

[Tech Note 983](#)

Resolving Issues in Publishing Historian Client v10.1 Reports

All Tech Notes, Tech Alerts and KBCD documents and software are provided "as is" without warranty of any kind. See the [Terms of Use](#) for more information.

Topic#: 002809

Created: October 2013

Introduction

Wonderware Historian Client (HistClient) allows you to publish reports using Microsoft Excel, Word, and Trend to the ActiveFactory Reporting Website (AFRWS). If you experience any problem in publishing HistClient reports to the AFRWS, you can use the recommendations in this *Tech Note* to trouble-shoot and to resolve the problem.

Since you can use the Wonderware Information Server (WIS) to view the published reports, AFRWS and WIS are used interchangeably in this *Tech Note*.

Because any of these suggestions can resolve the issue, you should go back to check if it helps resolving the issue after applying each of the tips.

Application Versions

- Wonderware Historian Client 2012 R2 (version 10.1) or above
- Wonderware Information Server (WIS) 2012 R2 (version 5.0) or above
- Wonderware Historian 11.0 P01 or above
- Microsoft Office Excel 2007 SP2 (or later), or 2010 (32-bit)
- Microsoft Office Word 2007 SP2 (or later), or 2010 (32-bit)
- Microsoft SQL Server 2008 SP3 or SQL Server 2012

Acronyms

- **HC**: Historian Client Desktop version (Trend, Excel Workbook, Word Report)
- **HCRWS**: HistClient Reporting Website (used interchangeably with AFRWS)
- **AFRWS**: ActiveFactory Reporting Website (used interchangeably with HCRWS)
- **WIS 5.0**: Wonderware Information Server 5.0 (used interchangeably with InfoServer)
- **AF Web Client**: Machine using Internet browser to view published reports

- **Historian:** Wonderware Historian version 11.0 or above

Assumptions

This Tech Note assumes that you are familiar with the following products:

- Historian 11.0 or later
- Historian Client 10.1 or later
- Wonderware Information Server (WIS) 5.0 or later
- MS SQL Server 2008 or later
- MS Windows Operating Systems (2008 or Windows 7)

Overview

The following components are used during AF report publishing to the AFRWS:

Historian's Runtime Database Tables

The following tables are added to the Runtime database when AFRWS is first installed.

- **aaHistClientReport:** Contains one row for each report that is published.
- **aaHistClientReportsFolder:** Contains one row for each report folder that appears under the main Published Reports navigation node.
- **aaHistClientReportSite:** Contains basic configuration information for the AFRWS such as the URL.

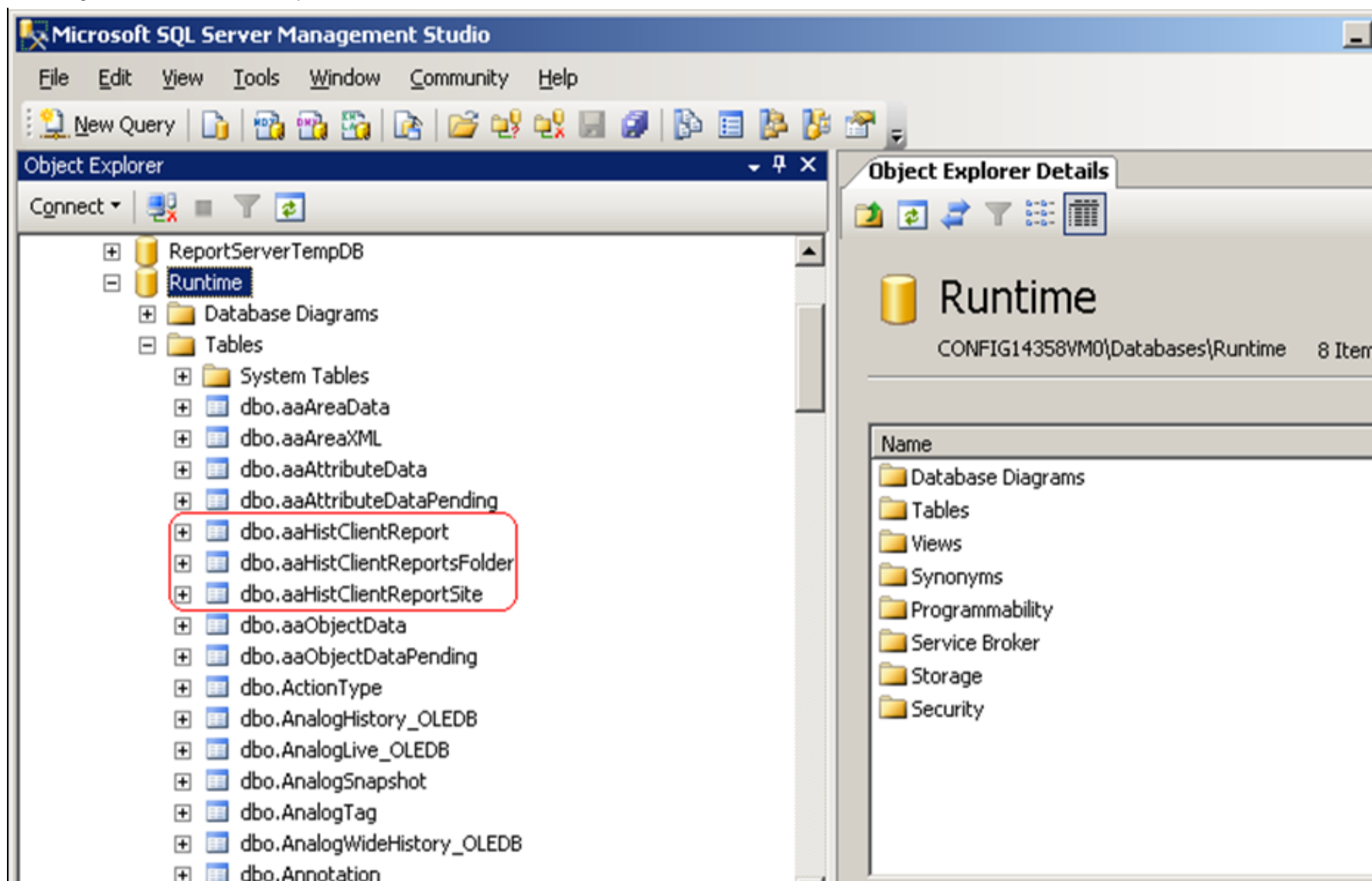


FIGURE 1: RUNTIME DB TABLES USED BY AFRWS

Report Folders Located on the Web Server

These folders contain the published reports. Each report type (Static, On Demand, and Scheduled) has its own folder. By default, they are configured under the AFWeb output folder at C:\Inetpub\wwwroot\AFWeb\Output.

