

# BusinessObjects Enterprise XI

## How to Use the openDocument URL Command

---

### Overview

This document contains information on using the **openDocument** command in order to call a report that is published in a BusinessObjects Enterprise XI system. This URL command allows the easy integration of Enterprise XI within web applications and portals without a deep knowledge of the underlying SDK.

### Contents

<b>INTRODUCTION</b> .....	<b>2</b>
<i>Background</i> .....	2
<b>DETERMINING PLATFORM INFORMATION</b> .....	<b>2</b>
<i>Query Builder</i> .....	2
<b>OPENDOCUMENT PARAMETERS</b> .....	<b>4</b>
<i>Undocumented openDocument parameters</i> .....	4
Single Sign-on.....	4
<i>Platform parameters</i> .....	4
<i>Deprecated parameters</i> .....	6
<b>INPUT PARAMETERS</b> .....	<b>6</b>
<i>Specifying prompts for OLAP Intelligence report targets</i> .....	11
<i>Understanding the OLAP context</i> .....	11
<i>Conventions used by OLAP Intelligence</i> .....	12
Syntax for a member parameter.....	12
Syntax for a memberset parameter.....	12
Syntax for a cube parameter.....	13
Syntax for a page parameter.....	13
<b>OUTPUT PARAMETERS</b> .....	<b>14</b>
<b>BEST PRACTICES</b> .....	<b>15</b>
<i>Integrating Universes</i> .....	15
<i>Using Repository custom functions</i> .....	15
<b>FINDING MORE INFORMATION</b> .....	<b>16</b>

## Introduction

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

The typical URL syntax is:

**JAVA-**

```
http://<hostname>:<port>/businessobjects/enterprise11/desktoplaunch/opendoc/openDocument.jsp
```

**COM-**

```
http://<hostname>:<port>/businessobjects/enterprise11/InfoView/scripts/opendocument.aspx
```

By default, Enterprise XI 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).

Example URLs where the server name is "paris":

**TOMCAT-**

```
http://paris:8080/businessobjects/enterprise11/desktoplaunch/opendoc/openDocument.jsp
```

**IIS-**

```
http://paris/businessobjects/enterprise11/InfoView/scripts/opendocument.aspx
```

**IMPORTANT**

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

## Background

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

The **openDocument** command replaces the **viewrpt.cwr** command that was available in prior versions of Enterprise.

## Determining Platform Information

### Query Builder

Enterprise XI stores a lot of information. This is why Enterprise XI includes a convenient web application, the **Query Builder**, to query the platform. This application is found on the left side of the **Enterprise XI**

**Administration Launchpad** page. The **Query Builder** can help you determine the values you will use to build your complete **openDocument URL**.

The following diagram, Figure 1, shows what the **Query Builder** looks like with a typical query entered into it.

**Figure 1: The Query Builder**

Welcome, Administrator! Exit

## BusinessObjects Enterprise - Query Builder

If you are not familiar with SQL syntax, click [here](#). Otherwise, you can enter the query statement below to access the CMS.  
(eg. To select all reports in the CMS, enter `SELECT SI_ID, SI_NAME FROM CI_INFOOBJECTS WHERE SI_KIND = 'CrystalReport'`)

```
select SI_NAME, SI-ID, SI_CUID, SI_RUID FROM CI_INFOOBJECTS WHERE SI_KIND = 'Webi'
```

---

### Building a Query Statement Step-by-Step

Follow the instructions to build a query statement to access the CMS.  
NOTE: The steps must be completed in sequence.

**1. Choose selection criteria.** Go to Finish

Specify the rules that the InfoObject(s) must satisfy.

Use the space provided below to specify other rules.  
NOTE: Remember that all strings need to be single-quoted. (eg. 'string' )

**2. Specify the relationship between the rules.** Go to Finish

Remove rules that you don't need and combine rules together until there is only one left.

The query in the diagram above returns the **Name**, **ID**, **Cluster ID**, and **Package ID** of the Web Intelligence documents that are published on this Enterprise XI 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 (COM or Java) SDK “Query Language Reference” chapter. To find this reference see the [Finding more information](#) section below.

