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Introduction

This troubleshooting guide is the fifth in a projected series.

This *Tech Note*, presents some real world cases and resolutions, such as not being able to convert the managed InTouch windows into Silverlight package, not being able to publish the converted Silverlight package to the WIS Portal, and not being able to verify the given WIS Homepage URL.

Application Versions

- WIS 4.0 and later
- Windows 2003 Server SP2
- Windows 2008 Server

Case Scenarios

- Cannot Verify WIS Homepage URL
- Web Exporter Cannot Transform the InTouch Win File into Silverlight Package
- Cannot publish the Silverlight package to the selected WIS portal

Scenario: Cannot Verify WIS Homepage URL

When you create a new Web Exporter project or publish a transformed InTouch window, the given WIS URL has to be verified successfully. If the WIS URL is not verified, you will see the following Warning (Figure 1 below).



FIGURE 1: INFORMATION SERVER URL NEEDS TO BE VERIFIED

Cause Analysis

First, make sure that the given URL is a valid URL. To verify this, you can open an instance of Internet Explorer (IE) and copy the Information Server (WIS) URL into the IE Address Bar.

If you cannot see the WIS Homepage using this URL, examine the URL to check whether or not WIS is ready to use.

If the URL is OK, the other two common issues of IIS 7.x are related to **WebDAV** settings.

To diagnose WebDAV settings

• Double-click the WebDAV Authoring Rules item. When you see the Error message shown in Figure 2 (below), it means that the **IIS 7.x Configuration File** contains a duplicate element.



FIGURE 2: CANNOT OPEN WEBDAV AUTHORING RULES WITH DOUBLE-CLICK

Solution: IIS 7.x Configuration File Contains a Duplicate Element

- 1. Go to [C]:\Windows\System32\inetsrv\config directory, and backup the **applicationHost.config** file.
- 2. Open applicationHost.config with Notepad.
- 3. Un-check the Word Wrap format mode.

4. Press Ctrl-G and provide line number 1248.

The line's content is <location path="Default Web Site/Wonderware/aawinroot">.

The error message (Figure 2 above) tells us that the same element already exists in the configuration file.

You can comment out the whole element using the <!-- ... --> block, as shown below:

- 5. Save and close the applicationHost.config file.
- 6. Double click on WebDAV, the error Message Box should not be seen again.
- 7. Verify that the WIS URL works.

Solution: Give wrong Authoring Rules for WebDAV

Verify the WebDAV Authoring Rules setting in the Default Web Site. As the Root of Authoring Rules for every Virtual Directory, by default, it remains empty in the page.



FIGURE 3 VERIFY WEBDAV AUTHORING RULES ON [DEFAULT WEB SITE] LAYER

Verify WebDAV Authoring Rules setting in aawinroot directory. You should see All Users with Read and Write Access

Permission (Figure 4 below).



FIGURE 4: AAWINROOT FOLDER SHOULD SHOW "ALL USERS" WITH READ AND WRITE PERMISSIONS

Scenario: Web Exporter Cannot Transform the InTouch Win File into Silverlight Package

This scenario can occur even a when using very simple InTouch window.

In this scenario, you will see the following error message:

Transformation failed! : Undetermined error, build project fail.

Cause Analysis

Web Exporter uses Microsoft's **msbuild.exe** to build the intermediated transformed files into Silverlight package without using the Microsoft Visual Studio IDE.

Msbuild.exe only works for the three Microsoft predefined Platforms: Any CPU, x86 and x64.

By default, it looks for **Any CPU**. However, if there is a Platform value defined under the System Environment Variables, Msbuild.exe will use this Platform value to do the build work.

Obviously, if the new Platform value is different from the above three predefined values, the build fails and Web Exporter generates the **Transformation Failed** error message.

You can provide a dedicated Platform name in the file. In this case, **msbuild.rsp**. **msbuild.exe** will ignore the Platform value defined in the System Environment Variables List. In this example, the **Transformation failed** error occured on a HP machine. Check the System Environment Variables List to see such variables as **Platform = HPD** defined in the Environment Variables List.

