FactoryStudio and IIS

When installing FactoryStudio, if IIS was previously installed, you will not be able to install our embedded web server (TWebServer.exe). The FactoryStudio software will run without the web server, except by remotely accessing project configurations and serving runtime web pages; all other FactoryStudio engineering and runtime tools run without needing to install the TWebServer or to do any IIS configuration. If you want to enable remote engineering access and the web clients using IIS, you need to install some FactoryStudio services in IIS or enabled the TWebServer embedded web server. Another scenario where IIS is necessary is when you want to run the RUNTIME as a Windows Service, and also to provide remote access to project web pages, iPad displays and project engineering. In order to enable the TWebServer stop the IIS server or other applications potentially using port 80 and run the product installation. In order to setup the IIS server, follow the procedure in this chapter. This section is the explanation of how to install those services in IIS. The explanation targets IIS 7.x and 8, but other versions should be similar. You are going to install three services inside IIS:

- TProjectServer —Allows you to remotely access your project configurations.
- TVisualizerWeb/TVisualizerRemote —Allows remote access to runtime displays.
- iDataPanel—Is the service to provide data to iOS devices.

When you are finished developing and testing your project, you can deploy the runtime application for use by end-user clients. Projects can be deployed to run locally on a stand-alone computer or embedded device, as well as in a client-server distributed architecture or on the cloud. This chapter discusses the various methods for deploying these applications.

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Configuration Procedure

- Verify that IIS is installed by going to Control Panel > Administrative Tools and looking for Internet Information Services (IIS) Manager in the list.
- 2. Enable ASP.Net and .Svc Handlers for the WCF Service.

On IIS 7.x:

If IIS was installed after the installation of the .NET Framework it is necessary to run and verify a procedure as described on http://msdn.microsoft.com /en-us/library/ms752252.aspx which is to run the following programs using the command prompt as Administrator:

° From the Microsoft .Net folder, open the Command Prompt and rung the following commands:

aspnet_regiis.exe -I -enable

ServiceModelReg.exe -r

- ° Microsoft .Net is installed in one of the following folders:
 - C:\Windows\Microsoft.NET\Framework\v4.0.30319 (for 32-bit operating systems)
 - C:\Windows\Microsoft.NET\Framework64\v4.0.30319 (for 64-bit operating systems)

For IIS 8.0:

- ° From the Control Panel, go to Program and Features, then click "Turn Windows features on or off".
- Enable the ASP.NET 4.7 option. Navigate the tree: Internet Information Services > World Wide Web Services > Application Development Features > ASP.NET 4.7:

👿 Windows Features	_		×
Turn Windows features on or off			?
To turn a feature on, select its check box. To turn a featur box. A filled box means that only part of the feature is tur	e off, cle ned on.	ar its cheo	:k
INET Framework 3.5 (includes NET 3.0 and 3.0) INET Framework 4.7 Advanced Services)		^
Containers	5		
Data Center Bridging			
Guarded Host			
⊕ □ _ Hyper-V			
Internet Explorer 11			
Internet Information Services	ore		
Legacy Components	JIC		
🗄 🔲 📕 Microsoft Message Queue (MSMQ) Server			
Microsoft Print to PDF			¥
	ОК	Cano	cel

• Enable the HTTP Activation option (under .Net Framework 4.7 Advanced Services).



3. From the IIS Manager, verify that the extension .svc is mapped to aspnet_isapi.dll.

- If needed, follow the procedure described on http://msdn.microsoft.com/en-us/library/ms752252.aspx for the version of IIS you are li using.
 - The .NET Framework installation directory usually is: C:\Windows\Microsoft.NET\Framework\v4.0.30319, or C: \Windows\Microsoft.NET\Framework64\v4.0.30319 (for x64 Windows)

Mail Internet Information Servi	ces (IIS) Manager		
CO CO RAFAEL	Sites Default Web Sit	e ►	
File View Help			
Connections	Use this feature to specify specific request types.	appings	such as DLLs and m
🖻 豰 Default Web Site	Group by: State	-	
⊕ aspnet_client	Name 🔺	Path	State
TProjectServe	svc-Integrated-4.0	*.svc	Enabled
iDataPanel	svc-ISAPI-4.0_32bit	*.svc	Enabled
	svc-ISAPI-4.0_64bit	*.svc	Enabled

4. From the FactoryStudio installation folder, run the utility: InstallTWebServer.exe /uninstall, which will remove the default TWebServer installation.

