

# BusinessObjects Enterprise XI

## Troubleshooting Time-outs in BusinessObjects Enterprise XI

---

### Overview

This document outlines where time-outs can occur in BusinessObjects Enterprise XI and how to resolve them. It contains a collection of knowledge base articles that discuss some common time-out behaviors. It also describes how to create and install a simple application composed of Java Server Pages that can be used to troubleshoot time-out issues in BusinessObjects Enterprise XI environments.

### Contents

<b>INTRODUCTION</b> .....	<b>2</b>
<b>CLIENT AND SESSION TIME-OUTS</b> .....	<b>2</b>
<i>Browser-related time-outs</i> .....	3
Microsoft Internet Explorer .....	3
<i>InfoView</i> .....	3
General time-outs.....	3
Session time-outs .....	4
Authentication time-outs .....	4
<b>CONFIGURING SERVER COMPONENTS</b> .....	<b>5</b>
<i>Crystal Management Console</i> .....	5
Crystal Reports Page Server, Desktop Intelligence Server .....	5
Web Intelligence Report Server.....	5
Connection Server.....	6
<i>Registry settings</i> .....	7
Central Management Server.....	7
File Repository Server .....	7
<b>DATABASE TIME-OUTS</b> .....	<b>8</b>
<i>Designer</i> .....	8
<b>THE CODE</b> .....	<b>8</b>
<i>dbconn.inc</i> .....	9
<i>index.jsp</i> .....	9
<b>DEPLOYING THE APPLICATION</b> .....	<b>10</b>
<i>Windows</i> .....	10
<i>UNIX</i> .....	10
<i>Weblogic</i> .....	10
<i>WebSphere</i> .....	10

## Introduction

Generally speaking, a time-out is set to prevent software from hanging while waiting for an event and to release unused resources. Usually, users are notified by a warning or error message indicating that a time-out value has been exceeded. Depending on the environment the software is operating in, it is sometimes necessary to increase or decrease those time-out values to optimize its operation.

<b>NOTE</b>	Changing time-out settings can have negative side effects, even when staying within the recommended ranges. It is recommended that different usage scenarios be tested first in a non-production environment.
-------------	---

Time-outs can be categorized into the following:

- Request
- Application or Session
- Connection
- Data Retrieval
- Hardware
- Silent

This document outlines where some common time-outs occur in BusinessObjects Enterprise XI and how to resolve them. It also describes how to create and install a simple application composed of Java Server Pages (JSP) that can be used to troubleshoot time-out issues in BusinessObjects Enterprise environments.

In order to determine if the time-out is occurring in Enterprise or in an external source, these JSP pages can be ported to an Application Server. From the Application Server, they can be used to execute longer-running SQL queries in an environment that is external to Enterprise.

<b>NOTE</b>	The sample code in this document is configured to connect to an Oracle 9i database but can be customized to use any other database by using the appropriate connectivity and driver details.
-------------	--

## Client and session time-outs

Request time-outs are the most common from the perspective of a user. When the time-out occurs, they are notified that the requested information or service is not available.

## Browser-related time-outs

The following error messages are not specific to Business Objects software. This section discusses these error messages.

### Microsoft Internet Explorer

"Internet Explorer cannot open Internet site <web address>. The operation timed out."

"Microsoft Internet Explorer error 10060 connection timed out."

These error messages usually appear when a time-out has been reached during a request of the following type:

```
http://<servername>:<port>/webdirectory/index.html
```

<b>NOTE</b>	If there is no port specified after the server name, it will default to port 80 for the HTTP protocol.
-------------	--

Internet Explorer has a time-out that dictates how long it will wait for the web server at the specified port to reply with an HTTP header. This time-out varies with the version of Internet Explorer you are using and its registry configuration. The time-out value is 60 seconds for Internet Explorer version 5.x and 6.x.

For information on changing this value, see Microsoft knowledge base article [181050](#).

## InfoView

Some time-out messages that appear to the end user are generated by InfoView. This section discusses these messages.

### General time-outs

In .NET InfoView, reports that take a long time to process but schedule successfully will time out after three minutes in the Advanced DHTML Viewer and the following error message appears:

"ERROR: Thread was being aborted"

For a resolution, see knowledge base article [c2018550](#).

When scheduling a Web Intelligence report in a clustered environment, with the Web Intelligence Job Server and the Central Management Server (CMS) running on different computers, the report fails to run with the following error message:

"Your Web Intelligence session has reached timeout. Log out and log in again to InfoView. (Error: WIS 30553)"

For a resolution, see knowledge base article [c2018887](#).

