

# Manage Your Metadata to Better Manage Your Business

WHITE PAPER



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## Executive Summary

As the volume of your enterprise data grows, so does the complexity of managing it. Your company needs visibility into all its data, including:

- The types and amounts of data
- Where data resides across the organization
- How it is derived
- How it flows from one system to another
- Where end users consume data

Metadata, commonly defined as “data about data,” is one of the most critical success factors in managing, sharing, and storing information cost-effectively. According to Gartner’s “Top 10 Strategic Technologies for 2008,” metadata management is a crucial yet often overlooked part of everyday business operations.<sup>1</sup> Your IT organization can more effectively manage its data-intensive business demands by harnessing the power of metadata to acquire, discover, and validate all enterprise data and its relationships.

In fact, metadata management is the foundation of data integration. While companies are embracing a data-centric approach to IT architecture and treating data as an asset, many fail to fully leverage their data integration investments to gain additional value from metadata management. Effective metadata management leads to the development of best practices for data integration as a whole.

Your IT organization needs to manage the expected growth in its data volumes while maintaining current cost levels. An effective metadata management approach can help your IT organization understand what data and other reusable artifacts exist so that you can better reuse and share resources and minimize redundancy. Effective metadata management results in:

- Lower IT development costs
- Faster project delivery rates
- Greater business confidence in data
- Less compliance exposure due to data inconsistencies

This white paper examines the business advantages of effective metadata management. It explores the important role metadata management plays in establishing data governance practices, capitalizing on the value of mergers and acquisitions, and improving business agility. This paper also shows how Metadata Manager, a key feature of Informatica® PowerCenter® Advanced Edition can help your IT organization:

- Effectively manage metadata to ensure data transparency and auditability
- Reduce redundancy
- Better align itself with the business

<sup>1</sup> Gartner, “Gartner Identifies the Top 10 Strategic Technologies for 2008” press release, October, 9, 2007.

## What Is Metadata?

More than just its standard definition of “data about data,” metadata facilitates the understanding of the characteristics and usage of data. From a technical perspective, metadata is used to help IT organizations better manage and maintain their data assets. From a business perspective, metadata provides context to data, acting as the semantic layer between a company’s IT systems and its business users. **Figure 1** provides examples of both business and technical metadata.



Figure 1. More than just “data about data,” metadata facilitates the understanding of the characteristics and usage of data, from both technical and business perspectives.

Technical metadata typically refers to descriptions of data elements and their representation in databases, files, or other systems and, as such, supports computer or software efforts. Business metadata is data that is subject to human interpretation, such as more descriptive business terms and their definitions.

Historically, data architects have been the main users of metadata. They use metadata as a map or guide to understanding what data they have, how it is structured, and how it relates to its sources, transformation, load processes, and consuming applications. This map allows data architects to understand, manage, and integrate data more effectively.

Today’s IT organizations realize that the impact of metadata extends beyond the data architect role. All parts of the business benefit from understanding not only the data representation, but also the contextual meaning and business significance of data and its relationships with other data.

## What Is Metadata Management?

Metadata management is the process of managing an organization's data assets according to how these assets are used. This process enables metadata to be integrated, linked, and centrally maintained across multiple sources so that data can be properly maintained, analyzed, consumed, and interpreted across the whole organization. When the meaning of data is derived from its business and technical metadata, data can be more effectively aggregated and integrated. Simply put, when metadata is effectively managed, data becomes more valuable.

Metadata management is the process of managing an organization's data assets according to how these assets are used. This process enables metadata to be integrated, linked, and centrally maintained across multiple sources so that data can be properly maintained, analyzed, consumed, and interpreted.

Your IT organization needs an effective metadata management solution to:

- **Simplify data discovery and tracking with a central catalog of data.** Most companies have to manage increasingly complex systems. By managing metadata, IT organizations can create an inventory of data assets across multiple systems that enables quick discovery of data assets.
- **Reinforce consistency through data reuse and redundancy elimination, thereby increasing productivity and reducing project delivery time.** A central metadata repository serves as the "single source of truth" to discover reusable components that developers can leverage. Companies can reduce the amount of redundant or unused data, which allows for hardware and software consolidation and cost savings.
- **Reduce the risk of knowledge drain from staff turnover.** Valuable information about where and how data is stored and what it means frequently goes undocumented, residing only in the heads of certain employees. When these key individuals leave the company, this knowledge disappears with them. A central metadata repository within a metadata management system preserves this knowledge and alleviates any risks of this information leaving with a departing employee.
- **Increase confidence in the data delivered in reports to business users.** Tracking the lineage of data—where it comes from and how it is derived, processed, and delivered—provides important context to business users. Profiling data in source systems allows data inaccuracy and inconsistencies issues to be exposed and resolved, resulting in trustworthy, high-quality data.
- **Improve IT responsiveness to the business by making the development process more efficient.** The integration and visibility of metadata helps IT understand what data exists, where it is located, and what it means, minimizing information complexity. In addition, this visibility provides the infrastructure for analyzing the impact of changes brought on by changing business requirements and will speed up the development of new data integration projects. Data integration developers can rely on this information to easily and accurately determine the data that is needed for their data integration projects. The ability to assess the impact of potential changes also can help managers quickly estimate project duration and resource costs.

## What Is Driving the Need for Metadata Management?

Several business initiatives are driving the need for effective metadata management.

### Data Governance and Compliance

#### Data Governance

Data governance involves the sets of processes, policies, standards, organizations, and technologies to manage data as an asset in an enterprise. The goals of data governance are to:

- Increase consistency and confidence in decision making
- Decrease the risk of regulatory fines
- Improve data security
- Ensure consistent information quality across the organization
- Maximize the income generation potential of data
- Designate accountability for information quality

Metadata is used to bridge the divide between technical systems, processes, and data and the information that business users can understand and use. In other words, in the context of data governance, metadata empowers organizations to fill the semantic gap between business and technical metadata and its users.

Data stewards define business metadata to link business information, as the business user understands it, with the appropriate data stored in physical systems. Therefore, metadata is critical for data stewards who are establishing a data governance program.

Metadata management also plays a key role in data governance by helping to automate the policies that achieve the goals of data transparency, accountability, auditability, predictability, and oversight by maintaining an inventory of data and its relationships.

#### Compliance

Tighter compliance and regulatory requirements are forcing organizations to provide transparency to key information and maintain accurate audit trails of how data moves across applications. It is often very difficult to manually retrace all the steps from the reports and financial statements to the original source of data, especially as data changes and transforms on its journey through various systems.

Metadata management documents these data flows and data changes across systems to deliver a lineage that can be used for transparency and auditability of the data. Basel II regulations, for example, focus on risk management processes and provide incentives for banks to prove that data in their systems is reliable, traceable, and authentic. Although the Basel II Accord makes no specific reference to metadata, banks can satisfy its key requirements if they can effectively capture and document data movements via metadata.

### METADATA MANAGEMENT IN ACTION: DATA GOVERNANCE AND COMPLIANCE

Let's say a chief financial officer of a large manufacturer is reviewing the regular quarterly sales report. But he has questions regarding the quality and scope of the data that this report contains. He tasks a business analyst to address his concerns. However, the knowledge about the various data sources and processes is spread among many analysts and developers across the organization. Without a metadata management solution, the CFO may not receive his answer for weeks.

But with a metadata management solution that offers data lineage capabilities, the data analyst can graphically track the data movements from each of the reports line items to quickly determine how the information was derived. She can even identify the source of the data and the changes made to it on its way to the data warehouse. This transparency and auditability of data movement helps the data analyst to not only answer the CFO's questions but also give him confidence that her answers are reliable and accurate. As a result, the manufacturer can comply with statutory requirements and enforce its data governance policies.

## METADATA MANAGEMENT IN ACTION: M&A

Let's say an IT department of a major retailer is tasked with integrating all the data sources from the company's recent acquisitions.

This includes thousands of databases, data marts, and reports from multiple business intelligence tools. Where can the IT department find an inventory of all the data sources to; 1) decide what is used or not to determine if some of them can be retired or reused to reduce cost; and 2) determine if all the data is relevant, complete, consistent, and accurate?

A metadata management solution that provides a central metadata catalog can help the IT department aggregate and catalog the data assets of the acquired companies to provide a "single source of truth." It can quickly find relevant items and maintain common interface definitions for data sources, warehouses, business intelligence, and other applications used in enterprise data integration projects. In addition, having a single integration metadata catalog helps the IT department quickly identify and retire unused or redundant data sources, which helps to promote reuse.

