ARIS Toolset
Version: 6.23

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1. Product Overview

IDS Scheer is a leading provider of business process management related products and consulting services designed to support every phase of the business process management lifecycle, ranging from design, modeling, and analysis to implementation, monitoring, and optimization.

For business process modeling and analysis, and for enterprise architecture design, IDS Scheer markets the ARIS Easy Design and ARIS Toolset products. The former is an entry level tool intended primarily for users just getting started in business process modeling and analysis as well as for general (i.e., non-technical) business users. The latter is a high-end tool set that provides all the facilities and features required to support enterprise architecture and enterprise process management initiatives. This report focuses on the ARIS Toolset and its optional add-on components, which, together, enable the enterprise-wide, global definition and design of business processes as well as their analysis and optimization.

ARIS is also the modeling tool used by SAP and by most SAP developers, and the product includes a number of features that support SAP modeling and development. It’s the only tool integrated into SAP NetWeaver.

Table 1 provides an overview of the ARIS Toolset (version 6.23) and its main add-on components. The ARIS Toolset provides extensive features and functionality, ranging from repository-based process modeling and analysis to facilities for managing, configuring, checking, and reporting on business processes. It supports a large number of process methodologies and enterprise frameworks. Optional add-on components are available for simulation, Balanced Scorecard implementation, activity-based costing (ABC), and web-based design and publishing of modeled and optimized processes.

A number of templates and reference models are also available, including for SCOR, ITIL, Oracle, Microsoft Axapta, Financial Services, and Home Building. IDS Scheer also offers various industry frameworks and solutions for ARIS Toolset, including for Defense and Healthcare. Finally, ARIS supports paperless certification according to many well-known standards.

Table 1. Overview of ARIS Toolset

<p>| <strong>ARIS Toolset</strong> | High-end EA and BP modeling and analysis tool consisting of a large number of modeling, analysis, database/repository, and design components. Supports a wide-range of EA frameworks and methodologies. Add-on options available for simulation, web-based design, publishing, and communication, and Balanced Scorecard, Activity-Based Costing, etc. |
| <strong>ARIS Easy Design</strong> | Intuitive, entry-level business process analysis and modeling tool targeted at BP beginners and occasional users who document their knowledge in graphical models. Provides modeling, presentation, and reporting functions. |
| <strong>ARIS Explorer</strong> | Core management component of ARIS Toolset: Provides flexible navigation options for administering servers, databases, user groups, access privileges, fonts, method filters, models, and objects. |
| <strong>ARIS Designer</strong> | Graphical design tool for modeling/documenting business processes, organizational views, data and views, etc. Supports large models, multiple placement of objects, user-defined objects, scaling of object |</p>
<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARIS Attributes</td>
<td>Central recording and editing component for ARIS Toolset. Allows users to conveniently enter the attributes of databases and all database content. Features a table structure of attribute editing – providing a quick overview of attribute values – and allows multiple items to be compared directly.</td>
</tr>
<tr>
<td>ARIS Configuration</td>
<td>Facility for configuring ARIS Toolset to meet organizational and end-user needs, including adapting methodologies and frameworks to special requirements and for defining filters and chart definitions. Provides import/export import capabilities.</td>
</tr>
<tr>
<td>ARIS Merge</td>
<td>Facilitates consistent merging of the contents of multiple ARIS databases/repositories into a single master database.</td>
</tr>
<tr>
<td>ARIS Change Management</td>
<td>Model generation facility; users can generate new model views from existing database contents. Existing models or objects can be combined according to certain rules to generate new models that provide additional information. Source models and objects remain unaffected.</td>
</tr>
<tr>
<td>ARIS Identification</td>
<td>Facilitates unique identification of database items. (An identifier “abb: ID” can be assigned to each item in a database.) Identifiers can be used to show which groups have created specific items.</td>
</tr>
<tr>
<td>ARIS Consolidation</td>
<td>Supports shared modeling by managing versions of equivalent objects in different databases through merging and the creation of an object definition that is valid throughout the company.</td>
</tr>
<tr>
<td>ARIS Analysis</td>
<td>Provides KPIs for qualitatively assessing and evaluating processes modeled in ARIS.</td>
</tr>
<tr>
<td>ARIS Chart</td>
<td>Allows users to create presentation-quality business graphics on the basis of data stored in the ARIS Repository. Charts can be integrated into other applications.</td>
</tr>
<tr>
<td>ARIS Report</td>
<td>Facility for outputting database content in text or table format. Report Wizard allows users with no knowledge of the script language to generate their own reports. Reports output in XLS, DOC, RTF, TXT, and HTML.</td>
</tr>
<tr>
<td>ARIS Semantic Check</td>
<td>Model control facility that verifies models for compliance with certain rules to ensure that the business processes are mapped in ARIS logically and meaningfully. Only if models meet requirements are they processed further by other ARIS components (e.g., simulation).</td>
</tr>
<tr>
<td>ARIS Variants</td>
<td>Using process variants, companies can, for example, define variants based on core practices that are tailored to the needs of different subsidiaries. Local differences are taken into account, but company-wide standards are preserved.</td>
</tr>
<tr>
<td>ARIS Web Designer</td>
<td>Add-on option for Web-based design and modeling of business processes. Typical users are technical departments. Provides intuitive GUI.</td>
</tr>
<tr>
<td>ARIS Web Publisher</td>
<td>Add-on option for publishing/distributing ARIS models via standard Web browsers. Access can be defined according to technical topic or role.</td>
</tr>
<tr>
<td>ARIS Simulation</td>
<td>Add-on option. Provides Discrete Event simulation and analysis capabilities, including object and attribute animation. Generates cumulative and detailed statistics of simulations and process efficiencies for display in ARIS Toolset or exporting to MS Excel, etc.</td>
</tr>
<tr>
<td>ARIS BSC</td>
<td>Add-on option. Supports rapid prototyping of Balanced Scorecard Systems. Includes structured methodology and project knowledge for selecting proper models, implementation, and visualizing and analyzing BSC data.</td>
</tr>
<tr>
<td>ARIS ABC</td>
<td>Add-on option for conducting Activity-Based Costing (ABC) analysis with ARIS Toolset.</td>
</tr>
</tbody>
</table>
2. **Product Architecture**