Environment Variable	25	×	
⊂User variables for ed	wardx		
Variable CLEARCASE_GR CLEARCASE_PR INCLUDE LIB	Value EARCASE_GR CORP\sgwwdevccusers EARCASE_PR CORP\sgwwdevccusers CLUDE C:\Program Files (x86)\Microsoft Visual C:\Program Files (x86)\Microsoft Visual C:\Program Files (x86)\Microsoft Visual		
System variables			
Variable	Value	▲	
BATHEAT	.COM: EXE;.BAT;.CMD;.VBS;.VBE;.JS;		
Platform	HPD		
PROCESSOR_A PROCESSOR_ID	AMD64 Intel64 Family 6 Model 26 Stepping 5, G	•	
	Ne <u>w</u> Edit Delete		
	OK Cance	el	

FIGURE 5: PLATFORM DEFINITION SYSTEM VARIABLE MIGHT CAUSE THE ERROR

Workaround

As mentioned before, msbuild.exe will use the platform value that you explicitly provide. See following steps for details.

- 1. Go to [C]:\WINDOWS\Microsoft.NET\Framework\v3.5, and open the msbuild.rsp file with Notepad (Run it as Administrator).
- 2. Add the following line: p:Platform=AnyCPU, and save the file.
- 3. This should fix the error mentioned in the scenario.

Note: You might have the **Read only** error when you save this msbuild.rsp. In this case, you need to give ownership and full controls to **Everyone** for this file.

Scenario: Cannot Publish the Silverlight Package to the Selected WIS Portal

In this scenario, you will see the authentication message. When you click **OK**, it doesn't disappear.

New folder	http://localhost/wonderware	
Name ^	Size	
😽 ArchestrA Web Exporter		
Eile View Options Help		
i 党 👂 💁 🖳 🎯 🕜 i 🥹 🧭 🚦	UserName: [edx08r2a\vmadmin] Your account is not	
Publishing (() Arct		
New Project1	User name:	
WindowSet001	Password:	
	Remember my password	
	OK Cancel	
	Publishing Status	
	Status: Start Publish Keeps pop-up this window.	0 / 0
	r +1	Close
		No. Your Advanta of Long and

FIGURE 6: AUTHENTICATION DIALOG KEEPS REAPPEARING AFTER YOU SUPPLY THE RIGHT CREDENTIALS

Cause Analysis

The issue is related to the **WebDAV** security settings in both IIS 6.0 and 7.x.

When you click **Publish**, you are telling Web Exporter to copy the selected files from their local locations to the virtual folder at **http://[WISServer]/[Wonderware]/aawinroot**. The physical path might be: **[C]:\inetpub\wwwroot\[Wonderware]\aawinroot** via HTTP Protocol. Under the hood, IIS employs WebDAV to finish this file transfer task.

Resolution

Identify if this belongs to the WebDAV security problem.

1. Open Windows Explorer/Tools/Map Network Drive.

If you don't see the Tool command on the main toolbar, click Organize/Layout/Menu Bar.

2. Map a drive to WIS Homepage URL (Figure 7 below).

🚷 Map Network Drive 🛛 🔀					
\bigcirc	🍕 Map N	etwork Drive			
	What net	work folder would you like to map? e drive letter for the connection and the folder that you want to connect to:			
	<u>D</u> rive:	V:			
	F <u>o</u> lder:	http://[WIS_MachineName/[wonderware]			
	/	Example: \\server\share			
		Connect using different credentials			
		Connect to a Web site that you can use to store your documents and pictures.			
	/ _{Exa}	mple: http://iomlkf0089d/wonderware			
		Einish Cancel			

FIGURE 7: CONFIRM YOU CAN MAP A DRIVE VIA THE HTTP PROTOCOL

3. When you see the following Network Error message, you must install WebDAV for IIS 6 or 7. Proceed to the installation steps below.

• If you *do not* see the following Network Error Message, skip the following steps (*do not* install WebDAV Publishing for IIS). Proceed to the **aawinroot Security check (Figure 15)** section below.