The web.config file in .NET InfoView can be edited to specify a time, in minutes, for the user's session time-out. However, after the session has timed out, the user is able to go back into InfoView without logging on. The user's name appears in the Central Management System (CMS) list of users.

For a resolution, see knowledge base article [c2017573](#).

When attempting to log on to InfoView, the start page does not appear even though the Central Management Console (CMC) shows that an InfoView session is created. Instead, a time-out error occurs. The reason is the Active Directory groups did not map correctly in the CMC. When you click **Update**, it can take more than 120 seconds for the Active Directory to update successfully.

For a resolution, see knowledge base article [c2019355](#).

A report times out after 100 seconds in BusinessObjects Enterprise XI .NET InfoView.

For a resolution, see knowledge base article [c2018856](#).

Data is not refreshed when a report is run in .NET and published as a Web Service.

For a resolution, see knowledge base article [c2014162](#).

### Session time-outs

To change the default session time-out value for .NET CMC or InfoView, see knowledge base article [c2016957](#).

To change the default session time-out value for the Java CMC and InfoView, see knowledge base article [c2017487](#).

### Authentication time-outs

When users log on to InfoView using their preferred way of authentication, it involves time-out settings which are hardcoded into the product. However, for Trusted Authentication, the time-out can be set in the Central Management Console (CMC). Click **Authentication** from the **Manage** section of the CMC and the **Trusted Authentication** section appears at the bottom of the **Enterprise** tab (see Figure 1).

**Trusted Authentication** **N is:**

Trusted Authentication is enabled

Shared secret:

Trusted logon request is timeout after N millisecond(s) (0 means no limit):

Figure 1

## Configuring server components

All Business Objects back-end servers that process documents, data, security, and so on, are configured with time-out settings. As well as conserving resources, this is to protect the system from becoming unstable.

### Crystal Management Console

Time-out settings for a specific server can be found by clicking **Servers** in the CMC. Click on the server name that you would like to configure and its **Properties** tab will contain a section that allows you to modify these settings.

<b>NOTE</b>	The values that are shown in the screen captures in this document are the default values after a standard installation of Enterprise XI.
-------------	--

#### Crystal Reports Page Server, Desktop Intelligence Server

Minutes Before an Idle Connection is Closed:	<input type="text" value="20"/>
Minutes Before an Idle Report Job is Closed:	<input type="text" value="60"/>

*Figure 2*

The **Minutes Before an Idle Connection is Closed** setting (see Figure 2) alters the length of time that the Page Server waits for further requests from an idle connection. Before you change this setting, it is important to understand that setting a value too low can cause a user's request to be closed prematurely. Setting a value that is too high can cause system resources to be consumed for longer than necessary.

The **Minutes before an Idle Report Job is Closed** setting (see Figure 2) alters the length of time that the Page Server keeps a report job active. Before you change this setting, it is important to understand that setting a value too low can cause a user's request to be closed prematurely. Setting a value that is too high can cause system resources to be consumed for longer than necessary. This setting works in conjunction with the **Report Job Database Connection** setting.

<b>NOTE</b>	The Desktop Intelligence Cache Server and Crystal Reports Cache Server, also have the setting <b>Minutes Before an Idle Connection is Closed</b> .
-------------	--

#### Web Intelligence Report Server

Connection Time Out	<input type="text" value="20"/>	minutes
---------------------	---------------------------------	---------

*Figure 3*

The **Connection Time Out** setting (see Figure 3) dictates the number of minutes before an idle connection to the Web Intelligence Report Server will be closed.

<b>NOTE</b>	1 minute = 60000 milliseconds.
-------------	--------------------------------

In BusinessObjects Enterprise XI, when a scheduled Web Intelligence document runs for more than 10 minutes, the following error message appears:

"Transport Error, Communication Failure"

The cause of the problem is that the default CORBA time-out is set to 10 minutes. The new CORBA time-out value after installing the latest patches is now set to 72 hours. The default CORBA time-out can be modified through a command line switch, **-RequestTimeout**, where the value is set in milliseconds. The **-RequestTimeout** switch is part of the Web Intelligence Job Server and can be set in the CMC.

For more information on this issue, see knowledge base article [c2018041](#).

### Connection Server

The screenshot shows a configuration window for the Connection Server. It is divided into two sections: 'Connection Pooling' and 'Connection Server Job'. In the 'Connection Pooling' section, there are three radio button options: 'Connections Not Managed By the Pool', 'No Timeout', and 'Maximum Pool Time:'. The 'Maximum Pool Time' option is selected, and its value is set to '60' in an adjacent text box. In the 'Connection Server Job' section, there is a text box labeled 'Timeout for Inactive Jobs:' with the value '60' entered.

