Web@Module Visual Basic Implementation

If you are familiar with Visual Basic (VB), you will find it is very easy to implement a Web-based remote device management using Web@Module.   Before you start to program your VB program, please find a good VB programming guide and practice network programming (winsock) using VB. Once you can access the serial port of Web@Module hardware through TCP server mode, you are ready to develop your web page for Web@Module. The operating principle of Web@Module is as following:

1. Develop a VB ActiveX Controls program first. This program contains a TCP client function which will build a TCP connection to Web@Module
2. Web@Module is configured as TCP server mode and the serial port of Web@Module hardware is correctly configured for the device to be controlled
3. Once your ActiveX Controls program can be operated correctly at your computer, you can pack your VB program as a web page.
4. Use the **Manager** utility program, you can convert the home page (index.html) and the related files such as winRAR (*.CAB) to a binary file (fsdata.anf).
5. Upload the fsdata.anf to Web@Module and reset the Web@Module to refresh the new web page
6. Now you can use your Web Browser (IE) to visit the web server of Web@Module
7. Remember to configure your Web Browser Security setting to allow ActiveX Controls .
8. The home page of Web@Module will download a ActiveX Controls to your web browser and the ActiveX Controls will build up a TCP connection to the Web@Module and open the serial port of Web@Module to control the device.

Following steps show you how to build a dynamic Web Page for Web@Module using VB 6.0 SP64
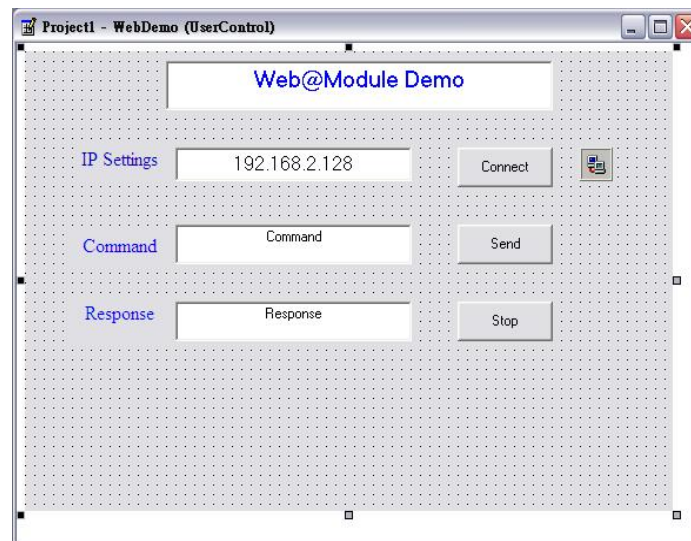
ATTENTION

⚠ **The filename of the VB ActiveX Controls must be less than 14. Otherwise the web server of Web@Module cannot recognize it.**
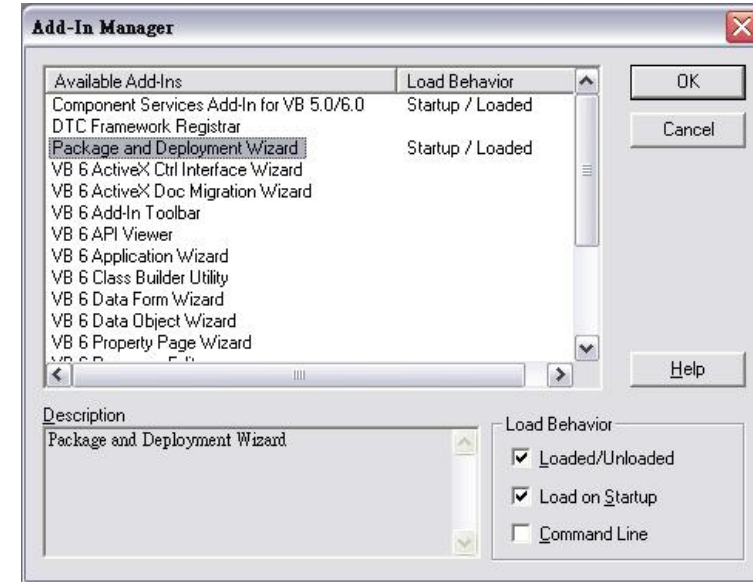
Step 1
Open a new project and choose ActiveX Control

