Indigo DQM Data Management System

Indigo DQM Data Management System (DMS) represents the ultimate in professional and secure data management. With a significant range of expert capabilities included in an all-in-one solution all your data requirements are satisfied with this powerful software system.

Featuring advanced query, processing and reporting capabilities with AI / Machine Learning our software is designed to maximise data assets, increase business value and intelligence.

Working with data, on or off the cloud, Indigo DQM's secure application is optimised for sensitive and secure handling of data on both private and public networks offering far superior security and functionality to any cloud based solutions.

Indigo DQM is an information and data reporting powerhouse and includes all the tools required for managing, querying and processing data as a valuable asset and resource.

Indigo DQM Advanced Features

✓ Data Queries and Execution Plans on Demand
✓ Data Analysis, Extraction and Migration
✓ Data Consolidation, Collection and Aggregation
✓ Data Ingestion and Interchange
✓ Data Transformation, Conversion and ETL
✓ Data SQL, NoSQL, XPath, XQuery, XSLT and Python
✓ Data Filtering, Sorting and Processing
✓ Data Artificial Intelligence / Machine Learning*
✓ Data Reporting and Document Generation
✓ Data Reports in HTML, PDF, DocX and RSS
✓ Data Web Scraping and Crawling
✓ Data Mining, Harvesting and Warehousing
✓ Data Downloads and Feeds from the Internet
✓ Data Execution Plans, Logs and Auditing
✓ Data Automation, Scheduling and Scripting
✓ Data Security and Encryption
✓ Data Backup, Restore and Data Migration
✓ Data from multiple Sources and Types supported
✓ Data Assets Stores for multiple Data Projects

Indigo DQM Applications and Usage

✓ Data Management, Query and Reporting
✓ Data Analysis, Information and Statistics
✓ Data Processing, Security and Encryption
✓ Sales Prospecting and Marketing Tool
✓ Customer, Client and Product Analysis
✓ Financial Data, Trends and Market Analysis
✓ Management Information Reports
✓ Web Data Scraping and Crawling
✓ Business Information and Data Intelligence
✓ Scientific Research and Experiments
✓ Data Harvesting and Warehousing
✓ Migration of Data to other systems / platforms
✓ Database Administration and Reporting
✓ Software Development and Design
✓ Quality Assurance Engineering
✓ Business and Data Analytics
✓ Educational and Training Tool
✓ Electronic Data Interchange
✓ Plus much more….
Indigo DQM Benefits and Advantages

- Maximises Data Assets
- Increase business value, expertise and intelligence
- Boost Competitive Advantage
- Lower support Overhead
- Reduce Business Costs
- Centralise Technology Solutions
- Manage any Data Source
- Superior Data Security
- Bring Data from different sources and types together
- Seamless migration and conversion of Data
- Reusable and highly compatible Reporting platform
- Complete all-in-one Solution
- Secure and Encrypt Data Assets
- Reduce IT and support overhead

With an impressive array of features, flexible and advanced functionality Indigo DQM represents the ultimate in professional and secure data management and reporting.

Ultimate Data Management

Representing the ultimate in professional and secure data management, Indigo DQM comprehensively covers all aspects of managing and processing demanding business data. This includes data queries, data analyses, data extraction, data mining, data migration and transformation, data security, data backup, report generation plus much more...

Our software can read, write, convert and translate data into many different formats and types allowing it to be intelligible and interchangeable between different applications and databases.

The ability to easily access and work with data no matter where it is located or what application created it makes Indigo DQM unique and opens up endless opportunities to different businesses using various data platforms.

Whatever your type of business or organization our software can help make the best of your most important asset.

Indigo DQM Technology

The Indigo DQM Data Management Engine (DME) is reusable .NET software component and an information and data reporting powerhouse totally unique in its ability to query and manage multiple data sources and types simultaneously.
Our Data Management Engine efficiently manages and consolidates all your Data Assets in a central shared Data Store for the most efficient and effective Querying, Processing and Data Reporting.

Indigo DQM can read, write, process, convert and translate data into many different formats and types allowing data to be compatible between different applications and databases.

**Data Queries, Transforms and Scripting**

The Data Management Engine can run queries and process data against any type of data source using standard relational SQL queries and / or XQuery / XPath and Python. Indigo DQM supports multiple data sources and types including Microsoft SQL Server, Microsoft Access, ODBC, OLEDB, MySQL, Oracle, Postgre, Firebird, XML, JSon, XLS and CSV.

**XQuery / XPath**

XQuery contains a superset of XPath expression syntax to address specific parts of an XML document. The language is based on the XQuery and XPath Data Model (XDM) which uses a tree-structured model of the information content of an XML document.