FIGURE 8: DRIVE MAPPING CANNOT FIND THE GIVEN URL

The **Network Error** message (Figure 8 above) means that we need to install WebDAV in IIS 6.0 and Desktop experience in IIS 7.x.

To Install WebDAV for IIS 6

The installation steps are shown in Figure 9 (below).

🐻 Add or Re	moua Drograme	Internet Information Services (IIS)	X
Change or Remove	Windows Components Wizard Windows Components You can add or remove components of Windows.	To add or remove a component, click the check box. A shaded box means that of the component will be installed. To see what's included in a component, click Subcomponents of Internet Information Services (IIS):	: only part : Details: MB
Programs Add New Programs Add/Remove Windows amponents	To add or remove a component, click the checkbox. A shaded box means that only part of the component will be installed. To see what's included in a component, click Details. Components: Accessories and Utilities 4.9 MB Accessories and Accessories 4.9 MB A	Internet Printing 0.0 Image: NNTP Service 1.0 Image: SMIP Service 1.2 Image: SMIP Service 1.2 Image: SMIP Service 8.0 Image: SMIP Service 7 Image: SMIP Service 3.0 MB Image: SMIP Service 3.0 MB Image: SMIP Service 0.0 Image: SMIP Service 0.0	MB MB MB n with etails
	Application Server To add or remove a component, click the check box. A shaded box means that only part of the component will be installed. To see what's included in a component, click Details. Subcomponents of Application Server: Application Server Console 0.0 MB ASP.NET 0.0 MB Asplication Server Console 0.0 MB Asplication Server Console 0.0 MB Asplication Server Console 0.0 MB Enable network COM+ access 0.0 MB Enable network DTC access 0.0 MB	 World Wide Web Service To add or remove a component, click the check box. A shaded box means the of the component will be installed. To see what's included in a component, click Subcomponents of World Wide Web Service: ■ Remote Administration (HTML) ■ Remote Desktop Web Connection ■ Server Side Include Check it if it is not. ■ WebDAV Publishing ■ World Wide Web Service ■ WebDAV Publishing ■ World Wide Web Service ■ World Wide Web Service ■ Netall WebDAV Publishing ■ Total disk space required:	at only part k Details. 7 MB 4 MB 9 MB 9 MB 1 1 1 1 1 1 1 1 1 1 1 1 1

FIGURE 9 INSTALL WEBDAV PUBLISHING IN IIS 6.0

To install the Desktop Experience Feature for IIS 7.x



FIGURE 10 INSTALL DESKTOP EXPERIENCE FEATURE USING SERVER MANAGER FOR IIS 7.x

Once you've installed WebDAV, you need to verify that it is enabled.

To verify this for IIS 6.x:

• Check the WebDAV option under the Web Service Extensions node in IIS Manager:



FIGURE 11: WEBDAV ENABLED IN IIS 6.0

To verify WebDAV for IIS 7.x:



FIGURE 12A DOUBLE-CLICK THE WEBDAV AUTHORING RULES AT THE DEFAULT WEB SITE

WebDA	/ Authoring Ru	les			Click it if you see same as this.	Alerts The WebDAV feature has t
Use this feature to spe	cify rules for authorizing) users to access con	itent.			Actions
Path	Users	Roles	Access	Entry Type		Add Authoring Rule
						Enable WebDAV
						WebDAV Settings

FIGURE 13 CLICK ENABLE WEBDAV FEATURE

Enable the WebDAV Client on the WIS Server Machine

The next task is to enable the WebDAV Client that will be used to create and manage content for your website.

N	/ebClient Propert	ies (Local Computer)	×
	General Log On	Recovery Dependencies	
	Service name.	WebClient	
	Display name:	WebClient	
	Description:	Enables Windows-based programs to create, Access, and modify Internet-based files. If this	
	Path to executable C:\Windows\syste	e: em32\svchost.exe -k WebClientGroup	
	Startup type:	Manual Or Automatic	
	Help me configure	service startup options.	
	Service status:	Started	
	Start	Stop Pause Resume	
	You can specify th from here.	ne start parameters that apply when you start the service	
	Start parameters:		
		OK Cancel Apply	

FIGURE 14: IN THE SERVICES PANEL, MAKE SURE THAT WEBCLIENT SERVICE IS SET TO MANUAL OR AUTOMATIC

At this point, when you map a network drive shown in Figure 7 (above), the screenshot below is what you should see. This tells you that WebDAV can see aawinroot now and is ready to do the publishing work.



