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Application Discovery and Enterprise Metadata Repository solution Questions

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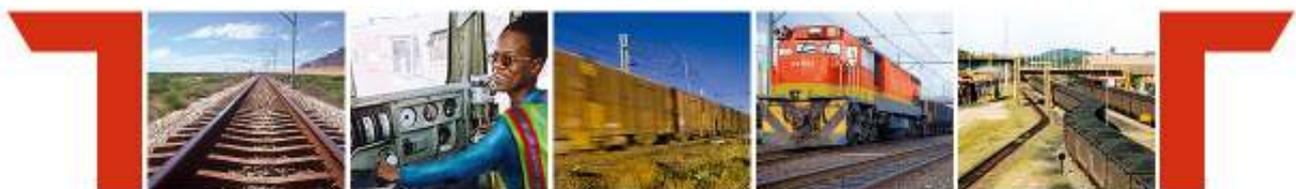


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SECTION 1

ENTERPRISE METADATA ENVIRONMENT

1.1 Technical Environment

- 1.1.1 What hardware/software configuration is required to run your product?
- 1.1.2 How (if at all) do you store metadata?
- 1.1.3 What database or file system does your repository use?
- 1.1.4 How can any metadata your product stores be accessed using SQL or SQL-dependent mechanisms?

1.2 Metadata Capture

1.2.1 Can you capture business metadata?

1.2.1.1 Business data definitions and rules

1.2.1.2 Can information be categorized?

1.2.1.3 Is there a semantic layer to the information stored in the repository?

1.2.2 Valid values and Codes

1.2.3 Data lineage

1.2.3.1 Linkages between systems of record and decision support systems

1.2.3.2 How are the links created?

1.2.4 Logical and physical data models

1.2.4.1 Relationships between logical and physical data models

1.2.5 Describe the support for data quality information

1.2.6 Technical/Physical Metadata Support

1.2.6.1 Data field definitions

1.2.6.2 What type of database and data store structure information is captured?

1.2.7 What type of information is captured between programs, data fields and data stores?

1.2.8 How is technical information provisioned?

1.2.8.1 List specific interfaces to applications, databases, ETL, modeling tools, BI etc...

1.2.9 Describe the support for impact analysis

1.2.10 Can information/definitions be re-used and easily extended?

1.2.11 Describe your support for XML

1.2.12 How do you keep metadata current, avoiding duplication?

1.2.13 How do you establish linkages or relationships between metadata objects from different data sources?

1.2.13.1 Describe any automatic reconciliation capabilities.

1.2.14 How are “mass update” and “mass delete” supported?

1.2.15 What is the process for providing support for metadata not covered “out of the box”?

1.2.16 What is your policy for time lines on support for new versions of 3rd party tools?

1.3 Metamodeling Capabilities

1.3.1 Describe your approach to defining and extending metamodels.

1.3.2 Does your modeling approach support Namespaces?

1.3.3 Does your modeling approach support inheritance?

1.3.4 Is your product supplied with prebuilt Metamodels?

1.3.5 How are Metamodels modified or extended?

1.3.6 Can any custom metadata – item types, attributes, or relationships – be modeled?

1.3.7 What special skills are required to change the Metamodel?

1.3.8 When Metamodels are changed, does metadata have to be recaptured?

1.4 Versioning

1.4.1 Does the product support multiple metadata object definitions over project or lifecycle phases – such as "Test", "Development", "Production", "Release 1.1", etc ...?
(Please describe)

1.4.2 Version Control - does your product provide "versioning"? How does it work?
(Please describe)

1.4.3 Can you compare different versions of objects to one another? (Please describe)

1.5 User Interfaces

1.5.1 What type of Administration Interface is offered to support the repository?

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- 1.5.2 Describe your administration user interface. How does it work?
 - 1.5.3 Is model administration supported?
 - 1.5.4 Is user administration supported?
 - 1.5.5 How is the user interface deployed? Describe any special supporting software requirements.
 - 1.5.6 Internationalization/localization - what languages/nationalities does the user interface support?
 - 1.5.7 How can the user interface be customized?
 - 1.5.8 What type of searching exists?
 - 1.5.9 What standard report layouts and visualizations are provided?
 - 1.5.10 Can favorite inquiries and reports be stored and reused?
 - 1.6 **Security and Auditing**
 - 1.6.1 Do you support "role-based" security?
 - 1.6.2 Do you support item-type/item based security?
 - 1.6.3 Are all passwords encrypted?
 - 1.6.4 Does your product support single sign-on or LDAP?
 - 1.6.5 Describe your backup, Restore, Failure, and Recovery utilities
 - 1.6.6 Describe capabilities for sorting / filtering search results criteria.
 - 1.6.7 Can the user define acronyms? (Example: "yld" for yield and "ccy" for currency.)
-

