

**Feedback from the Market:**

"Forest Rim enables significant improvements in the quality of semantic information derived from text data. This is critical to delivering more accurate understandings of social, business and scientific information"

-- Jack Hakim, CEO of EC Wise

Key Capabilities:

Forest Rim unlocks the value of legacy knowledge - legacy programs, applications, stored procedures, data definition, queries, reports, proprietary semantic models and documents

Forest Rim is business oriented - delivers a new generation of metadata management capabilities

Forest Rim manages critical knowledge rules - business, analysis, security, data, quality, workflow, governance.

EC Wise Report:**Harvesting of Valuable Knowledge from Legacy Systems**

By Frank Teklitz

The Challenge: Creating Useful, Consumable Structured Knowledge

One of the most pressing challenges for Information Technology organizations today is the harvesting of valuable knowledge from legacy systems - that are typically siloed - to facilitate the creation of contemporary business platforms for operations and analysis.

Significant investments have been made by IT in data warehouses, applications, communications, analysis and enterprise solutions leveraging stored procedures, legacy languages, database definitions, transformations, business workflow rules and unstructured documents from many sources. While these legacy applications are useful, they often lack the agility and transparency required to deliver competitive advantage for today's markets. Unfortunately, IT organizations are often blocked from evolving legacy siloed solutions, because of expense, complexity and risk.

EC Wise's best practices analysis of this problem, based on our research and working methods, is that IT organizations should evaluate semantic driven tools to manage and consume knowledge in a structured manner for major business knowledge sources in the enterprise. We have determined four criteria for the creation and management of structured knowledge:

- **Structured knowledge must be user managed and created** - for all the knowledge rules - self-service every where
- **Knowledge repositories must manage critical knowledge rules** – business, analysis, security, data, workflow, quality and governance rules.
- **Knowledge rules must be highly consumable** – rule models needs to be highly usable for business analysis, quality, data and business transformation, workflow, governance, etc.
- **Knowledge engine must be able to consume and transform legacy knowledge** - legacy programs, stored procedures, data definitions, proprietary semantic models, documents, etc.

The Solution

EC Wise is working with Forest Rim's knowledge transformation solution - Knowledge ETL. Knowledge ETL is a tool for both business and technical users that interprets all forms of unstructured knowledge to produce contextual, semantic, metadata models.

