Getting started and moving ahead with Crystal Reports .NET applications

Purpose

Working through the forums and support incidents I have observed that most of the issues could be resolved just by properly troubleshooting them (the application or the environment), using the vast documentation available on our community network.

The idea behind this article is to provide guidelines and the related documentation for Development, Deployment and troubleshooting various issues with a Crystal Reports .NET application.

I have tried to include as many articles, KBs as possible written by our experts.

Getting started:

First of all, based on the Visual Studio version you are using, choose the respective compatible version of Crystal Reports.

For checking the compatibility and the supported operating systems by each CR version see this.

Crystal Reports v. 9.1 to CRVS2010 Runtime Distribution & Supported Operating Systems

Prepare your development machine-

- Install Visual Studio
- Install Crystal Reports version compatible with above version of Visual Studio.
  See: KBA 1514084 - Compatibility of Crystal Reports with Visual Studio

After installation is done, quickly do below tests.

- Check your GAC for ‘CrystalDecisions.*’ assemblies, just to make sure that the SDK is installed.

NOTE: Crystal Reports 2011 and Crystal Reports 2013 does not have / install any .NET assemblies (does not have an SDK).

See this blog: How do you spell confusion; CR for VS, Crystal 2011, BI 4.x and the .NET SDKs

- Open Visual Studio, start a new project / app, check toolbox, move your mouse over Crystal reports Viewer, check the tooltip for Version. Compare it with the version of Crystal Reports you have just installed, they should be the same.

The same could be checked at the code behind of the CR viewer once it is dropped / added to a form.

Now you have prepared your Development machine for Crystal Reports .Net applications.

Let's start developing the application.

The developer resources are here:

Crystal Reports 2008 : http://scn.sap.com/docs/DOC-27446

'SAP Crystal Reports developer version for Microsoft Visual Studio’ which works with VS 2010, VS 2012 (SP5 onwards) and VS 2013 (SP9 onwards) : http://scn.sap.com/docs/DOC-7824

Evrything else is here : http://scn.sap.com/docs/DOC-27465

Now that we are well equipped with the SDK resources and a well prepared DEV environment, we are ready to develop our application.

To make any of the Crystal Report work through the application it is MENDETORY that the report should work fine from the Crystal Reports designer. If it does not work in the designer it WILL NOT work from the application / runtime.
Application Development:

Crystal Reports .Net SDK could be used mainly to View, Export, Print a Crystal report.

Crystal Reports .Net SDK applications can be found here.

http://www.sdn.sap.com/irj/boc/go/portal/prtroot/docs/library/uuid/d0bf6496-2a81-2b10-95ac-b1f465b63f5

InProc RAS .Net SDK can be used for Report creation and manipulation. Samples can be found below.

http://wiki.sdn.sap.com/wiki/display/BOBJ/Crystal+Reports+for+.NET+SDK+Samples

http://www.sdn.sap.com/irj/boc/go/portal/prtroot/docs/library/uuid/70834815-d166-2b10-a2a2-e7c8c9d3c668

Issues could be broadly categorized as ‘How to’ issues, Environment configuration issues, Coding errors, or runtime exceptions etc.

Most of the ‘How to’ issues could be resolved by carefully studying the sample applications and the developer resources SDK Developer guide and the API reference guide.

Here are some very common issues / errors which occur while developing a Crystal Reports .Net application and few quick steps to overcome them.

- **Error “Load report failed”:**

  Check the path of the report provided in the application and if the report exists at that location.

  Check if the application has permissions / rights to access the report.

  For detailed steps see this: [http://scn.sap.com/docs/DOC-21995](http://scn.sap.com/docs/DOC-21995)

- **Error “Bobj is undefined” :**

  See this: [How do I troubleshoot ‘Bobj is undefined’](#)

- **Error “The request could not be submitted for background processing”**

  See this: [Troubleshooting ‘Background processing error’](#)

- It is always recommended to set the Target platform of the application in Visual Studio while developing the application to either X86 or X64 instead of keeping it ANYCPU, which resolves many possible issues during deployment.

- If you are intending to use ADO.NET datasets with Crystal Reports, here is what you should read.

  [KB 1511438 – How to use Datasets to pass data to Crystal report.](#)

  And the articles “Troubleshooting VS.Net Datasets and Crystal Reports” and [Crystal Reports for Visual Studio .NET - Walkthrough - Reporting Off ADO.NET Datasets](#)

  - In most cases we recommend the use of the troubleshooting tools to further diagnose these issues.