## OpenDocument Parameters

### Undocumented openDocument parameters

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

#### Single Sign-on

**OpenDocument** supports single sign-on (SSO). In order to achieve SSO, **openDocument** first checks if a session variable called **ISEnterpriseSession** is available (this variable contains an Enterprise XI session). If this HTTP session variable is not available, then **openDocument** checks the new **token** parameter used to pass the session identifier token. This token is returned by the Enterprise XI SDK when a session is created or via the **ILogonTokenMgr.getDefaultToken()** API.

Parameter Name	Description	Mandatory	Example
<b>token</b>	Contains the user's session token generated by the platform	No	

### Platform parameters

Enterprise XI provides two options to reference a resource:

- Enterprise XI platform resource identifiers
- Enterprise XI 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 were utilized to point to the right document. In Enterprise XI, the name identification is still available but a much more flexible way to reference your documents based on the Enterprise XI **InfoObject** identifier has been introduced.

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

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

Parameter Name	Description	Mandatory	Example
<b>iDocID</b>	Document identifier	Yes, but can be replaced by <b>sDocName</b>	Document identifier (InfoObjectID)
<b>sIDType</b>	Central Management Server (CMS) object identifier type	Yes, if the default document identifier (InfoObjectID) is not used	<ul style="list-style-type: none"> <li>• CUID</li> <li>• GUID</li> <li>• RUID</li> <li>• InfoObjectID (default)</li> </ul>
<b>Code samples</b>			
<pre>openDocument.jsp?iDocID=342 openDocument.jsp?iDocID=AWimiw9StnhGm993evk.Amc&amp;sIDType=CUID</pre>			
<b>sType</b>	The file type of the target document or report	Yes, but ignored for agnostic documents (xls, doc, txt, etc.)	<ul style="list-style-type: none"> <li>• wid</li> <li>• rpt</li> <li>• car</li> </ul>
<b>Code samples</b>			
<pre>openDocument.jsp?iDocID=342&amp; sType=wid openDocument.jsp?iDocID=343&amp; sType=rpt</pre>			
<b>sPath</b>	<ul style="list-style-type: none"> <li>• The name of the Enterprise XI folder and subfolder that contains the target document</li> <li>• This parameter is used in conjunction with <b>sDocName</b></li> </ul>	No	Enterprise XI folder and/or subfolder: [folder],[subfolder]
<b>sDocName</b>	<ul style="list-style-type: none"> <li>• The name of the document without extension</li> <li>• This parameter is used in conjunction with <b>sPath</b></li> </ul>	No	myDocument
<b>Code samples</b>			
<pre>openDocument.jsp?sPath=[reports]&amp;sDocName=Charting&amp;sType=rpt openDocument.jsp?sPath=[reports],[finance]&amp;sDocName=Summary&amp;sType=rpt</pre>			

## Deprecated parameters

Parameter Name	Description	Mandatory	Example
<b>sRepo</b>	Repository name (or Domain name), defaults to "Document"	No	sRepo=Document (no longer used)
<b>sRepoType</b>	<ul style="list-style-type: none"> <li>Repository type ("corporate", "personal", "inbox", "crystal", or "URL")</li> <li>Defaults to "crystal"</li> </ul>	No	RepoType=crystal

## Input Parameters

This information is provided to populate the different parameters or reference a specific location inside a document.

Parameter Name	Description	Mandatory	Example
<b>sReportName</b>	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.
<b>Code sample</b>			
<code>openDocument.jsp?iDocID=342&amp;sType=wid&amp;sReportName=Report2</code>			
<b>sReportPart</b>	Indicates which specific part of the target Crystal report to open	No	Name of the report part
<b>sPartContext</b>	In Crystal reports, a report part is associated to a data context.	Yes, if a value is specified for <b>sReportPart</b>	Data context of the report part

<p><b>sReportMode</b></p>	<p>For Crystal report targets only, indicates whether the link should open the full target report or just the report part specified in <b>sReportPart</b></p>	<p>No, default is Full (only applies if a value is specified for sReportPart)</p>	<ul style="list-style-type: none"> <li>• Full</li> <li>• Part</li> </ul>
---------------------------	---	---	--

