

Build Quality Applications Faster, Better and Cheaper

Database Visual ARCHITECT Deployment Guide for .NET

Access database with Object-Oriented technology



DB Visual ARCHITECT 4.0 Deployment Guide for .NET

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Deployment Guide for .NET

1

Deploying Standalone .NET Application

Chapter 1 - Deploying Standalone .NET Application

DB Visual ARCHITECT (DB-VA) can generate all .NET code for accessing database, you do not need to write any SQL to insert, query, update or delete the record, hence you can develop quality Standalone .NET Application much faster, better and cheaper. In this chapter we focus on deploying standalone .NET application. If you want to know how to develop a quality standalone .NET application, you can reference the Programmer's Guide for .NET -Chapter 1 Developing Standalone .NET Application.

In this chapter:

- Creating the Setup Project for Standalone .NET Application
- Installing the Application

Creating the Setup Project for Standalone .NET Application

After you have developed the standalone .NET application in Visual Studio .NET, you may wonder how to deploy the application to another computer. Visual Studio provides an excellent feature to create setup file (installer) so you can install the application on other machines easily. You can download the example of the Programmer's Guide for .NET -Chapter 4 Developing Standalone .NET Application and follow the steps below to create the setup file and install it.

1. Open the Chapter 4 example in Visual Studio .NET.



Figure 1.1 - Open a project

2. Change the Active Solution Configuration from Debug to Release.



Figure 1.2 - The Release button

Debug and Release are different configurations for building your project. As the name implies, you generally use the Debug mode for debugging your project and the Release mode for the final build for end user. The Debug mode does not optimize the binary it produces (as optimizations can greatly complicate debugging) and generates additional data to aid debugging. The Release mode enables optimizations and generates less extra debug data.

3. From the main menu, select **Build > Build Solution** to compile the code.



Figure 1.3 - To build solution

4. The Release folder is created in bin folder of the project path. It contains all the referenced libraries and executable file.

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🚞 Debug		File Folder	1/30/2005 2	19 PM
Release		File Folder	1/30/2005 1	0:11 AM

Figure 1.4 - The bin folder

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Address 🛅 C:\Developme	nt\Demo\Scl	noolSystem\Stan	dalone School System	bin Relea: 💌 🛃	Go	Links *
Name 🔺		Size	Туре	Date Modified		Attrit
HashCodeProvider.dll		12 KB	Application Extension	n 12/21/2005 10:	:04 AM	A
log4net.dl		244 KB	Application Extension	n 12/21/2005 10:	04 AM	A
MySql.Data.dl		144 KB	Application Extension	n 12/21/2005 10:	04 AM	A
NHbernate.dli		832 KB	Application Extension	n 12/21/2005 10:	04 AM	A
SchoolSystem.dll		36 KB	Application Extension	1/30/2005 2:29	PM	A
Standalone School Syste	em.exe	104 KB	Application	1/30/2005 10:1	1 AM	A

Figure 1.5 - The release folder

5. Copy the configuration file (**hibernate.cfg.xml**) from DB-VA generated C# project to the Release folder. The configuration file contains the connect database information. The application will fail when execution if this file is missing.

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Name 🔺	Size	Туре	Date Mod	fied	Attrib
MashCodeProvider.dll	12 KB	Application Extension	12/21/200	5 10:04 AM	A
🔊 log4net.dl	244 KB	Application Extension	12/21/200	5 10:04 AM	A
🚵 MySql.Data.dll	144 KB	Application Extension	12/21/200	5 10:04 AM	A
🚳 NHbernate.dl	832 KB	Application Extension	12/21/200	5 10:04 AM	A
SchoolSystem, dll	36 KB	Application Extension	1/30/2005	2:29 PM	A
Standalone School System.exe	104 KB	Application	1/30/2005	10:11 AM	A
hibernate.cfg.aml	1 KB	XML Document	12/21/200	5 10:04 AM	A

Figure 1.6 - The hibernate.cfg.xml files in the release folder

6. Right Click the Solution, select **Add > New Project** from menu.



Figure 1.7 - Create a new project

7. Select **Setup and Deployment Project** in Project Types, and the select **Setup Wizard** in Templates. Click OK to create the Setup and Deployment Project.