Each of these folders contains two subfolders: **Source** and **Target**. When a report is published, the Report Service copies the published report file to the Source folder. The Target folder is used during the actual generation of the report by the website user. For scheduled reports, there is a subfolder for each time period.

Important: These tables and stored procedures are for internal use only. Do not modify them.

XML Files

The XML files control the configuration and parameters for published reports. They are created during the installation of AFRWS Server in the AFWeb folder at C:\inetpub\wwwroot\AFWeb\Output. The following XML files are used by the Reporting Website:

- **ReportParameters.xml:** This file stores information related to the reports. There is a section for each report group (Pre-Defined, System Status, Summary Reports, and so on), as well as sections for each type of report in the report groups. For published reports, additional sections are included to contain information regarding the report name, file names and paths, the report type, and so on.
- **Configuration.config:** This file stores basic information for the website, such as schedules and archival rules for reports and the folders for scheduled, static, and on-demand reports.
- **ReportsDefinition.xml:** This file stores all of the query definitions for the pre-configured reports, as well as information regarding the style sheet files for these types of reports.

aaHistClientReportingService

This service performs all the report publishing tasks.

Report Publishing Sequence

- When a report is published to the AFRWS, information about the report is added to the Historian's Runtime database.
- The report file is then copied to the proper report folder on the computer running AFRWS by the aaHistClientReportingService service. The service checks the Runtime database periodically to see if there is a new report to be published to the AFRWS.
- For a **Static** report, the results are saved as an HTML file. When accessing the report, client users see the saved static data.
- For an **On-demand** report, only the report definition is saved, but no data. Current data is retrieved from the database whenever a client user accesses the report.

Troubleshooting Tips

1. Be sure to install MS Office 2007 (SP2 or later) or 2010 (32-bit version only) on the AFRWS/WIS Server node. This is a base-line requirement and will allow you to generate and view the published report.
2. Run the O/S Configuration utility if applicable.
3. Click the **Enable Distributed COM (DCOM)** option for the computers running AF desktop components and AFRWS (or WIS). To check this, navigate to My Computer Properties by clicking through Windows Start -> All Programs -> Administrative Tools -> Component Services -> Computer -> My Computer -> **Default Properties** tab.