2.1. **Architecture Overview**

Figure 1 provides an overview of the ARIS Toolset architecture. ARIS has a flexible architecture that can scale from a single user to hundreds of users geographically dispersed. The ARIS Toolset and its accompanying modules and add-on components (e.g., Simulation, Balanced Scorecard, Web Publisher, etc.) run on Windows platforms and operate in a LAN environment. The web-based modeling and web-based viewing facilities are Java-based. The ARIS Web Publisher can also function in a WAN environment. The ARIS Web Designer modeling tool works in either a LAN or WAN environments, and can run either in a browser, as a stand-alone application, or installed locally.

ARIS features a central repository, which can be accessed by multiple users and can be deployed in a development and production environment. ARIS repository data is stored in a Sybase, Oracle, IBM, or Microsoft SQL Server database. ARIS client components access the database (repository) server via the ARIS Business Server and are linked by high-speed network. It is also possible to use ARIS Toolset and ARIS Easy Design tools in single-user mode – a scenario primarily intended for desktop PC or notebook users.

2.2. **Usability and User Interface**

ARIS modeling tools support both general business users and technical analysts and IT personnel. ARIS Easy Design is intended for more general business users, while ARIS Toolset is targeted at more technical users like IT architects, project managers, and systems designers. However, all models created in various ARIS tools and components are connectable and shareable because they utilize the same repository.
Figure 2 shows the basic GUI for the ARIS Web Designer tool. This screen is displaying an overview of a fictitious company’s business model. By clicking on the various icons (e.g., “Strategy,” “Organization,” “Business Process,” “Data,” “Systems/Interfaces,” “Products/Services,” etc.) the user can drill-down to specific models and their associated information.