Step 2
Program an ActiveX Control and which contains a TCP client function. Debug the program at your PC until it is bug free
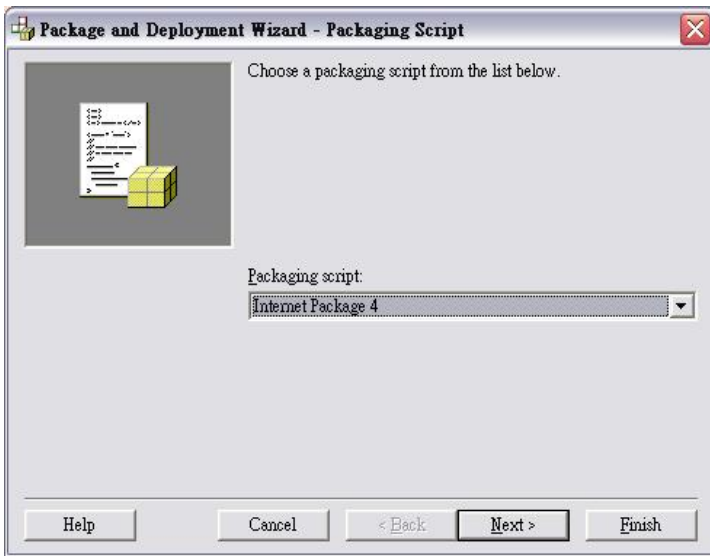

Step 3
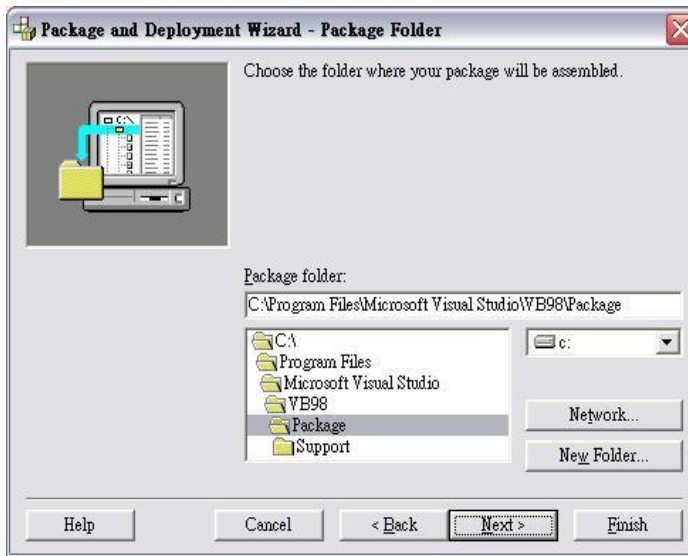Under Tool menu of VB 6.0 add Package and Deployment Wizard
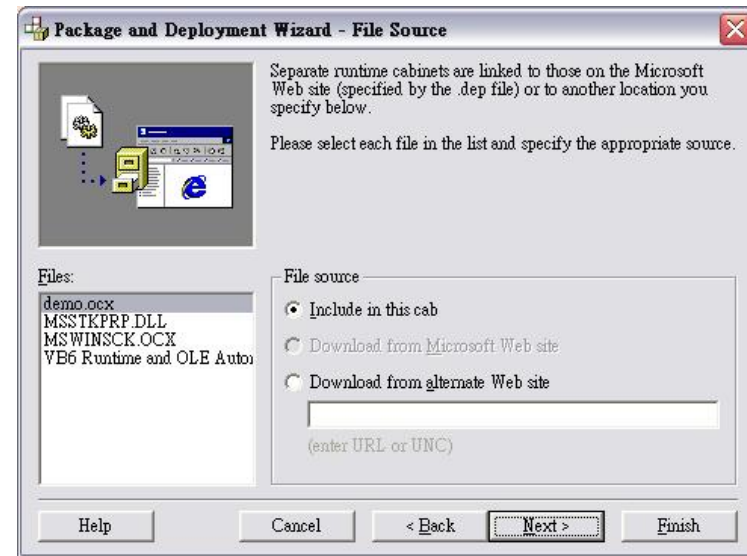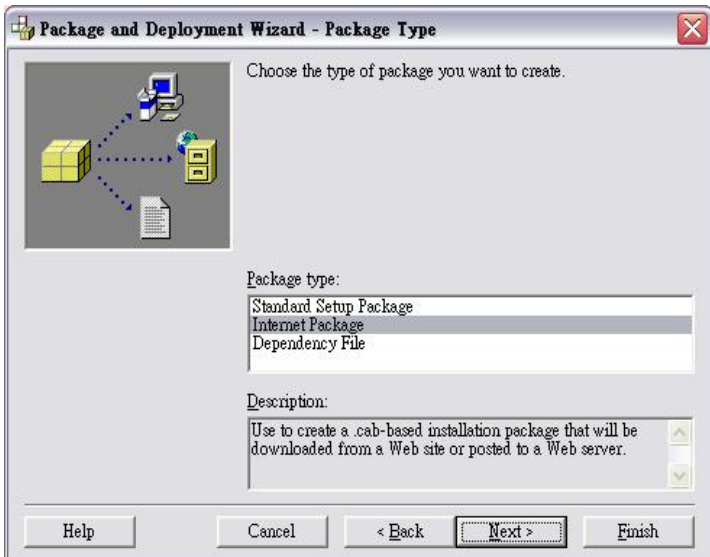

