Business Objects

BusinessObjects Enterprise XI Release 2

How to use the openDocument URL command

Overview

This document contains information on using the **openDocument** command to call a report that is published in a BusinessObjects Enterprise XI Release 2 system. This URL command allows for the integration of BusinessObjects Enterprise XI Release 2 into web applications and portals without requiring thorough knowledge of the underlying SDK.

Contents

Introduction

This document lists the parameters that are available to use with the **openDocument** command as well as how to use them. It also explains some best practices and shows the location of help files related to using this technology.

URL syntax

The typical URL syntax is as follows:

JAVA

```
http://<hostname>:<port>/businessobjects/enterprise115/desktoplaunch/opendoc/openDocument.jsp
```

COM

```
http://<hostname>:<port>/businessobjects/enterprise115/InfoView/scripts/opendocument.aspx
```

By default, BusinessObjects Enterprise XI Release 2 uses the <hostname> as the server name. The port is 8080 for Tomcat web servers and 80 for IIS web servers (which is the default HTTP port and can be omitted).

The following are example URLs where the server name is "paris":

TOMCAT

```
http://paris:8080/businessobjects/enterprise115/desktoplaunch/opendoc/openDocument.jsp
```

IIS

```
http://paris/businessobjects/enterprise115/InfoView/scripts/opendocument.aspx
```

IMPORTANT	For the remainder of this document, the term "openDocument.jsp" is used in place of the complete URL path.

Background

In BusinessObjects Enterprise XI Release 2, you can call the **openDocument** URL command to generate and display reports and other documents that have been previously published to the BusinessObjects Enterprise XI Release 2 system.

The **openDocument** command replaces the **viewrpt.cwr** command that is available in earlier versions.

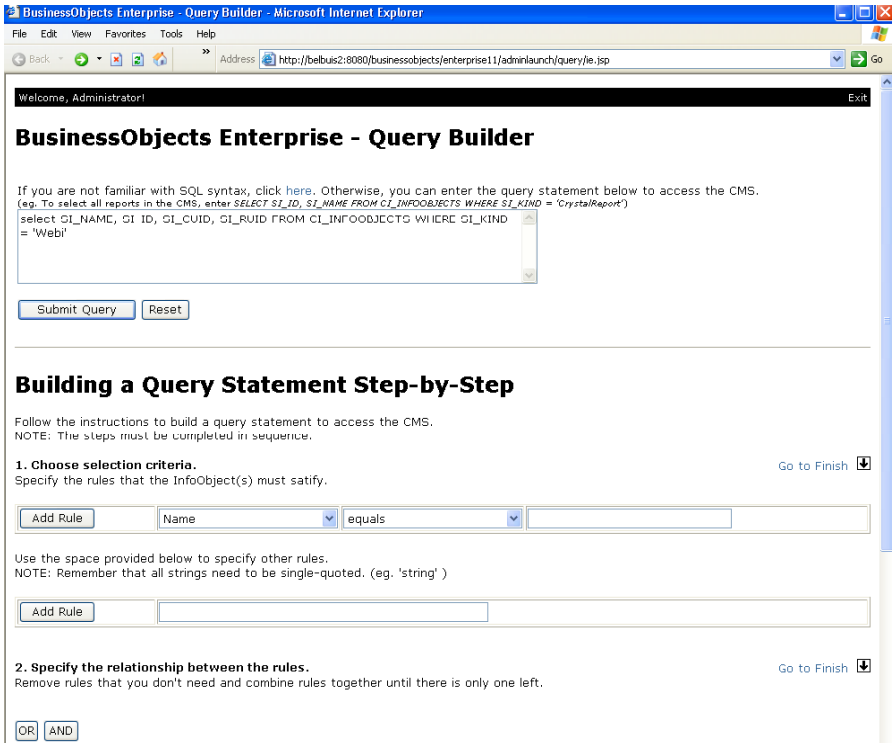
Determining platform information

Query Builder

BusinessObjects Enterprise XI Release 2 stores a large amount of information, which is why the Query Builder application is included to query the platform. This application is found on the left side of the **Enterprise XI Release 2 Administration Launchpad** page. The **Query**

