

WHITEPAPER

Crystal to SSRS Conversion

Considerations, Estimating and Risk Factors when considering Crystal to SSRS Conversions

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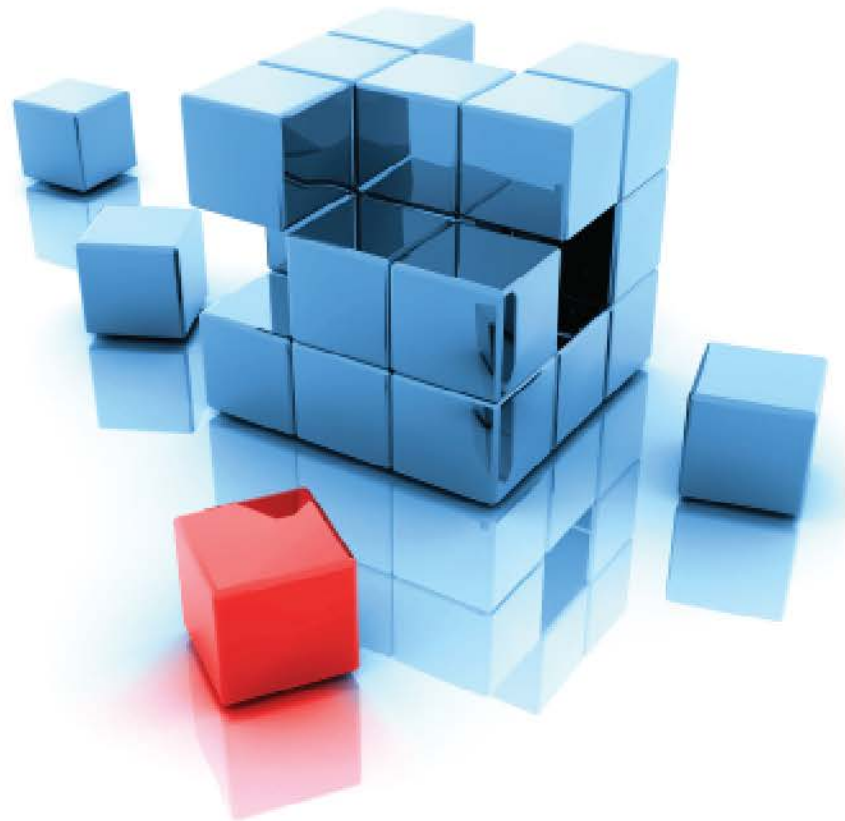


Table of Contents

Overview	3
Introduction	4
Ramp Up.....	5
Passing Variables.....	5
Barcodes Unique Items	5
Special Formatting	5
Page and Print Layout.....	6
Dynamic Sorting	6
Conversion Process	7
Environment Consideration	7
Report Conversion Lifecycle.....	7
Formatting Options.....	7
Risk Factors	8
Poor Knowledge Transfer.....	8
Developers Skill level	8
Risk Registry	8
WCI Consulting	9

Overview

SQL Server offers a free reporting tool when you purchase SQL Server Enterprise edition. Business owners are looking to reduce costs by switching to Microsoft's SSRS reporting tool. There are several differences between the two reporting tools that should be taken into consideration when deciding to make the transition. There can also be a considerable ramp up time for learning a new tool or a company's environment. These can all lead to risk factors that should be taken into consideration when planning a conversion. WCI has experience in every aspect of this conversion process to better allow us to manage a conversion process like this and expedite the conversion process.

Introduction

SSRS offers a comparable reporting platform to that of SAP Crystal and is offered with the full version of SQL Server Enterprise. Many companies have been looking to include SSRS as part of the reporting solution and convert existing Crystal Reports to SSRS to get rid of licensing or maintenance costs. There are several key differences in the two reporting tools that can cause issues when doing this. In this document, we will discuss those differences as well as ramp up time to get going, different styles of reporting from company to company, and risk factors that can arise under different scenarios:

Ramp Up

We have experienced several obstacles when moving from Crystal to SSRS below I will discuss several and the need to document all unusual reporting features to be aware of before starting the conversion process.

Passing Variables

There are instances that Crystal might have hard coded values because an outside program may be passing values to the report. These values will have to be handled as parameters in SSRS in order to take the values for the report.

NOTE It is important to document these values at the start of the project to avoid rework of the reports down the road.

Barcodes Unique Items

We have created special reusable code around items like barcodes, but there is an initial setup around these types of items that have to be worked out. These items when unique to an organization can add 400-500% to an otherwise easy report.

