

# Crystal Reports

## Troubleshooting the error: “User Session Has Expired”

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### Overview

This white paper is an amalgamation of the Knowledge Base articles available on the Crystal Decisions Support web site that involve troubleshooting the error message: “User Session Has Expired”. This error message can be encountered while using the ASP (Active Server Pages) Reports Server to view reports through a web browser.

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## Why is the error "User Session Expired" generated?

The file Rptserver.asp generates the error User Session Expired. The error occurs if the object session("oPageEngine") does not exist.

This can be caused by two reasons:

- 1) The session("oPageEngine") object is not in scope
- 2) The session ("oPageEngine") object was not created.

Diagnosing/Resolving Issue 1:

The session("oPageEngine") object is not created in the Rptserver.asp page. If the session("oPageEngine") object is created in a page stored in a separate virtual directory from Rptserver.asp, this can cause the object to be out of scope from Rptserver.asp.

To test if it is a scope issue, try using Rptserver.asp as a server side include in your Active Server Pages (ASP) page. This will ensure that the Rptserver.asp code is in the same scope as the session("oPageEngine") object. If scope is the issue you should see your report in the HTML Page viewer. To fix the scope issue move the Rptserver.asp page into the same directory as your ASP page and change the links to it accordingly.

Diagnosing/Resolving Issue 2:

If you still receive "User Session has Expired" after testing the scope issue, then the problem is that the session("oPageEngine") object is not being created. In your ASP page the session("oPageEngine") is likely being created with code similar to:

```
On Error Resume Next

session("oRpt").ReadRecords

If err.number <> 0 then

    Response.Write("An error has occurred in attempting to access the datasource")

Else

    If IsObject(session("oPageEngine")) then

        set session("oPageEngine") = nothing

    End If

    set session("oPageEngine") = session("oRpt").PageEngine

End If
```

If you are using this code, the session("oPageEngine") will not be created if the session("oRpt").ReadRecords method fails. Therefore, you will need to determine why the ReadRecords method call is failing. The first thing to do is return the error code and message. So change the Response.Write statement to:

```
Response.Write("Error returned: " & err.number & " meaning: " &
Err.Description)
```

This will give you the actual error code and message that is occurring.

Some other causes of this error would be failing to set parameters, not providing database logon credentials, or incorrect ActiveX Data Objects (ADO) recordset usage.

## Microsoft's Visual InterDev

### Security Settings

Synopsis:

A report is called through the ASP (Active Server Pages) Reports Server from a client machine logged onto by "User A" and the report is displayed in the browser as expected. However, "User B" logs onto the same machine and calls the report and receives the error message:

"User Session Has Expired".

Solution:

The ASP application was developed in Microsoft's Visual InterDev. Visual InterDev imposes security extensions upon the ASP pages in the project. These

restrictions must be removed in order to be able to accessed by Crystal Reports ASP Report Server.

To remove these security extensions:

1. Open the Management Console for Internet Information Server (IIS) on the web server machine.
2. Right-click on the virtual directory that contains the ASP pages referencing the reports, and select "Properties".
3. Go to the Virtual Directory tab.
4. Under "Application Settings" click Remove.
5. Click OK.

Please refer to the Knowledge Base Item c2004818 for more details on this issue.

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## **Error - "User Session Has Expired" Deploying Web Applications**

Synopsis:

When deploying a new web project with Microsoft Visual Interdev or Front Page the error message "User Session Has Expired " can occur.

When the report is called through the Web Component Server (WCS) the following message is displayed:

"Connection to Report Server Failed"

Solution:

When Visual Interdev deploys projects or Front Page they will, by nature, use the security imposed by Front Page Extensions.

With Front Page Extensions there are 3 types of users:

- Browsers
- Authors
- Administrators

ISAPI DLL files located in the "\_vti\_bin" virtual directory, set up when the extensions are installed, handle the security for the users. MS Visual Interdev and Front Page communicate with the extensions using HTTP posts behind the scenes. These permissions are set in Front Page under Tools and Permissions and are set in Visual Interdev in the "Web Permissions" area found in the "Web" section of the "Project" menu.

