IBM Information Server Version 8.0: Understanding and Analyzing Your Data

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Highlights

- ■ *Create a greater understanding of data source structure, content and quality*

- ■ *Ensure healthy data quality throughout the project lifecycle*

- ■ *Eliminate the risk and uncertainty of proliferating bad data throughout the enterprise*

Organizations face an information challenge beginning with locating information, getting it when it's needed in the form needed, and once found, discerning further insights from it. Not to mention the concerns of information validity and control. The challenges only mount if businesses cannot ensure access to authoritative, consistent, timely and complete information.

IBM Information Server is a revolutionary new software platform that helps you derive more value from the complex, heterogeneous information spread across your systems. It enables your organization to integrate disparate data and deliver trusted information wherever and whenever needed, in line and in context, to specific people, applications and processes. It helps business and IT personnel collaborate to understand the meaning, structure, and content of any type of information across any source. It provides breakthrough productivity and performance for cleansing, transforming and moving this information consistently and securely throughout the enterprise, so it can be accessed and used in new ways to drive innovation, increase operational efficiency and lower risk.

Understanding and addressing data quality: A critical early step

What price tag would you place on the value of truly understanding the data sources of your data-driven project? According to industry analysts, over 80 percent of IT projects either fail or overrun their budgets due to a lack of data understanding.

IBM Information Server can help you quickly and easily understand your data by providing data profiling as well as monitoring capabilities. These insights can help you accelerate information-based projects, from data warehousing to infrastructure consolidation to master data management and data governance.

Data profiling (aka data source analysis) helps you understand your data by revealing insightful information about the structure, content and quality of your data sources. Data quality is a core discipline of IBM Information Server as it enables the delivery of consistent, reusable, trusted information. The data quality continuum includes data profiling, standardization, matching and data quality monitoring. IBM Information Server delivers them all. For more information on standardization and matching, visit: **ibm.com**/software/data/integration/qualitystage/.

DEMAND BUSINESS™

IBM Information Server inspires confidence in data quality

IBM Information Server automates data profiling, analysis and monitoring, helping to not only simplify information integration, but also inspire greater confidence in the quality of information delivered. IBM Information Server allows you to meet the demanding requirements of your enterprise today while achieving the objectives that will help sustain your growth for tomorrow. By using the data profiling capabilities of IBM Information Server in the early phases of your data integration projects, you can:

- *Expedite delivery of data-driven projects.*

- *Minimize costs and resources of critical data integration projects.*

- *Eliminate the risk and impact of proliferating incorrect and inaccurate data.*

- *Ensure the timely delivery of trusted information.*

IBM Information Server profiles data by performing complete source-system analysis, including column and table analysis, primary and foreign key analysis, relationship analysis, redundancy analysis and table normalization analysis on your heterogeneous data sources. It also features extensive reporting capabilities,
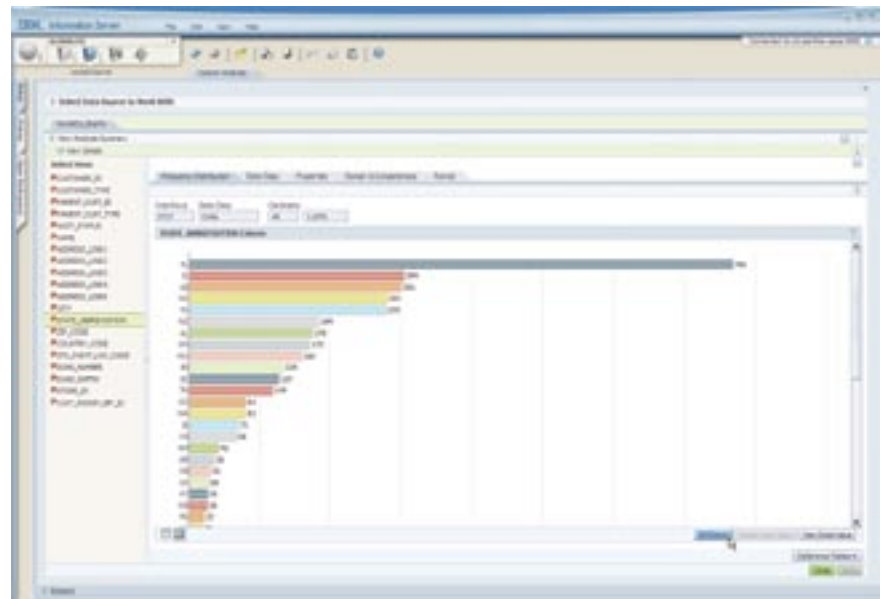

Figure 1. Frequency distribution results from column analysis.

robust security, scheduling and a customizable dashboard, all in a state-of-the-art intuitive GUI. (See Figure 1)

IBM Information Server data profiling and analysis features include:

Comprehensive data analysis— A complete set of metrics offers a complete picture of your data from every possible angle and enables users to immediately document all discovered data anomalies including data type, minimum, maximum, average, count and nulls, and others.