Builder can help you determine the values you will use to build your complete **openDocument** URL. Figure 1 shows a typical query in the **Query Builder**:

Figure 1: The Query Builder



The query in Figure 1 returns the **Name**, **ID**, **Cluster ID, and Package ID** of the Web Intelligence documents that are published on this BusinessObjects Enterprise XI Release 2 system:

```
select SI_NAME, SI_ID, SI_CUID, SI_RUID FROM CI_INFOOBJECTS
WHERE SI_KIND = 'Webi'
```

The complete syntax is detailed in the BusinessObjects Enterprise XI Release 2 (COM or Java) SDK “Query Language Reference” chapter. To find this reference refer to the Finding more information section.

OpenDocument parameters

Undocumented openDocument parameters

The following parameters are supported by **openDocument**, but are not documented in the BusinessObjects Enterprise XI Release 2 release documentation.

Single Sign-On

OpenDocument supports Single Sign-On (SSO). In order to use SSO, **openDocument** first checks if a session variable called **CE_ENTERPRISESESSION** is available (this variable contains an Enterprise session). If this HTTP session variable is not available, then

openDocument checks the new **token** parameter (Table 1) that is used to pass the session identifier token. This token is returned by the BusinessObjects Enterprise XI Release 2 SDK when a session is created or by the **ILogonTokenMgr.getDefaultToken()** API.

Table 1: Token parameter

Parameter Name	Description	Mandatory
token	Contains the user's session token generated by the platform	No

Platform parameters

BusinessObjects Enterprise XI Release 2 provides two options to reference a resource:

- Platform resource identifiers
- Platform resource names (name can be a concatenation of resource name and folder path to remove ambiguity)

OpenDocument introduces a new way to identify the targeted documents. With BusinessObjects Enterprise 6.x, a mix of document name, identifier, and repository type are used to reference the correct document. In BusinessObjects Enterprise XI Release 2, the name identification is still available but a much more flexible way to reference your documents based on the **InfoObject** identifier has been introduced:

- Identifier (ID)
- Cluster identifier (CUID)
- Package identifier (RUID)
- Global identifier (GUID)

The choice is dependent on your deployment; however, resource names are less robust to change when generating URLs programmatically.

Table 2: Platform parameters

Parameter Name	Description	Mandatory	Example
iDocID	Document identifier	Yes, but can be replaced by **sDocName**	Document identifier (InfoObjectID)
sIDType	Central Management Server (CMS) object identifier type	Yes, if the default document identifier (InfoObjectID) is not used	• CUID • GUID • RUID • InfoObjectID (default)

Code samples
`openDocument.jsp?`**`iDocID`**`=342`
`openDocument.jsp?`**`iDocID`**`=AWimiw9StnhGm993evk.Amc&`**`sIDType`**`=CUID`			

sType	The file type of the target document or report	Yes, but ignored for agnostic documents (xls, doc, txt, etc.)	• .wid • .rpt • .car • .rep

Code samples
`openDocument.jsp?`**`iDocID`**`=342& `**`sType`**`=wid`
`openDocument.jsp?`**`iDocID`**`=343& `**`sType`**`=rpt`			

sPath	The name of the Enterprise XI Release 2 folder and subfolder that contains the target document This parameter is used in conjunction with	No	Enterprise XI Release 2 folder and/or subfolder: [folder],[subfolder]

Parameter Name	Description	Mandatory	Example
	sDocName		
sDocName	The name of the document without extension This parameter is used in conjunction with **sPath**	No	myDocument

Code samples
`openDocument.jsp?sPath=[reports]&sDocName=Charting&sType=rpt`
`openDocument.jsp?sPath=[reports],[finance]&sDocName=Summary&sType=rpt`			

Deprecated parameters

Table 3 lists and describes the deprecated parameters, as well as provides examples of each parameter.