**Code samples**

The **World Sales Report** provided with Enterprise XI 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=/`

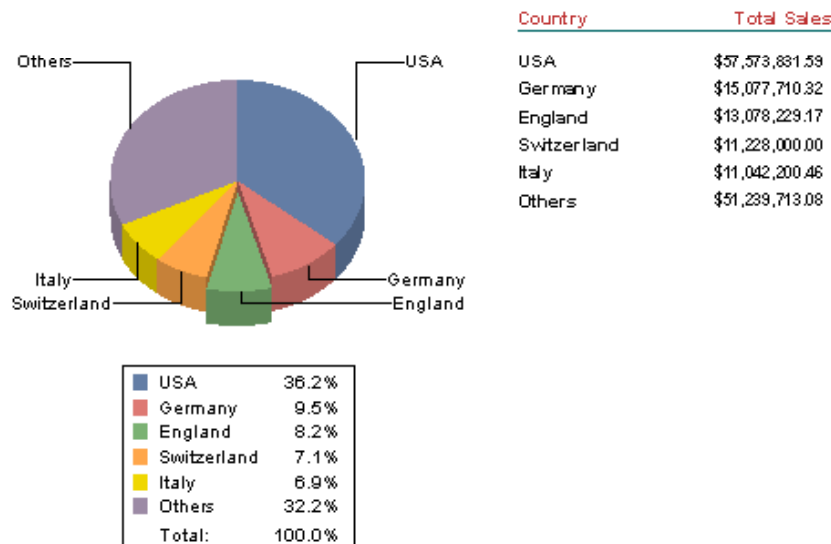
**Figure 2: The World Sales Report**

*World Sales Report*

3/31/2005 3:58:33P M



**Top 5 Countries' Sales**



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

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

Parameter Name	Description	Mandatory	Example
<b>sRefresh</b>	<ul style="list-style-type: none"> <li>Indicates whether a refresh should be forced when the target document or report is opened</li> <li>For Crystal reports, use the report object instead of the instances to connect to the database (on demand viewing)</li> </ul>	No	<ul style="list-style-type: none"> <li>Y (refresh the document)</li> <li>N (note that the refresh on open feature overrides this value)</li> </ul>
<b>Code sample</b>			
openDocument.jsp?iDocID=342&sType=wid&sRefresh=Y			
<b>lss[NAME]</b>	<ul style="list-style-type: none"> <li>Specifies a value for a single prompt</li> <li>[NAME] is the text of the prompt</li> </ul>	No	A single prompt value
<b>Code samples</b>			
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
<b>lsM</b> [NAME]	<ul style="list-style-type: none"> <li>Specifies multiple values for a prompt</li> <li>[NAME] is the text of the prompt</li> </ul>	No	<ul style="list-style-type: none"> <li>Multiple prompt values separated by a comma for CR &amp; OLAP</li> <li>Separated by a semicolon for Webi</li> <li>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.</li> </ul>
<p><b>Code samples</b></p> <pre>openDocument.jsp?iDocID=345&amp; sType=wid&amp;sRefresh=Y&amp;lsMProductName=Cycle;Car  openDocument.jsp?sType=rpt&amp;iDocID=859&amp;sRefresh=Y&amp; lsMparamStringDR=[c],[d]&amp;lsMparamNumberDR=[3],[4]&amp; lsMparamDateDR=[Date(2003,6,3)],[Date(2003,6,4)]&amp; lsMparamDateTimeDR=[DateTime(2003,6,1,3,1,1)],[DateTime(2003,6,1,4,1,1)]</pre>			
<b>lsR</b> [NAME]	Specifies a range of values for a prompt. [NAME] is the text of the prompt.	No	<ul style="list-style-type: none"> <li>A range of values for the prompt, separated by a double period (..)</li> <li>If the target is a Crystal report, the range must be enclosed in square brackets and/or parentheses (use a square bracket next to a value to include it in the range, and parentheses to exclude it)</li> <li>If the target is a OLAP report, use the MDX WITH clause</li> </ul>