Project Typ	ies:	Templates:		000
IB Vis Vi	M Projects sual Basic Projects sual C# Projects sual J# Projects sual C++ Projects fun and Derdowment Projects	Setup Project	Web Setup Project	Merge Module Project
÷ 🗍 Ö	her Projects	Setup Wizard	Cab Project	
E Create a V	windows Installer project with the aid	Setup Wizard	Cab Project	
+ 🔁 or Create a V <u>N</u> ame:	Vindows Installer project with the aid	Setup Wizard	Cab Project	
reate a \ Create a \ Name: Location:	And and copyright Projects her Projects Windows Installer project with the aid School Project Setup C:\Development\Demo\SchoolSyste	of a wizard.	Cab Project	Browse

Figure 1.8 - Select the template

8. The Setup Project Wizard is shown.



Figure 1.9 - setup Wizard

9.

10. Select Create a setup for a Windows application and then click Next >.



Figure 1.10 - Choose a project type

11. Choose the **Primary output from Standalone School System**, this option will help you to add all the DLL or EXE file to the setup file. You must select a correct project for primary output in solution. After that, click **Finish**. You can also click **Next>** to follow the wizard to add readme file to the setup file.



Figure 1.11 - Select the project output

12. The Setup project is created.



Figure 1.12 - Project created

13. Open the File System (Setup) of the Setup project. Right click the Application Folder, select **Add** > **File** to add the hibernate.cfg.xml manually.

File System on Targe	t Mac	hine		Name
Application Folde	r			+□HashCodeP
User's Desktop		Add >	Eol	der
User's Programs		Greate Shortcut to Application Folder	Bro	ject Output
	X Cut Easte	Cut.	File	
		Baste	As	sembly
	×	Delete		
	P	Properties Window		

Figure 1.13 - To add file to project

B File System on Target Machine	Name	Type
Application Folder	+ HashCodeProvider.dll	Assembly
- 💫 User's Desktop	hibernate.cfg.xml	File
- 😡 User's Programs Menu	* log4net.dl	Assembly
	*@MySql.Data.dl	Assembly
	+ NHibernate.dl	Assembly
	Primary output from Standalone School System (Active)	Output
	* SchoolSystem.dl	Assembly

Figure 1.14 - The files in the folder

14. Right click **Primary output from Standalone School System** and then select **Create Shortcut to Primary output** from Standalone School System.

Name		Туре	- Bec
 SchoolSystem.dll 		Assembly	10
Primary output from Stan	Jakone School Sustem (Active)	Cutout	1.0
+==NHibernate.dll	Create Shortcut to P	Primary output from Standalone School Sy	stem (Active)
• MySql.Data.dli • Diog4net.dli • hibernate.cfg.xml • MashCodeProvider.dli	Dependencies ExcludeEilter Qutputs		
	X Cut		
	× Delete		
	Properties Window		

Figure 1.15 - To create shortcut to primary output

15. The shortcut is created on the Application Folder. You can change the properties of the shortcut.

For Name -School System

For **Folder** -User's Desktop

This shortcut will be created on the user's desktop when user installs this application.



Figure 1.16 - The Project properties

16. Right Click the School System Setup project and select Build to create the installer.



Figure 1.17 - To build the application

17. The setup file is created in School Project Setup\Release folder.

🗢 C: Development Demo\School System\School Project Setup\Release 💦 🔲 🔀							
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Name 🔺	Size	Туре	Date Modified	Attri			
😼 School Project Setup.msi	751 KB	Windows Installer P	1/30/2005 3:21 PM	Α			
🛃 Setup.Exe	108 KB	Application	3/19/2003 2:03 PM	Α			
Setup.Ini	1 KB	Configuration Settings	1/30/2005 3:21 PM	A			
<				>			

Figure 1.18 - The Installer are created

Installing the Application

The setup file is created in School Project Setup\Release folder. Now, you can copy the **School Project Setup.msi** file to another machine and install it.

1. Double click the School Project Setup.msi file to start install, and then click Next >.



Figure 1.19 - Setup welcome page

2. Select the path to install the application. By default, application install in the Program File. Click Next>.



Figure 1.20 - Select the install directory

3. Confirm to install then the application will be installed on your selected path. Click Close to finish the installation.

🖗 School Project Setup		🛛
Installation Complete	1	
School Project Setup has been suc	cessfully installed.	
Click "Close" to exit.		
Please use Windows Update to che	eck for any critical updates to the	e .NET Framework.
	Cancel	< Back Close

Figure 1.23 - Install complete message

The installer created shortcut of School System on the Desktop and installed the application on selected path. User can double-click this shortcut to execute the standalone .NET application.