Table 3: Deprecated parameters

Parameter Name	Description	Mandatory	Example
sRepo	Repository name (or Domain name),defaults to "Document"	No	sRepo=Document (no longer used)
sRepoType	• Repository type ("corporate", "personal", "inbox", "crystal", or "URL") • Defaults to "crystal"	No	RepoType=crystal

Input parameters

Table 4 provides information to populate the different parameters or reference a specific location inside a document.

Table 4: Input Parameters

Parameter Name	Description	Mandatory	Example
sReportName	Indicates which report to open if target document contains multi-report (the active report is opened by default)	No	Report name for Web Intelligence documents, sub-report for Crystal Reports, pages for OLAP Intelligence reports.
Code sample `openDocument.jsp?iDocID=342&sType=wid&sReportName=Report2`			
sReportPart	Indicates which specific part of the target Crystal report to open	No	Name of the report part
sPartContext	In Crystal reports, a report part is associated to a data context.	Yes, if a value is specified for **sReportPart**	Data context of the report part
sReportMode	For Crystal report targets only, indicates whether the link should open the full target report or just the report part specified in **sReportPart**	No, default is Full (only applies if a value is specified for sReportPart)	• Full • Part
Code samples			

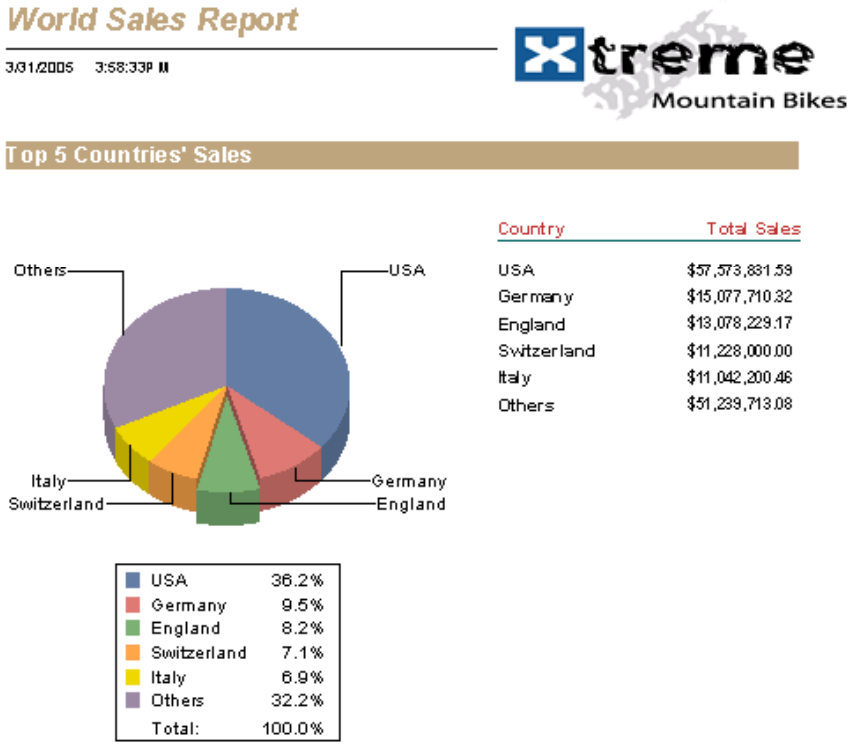
The **World Sales Report** (Figure 2) provided with Enterprise XI Release 2 contains report parts.

To see the report parts information, open the report in the Designer, go to the **File** menu, and click **Report Options**. See the **Initial Report Part Settings** section of the **Report Options** dialog.

By default, the Object Name is "**Text2;Graph1**" and the Data Context is "**/**":

openDocument.jsp?**sType**=rpt&**sDocName**=World+Sales+Report&**sReportPart**=Text2;Graph1&**sPartContext**=/

Figure 2: The World Sales Report



openDocument.jsp?**sType**=rpt&**sDocName**=World+Sales+Report&**sReportPart**=Text2;Graph1&**sPartContext**=/Country[England]&**sReportMode**=Part

NOTE	In the above code sample, the addition sign (+) is a URL encoded character for the space character.