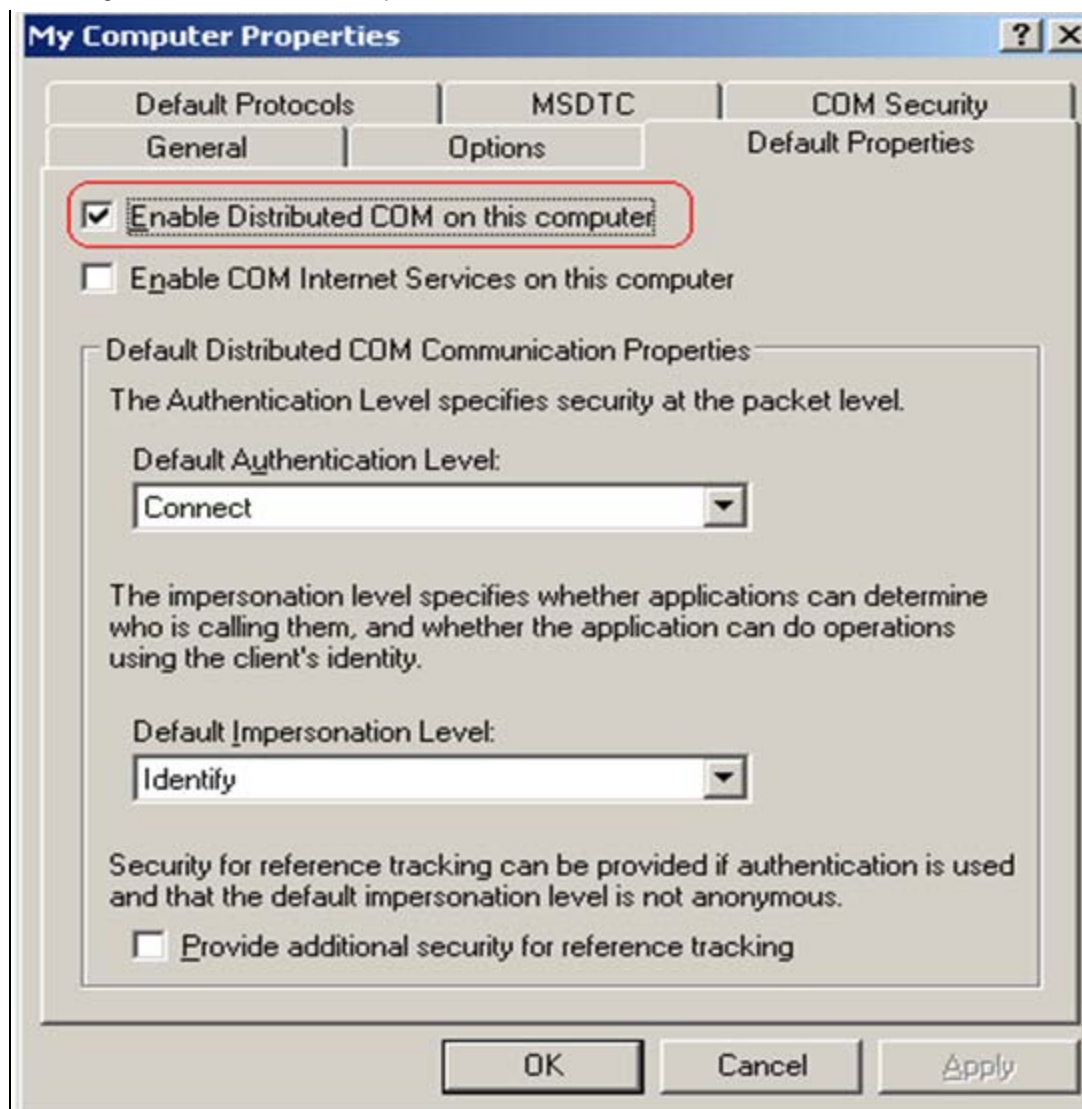


FIGURE 2: ENABLING DCOM

Configure DCOM for Excel to Use The Launching User

1. Click **Start/All Programs/Administrative Tools**.
2. Click **Component Services/Computers/My Computer/DCOM Config**.
3. Right-click **Microsoft Excel Application** (see Note below).
4. Click the **Identity** tab, then click the **The launching user** option.
 - **The interactive User:** The application will run using the security context of the user currently logged onto the computer. If this option is selected and the user is not logged on, the application will not start.

- **The launching User:** The application will run using the security context of the user who started the application. The launching user and the interactive user can be the same.
- **This user:** You can specify the user whose security context will be used to run the application.

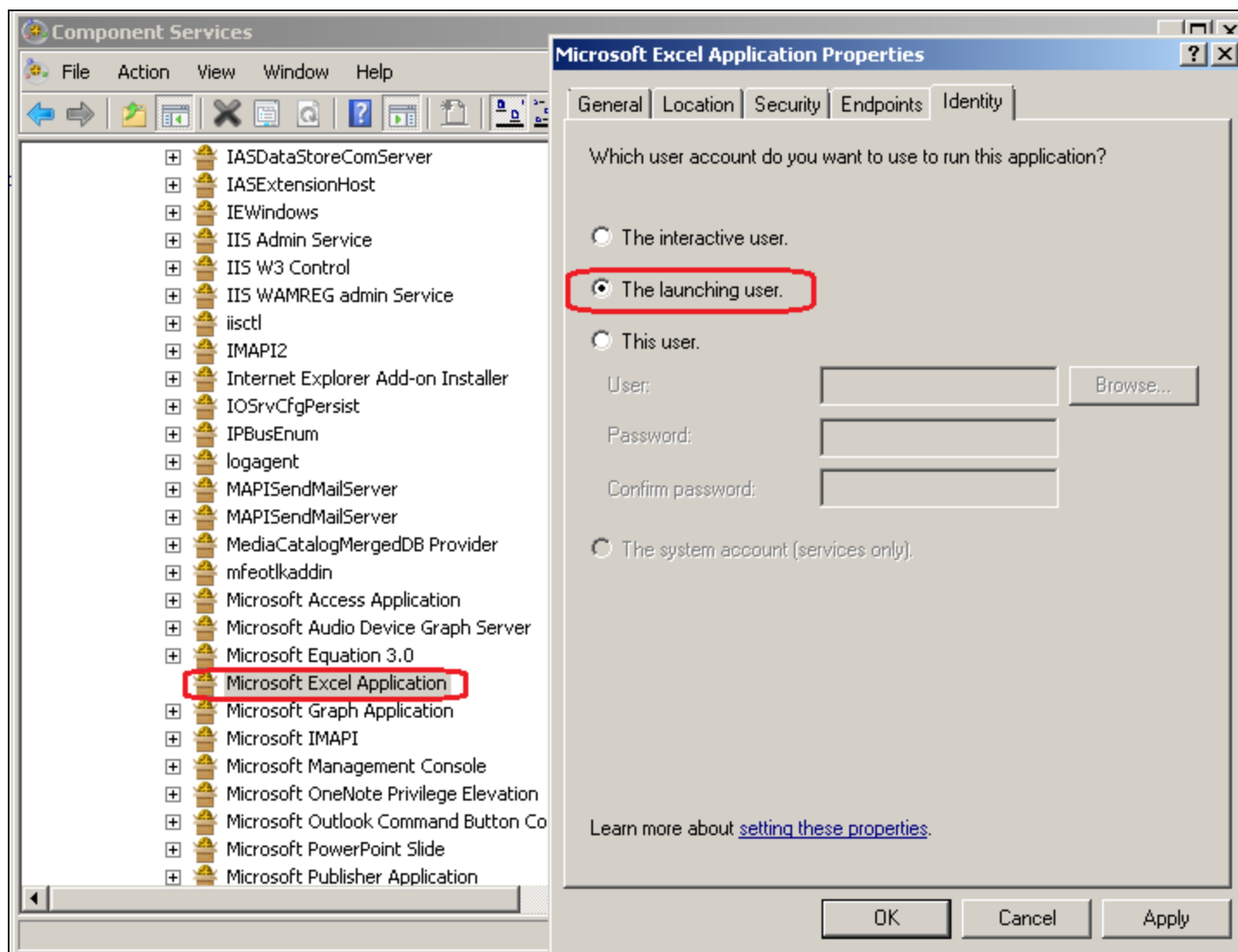


FIGURE 3: CONFIGURE MICROSOFT TO USE THE LAUNCHING USER

Note: The Component Services list can display the GUID {00020812-0000-0000-C000-000000000046} instead of the application name for MS Office Excel (Figure 3 above).

Enable Anonymous Access for AFWeb

1. Open the Internet Information Services (IIS) Manager (Run **inetmgr**).

2. Browse to **Web Site/Default Web Site**.
3. Highlight **AFWeb** and scroll down to the IIS section. Then double-click on the **Authentication** icon.