1. Either use the root web permissions or use unique permissions for the web application. If the Crystal Reports Active Server Pages (ASP) samples are

running from the "/scrsamples" ("/scrreports" for version 7.0 or "/crweb" for version 6.0) virtual directory then the project should run with root web permissions. If the Front Page Server Extensions were installed after Seagate Crystal Reports then the root web permissions may not allow the ASP application to run.

2. If unique permissions are being used make sure that the system account is allowed to "administer this application". This will ensure that the application has all the permissions it needs to execute correctly.

3. Create a new virtual directory and map it to your .rpt file referenced in the Visual Interdev Project, and accept all the default permissions.

Please refer to the Knowledge Base Item c2005753 for more details on this issue.

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## Design Time Control (DTC)

### Error: "An Error Has Occurred in Attempting to Access the Following Data Source" Using the Design Time Control (DTC)

Synopsis:

Previewing a report in a Smart Viewer using an Active Server Page created with the Design Time Control (DTC), the following error occurs:

"An Error has occurred on the server in attempting to access the following data source - User Session has expired"

or the Smart Viewer loads, but no report is displayed.

Solution:

When 'Existing Report' is chosen using the Design Time Control, and the report requires a logon and password to a secure database, a connection to the data source is not automatically created.

Either LogOnServer, or SetLogOnInfo can be used to create a connection to the data source.

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## Web Server Computer Resources

### Error - "File I/O error" or "User Session has Expired" Reporting Through the Web

Synopsis:

A report is called through the Web using either the Web Component Server (WCS) or the ASP (Active Server Pages) Reports Server. However, the report is not displayed and one of the following errors is displayed:

"User Session has Expired" OR "File I/O Error"

After the web server computer is rebooted reports are returned correctly for a time but eventually the errors return.

**Solution:**

It was found that the hard drive on the web server computer had less than 50MB of free space. A minimum of 100MB of hard drive space is needed to store the temporary files necessary to process a report. If this space is not available the report cannot be processed and an error will be returned.

Disk space is also considered unavailable when insufficient NTFS Rights have been applied to the web server computer's file system. The temporary files (.TMP or .TEMP) must be allowed to be written to the <DRIVE>:/TEMP directory (ASP Reports Server) or to the Cachedir folder (WCS). The location of the Cachedir folder can be changed in the Web Component Manager. Consult the NTFS Rights document for your particular version (SCR6\_NTFSRights.pdf, SCR7\_NTFSRights.pdf, SCR8\_NTFSRights.pdf) available on the Crystal Decisions Technical Support Web site at:

<http://www.crystaldecisions.com/docs>.

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## ASP Code Issues

### Duplicate HTML Tags

#### Blank Report Returned to the Browser using the Active Server Pages Report Server

**Synopsis:**

A report is called from a Microsoft Internet Explorer 4.0 browser through the Active Server Pages (ASP) Report Server. However, the ActiveX Report Viewer is displayed as a gray frame and the report is never returned. The same report called through a Microsoft Internet Explorer 5.0 browser returned the report correctly.

What is happening?

**Solution:**

The main ASP page, referencing the Crystal Reports file, refers to the file SmartViewerActiveX.asp, which contains the code for instantiating the ActiveX Viewer in the browser.

In an attempt to gain some more insight into the issue, the "#Include" line of code in this main ASP page was changed from:

```
<!-- #include file="SmartViewerActiveX.asp" -->
```

to

```
<!-- #include file="Rptserver.asp" --> "
```

This resulted in more descriptive messages being returned to the browser. The errors:

"Headers have already been written to the page" and "User session has expired"

were displayed indicating that there may be more than one pair of <HTML> </HTML> tags being used. The duplicate tags were removed and the report ran correctly in both versions of the browser. Microsoft Internet Explorer 5.0 has more advanced error-handling abilities and was able to ignore the duplicate header. This is why the report was returned correctly before the code was fixed.