## Mergers and Acquisitions

The goal of most mergers and acquisitions (M&A) is to increase a company's long-term profitability and shareholder value by expanding its operations. One of the expected benefits of an M&A is a reduction in costs to run the back office by eliminating redundant roles and/or operating more efficiently.

However, when two companies merge, the acquiring company faces the daunting challenge of consolidating data from the two organizations to run day-to-day operations. When one company acquires another, it is buying its data—customer, financial, product. Metadata management helps to maximize the return on this investment.

Metadata management helps handle the consolidation and integration of merged company data by maintaining an inventory of the existing data assets, where they are located, what they mean, and how they are derived within each organization. During consolidation, a metadata catalog within each organization also helps identify and eliminate redundancies, as well as promote consistency of data definitions and usage across both organizations.

## Increasing Business Agility

An agile business responds rapidly to changes in its business environment by applying new strategies and technologies to its operations quickly and accurately. Regulatory, competitive, or market forces drive these changes. The challenge is for IT to align with the business to efficiently respond to these changes. Departmental time, budget, and resource constraints can compound this challenge.

By effectively managing their metadata, IT organizations can help the business quickly adapt to new and changing data requirements. By providing business context to IT artifacts, metadata management promotes collaboration between the subject matter experts and IT with a central catalog of data to simplify data discovery, understanding, and tracking. IT organizations can improve their responsiveness to the business by using 1) a central metadata catalog to facilitate reuse of data processing logic; and 2) impact analysis to reduce the time needed to find impacted systems.

By strengthening the alignment between the business and IT functions, metadata management enables organizations to respond effectively to changing business demands and make timelier business decisions based on trusted data.



## Current Barriers to Effective Metadata Management

In this section, we'll examine the importance of effective metadata management by exploring the limitations of two alternatives:

1. Hand-coding metadata documentation solutions
2. Creating metadata repositories

### The Limitations of Hand-Coded Solutions

To understand how important metadata management is, let's consider the alternative. In traditional hand-coded, point-to-point metadata maintenance, IT organizations follow an often cumbersome and time-consuming process that involves:

- Abstracting metadata from sources
- Maintaining the metadata in isolated Excel spreadsheets and/or modeling tools

Large-scale manual metadata integration is very resource-intensive and soon becomes too error-prone to maintain over time. Several factors contribute to the complexity: the volume of metadata involved, the number of data sources, and the frequency of changes.

IT organizations have to work with metadata scattered across multiple spreadsheets, logical modeling tools, and/or transactional systems. Sporadic replication and updates across the spreadsheets complicate the collaborative review and analysis tasks that are designed to validate and exercise control over metadata. They also hinder an organization's ability to quantify risk levels throughout the enterprise. All too often, hand-coded approaches result in metadata documentation that quickly becomes stale and out of date.

### The Limitations of Standalone Metadata Tools

Organizations have attempted to create a single enterprise metadata repository to capture, centralize, update, and analyze metadata from disparate, fragmented systems across the organization. Although this generalist approach can extract a broad spectrum of metadata, it does not capture metadata in the granularity needed to provide value to data integration. Put another way, standalone enterprise metadata repository solutions may provide a mile-wide view of an organization's data assets, but this view is only an inch deep.

Standalone metadata repository solutions lack adequate, integrated documentation of critical data integration processes. This inhibits an IT team's ability to:

- Check the impact of a data integration process design choice or change to data structures
- Plan approaches that make the best use of existing data and system resources without a data lineage or impact assessment
- Audit data movement and changes that affect the accuracy and consistency of the data consumed by the business

While standalone enterprise metadata solutions offer a framework with which to manage metadata, they still lack the ability to adequately extract critical metadata used in data integration. Without the ability to unify and plan data integration processes based on a metadata-driven architecture, IT productivity decreases while IT costs increase.

## METADATA MANAGEMENT IN ACTION: BUSINESS AGILITY

Let's say that a CFO of a publicly traded company is reviewing the quarterly profit and loss statement. She notices that the gross margin number is vastly different from the same report two days ago. The global finance team confirms that there were no last minute items of any substantial impact, so the CFO is now questioning all the figures in the report.

The company's board meeting is in two short days. Resources from finance, sales, and IT are pulled away from their normal tasks to resolve the discrepancy quickly. Eventually, the cause is found: a change in a computation in the European region for cost of goods sold (COGS). A new manufacturing application was deployed at the end of the quarter, so the calculations for COGS changed.