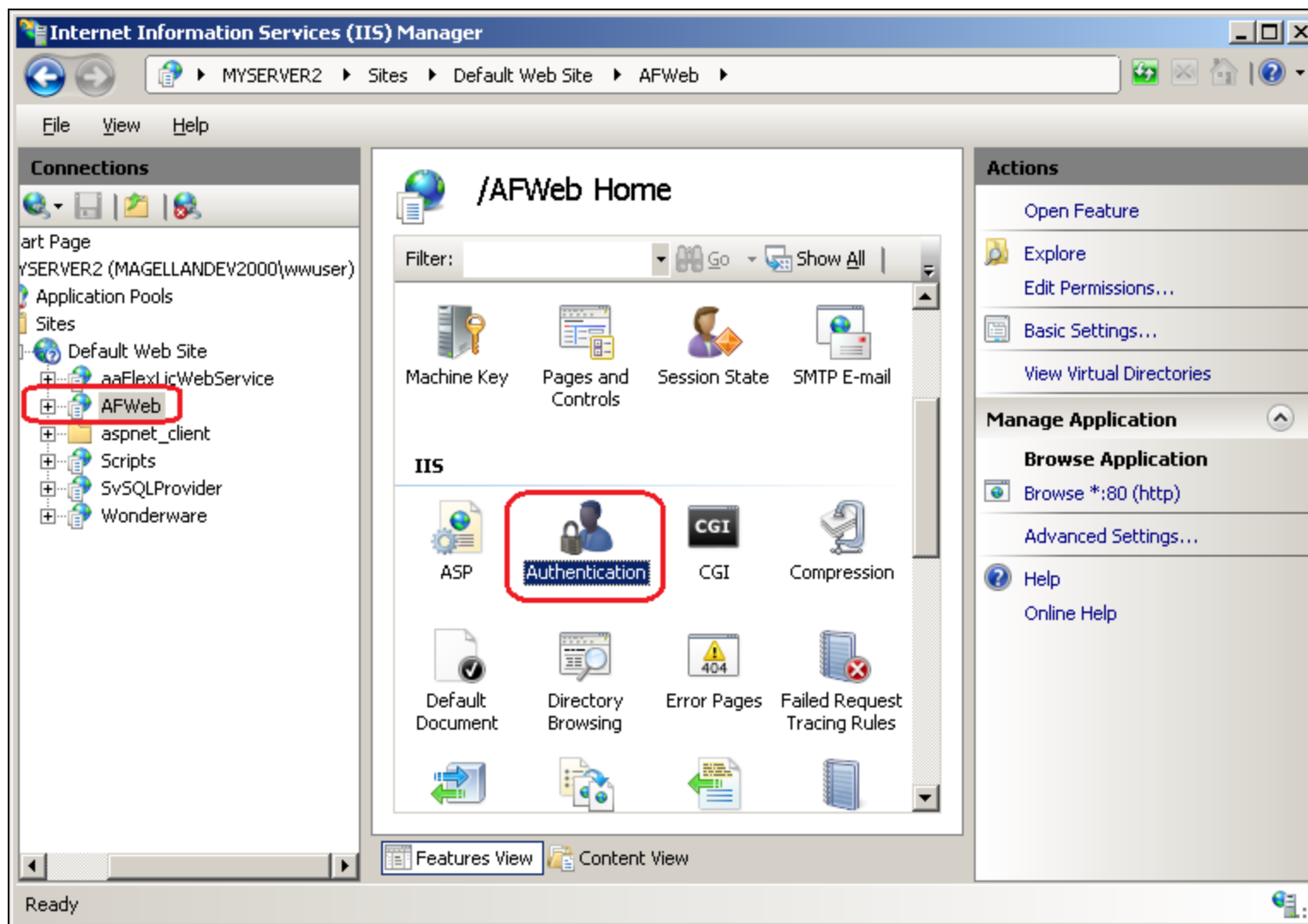


FIGURE 4: ENABLING ANONYMOUS ACCESS FOR AFWEB

4. In the **Authentication** dialog box, enable the **Anonymous Authentication** option.

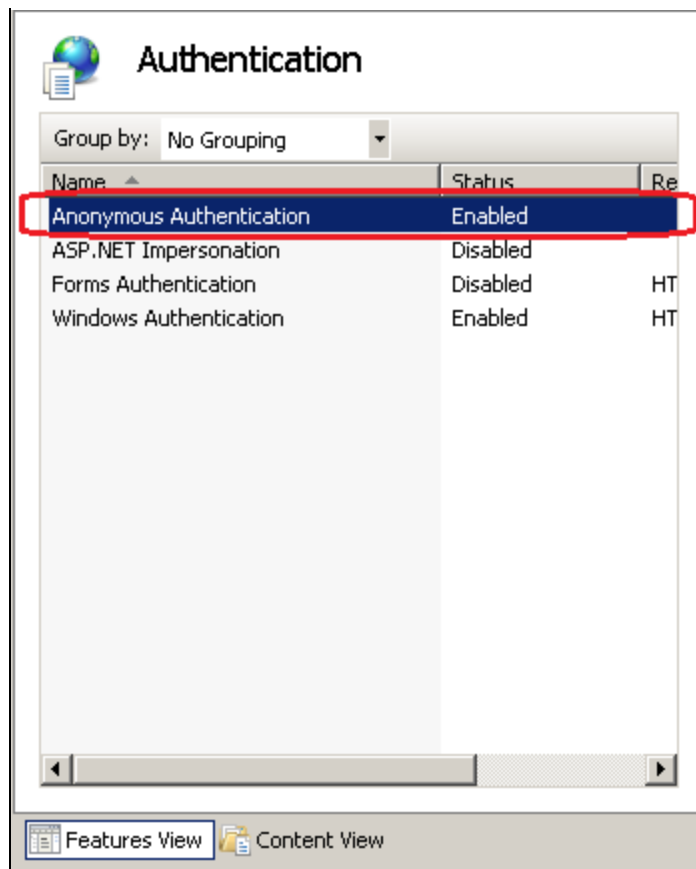


FIGURE 5: ENABLE ANONYMOUS AUTHENTICATION

- Anonymous access allows users to establish an anonymous connection. The user logs on to IIS with an anonymous or guest account.