Table 4 (continued)

Parameter Name	Description	Mandatory	Example
sRefresh	• Indicates whether a refresh should be forced when the target document or report is opened • For Crystal reports, use the report object instead of the instances to connect to the database (on demand viewing)	No	• Y (refresh the document) • N (note that the refresh on open feature overrides this value)
Code sample **openDocument.jsp?iDocID=342&sType=wid&sRefresh=Y**			
lsS[NAME**]**	• Specifies a value for a single prompt • [NAME] is the text of the prompt	No	A single prompt value
Code samples **openDocument.jsp?iDocID=342&** **sType=wid&sRefresh=Y&lsSProductName=Cycle** **The following sample uses almost all of the Crystal report parameter types:** **openDocument.jsp?sType=rpt&iDocID=858&sRefresh=Y&** **lsSparamString=h&lsSparamNumber=1&** **lsSparamCurrency=121&lsSparamDate=Date(2003,6,11)&** **lsSparamDateTime=DateTime(2003,6,11,14,38,37)&lsSparamBoolean=false&** **lsSparamTime=Time(12,39,2)&lsSparamStringDR=a&lsSparamDateDR=Date(2003,6,1)**			

Parameter Name	Description	Mandatory	Example
lsM[NAME**]**	• Specifies multiple values for a prompt • [NAME] is the text of the prompt	No	• Multiple prompt values separated by a comma for CR & OLAP • Separated by a semicolon for Webi If the target is a Crystal report, each value must be enclosed in square brackets. If the target is a Crystal Analysis report, use the MDX WITH clause.
Code samples **openDocument.jsp?iDocID=345&** **sType=wid&sRefresh=Y&lsMProductName=Cycle;Car** **openDocument.jsp?sType=rpt&iDocID=859&sRefresh=Y&** **lsMparamStringDR=[c],[d]&lsMparamNumberDR=[3],[4]&** **lsMparamDateDR=[Date(2003,6,3)],[Date(2003,6,4)]&** **lsM**paramDateTimeDR=[DateTime(2003,6,1,3,1,1)],[DateTime(2003,6,1,4,1,1)]			
lsR[NAME**]**	Specifies a range of values for a prompt. [NAME] is the text of the prompt.	No	• A range of values for the prompt, separated by a double period (..) • If the target is a Crystal report, the range must be enclosed in square

Parameter Name	Description	Mandatory	Example
			brackets and/or parentheses (use a square bracket next to a value to include it in the range, and parentheses to exclude it) • If the target is a OLAP report, use the MDX WITH clause

Code samples

```
openDocument.jsp?iDocID=345&
sType=wid&sRefresh=Y&lsMProductName=Cycle,Car


openDocument.jsp?sType=rpt&iDocID=860&lsRparamStringD
R=[h..i]&
lsRparamNumberDR=[7..8]&
lsRparamCurrencyDR=[3..4]&
lsRparamDateDR=[Date(2003,6,7)..Date(2003,6,8)]&
lsRparamDateTimeDR=[DateTime(2003,6,1,7,1,1)..DateTim
e(2003,6,1,8,1,1)]&
lsRparamTimeDR=[Time(1,1,7)..Time(1,1,8)]&lsRparamUnb
ound1=(..6)&
lsRparamUnbound2=[6..)&lsRparamStringR=[a..d]&lsRpara
mNumberR=[1..3]&
lsRparamCurrencyR=[1..3]&lsRparamDateR=[Date(2003,6,1
)..Date(2003,6,3)]&
lsRparamDateTimeR=[DateTime(2003,6,1,1,1,1)..DateTime
(2003,6,1,3,1,1)]&
lsRparamTimeR=[Time(1,1,1)..Time(3,1,1)]
```

Parameter Name	Description	Mandatory	Example
lsC	Specifies a contextual prompt if there is an ambiguity during SQL generation (BusinessObjects and Web Intelligence documents only)	No	A prompt value that resolves the ambiguity in the SQL generation
Code sample `openDocument.jsp?iDocID=346&sType=wid&sRefresh=Y&lsC=Reservations`			
sInstance	Indicates which specific instance of the target report to open	No	• **User** (Link to latest instance owned by current user) • **Last** (Link to latest instance for report) • **Param** (Link to latest instance of report with matching parameter values)

