VBVoice 10.1 Software Installation

This guide will take you through the steps required to install the Pronexus VBVoice 10.1 software in a development or in a production environment as well as Dialogic Power Media HMP. As a pre-requisite, you must have the Dialogic driver (HMP for Voice over IP or SR6 for JCT and DMV) installed prior to the VBVoice installation.

VBVoice Licenses

VBVoice 10.1 does not require licenses for developing Voice and Data enabled applications. Only when developing Speech Recognition and Text To Speech enabled applications do you require additional licenses in the development system's Runtime Manager.

Please refer to the VBVoice 10.1 License Guide for information on VBVoice licenses and license administration.
www.download.pronexus.com/VBVoiceLicenseGuide.pdf

VBVoice Runtime licenses (PRONEXUSRT.ini) are required in order to run a compiled VBVoice application in a production environment. Contact Sales@Pronexus.com for license purchasing details.

Installation Requirements

Complete System Requirements information, including Operating System Support, can be found in the VBVoice 10.1 Release Notes. Due to the nature of Windows UAC, it is required to always use the Windows "Run-As" option when installing and administering VBVoice even with the UAC disabled.

Download VBVoice 10.1

www.download.pronexus.com/VBVoice10.1.exe

Release Notes:

 www.download.pronexus.com/VBVoice10.1_ReleaseNotes.pdf

64 bit Operating System

VBVoice 10 provides support for 64 bit Operating Systems. There is no support for 32 bit Operating Systems.

The VBVoice application must be compiled in 32 bit, as per Dialogic requirements. In a 64 bit development environment, the Visual Studio must be configured as x86 mode. Refer to the section **Development of VBVoice 10.1 on 64 bit** in this guide for steps on how to switch the development environment to x86.

Installation Procedure

Note: If using Remote Desktop to install and/or administer VBVoice, you must use a Console session. Use of Terminal Services to install/administer VBVoice is not supported.
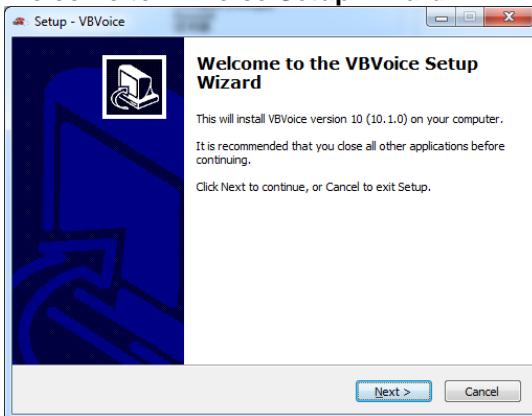
1. Select Setup Language

Once you have run the VBVoice 10.1 installer you will be prompted to select the language in which the installer steps will be presented.
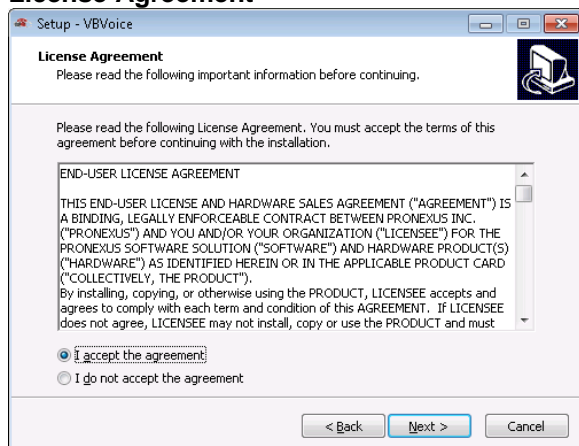
Use the dropdown to change to an optional language for the remainder of the installation.

2. Welcome to VBVoice Setup Wizard

In preparation for the installation of VBVoice, it is recommended that all other running applications be closed whenever possible.

3. License Agreement

The Pronexus License Agreement outlines information as it applies to the use of the VBVoice software and the required licenses to use the VBVoice software. As well, information regarding Dialogic hardware which has been purchased from Pronexus.

NOTE: Dialogic's Hardware return policy is that the hardware is non-returnable if the original packaging has been opened.
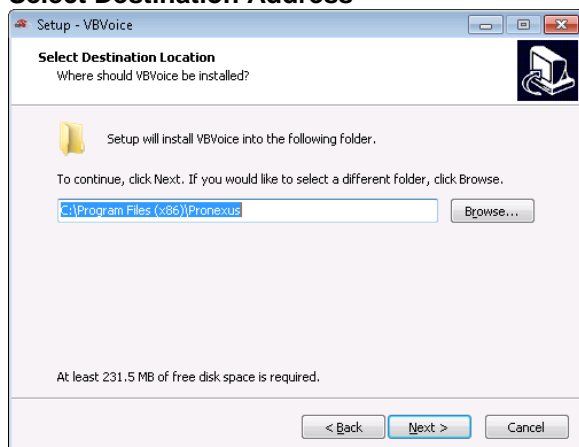
Contact Pronexus Sales for further details on Pronexus and Dialogic Return Policies.

4. Best Practices
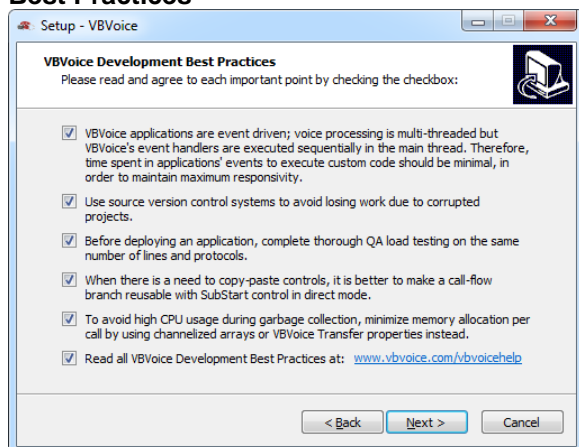
The success of your VBVoice IVR solution starts at the development stage. Please take a moment to read through the checklist of Best Practices provided by our very own application developers and architects.
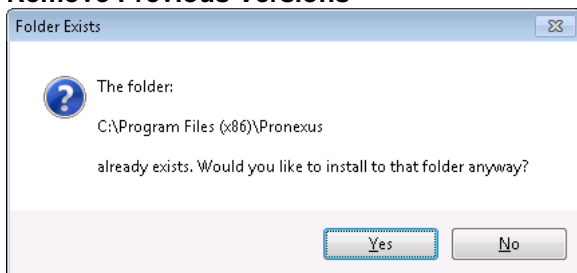
5. Select Destination Address

VBVoice can be installed to any available directory. It is recommended to retain the default value, but is not mandatory.

The default path when installing on 64 bit Operating System is C:\Program Files(x86)\Pronexus

6. **Remove Previous Versions**

Click Yes and the VBVoice installer will automatically uninstall the previous version of VBVoice that has been detected.