Verify aaHistClienReportService Configuration

1. Open **Control Panel/Administrative Tools/Services**.
2. Check that the **aaHistClientReportService** is configured for **Automatic** and **Local System**.
3. Restart this service after a report has been published.

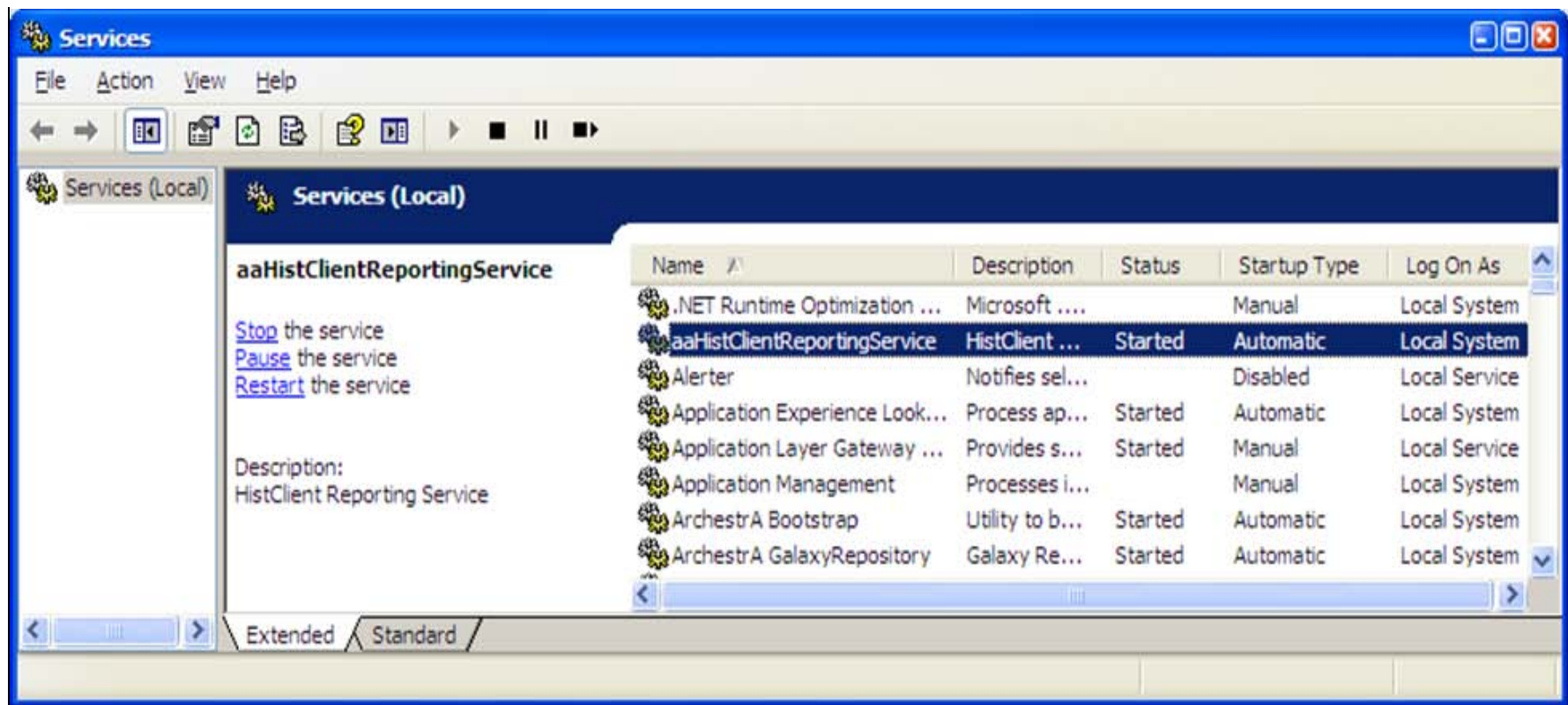


FIGURE 6: AAHISTCLIENTREPORTSERVICE

Check Event Logs

Check the **Windows Application**, **System**, and **Security Event Viewer** logs for any related messages. If the report failed to be published to the AFWeb site, you will see messages about the failure. These messages can be very useful and you can use the message text to research solutions.

Verify the Report Exists

Check if the report exists in the aaHistClientReport table (Figure 6 below).

1. On the Historian Server, open SQL Server Management Studio.
2. Expand **Databases/Runtime/Tables**.
3. Right-click **dbo.aaHistClientReport** and click **Open table**. If the report's name does not appear in the **FileName** column, make sure the aaHistClientReportingService is started and DCOM has been configured correctly as shown in the previous steps. Also, check the Windows EventViewer Application log for any related message.
4. Check the value of the **Published** column for the **aaHistClientReport** table to see if the value is **1**. This indicates that the report

has been published successfully (Figure 6 below).