1.6.8 Can the user define synonyms? Example Bond Principal = Bond National

1.6.9 Are synonyms/acronyms taken into account when searching?

1.6.10 Can you associate a term to an industry standard definition?

1.7 Integration with Application Understanding and Portfolio Management Tools

1.7.1 Does your metadata repository tool integrate with Application Understanding and Portfolio Management tools that cover both Client Server as well as Mainframe environments? If Yes, please answer the following:

1.7.1.1 Describe the benefits of such integration in terms of automation and how this will deliver end-to-end data lineage?

1.7.1.2 Describe how this improves or adds to the quality and accessibility of IT Applications

1.7.1.3 Describe your key differentiators in terms of the solution you use for integration

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SECTION 2

APPLICATION DISCOVERY

2.1 Source Code Analysis

2.1.1 The product should support the following mainframe languages used at TFR.

2.1.1.1 Can the product analyze the following code? Please specify which release. COBOL, JCL, IMS, CICS, Sapiens

2.1.1.2 Can the product analyze DB2 table definitions? Please explain.

2.1.1.3 Can the product interface with Schedulers? Please explain.

2.1.2 Should any of the above not be possible from standard scanners, please explain how the required scanners can be adapted/created to TFR's requirements

2.1.3 Which other languages are supported on Mainframe systems? Please specify.

2.1.4 The product should support distributed environment languages used at TFR.

2.1.4.1 Can the product analyze the following code? Please specify which release. JAVA, JSP, Web Methods, C/C++, MQ

2.1.4.2 Can the product analyze Oracle table definitions? Please specify which level and release.

2.1.4.3 Can the product analyze SAP applications and ABAP code? Please specify which level and release

2.1.4.4 Which other languages are supported on open systems? Please specify.

2.1.5 Can inventory information be reported on the source code library? (LOC, asset number, batch job number etc) Please specify what types of reports information can be given.

2.1.6 Can the product extract code complexity and reusability information from the code?

Please explain in detail.

2.1.7 Can unused code be analyzed?

2.1.8 Can metrics be calculated from the analyzed code? Please specify which metrics can be obtained.

2.2 Impact Analysis

2.2.1 On which types of assets in the code library can the product do impact analysis? Please specify.

2.2.2 Can the product make impact analysis on the asset's detailed fields? (Example: Table Column, copybook space)

2.2.3 Can impact analysis be done within the detailed fields of the assets like read / update / add / delete?

2.3 Usage

2.3.1 Are there any size limitations on the codes to be analyzed? Please explain.

2.3.2 Can application breakdown be supported in code analysis? Please explain.

2.3.3 Can technology and coding language breakdown be done in code analysis and reported? Please explain.

2.3.4 Can a different environment be used for outsourced codes quality measurement? Please explain in detail.

2.3.5 Can the product be installed for different purposes like development, test projects and production? Would it just need separate repositories or totally different installation? Please explain.

2.3.6 For 3 levels of usage please specify what type of installation should be performed.

2.3.7 Can the information, captured within the solution, be made easily available to metadata repository technology for higher level architectural analysis? Please explain.

2.4 Versioning

2.4.1 Can the information gathered after analysis be versioned? Please explain the method to be used.

2.4.2 In which scope and quantity versioning can be kept?

2.4.3 Within the versions can analysis results such as standard, complexity levels, be compared? Please explain in detail.

2.5 Tool Requirements

2.5.1 Maintain (create/update) a repository of meta-data for software components?

2.5.2 Automatically generate metadata from source code and other artifacts to populate the repository. (i.e. source code, copybooks, jcl/scripts, CICS tables, ...)?

2.5.3 Allow for interactive and batch exploration of the repository data?

2.5.4 Create diagrams, reports, charts and other analysis artifacts from the stored data to show relationships to other assets in the repository?

2.5.5 What is the ability to provide individual asset breakdown to garner metrics and detailed artifacts for use in modernization efforts?