Special Formatting

Organizations may encounter formatting that is not supported by SSRS, but is used in Crystal. An example of this might be something like RTF formatting. Crystal allows for the editing of properties to handle RTF formatting, in order to accomplish the same thing in SSRS the report developer is required to add custom code to get the same results as in Crystal. This is an item of complexity that when encountered for the first time can add 400-500% to a report with the coding and testing of the additional logic.

Page and Print Layout

Crystal has a different layout than SSRS. There is different functionality for things like visibility of text boxes that have to be coded around. There are sections in Crystal that don't exist in SSRS that have to be accounted for. This is more of understanding the differences of the tool and finding the appropriate work around. There might always be small differences based on the engines that process the code for the two different reporting platforms.

Dynamic Sorting

Crystal has the ability to do dynamic sorting with in reports. Using custom code and parameters we have developed a way to accomplish dynamic sorting with in SSRS. This is not out of the box functionality within SSRS so it would require an initial setup time for a SSRS developer.

Conversion Process

During the conversion process we like as much upfront information as possible to lower the Ramp Up as mentioned above. After the Ramp Up, we get a list of reports that are analyzed by Inputs, Outputs, Queries, Files/Sources, and Sub reports. This allows us to find the unadjusted function point of the reports. In order to come up with the estimate we use Function Point Estimating.

Environment Consideration

When converting reports from Crystal to SSRS there are a few things that must be known:

- The location and access to the Crystal Reports
- A location and access to put the SSRS Reports
- Access to the same Database from both reporting platforms
- Install SQL Server Data Tools
- Access to Crystal Reports

Report Conversion Lifecycle

We follow a traditional reporting conversion lifecycle:

- Review existing report
- Create the queries and formulas
- Format the report
- Test the report data
- Peer review of the report

Formatting Options

There are various differences between Crystal and SSRS. There may be instances that reports will not be identical based on limitation or differences between Crystal and SSRS. Some of these differences have already been stated in the ramp up section, but there are some additional items like the number of sections, how sub reports are handled, and the same font may appear different between the two environments.

Risk Factors

Project risk is an uncertain event or condition that, if it occurs, has a positive or a negative effect on the project objective. Risk management is the systematic process of identifying, analyzing, and responding to project risk. It includes maximizing the probability and consequences of positive events and minimizing the probability and consequences of adverse events to a project objectives.

Poor Knowledge Transfer

During the Ramp up it is important to get proper knowledge transfer in order to have a good hand off between reports. Reports being arbitrarily placed in the report conversion folder without proper background can cause project delay and 100 – 1000% increase in execution time with the amount of rework and invalid assumptions.

Developers Skill level

Experience has demonstrated using the correct resources can greatly increase the speed of a project. This can cause issues with availability and delayed start based on getting that resource. Having a developer with development skills in both Crystal and SSRS is necessary to successfully completing a project of this type. Using the warm body approach can cause a delay of 800-3200% while the developer comes up to speed on the project.

Risk Registry

From past experience, we have developed a risk registry to identify and reduce the impact of risk in projects. This allows us do the following:

- Quickly identify project risks
- Speak to individuals in the organization that have also experienced the risk
- Best practices around the risk (being proactive instead of reactive)
- Quick turnaround on timelines and direction to address risk

WCI Consulting

Our Mission - To provide an unrelenting focus of value to our clients through a dedication in excellence, integrity and the desire to foster long lasting relationships.

WCI is a consulting services company focused on the application of data through the use of Business Intelligence and Data Warehouse technologies that bring increased business performance for our clients. Founded in 1998, WCI has serviced well over 500 companies through our knowledge and expertise of how to make data valuable to decision makers. WCI's geographic reach spans coast to coast within the United States as well as Canada, South America, Europe and Australia. In addition, WCI's client profile covers the small, mid-sized and large enterprise markets.

WCI, over the years, has expanded our vertical expertise in the segments of Banking/Finance, Real Estate, Retail, Supply Chain/ Manufacturing, Telecom/Mobility, Energy/Oil and Gas, Healthcare/Life Sciences, Public Sector/Government, Green/Sustainability, Sales/Marketing and Hospitality/Recreation.

WCI is committed to supporting our clients through innovative means like Instant Access, an online portal that ensures our customers receive support and training after the end of the project. We support a variety of tool sets and provide customized training sessions in an affordable package that is easily accessed through a virtual chat session.

"WCI takes initiative in the first discussion to address possible problems before they can arise. Through our years of experience we've seen all sorts of different environment and have confidence that we can achieve the project goals of our clients. Beyond project success we can ensure a successful long term strategy through Instant Access post project support." – Marty Carney, CEO WCI Consulting