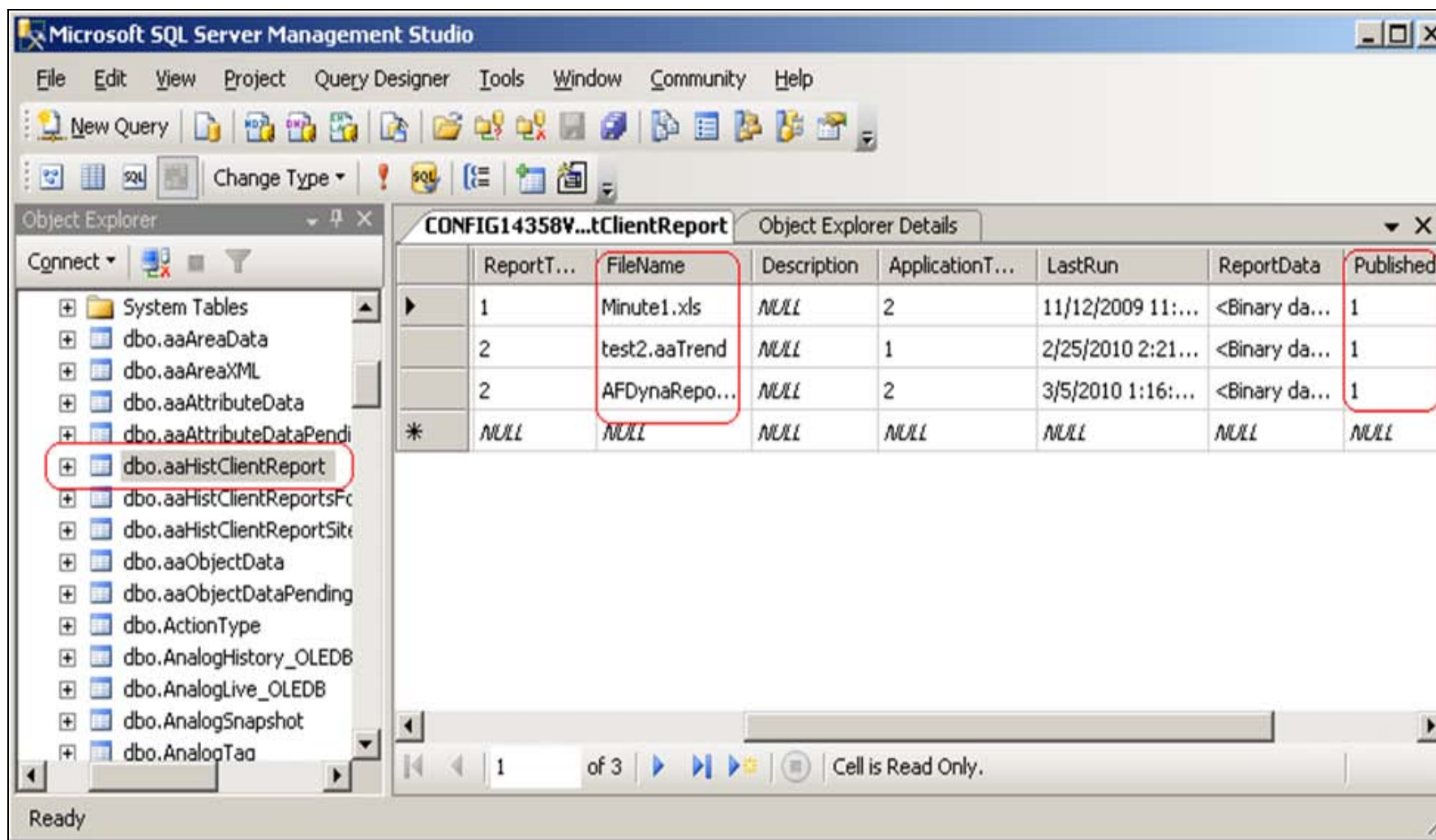


FIGURE 7: AAHISTCLIENTREPORT

- If the value of the Published column for the report is 0, verify that the Historian data source from WIS is configured correctly.

Verify WIS Configuration

- Start up the Wonderware Information Server.
- From the **Launch Pad** panel, expand **Administrator** and click **Data Source Manager**.
- Click the Historian's Data Source name which has data source type of Historian to go to the Modified Shared Data Source dialog box as shown in the following figure.