Drill down—View individual records from profiling results in real time. For example, if you discover an invalid value in a column, easily drill down to the actual record for further investigation.

Extensive reporting—Over 60 reports are ready to use out of the box, customizable for your environment. Visual representation of analysis, trends and metrics and incorporation of user notes all help you understand results quickly and efficiently.

Intuitive user interface—A rich, visual and graphically enabled user interface with intuitive navigation experience promotes the understanding of information and improves usability and productivity. A task-based approach to navigation helps you quickly perform what you need to do, when you need to do it. (See Figure 2)

Native parallel data profiling— Profile high volumes of data easily without any added configuration.

Secured analysis—Project-, role- and user-based security controls access to sensitive analytical information with granularity down to the individual column level. Controls can be as open or as restrictive as needed to meet compliance requirements.

Collaborative multi-user environment—With support for multiple analytical reviews, as well as asynchronous profiling, a project-based environment allows more than one user to work in a project-based context.

Baseline analysis—Compare results from current profiling sessions with the results from a prior profiling session, gaining insight into what may have changed in structure or content over time.

Integrated metadata—Share analytical results and profiling notes across all IBM Information Server modules.

Broad support of data sources—Profile IBM DB2®, Oracle, IBM SQL Server, Sybase, IBM Informix®, Microsoft® Access, text files, ODBC data sources and more.

Data profiling within a unified platform
Leveraging a Service Oriented Architecture (SOA) to unlock information from individual silos, IBM WebSphere Information Analyzer, a product module of IBM Information Server, delivers data profiling and analysis functions within the context of a complete information integration platform, enabling more accessibility and consistency throughout the enterprise. Active metadata across IBM Information Server simplifies the collection and management of metadata across the entire integration spectrum. Within the WebSphere Information Analyzer module, profiling results are stored in the common metadata repository. The result? Profiling outcomes pertinent to IBM WebSphere DataStage® and IBM WebSphere QualityStage users are instantly accessible without the need to export/import the data.

Organizations face an information challenge beginning with locating information, getting it when it's needed in the form needed, and once it is found, discerning further insights from it. Information validity and control are additional concerns. The challenges only mount if businesses cannot ensure access to authoritative, consistent, timely and complete information.
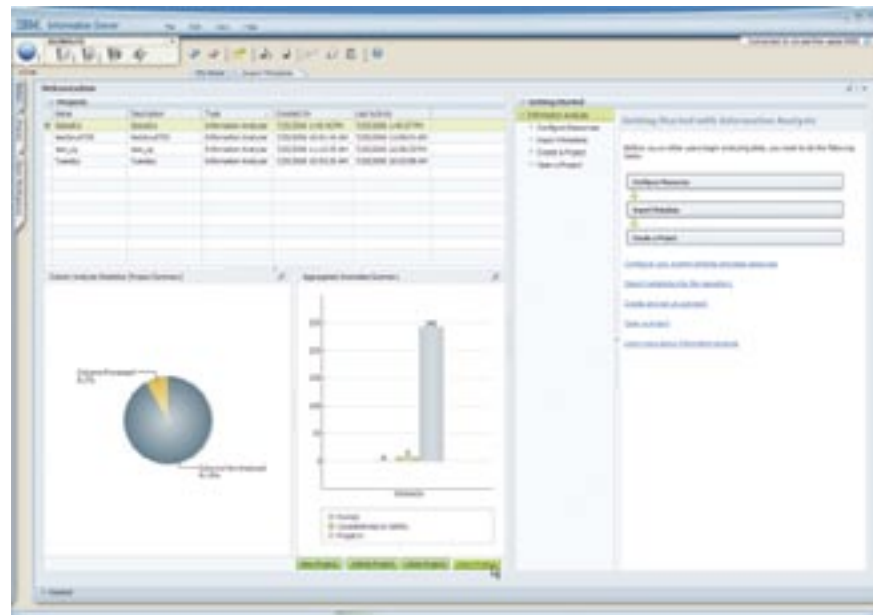

Figure 2. Rich, task-based graphical user interface with customizable dashboard.

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System requirements

WebSphere Information Analyzer — the IBM Information Server module that delivers information profiling and analysis functions — supports the following operating systems: IBM AIX®, Redhat Enterprise Linux®, SuSE Enterprise Linux, Solaris, HP-UX and Microsoft® Windows®. For current, detailed hardware and software system requirements for IBM information integration products, visit: **ibm.com**/software/data/integration.

For more information

To learn more about IBM Information Server and how it can help you derive more value from the complex, heterogeneous information spread across your systems, or to learn more about other information integration solutions from IBM, contact your IBM marketing representative or IBM Business Partner, or visit: **ibm.com**/software/data/integration.

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