The ARIS GUI provides comprehensive design and navigation capabilities. Users can prepare models graphically or in text format. Full-screen mode and navigation options enable users to present data in a comfortable way, allowing design and modeling issues to be divided into clearly understandable sections, and large models to be viewed in their entirety. Users can also embed and link (OLE-capable) multimedia objects in their graphical models as additional information, allowing the integration of text, presentations, videos, or internet links into their process documentation.

The ARIS interface is also configurable, allowing users to define their own symbols and the appearance of objects, and to specify font and language capabilities used by the tool.

The ARIS design environment provides a number of features to assist users with creating process, organization charts, and other diagrams. These include automatic layout generation – including the multiple placements of objects as well as placement of attribute occurrences on several objects at the same time through multiple selections.

ARIS also has several features that provide behind-the-scenes “intelligence” for assessing and evaluating the quality of processes modeled in the tool. A semantic-checking facility ensures that as the user creates a model it will comply with established modeling conventions. In addition, an analysis module provides KPIs on the process-orientation of the organizational structure, on the integration of data and information, and on the degree to which the processes are integrated in the system. Figure 3 shows a process flow (in Swim Lane format) modeled in ARIS Web Designer.
2.3. Repository Options/Team Development

ARIS provides multiple capabilities for supporting team design and development. ARIS is repository driven, with all models and knowledge of business processes stored in the ARIS database repository, thus, ensuring maximum reusability of the data and models. The IDS Scheer folks refer to ARIS as having an “active repository” whereby all work or modeling takes place inside the repository. In other words, developers do not actually check out a model and then check it back in the traditional sense. Rather, when you open a model inside the repository, it is, in effect, “checked out.”

ARIS’s model-generation capabilities enable users to generate new views of existing models and other repository content. Users can combine existing models or objects according to specific rules to generate new models that provide additional information. For example, users might generate a function tree diagram from functions contained in multiple event-driven process chains (EPCs). Or, users could create an EPC from UML Activity diagrams. Importantly, source models and objects are not affected by this process.

Further team development support is provided by ARIS Web Designer, which allows users to design models in a standard browser, and ARIS Web Publisher provides role-based web access of models to employees via the internet.

Finally, ARIS Toolset features multilingual functionality for supporting international project teams.

2.4. Integration with Other Products

ARIS Toolset offers various APIs and import/export formats for integrating and exchanging data with other products. In addition to XMI, export and import capabilities, ARIS can import process models...
from txt, XML, Visio, BPEL, and Excel, as well as from popular case tools like IBM Rational Rose and ERwin. ARIS also provides an Active-X-API for exporting and importing information from the toolset.

Users can also use BPEL imports to transfer business scenarios and business processes from SAP XI to the ARIS database. This interface is available for ARIS for SAP NetWeaver 6.23.

Finally, IDS Scheer offers consulting services for custom interface development. And Reischmann Informatik offers several third-party interface solutions for ARIS as well.

3. Analysis and Process Modeling

3.1. Enterprise and Organization Models

Enterprise Architecture Models
ARIS is one of the few tools on the market that supports all of the major frameworks, including Zachman, TOGAS, FEA, DoDAF, and C4ISR. In addition, ARIS features its own proprietary framework known as “ARIS House.”

ARIS Toolset also features a configuration component that allows users to customize frameworks and methodologies to meet the specific framework and methodology needs of their organization by creating filters or templates (See Section 3.2.3).

Organization Models
Organizational units, data objects, application systems and information carriers can be modeled within processes in ARIS, along with events and functions.

Resource and Cost Modeling
ARIS allows users to model a range of resource categories – including equipment, human, consumable, and services. Users can also define cost, schedules, and usage patterns as well.

Mapping Organization Strategies to Performance Measures
ARIS offers several options for representing performance strategies and goals, including Balanced Scorecard. End-user organizations can also add other representations to suit their needs.

The ARIS Balanced Scorecard (BSC) option supports the documentation and analysis as well as the integration of strategic objectives, critical factors, and key data and measures necessary for implementing a balanced scorecard solution. A variety of options are offered. These range from the basic planning and documentation of a Balanced Scorecard to prototype development and the transfer of the information via Excel interfaces. Also supported are the analysis of cause-and-effect relationships and the calculation of actual values and a comparison with target values as well as immediate detection of deviations.