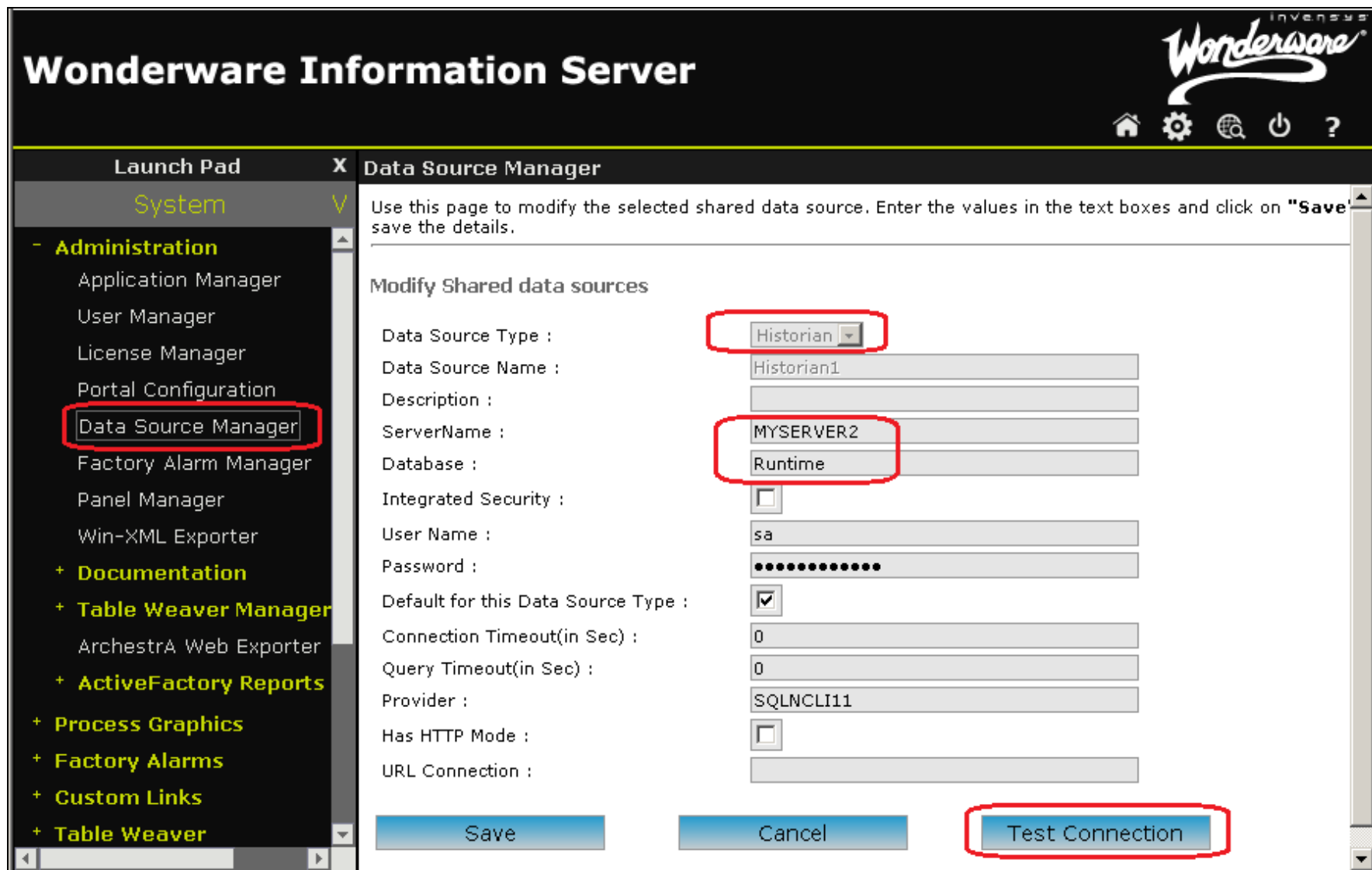


FIGURE 8: HISTORIAN DATA SOURCE MANAGER

4. Click the **Test Connection** button at the bottom of the panel to check if everything is configured correctly, and that the Information Server can connect to the Historian Server.

Match SITEID and ReportSiteKey Values

The **SITEID** value is found in **Configuration.config** and it must match the **ReportSitekey** value in the **aaHistClientReportSite** table.

1. Use Notepad to open **Configuration.config**. The location is **C:\inetpub\wwwroot\AFWeb**.

- Search (**Ctrl + F**) for **SITEID**. In this example, the SITEID is value **1**, and is the same as the ReportSiteKey value of (Figure 8 below):

<SITEID Description="The ID of this site in the Runtime database's aaHistClientReportSite table. This should be set automatically by the installation.">1</SITEID>

- Confirm the **SiteURL** value in the **aaHistClientReportSite** table is correct.

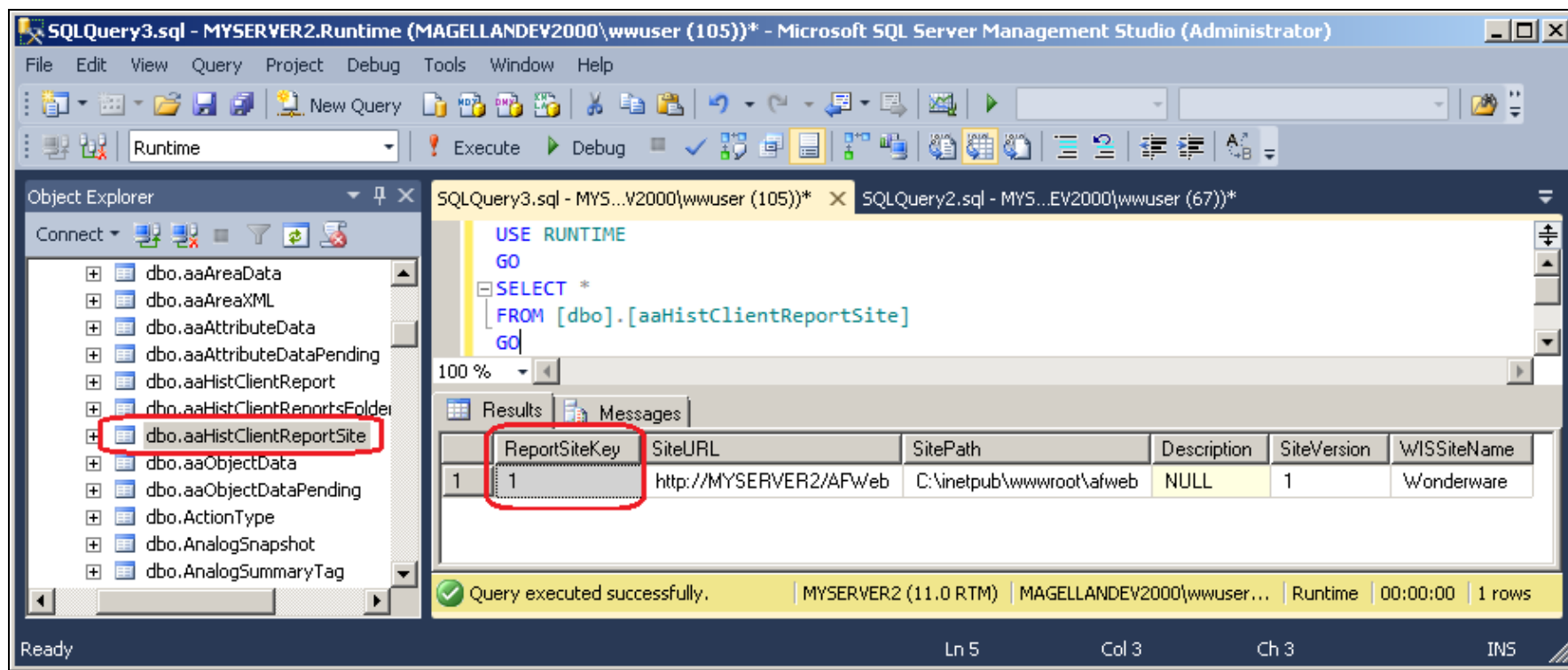


FIGURE 9: AAHISTCLIENTREPORTSITE

- Verify that the **ReportSiteKey** in the **aaHistClientReportSite** table matches with that in the **aaHistClientReport** table for the report in question.

Verify the Output Source Folder Contains the Matching Excel File

- For **OnDemand** reports, go to **C:\inetpub\wwwroot\AfWeb\OnDemand\Source**.
- For **Scheduled** reports, go to **C:\inetpub\wwwroot\AfWeb\Scheduled\Source**.
- For **Static** reports, go to **C:\inetpub\wwwroot\AfWeb\Static\Source**.