Step 4
Choose Package option

Step 5
Click Next

Step 7
Choose the folder for the web page
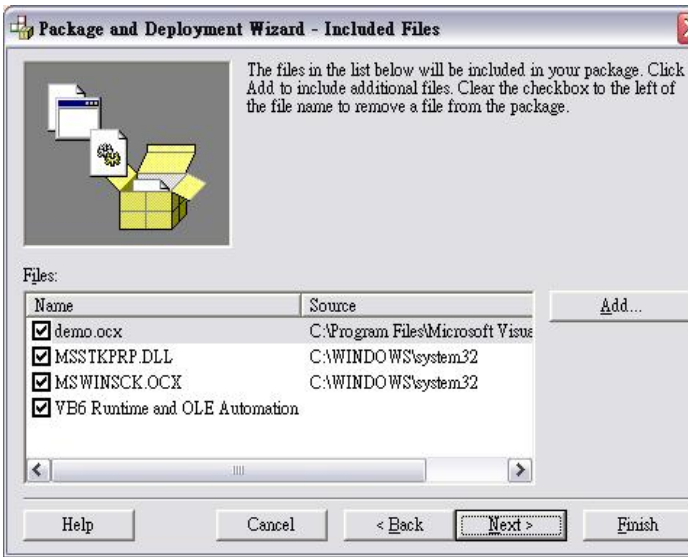
Step 9
Click Next

Package and Deployment Wizard - Packaging Script

Choose a packaging script from the list below.

Packaging script:
Internet Package 4

Help | Cancel | < Back | Next > | Finish

Package and Deployment Wizard - Package Folder

Choose the folder where your package will be assembled.

Package folder:
C:\Program Files\Microsoft Visual Studio\VB98\Package

- C:\
  - Program Files
    - Microsoft Visual Studio
      - VB98
        - Package
        - Support

c:

Network...
New Folder...

Help | Cancel | < Back | Next > | Finish

Package and Deployment Wizard - File Source

Separate runtime cabinets are linked to those on the Microsoft Web site (specified by the .dep file) or to another location you specify below.

Please select each file in the list and specify the appropriate source.

Files:
demo.ocx
MSSTKPRP.DLL
MSWINSCK.OCX
VB6 Runtime and OLE Autom

File source
- Include in this cab
- Download from Microsoft Web site
- Download from alternate Web site

(enter URL or UNC)
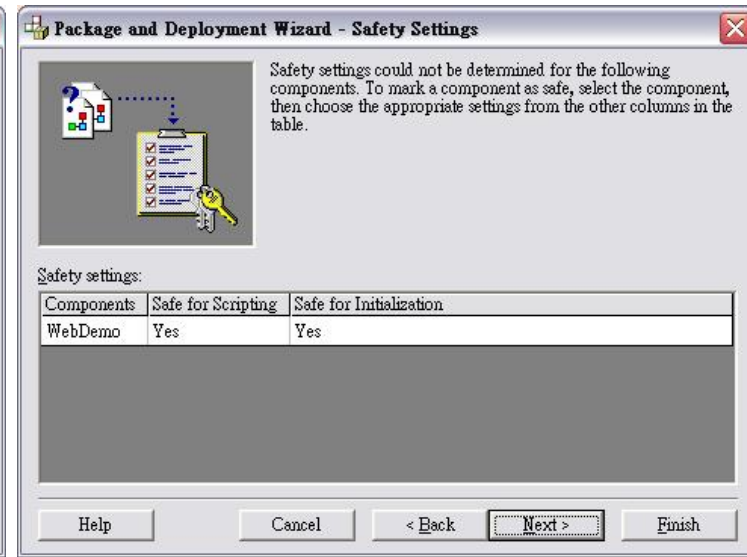
Help | Cancel | < Back | Next > | Finish