With a metadata management solution that offers data lineage capabilities, data analysts and developers can drill down and across data sources to determine the origin and derivation of numbers in a report—right down to the table column and to the transformation expression. IT developers can graphically see the impact that a change will have on downstream data warehouses and reports before changing the data. The impact of the proposed change can help isolate and analyze the impact of the pending change, mitigating costly development and downtime.

## WHO BENEFITS FROM METADATA MANAGER?

### Data Integration Developers

Data integration developers perform detailed impact analysis when changes are made to metadata used in mappings, sessions, workflows, sources, and targets. Metadata Manager's comprehensive impact analysis capabilities enable them to quickly identify which design artifacts are affected and need to be modified accordingly.

### Data Stewards and Business Analysts

Data stewards and business analysts use personalized data lineage to view the data flow diagram at a higher level of abstraction, seeing only the metadata artifacts they are interested in. They can also view integrated data profiling results to quickly assess the content and quality of the data sources.

### Data Architects

Data architects interact with the integration metadata catalog to browse and search for metadata definitions, define new custom models, extend existing metadata, and maintain common interface definitions for data sources, warehouses, business intelligence, and other applications that are used in enterprise data integration projects.

## The Solution

Informatica PowerCenter Advanced Edition is the ideal platform for standardizing data integration at an enterprise level, across a number of projects and departments. It lets you discover, access, and integrate data from virtually any business system, in any format, and deliver that data throughout the enterprise at any speed.

Metadata Manager, one of the key features of PowerCenter Advanced Edition, is specifically designed to access, search, discover, report, and analyze metadata. Metadata Manager aggregates and links metadata from a wide variety of data sources and third-party tools that are used or are impacted by PowerCenter processes in an integration metadata catalog. In addition, Metadata Manager provides information about structure, end-to-end impact analysis, and report-to-source data lineage—all available through PowerCenter's dynamic and interactive Web-based user interface.

By providing more business context to IT artifacts, Metadata Manager strengthens alignment among IT organizations, development teams, and business analysts, which improves business agility. By supplying full visibility into the potential impact of data changes, Metadata Manager also reduces delivery time and helps teams obtain more accurate cost estimates.

With Metadata Manager, your IT organization can:

- Deliver trusted data for compliance requirements and internal controls
- Improve IT responsiveness by decreasing the cost of change management
- Enhance business alignment through more efficient cross-functional collaboration

## Deliver Trusted Data

Many companies struggle with understanding and interpreting the volume and complexity of data that has proliferated throughout their organization. There is a wide variety of data sources—including databases, business intelligence and other applications, and mainframe systems—and this data is not linked together or integrated in a way that it can be easily understood, interpreted, or managed.

Metadata Manager delivers personalized data lineage and comprehensive impact analysis. It links data together to provide transparency into where data comes from, where it's going, and the intermediate data stores and transformation processes that it flows through. **Figure 2** on the following page shows Metadata Manager's interactive and dynamic interface of end-to-end data lineage. With the personalized visualization report to source lineage, your IT organization can selectively and progressively drill into data elements of interest.

Furthermore, using Metadata Manager's integrated data profiling capabilities, you can provide additional insights into the number, pattern, distribution, and duplication of data values and completeness of a particular source field. **Figure 3** on the following page shows an example of data profiling results. With Metadata Manager, IT analysts and developers can quickly assess the accuracy and consistency of data, helping them deliver more trusted data to the business.

Metadata Manager's data lineage and data profiling capabilities enable your IT organization to provide the business with verifiable audit trails. With the help of Metadata Manager, your IT organization can provide insight into all its enterprise data, which increases the trust in the data that drives your company's business decisions.



Figure 2. Metadata Manager delivers personalized lineage views that document changes to data as it flows through various enterprise systems.

