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Introduction

This troubleshooting guide is the Eighth in a projected series.

Because it crosses multiple technical areas, the ActiveFactory Reports-related issues occur often in Wonderware's Technical Support Queue. This *Tech Note* lists some common errors we have seen and their solutions.

Application Versions

- WIS 4.0 and later
- Historian Client 10 SP1 and later
- Windows 2003 and later
- Windows 2008 and later

Case scenarios

- Clicking on an On-Demand report, Unknown-Error is Shown
- AFWeb Trend Hangs on the WIS Client Machines
- In WIS it Can Take a Long Time to Expand the ActiveFactory Node

Scenario: Clicking on an On-Demand report, Unknown Item is Shown

When you open an On-Demand report, you can often see the Unknown item (Figure 1 below).

No matter what do you to change the DCOM securities or give full access for the certain folders, you still see this Unknown list.

Book1			
Wonderware I	nformation Server		
Unknown •Unknown			

FIGURE 1: UNKNOWN-ERROR WHEN OPENING ON-DEMAND REPORT

There are a number of causes for this issue.

Resolution

Internally, Excel creates some temporary files in the **Desktop** folder.

The first thing to check is to verify whether or not the **Desktop** folder exists, and whether the current log-on user can access it.

If the **Desktop** folder does not exist, create it. Details below:

- For 64-bit machine, check \[Windows]\SysWOW64\config\systemprofile
- For 32-bit machine, check \[Windows]\System32\config\systemprofile

When the Desktop folder already exists, make sure the current log-on user has Full Control on this folder and also is the owner of this folder (Figure 2 below).

Name ^	Date modified	Туре	Size	
\mu AppData	12/21/2011 12:37 AM	File folder		
Application Data	9/13/2012 9:21 AM	File folder		
🔒 desktop	9/13/2012 9:20 AM	File folder		
desktop Properties		Security Settings for	r deskton	
Concert Charine Security During Version Contention				-1
General Shanne Security Previous Versions Customize	Permissions	Auditing Owner Effe	ctive Permissions	3
Object name: C:\Windows\SysWOW64\config\systemprofi	le\de: You can ta	ke or assign ownership of	this object if you	have the required permissions or privile
Group or user names:				
SYSTEM .	Object nam	e: C:\Windows\Sys\	NOW64\config\	systemprofile\desktop
Administrators (IOMLKF0089D\Administrators)	Constant and		-	
	<u>C</u> urrent ow			
	Administra	tors (IOMLKF0U89D\Admi	nistrators)	
To change permissions, click Edit. Edit	Change ow	nerto:		
	Name			
Permissions for Administrators Allow Deny	& Admin	istrators (IOMLKF0089D∖	Administrators)	
Full control 🗸	🔺 🛛 👗 Xu, Ed	dward (Edward Xu@inven	isys.com)	
Modify 🗸				
Read & execute 🗸				
List folder contents 🗸				
Read 🗸				
Write 🗸	'			
For special permissions or advanced settings Advanced click Advanced.				
Leam about access control and permissions	Leam abou	t object ownership		
OK Cancel As	ylqc			ОК

FIGURE 2: SECURITY SETTING FOR THE DESKTOP FOLDER

The Unknown Item Appears When You Click on an On-Demand Report

Currently we have found that AFWeb Reporting cannot render an Excel report when the report contains a CHART page. For example, if your report looks like the following graphic (chart) in Excel, you will see the **Unknown** item from AFWeb. Figure 3 (below) shows the Excel report.



FIGURE 3: PUBLISHED REPORT WITH CHART

After you publish it, you open the report using AFWeb (Figure 4 below).

AGTIVE FACTORY	Home	Reports	Trend
Reports Predefined System Support Summary Reports Manual Data Entry Published Reports Published Reports Image: Test 1 Scheduled Reports Scheduled Reports Scheduled Reports			

FIGURE 4: OPEN THE REPORT FROM ACTIVEFACTORY AFWEB

You will see the **Unknown** link items from the ActiveFactory/WIS interface (Figure 5 below).

AGTIVE 🔶 FACTORY "	
Wonderware Information Server	
Unknown Onknown	

FIGURE 5: UNKNOWN ITEM WHEN THE TARGET EXCEL REPORT INCLUDES A CHART GRAPHIC

Workaround

• Embed the chart into a SHEET page.



FIGURE 6: WORKAROUND TO THE "UNKNOWN" ITEM

Cannot Find the Report When Clicking the On-Demand Report

You might see the following error message.

From WIS:



FIGURE 7: CANNOT FIND THE REPORT

From AFWeb:

Wordenson	ACTIVE	
Wonderwa	re Information Server	
Unknown =Unknowr	n	

FIGURE 8: UNKNOWN LIST WHEN BROWSING FROM THE AF WEB PAGE

This error message indicates that WIS or AFWeb cannot locate the report file. Your **ReportParameters.xml** file might be corrupted.