*Figure 4*

The **Maximum Pool Time** setting (see Figure 4) is the value in minutes of how long it a connection is allowed to stay open so it can be reused.

The **Timeout for Inactive Jobs** setting (see Figure 4) controls the number of minutes before an inactive Connection Server job is closed.

<b>NOTE</b>	The Connection Server libraries are present on following servers: Web Intelligence Report Server, Desktop Intelligence Report Server and Web Intelligence Job Server. As a result, these services can query the database directly and do not need to communicate with the Connection Server service.
-------------	--

## Registry settings

Some time-out settings can be found in the registry, but are not documented in the online Help.

<b>CAUTION</b>	<p>Using the Registry Editor incorrectly can cause serious problems that may require you to reinstall the Microsoft Windows operating system. Use the Registry Editor at your own risk.</p> <p>It is strongly recommended that you make a backup copy of the registry files (System.dat and User.dat on Win9x computers) before you edit the registry.</p>
----------------	--

### Central Management Server

The time-out settings for the CMS are located in the following registry folder:

```
HKEY_LOCAL_MACHINE\SOFTWARE\Business Objects\Suite  
11.5\CMS\Instances\<<HOST>.cms
```

### File Repository Server

When importing a large BIAR file from another system, it can take a long time to complete. This is where users can experience timeout issues and get an error like the following:

```
"Committing the export object to the destination CMS failed. Reason:  
Unable to add SL_PATH property"
```

<b>NOTE</b>	<p>The above error can also appear, if the File Repository Servers are not enabled. For example the Central Management Server database was recreated to have a clean system to import the BIAR file to, but then by default all the servers are disabled.</p>
-------------	---

The reason is that the File Repository Servers have a timeout to clear out temporary files, by default it is set to 10 minutes. And in case an operation takes longer than 10 minutes, the temporary files will be cleared and the import will fail.

If your File Repository Server (FRS) runs on a Windows operating system, check the registry under:

```
HKEY_LOCAL_MACHINE\SOFTWARE\Business Objects\Suite  
11.5\File Server\Instances\  

```

You will see each repository, Input and Output, as a folder. Under each folder there is a key entry called "ServerMaxIdleTime". This value can be increased to a maximum of 90 (or 5a in Hexadecimal) and represents 90 minutes. Both Input and Output Servers are involved in the import process, as not only template documents can be imported, but also their instances. After modifying the registry value, you have to restart the affected FRS services.

If your destination system is UNIX, modify the `ccm.config` file to add a parameter `"-ServerMaxIdleTime 90"` for each FRS.

## Database time-outs

Database or connection-specific time-outs are not discussed in this document, as there are too many combinations of manufacturers, connection types and versions.

The following general tips can apply to any database or connection time-outs:

- Use a third-party tool to verify connection/query problems stemming from incompatible or missing drivers, network issues or other sources unrelated to the setup of Business Objects Enterprise.
- Use the same SQL syntax as used in the report and executed it with the third-party tool.
- Time-out settings can be configured on both the database client and the database server.

## Designer

There is no time-out value which can be set directly at the universe level, however, the **Limit execution time to** setting is important (see Figure 5). It sets a limit on how long the SQL query is allowed to execute and provides control over the processing load that users can put on the database server. The setting can be found in the Designer by going to the **File > Parameters > Controls** tab. The default is set to a maximum of 5 minutes. If it takes longer than this time to retrieve data from the database, the query is aborted.

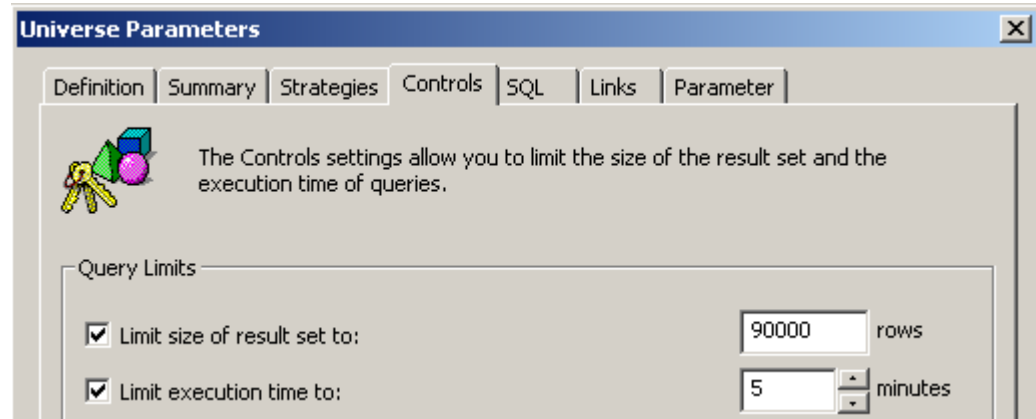


Figure 5

## The code

In this section, code samples are provided to help you troubleshoot time-out issues.