Managing Process Portfolios
Process portfolios are managed in the ARIS Repository, which can handle up to hundreds of thousands of processes. A complete description of the enterprise processes is captured in the ARIS tool set, including metrics, people, systems, and data.

3.2. Defining Processes

ARIS offers several ways to model processes, with each method applying semantics that enforce process integrity. The user can model the process flow, process rules, actor, systems, inputs and outputs, and other resources needed in the process.

Define Processes
Processes are defined using ARIS Designer or ARIS Web Designer – graphical design tools for modeling and documenting business processes, organizational views, and data. Users can also define process models in text format.
Process Information Storage and Integrity

All models are stored in the ARIS repository. In addition, ARIS’s semantic model control capability ensures that models are checked to verify they comply with specific rules. This helps to ensure that the processes are mapped in ARIS logically and meaningfully. Only if models meet certain requirements are they processed further by other ARIS components, such as ARIS Simulation or ARIS Balanced Scorecard. (For more on ARIS Repository features and system administration/security, see Section 2.3.)

Graphical Notations

ARIS supports over 144 notations for modeling processes, data, systems, organizations, products, and services.

Users can also create tailored notations and frameworks. This is accomplished using the ARIS Configuration component, which provides facilities for configuring ARIS Toolset to meet organizational and end-user needs. For example, by creating the appropriate filters, end-user organizations can adapt the ARIS Methodology to special requirements (e.g., rename model types, object types, symbols, attribute type groups, etc.). Users can also define templates that influence the appearance of objects and connections. (Templates can be assigned to specific models in ARIS Explorer or ARIS Designer.)

In version 6.2, ARIS offers BPMN as an additional modeling notation. This method can now be used in conjunction with the other ARIS methods available.

A UML Design component that supports all UML methods, including UML 2.0 Activity Diagrams, is available for ARIS Toolset. (For more on ARIS’ UML capabilities see Section 7.1.)

3.3. Subprocesses and Activities

Handling Subprocesses and Activities

ARIS provides a drill-down capability for representing and managing subprocesses.

Defining Activities

ARIS offers multiple drill down levels all the way down to the activity level. Using the function object, a user can depict activities. Alternatively, one can use the Activity diagram to show actors and activities.

Documenting Decision Rules

In ARIS, decisions are defined using the logical operators and events.

Rules Entry

Business rules can be depicted in the form of events and operators to show process rules; other rules can be shown as separate rule objects in the model.

Activity Costs, Resources, and Time Data

ARIS methodology allows the storage of cost, resource, and time data with activities.

3.4. Simulation

Simulation Capabilities

The ARIS Simulation add-on option features a Discrete Event engine that provides a number of simulation capabilities, including the ability to define and run multiple process scenarios and the ability to run graphical animations (both object and attribute animations).

Analytic Capabilities

For individual processes, the following data can be determined by dynamic simulation:

- Executability of the process, process weak points, resource bottlenecks, and so on
- Process duration that considers available resources for this process and other resources
- Execution frequency of a process within a given period
- Use of employees, organizational units, and other resources by certain processes
• Capacity development of used and consumed materials as well as finished products
• Wait times of the processes, resulting from employee and other bottlenecks
• Localization of the process weak points
• With the simulation of target processes, you can forecast the actual effect of planned restructuring

Real-time Data Utilization
ARIS Simulation does not interact with operational systems; however, IDS Scheer’s Solutions Groups can build such an interface.

Model Distribution and Simulation on Enterprise Networks
ARIS offers a full process discrete event simulation. The simulation can be run on high-level models that represent enterprise process flows. The simulation can also be run on the server.

Statistical Fit/Data Analysis
ARIS provides some analysis capability to analyze the process, using the simulation tool and the Process Cost Analyzer. The simulation engine produces various statistics from each simulation run that can be taken into statistical analysis tools like MINITAB.