## METADATA MANAGER IN ACTION: DELIVERING TRUSTED DATA

Australia’s first and oldest bank needed to improve management reporting and meet statutory requirements. In addition, the bank faced challenges of personnel retention and uncertainty of estimating the cost of projects. Relying on PowerCenter Advanced Edition, the bank used Metadata Manager to automate the metadata source handling for accurate data lineage, improve estimates for change costs with impact analysis, and define clear KPI definitions to enhance management decisions. By providing a consistent and integrated data integration mechanism for management and reporting, Metadata Manager helped this bank:

- Meet audit requirements including Basel II and mitigated cost/impact from potential noncompliance
- Reduce manual reporting, analysis, and verification procedures
- Automate the data lineage proof process in audits
- Increase the accuracy of cost estimates and contain the costs of changes and additions

Column Name	% Distinct	% Null	Pattern	% Satisfied
CUST_ADDRESS	40.01%	0%		
CUST_AGE	0.5%	0%	List of Values	100%
CUST_AGE_GROUP	0.12%	0%	List of Values	100%
CUST_CITY	0.6%	0%	List of Values	100%
CUST_COUNTRY	0.02%	0%	List of Values	100%
CUST_CRC	0.02%	100%		
CUST_E_MAIL	86.05%	7.45%		
CUST_GENDER	0.08%	0%	List of Values	100%
CUST_GENDER			F	28.79%
CUST_GENDER			FEMALE	10.26%
CUST_GENDER			M	38.79%
CUST_GENDER			MALE	22.16%
CUST_ID	100%	0%	Pattern	81.99%
CUST_INCOME	69.46%	0%	Pattern	94.45%
CUST_NAME	98.14%	0%		
CUST_PHONE_NMBR	99.65%	0%	Pattern	87.23%
CUST_STATE	0.37%	0%	List of Values	100%
CUST_ZIP_CODE	5.41%	1.18%	List of Values	98.82%
DW_INSERT_DT	0.02%	100%		
DW_UPDATE_DT	0.02%	100%		

Figure 3. Metadata Manager’s integrated data profiling results provide additional insights into the number, pattern, distribution, and duplication of data values and completeness of a particular source field.

## METADATA MANAGER IN ACTION: IMPROVING IT RESPONSIVENESS

A major business unit of a Fortune 50 company with diverse technology product offerings sought to increase its levels of regulatory compliance, improve data quality, reduce development costs, and accelerate data integration and data delivery. This business unit used the Metadata Manager feature in PowerCenter Advanced Edition to automate impact analysis, gap assessment, and data lineage tracking, from data inception to final delivery to end users, both visually and textually, within a single toolset. By making this company's data integration-related metadata repository sharable, searchable, and persistent, Metadata Manager helped this business unit:

- Accelerate adoption of its central data warehouse and rationalize the information delivered in the multiple disparate reporting environments
- Save hundreds of hours per analysis cycle
- Simplify and accelerate its data integration life cycle
- Speed time to value by enabling a high degree of reusability in development efforts

## Improve IT Responsiveness

As applications and systems proliferate throughout your company, your IT organization struggles more and more with the fragmentation of data housed in multiple data silos. Some data is used exclusively by certain groups or departments and is unknown to others. Other data goes unused altogether.

For example, each business unit within a company may develop a data warehouse to meet its own business needs. As the company grows organically or through mergers and acquisitions, the proliferation of isolated data warehouses contributes to data inconsistencies and redundancies. The costs of managing this data are high, both in terms of hardware and software costs and IT resources. These high costs and inefficiencies inhibit IT's responsiveness to the needs of the business.

Figure 4 illustrates how time and resources are poorly spent when business units create their own data warehouses using the same data sources.

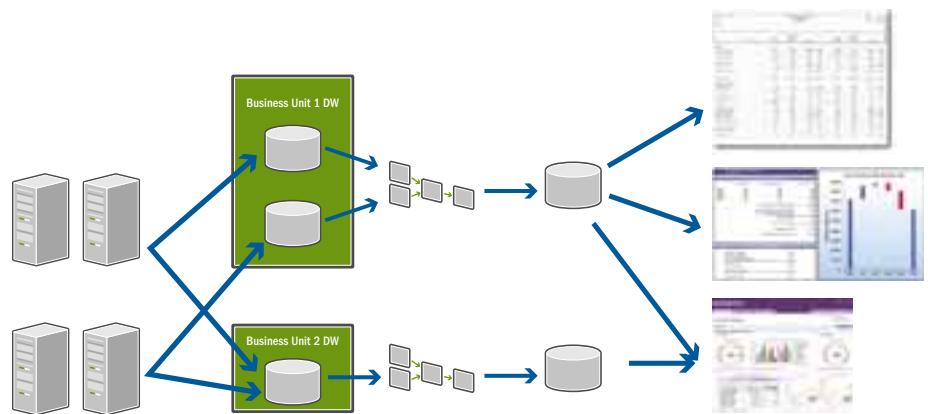


Figure 4. When multiple business units of a single company create their own data warehouses using the same data sources, it creates data inconsistencies and redundancies that are costly to manage and inhibit IT's responsiveness to the business.