FIGURE 15: AAWINROOT IS VIEWABLE FROM WEBDAV

If you cannot see the **aawinroot** folder , complete the following steps to fix the problem in IIS 6.0 or IIS 7.x.

Settings For IIS 6.0

• Open **aawinroot** properties and set the **Directory** properties shown in Figure 16 (below). Since you need to publish, **aawinroot** has to give the **Write** permission for IIS 6.0.



FIGURE 16: MAKE SURE READ AND WRITE OPTIONS ARE CHECKED

For IIS 7.x

• Expand aawinroot and double-click WebDAV Authoring Rules to to access its properties.



FIGURE 17: ACCESS WEBDAV AUTHORING RULES PROPERTIES

Γ			Julas If	you don't see th	e permission below, click on 🛶	Actions
	WedDA	WebDAV Authoring Rules				Add Authoring Rule
	Use this feature to specify rules for authorizing users to access content.				WebDAV Settings	
	Path	Users	Roles	Access	Entry Type	Help
	*	All users		Read, Write	Local	Online Help

FIGURE 18: CONFIGURE THE AUTHORING RULES FOR AAWINROOT FOLDER

Add Authoring Rule	? ×
Allow access to:	1
All content	
C Specified content:	
J Example: *.bas, wsvc.axd	
Allow access to this content to:	1
All users	
C Specified roles or user groups:	
Example: Admin, Guest	
C Specified users:	
Example: User1, User2	
Permissions	1
Read	
C Source	
Vrite	
OK Cancel	

FIGURE 19: CONFIGURE SAME SETTINGS

For both IIS 6.0 and IIS 7.x, configure NTFS permissions on the WIS Server to restrict who has access to the content directory (in the aawinroot directory). In order to give permissions for certain users (Users group in this example) to access aawinroot, you need to apply the following settings on the **aawinroot** directory.

- 1. Open Windows Explorer, right-click aawinroot and click Properties.
- 2. Click the Security tab.

aspnet_client	
퉬 InSQLOnlocalhost	aawinroot Properties
) LoadGRCtrl	General Sharing Security Previous Versions Customize
) New folder	Object name: C:\instaub\uuuuraat\Wandaauara\aauinmat
퉬 UseGRWebGetUserCtrl	Object hame. C. whetpub wwwwool wonderware aawintool
퉬 Wonderware	Group or user names:
🃗 _images	S Developers (IOMLKF0089D\VS Developers)
🍌 _library	Administrators (IOMLKF0089D\Administrators)
📗 AADataSvc	
🍌 aawinroot	
Applications	To change permissions, click Edit.
ArchestrAReports	
🍌 Branding	Permissions for Users Allow Deny
📗 custom	Full control
📗 DHFrameWork	Modify
🍌 docs	Read & execute 🗸
📗 HomePage	List folder contents
🃗 LanguageToolkit	Read 🗸
📗 SDSManager	Vvnte
📗 useng	For special permissions or advanced settings, Advanced
鷆 winroot	
🚮 web.zip	Leam about access control and permissions
L00119065	
MSOCache	OK Cancel Apply

FIGURE 20: PERMISSION SETTINGS ON AAWINROOT FOLDER

Note: The Users group has Read, Read & Execute, and List folder contents permissions. These permissions are necessary for WebDAV users to write and modify content on the web server.

The following additional User Group permissions are necessary:

- Create Files / Write Data
- Create Folders / Append Data

These permissions are also necessary for WebDAV publishing, so do not change them.

Final Cleanup

- 1. Delete the IE's cached files.
- 2. Go to the **Services** Panel and restart the **WebClient** Service.
- 3. After these steps are finished, the **aawinroot** directory should be "seen" by WebDAV and the Web Exporter should be able to

publish.

E. Xu, K. Nourbakhsh

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