Capture and Reporting of Simulated Metrics
ARIS’s animation features allow users to (visually) determine first results and tendencies during the simulation itself. Visual changes to individual objects during the simulation may immediately indicate whether or not process branches are ever run through. While attribute animation provides more detailed information about the state of individual objects, indicating, for example, the number of times a function is carried out at a certain point in time.

ARIS also generates cumulative and detailed statistics of simulations and process efficiencies, and the statistics can be displayed online (in real-time) in the form of charts, tables, and other diagram formats. Users can also export simulation results and statistics to Excel for further analysis, formatting, and publishing.

4. Business Process Methodologies

4.1. Business Process Methodologies

“ARIS Value Engineering” is the principal IDS Scheer methodology for business process management. The ARIS methodology includes over 140 model types and hundreds of objects. Users can also modify the appearance of objects.

In addition, ARIS Concept provides a guideline for developing, optimizing, and implementing integrated application systems. At the same time, it shows business administration specialists how to view, analyze, document, and implement information systems. This ARIS Concept approach is broader than just systems development. It supports enterprise architectures, business process improvement, and compliance. It also includes some standard approaches, as well as proprietary approaches.

4.2. Six Sigma Support

IDS Scheer does not offer a specific Six Sigma add-on package for use with ARIS Toolset. However, the company does offer a training program designed to support a Six Sigma model-driven solution. This includes a 5-day-workshop covering the Six Sigma concept as well as IDS Scheer’s Six Sigma product portfolio.
5. Report Generation and Document Management Capabilities

ARIS includes a GUI for users to evaluate and run reports at the group, model, or object level. Users can also use a Report Wizard designed to assist in creating a report by accessing report scripts included with the ARIS package, or that have been created (i.e., user-defined) with ARIS Script Editor and ARIS Script. ARIS includes 90 standard reports, which users can modify.

The ARIS Report component allows you to evaluate selected database contents in text form. Evaluations can be created as files of various formats, which users can edit further, using standard applications such as Word, Excel, or an HTML editor. Users can also export model graphics in such formats as WMF, GIF, JPG, and BMP. Some reports can also write data to ARIS databases. In addition, database contents can be output automatically for translation, and translated texts can be entered back into the database.

The ARIS Chart components assists users in creating charts and graphics that are presentation ready on the basis of data stored in the ARIS repository. ARIS includes a large number of chart types. Users can also define templates to set up chart definitions that can be used to display issues and the relationships between issues in a format suitable for presentation. These charts can also be integrated in other applications.

With ARIS, users can also create knowledge management models by using a knowledge object to indicate knowledge. In these knowledge objects, the user can link to external sources (e.g., documents, URLs, or knowledge management systems, etc.) so that external documents can be triggered from the model.

6. Development Environment

6.1. Language of Tool

The ARIS Toolset is written in C++. The Web Designer and Web Publisher components are written in Java.

6.2. Product Support, Maintenance, and New Versions

Users on maintenance are provided with support via email or phone. They can also access a FAQs knowledgebase on the IDS Scheer website.

Users with updated maintenance receive all product upgrades at no charge. Updates and patches are provided as needed and can be downloaded from the IDS Scheer FTP server.

7. Software Modeling and Code Generation

An optional component is available – ARIS UML Designer that is designed to support business-driven software engineering efforts by linking process models (in ARIS Toolset) with technical (UML) models. Typical users include software development engineers and managers.

UML Designer is fully integrated with the ARIS Toolset (i.e., shares the same repository) and can access the process modeler’s data directly. Thus, multiple users at different locations can process the same data with both ARIS UML Designer and ARIS Web Designer. UML Designer fully supports all UML modeling methods as well as the Object Management Group’s (OMG) Model Driven Architecture (MDA) framework.

UML Modeler also provides quality assurance capabilities through online consistency monitoring. This active modeling capability monitors and detects syntactical and structural modeling errors. Users can
then transfer tested models from ARIS to third-party software design/development environments via XMI, where they can be used to generate program code.

7.1. **UML Model Generation**

The UML Designer component fully supports all UML diagrams.

