

## Indigo DQM Data Management System

Indigo DQM Data Management System (DMS) represents the ultimate in professional and secure data management and reporting. Our software empowers data 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 Management of all Data Types and Sources
- ✓ Data Analysis, Extraction and Migration
- ✓ Data SQL, NoSQL, XPath, XQuery, XSLT, JSoN and Python
- ✓ Data Transformation, Conversion and ETL
- ✓ Data Mapping, Filtering, Sorting and Processing
- ✓ Data Artificial Intelligence / Machine Learning\*
- ✓ Data Reporting and Document Generation
- ✓ Data Reports in HTML, PDF, DocX and RSS
- ✓ Data Consolidation, Collection and Aggregation
- ✓ Data Ingestion, Conversion and Interchange
- ✓ Data Web Scraping and Crawling
- ✓ Data Mining, Harvesting and Warehousing
- ✓ Data Downloads and Feeds from the Internet
- ✓ Data Outputs, Writing and Publishing
- ✓ Data Backup, Restore and Data Migration
- ✓ Data Execution Plans, Logs and Auditing
- ✓ Data Automation, Scheduling and Scripting
- ✓ Data Security, Encryption and Password Management
- ✓ Data File Packaging, Compression and Encryption
- ✓ 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
- ✓ Data Mining and Harvesting
- ✓ Web Data Scraping and Crawling
- ✓ Business Information and Data Intelligence
- ✓ Scientific Research and Experiments
- ✓ Data Harvesting and Warehousing
- ✓ Data Migration to other systems / platforms
- ✓ Database Administration and Reporting
- ✓ Data Outputs, Reports and Publishing
- ✓ Software Development and Design
- ✓ Quality Assurance Engineering
- ✓ Business Intelligence and Data Analytics

- ✓ Educational and Training Tool
- ✓ Electronic Data Interchange
- ✓ Plus much more....

## **Indigo DQM Benefits and Advantages**

- ✓ Maximises Data Assets
- ✓ Increases Business Value and Intelligence
- ✓ Rapid Data Report Development
- ✓ Boosts Competitive Advantage
- ✓ Reduces Business Costs
- ✓ Centralizes Technology Solutions
- ✓ Manages any Data Source and Type
- ✓ Superior Data Security
- ✓ Consolidation of Data
- ✓ Seamless Migration of Data
- ✓ Effortless Data Conversion
- ✓ Publish Data and Reports Globally
- ✓ Reusable Reporting platform
- ✓ Complete All-In-One Solution
- ✓ Secures and Encrypts Data Assets
- ✓ Reduces IT and Support Overhead
- ✓ Total Data Expertise and Intelligence

Indigo DQM supports data from multiple different sources and types simultaneously including Microsoft SQL Server, Microsoft Access, ODBC, OLEDB, MySQL, Oracle, Postgre, Firebird, XML, JSon, XLSX and CSV.

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 and reporting, 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, process, 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. This opens up endless opportunities to businesses using various different platforms ensuring the best is made of important business data.

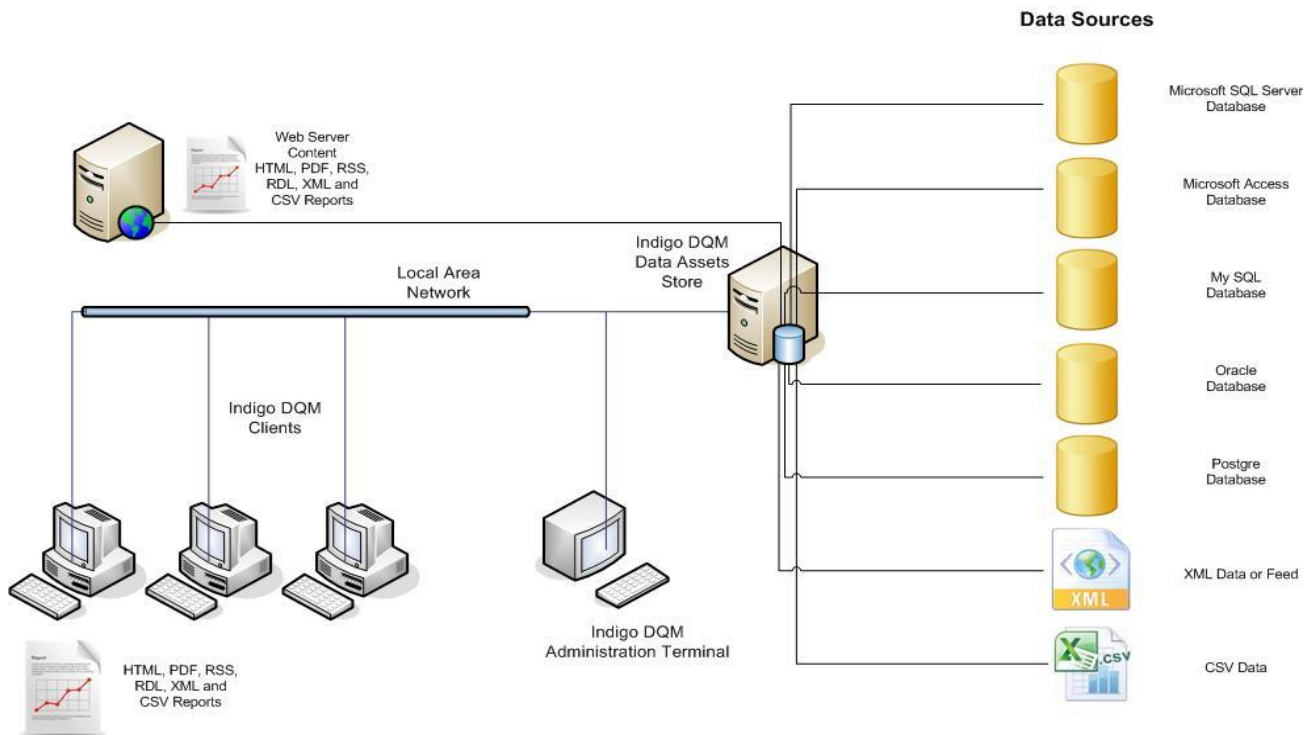
Whatever your type of business or organization our software can help make the best of your most important asset.