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### Logonserver call cannot be used to change databases

The Server Name parameter passed to the session("oApp").LogonServer call is not the same server that is stored in the report. The LogonServer call cannot be used to tell the report to point at a different server at runtime. Open the report in the Crystal Reports designer and go into the Database menu and choose "Set Location". Check to see what the "Server Name" is. That is what is passed in the LogonServer call.

### Database not logged onto correctly

The database is not being logged onto correctly. The ASP page that instantiates the report does not call LogonServer, or SetLogonInfo. If this is the case the sample ASP applications for your version of Crystal Reports should be downloaded (Simpxmps.zip, ASPXMPS7.exe, ASPXMPS8.exe) from the Crystal Decisions Support web site at:

<http://www.crystaldecisions.com/downloads>

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## Session Scope Issues

### Crystal Reports ASP applications using Windows NT Load Balancing Service

A company is running their Crystal Reports ASP (Active Server Pages) web applications across multiple web servers using Windows NT Load Balancing Service. Load balancing is being used in an attempt to handle a large volume of client requests without creating unwanted delays.

However, the first report that is run after starting the web services returns the following error:

"User Session has Expired"

Subsequent reports ran successfully.

Load Balancing involves switching between multiple web servers and this can affect a web application's session scope. To avoid this issue the Load Balancing software should be configured so that all actions within the session are taken on the same server as opposed to allowing the Load Balancing to switch between servers within the same session.

### ASP Report Server applications must use Session Variables

A report is called through the ASP Report Server, however the following error message is displayed:

"User Session Has Expired"

It was found that the ASP application was using Application Objects and Variables as below:

```
crtable2.setLogoninfo  
Application("db_server"),Application("db_name"),Application("report_userID")  
,Application("report_password")
```

instead of Session Variables and Objects. Crystal ASP applications NEED to use Session Variables. This is the only way that the application and the report object will be able to hold onto information without losing it when another user launches a new session.

For example, userA launches reportA under an Application Object instead of a session variable.

Now userB launches reportB under the same Application Object thus overwriting userA's application object and variables. Now if userA scrolls on or makes a new request to another page or portion of reportA (under the application object), userA will see userB's reportB information rather than reportA.

Once the application was adjusted to use Session Variables and Objects reports ran correctly. See the "Sample ASP Applications" section for information on downloading our sample applications.

### **Error: "User Session Has Expired" and Blank Pages in Report Viewer for HTML**

Synopsis:

An Active Server Pages application is developed to display a report in the Report Viewer for HTML using the Active Server Pages (ASP) Reports Server. However, both the Group Tree and report pages are blank and the following error message is displayed:

"User Session Has expired"

Solution:

The SmartViewerHTMLFrame.asp file contains code that calls or redirects to another ASP page in the application (HTMLStart.asp). The HTMLStart.asp page loads all of the components of the application into memory. Upon this redirection, the ASP page was losing scope of the report and the information gathered by the application. Adding the code:

```
response.buffer = true
```

to the top of the initial report calling ASP page would allow all of the information to be buffered to the redirected pages and Rptserver.asp. The application now returns the report correctly to the Report Viewer for HTML.

---

## Error 20534 when using framed ASP application with Automation Server

### Synopsis:

A Crystal report was being called into a browser through an Active Server Pages (ASP) application using the ASP Reports Server. The application has suddenly stopped working, and is generating the error:

"20534: User Session Has Expired".

### Solution:

It was found that the ASP application was using framed pages, where one of the frames was using an HTML page, while the other frame was using an ASP page. The HTML page was used to avoid the use of server-side scripting on that particular frame. However when frames are used in a web application Microsoft Internet Information Server has known issues maintaining sessions variables if HTML pages are mixed with ASP pages within the same set of framed pages.