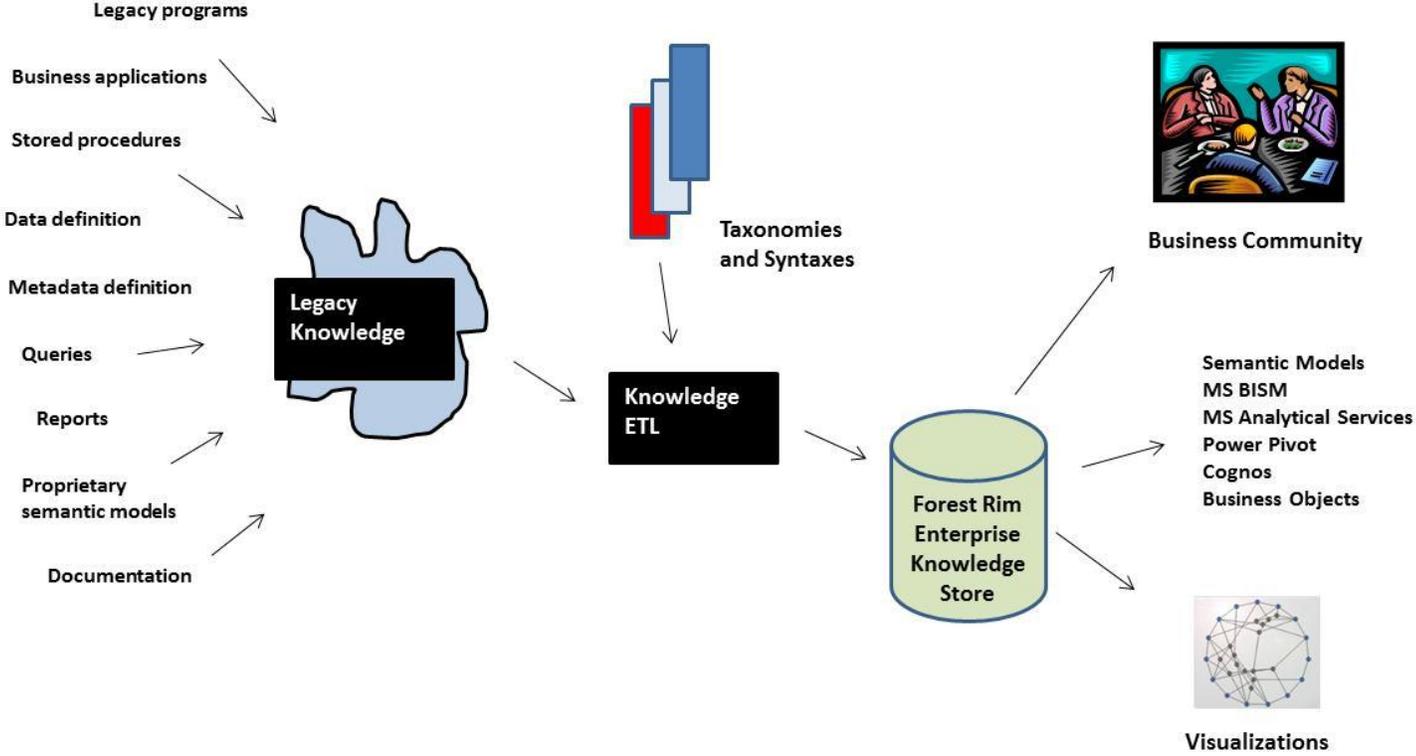
Forest Rim delivers knowledge transformation capabilities that provide taxonomical, ontological and semantic transformations performed on IT legacy knowledge stores - such as legacy programs, stored procedures, data definitions, proprietary semantic models and documents - to increase their usefulness and value by creating an agile and vastly consumable enterprise knowledge repository. In Forest Rim this enterprise knowledge repository is called the Enterprise Knowledge Store. The Enterprise Knowledge Store can be queried directly or can be used to produce business specific semantic models like Microsoft Business Intelligence Semantic Model (BISM), which in turn can be consumed by tools like Microsoft SSIS, QMS, MDS, Analysis Services and Power Pivot. In this way Knowledge ETL enables the building of analytical applications that leverage legacy knowledge.

Critical to the Forest Rim knowledge transformation solution, is the business oriented interface that delivers a new generation of metadata management capabilities that significantly improves the production and consumption of metadata to more quickly build contemporary, unified and agile business applications, data warehouses, workflows, analysis and business specific semantic models.

The Value

- **Unlock the value of legacy knowledge** – by consuming and transforming legacy programs, applications, stored procedures, data definition, queries, reports, proprietary semantic models and documentation into useful and consumable structured semantic knowledge.
- **Business oriented interface** - delivers a new generation of metadata management capabilities that significantly improves the production and consumption of metadata to more quickly build contemporary, unified and agile business applications, workflows, data warehouses, analysis and business specific semantic models.
- **Manage critical knowledge rules** – business, analysis, security, data, quality, workflow and governance rules.
- **Unlock the value of proven, contemporary business intelligence tools** - today's metadata environments just don't lend themselves to easy, facile and open sharing of knowledge for business operation, workflow and analysis. Forest Rim unlocks the value of business intelligence tools by enabling a knowledge environment that is consumable and shareable by business users and IT.
- **Better leverage documents, text management systems and big data** – the tools that exist for doing analysis in the Big Data environment are still evolving. Forest Rim enables proven, contemporary business intelligence tools for unstructured data analysis to determine what valuable information is in your document files; integrate your big data with the data warehouse, remove "blather" and stop words