## **Indigo DQM Technology**

Indigo DQM's core Data Management Engine (DME) is a reusable .NET SDK software component library which is 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.

The reusability allows Data Asset Stores to be shared between applications and / or websites in the .NET framework using the Indigo DQM core Data Management Engine which can also be built into and reused separately in other projects.



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

XQuery can be used to query data and 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.

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.

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. Python scripting can be used to query, analyze and transform data.

### Python Scripting

Indigo DQM's Data Management Engine (DME) can run IronPython Scripts for additional Data Processing. IronPython is an implementation of the Python programming language targeting the .NET Framework and Mono.

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 and analysis.

## 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 Mapping, Filtering and Sorting

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. Data Source Mapping can be used to map data and add additional custom Data Columns to a Data Table using formulas, expressions and queries.

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

## Data Reporting Tools\*

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

Indigo Scape DRS is an advanced Data Reporting and Document Generation System for Rapid Report Development (RRD) using HTML, XML, XSLT, XQuery and Python to generate highly compatible and content rich business reports and documents with HTML.

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 making it the only choice for demanding business, financial, scientific and engineering reporting.

In addition to the Report Designer, Indigo DRS also includes a selection of powerful Report Management Tools and utilities to assist with the design, development, implementation and deployment of reports and the querying of report data.

## Indigo DRS Advanced Features

- ✓ Powerful RDL Report Engine
- ✓ XQuery / XPath, XSLT, Python, SQL
- ✓ Data Visualization, Charting and Graphs
- ✓ Data Tables, Data Sheets and Pivot Tables
- ✓ Data Mapping, Filtering and Sorting
- ✓ Expression and Formula Evaluation
- ✓ Imaging, Drawing, CAD, Barcodes, QR Codes
- ✓ 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
- ✓ PDF Security, Permissions and Certificates
- ✓ Report Templates and Fragment Libraries
- ✓ Report Management and Publishing Tools
- ✓ Report Packaging and Deployment
- ✓ Report Licensing Entitlement\*
- ✓ Data Security and Encryption
- ✓ Password Management Tools
- ✓ Reusable Reporting Platform (.NET Library)

Indigo DRS advanced reusable reporting and document generation platform 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.

### **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, platforms 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 / Mining, 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**

Data 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 Commands and Execution Plans can output and automatically save data and reports in various formats including HTML, PDF, RSS, XML, JSon, XLSX and CSV. This content can be saved locally, to a network location or uploaded to web servers on Internet / Intranet allowing the automatic distribution of content, reports and data.

## **Data Migration**

Data Migration is seamless with Indigo DQM which can map and transfer data between different formats, storage systems and types. Migrations can also be included in Data 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 the automation of certain operations such as downloading Data Feeds from the Internet or the saving / uploading of data and reports.

## **Data Execution Log**

Indigo DQM includes a detailed Data Execution Log of all the executed Data Command Queries and Execution Plans in the Data Asset Store. Execution Logs record information including User Name, Computer, IP Address and Execution Time.

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 Transparency**

Indigo DQM's Data Management Engine (DME) is unique in its ability to handle data from multiple different sources and types simultaneously making it transparent to virtually all data.

The ability to easily access, process and work with data no matter where it is located or what application created it makes Indigo DQM a unique software solution. Our software can read, write, convert and translate data into many different formats and types allowing it to be compatible between different applications and databases.

## **Data File Packaging, Compression and Encryption**

The File Package and Deployment Manager is a tool for deploying multiple files into a compressed ZIP File with the option to encrypt the packaged files using AES 256 Advanced Encryption.

Data Files can be packaged and deployed rapidly and data assets protected with encryption with this powerful tool.



## **Data Security, Encryption and Password Management**

Indigo DQM is the most secure way to manage, query, process and report on your Data Assets with a software application that is installed on private computers it has the best security for managing data on both private and public networks where data 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 your Data Assets can be stored and transmitted across the Internet / Cloud in the most secure way possible.

The Advanced Encryption System (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.

The Password Management Tool allows passwords to be securely stored in an encrypted data file. With AES-256 bit encryption you can be assured that you will be the only one who can access your critical information.

## **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  
Data Analysis, Data Mining

### • 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!