Once the HTML page was changed to use ASP code, the application worked fine.

Here is the MS Knowledge Base article that explains this issue:

<http://support.microsoft.com/support/kb/articles/Q178/0/37.ASP>

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## Errors When Opening a New Browser Window to Display a Report Through ASP

### Synopsis:

When opening a new browser window to display a report through Active Server Pages (ASP) and the Crystal Automation Server results in the error message:

User Session Has Expired

The issue was only occurring with Internet Explorer (IE) 4.0 browsers.

### Solution:

In IE 4.0 go to View | Internet Options

Click on the Advanced tab.

Under the "Browsing" category, make sure that "Browse in a new process" (this may also display as "Open Window in a New Process") is unchecked.

If this option is selected then a new session can be created when opening a new window.

Since the Automation Server application uses session variables, the values of the variables are not available in the new session.

There was a known issue with the original release of IE 4 that sessions could still be lost.

To resolve the issue entirely, install Service Pack 2 of IE 4.

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### Displaying a report in the Smart Viewer for Java through ASP on a Macintosh

Synopsis:

Reports will run through the Smart Viewer for Java on an Apple Macintosh client machine when called through the URL command line but calling a report from an Active Server Page (ASP) will give the message "User Session Has Expired".

Solution:

Unfortunately we have found that the Mac MRJ (java runtime environment) appears to take the session variables out of scope and when the Rptserver.asp page is requesting the server variables they are not available.

The workarounds are to either use the HTML viewer for the Mac clients or use the Web Reports Server to bring up the report over the URL.

---

### Active Data Object Application Running in a separate memory space

Synopsis:

When the ADORecordSet.asp sample application is run, the report is returned successfully. However, when the application is set to run in its own memory space within IIS, the error message "User Session Has Expired" is returned to the browser. The "Create" button under the Virtual Directory tab within IIS will enable an application mapping to run under its own memory space.

Solution:

Running an application within its own memory space should not be used with the Web Report Server or Active Server Pages. This is because the Crystal Report Print Engine is single-threaded. Once the application was set to not run in its own memory space, the report was returned to the browser successfully.

---

## ASP Reports Server Installation

### Location of Rptserver.asp

#### Error message "User Session Has Expired" when calling ASP page to display report

Synopsis:

When calling an Active Server Pages (ASP) page using the Crystal Automation Server to preview a report, the viewer displays the error message "User Session has Expired".

Solution:

The ActiveX and Java Viewers reference the file Rptserver.asp. Rptserver.asp was referenced by the viewer in a different virtual directory than the ASP page that was originally called. As a result, the session("oApp"), session("oRpt") and session("oPageEngine") objects created in the initial ASP page were not visible to the Rptserver.asp. The message "User Session has Expired" occurs in Rptserver.asp when the session("oPageEngine") does not exist.

To solve the issue, copy Rptserver.asp page into the same directory as the initial ASP page and ensure that the viewers are referencing the correct one.

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### Are you using a firewall or proxy server on your network?

A report is called through an ASP application using the ASP Web Reports Server. If the Report Viewer for HTML is used to display the report the report is displayed correctly. However, if the Report Viewer for Java or ActiveX is used the following message is displayed:

"User Session Has Expired".

Check to see if your network is using a proxy server or firewall. Some proxy servers or firewalls are case sensitive and so filenames and paths need to be in the correct case or they will fail over the web. Make sure that the path to the Rptserver.asp file referenced in the SmartViewerActiveX.asp and SmartViewerJava.asp is case sensitive. For example:

"http://server/folder/rptserver.asp" may need to be changed to

"http://server/Folder/rptserver.asp".

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### Error "User Session has Expired" in the Java Viewer

Synopsis:

When the Java viewer is used, the IE browser returns a "User Session has Expired" error message, while in the Netscape browser, a Java Security window alert pops up requesting further security authorization. At the bottom of the viewer, "User Session has Expired" is displayed.

