

Updating the Crystal Reports VCL

Symptom

Migration of a legacy C++ Builder or Delphi 7 application is blocked because the Crystal Reports Visual Component Library is not available for the latest versions of Crystal Reports

Resolution

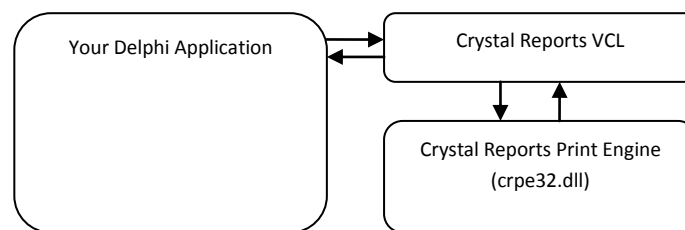
As the development market trends towards managed solutions provided by .NET, Business Objects must make corresponding changes to optimize its ability to serve this market. As a consequence of this, the Crystal Reports Visual Component Library has been in deprecation mode since Version 9.0. As of Crystal Reports XI, the component became officially unsupported. There are several implications of this unsupported status.

1. The Business Objects support team will no longer accept support calls on issues specific to the VCL.
2. The Crystal Reports engineering team will no longer accept escalations on issues specific to the VCL.

It is possible to attempt updates of the VCL supplied by Business Objects for Crystal Reports XI to work with more recent versions of Crystal Reports such as Crystal Reports XI R2 and Crystal Reports 2008. (Note that such a deployment is not supported by Business Objects and no support will be provided on issues specific to this deployment). This document contains information to help customers undertake such a project.

Updating the VCL

The Crystal Reports Visual Component Library provides an Object-Oriented façade over the Crystal Reports Engine (crpe32.dll). As such, the VCL contains no reporting logic on its own and its primary duties are to pass commands into the Crystal Reports Engine.



Since the VCL is simply a collection of Delphi source, it is possible to update the library itself to load the latest version of the Crystal Reports Print Engine. Since the method entry points to crpe32.dll itself tend not to vary from version to version, updates to support a newer version of Crystal Reports are generally minute.

The following instructions are based on the work that was necessary to update the Crystal Reports 10.0 VCL for use with Crystal Reports XI (version 11). These instructions have not been tested with any newer versions of Crystal Reports and will not be supported by Business Objects.

***Note: The Crystal Reports XI VCL should be used as the basis of any custom updates.**

1. *dcl7cr11.dpk*
 - Update the package declaration, and the library description to reflect the referenced version of Crystal Reports
2. *UCrpeUtl.pas*
 - This is a utility file for reading / writing Crystal Reports related areas of the registry
 - i. Update all references to the registry paths in this file by inspecting your installation of the required version of Crystal Reports
 - ii. The most critical update is in `GetCommonFilesPath`, which provides the location of *crpe32.dll*
3. *UCrpeDSAbout.dfm*
 - This file represents the content of the *About* dialog; versioning information provided to end users can be updated here.
4. *UCrpe32.pas*
 - This is the main unit file of the Crystal Reports VCL.
 - i. Update the version number check that occurs as the report engine and report document is being loaded. This is located in the `TCrpe.LoadEngine`, `TCrpe.GetReportStyle` and `TCrpe.SetReportStyle`.
 - ii. Update the *About* contents by updating the `TCRPE_VERSION` constant.

Summary

The unsupported status of the Crystal Reports VCL will not be retracted by Business Objects. The custom update to the VCL described in this document does not change the unsupported status of this deployment, and should only be undertaken as a final resort.