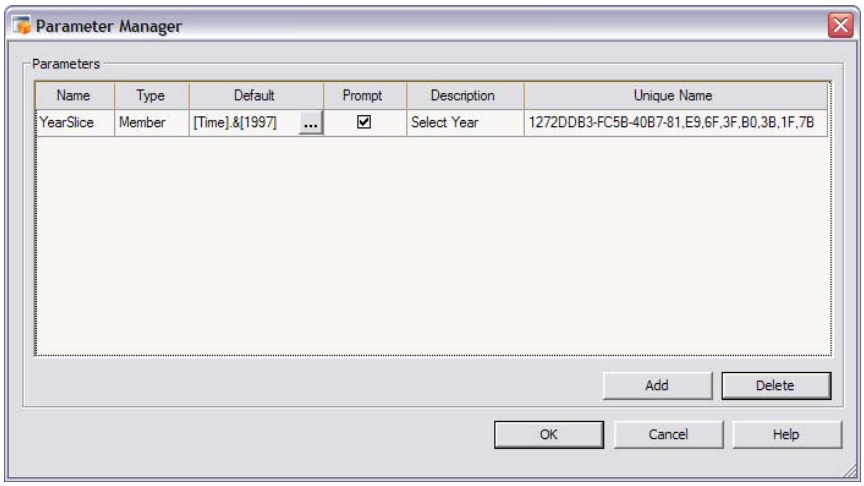
Specifying prompts for OLAP Intelligence report targets

If the target document is an OLAP Intelligence report (*.car), use the OLAP database vendor query language to pass the context to the database. Each OLAP database vendor implements its own syntax to reference a member or a child.

In addition, the BusinessObjects XI Release 2 version of OLAP Intelligence is updated to support SAP server- and client-side parameters. As a result of exposing SAP server side-defined parameters, report authors may not be aware of the parameter names used on the server, which could lead to using a duplicate client-side parameter name. In order to uniquely identify each parameter, the unique name must be used in the **openDocument** URL command.

An example is the `name “YearSlice” which has to be replaced by its unique name “1272DDB3-FC5B-40B7-81,E9,6F,3F,B0,3B,1F,7B”` as shown in Figure 3.

Figure 3: The Parameter Manager



Understanding the OLAP context

When linking to an OLAP Intelligence report, the prompt value must be fully qualified (full hierarchy) with the full syntax which is provider dependant. For example:

`[Time].&[1997].&[Q4].&[10].`

When linking from OLAP Intelligence to Crystal or Web Intelligence documents, the user needs to provide only the prompt value. For example:

`10` (with no brackets)

Conventions used by OLAP Intelligence

The following sections describe the conventions used for

- Microsoft Analysis Services (MSAS)
- Essbase/DB2 OLAP (Enhanced Driver)
- Essbase/DB2 OLAP (Legacy Driver)
- Holos

NOTE	The following examples use these URL encoding conventions: • %26 = & (ampersand) • %40 = @ (at sign)

Syntax for a member parameter

openDocument.jsp?iDocID=367& **sType**=car&**lsS**[unique parameter name]=[unique member name]

Microsoft Analysis Services

lsS1272DDB3-FC5B-40B7-81,E9,6F,3F,B0,3B,1F,7B =[Time].%26[1998]

Essbase/DB2 OLAP (Enhanced Driver)

lsS1272DDB3-FC5B-40B7-81,E9,6F,3F,B0,3B,1F,7B =Qtr4

Essbase/DB2 OLAP (Legacy Driver)

lsS1272DDB3-FC5B-40B7-81,E9,6F,3F,B0,3B,1F,7B =Year%40Year%40Qtr4

Holos

[unique member name]

lsS1272DDB3-FC5B-40B7-81,E9,6F,3F,B0,3B,1F,7B =Year%40'Qtr4'

Syntax for a memberset parameter

openDocument.jsp?iDocID=367& **sType**=car&**lsM**[unique parameter name]=[unique member name],[unique member name]