Metadata Manager provides a single integration catalog to consolidate the metadata used in these multiple data warehouses, as Figure 5 shows on the following page. With Metadata Manager, IT organizations can identify redundancies and improve consistency across data assets, which drives down maintenance costs and speeds up project delivery times.

Metadata is the basis for effective change management. Metadata Manager's comprehensive impact analysis capabilities enable IT developers to quickly assess which data assets may be affected by a potential change, as Figure 6 shows on the following page. Metadata Manager helps your IT organization accelerate data integration projects and develop more accurate cost impact estimates. As such, Metadata Manager enhances IT's agility and responsiveness to changing business demands.

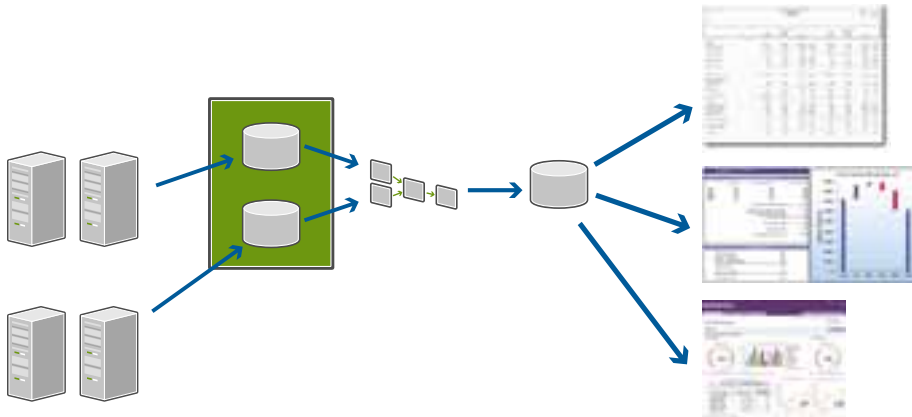


Figure 5. By using Metadata Manager to consolidate the metadata in a single data warehouse, IT organizations can eliminate redundancies, resulting in faster IT project delivery times and lower maintenance costs.

### METADATA MANAGER IN ACTION: IMPROVING IT RESPONSIVENESS

A leading food retailer in Europe and the United States faced the challenge of maintaining a complex and growing BI environment and rising development costs. By implementing PowerCenter Advanced Edition, this company's IT organization used Metadata Manager to maintain metadata across its source systems by aggregating metadata into a single integration catalog. As a result, Metadata Manager helped this company:

- Cut IT project delivery time and costs by more than 50 percent compared to existing processes
- Reduce the impact assessment time from 8 hours to 1 hour
- Decrease the investigation time on how sources are used in mappings from 40 hours to 1 hour
- Compress the time needed to handle calls to explain or investigate specific figures in reports for business users from 24 hours a week to just 8 hours a week

The screenshot shows the 'Where-Used Analysis' tool in Metadata Manager. It displays a tree view of database objects and their relationships. The 'Name' column lists objects like 'Hersche Motors Oracle DB', 'Hersche Motors Erwin', and 'Hersche Motors PowerCenter'. The 'Type' column lists object types such as 'OracleDatatype', 'OracleSchema', 'OracleTable', 'OracleIndexColumn', 'OracleView', 'OracleColumn', 'Repository', 'ERwinModel', 'ERwinSubjectArea', 'ERwinTable', and 'ERwinColumn'. The 'Description' column provides details about each object, such as 'This is the Hersche Motors products dimension table' for the 'Hersche Motors Oracle DB' table and 'The unique identifier for the product row in the data warehouse' for the 'PRODUCT\_ID' column.