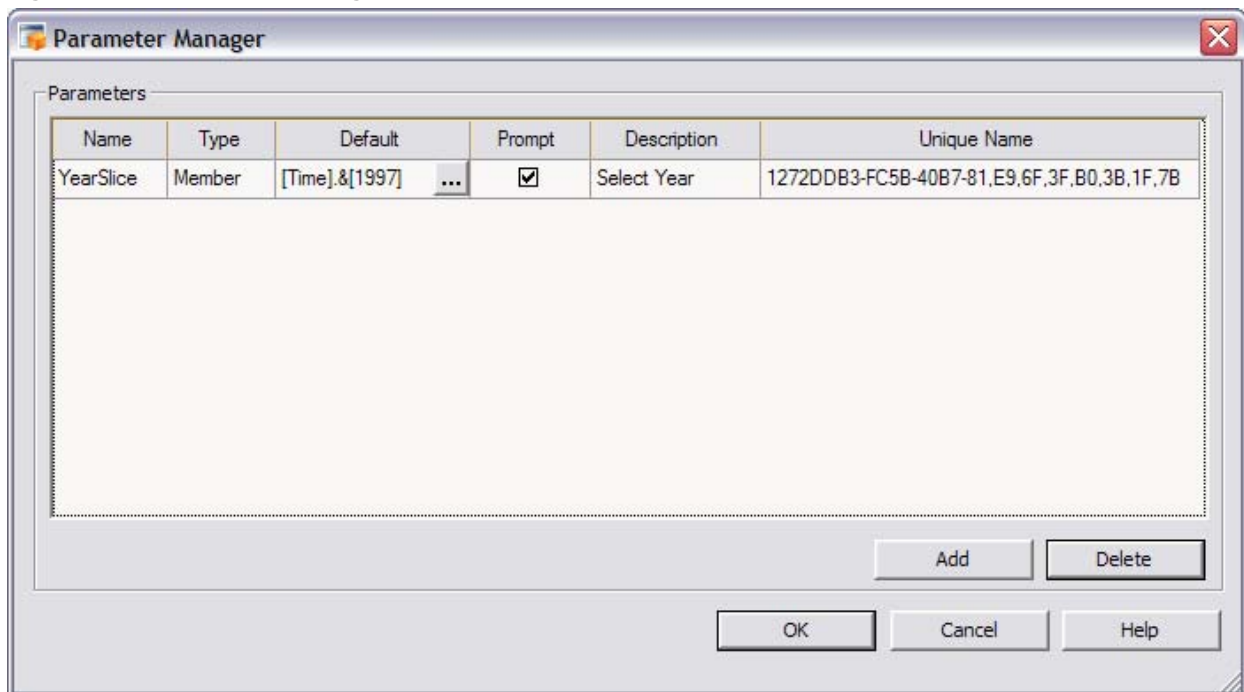
Parameter Name	Description	Mandatory	Example
<b>Code samples</b>			
<pre>openDocument.jsp?iDocID=345&amp; sType=wid&amp;sRefresh=Y&amp;lsMProductName=Cycle,Car  openDocument.jsp?sType=rpt&amp;iDocID=860&amp;lsRparamStringDR=[h..i]&amp; lsRparamNumberDR=[7..8]&amp; lsRparamCurrencyDR=[3..4]&amp; lsRparamDateDR=[Date(2003,6,7)..Date(2003,6,8)]&amp; lsRparamDateTimeDR=[DateTime(2003,6,1,7,1,1)..DateTime(2003,6,1,8,1,1)]&amp; lsRparamTimeDR=[Time(1,1,7)..Time(1,1,8)]&amp;lsRparamUnbound1=(..6)&amp; lsRparamUnbound2=[6..]&amp;lsRparamStringR=[a..d]&amp;lsRparamNumberR=[1..3]&amp; lsRparamCurrencyR=[1..3]&amp;lsRparamDateR=[Date(2003,6,1)..Date(2003,6,3)]&amp; lsRparamDateTimeR=[DateTime(2003,6,1,1,1,1)..DateTime(2003,6,1,3,1,1)]&amp; lsRparamTimeR=[Time(1,1,1)..Time(3,1,1)]</pre>			
<b>lsC</b>	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
<b>Code sample</b>			
<pre>openDocument.jsp?iDocID=346&amp;sType=wid&amp;sRefresh=Y&amp;lsC=Reservations</pre>			
<b>sInstance</b>	Indicates which specific instance of the target report to open	No	<ul style="list-style-type: none"> <li>• <b>User</b> (Link to latest instance owned by current user)</li> <li>• <b>Last</b> (Link to latest instance for report)</li> <li>• <b>Param</b> (Link to latest instance of report with matching parameter values)</li> </ul>