2.5.6 Describe your ability to map all application assets in the enterprise (mainframe and Open Systems)?

2.5.7 Provide tools to assist in modernization and SOA efforts?

2.5.8 Provide interfaces/queries/reports necessary to perform 'risk analyses'?

2.5.9 Provide web access to the repository?

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- 2.5.10 **Create diagrams/flows/charts of the data within the repository?**
 - 2.5.11 **Describe and detail the general benefits (such as extendibility, reusability, adherence to standards, performance, etc.) that would be gained within the company with the use of each of your products.**
 - 2.5.12 **What areas within Information Technology do you see best making use of the tool(s). (i.e., enterprise architects, system architects, application architects, developers, analysts, business analysts, managers, etc...)**
 - 2.5.13 **What are the release cycles for the products?**
 - 2.5.14 **How many years has this tool been in the market? Also, confirm that the proposed tools are generally available to customers under full maintenance and technical support.**

2.6 Application Discovery and Understanding Solution Repository

- 2.6.1 **Describe the DBMS(s) used for the repository.**
- 2.6.2 **Is the schema open and extendable?**
- 2.6.3 **What are some performance measurements you have achieved with your product(s)?**
- 2.6.4 **What kind of performance has other companies achieved with practical use?**
- 2.6.5 **What query language is used for the repository?**
- 2.6.6 **What repository queries are available out-of-the-box?**
- 2.6.7 **Provide a diagram and description of your repository's metamodel?**

2.7 Application Discovery and Understanding Repository Building Capabilities

- 2.7.1 **Specify any hardware/software required in addition to this product.**
- 2.7.2 **Describe the capabilities of your tool that decomposes the assets to load into the**

repository.

- 2.7.3 What platform does it use for execution? What are the requirements for the platform?
- 2.7.4 What metadata is captured and stored in the repository out-of-the-box?
- 2.7.5 Other than source code, what resources (mainframe or open systems) can be loaded into the repository?
- 2.7.6 Describe the entire process from identifying assets to the population of the repository.
- 2.7.7 How are services and their usage captured and handled within the repository?
- 2.7.8 How are deltas handled and, can they be fully automated?
- 2.7.9 Can user supplied data be added to the repository (like notes/memos) and be attached to specific items? What happens to them when deltas are applied or the tool is upgraded?
- 2.7.10 What metadata needs to be captured manually for repository storage? (i.e. program long names, descriptions, etc...)

2.8 Software Asset Analysis Capabilities

- 2.8.1 Can analysts save work and/or share it with other analysts? If so, describe the capabilities available.
- 2.8.2 What metrics are produced and stored for each asset type?
- 2.8.3 What percent of the code can we expect to be fully decomposed for the loading into the repository?
- 2.8.4 What impact does deltas have on individual stored work?
- 2.8.5 Describe how you handle the mapping of data overlay structures?
- 2.8.6 Describe all of the diagrams and charting that your products can produce both in a

batch mode and interactively. Please provide an example of each.

- 2.8.7 Describe how a Project Manager would typically use the products described above?**
- 2.8.8 Describe how an analyst would typically use the products described above?**
- 2.8.9 Describe how a developer would typically use the products described above?**
- 2.8.10 Describe how an architect would typically use the products described above?**
- 2.8.11 Describe the user interface associated with your products?**
- 2.8.12 What interfaces/queries/diagrams above are available via a web interface?**
- 2.8.13 What export formats (like Excel) are supported for storing query results external to your applications?**
- 2.8.14 What export formats (like Visio) are supported for storing diagrams external to your applications?**
- 2.8.15 Describe the search capabilities. (For example, can it search across metadata fields?)**

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SECTION 3

PRICING, TRAINING SUPPORT AND ENHANCEMENTS

3.1 Pricing, Training, Support and Enhancements

- 3.1.1 Describe your pricing model; please include Maintenance, Support, and Implementation costs.
- 3.1.2 Describe your maintenance program.
- 3.1.3 Describe your support program.
- 3.1.4 Describe your professional services offerings. How much installation support does the typical customer require?
- 3.1.5 Describe your product training programs and delivery mechanisms.
- 3.1.6 Describe training for administrators
- 3.1.7 Describe training for end users
- 3.1.8 Describe your product documentation.
- 3.1.9 How do you handle request for product changes?