Name	Type	Description
Hersche Motors Oracle DB	OracleDatatype	
MM_DATAWAREHOUSE	OracleSchema	
MM_PRODUCT	OracleTable	This is the Hersche Motors products dimension table
SYSC0039898	OracleCheckConstrai	
SYSC0039899	OraclePrimaryKeyCo	
PRODUCT_ID	OracleColumn	The unique identifier for the product row in the data warehouse
SYSC0039899	OracleIndex	
V_PRODUCT	OracleView	
PRODUCT_ID	OracleColumn	
Hersche Motors Erwin	Repository	
MM_MODEL	ERwinModel	
<Main Subject Area>	ERwinSubjectArea	
MM_PRODUCT	ERwinTable	
PRODUCT_ID	ERwinColumn	
Hersche Motors PowerCenter	Repository	
MM_LOAD	Folder	
MM_PRODUCT	SourceDefinition	Hersche Motors product dimension warehouse table.
PRODUCT_ID	SourceDefinitionPart	
Common Load	Folder	
MM_PRODUCT	TargetDefinition	This is the product dimension table for the Hersche Motors warehouse.
PRODUCT_ID	TargetDefinitionPart	

Figure 6. Metadata Manager's comprehensive impact analysis enables IT to manage the impact of a potential change.



## METADATA MANAGER IN ACTION: ENHANCING ALIGNMENT BETWEEN BUSINESS AND IT

One of the largest diversified insurance and financial services organizations in the world wanted tighter control of its disparate financial systems and implemented a data governance program to provide reliably accurate information. The company foresaw opportunities for a unified enterprise-wide system that consolidated metadata from multiple systems to give both business and IT personnel a powerful and incisive toolset to better understand and manage complex business dynamics. By using PowerCenter Advanced Edition, the company recognized that it could use Metadata Manager to improve business users' understanding of interrelated data across systems, build data confidence with lineage and governance, and improve productivity by simplifying change management. Metadata Manager helped this company:

- Use the reporting and data lineage diagram as part of demonstrating adherence to Sarbanes-Oxley compliance
- Increase data assurance for integration success overall
- Improve productivity and reliability for change impact assessment
- Boost ROI on data integration projects

## Enhance Business Alignment Through Cross-Functional Collaboration

Metadata Manager integrates metadata in a centralized metadata catalog that allows business and data analysts and IT to easily share and exchange information and collaborate using a common taxonomy of metadata definitions that are enriched with their business context.

Metadata Manager shows the data flow at different levels of detail and enables users to personalize the graphical data lineage diagram to show only that information in which they are interested. For example, business analysts can obtain a global view of all data sources, while IT developers can drill down to the specific transformations used in data integration.

As Figures 7 and 8 illustrate, Metadata Manager offers users the option to view data lineage with the business or technical names of technical artifacts.

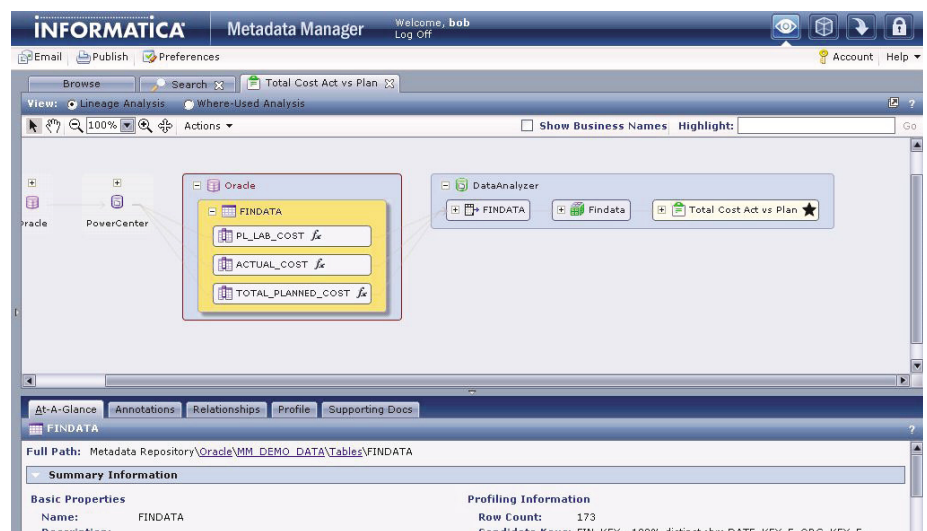


Figure 7. With Metadata Manager, you can choose to view data lineage with the technical names of technical artifacts.