7.2. **BPEL Generation**

ARIS version 6.2 can import BPEL; however, ARIS version 7.0 (available 2QTR 2004) will be able to export BPEL.

8. **Templates and Frameworks**

IDS Scheer offers a number of reference models and industry templates and solutions for the ARIS Toolset, including:

- SCOR reference model
- ITIL reference model
- SAP reference model
- Oracle reference model
- Microsoft Axapta reference model
- Financial Services reference model
- Home building reference model

**SOX Audit Manager**

A SOX Audit Manager is also available for ensuring Sarbanes-Oxley compliance. It includes the following:

- Structured method and integrated procedures
- Maintenance of master data only in ARIS (i.e., no redundant data maintenance)
- Fast implementation and maintenance of the management system due to synchronization with ARIS
- Operational support for necessary tests within processes. In addition to documenting the risks and controls in the process, one can also document the test activities that need to be performed to validate the controls.
- Hassle-free production of documentation for auditors

**ARIS Defense Solution**

This is a professional tool for enterprise architectures supporting DoDAF/C4ISR. ARIS Defense Solution enables organizations to optimize enterprise architecture management based on the DoDAF and C4ISR.

**ARIS Healthcare Solution**

ARIS Healthcare Solution is a process management tool custom-tailored for the healthcare industry. It enables the concise graphical representation of complex medical treatment processes as well as interactions across hospitals. It supports creating an optimal view of treatment paths and costs to support Case Management and Disease Management. ARIS Healthcare Solution also makes allowances for quality assurance; it can serve to minimize organizational risks considerably.

**ARIS for SAP Netweaver**

Formerly known as “ARIS for MySAP,” ARIS for SAP Netweaver works with ARIS to enable process-oriented implementation of SAP applications. Benefits include linking of business processes with SAP
transactions, integration of enterprise requirements and customization, integration of SAP implementation tools, process-oriented user training sessions, and creation of user profiles.

**ARIS Scouts/ARIS Scout Generator**

IDS Scheer offers a number of “ARIS Scouts.” ARIS Scouts embed expertise that IDS Scheer has accumulated from consulting projects into methodologies designed to support specific domains, applications, and industries. ARIS Scouts are available for Risk Management, Quality Management, Software Engineering, and Re-documentation of SAP R/3 applications.

A “Scout Generator” component is also available that allows users to capture and package project expertise into Scouts. Scouts can then be used – in conjunction with ARIS Toolset – for subsequent projects. IDS Scheer uses Scout Generator to create its own Scout products. It is also popular with end-user companies and consultancies that wish to package their own expertise into a methodology and tool set.

### 9. Systems Administration and Security

ARIS Toolset provides a number of administration and security features. These range from the modeling and semantic-checking features associated with the design and development tools (discussed previously) to a controlled review environment and data storage, documentation, and release lifecycle management capabilities.

**Management.** Core management capabilities for ARIS Toolset are provided by ARIS Explorer. ARIS Explorer provides navigation options and enables users to administer servers, databases, user groups, access privileges, fonts, methodology filters, models, and objects.

Models and objects can be displayed in the Explorer so that the user can control the degree of complexity of the display. In addition, assignments to models can be shown in a concise and convenient manner.

The authentication of users via LDAP (Lightweight Directory Access Protocol) enables efficient administration of access privileges, particularly for large application scenarios.

**Shared Modeling.** To avoid conflicts and inconsistencies among versions of equivalent objects (maintained in different departmental databases), the ARIS Consolidation facility is used for merging objects and for creating an object definition that is valid throughout the organization.

A merge facility is also available that allows consistent merging of the contents of multiple databases into a single master database. This feature is important because, in multi-user mode, operational departments can enter their business processes in different databases. The ARIS Merge facility allows users (i.e., typically a coordinating office or group) to merge the content of varying databases – including those residing on different servers – to form one master ARIS database. ARIS Merge recognizes identical items when conducting a merge, allowing the user to decide which item(s) to transfer.