Figure 1.24 - Desktop shortcut are created

School Project Setup			
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Deploying ASP.NET Standalone

Chapter 2 - Deploying ASP.NET Application

In Programmer's Guide for .NET -Chapter 3 Developing ASP.NET Application, we have created the ASP.NET application. The ASP.NET application can be run on the local Internet Information Server (IIS) but you may want to deploy the ASP.NET on other machines. Visual Studio .NET provides the feature to create the installer ASP.NET applications so you can install the application on other machines easily.

In this chapter:

- Creating the Setup Project for ASP.NET Application
- Installing the Application

Creating the Setup Project for ASP.NET Application

You can download the example of the Programmer's Guide for .NET -Chapter 3 Developing ASP.NET Application and follow the steps below to create the setup file and install it.

1. Open the Chapter 3 example in the Visual Studio .NET.



Figure 2.1 - Open a project

2. Right Click Solution, select **Add > New Project...** from menu.



Figure 2.2 - Add a new project

3. Select **Setup and Deployment Project** in Project Types, and the select **Setup Wizard** in Templates. Type "**web** school system" for name. Click OK to create the Setup and Deployment Project.



Figure 2.3 - Select Setup Wizard template

4. The Setup Project Wizard is shown.



Figure 2.4 - Setup Wizard Welcome Page

5. Select Create a setup for a web application and then click Next >.



Figure 2.5 - Select the project type

6. Select **Primary output from webschoolsystem** and **Content Files from webschoolsystem**, this option will help you to add all the DLL or EXE and ASP.NET file to the setup file. You must select a correct project for primary output in the solution. After that, click **Finish**. You also can click **Next** > to follow the wizard to add readme file to the setup file.

Choose project outputs You can include outputs from	to include	ts in your solutio	ın,	R
Which project output group	s do you wa	nt to include?		
Documentation Files from we	bschoolsyster	n		~
Primary output from webschi	oolsystem			
Localized resources from well	oschoolsysten	5.		
Content Files from webschor	devetern			
Source Files from webschool	system			
Documentation Files from Sch	noolSystem			
Primary output from SchoolS	ystem			×
Description:				
Contains the DLL or EXE built by	the project.			1
				S
	and the second		1	-
	Cancel	< <u>B</u> ack	Next >	Einish

Figure 2.6 - Select the project output

7. The Setup project is created in solution.



Figure 2.7 - The Project created

8. Open the File System (Setup) of the Setup project. Right click the **Web Application Folder**\bin Folder, select **Add** > **File...** to add the **hibernate.cfg.xml** manually from the DB-VA generated C# project.



Figure 2.8 - Add a files to project



Figure 2.9 - The files in the folder

9. Right click the Web School System Setup project and then select **Build** on menu.



Figure 2.10 - To build the application

10. The Setup File is created in the Web School System Setup\Debug folder.

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BSetup.Exe	108 KB Application 3/1	.9/2003 2:03 PM A							
📴 Setup.Ini	1 KB Configuration Settings 1/3	30/2005 4:33 PM A							
🐻 Web School System Setup.msi	756 KB Windows Installer P 1/3	80/2005 4:33 PM A							
<		>							

Figure 2.11 - The Setup execute file are generated

Installing the Application

The setup file for ASP.NET application is created. You can copy the Web School System Setup.msi file to other machines and install. The installation machine must have IIS installed otherwise the message below will be shown.

🖗 Web School System Setup	
This setup requires Internet Information Server 4.0 or higher and W Windows 2000, or Windows XP. This setup cannot be installed or Windows 58, or Windows Me. Please install Internet Information S again.	indows NT 4.0, Windows 95, erver and run this setup

Figure 2.12 - The setup warning message

1. The setup wizard will be shown if your machine has IIS installed. Click Next >.



Figure 2.13 - Setup Welcome Page

2. Type the Virtual Directory name and Port for the web application. The Virtual Directory is the web application for browser to access. For example, <u>http://localhost:<<Port>>/<<Virtual directory>></u>.



Figure 2.14 - enter the virtual directory and port

3. Confirm to install, then the application will be installed on your selected path. Click Close to finish the installation.

🖗 Web School System Setup				
Installation Complete				
Web School System Setup has been success	fully installe	d.		
Click "Close" to exit.				
Please use Windows Update to check for an	critical upd	ates to the N	ET Framewor	k
	erneur ops		LT THURSDAY	
	Cancel	11 <8	aok [Close
	1075/025			2000

Figure 2.15 - Installation complete message

4. Open the Internet Information Service (IIS) Manager, you can see the ASP.NET application is installed on Web Sites\Default Web Site\<Virtual directory>



Figure 2.16 - Internet Information Service (IIS)

5. Go to the <u>http://localhost/webss/index.htm</u>, the ASP.NET application is running in the IIS.

