

## Indigo DRS Data Reporting and Document Generation System

Indigo Scope DRS is an advanced Data Reporting and Document Generation System using HTML, XML, XSLT, XQuery and Python to generate highly compatible and content rich business reports and documents with standard HTML.

Representing the ultimate in data reporting our advanced technology and reusable reporting platform gives the best functionality and compatibility.

With advanced reporting features and effortless integration of this software into your business you can be assured of having the best reporting capabilities!

### Advanced Features

- HTML / XML Report Engine
- XQuery / XPath, XSLT, Python
- Charting, Graphs and Tables
- Data Pivot Tables
- Data Filtering and Sorting
- Expression Evaluation
- Sub Reports
- Report Rules and Contexts
- Fully modular reporting
- Retrieve Data from API's
- HTML and PDF Document Outputs
- Reusable Reporting Platform (.NET Library)

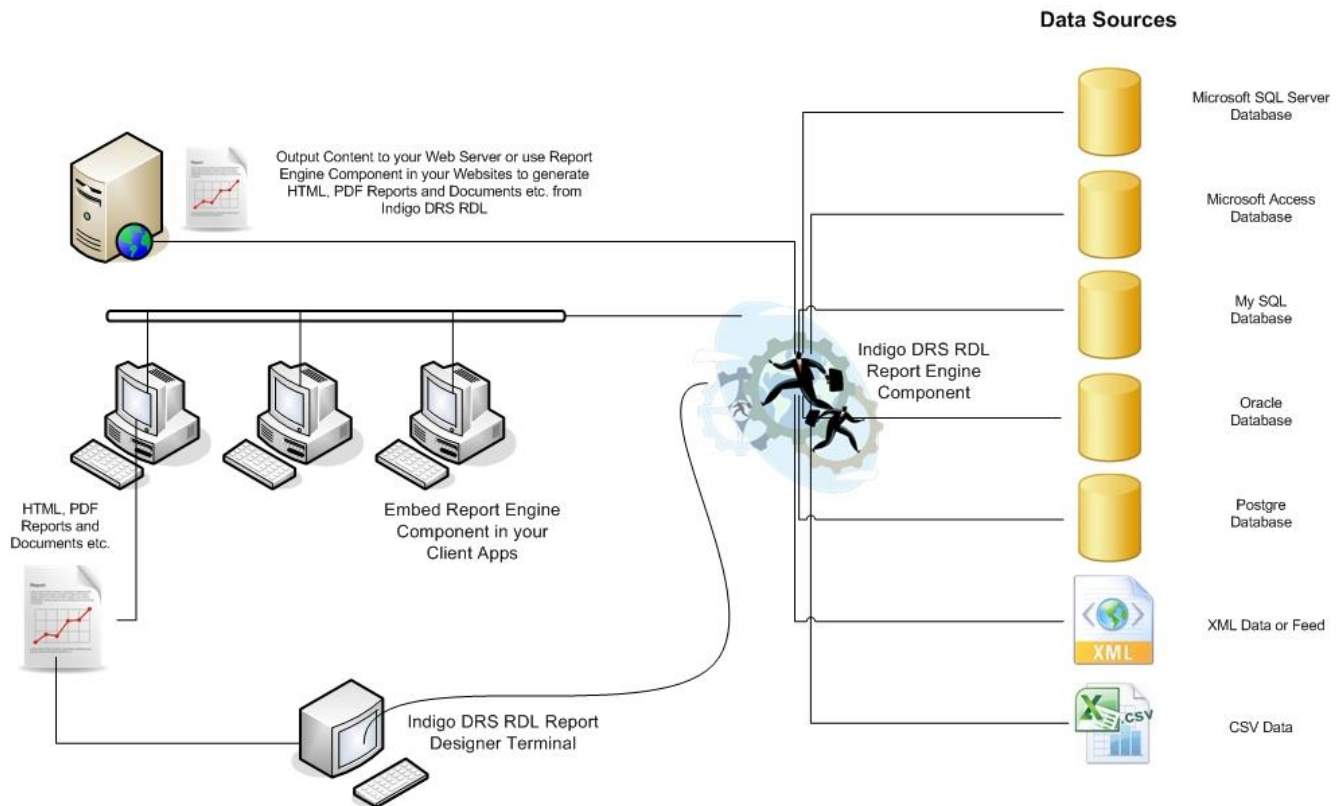
### Indigo DRS Creates

- Invoices / Bills
- Finance Reports
- Technical Reports
- Insurance Policies
- Administrative Papers
- Management Reports
- Certificates
- Legal Documents
- Scientific Papers / Data
- Financial Statements
- Account Statements
- Charts and Graphs
- Statistical Reports
- Mathematical Reports
- Engineering Reports
- General Documents
- And much more!

