

Lookup User Function Library



Applies to:

Crystal Reports 2008 and SAP BusinessObjects Enterprise XI 3.1

For more information, visit the [Business Objects homepage](#).

Summary

The included User Function Library (UFL) provides the capability to Crystal Reports to do a lookup in an external file. Key values in the lookup file have a locale associated with them so that multilingual reports can be created. The UFL is designed to be used in the Crystal Reports designer as well as BusinessObjects Enterprise.

Important: This is an **unsupported** component. No warranties are extended in any way.

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Author Bio



Ian Treleaven is a software engineer working on the Crystal Reports product development team. He has helped create Crystal Reports features as a Senior Developer, Development Lead, and most recently as a Program Manager. Prior to working on Crystal Reports at Seagate Software/Crystal Decisions/Business Objects/SAP, Ian worked for a number of years in the industry at various companies including Microsoft and IBM.

Table of Contents

Introduction	3
Compatibility	3
Installation.....	3
Installing the UFL DLL	5
Usage.....	5
Debugging.....	5
Translations	5
Copyright.....	6

Introduction

The included User Function Library (UFL) provides the capability to Crystal Reports to do a lookup in an external file. Key values in the lookup file have a locale associated with them so that multilingual reports can be created. The UFL is designed to be used in the Crystal Reports designer as well as BusinessObjects Enterprise.

The lookup file is an XML format file. Each lookup key can have multiple localization entries, such as the following example:

```
<key value="LastYearsSales">
<localization locale="fr_FR">L'année dernière ventes</localization>
<localization locale="de_DE">Verkäufe des letzten Jahres</localization>
<localization locale="en_US">Last Year's Sales</localization>
<localization locale="ja_JP">昨年の売上高</localization>
</key>
```

A formula in Crystal Reports can access the Lookup function to access this data as follows:

```
Lookup("LastYearsSales", "en_US")
```

This will return the string from the [lookup.xml](#) file, "Last Year's Sales", since that is the match-up of "LastYearsSales" with a locale of "en_US".

A Crystal Report can take advantage of the user's *Preferred Viewing Locale* by passing the ContentLocale special variable, like this:

```
Lookup("LastYearsSales", ContentLocale)
```

The Preferred Viewing Locale can be changed in the Crystal Reports designer from the View menu.

Compatibility

This UFL is compatible with Crystal Reports 2008 **SP1** and BusinessObjects XI **3.1** and newer. It is compatible with Windows only. This is a C++ UFL and so doesn't require .NET or Java runtime environments.

Installation

The version included works on Windows only.

The xml file that is read is named lookup.xml. The file lookup.xml is expected to be found in the %ALLUSERSPROFILE%\LocalLookup folder.

You can find this folder by entering the set command in a cmd shell and locate the value of ALLUSERSPROFILE.