**Change Management.** The ARIS Change Management evaluation component helps ensure that models are current and that business processes are mapped correctly. Basically, this component functions by incorporating process models in improvement cycles so that documentation and analysis of continuous improvement are assured. Proposals for change and improvement can be made for all objects and models in the ARIS database/repository.

Basically, model users enter their proposals for improvement directly into the ARIS database/repository, with or without consulting a process manager. An improvement manager receives an overview of all improvement proposals via corresponding database items in the ARIS Explorer tool. Model users see the proposals for change and improvement in attribute editing. The improvement manager receives information on all improvement proposals and their status. Based on this information, he or she can assign tasks to responsible parties. Modelers automatically receive notification of the tasks assigned to
them, and the process manager is responsible for the implementation of the modified process. Thus modeled processes are evaluated and change measures initiated for them where they are actually being executed. In this way, process analyses with ARIS Toolset provide a constant stream of current results that are pertinent for decision making. Reports are used to make the improvement information available outside the program as well.

**Release Lifecycle Management.** ARIS Toolset features a release lifecycle management capability that allows the tracking of complex process release cycles. The release cycle commences with a formal review of the model status by a coordinator in the development environment. The process manager who receives the results of this review checks the contents and then passes the model and project information released to a protected release environment and also back to the development environment.

10. **Scalability**

ARIS can scale from a single user to hundreds of users that are geographical dispersed. It has a central repository that can be accessed by multiple users and can be deployed in a development and production environment.

The ARIS simulation engine can simulate large complex models and can also simulate linked and inter-related models.

11. **Supported Platforms**

ARIS Toolset and its components can run on several platforms.

**Supported Client Platforms**
Supported client application platforms include Windows NT, 2000, 2003 and XP Professional.

**Supported Client Browsers**
Supported client browsers include Internet Explorer (version 4.1 or higher) and Netscape Navigator (version 4.01 or higher).

**Supported Relational Database Platforms**
Supported relational database platforms include Windows NT, 2000, 2000 Advanced, IBM AIX, and Solaris.

12. **Pricing**

Pricing for ARIS Toolset starts at US $2,500, with the pricing varying, depending on which components the customers wish to access. Site licenses are also available. Standard pricing is on a per-user basis.

13. **Company Product Positioning and Support**

13.1. **Company Background Information**

IDS Scheer is a leading provider of business process management and IT products and services. The company has spent the past 20 years dedicating its R&D efforts and services to business process management. In 1992, it introduced the ARIS Toolset. Today, IDS Scheer’s products and services cover the full lifecycle of enterprise architecture and business process management.

In addition to strongly focusing on offering products and services to help companies with SAP implementation, IDS Scheer offers a range of products and consulting services targeting various industry verticals – including consumer packaged goods, pharmaceuticals, automotive, chemicals, retail, and software development.
IDS Scheer was founded in 1984. The company is headquartered in Germany and has subsidiaries in 22 countries with representation in over 50 more. IDS Scheer has over 2,200 employees, including over 150 developers. Approximately 800 employees are dedicated to the ARIS line, while another 800 or so are involved in ERP consulting and use ARIS to conduct these projects.

IDS Scheer has seen growth every year since its inception. For 2004, IDS Scheer reported revenues of US $300 million.

13.2. Positioning

IDS Scheer has positioned ARIS Toolset to support the entire range of EA modeling and BP change activities, including

- Enterprise architecture modeling and analysis
- Process modeling and analysis, redesign, and improvement
- Detailed process modeling and analysis
- IT support/software development
- Human performance improvement initiatives
- Development of management and measurement systems

IDS Scheer has been a leader in business process management for almost 20 years – both in product offerings as well as consulting services. As a result, the company has amassed extensive experience and expertise in all areas of business process management. This shows in the ARIS Toolset, which provides a wide-range of features and functionality necessary to support the full breadth of enterprise architecture and business process management requirements. This experience also shows in the constant addition of new capabilities to the toolset, enabling IDS Scheer and its offerings to remain at the forefront of the market. (As an example, with its Web Designer component, which has been available for almost 5 years, IDS Scheer was one of the first companies to market a web-based business process analysis and modeling environment.) Today, IDS Scheer is heavily focused on packaging its considerable expertise in the form of process content for use with ARIS in order to offer customers pre-configured solutions for specific industries and applications.