NOTE: Ensure you make a backup of the VBVoice Runtime Licenses in the VBVoice RTM and also make a backup of your vbvoice.ini configuration file (found in the Windows directory).

**Only if you are performing an upgrade or reinstalling VBVoice you will receive this step.**

7. **Select Start Menu Folder**
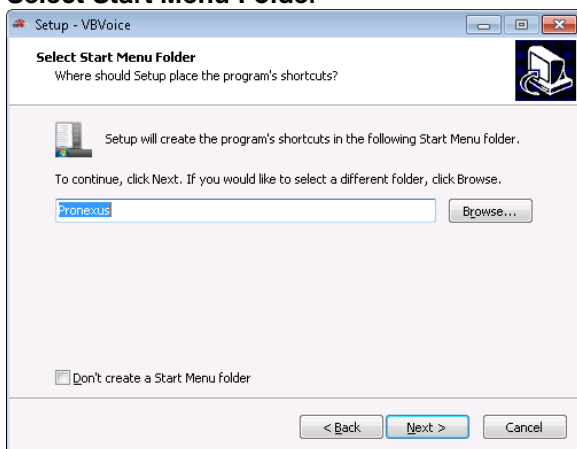
Define the location of the VBVoice programs shortcuts, such as the VBVoice Runtime Manager for administering and activating VBVoice license.
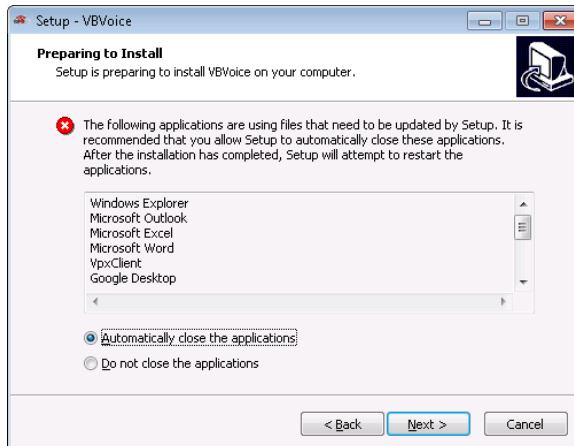
This will also define a Start Menu folder for the VBVConfig utility, VBVoice example applications, as well as additional VBVoice elements.
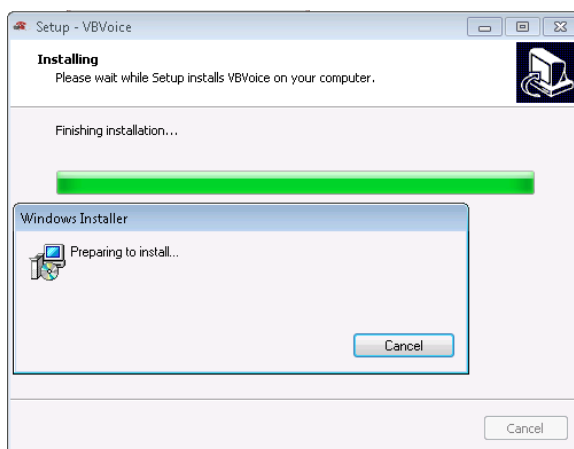
8. **Ready to Install**
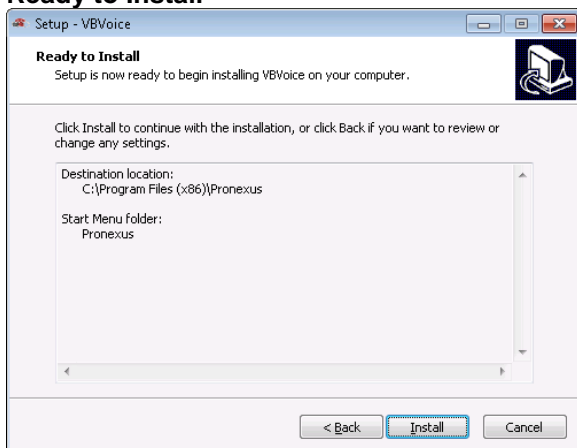
A summary of the VBVoice installation outlines the destination of the installation and the Start Menu folders.

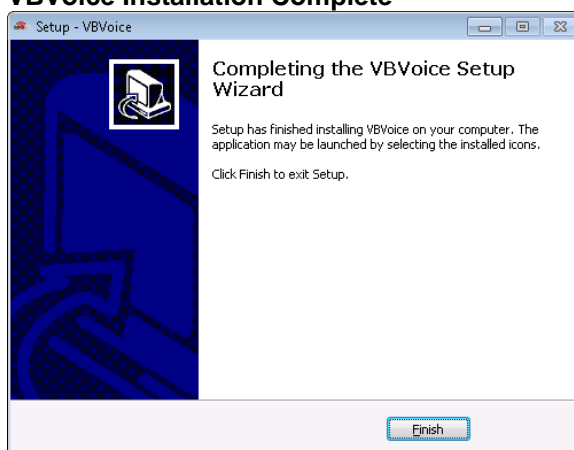Confirm by clicking the Install button.

The VBVoice installer will prompt you to close any programs which may interfere with the proper installation of VBVoice.
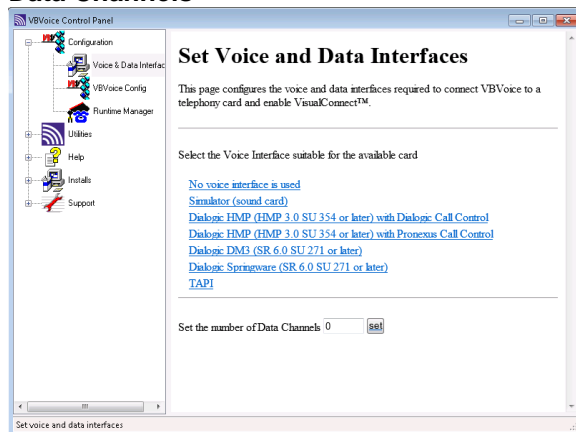
It will take just a few moments to install the VBVoice software.

9.   VBVoice Installation Complete

VBVoice is now installed. You can begin application development immediately.

10. Select the Telephony Interface and Number of Data Channels

In order to "connect" VBVoice with the Dialogic driver that is installed you must open the VBVoice Control Panel from the Start Menu and then run the "Voice & Data Interfaces" utility.

By default VBVoice is configured to use the local server's soundcard and speakers to provide call flow testing without the need for Dialogic media. A call in to or out of the IVR using a phone is not required for this; there is a call simulator launched when you run the application in this mode.

Select the card type and driver version that matches the Dialogic driver you have installed. You can also specify the number of Data Channels that will connect Visual Connect instances.