The ActiveX viewer runs and loads the report fine.

Solution:

Upon checking the SmartviewerJava.asp file, it was not referencing the correct virtual directory location for Rptserver.asp.

After changing this reference to point to:

```
<param name=ReportName value="/VirtualDirectoryName/Rptserver.asp">
```

the report and viewer loaded successfully.

---

## Error "User Session Has Expired" Displayed in an ASP Report Server Application

Synopsis:

A Crystal Report is called through the Active Server Page (ASP) Report Server, utilizing the Crystal Automation Server. The application is designed to display the report in either the Smart Viewer for Java or the Smart Viewer for ActiveX however the message "User Session Has Expired" is displayed in a message box instead. The report is not displayed and the animated cursor, or hourglass, does not move. Clicking the refresh button in the browser results in the message "CPEAUT Error Occurred on Server 424 Object Required" being displayed in the browser.

Solution:

On closer inspection of the ASP code for the Smart Viewers, it was found that they were not referencing the correct location of the Rptserver.asp file. This file is required to create the report's encapsulated page files that are ultimately served by the web server to the viewers in the browser. The Rptserver.asp file should be located in the same directory as the ASP page that is calling the report.

If the Smart Viewer for ActiveX is being used to preview the report in the browser, the following two lines in the Web Broker section of its code must correctly reference the location of the Rptserver.asp file.

```
CRViewer.ReportName = Location.Protocol + "://" + Location.Host  
+ "<application's virtual directory>/Rptserver.asp"
```

```
webSource.URL = Location.Protocol + "://" + Location.Host + "<application's  
virtual directory>/Rptserver.asp"
```

If the Smart Viewer for Java is being used to preview the report in the browser, only one line must correctly reference the location of the Rptserver.asp file:

```
<param name=ReportName value="<application's virtual  
directory>/Rptserver.asp">
```

---

## Error -"User Session Has Expired"/"Error Occurred on Server 424 Object Required"

Synopsis:

When calling an Active Server Page (ASP) to display a report using the Crystal Automation Server, the Smart Viewer ActiveX displays a dialog "User Session Has Expired" with no report. Clicking the refresh button in the browser results in the dialog "CPEAUT Error Occurred on Server 424 Object Required".

**Solution:**

The ASP containing the code for calling the ActiveX Smart Viewer was not referencing the Rptserver.asp page required to create the report Encapsulated Page Files (EPF). When looking at the webSource.URL line of the Smart Viewer ActiveX script it was not correctly referencing the URL for the Rptserver.asp page on the Web server. To avoid this error make sure that the Rptserver.asp page is in the same directory as the ASP page that is called in the report. If the ActiveX Smart Viewer is being used to preview the report in the browser the webSource.URL must be set to the appropriate URL pointing to Rptserver.asp.

See SmartViewerActiveX.asp in \<Crystal Reports Directory>\sample\ASPSamples for demo code.

\*Where <Crystal Reports Directory> is the directory you installed Seagate Crystal Reports 7 Professional. Below are the two lines in question that must correctly point to the location of the Rptserver.asp:

```
CRViewer.ReportName = Location.Protocol + "/" + Location.Host  
+ "/applicationvirtualdirectory/Rptserver.asp"
```

```
webSource.URL = Location.Protocol + "/" + Location.Host +  
"/applicationvirtualdirectory/Rptserver.asp"
```

---

## Browser Issues

### Crystal Smart Viewer "User Session has expired" in IE 4.0

**Synopsis:**

On attempting to call a Crystal Report through Active Server Pages (ASP) and the Automation Server a Crystal Smart Viewer dialog box appears containing the message "User Session has Expired".

The ASP page is accessed through Internet Explorer 4.0.

**Solution:**

Accessing the "Internet Options" window through the "View" menu of Internet Explorer, the "Settings" button is clicked in the "General" tab. At the top of the resulting window the section "Check for newer versions of stored pages" is found.