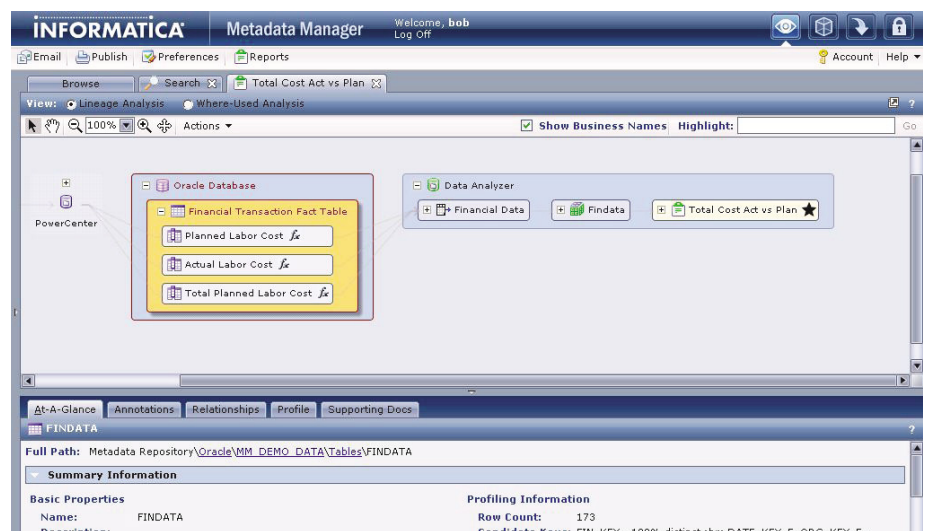


Figure 8. You can also choose to view data lineage with business-friendly names of technical artifacts, which enables business analysts to collaborate more effectively with IT on data integration projects.

This flexibility lets both analysts and IT developers each view the same information within the context that suits each role best. As such, Metadata Manager enables business users to participate in technical data integration projects. With personalized data lineage and the ability to augment metadata with annotations and linked documents—such as Microsoft Word or Excel specifications—and by sharing favorites and search conditions, personalized metadata assets, and customized views, IT organizations can streamline information exchange among team members to quickly identify and resolve issues. Metadata Manager promotes reuse and reduces IT costs by helping teams to work together more effectively.

## **METADATA MANAGER IN ACTION: ENHANCING ALIGNMENT BETWEEN BUSINESS AND IT**

A major European carmaker created a center of excellence to gain visibility into data produced and consumed by its business units. Faced with the challenges from poor documentation of home-grown projects, the lack of visibility into data flows, and limited access of metadata across multiple data sources (i.e., Cognos, Oracle, SQL Server, and DB2 mainframe), the company implemented PowerCenter Advanced Edition. Using Metadata Manager, the company's IT organization was able to strengthen its alignment with the business to analyze and collaborate on data integration projects resulting in:

- Maximized reusability of data and technical artifacts by identifying synergies and reducing redundant development across business lines
- Increased confidence in business reports through transparency of where the information in those reports came from, how they were derived, and what they mean
- Improved responsiveness to business service requests resulting from more effective change management and more accurate assessment of the scope and effort of a project

## Conclusion

As a company's data volume and complexity expand, it has become increasingly difficult to identify, understand, and interpret data flowing through the various systems in the organization. Lack of visibility into and understanding of how multiple sources of data are related and how they are processed across tools and data stores reduces confidence in the information used to make business decisions. This in turn inhibits companies from strategically managing their business in a competitive environment.

Managing these data assets requires a unified data integration platform that provides metadata management capabilities to gain operational efficiency, support data governance, minimize compliance exposure, and increase business agility.

Informatica PowerCenter Advanced Edition helps organizations address the problem of data and metadata fragmentation across the enterprise. A key feature of PowerCenter Advanced Edition, Metadata Manager provides: 1) a central metadata catalog that helps IT organizations perform data lineage verification and forward-looking impact assessments, and 2) a collaborative environment for analysts and IT personnel to share information, streamline processes, and improve productivity.

## Learn More

Learn more about Informatica PowerCenter Advanced Edition and the entire Informatica product platform. Visit us at [www.informatica.com](http://www.informatica.com) or call 800.653.3871.

## About Informatica

Informatica enables organizations to gain a competitive advantage in today's global information economy by empowering them to access, integrate, and trust all their information assets. As the independent data integration leader, Informatica has a proven track record of success helping the world's leading companies leverage all their information assets to grow revenues, improve profitability, and increase customer loyalty.



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