For more details on Visual Connect go to: http://vbvoice.com/ivr-product-features/vbvoice-10dot1-features

Command Line Installer

Overview

The Setup program accepts optional command line parameters. These can be useful to system administrators, and to other programs calling the Setup program.

Procedure

Place the VBVoice installation .exe in a directory, open a command prompt and change directory to the installer's location. Run the command *VBVoice10.1.exe* followed by the following switches as you require.

/SP-

Disables the "*This will install... Do you wish to continue?"* prompt at the beginning of Setup.

/SILENT, /VERYSILENT

Instructs Setup to be silent or very silent. When Setup is silent the wizard and the background window are not displayed but the installation progress window is. When a setup is very silent this installation progress window is not displayed. Everything else is normal so for example error messages during installation are displayed and the startup prompt is (if you haven't disabled it with the '/SP-' command line option explained above).

If a restart is necessary and the '/NORESTART' command isn't used (see below) and Setup is silent, it will display a "*Reboot now?"* message box. If it's very silent it will reboot without asking.

/NOCANCEL

Prevents the user from canceling during the installation process, by disabling the Cancel button and ignoring clicks on the close button. Useful along with '/SILENT' or '/VERYSILENT'.

/NORESTART

Prevents Setup from restarting the system following a successful installation, or after a *Preparing to Install* failure that requests a restart. Typically used along with /SILENT or /VERYSILENT.

/RESTARTEXITCODE=*exit code*

Specifies a custom exit code that Setup is to return when the system needs to be restarted following a successful installation. (By default, 0 is returned in this case.) Typically used along with /NORESTART. See also: Setup Exit Codes

/LOADINF="*filename***"**

Instructs Setup to load the settings from the specified file after having checked the command line. This file can be prepared using the '/SAVEINF=' command as explained below.

Don't forget to use quotes if the filename contains spaces.

/SAVEINF="*filename***"**

Instructs Setup to save installation settings to the specified file. Don't forget to use quotes if the filename contains spaces.

/LANG=language

Specifies the language to use. *language* specifies the internal name of the language as specified in a [Languages] section entry.

When a valid /LANG parameter is used, the *Select Language* dialog will be suppressed.

/DIR="*x:\dirname*"

Overrides the default directory name displayed on the *Select Destination Location* wizard page. A fully qualified pathname must be specified. May include an "expand:" prefix which instructs Setup to expand any constants in the name. For example: '/DIR=expand:{pf}\My Program'.

/GROUP="folder name"

Overrides the default folder name displayed on the *Select Start Menu Folder* wizard page. May include an "expand:" prefix, see '/DIR='.

/NOICONS

Instructs Setup to initially check the *Don't create a Start Menu* folder check box on the *Select Start Menu Folder* wizard page.

Dialogic Integration

This guide will take you through the steps required to install the Dialogic drivers supported by VBVoice, specifically the VOIP driver from Dialogic called Power Media HMP (previously called Host Media Processing or HMP)..

Overview

Support for Dialogic HMP VoIP Solution

The Dialogic HMP software provides a SIP or H323 connection to the VBVoice application. All call processing is done on the CPU of the system. Recommended due to its cost effectiveness and versatility.

Support for Dialogic Springware JCT Series of Cards

These cards go from 4 to 12 analog ports and up to 48 digital channels on a board. VBVoice has support for regular voice processing as well as ASR and TTS on certain models only (contact Sales@Pronexus.com for details)

Support for Dialogic DM3 Series of Cards

The DM/V series of cards have 'on-board' resources to support bridging, conferencing, faxing, ASR and TTS engine integration. These cards offer up to 120 digital channels (4 trunks) or 16 analog ports.

Support for Dialogic DISI Series of Cards

These cards offer support for station sets, usually for call center solutions.

Support for Dialogic DNI Cards

These boards have no 'on-board' resources. Dialogic HMP driver and licenses determine the capabilities of the DNI board. Capacity includes 1 to 8 E1 or T1 digital trunks (up to 240 channels on a board)

VBVoice has a wider range of support for Dialogic hardware of DM3 architecture. This is done via a new interface that has been optimized for peak performance and offers the most flexibility in resource management for this line of Dialogic voice cards. For a complete list of supported hardware in VBVoice, please contact Pronexus, or visit

http://www.vbvoice.com/ivr-software-vbvoice-deployment/vbvoice-supported-voice-card

NOTE: As a pre-requisite, any previous/unsupported version of Dialogic HMP or Dialogic SR6 driver must be uninstalled prior to installation of a different or later version.

NOTE: VBVoice Simulator mode will not facilitate a connection with any telephony infrastructure, and has certain application limitations. Refer to the VBVoice Help File for more details about Simulator mode and testing and debugging.

Installation Requirements

Refer to the Dialogic product documentation for board specs and information such as physical card dimensions, supported hardware, power requirements, and cable connector pinout.

Dialogic stipulates that the system have DEP and PAE disabled. Refer to the Dialogic Release Guide for full system requirement details:

Dialogic HMP3 Release Guide: www.download.pronexus.com/HMP_Release_Guide.pdf

Dialogic SR6 Release Guide: www.download.pronexus.com/SR6_Release_Guide.pdf

Install Procedure

NOTE: Windows 7 Server 2008 and Server 2012 users -

Installation files and configuration utilities must be run by right click of the installation file or utility executable, and then by selecting 'Run As Administrator'.

See next page for step by step instruction.

HMP Driver Installation

1. **Welcome to Dialogic HMP**
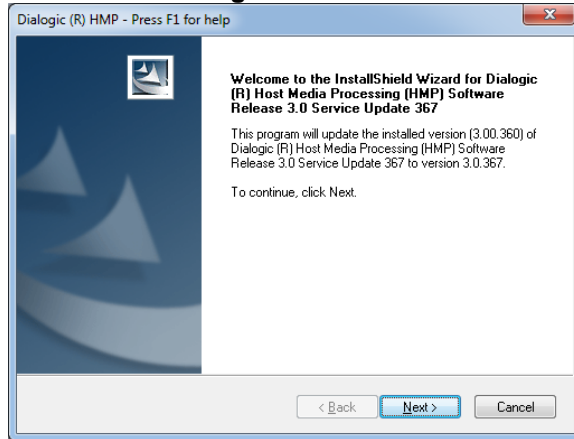
VBVoice 10.1 supports HMP3.0 SU367.

www.download.pronexus.com/hmp3su367.zip

The installation steps are the same for both HMP releases.