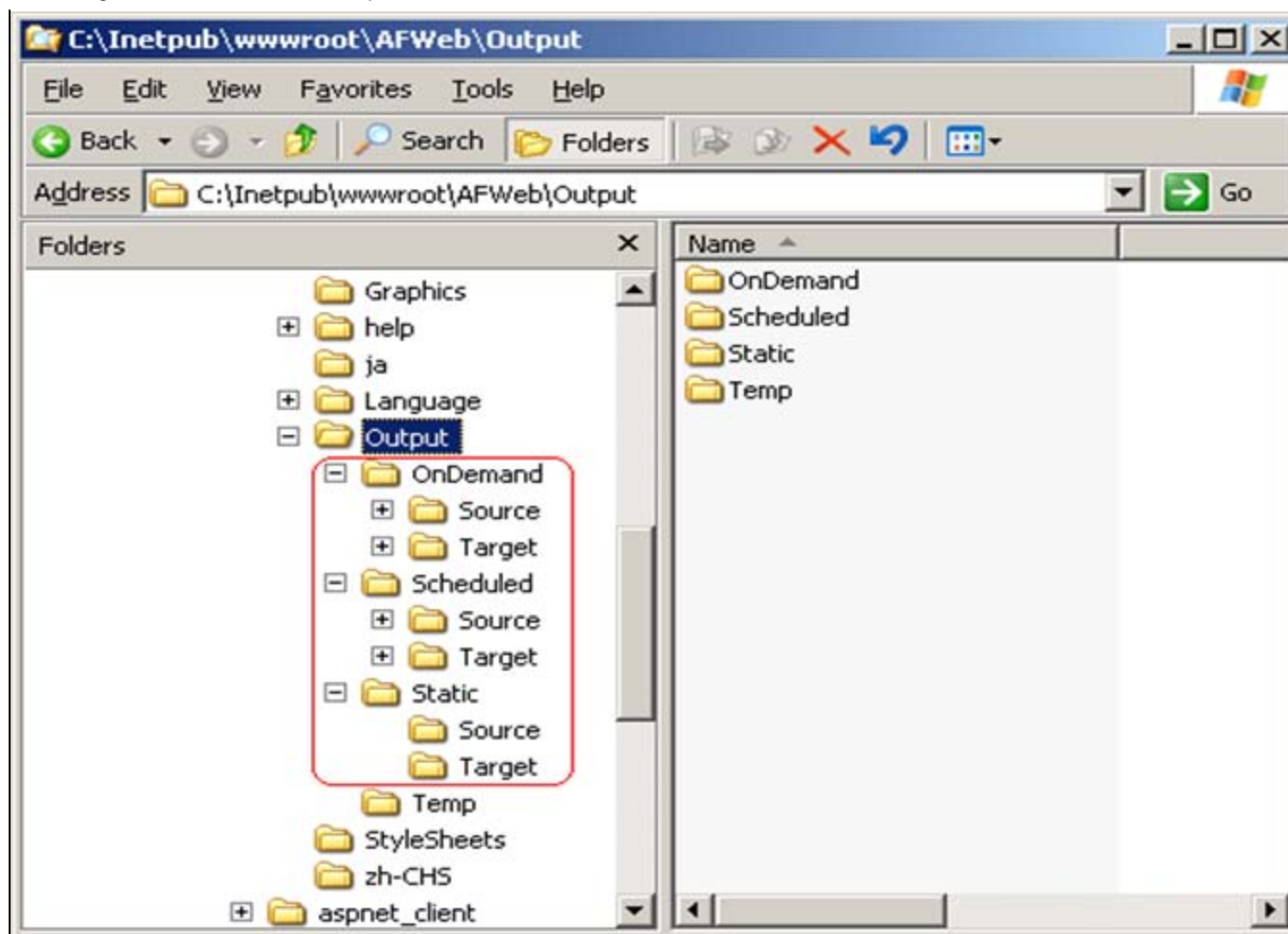


FIGURE 9: AFWEB OUTPUT FOLDERS

- Double-click the report in the **Source** folder to open the file there. Any issue or any popup message preventing the file from opening should be resolved before the report can be published to the web site.

Note: Multiple instances of Excel.exe processes can be started on the computer running the ActiveFactory Workbook report. If this is the case, close the Workbook and end all Excel.exe processes from the Windows Task Manager, then run the test again.

Verify the Target Folders Contain Reports

- Verify that the corresponding Target folder contains the HTML file generated by the Reporting Service (aaHistClientReportService) before publishing the report. If the HTML file is not there in the folder, make sure that the aaHistClientReportService is started and DCOM has been enabled for Excel (above).
- For a **Scheduled** report, go to **C:\inetpub\wwwroot\AfWeb\Output\Scheduled\Target**.
- For a **Static** report, go to **C:\inetpub\wwwroot\AfWeb\Output\Static\Target**.

- For the **OnDemand** report, the report is generated only after the user clicks on the report in the WIS Published Reports/OnDemand Reports tree. The Reporting Service converts the Excel file in the Source folder into an HTML file, names it as tmpXX.html, where XX is a number the aaHistClientReportService assigns to the temporary file. The Service then puts the file into the C:\inetpub\wwwroot\AfWeb\Output\Temp location.

Verify the Report Name Exists

The **Reportparameters.xml** file is in **C:\inetpub\wwwroot\AfWeb**. If the report is not there, make sure the following folders are configured for **Everyone** with **Full Control**.

- **C:\inetpub\wwwroot\AfWeb\Language**
- **C:\inetpub\wwwroot\AfWeb\Language\en**
- **C:\inetpub\wwwroot\AfWeb\Language\en-us**

B. Nguyen

Tech Notes are published occasionally by Wonderware Technical Support. Publisher: Invensys Systems, Inc., 26561 Rancho Parkway South, Lake Forest, CA 92630. There is also technical information on our software products at [Wonderware Technical Support](#).

For technical support questions, send an e-mail to wwsupport@invensys.com.



[Back to top](#)

©2013 Invensys Systems, Inc. All rights reserved. No part of the material protected by this copyright may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording, broadcasting, or by any information storage and retrieval system, without permission in writing from Invensys Systems, Inc.

[Terms of Use](#).