## Specifying prompts for OLAP Intelligence report targets

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

In addition, the XI version of OLAP Intelligence has been 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 a duplicate client side parameter name to be used. 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 the **Parameter Manager** below.

Figure 3: The Parameter Manager



## Understanding the OLAP context

When linking to an OLAP Intelligence report, the prompt value needs to 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

<b>NOTE</b>	<p>The following examples use these URL encoding conventions:</p> <ul style="list-style-type: none"> <li>• %26 = &amp; (ampersand)</li> <li>• %40 = @ (at sign)</li> </ul>
-------------	--

### Syntax for a member parameter

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

#### Microsoft Analysis Services:

**IsS1272DDB3-FC5B-40B7-81,E9,6F,3F,B0,3B,1F,7B**  
**=[Time].%26[1998]**

#### Essbase/DB2 OLAP (Enhanced Driver):

**IsS1272DDB3-FC5B-40B7-81,E9,6F,3F,B0,3B,1F,7B =Qtr4**

#### Essbase/DB2 OLAP (Legacy Driver):

**IsS1272DDB3-FC5B-40B7-81,E9,6F,3F,B0,3B,1F,7B**  
**=Year%40Year%40Qtr4**

#### Holos:

**[unique member name]**

**IsS1272DDB3-FC5B-40B7-81,E9,6F,3F,B0,3B,1F,7B**  
**=Year%40'Qtr4'**

### Syntax for a memberset parameter

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

#### Microsoft Analysis Services:

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

**IsM1272DDB3-FC5B-40B7-81, E9, 6F, 3F, B0, 3B, 1F, 7B**  
 =[[Time].%26[1997]],[[Time].%26[1998]]

**Essbase/DB2 OLAP (Enhanced Driver):**

**IsM1272DDB3-FC5B-40B7-81, E9, 6F, 3F, B0, 3B, 1F, 7B** =Qtr3,Qtr4

**Essbase/DB2 OLAP (Legacy Driver):**

**IsM1272DDB3-FC5B-40B7-81, E9, 6F, 3F, B0, 3B, 1F, 7B**  
 =Year%40Year%40Qtr3,Year%40Year%40Qtr4

**Holos:**

**IsM1272DDB3-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&IsS[unique parameter name]=[cube location]**

**Microsoft Analysis Services:**

**IsS1272DDB3-FC5B-40B7-81, E9, 6F, 3F, B0, 3B, 1F, 7B**  
 =SERVER=server1,CATALOG=FoodMart 2000,CUBE=warehouse

**Essbase/DB2 OLAP (Enhanced Driver):**

**IsS1272DDB3-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):**

**IsS1272DDB3-FC5B-40B7-81, E9, 6F, 3F, B0, 3B, 1F, 7B**  
 =SERVER=server1,USER=bob,PWD=bobpassword,DATABASE=Samppart,SCHEMA=Company,CUBE=Company