From the HMP3 installation folder, run the "setup.exe" file using
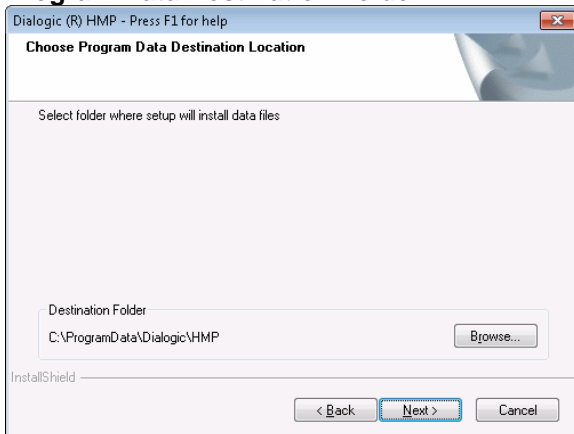
The right-click 'Run As Administrator' option.

2. **Program Files Destination Folder**
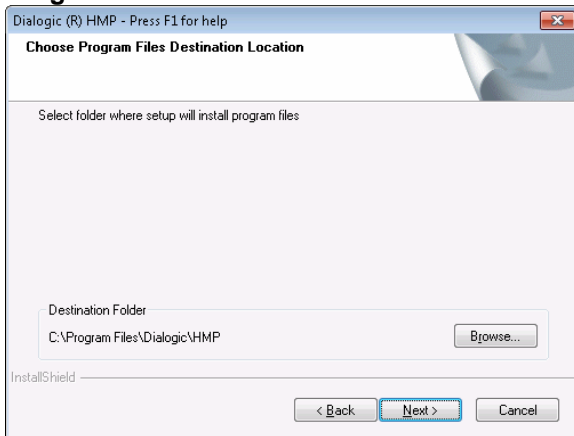
Dialogic will install a number of firmware files, as well as the Demo applications (when selected to be installed) by default to:

C:\Program Data\Dialogic\

3. **Program Data Destination Folder**

Dialogic will install a number of firmware files, as well as the Demo applications (when selected to be installed) by default to:

C:\Program Data\Dialogic\

4. Select Features
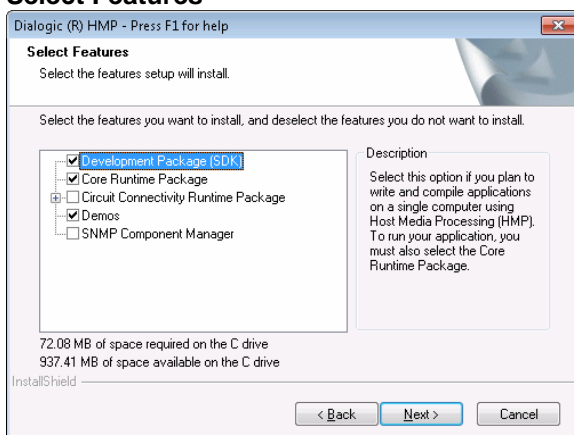
When prompted to select features, use the check-boxes to choose the components shown to the left:

- Development Package (SDK) - **Required**
- Core Runtime Package - **Required**
- Demos – **Optional** (recommended)
- SNMP Component Manager is an option for remote monitoring of Dialogic. See Dialogic Installation documentation for details. – **Optional** (not recommended)
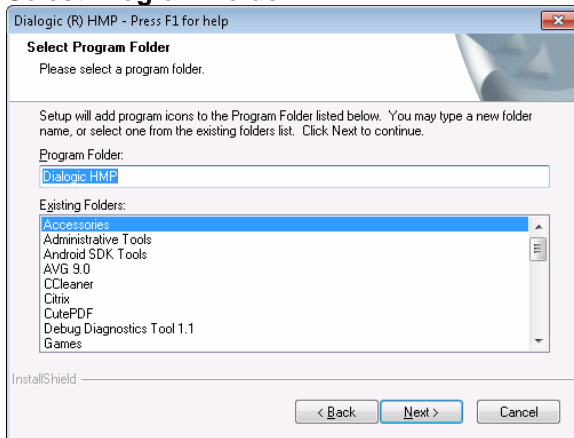- Circuit Connectivity Runtime Package - **Required for installation of Dialogic DNI boards**

NOTE: SNMP has been identified to increase CPU use and impact IVR performance.
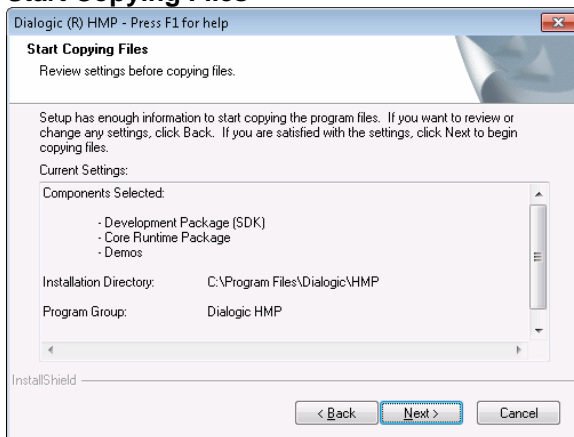
5. Continue with Installation
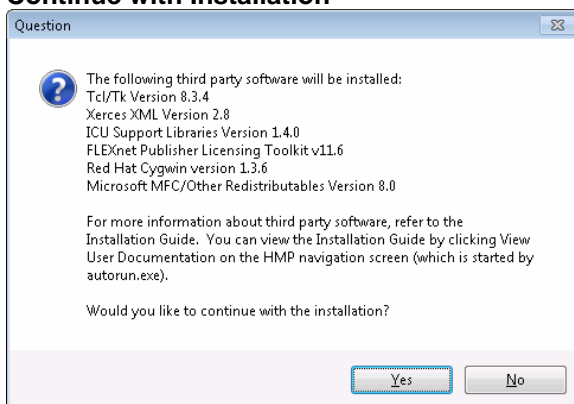
Click the "Yes" button to confirm the driver installation in order to proceed.
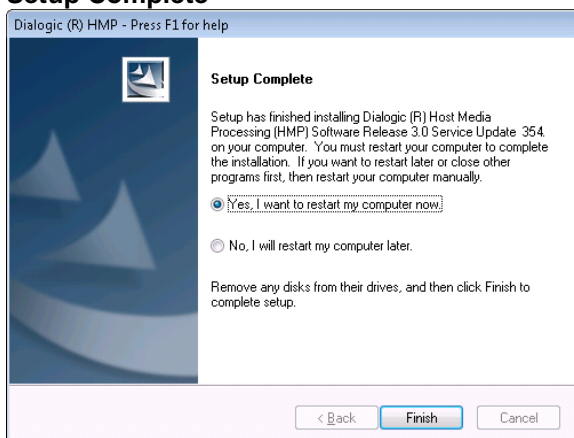
6. Select Program Folder

Specify the Programs Folder where the HMP installer will add program icons.

7. Start Copying Files

Confirm the components, and path of installation for Dialogic HMP, and click the "Next" button.