The Indigo DRS Data Report Engine 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.

## Indigo DRS Topology

Indigo Data Reporting System comprises of the Report Designer and the separate Report Engine .NET Component Library. The Indigo Scape DRD Report Designer creates the reports and the Report Engine renders the Reports in HTML for use in your .NET Applications or Websites.



The Report Designer Tool 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 HTML reports rich in content with many options for styling, formatting and customisation. Tables and Charts can be added to the report effortlessly allowing complex data to be presented with the minimum of effort.

## Reusable Reporting Platform

Data Report Engine .NET Component SDK is a reusable reporting platform that renders and outputs reports created by the separate Indigo Scape Data Report Designer. The Report Engine Component Library can be used to generate and output reports for Applications and Websites in the .NET framework using Indigo DRS RDL (Report Description Language).

## Basic Concepts

HTML (Hyper Text Markup Language) is the standard markup language used to create web content. XQuery is a query and functional programming language that queries and transforms collections of structured and unstructured data, usually in the form of XML Data.

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. IronPython can use the .NET Framework and Python libraries, and other .NET languages can use Python code just as easily.

Indigo DRS brings these technologies together to create an advanced reporting and document generation platform that is highly compatible and requires no additional components, software or hardware upgrades.

## **XQuery**

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. Rules can also be applied to manage how report content is displayed.

Indigo Scope DRS uses the Saxon XQuery Engine from Saxonica for XQueries.

## **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 the Indigo DRS Data Reporting Engine 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 Report Data and create Report Contexts.

## **Expression Evaluation**

The Expression Evaluation Engine in Indigo DRS Report Engine can evaluate complex mathematical equations and formulas. Scientific, engineering, finance and mathematical reports can be created using the Expression Evaluation Engine. The Report Designer features an Expression Editor which includes common functions, constants and units allowing formulas and equations to be calculated and included in the report design.

## **Report Contexts**

Report Contexts can be used to drive and build Report Content. Context Types allow Data from different sources and types such as API's, Websites and Files to be read and used in the Report Data. The Report Engine can read Data from XML, CSV, JSon and HTML Data Sources.

## **Report Rules**

Report Conditional Rules determine if Report Content is displayed or not. Report Rules are XQuery or Python statements that return True or False and determine if Content is enabled depending on the Report Data Source. Report Rules are useful for controlling the flow of Report Content.

## **Report Sub Reporting**

Sub Reporting allows a Report to contain other Reports in Sub Sections of the main Report. These Reports are called Sub Reports and allow Report Content to be modularised and shared between other Reports and Sub Reports if the Content is reusable, duplicated or common Sections of Content.

## **Report CSS**

Cascading Style Sheets (CSS) is a style sheet language used for describing the look and formatting of a document written in a markup language such as HTML. CSS is designed primarily to enable the separation of document content from document presentation, including elements such as the layout, colors, and fonts.

Indigo DRS uses CSS style sheets extensively improving content accessibility, providing more flexibility and control in the specification of presentation characteristics, enabling multiple HTML pages to share formatting by specifying the relevant CSS in a separate .css file, and reduce complexity and repetition in the structural content.

## **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 DRS 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 HTML 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.

## **Installation**

Indigo DRD (Data Report Designer) can be installed on any Win32 or Win64 operating system (server or workstation): Windows XP, Windows Vista, Windows 7, Windows 8, Windows 10, Windows Server 2003, 2008, 2012 etc.

### **• 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 Reporting, Document Generation

### **• Reporting Formats**

- HTML, PDF, DOC, TXT