Forest Rim Applications and Major Features Overview



Forest Rim Knowledge ETL Process

The Forest Rim Knowledge ETL process enables the input of legacy knowledge and taxonomies that are consumed by the Forest Rim Knowledge ETL Engine (there is also a Forest Rim Textual ETL Engine for document consumption, classification, indexing and retrieval). The result from the Knowledge ETL process is structured, semantic, business knowledge that is stored in the Forest Rim Enterprise Knowledge Store, which in turn can be consumed by proprietary semantic models, BI applications and visualization tools. The Forest Rim Knowledge ETL process is specified below:

Legacy Knowledge Input

The input into Knowledge ETL is basically electronic text. This text can be in English, Spanish, German, French, Italian or Portuguese. Forest Rim Knowledge ETL can handle ANY form of legacy knowledge – legacy programs, applications, stored procedures, data definition, queries, reports, legacy metadata models, proprietary semantic models and documentation. Regarding documentation, Forest Rim Knowledge ETL can consume formal text, informal text, notes, shorthand, email, blogs, tweets, etc. The most common forms of electronic documentation are files that have the extension type of .txt, .doc, .docx, or .pdf

Knowledge ETL

At the heart of knowledge transformation is Forest Rim Knowledge ETL. In knowledge transformation, legacy knowledge is ingested and transformed into a form that is suitable for a semantic model, XML knowledge store or relational data base.

In order to manage structured knowledge in a sophisticated manner, the legacy knowledge must be contextually transformed. For example:

- Terminologies, rules and definitions from multiple sources must be analyzed, transformed and categorized to yield consistent knowledge, even though the original legacy knowledge is different from each source,
- Alternate spellings and common misspellings must be accounted for,
- Words need to be stemmed (antonyms, synonyms, homonyms) to their Latin or Greek roots, and so forth.

Forest Rim today has over 40 types of contextual knowledge transformations. Each of these transforms adds value, context and understanding that cannot be obtained from the legacy knowledge alone in programs, applications, stored procedures, data definitions, documents, etc.

Taxonomies and Syntaxes

Taxonomies and syntaxes are important inputs for most Knowledge ETL processing. Taxonomies and syntaxes are useful in resolving terminology, developing contextual classifications, and in filtering text (like documents, code and data definitions). Forest Rim Technology can operate with taxonomies that have been built by the client or Forest Rim. Forest Rim has access to over 29,000 professionally built and maintained taxonomies and syntaxes. In most cases it is simply a matter of selecting the 4 or 5 taxonomies and syntaxes that are the most relevant and installing them. This is done in a matter of minutes.

Forest Rim Enterprise Knowledge Store

The Forest Rim Enterprise Knowledge Store provides the shared environment for storing and managing business, analysis, security, data, workflow, quality and governance rules / knowledge definitions.

Knowledge ETL creates DB2/UDB, Oracle, SQL Server, Teradata, and other relational data bases. Knowledge ETL is agnostic to the type of relational data base that is created. Knowledge ETL creates up to 35 different types of analysis tables. These tables are designed for analytical joins and when taken together are much more powerful analytically than any one given table. These tables are designed to be easily read and manipulated by standard Business Intelligence software.

The Forest Rim Enterprise Knowledge Store can also be consumed by business level semantic models and XML knowledge stores, and the business and operating applications that consume them.

The Forest Rim Enterprise Knowledge Store can be stored at part of the enterprise data warehouse, enabling unstructured and structured data to be queryable from one environment. This is what Bill Inmon refers to as DW 2.0.

Business Intelligence

The Forest Rim Enterprise Knowledge Store is queryable with traditional business intelligence tools, including Business Objects, Cognos, MicroStrategy, SAS, Crystal Reports or Tableau.