The option checked was "Never". It is recommended that "Every visit to the page" is used to ensure that report data is refreshed. On changing this setting to "Every visit to the page" the error message disappeared.

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## Database Issues

### Fully Qualified Table Names

#### "User Session Has Expired" Displayed When Changing Databases at Runtime

Synopsis:

A Crystal report was being called into a browser through an Active Server Pages (ASP) application using the ASP Reports Server. The report contains two different databases that have identical table structure, but the data is physically different. An ODBC System DSN has been created for both data sources. Using the SetLogonInfo method (in an ASP page) to change database location generated the following error:

"User session has expired."

In the Seagate Crystal Reports Designer, the report previewed as expected and the database location could be changed with no errors. The syntax of the ASP code was checked and no errors were detected. The report is returned as expected through the browser using the Crystal Web Report Server (URL Command Line).

Solution:

It was found that the fully qualified table names were being referenced in the report. In the Crystal Reports Designer, go to Database | Set Location and check to make sure that the report does not contain the fully qualified table names. The SQL Server format is <db name>.<owner>.<table name>.

In order for a report to be able to switch between two different databases, remove the database and owner name for the table and ensure that the tables have the same name in both databases.

When the fully qualified table name is removed from the report, the "User Session Has Expired" error is no longer received.

Another reason for this to occur is that the ODBC data sources are not both System DSNs.

---

### Client Side Cursors

#### ADO with Client Side Cursor Generates Error - "User session has expired"

Synopsis:

Creating an ADO RecordSet using Active Server Pages (ASP) and setting the CursorLocation method to 3 indicating a client side cursor be used causes the report to fail with the following error:

"User Session has Expired"

Solution:

The following ASP code has been used to create the record set.

```
strConn="Database=pubs;DSN=TestData;UID=sa;PWD=sa"
```

```
Set Session("oRs") = Server.CreateObject("ADODB.Recordset")
```

```
Session("oRs").CursorLocation=3
```

Setting the CursorLocation property to 3 directs the ADO Record Set to move through the data with a client side data cursor. The P2smon.dll which provides the connection to the Active Data does not interpret Client Side Cursors, this issue has been tracked in our database.

The workaround, in this case, would be to use Server side cursors. If the record set contains a Memo Field, however, this work around is not an option.

---

### Oracle stored procedures

Attempting to pass stored procedure values for an Oracle Stored Procedure will result in this error. This is because there is an issue with the Crystal Reports Print Engine (Crpe32.dll) handling Oracle Stored Procedures. This issue has been tracked (track ID 8884) and is fixed in version 7.0.1.192.

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### Incorrect Log on Credentials

The logon credentials being provided for the database are incorrect. If the user ID and password being passed do not have sufficient rights to the database object (Table, View, Stored Procedure, etc...) this error will occur.

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### Named Pipes Default Setting for an SQL Driver

This error could also be the direct result of a default setting of Named Pipes for a SQL driver. The Cliconfg.exe utility can be used to change the default to TCP/IP. This utility can be found under c:\<%systemdir%\system32.

## Sample ASP Applications

For sample ASP code to use as templates for your Crystal Reports web applications please download:

[Simpxmpps.zip](#) if you are developing web applications with Crystal Reports version 6.0,

[ASPMPS7.exe](#) if you are developing web applications with Crystal Reports version 7.0,

[ASPMPS8.exe](#) if you are developing web applications with Crystal Reports version 8.0,

from our support site at:

<http://www.crystaldecisions.com/downloads>

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## Contacting Crystal Decisions for Technical Support

We recommend that you refer to the product documentation and that you visit our Technical Support web site for more resources.

**Self-serve Support:**

<http://support.crystaldecisions.com/>

**Email Support:**

<http://support.crystaldecisions.com/support/answers.asp>

**Telephone Support:**

<http://www.crystaldecisions.com/contact/support.asp>