**Holos:**

**IsS1272DDB3-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&IsS[parameter name]=[page #]**

**IsS1272DDB3-FC5B-40B7-81, E9, 6F, 3F, B0, 3B, 1F, 7B** =2

## Output parameters

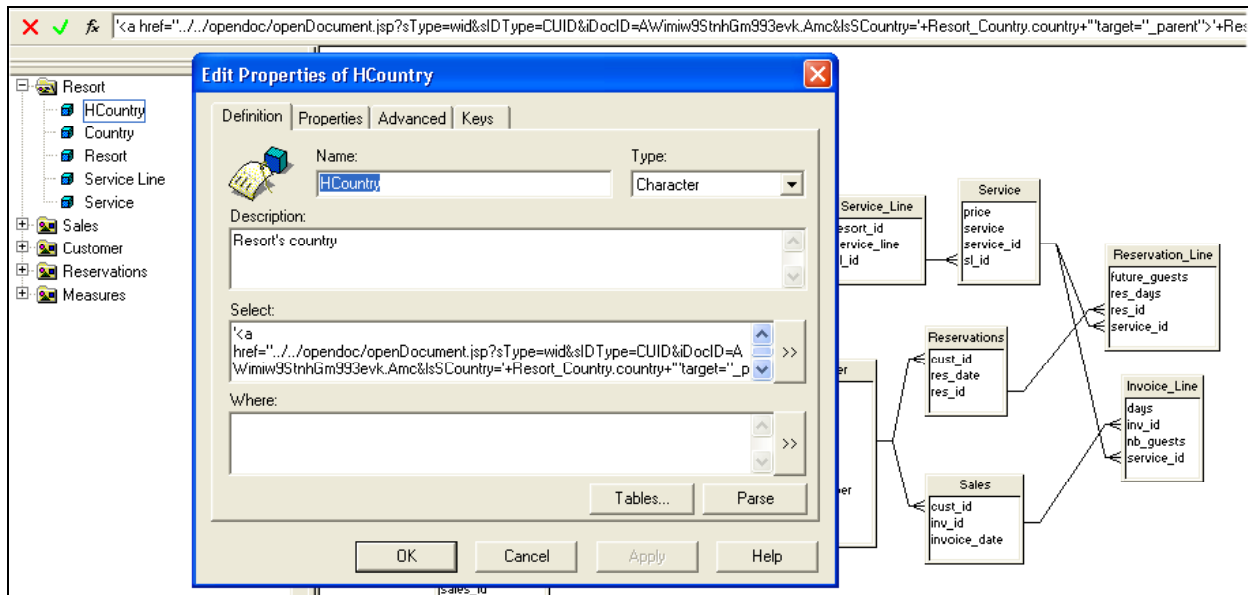
Parameter Name	Description	Mandatory	Example
<b>sOutputFormat</b>	Indicates the format in which the target document is displayed	No. Default is HTML	<ul style="list-style-type: none"> <li>• H (HTML)</li> <li>• P (PDF)</li> <li>• E (Excel)</li> </ul> <p><b>Crystal reports only</b></p> <ul style="list-style-type: none"> <li>• W (Word)</li> </ul>
<p><b>Code samples</b></p> <pre>openDocument.jsp?iDocID=347&amp;sType=wid&amp;sOutputFormat=P</pre> <pre>openDocument.jsp?iDocID=861&amp;sType=rpt&amp;sOutputFormat=W</pre>			
<b>sViewer</b>	Indicates the selected report viewer (CR & CA only)  CAUTION: This parameter can conflict with <b>sOutputFormat</b> and should not be combined	No	<ul style="list-style-type: none"> <li>• <b>CR &amp; CA</b> html (HTML)</li> <li>• <b>CR only</b> interactive (dHTML)</li> </ul>
<p><b>Code sample</b></p> <pre>openDocument.jsp?sType=rpt&amp;iDocID=860&amp;sRefresh=Y&amp;sViewer=interactive</pre>			
<b>sWindow</b>	Indicates whether the target report will open in the current browser instance or launch a new one	No	<ul style="list-style-type: none"> <li>• Same</li> <li>• New</li> </ul>
<b>NAII</b>	Avoid the display of the valorized prompts, just display the prompts that have no <b>lsS</b> , <b>lsM</b> or <b>lsR</b>	No	<ul style="list-style-type: none"> <li>• Y (all prompts whose values are passed with <b>lsS</b>, <b>lsM</b> or <b>lsR</b> are pre-selected)</li> <li>• N (displays only the prompts whose values passed with <b>lsS</b>, <b>lsM</b> or <b>lsR</b>)</li> </ul>