Knowledge Visualizations

Forest Rim provides visualizations to help understand and analyze rules, data definitions, information flows and interrelationships

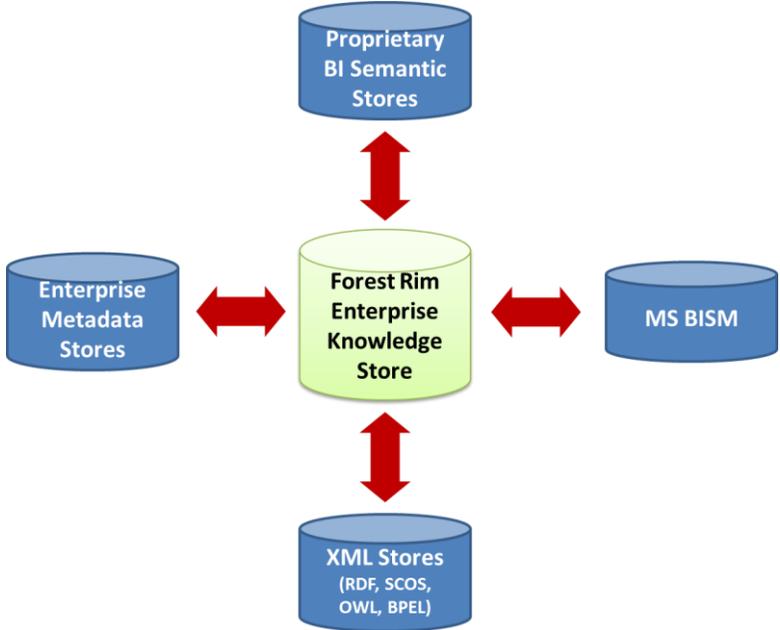
Textual Business Intelligence

Forest Rim can also contextualize unstructured, textual (big) data to enable one analytical environment for both structured and unstructured data. Forest Rim enables textual data to be contextualized - classified, organized and categorized - using the ontologies and taxonomies in the corporation – just like traditional business intelligence – creating one version of truth for structured and unstructured data.

Leveraging the Forest Rim Enterprise Knowledge Store

The Forest Rim Enterprise Knowledge Store provides the shared environment for storing and managing business, analysis, security, data, workflow, quality and governance rules / knowledge definitions. These rules and knowledge definitions are used to feed business level semantic models and XML knowledge stores, and the business and operating applications that consume them.

The Forest Rim Enterprise Knowledge Store is a relational database that enables standard SQL and query processing. The resulting database can be used for standalone analytics or for analytics against both structured data and unstructured data. Knowledge ETL is agnostic to the type of relational data base that is created.



Forest Rim Enterprise Knowledge Store is a repository for all transformed legacy knowledge by the Forest Rim Knowledge and Text ETL engines and is a hub for critical semantic business knowledge, including:

- **Proprietary BI Semantic Stores** – Most legacy BI platforms have some form of a propriety semantic store. The Forest Rim Enterprise Knowledge Store is a standard model for managing and transforming knowledge from these legacy environments into one master enterprise knowledge store. This includes **Microsoft Business Intelligence Semantic Model (BISM)**.
- **XML Stores** - XML semantic models – RDF / SCOS / OWL, BPEL interfaces are available via professional services engagements.
- **Enterprise Metadata Stores** – can be consumed by Forest Rim with interfaces for import available via professional services.

Forest Rim Cloud Based Knowledge ETL with EC Wise

EC Wise provides a cloud based Forest Rim Knowledge ETL facility on Microsoft Azure that hosts the Forest Rim Knowledge Engine and Text Semantic Engine with support for Search Metadata Integration

- **Text Inputs** – Contracts, Email, Spreadsheets, Documents; Metadata Samples; Search Data Indexes Samples; Compliance Laws
- **IT Knowledge Inputs** - legacy programs, applications, stored procedures, data definition, queries, reports, proprietary semantic models and documentation
- **Outputs**
 - Forest Rim Enterprise Knowledge Store
 - Microsoft Business Intelligence Semantic Model (BISM)
- **Cloud Infrastructure Options**
 - Hosted by FRT – Limited data size
 - In the Cloud – You pick the data volume – We support Microsoft Azure
- **Data Transfer** – Secure FTP or Dropbox
- **Additional interfaces** - available via a professional services engagement

Forest Rim and EC Wise Proof of Value

Forest Rim and EC Wise offer free proof of value for samples of 50 stored procedures and / or data definitions or less. For more than 50 elements we will do a proof of value for a nominal fee.

You can contact us at fteklitz@ecwise.com