **Custom Properties and Fields** within each requirement, package and project, dramatically increasing the flexibility of the project data to hold data specific to the needs of different roles. This makes it extremely easy to attribute qualities to project requirements and elements. Priorities can also be set within projects and it is very easy to sort within the project for specific classes or categories of requirements (i.e. high-risk, completed, etc.). Domain-specific information can also be captured alongside project requirements. Custom Properties can be set as either freeform or 'bound', the latter meaning you can select from one of a list of predefined values.

Full, logical **Complex Querying** of project data is completely enabled whether by requirement, custom field, or other element, e.g.

approved/unapproved elements, status of project, priority issues, etc. (See right). Queries are easy to set up and can be saved for regular and future use. Query results can also be exported to support further work/filtering on project parameters or the development of

detailed documentation/reports. By getting a better, or more concise view of project data, prioritization, reporting and tracking are made much easier. Stakeholder-specific status and management reports can also be easily produced.



**Risk Analysis/Corporate compliance** are also supported through SteelTrace's ability to show how business needs and priorities are being met and delivered by the project. The tracking of business needs throughout the development life cycle right through to the automatic generation of test cases and seamless integration with AD tools assures compliant project delivery. Corporate compliance support, risk analysis and general performance assessment is made easy through project data and metrics and the use of custom fields such as risk, profile, dependency, owner, etc.

## CONCLUSION

SteelTrace is the proven leader in project definition and specification. It is easy to understand by all stakeholders and creates a collaborative and structured approach to project definition that accelerates projects and improves the value they yield.

Already powering requirements for leading Fortune 100 companies and many organizations around the world, Steeltrace continuously evolves to deliver the very best levels of usability, communication and collaboration available in the market.

Let Steeltrace give you the structure and the easy-to-use functionality to help you deliver your projects effectively, on time and in budget, no risk.

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### System Requirements for SteelTrace Enterprise (client side)

- Pentium 3-class processor or equivalent
- 256 MB of RAM (minimum)
- 60 MB of available hard disk space
- Microsoft Windows 2000 with latest Service Pack, Windows XP with latest Service Pack
- Microsoft Word 2000, Microsoft Word 2002 or Microsoft Word 2003
- Adobe Acrobat Reader for SteelTrace Help Files.

### System Requirements for SteelTrace Enterprise Server

- Pentium 3-class processor or equivalent
- 512MB of RAM (minimum)
- 60 MB of available hard disk space for Enterprise Server. Additional space required for SQL Database (Typical MySQL size approx 200MB).
- MySQL (available free) or Oracle 9i or MS SQL Server 2000 with SP 3
- Microsoft Windows 2000 with latest Service Pack
- Adobe Acrobat Reader for SteelTrace Help Files.