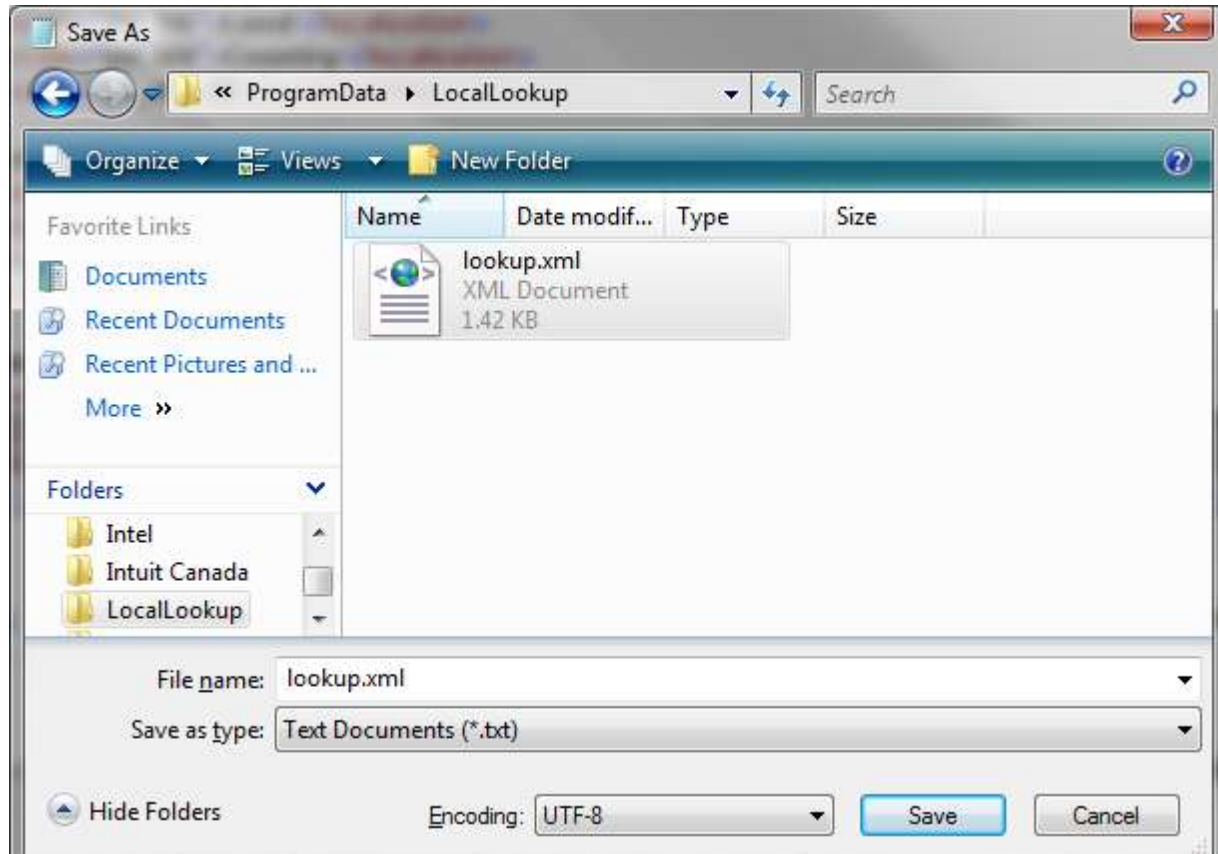
On Windows 2003/XP, this folder is **C:\Documents and Settings\All Users\Application Data**

On Windows 2008/Vista, this folder is **C:\ProgramData**

Once the folder is located, create the subfolder, "**LocalLookup**" and place the lookup.xml file in it.

Note: This location is chosen since Windows Vista/2008 users are able to create folders and edit files in that location without the edit running at administrative privilege level.

lookup.xml is a UTF-8 text file. When editing this file, be sure to save it using the UTF-8 option of your text editor. When using Windows Notepad, be sure to set the Encoding at the bottom of the Save As window.



The full path to the XML file will therefore be

On Windows 2003/XP, this folder is C:\Documents and Settings\All Users\Application Data\LocalLookup\lookup.xml

On Windows 2008/Vista, this folder is C:\ProgramData\LocalLookup\lookup.xml

Installing the UFL DLL

The DLL file included, [u212samp.dll](#), and the supporting DLL, [xerces-c_3_0.dll](#), need to be copied to the following folder. u212samp.dll replaces an existing sample UFL that will already be present in that folder.

For 32-bit Windows:

C:\Program Files\Business Objects\BusinessObjects Enterprise 12.0\win32_x86

For 64-bit Windows:

C:\Program Files (x86)\Business Objects\BusinessObjects Enterprise 12.0\win32_x86

Usage

The Lookup UFL loads the contents of the lookup.xml file the first time the Lookup function is called. The contents of the file are then cached in memory. In order to update the data returned by the Lookup function, the UFL will have to be unloaded from memory. This requires closing the Crystal Reports designer or in the case of BusinessObjects Enterprise, restarting servers that may have loaded it such as the Crystal Reports Page Server or Crystal Reports Job Server.

The included sample report, [Lookup Demo.rpt](#), should load and preview should work if the components and files have been installed correctly. It also serves as an example of how to use the Lookup UFL function.

Debugging

When issues are found in the loading or processing of the XML, the Lookup UFL will attempt to create a log file named LookupUFL.log. It will likely be located in the same folder as the process that loads the UFL. Look in this file for issues noted by the UFL.

Translations

If you need help creating translations, check out Google Translate at <http://translate.google.com>

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