Microsoft Analysis Services

NOTE	As Microsoft Analysis Services unique member names contain brackets ([,]), add an additional set of brackets around the unique name.

lsM1272DDB3-FC5B-40B7-81,E9,6F,3F,B0,3B,1F,7B =[[Time].%26[1997]],[[Time].%26[1998]]

Essbase/DB2 OLAP (Enhanced Driver)

lsM1272DDB3-FC5B-40B7-81,E9,6F,3F,B0,3B,1F,7B =Qtr3,Qtr4

Essbase/DB2 OLAP (Legacy Driver)

lsM1272DDB3-FC5B-40B7-81,E9,6F,3F,B0,3B,1F,7B =Year%40Year%40Qtr3,Year%40Year%40Qtr4

Holos

lsM1272DDB3-FC5B-40B7-81,E9,6F,3F,B0,3B,1F,7B = Year%40'Qtr3', Year%40'Qtr4'

Syntax for a cube parameter

openDocument.jsp?`iDocID`=367&**`sType`**=car&**lsS**[unique parameter name]=[cube location]

Microsoft Analysis Services

lsS`1272DDB3-FC5B-40B7-81,E9,6F,3F,B0,3B,1F,7B`
=SERVER=server1,CATALOG=FoodMart 2000,CUBE=warehouse

Essbase/DB2 OLAP (Enhanced Driver)

lsS`1272DDB3-FC5B-40B7-81,E9,6F,3F,B0,3B,1F,7B`
=SERVER=server1,USER=bob,PWD=bobpassword,APPLICATION=Samppart,CUBE=Company

Essbase/DB2 OLAP (Legacy Driver)

lsS`1272DDB3-FC5B-40B7-81,E9,6F,3F,B0,3B,1F,7B`
=SERVER=server1,USER=bob,PWD=bobpassword,DATABASE=Sampp art,SCHEMA=Company,CUBE=Company

Holos

lsS`1272DDB3-FC5B-40B7-81,E9,6F,3F,B0,3B,1F,7B`
=NSHOST=NSserver1,NSPORT=10000,OCASERVER=test.server1,USER =bob,PWD=bobpassword,CUBE=cube1

Syntax for a page parameter

openDocument.jsp?`iDocID`=367& **`sType`**=car&**lsS**[parameter name]=[page #]

lsS`1272DDB3-FC5B-40B7-81,E9,6F,3F,B0,3B,1F,7B` =2

Output parameters

Table 5 lists and describes the deprecated parameters, as well as provides examples of each parameter.

Table 5: Output parameters

Parameter Name	Description	Mandatory	Example
sOutputFormat	Indicates the format in which the target document is displayed	No. Default is HTML	• H (HTML) • P (PDF) • E (Excel) **Crystal reports only** • W (Word)

Code samples
`openDocument.jsp?`**`iDocID`**`=347&`**`sType`**`=wid&`**`sOutputFormat`**`=P`
 	
`openDocument.jsp?`**`iDocID`**`=861&`**`sType`**`=rpt&`**`sOutputFormat`**`=W`			

sViewer	Indicates the selected report viewer (CR & CA only) CAUTION: This parameter can conflict with **sOutputFormat** and should not be combined	No	• **CR & CA** html (HTML) • **CR only** interactive (dHTML)
Code sample `openDocument.jsp?`**`sType`**`=rpt&`**`iDocID`**`=860&`**`sRefresh`**`=Y&`**`sViewer`**`=interactive`			
sWindow	Indicates whether the target report will open in the current browser instance or launch a new one	No	• Same • New
NAII	Avoid the display of the valorized prompts, just display the prompts that have no **lsS**, **lsM** or **LsR**	No	• Y (all prompts whose values are passed with **lsS**, **lsM** or **lsR** are pre-selected) • N (displays only the prompts whose values passed with **lsS**, **lsM** or **lsR**)

