

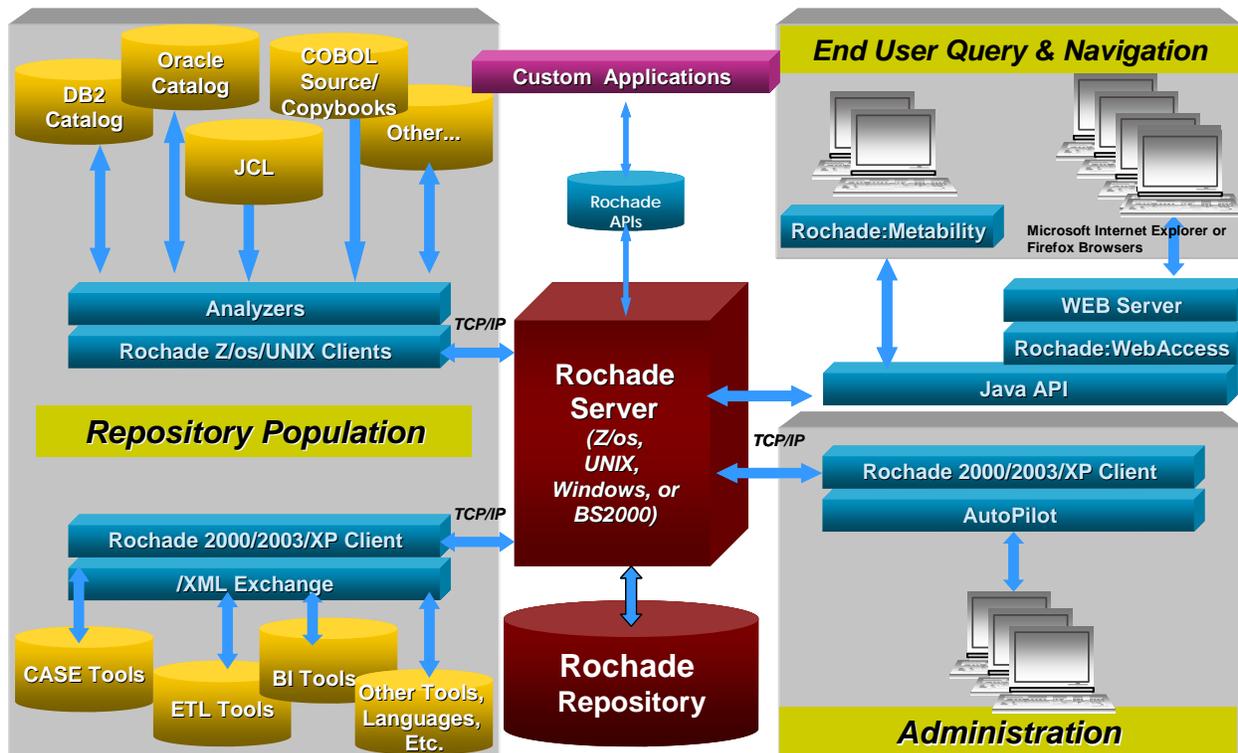
Executive Overview Enterprise Metadata Repository Technology

ASG understands that many organizations have a goal to implement an Enterprise Level Metadata Repository.

- Objectives of the Enterprise Level Metadata Repository include but are not limited to:
- Hold company metadata in a single, centralized repository.
- Improve the documentation of data and other IT components
- Reduce time to define and create new database tables
- Allow analysis of data usage (e.g. for impact analysis)
- Reduce effort for developers to identify and use existing data sources
- Support standards in data naming and the data management process
- Integrate with present and other industry standard data administration tools
- Automatically extract and load metadata from new and existing program source code and JCL
- Allow extension of the metadata model with user-defined objects and relationships
- Provide a User Interface suitable for both IT and business staff
- Provide an enterprise-wide, cost-effective solution.

To accomplish this goal, many organizations utilize Rochade, one of the longest established, and perhaps the most technologically competent, repositories currently available. Rochade facilitates an integrated IT asset management environment, providing a single point of communication for managing critical information about data, regardless of its location within the enterprise. Whereas many of the earlier repository products were not particularly suited to implementation within a distributed environment, Rochade presents no such barriers. It supports all the latest information technology environments including client/server architectures, Internets/Intranets (including Web browsers), object orientation, and graphical user interfaces (GUIs) utilizing TCP/IP, APPC, and NETBIOS. In fact,

Rochade supports a laptop up to a mainframe – **all with the same architecture, all with the same level of functionality**. The following depicts the basic architecture of the Rochade product solution set:



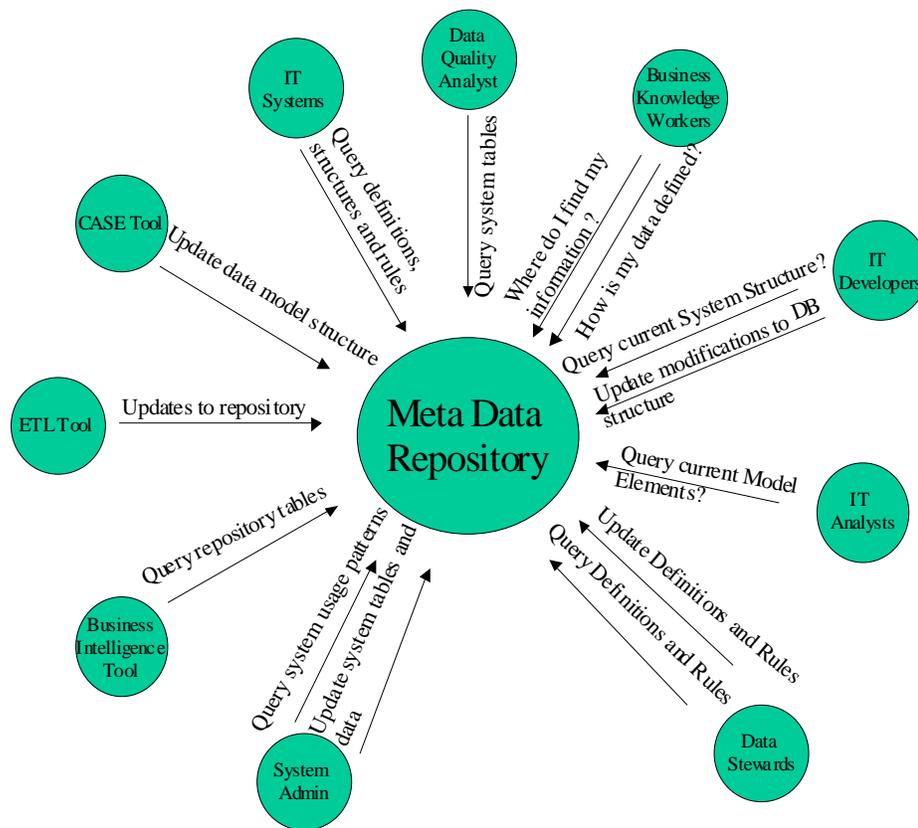
Key Functions, Facilities, Features

- Rochade is an enterprise-scale repository environment implemented in client/server architecture. Rochade provides rich services for the capture, analysis, synthesis, and enhancement of information assets. Major features include:
- A fully customizable and extensible (expandable), open (allows information from other tools) information modeling environment for enterprise-wide information modeling.
- High-performance and high-capacity database engine designed specifically for the demands of text-rich, dynamic, and highly cross-referenced metadata.
- Sophisticated versioning and configuration management, enabling up to 32,000 versions of a single data item, and up to 100,000 configurations.
- A rich complement of buses and scanners that interface with tools, databases, document archives, data warehouses, and policies and procedures archives.
- An integrated, customizable GUI, including an information visualization tool for graphical representation and manipulation of information assets.
- An integrated Web development and execution environment, allowing easy Web access.
- Open application programming interfaces for building custom applications, including an XML (SAX2) API and a Java API.
- Skilled consultants who can adapt Rochade to provide a solution for the customer's initiative or implement a project on the customer's behalf.
- Experienced trainers to facilitate knowledge transfer, allowing customers to manage a Rochade implementation.

Equally as important as storing the data, is the ability for users to gain access, enabling them to turn the data into valuable information. This is achievable through customized applications written in

languages such as C++ or Visual Basic, or Web-based applications. Rochade also provides its own access methods, using point-and-click navigational procedures with either text or diagrams.

The Rochade solution provides organizations with something like this:



Why select ASG and Rochade???

Because of ASG’s experience in the supply and implementation of Metadata Repository technology, we believe ASG is uniquely qualified to provide the best quality Metadata Repository available today. For over 30 years ASG and predecessor/acquired companies have built an international reputation as a world leader in Metadata Repository technology and implementation. We have successfully installed and implemented hundreds of separate projects for a diversified customer base while building a world leadership position in the field of Metadata Repository technology.

At ASG, our entire organization is committed to making this effort at your organization the best we have ever implemented and one in which you can take great pride. Many of the required facilities are available as a standard offering. Others, particularly in the area of Metadata interfaces, will require custom development. ASG proposes a joint partnership with you to achieve these developments with the secondary objective of creating a center of competence in your organization that will be able to provide for your future unique requirements in a timely and cost effective way. Rochade is a fully functional metadata hub, and as such fully meets these requirements. Because of its open, extensible nature, we believe there are no metadata sources with which Rochade cannot be integrated.