When combined with its various optional components, the ARIS Toolset offers one of the most comprehensive platforms available. In short, ARIS covers the full spectrum of business process modeling, simulation and analysis, optimization and enterprise architecture, and IT architecture design, making it suitable for modeling the entire organization. In addition, the large number of supported frameworks and methodologies (over 140+) make ARIS well suited for almost any modeling effort, including human performance improvement initiatives and development of Balanced Scorecards and other management and measurement systems. Likewise, when used in conjunction with UML modeling components, ARIS provides the ability to support IT and software development efforts, too. Finally, the availability of various reference models and industry templates provides a quick way for organizations to “jump start” various process and IT initiatives like SCOR, ITIL, financial services, healthcare, homebuilding, SAP, Oracle, and Microsoft Axapta efforts.

13.3. Product Training

IDS Scheer offers numerous training sessions and workshops oriented toward ARIS tools and business process management, in general. These include a management workshop on “Strategic Business Process Management” and various ARIS training courses:

- Creating and analyzing models with ARIS Toolset
- Creating and analyzing models with ARIS Web Designer
- ARIS Balanced Scorecard
- Dynamic simulation with ARIS
13.4. Business Process Consulting

IDS Scheer offers extensive consulting solutions for SAP, Enterprise Application Integration (EAI), Business Intelligence, and Business Process Reengineering.

The company’s industry-specific expertise covers: automotive industry, capital goods industry, chemical and pharmaceutical, consumer goods industry and retail, financial services, media, metals industry, paper industry, public sector, telecommunications, textile industry, transportation and travel, and the utilities sector.

14. Case Study

TVNZ offers two of the most successful television stations in New Zealand – TV ONE and TV2. At the end of 1999, TVNZ decided to analyze its business processes in order to increase transparency in the fast growing company. A new “Business Process Improvement” task force was created. This team consisted of eight project members with experience from different areas of TVNZ.

The main objectives of TVNZ’s business process improvement initiative included

- The top-down description of the current processes on different levels of abstraction
- The analysis and improvement of core business and support processes
- The Intranet-based distribution of process-relevant information
- Simulation of selected processes

Overall, the team aimed to increase the awareness of TVNZ’s business processes.

The modeling of the business processes stated in January 2000. Up to six modelers in parallel designed value-added chain diagrams and event-driven process chains (EPCs) for TVNZ’s core business processes.

Utilizing ARIS, the “as-is” model was documented, based on the traditional use of videotape, while the “to-be” model included digital production via servers. Thus, journalists and editors would be able to work independently of tape in a non-linear environment. The effects of the change were evaluated using a simulation that focused on the utilization of the servers. Different types of stories (e.g., foreign stories, sports stories, etc.) were taken into account and the effects on the server capacity were carefully evaluated. Based on ARIS Simulation, it was possible to ensure optimization of the huge investment planned for new technology.

The intensive work quickly led to positive results like a new and more complete understanding of TVNZ’s business processes and the identification of weaknesses. However, the number of process models increased very quickly. Thus, it was obvious that further concepts for the management of the fast growing process model complexity were necessary. The approach adopted was to design an individual business framework for TVNZ. This framework required a process focus; had to represent on a high level of abstraction the entire business; and had to be flexible regarding changes in the business (e.g., increased internet market, etc.). The final developed framework now serves as an intranet-based access point to all of TVNZ’s business process models.
15. Company Offices

Headquarters of IDS Scheer Global are in Saarbruecken, Germany, the North American Headquarters are in Philadelphia (Berwyn), PA. Subsidiaries of IDS Scheer are in Germany (Saarbrücken, Berlin, Düsseldorf, Frankfurt, Hamburg, Munich, and Nuremberg) as well as in 20 further countries, including Great Britain, France, USA, Canada, Brazil, Japan, Russian, Singapore, and others within Central and Eastern Europe. Please contact the IDS Scheer website for a complete list of subsidiaries.

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