  So here is some information regarding the troubleshooting tools :

    “Utility tools for better troubleshooting”
Application Deployment

Once you get the application working on the Development machine, it’s time to deploy the application.

The best information is provided in the Developer guide of the Crystal .NET SDK ‘Deployment’ section. Find the link to Developer guide above.

And the article “Crystal Reports and Visual Studio .NET- Application Deployment”

• Crystal Reports runtimes along with other Crystal components can be downloaded at Crystal Reports Download.

One other aspect to decide upon is Crystal Reports licensing.

Once the approach is decided and the application is deployed, few common issues which could possibly occur are as follows:

• Error : “Retrieving the COM class factory for component with CLSID”

This is very common error message and is discussed many time through forums and KBs, see this search :

http://search.sap.com/ui/scn#query=COM+CLSID%2C+.net&startindex=1&filter=scm_a_site%28scm_v_Site11%29

• Remember there are no 64 bit runtimes available for Every version of Crystal Reports.

See this: KB 1483811 - Where are the 64 bit runtime files for Crystal Reports 2008 .NET SDK?

And this article : Crystal Reports Support of 64-bit Operating Systems

For those versions of Crystal Reports which do not have 64 bit runtimes, see below article

How to deploy a Crystal Reports .Net Web application on a 64 bit operating system?

• Error: “The maximum report processing jobs limit configured by your system administrator has been reached.”


And the blog: What exactly is ’maximum report processing job limit’ for Crystal Reports?
• **Database connectivity issues:**

Most of the Database connectivity issues could be resolved by carefully configuring the server / or client machine for the application. Here are few things to do.

- Check if the database is accessible from this machine (a .udl file may help)
- Check if the same database client / driver / provided which is used on the development machine is installed here. (check database properties of the report ‘Set Database location’ option in the designer)
- If the user logging into the application / machine has rights to access the DB / DB server.
- And the basic thing, check the logon credentials supplied by the application.

For more see this: “Troubleshooting Guide to Database Connectivity Issues with Crystal Reports in Visual Studio .NET Applications”

Here is the utility which generates the Database logon code for a Crystal Report.

1553921 - Is there a utility that would help in writing database logon code?

• **Crystal Reports .NET application performance issues:**

Issues like, report takes longer on the server / client as compared to development machine.

Report takes longer on the first load and then works fine.

Report takes longer time to export / print could be resolved and performance could be optimized by adapting the guidelines provided in this article:

*Improving Crystal Reports Performance in Visual Studio .NET Applications*

One more thing which plays a major role in the report performance is the performance of the Database.

Use SQL profiler or database tracing (or something similar for your DB) to observe if it is the DB which is causing the report to work slowly. Ultimately Crystal Reports is a Data representation tool.

• **Crystal report printing issues:**

Error: “Communication error has occurred, printing will be stopped”.

This also a very generic issue and could be caused by many factors, see below search for the related forum threads and KB articles.

http://search.sap.com/ui/scn#query=Communication+error+has+occurred%252C+printing+will+be&startindex=1&filter=scm_a_site(scm_v_Site11)

• **Here are some very good articles which speak about Crystal report printing from an application.**

*Printing Web based reports with Crystal Reports for Visual Studio .NET*

*Crystal Reports for Visual Studio .NET - Export and Print a Crystal Report*

*RAS Server Side Printing*

• For any other specific / adhoc issues/ error search our community forums and knowledge base articles here:

http://search.sap.com/ui/scn#query=Crystal+.NET&startindex=1&filter=scm_a_site%28scm_v_Site11%29
If none of the above helps, post your query at our development forum

SAP Crystal Reports, version for Visual Studio space on SCN

If the issue is important or could not be resolved on forums, finally you may log a support incident with us from SAP Service Marketplace or purchase a single support incident.

Also checkout this blog which outlines the scope of support. How can SAP Crystal Reports & BOE SDK developer support help you?

Related Content

Related Documents

“My troubleshooting tips for VS .NET applications using Crystal Reports” by Ludek

Crystal Reports for Visual Studio 2010 Updates & Runtime Downloads

Crystal Reports 2008 - Version and Download information for SPs and FPs

Crystal Reports 2008 (and 9.1, XI R1, XI R2) - Version and Download information for Service Packs

All the sample applications

Troubleshooting error: "Unsupported Operation. A document processed by the JRC engine cannot be opened in the C++ stack".

So, what's up with CR 2011 and .NET SDK - actually, any SDK?

What do I need to do to get the fastest issue resolution?

Comparison of features by version for SAP® Crystal Reports® and SAP Crystal Server