Step 6
Choose Internet Package

Step 8
Click Next

Step 10
Choose Yes in Safe for Scripting and Safe for Initialization

Package and Deployment Wizard - Package Type

Choose the type of package you want to create.

Package type:
Standard Setup Package
Internet Package
Dependency File

Description:
Use to create a .cab-based installation package that will be downloaded from a Web site or posted to a Web server.

Help | Cancel | < Back | Next > | Finish

Package and Deployment Wizard - Included Files

The files in the list below will be included in your package. Click Add to include additional files. Clear the checkbox to the left of the file name to remove a file from the package.

Files:

Name	Source
☑ demo.ocx	C:\Program Files\Microsoft Visua
☑ MSSTKPRP.DLL	C:\WINDOWS\system32
☑ MSWINSCK.OCX	C:\WINDOWS\system32
☑ VB6 Runtime and OLE Automation	

Add...

Help | Cancel | < Back | Next > | Finish

Package and Deployment Wizard - Safety Settings

Safety settings could not be determined for the following components. To mark a component as safe, select the component, then choose the appropriate settings from the other columns in the table.

Safety settings:

Components	Safe for Scripting	Safe for Initialization
WebDemo	Yes	Yes

Help | Cancel | < Back | Next > | Finish

Step 11
Click Finish to Complete

Step 12
You will discover one HTML file and One WinRAR (.CAB) file are created and one Support folder in the Package folder

Step 13
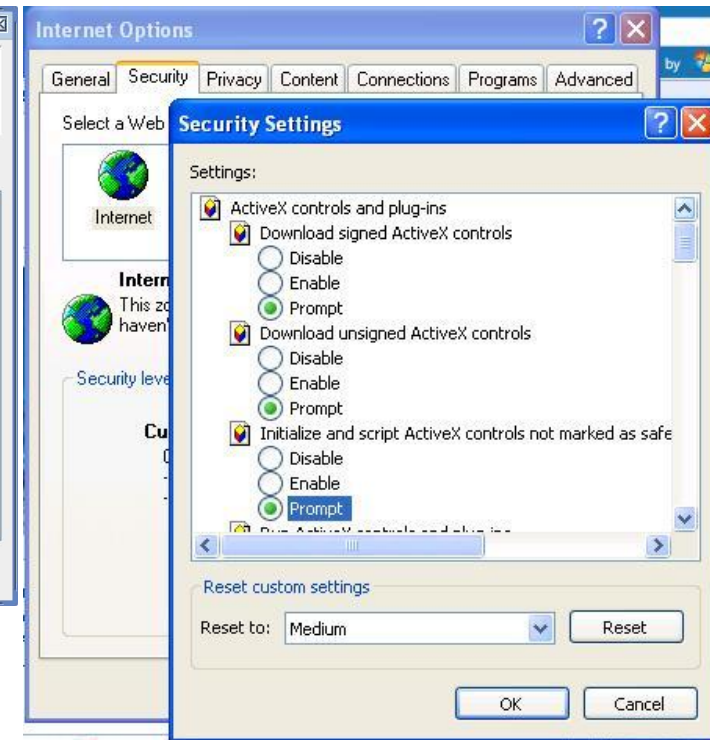Copy the WinRAR file and HTML file to a new folder and rename the HTML file as **index.html.**

Step 14
Use Manager Utility to Convert the index.html and the WinRAR file (.CAB) to the output folder for fsdata.anf

Step 15
Configure Web Browser Security setting to allow ActiveX Control and disable the Internet Security Software.

Example Program in Artila CD are located at
1. VB example program: \VB\example
2. Index.html and WinRAR file: \VB\html
3. Binary file fsdata.anf:\VB\upload