Administrato	or: C:\Wi	ndows\system32\cmd.exe		x
:\Program	Files	<pre><x86>\Tatsoft\FactoryStudio>InstallTWebServer.exe</x86></pre>	∕unistall_	

5. From IIS Manager, go to Sites > Default Web Site > Add Application and configure the information for the services as described in following steps



- 6. For TProjectServer, configure:
 - Alias-TProjectServer
 - Physical Path—C:\Program Files\Tatsoft\FactoryStudio (Default folder. Make sure you use the correct path to the FactoryStudio installation folder.)
 - Application Pool—Configure any pool based on .NET 4.0. Example: ASP.NET v4.0

Add Application	?	×
Site name: Default Web Site Path: /		
Alias: Application pool:		
TProjectServer DefaultAppPool	Select	
Example: sales		
Physical path:		
C:\Program Files (x86)\Tatsoft\FactoryStudio		
Pass-through authentication Connect as Test Settings		
Enable Preload		
ОК	Cancel	

- Note: You should allow "Everyone" access, at least for reading
 From IE, use the URL http://localhost/tprojectserver/service.svc to verify if the service was correctly installed. That should show a page with information about the service.
- 7. For TVisualizerWeb/TVisualizerRemote, configure:

 - Alias fs-8.1
 Physical Path—C:\Program Files\Tatsoft\FactoryStudio\fs-8.1 (Default folder. Make sure you use the correct path to the FactoryStudio installation folder.)
 Application Pool—Configure any pool based on .NET 4.0. Example: ASP.NET v4.0

Add Application	?	×
Site name: Default Web Site Path: /		
Alias: Application pool:		
fs-8.1 DefaultAppPool	Select	
Example: sales		
Physical path:		
C:\Program Files (x86)\Tatsoft\FactoryStudio\fs-8.1		
Pass-through authentication Connect as Test Settings		
Enable Preload		
OK	Cancel	

- Note: Security should enable any user (Everyone), at least for reading.
 On IE, test the URL http://localhost/fs-8.1/service.svc to verify the service was correctly installed. It should show a page with information about the service.
- 8. For iDataPanel Service, configure:

 - Alias—iDataPanel
 Physical Path—C:\Program Files\Tatsoft\FactoryStudio\fs-8.1 (Default folder. Make sure you use the correct path to the FactoryStudio installation folder.)
 Application Pool—Configure any pool based on .NET 4.0. Example: ASP.NET v4.0
 Note: Security should enable any user (Everyone), at least for reading.

Add Application	? ×
Site name: Default Web Site Path: /	
Alias: Application pool:	
iDataPanel DefaultAppPool	Select
Example: sales	
Physical path:	
C:\Program Files (x86)\Tatsoft\FactoryStudio\fs-8.1	
Pass-through authentication Connect as Test Settings	
Enable Preload	
ОК	Cancel

9. For DataPanelImages (Virtual Directory), configure:



Alias—iDataPanelImages
 Physical Path—C:\FactoryStudio Projects\iDataPanelImages

10. Enable Anonymous Authentication for each of the services.

Authentication			
Group by: No Grouping •			
Name	Status	Response Type	
Anonymous Authentication	Enabled		

11. Setup the Compression module. If it is not installed, you will see the alert boxes.

		Alerts
IIS		Use of dynamic compression may increase processor utilization and reduce the overall performance of the server.
hentication Com	Default Document	 The dynamic content compression module is not installed.
URL 4	uthorization	Not installed
📥 Request Filtering		Installed
IP and Domain Restrictions		Not installed
📥 Perform	ance	Installed
Static Content Compression		Installed
Dynamic Content Compression		Installed
La Management Tools		Installed
LIS Management Console		Installed
IIS Management Scripts and Tools		Not installed
Manage	ment Service	Not installed

12. Create a new MIME Type for the .tzip extension

Add MIME Type	?	×
File name extension: .tzip MIME type:		
application/x-zip-compressed		
ОК	Cancel	

If it's not installed, go to the Server Manager, Roles, Web Server. Under Role Services, check your installed Roles. If Dynamic Compression isn't installed, click Add Roles and install it.

You can go back to compression for your site and ensure Dynamic Compression is checked. At this point, Dynamic Compression should be setup, but you really need to be specific about what mimeTypes will be compressed.



From the dropdown, select system.webServer/ webdev / httpCompression:



Then click on Dynamic Types and now that you're in the list editor. Add application/json as seen below.

			Collection Editor - system.webServer/httpCompression/dynamic1
Items:			
mimeType	enabled	Entry Path	
text/*	True	MACHINE/WEBROOT/APPHOST	
message/*	True	MACHINE/WEBROOT/APPHOST	
application/x-javascript	True	MACHINE/WEBROOT/APPHOST	
application/javascript	True	MACHINE/WEBROOT/APPHOST	
/	False	MACHINE/WEBROOT/APPHOST	
application/json	True	MACHINE/WEBROOT/APPHOST	
7			

After you've added them and closed the dialog.

12. If your remote users cannot access the FactoryStudio, you should allow Everyone access to the FactoryStudio folder, at least for reading. Right-click the folder, click the Security tab, click Edit, then add read permissions for Everyone.

IIS must be restarted after configuring the services.