8. Setup Complete

Reboot once the installer finishes in order to complete the Dialogic HMP installation.

Dialogic HMP Licenses

This guide will outline how to download a demo HMP license file, and use it to apply and activate the license in the Dialogic HMP License Manager. Also outlined here is how to apply the HMP resources to the HMP_Software virtual board.

Permanent HMP licenses are available through Pronexus. Contact Sales@Pronexus.com for details.

Overview

The HMP licenses directly reflect the resources, or capabilities, which the HMP_Software device will have. These same resources apply to the DNI series of Dialogic board, as they run on the HMP driver as well.

The HMP resources are as follows. These resources are purchased via the HMP licensing solution:

RTP – G.711

Provides the capability of streaming digitized voice over RTP using the G.711 coder with 10, 20, 30 ms frames. The number of RTP resources for any given configuration should be greater than or equal to the number of voice, enhanced voice, conferencing, continuous speech processing, or fax resources (whichever requires the highest number of resources).

Enhanced RTP

Adds the capability of streaming voice over RTP using the G.723.1, G.729a, and G.729b coders.

Voice

Basic voice ports that allow you to control volume, record with Automatic Gain Control (AGC), and DTMF and user-defined tone detection, including RFC 2833 and H.245 UII. Each voice port requires an RTP G.711 port.

Conferencing

Conferences parties using advanced features such as coach/pupil mode, tone clamping, and active talker notification. Conferencing resources require RTP G.711.

Speech Integration (Continuous Speech Processing)

Speech integration capabilities that enable you to integrate the HMP Software product with speech engines for Automatic Speech Recognition (ASR) support using the Dialogic® Continuous Speech Processing APIs.

Fax Termination

Supports T.38 and V.17 fax origination and termination sessions. Fax requires RTP G.711.

IP Call Control

Supports first party and third party IP call control. First party call control manages a media session that is initiated and terminated by Dialogic® HMP Software. Third party call control enables one entity to create, modify, or terminate a media session between two or more endpoints where the call control signaling and media exchange are independently managed.

Dialogic HMP Configuration Steps

Once you have purchased HMP licenses from Pronexus, you will receive an email with a link and an ID. Use these to access the Dialogic HMP licensing portal. Follow the simple steps to provide the MAC address of the system's primary NIC card. The "Lock to Host" option is used on VoIP only systems. Systems which have a DNI board installed will host the licenses to the serial number of the DNI board. The "Lock to Board" option is used in the case systems with DNI boards installed.

See the following page for steps outlining how to apply and activate the newly generated Dialogic HMP .lic license file, and how to apply the resources to the HMP_Software device in a VoIP system.

1. **Download the HMP License File**
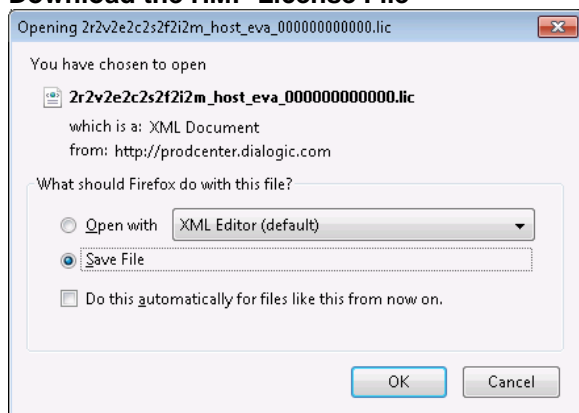
To acquire a temporary Dialogic HMP3 go to the Dialogic website

The default location to save the HMP license file is:
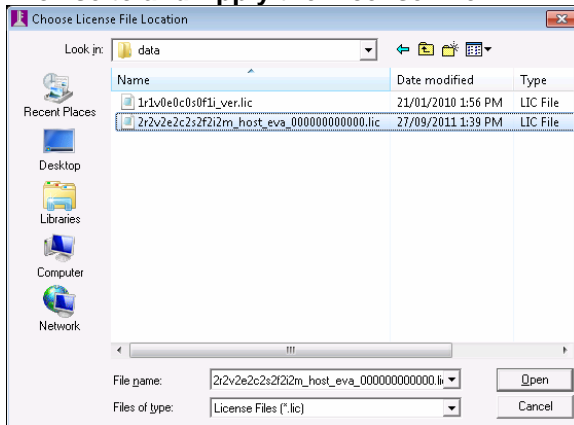
C:\Program Files(x86)\Dialogic\HMP\data

2. **Open the Dialogic HMP License Manager**
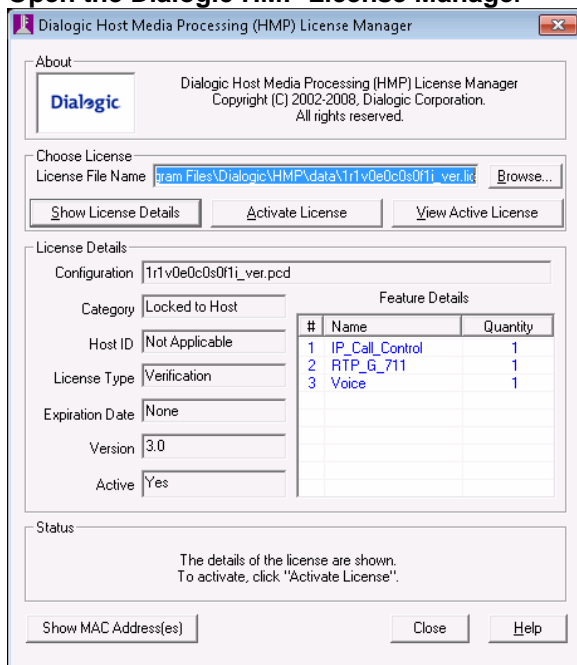
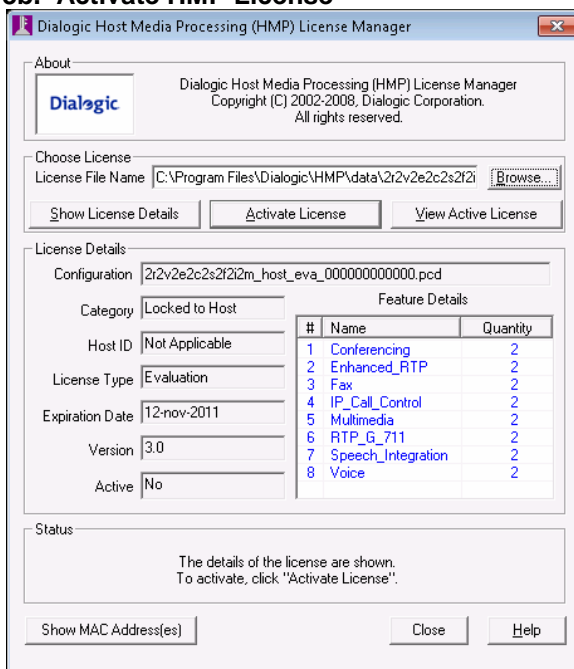The HMP License Manager is used to apply and activate the Dialogic HMP .lic license file.