Resolution

- 1. Open the ReportParameter.xml from [C]:\inetpub\wwwroot\AFWeb.
- 2. Search for <Name>On Demand Reports</Name>.
- 3. In this example, you should see the element(s) [path] under the name element. The [path] element should include the full file path of **Book1.xlsx**, such as **C:\inetpub\wwwroot\AFWeb/Output/OnDemand/Source/Book1.xlsx**.
- If you see the [path] element with the URL format <Id>
 http://inetpub/wwwroot/AFWeb/Output/OnDemand/Source/Book1.xlsx/</ld>, this indicates a problem.
- 5. Replace <Id>URL Format</Id> with <Id>File Full Path Format</Id> for all the elements under the <Name>On Demand Reports</Name> element.

Scenario: AFWeb Trend Hangs on the WIS Client Machines

Cause

file:///C|/inetpub/wwwroot/t002719/t002719.htm[1/8/2013 10:01:06 AM]

AFWeb local cache might be out of date.

Context

After AFWeb successfully makes a connection to given Historian(s), the WIS client component caches the current connection into local files on the WIS client machine.

However, if the cached connection information is no longer true, the following scenarios are possible:

- Two Historian Servers (A and B) were connected and cached. Now, the Historian Server A is no longer connected.
 If this is the case, Trend will still wait for the connection of Historian A to timeout.
- The Historian Server A was connected and cached. Now, the Historian B is connected.
 - If this is the case, Trend will not start, or it will hang after starting.

In either case, the cached file is not updated in the current implementation.

Resolution

Delete the cached file manually. To do this,

- For Windows 2008 or Windows 7, the cached file is at
 [C]:\Users\CurrentLogOnUser\AppData\Local\Wonderware\ActiveFactory\servers.xml
- For Windows 2003 or Windows XP, the cached file is at [C]:\Documents and Settings\ CurrentLogOnUser\Local Settings\Application Data\Wonderware\ActiveFactory\servers.xml

The WIS client component will create new cache file.

Cause

Sometimes, the URLs of http://WISNodeName/AFWeb and http://WISNodeIPAddress/AFWeb are not the same.

Context

When AFWeb opens a Trend, it is trying to obtain the root URL from aaHistClientReportSite table of the Runtime Database. If the WIS clients are in different domains than the WIS server, the **http://WISNodeName/AFWeb** is not sufficient.

Workaround

Map the WISNodeName with WISNode's IP Address.

For example

1. Open C:\Windows\System32\drivers\etc\hosts.

Add this line:
localhost name resolution is handled within DNS itself.
127.0.0.1 localhost
::1 localhost
10.2.81.99 IOMLKF0089D

Note: In Windows 2003, you might need to reboot the machine after you have changed the hosts file.

Resolution

Install **SQLXML** on the WIS node and point to the Historian machine. For details, please see <HistorianClient User Guide> at page 32 Using HTTP as the Server Connection Protocol.

Scenario: In WIS It Can Take a Long Time to Expand the ActiveFactory Node

If you have many published reports under the ActiveFactory node, expanding the Reports will take quite long time when you first try. This behavior is also known as the **First-Time-Expand** issue, and the performance improves on the second try, more on the third try, and so on.

However, when you come expand after a long idle period, you will see the **First-Time-Expand** behavior again, even though there is no any new published report.

The reason for this performance repetition is the default settings in the **IIS Application Pool**.

In IIS 6.0 or 7.x, each active Application Pool has one corresponding **w3wp.exe** (w3wp.exe *32 for 64-bit machine). When the first application in the Pool is launched, it triggers one instance of **w3wp.exe**. This instance of w3wp.exe has its own cache mechanism.

However, the instance of w3wp.exe has a predefined Life-span. If there is no activity in the Application Pool during this Life-span, the instance of w3wp.exe is terminated and all its cached content is discarded.

You can change the default values to make the Life-span longer.

The following parameters in the Application Pool impact the Life-span.

- IIS 6.0: Recycle worker processes (in minutes)
- IIS 7.x: Regular time intervals (in minutes)

For IIS 6.0

🦉 Internet Informatio	n Services	(IIS) Manager	
🧐 Eile <u>A</u> ction <u>V</u> iew <u>W</u> inc	low <u>H</u> elp		
⇔ → 🖻 🖪 🖀 😫 😫		П	· · · · · · · · · · · · · · · · · · ·
Internet Information Servic	ies	Description	Path
Application Pools	FWebPool	Properties	?×
	Recycling Performa	nce Health Identity	
ChangeControl		r processes (in minutes):	120
DefaultAppPool	Recycle worke	r process (number or requests):	35000
SharePoint - 80		A <u>d</u> d	
SVAppPool		Remove	
Web Sites Web Service Extens		Edit	
1	Memory recycling		
Right click and select	Maximum virtu	al memory (in megabytes):	500
Properties.	Maximum used	l memory (in megabytes):	- 192
		OK Cancel	Apply Help

FIGURE 9: AFWEB APPLICATION POOL SETTING (RECYCLING TAB IN IIS 6)

• Check the Recycle worker processes (in minutes) option and change the value to 1440. The maximum number is 10080.