## dbconn.inc

The application is composed of a single web page and an include file. The include file dbconn.inc outlines the connection information to the database against which the SQL query is executed. It also initiates the parameters to create and initialize the connection and the SQL statement that is used in the JSP page. The include file contains the following code:

```
<%@ page language="java"
import="java.util.*,java.io.*,java.lang.*,java.sql.*,javax.
naming.*"%>

<% Class.forName("oracle.jdbc.driver.OracleDriver");

DriverManager.registerDriver(new
oracle.jdbc.OracleDriver());

Connection con =
DriverManager.getConnection("jdbc:oracle:thin:@(DESCRIPTION
=(ADDRESS_LIST=(ADDRESS=(PROTOCOL=TCP)(HOST=10.61.161.50)(P
ORT=1521)))(CONNECT_DATA=(SID=ORCL1)(SERVER=DEDICATED)))",
"scott", "tiger");

Statement stmt=con.createStatement();

%>
```

### NOTE

It is important that both index.jsp and dbconn.inc reside in the same folder and are accessible by the Application Server.

The code above initiates the Oracle client driver to allow connectivity to the Oracle Database using JSP pages and then registers the driver. The parameters for the `getConnection` method include the **SID**, **HostName**, **userid** and **password** to the Oracle database against which the test is run. The parameter values listed above are examples and should be replaced by the parameter values for your environment.

The last line of code in the above code sample creates a new SQL statement for the variable **stmt** which is to be executed in the JSP page that follows.

## index.jsp

The second page, index.jsp, contains the code to execute the SQL statement. If required, this page can be renamed but it must be deployed to the Application Server.

```
<HTML><TITLE>ENTERPRISE TIME-OUT TEST</TITLE>
<BODY>
<%@ include file="dbconn.inc" %>
<%ResultSet rs = stmt.executeQuery("SELECT sysdate from
dual") ;%>
QUERY EXECUTED SUCCESSFULLY
</BODY>
</HTML>
```

**NOTE**

It is important that both index.jsp and dbconn.inc reside in the same folder and are accessible by the Application Server.

The above samples are designed for Oracle databases. Your SQL statement that takes a long time to run should replace the statement `"SELECT sysdate from dual"` in the above code.

## Deploying the application

The application can be deployed in the `<tomcat root>/webapps/ROOT` folder in order to be accessible directly using the default Tomcat URL. To deploy the files, simply copy the files in the folder mentioned above.

In a default Tomcat installation, the page should be accessible using the following URL:

```
http://<Server Name>:8080/index.jsp
```

## Windows

On a Windows server, in order for the JSP to find the classes required to connect to the Oracle middleware, copy the file `classes12.jar` from the Oracle middleware installation on the server to the folders:

```
<tomcat-root>/webapps/ROOT/WEB-INF/classes
```

```
<tomcat-root>/webapps/ROOT/WEB-INF/classes/lib
```

## UNIX

On UNIX, once this file is copied over, Tomcat may still not be able to find the required classes. In that case, edit the `catalina.sh` file to modify the `CLASSPATH` variable to point to the folder `<tomcat-root>/WEB-INF/classes`. Tomcat must be restarted after modifying `Catalina.sh`.

The `classes12.jar` file resides in the folder `<ORACLE_HOME>/jdbc/lib`.

## Weblogic

To deploy the files on Weblogic, copy the file into the InfoView folder created by the Web Intelligence installation and access it using the appropriate URL.

## WebSphere

To deploy the file in WebSphere, create and deploy an ear (enterprise Archive) file with the two files. Alternatively, the files can be made a part

of the InfoView ear file created by Wdeploy and accessed with the appropriate URL.

**NOTE**

The scope of this document does not include the creation of ear files in Websphere.

Once the query is executed successfully, the following message will appear:

“QUERY EXECUTED SUCCESSFULLY”

**CAUTION**

This application has been tested successfully with Oracle 9i middleware. It does not work with Oracle 8i middleware. If the classes12.jar file is copied from an Oracle 8i middleware, it will not work.

## Finding more information

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

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

► [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.