## 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.

Figure 4: A Universe



In the above diagram, the Select statement contains:

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

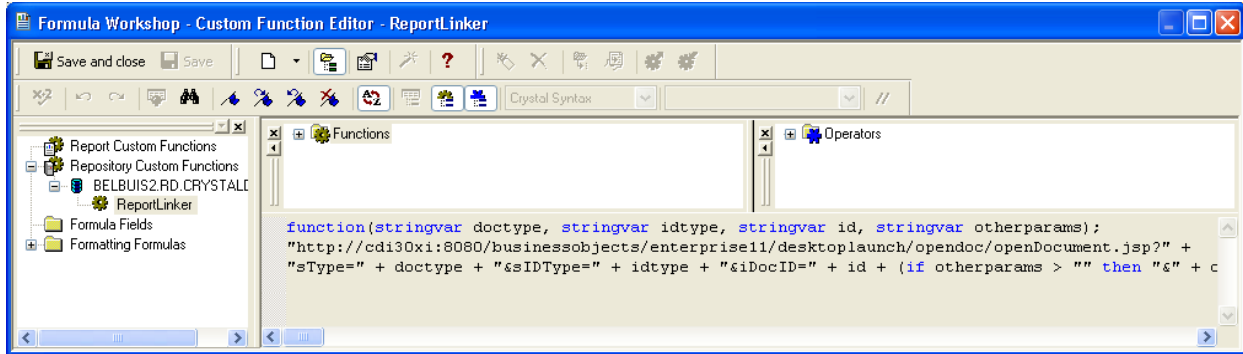
The href uses relative reference (../..) to synchronize with the new Enterprise XI Interactive Viewer.

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

### 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 will be centralized and all the reports using this object will be automatically updated.

Figure 2: The Formula Workshop



The following is the content of the **ReportLinker** function from the above diagram:

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

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

## Finding more information

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

The COM SDK documentation is located in:

**[drive letter]:\Program Files\Business Objects\BusinessObjects Enterprise 11\Help\[language]\Application\com\_docs.zip**


The Java SDK documentation is located in:

**[drive letter]:\Program Files\Business Objects\BusinessObjects Enterprise 11\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).

For more information and resources, refer to the product documentation and visit the support area of the web site at:

<http://www.businessobjects.com/>

<b>NOTE</b>	<p>To highlight text in a PDF document for copying and pasting code, click the <b>Text Select Tool</b> toolbar button in Adobe Acrobat.</p>  <p>This procedure applies to Adobe Acrobat 4.0 and 5.0.</p>
-------------	---

► [www.businessobjects.com](http://www.businessobjects.com)

No part of the computer software or this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from Business Objects.

The information in this document is subject to change without notice. Business Objects does not warrant that this document is error free.

This software and documentation is commercial computer software under Federal Acquisition regulations, and is provided only under the Restricted Rights of the Federal Acquisition Regulations applicable to commercial computer software provided at private expense. The use, duplication, or disclosure by the U.S. Government is subject to restrictions set forth in subdivision (c) (1) (ii) of the Rights in Technical Data and Computer Software clause at 252.227-7013.

The Business Objects product and technology are protected by US patent numbers 5,555,403; 6,247,008; 6,578,027; 6,490,593; and 6,289,352. The Business Objects logo, the Business Objects tagline, BusinessObjects, BusinessObjects Broadcast Agent, BusinessQuery, Crystal Analysis, Crystal Analysis Holos, Crystal Applications, Crystal Enterprise, Crystal Info, Crystal Reports, Rapid Mart, and WebIntelligence are trademarks or registered trademarks of Business Objects SA in the United States and/or other countries. Various product and service names referenced herein may be trademarks of Business Objects SA. All other company, product, or brand names mentioned herein, may be the trademarks of their respective owners. Specifications subject to change without notice. Not responsible for errors or omissions.

Copyright © 2007 Business Objects SA. All rights reserved.