XQuery is used to query the Report XML Data source adding content to the Report with queries, rules, paragraphs, charts and tables. Fully modular design allows common sections of the Report to be included as Sub Reports. Report Rules can also be applied to manage how Report content is displayed.

**XSL Transformations**

XSLT (Extensible Stylesheet Language Transformations) is a language for transforming XML documents into other XML documents or other formats such as HTML for web pages or plain text.

Indigo DRS implements XSLT and is designed for use as part of XSL, which is a stylesheet language for XML. In addition to XSLT, XSL includes an XML vocabulary for specifying formatting. XSL specifies the styling of an XML document by using XSLT to describe how the document is transformed into another XML document that uses the formatting vocabulary.

**Python Scripting**

In addition to XQuery Indigo DQM can use IronPython an open-source implementation of the Python programming language which is tightly integrated with the .NET Framework.

IronPython can use the .NET Framework and Python libraries, and other .NET languages can use Python code just as easily. Python Scripting can be used to Query, Analyze and Transform Data Sources.

**Artificial Intelligence / Machine Learning**

Indigo DQM Data Management Engine (DME) can use Python for Machine Learning / AI and Statistical Modelling. An optional add-in software component for Indigo DQM facilitates the use of the Accord .NET Framework for Machine Learning and enhances the presentation and formatting of data making it suitable for enhanced reporting.

**Data Security and Encryption**

Indigo DQM is the most secure way to manage, query, process and report on your Data Assets. Because Indigo DQM is a software application that is installed on private computers it has the best security for managing data on both private and public networks where security is of the utmost concern and priority.

Delivering a far higher level of security and functionality than any cloud based solutions Indigo DQM ensures your data assets are protected at all times.

Featuring AES 256 encryption your data assets can be stored and transmitted across the Internet / Cloud in the most secure way possible. The Advanced Encryption Standard (AES) 256 is a symmetrical encryption algorithm
that uses a 256-bit Encryption Key. It is accepted by the U.S. and Canadian governments as the most secure way to store sensitive data.

With AES-256 bit encryption you can be assured that you will be the only one who can access your critical information.

**Data Consolidation, Ingestion and Aggregation**

Indigo DQM manages data consolidation by allowing the query, collection and integration of data from multiple data sources and types into a single destination. During this process, different data sources are put together, or consolidated. Data aggregation is the compiling of information from databases with intent to prepare combined datasets for data processing.

Data ingestion is the process of obtaining and importing data for immediate use or storage in a database. Indigo DQM makes all these tasks effortless!

**Data Filtering, Sorting and Processing**

Data Filtering is the process of choosing a smaller part of a Data Set and using that subset for viewing or analysis. Data Sorting is the process that involves rearranging the data into some meaningful order to make it easier to understand, analyze or visualize.

When working with data, Indigo DQM's advanced filtering methods make it easy to visualize data in a form that makes it easier to comprehend the story the data is telling.

**Data Reporting and Document Generation**

Indigo DQM Data Management System uses the Indigo DRS Data Reporting System (DRS) to create advanced reports and documents.

The Indigo DRS Data Report Engine (DRE) is an information and data reporting powerhouse and is unique in its ability to query in both XQuery and Python and use data from multiple data sources and types.

**Advanced Features**

- Powerful RDL Report Engine
- XQuery / XPath, XSLT, Python, SQL
- Data Visualization, Charting and Graphs
- Data Tables and Pivot Tables
- Data Filtering and Sorting
- Expression and Formula Evaluation
- Report Rules and Data Contexts
- Artificial Intelligence / Machine Learning*
- Table of Contents and Indexing
- Sub Reports, Modular / Shared Reporting
- Include Data from XML, JSON, CSV and XLSX
- Query and Import Data from API's
- HTML, PDF and Text Document Outputs
- Report Licensing Entitlement*
- Reusable Reporting Platform (.NET Library)

Indigo DRS is an advanced reusable reporting and document generation platform that gives the best functionality and compatibility with advanced reporting features and effortless integration of this technology into your projects you can be assured of having the best reporting capabilities.

The optional Indigo DRD Report Designer Tool, not included, uses Indigo DRS RDL (Report Description Language) with advanced reporting capabilities complex Data can be presented in a visual and meaningful format.
The report designer can quickly create advanced reports rich in content. Tables and Charts can be added to the report effortlessly allowing complex data to be presented with the minimum of effort.

Indigo DRS reports give the best functionality and compatibility and because they use standard HTML for reporting the reports can be displayed on any type of device and in any type of browser.

Data Mining

Data mining is the process of analysing data from different perspectives and summarizing it into useful information. This information can be used to increase business intelligence, revenue, cuts costs, or both.

Indigo DQM's Data mining capabilities allows users to process and report on data from many different dimensions or angles, categorize it, and summarize the relationships identified. Technically, data mining is the process of finding correlations or patterns among dozens of fields in large relational databases.