Launch the HMP License Manager from Your Start Menu or from the executable found here C:\Program Files\(x86)\Dialogic\HMP\bin\ LicenseManagerGUI.exe
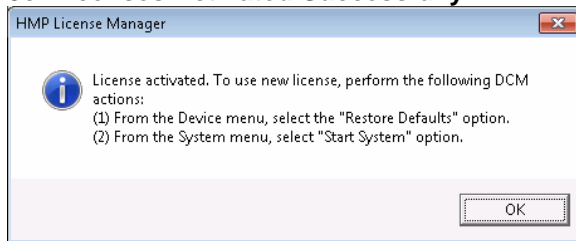
3. Browse to and Apply the License File

Click the Browse button in the HMP License Manager in order to apply the .lic license file
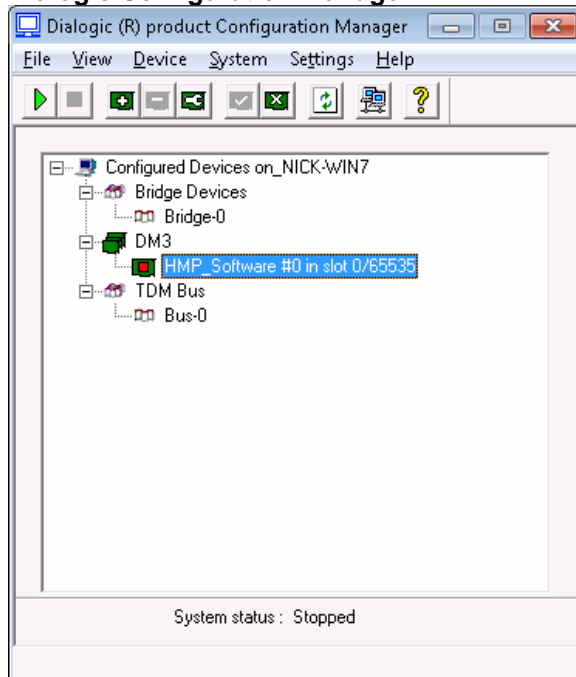
.

3b. Activate HMP License

Click the "Activate License" button to activate the currently applied HMP .lic license file.

3c. Licenses Activated Successfully

Once the HMP license activates the next steps are described – access the Dialogic Configuration Manager and apply the firmware to the HMP_Software device.
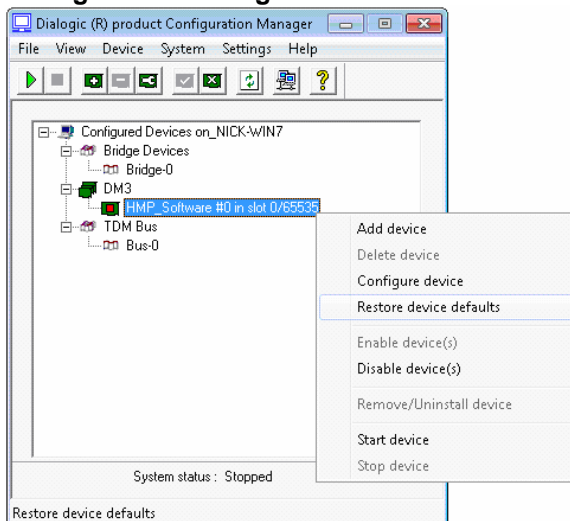
4. **Dialogic Configuration Manager**

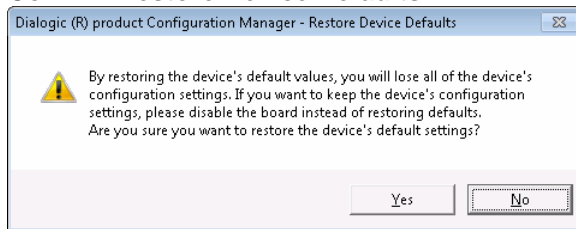The Dialogic Configuration Manager (DCM) can be accessed from the Start Menu, under the Dialogic folder.

Alternatively you can launch the Dialogic Configuration Manager from C:\Program Files\(x86)\Dialogic\HMP\bin\NCM.exe
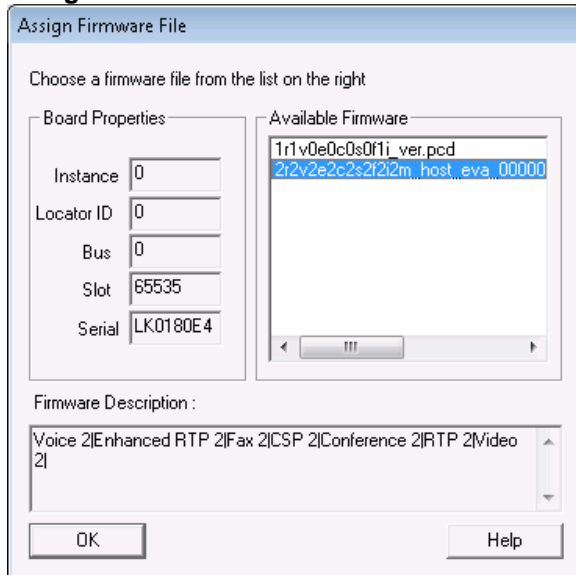
5. **Configuration Manager**

Right Click the HMP_Software device and select the "Restore Device Defaults" option.

6. **Confirm Restore Device Defaults**

Click "Yes" to proceed with Restore Device Defaults configuration.

7. **Assign Firmware**

Select the firmware file which reflects the license file that was activated in HMP License Manager. This will be applied to the HMP_Software device resources. Click "OK" to apply the firmware and close the browsing window.

8. Start the Dialogic Board
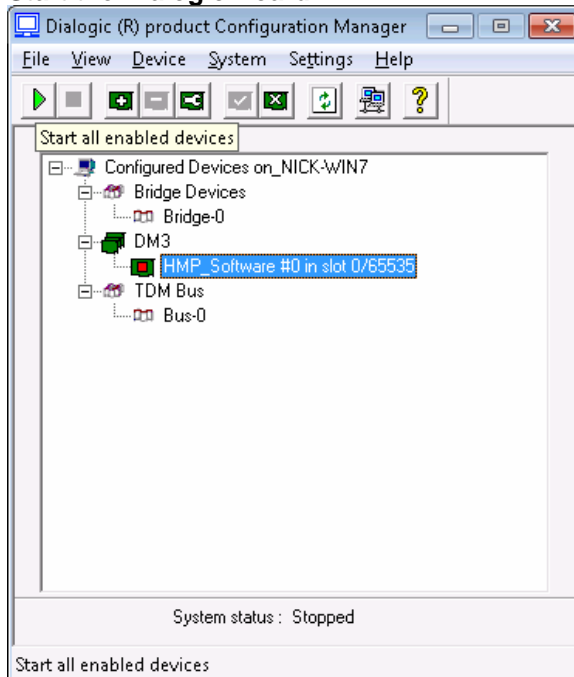
Click the green arrow button in the upper left to 'start' the HMP_Software device.