Best practices

Integrating universes

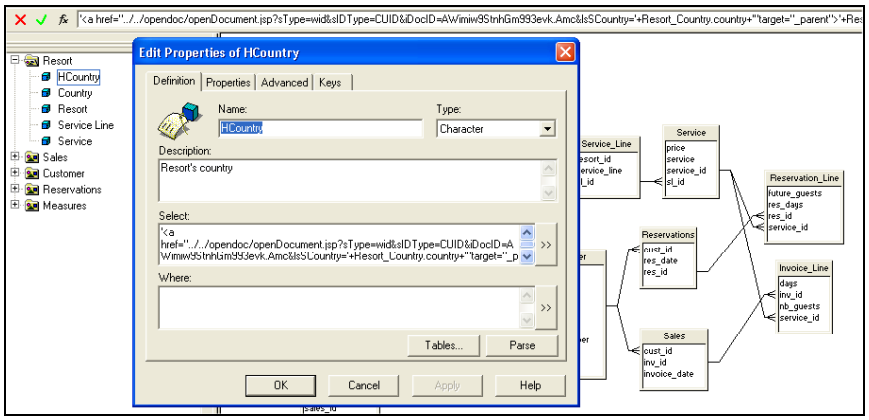
A good practice is to create an object wrapping the complete URL that includes the **openDocument** command. This approach allows you to migrate your deployment with just a universe object update. In Figure 4, the Select statement contains:

```
'<a
href=../../opendoc/openDocument.jsp?sType=wid&sIDType=CUID&
iDocID=AWimiw9StnhGm993evk.Amc&lsSCountry?='+Resort_Country
.country+'"target="_parent">'+Resort_Country.country+'</a>'
```

The `href` uses relative reference (../..) to synchronize with the new BusinessObjects Enterprise XI Release 2 Interactive Viewer.

Another technique is to use the HTML target keyword (target=_parent) pointing to the parent frame to avoid nested frames.

Figure 4: A Universe



Using repository custom functions

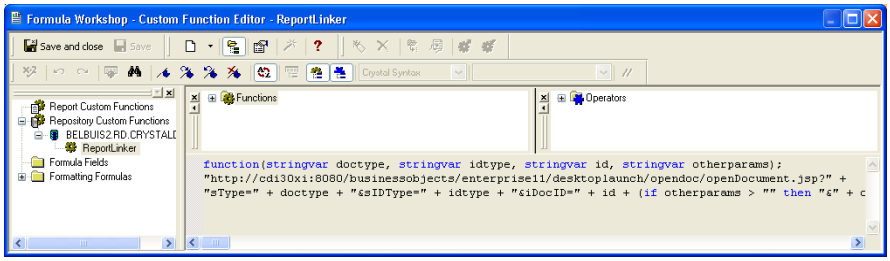
When using Crystal Reports, it is a good practice to use a repository custom function to store your link definitions. With this approach, any changes to a URL are centralized and all the reports using this object are automatically updated.

The following is the content of the **ReportLinker** function from Figure 5.

```
function(stringvar doctype, stringvar idtype, stringvar id,
stringvar otherparams);

"http://cdi30xi:8080/businessobjects/enterprise11/desktopla
unch/opendoc/openDocument.jsp?" + "sType=" + doctype +
"&sIDType=" + idtype + "&iDocID=" + id + (if otherparams >
"" then "&" + otherparams)
```

Figure 5: The Formula Workshop



Finding more information

The BusinessObjects XI Release 2 **openDocument** command is documented in the BusinessObjects Enterprise SDK guides that are installed with the product.

The COM SDK documentation is located at the following location:

[drive letter]:\Program Files\Business Objects\BusinessObjects Enterprise 115\Help\[language]\Application\com_docs.zip

The Java SDK documentation is located at the following location:

[drive letter]:\Program Files\Business Objects\BusinessObjects Enterprise 115\Help\[language]\Application\java_docs.zip

Documentation for the **openDocument** command is found in the section **Viewing Reports and Documents using URLs > URL Reporting Using openDocument** of the Viewer COM SDK Guide (Report_Viewers.chm) and the Viewer Java SDK Guide (Viewers Java SDK Guide > General Reference).

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