Data Warehousing

Data warehousing emphasizes the capture of data from diverse sources for useful analysis and access. Indigo DQM can create and manage Data warehouses / marts for query, analysis and reporting.

Data Transformation (ETL)

Data transformation is the process of converting Data from one format (e.g. a database file, XML document, or Excel sheet) to another. Typically Data often resides in different locations and formats so Data transformation is necessary to ensure Data from one application or database is intelligible to other applications and databases.

Indigo DQM can extract, convert and transform / translate Data into many different formats and types allowing Data to be intelligible between different applications and databases. The ability to easily access and work with data no matter where it is located or what application created it makes Indigo DQM unique...

Electronic Data Interchange

Indigo DQM allows users to easily interchange, process and work with data - no matter where it is located or which application created it. This opens up endless opportunities to businesses that may be accessing and sharing their data via a variety of different data platforms.

Web Data Scraping and Crawling

Web scraping is used for content scraping and data extraction, and as a component of applications used for web indexing, data mining, online price change monitoring and price comparison, product review scraping (to watch the competition), gathering real estate listings, weather data monitoring, website change detection, research, tracking online presence and reputation, web mashup and, web data integration.

Data Execution Plans

Execution Plans can run multiple Data Command Queries against multiple Data Sources and Types in one operation. This powerful feature allows Data from different locations to be brought together into one result with the outputs being available for data warehousing, saving, migration and reporting.

Data Outputs

Data outputs can be saved in HTML, PDF, RSS, XML, JSon and CSV formats for viewing and uploading to Web Servers for Internet / Intranet reporting content.

Data Migration

Data migration is seamless with Indigo DQM which can map and transfer data between different formats, storage systems and types. Data migration can also be included in Execution Plans so multiple migrations can be performed in one go.
Typically migration takes 30 to 40 percent of the effort in any new application project. Whether you’re implementing an entirely new enterprise application or consolidating, upgrading, or modernizing an existing one, Indigo DQM data migration effortlessly handles all migration requirements ensuring your projects are a success.

**Data Automation**

Data Commands and Execution Plans can be scheduled to execute automatically. This allows automation of certain operations such as downloading a Data Feed from the Internet.

**Execution Log**

Indigo DQM includes an Execution Log which keeps a detailed record of what queries and plans have been run, by whom and when. Additionally Snapshots of the Data can be taken at the time of execution allowing a Data state record to be kept over time for analysis and comparison.

**Data Assets Stores**

Indigo DQM’s Data Asset Store (DAS) is a Database that contains all the Data Command Queries, Data Folders, Data Sources, Data Reports, Data Execution Plans and Execution Logs in a shared Data Asset Repository (DAR).

Data Asset Stores are essentially Data Projects with purpose of consolidating Data Assets into a shared repository for the most efficient and effective data management and data reporting.

Data Queries, Data Sources, Data Reports and Execution Plans can be organized into Data Folders for the most effective management and availability of Data Assets.

Data Consolidation allows the collection and integration of data from multiple sources and types into a single destination. During this process, different data sources and types are put together, or consolidated, into the Indigo DQM Data Asset Store.

Indigo DQM allows multiple Data Assets Stores and Data Projects to be configured with Data Asset Stores Tool. Data Stores can be easily added, edited, deleted and activated.
Prerequisites

Any Win32 or Win64 operating system (server or workstation): Windows Vista, Windows 7, Windows 8, Windows 10 or Windows Server 2003, 2008, 2012 etc.

Compatibility

Indigo DQM is compatible with Data Sources on most operating systems such as Windows, Linux, Unix, Mac OS etc. using XML, JSon, CSV or HTML as the Data Source.

The system is highly configurable and adaptable making it compatible with most data and reporting requirements regardless of infrastructure or schema.

The reports generated by Indigo DRS give the best functionality and compatibility and because they use standard HTML for reporting the documents can be displayed on any type of device whether a PC, tablet, mobile and in any type of browser.

Licensing

One software license is required per user.

Compatibility

• Operating Systems for Deployment
  Windows 2012
  Windows 2008
  Windows 10
  Windows 8
  Windows 7
  Windows Vista
  Windows 2003
  Windows XP
• Architecture of Product
  32Bit, 64Bit
• Tool Type
  Application
• Business Function
  Data Management, Data Query, Data Processing, Data Reporting
• Compatible Data Sources
  Microsoft SQL Server
  Microsoft Access
  MySQL
  Oracle
  Postgre
  Firebird
  ODBC
  OLEDB
  XML
  JSon
  CSV, TXT
  XLS, XLSX
  HTML
• Reporting Formats
  HTML, PDF, RSS,
  CSV, TXT, XML,
  XSLT, RDL

NOTE: *Optional features that require a separate licensing entitlement to be purchased!