9. Dialogic Board Started in DCM
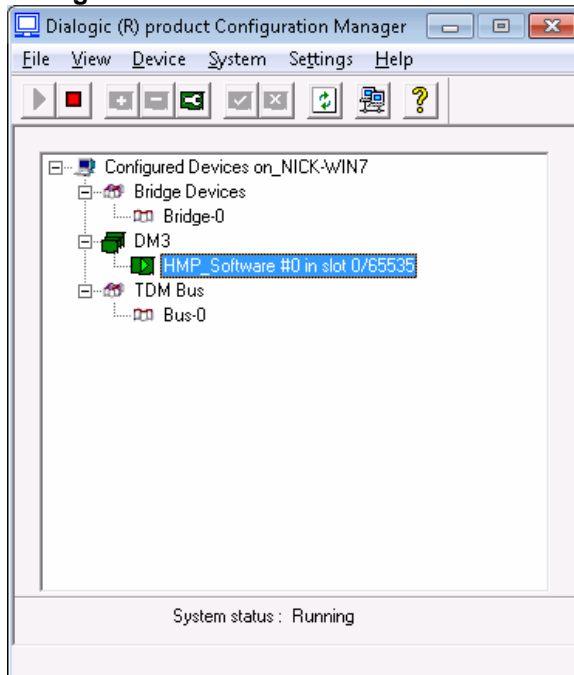
Once the Dialogic board (HMP_Software device) has started, Dialogic is ready to begin passing calls up to the VBVoice application, and likewise initiate outbound calls as requested by the VBVoice application.

Set Voice and Data Interfaces

The following will take you through the steps required to connect the VBVoice API to the Dialogic media. It is required to have a supported version of the Dialogic HMP OR Dialogic SR6 driver installed prior to making this configuration. The card type option will not be available unless the driver is installed.

As a pre-requisite, any previous/unsupported version of Dialogic HMP or Dialogic SR6 driver must be uninstalled prior to installation of a different or later version.

By default, the card type is set as "Simulator", which enables VBVoice to use the system's soundcard and speakers to test an application call flow without the need for Dialogic media. This feature is most useful when developing, and debugging the application. Since there is no need for Dialogic media when running in Simulator mode, VBVoice is flexible enough to be installed on any laptop or tablet.

NOTE: Simulator mode will not facilitate a connection with any telephony infrastructure, and has certain application limitations. Refer to the VBVoice Help File for more details about Simulator mode and testing and debugging.

Navigate to the VBVoice Control Panel via the Start Menu, select the Configuration section, and then select the Voice & Data Interface.

Click on the appropriate Dialogic telephony media; Contact Pronexus Sales to inquire about Pronexus Call Control implementation.If you have a Dialogic JCT card you will have installed the Dialogic SR6 driver, and you will select the Dialogic Springeware option.

New for VBVoice 10 is the option to add a visual component to your IVR called Visual Connect. This allows callers to establish a data session (rather than a voice session) with your IVR call flow by using an HTML5 web browser for the interaction with the IVR, rather than a traditional voice call. Contact Pronexus Sales for more details on this new feature.
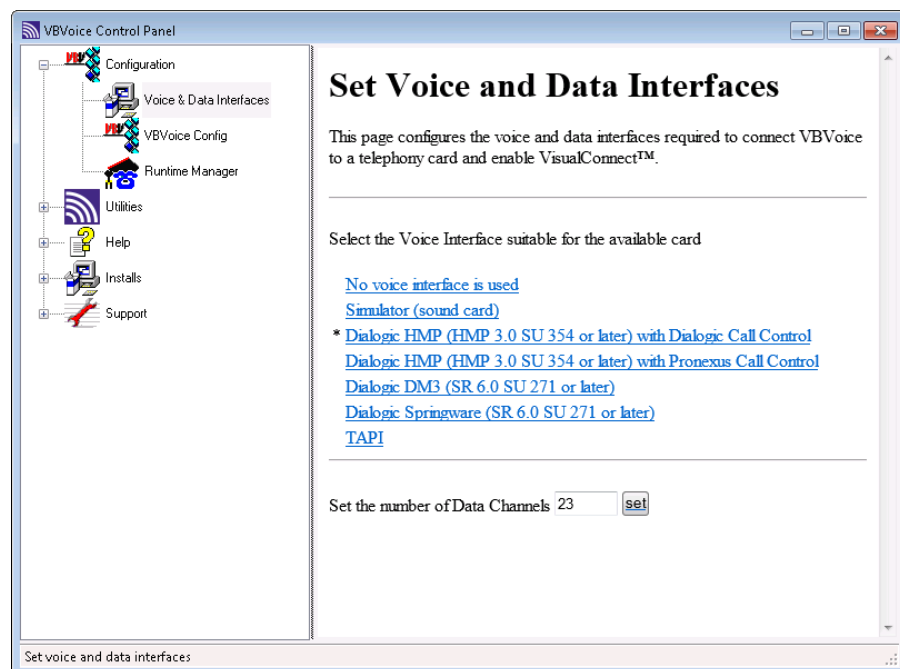
Developing your application with VBVoice 10 on 64 bit

Overview

By default, 64 bit Visual Studio will open the VBVoice example applications in 64 bit. This will throw a COM Exception when the example is run. This guide will take you through the steps required to configure Visual Studio to compile the VBVoice application as x86.

Procedure

1. Open the VBVoice example project in the development environment. Note the project is set for use 'Any CPU'. On 64 bit system, the default will be 64 bit platform, which is not supported by Dialogic.