ASG's repository technologies underlie many of our most important initiatives. We anticipate strong revenue growth in this area, with repository sales representing as much as 20% of new license revenue over the next 2-3 years. Our focus is on large enterprises, often characterized as "the Global 2000". Within that group we have had much success with financial institutions, but this is more related to the demographics of the group than to any specific targeting. We have customers in manufacturing, retail, telecommunications, transport and government organizations. We have repository customers in the USA, Europe, Asia/Pacific and South/Latin America.

ASG as a whole is expanding its product and service range to be a strategic supplier to its target customers. We recognize a shift in the way our customers are doing business, and the underlying I.T. infrastructure that supports their businesses. We are therefore committed to the development of our offerings to exploit and support emerging standards, and to support business both as they are, and in their transition to new models.

ASG believes that its core competencies are:

The development of solutions to the problems of the management and evolution of enterprise information technology,

The management of relationships with our customers,

And the acquisition and integration of companies and technologies to support our corporate mission

ASG is a rapidly growing company. We have more than 900 people, and expect to have more than 1000 by the end of 2002. More than 30% of our budget is devoted to research and development and support. Our customers are - by and large - satisfied with our performance, and more than 97% renew their relationship with us, year on year. We have a strong global presence, with more than 30 offices worldwide, and multi-lingual support personnel.

ASG's own business model is changing; historically the company has been a harvester of maintenance revenue streams, as it developed critical mass. Though no plans have yet been announced it can reasonably be anticipated that ASG will continue to pursue its acquisition of products and distribution channels to increase product range and direct presence, worldwide.

ASG has been in business since 1986. The product being proposed (Rochade) has been on the market since 1982.

ASG and its predecessor/acquired companies have been selling and supporting Metadata Management offerings since the early 1970's. Our development organization has produced technology long acknowledged to be the premier enterprise repository, and our Professional Services organization has implemented, or assisted in the implementation of, hundreds of Metadata management solutions. In addition to a highly experienced metadata repository development staff is the equally experienced customer support staff. Should you have a technical problem/question regarding the product, you would simply call our support center and report the problem in sufficient detail for our support team to understand the problem. We solve most of our customer's technical problems on the initial call. ASG has dedicated Rochade customer service representatives who specialize in handling Rochade customer questions. The typical ratio is 20 to 25 customers to 1 support analyst. All of the Rochade customer service representatives have more than 10 years IS experience. Three of the staff have a combined experience with repository technology totaling over 58 years.

ASG's repository offerings are central to a range of enterprise software solutions in the areas of operations, applications and information management. We believe that our work in this broad range of areas and our commitment to supporting our clients current business operations and their business transitions offer us a unique understanding of the place of Metadata in the broad enterprise.

ASG's Development Organization

ASG commits a major part of its resources to research and development, and at present our Development Department consists of more than 250 people in six major development groups located across North America and Europe.

Development is tasked with enhancing ASG's existing products and developing new offerings to bring value to our customers and increase ASG's sales. While maintaining and developing more than 100 products in the areas of operations, applications, and information management, Development delivers new releases in a timely manner, ensuring the highest level of quality in a continue effort to satisfy our clients.

ASG's mainframe, mid-range, and PC applications involve all aspects of computer science and employ a wide range of tools and technologies. In supporting our clients' transition to the new e-Business model, we combine development, acquisition, and strategic client partnerships to provide integrated business solutions that manage existing mainframe and non-mainframe operations and applications.

Recognizing our diverse heritage, and our clients' gradual shift to an internet-based computing model, ASG's Development Department is employing the following strategies:

- Instituting a common software engineering process across all development groups
- Continuously enhancing products and releases per individual product plans
- Providing client capabilities for navigation, queries, and wizards to simplify end-user access to our products
- Web-enabling our products
- Creating application servers
- Integrating our products
- Employing new technologies to create leading edge applications such as our ASG-Business Information Portal

ASG's Vision

ASG sees the repository and related tools as a hub for the collection and storage of Metadata, and the mechanism for the use and distribution of that information throughout the enterprise. In that context we foresee the exploitation of increasingly standardized data exchange formats -- notably XML -- and the delivery of applications and access facilities to extract the maximum value from corporate metadata.