Recycle worker processes (in minutes): 1440 ÷

FIGURE 10: RECYCLE WORKER PROCESS IN MINUTES

• Click the **Performance** tab and change the **Shutdown worker processes after being idle for (time in minutes)** option setting to **1440**. The maximum number is **10080**.

AFWebPool Properties	? ×
Recycling Performance Health Identity	
Idle timeout	1440
Request queue limit Imit the kernel request queue (number of requests):	1000
Maximum ⊆PU use (percentage):	- 100
Refresh CPU usage numbers (in minutes):	5
Action performed when CPU usage exceeds maximum CPU use:	
Web garden Maximum number of <u>w</u> orker processes:	÷ 1
OK Cancel Apply	Help

FIGURE 11: PERFORMANCE > SHUTDOWN PROCESS AFTER IDLE

For IIS 7.x

1. In the Application Pools panel, right-click AFWebPool and click Recycling.

Internet Information Services (IIS) Manager ► IOMLKF0089D ► Application Pools File View Help Connections Application Pools 🍭 - 🔚 🔰 😪 Edit Application Pool Recycling Settings 🝓 Start Page This page lets you view and manage the list of application pools on the □ GONENTIC IOMLKF0089D (CORP\edwardx) **Recycling Conditions** and provide isolation among different applications. Application Pools - - Go - - - - Show All | Group by: 🗄 👩 Sites Filter: Name 🔺 Status -Fixed Intervals aaFlexLicWebServiceAppPool Started Fixed number of reque Regular time intervals (in minutes): AFWebPool Started Add Application Pool... ASP.NET 1.1 1440 ASP.NET v4.0 Set Application Pool Defaults... Check and give new value. ASP.NET v4.0 Class Specific time(s): Start Classic .NET AppPod 📄 DefaultAppPool Stop SVAppPool Example: 8:00 PM, 12:00 AM z Recycle... Basic Settings. Memory Based Maximums Recycling... Private memory usage Virtual memory usage (in KB): Advanced Settings... Rename × Remove View Applications Help Previous Next Online Help

FIGURE 12: AFWEB APPLICATION POOL SETTING

- 2. Click the Regular time intervals (in minutes) option and type 1440 (24 hours). The maximum number is 10080 (168 hours).
- 3. Right-click the AFWebPool item and click Advanced Settings.
- 4. Change the Idle Time-out (minutes) setting to 1440. The maximum number is 10080 (Figure 12 below).

Internet Information Services (IIS) Manager IOMLKF0089D ► Application Pools File View Help Connections Application Pools 🔍 - 🔚 🛯 🖄 🔛 ? X Advanced Settings 🝓 Start Page This page lets you view and manage the list of application pools on and provide isolation among different applications. General) ٠ Application Pools .NET Framework Version ▼ A Go → 🔙 Show All | Group I v2.0 🗄 🐻 Sites Filter: Enable 32-Bit Applications True Name 🔺 Status Managed Pipeline Mode Classic aaFlexLicWebServiceAppPool Started Name AFWebPool AFWebPool Add Application Pool... Queue Length 1000 ASP.NET 1.1 Start Automatically True Set Application Pool Defaults... ASP.NET v4.0 🗆 CPU ASP.NET v4.0 Start Limit 0 Classic .NET Ad Limit Action NoAction Stop DefaultAppPoo 5 Limit Interval (minutes) SVAppPool Recycle... Processor Affinity Enabled False Basic Settings... Processor Affinity Mask 4294967295 Process Model Recycling... Identity LocalSystem Advanced Settings... 1440 Idle Time-out (minutes) Rename Load User Profile False Remove Maximum Worker Processes 1 Ping Enabled True View Applications Ping Maximum Response Time (second 90 Ping Period (seconds) 30 Help Shutdown Time Limit (seconds) 90 Online Help • Startun Time Limit (seconds) 90 Idle Time-out (minutes) [idleTimeout] Amount of time (in minutes) a worker process will remain idle before it shuts down. A worker process is idle if it is not processing requests and no new requests are received. OK Cancel

FIGURE 13: APPLICATION POOL IDLE TIME-OUT (MINUTES)

By changing the Application Pool settings, the cached contents remain in memory longer. Using this approach, you can keep the cached contents in memory for one day or more.

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