2. Right click the Project Solution and choose Properties option.
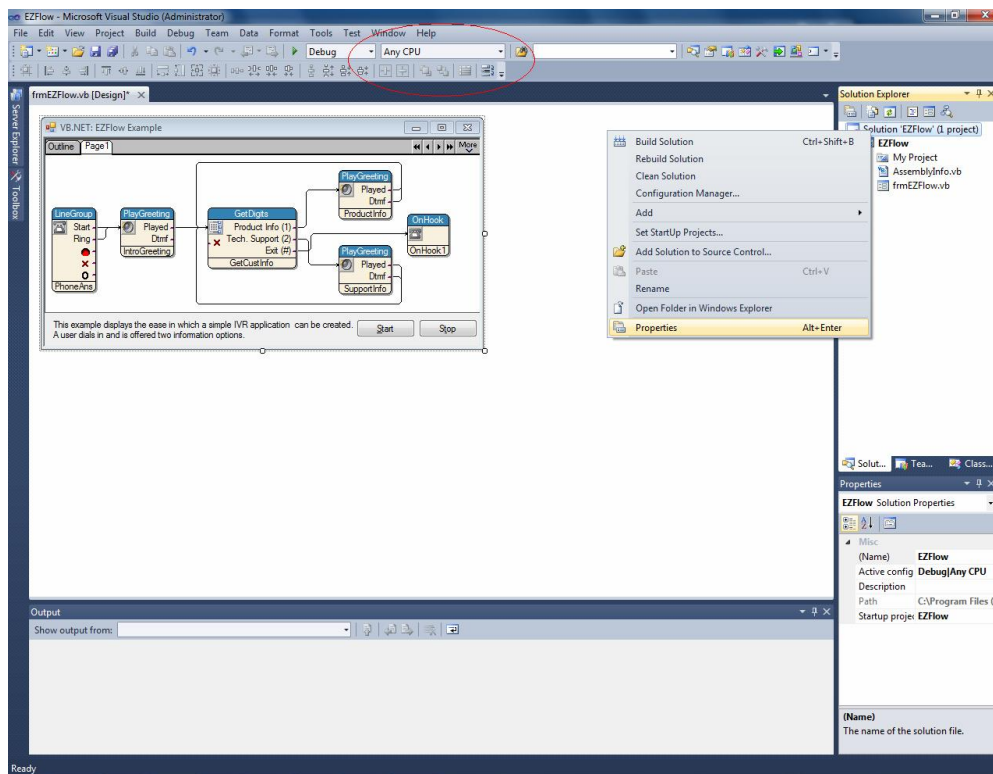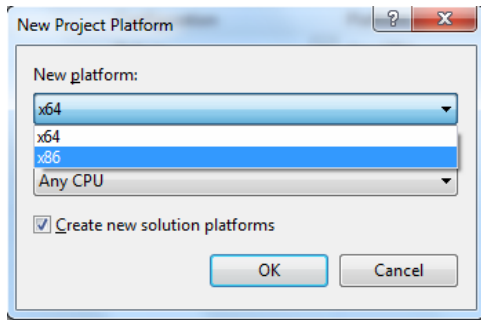
3. Select the Configuration Manager button.
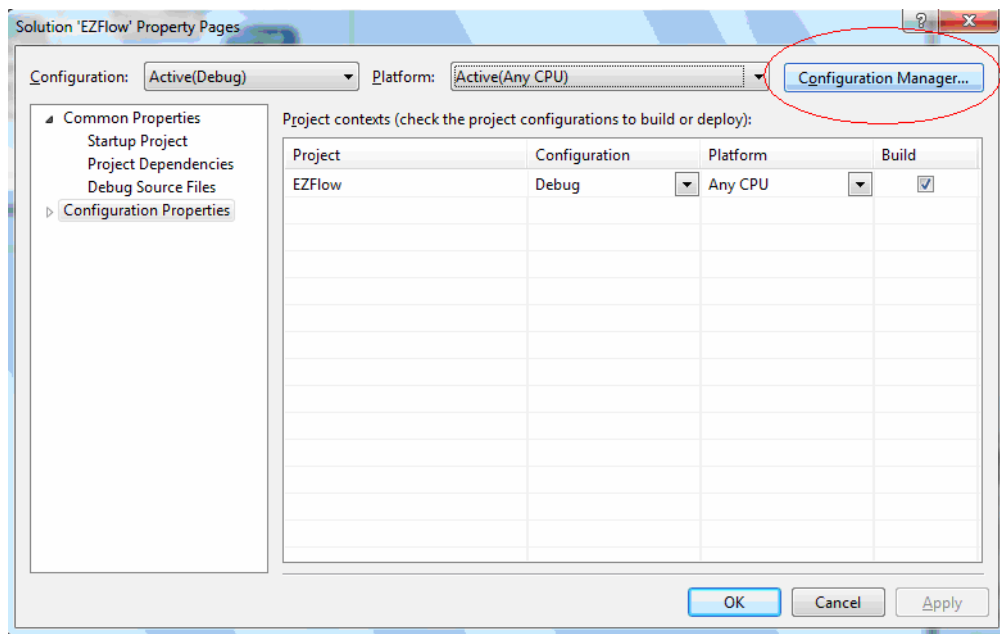
4. Use the platform dropdown to create New Platform configuration.
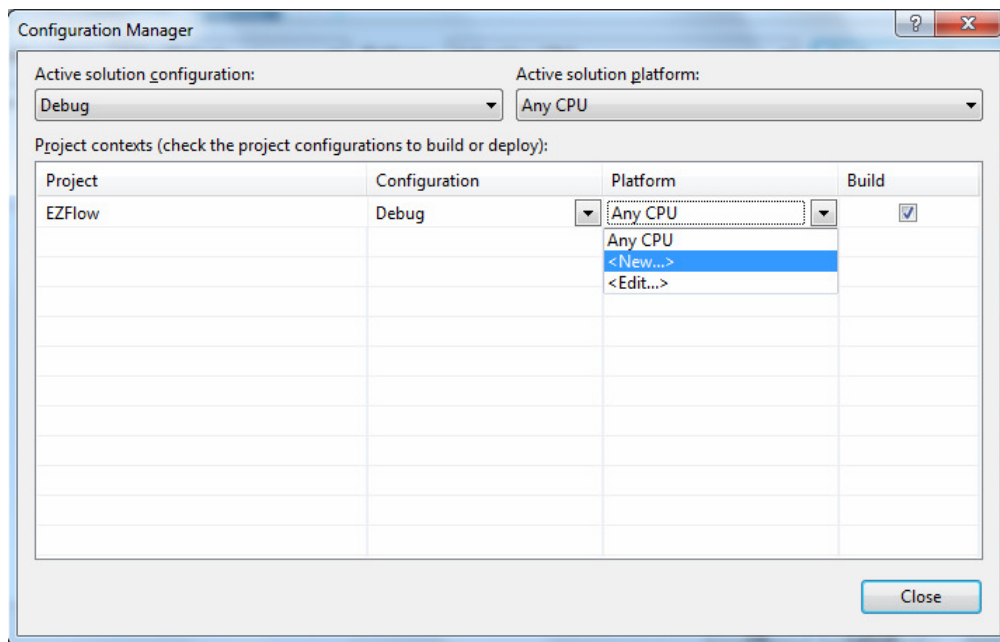
5. Use the New Platform dropdown to select x86 (32 bit) option, and then click ok.

6. Click ok on the remaining windows until you return to the project. Note that the configuration is now set to x86 Platform.