ASG views its Rochade repository facilities in 3 layers:

The first level is the underlying technology that supports all solutions -- metadata collection, management (consolidation / cleansing, structure / combination, browsing, change management, transformation / use) and presentation

The second level, based on underlying technology, forms the basic Rochade solutions -- Model Management, Data Management, Asset Management and Change Management. Our Professional

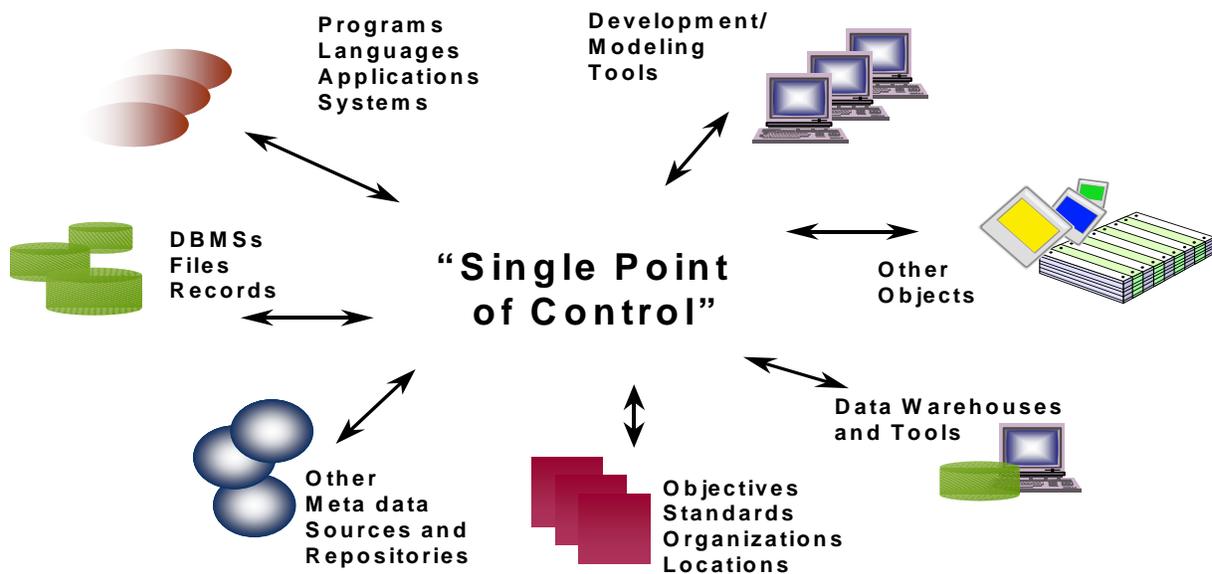
Services team also frequently implements solutions in the areas of application life cycle management and tool federation.

The final level consists of enhanced Rochade solutions that combine basic solutions with Professional Services to deliver customized solutions for individual clients in areas such as Data Warehouse, Enterprise Application Integration, Mergers and Acquisitions, CRM Integration, ERP Integration and Knowledge Management

ASG expects the increasing standardization of Meta models in many of these areas. We will expect to work with you to implement those Meta models in the Rochade repository, to support the company's direction in exploiting emerging industry standards such as Common Warehouse Model (CWM).

We view emerging XML standards as particularly important, with their ability both to facilitate inter-enterprise communication and to allow the same information to be presented in different ways to different users, appropriately to their distinct roles. We will work with you to ensure that their Metadata is made valuable to the entire organization.

Finally, the ever-increasing importance of Metadata in the management of the global enterprise leads us to believe that a federated repository is an essential development, and this is central to our strategic direction for our repository technologies.



One more note:

If your organization is reinventing itself as a company, and seeking to unleash its reservoir of creativity and talent, one of the major challenges in achieving those goals is to ensure that knowledge is shared, and that decisions are made on a common information base. The Rochade repository offers an ideal mechanism to ensure that your people have a common understanding of the data that underpins your business processes. Few global organizations have such command of the facts of their business.

Another of your likely objectives is to make the customer experience as engaging as it can be. That can only happen when disconnects, which are caused by misinterpretation of information, are eliminated. Management of metadata is the key.

As the CEO of a large hardware company said recently:

“And our rules are, believe you can change the world, work quickly, keep the tools unlocked, work whenever, know when to work alone and when to work together; share tools, ideas, trust your colleagues. No politics, no bureaucracy: these are ridiculous in a garage. The customer defines a job well done. Radical ideas are not bad ideas. Invent different ways of working. Make a contribution every day. If it doesn't contribute, it doesn't leave the garage. Believe that together we can do anything. Invent. ”

ASG believes that the Rochade repository will provide the common understanding of information that will help your people live the rules. We believe that our Professional Services team invents things that make a contribution to customer satisfaction. Your rules, successfully observed, are the competitive edge. ASG's technology and services will make keeping the rules easier.

Another major differentiation between Rochade and other repository technologies is the depth and breath of customer accomplishments, which is due to a combination of superior product and services.

A Sampling from Over 300 Rochade Customers Worldwide:



Why Were These Sites Successful ?

- Realistic Expectations, Goals, and Objectives that target strategic projects
- Focused Implementation Plans - which include “Packaging & Rollout” to repository Users
- Executive Management Commitment
- Typical Implementation Team = 2-4 people
- Not Afraid to Ask ASG for Help
- Commitment to proper Training and Assistance



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