

COGNEX

VisionView[®] Application Note

Advantech HMI Panels

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Introduction

This application note describes the necessary steps to integrate the Cognex VisionView® application onto a Windows® CE-based Advantech HMI panel.

The VisionView application can be configured for the run-time environment of the machine HMI panel. The VisionView application can be deployed on the following Advantech devices:

- TPC-650H (640 x 480)
- TPC-1070H (800 x 600)
- TPC-1250H (800 x 600)
- TPC-1570H (1024 x 768)
- TPC-1770H (1280 x 1024)
- TPC-1780H (1280 x 1024)

Note: The VisionView application can be deployed on Advantech panels running Windows CE 6.0.

VisionView Support

Cognex online support is available to assist you in using the VisionView application software. For online support, documentation, and downloads, visit:

<http://www.cognex.com/Support/VisionView>.

Installation and Configuration

Install the Software to the PC

1. Install InduSoft Web Studio™ version 7.0 or higher to the PC.
2. Install the VisionView CE-SL software to the PC. This will automatically install the following to the PC:
 - A VisionView_1.6.6_Advantech.cab file provided by Cognex and used to install VisionView and its required components to the Advantech panel.

Install the Software to the Panel

1. Insert the USB drive or Secure Digital (SD) media card into the PC.
2. From the PC, navigate to the VisionView folder that contains the panel installation files. The default location is: C:\Program Files (x86)\Cognex\VisionView\CE-SL x.x.x\Advantech\CAB.
3. Copy the **VisionView_1.6.6_Advantech.cab** file to the removable media.
4. Remove the USB drive or SD media card from the PC and insert it into the applicable slot on the HMI panel.
5. From the HMI panel, use My Device to navigate to the location of the removable media (for USB drives, this will be “USB Hard Disk”) and double-click the drive to view its contents.
6. Double-click the **VisionView_1.6.6_Advantech.cab** file to install the VisionView application and its related components to the HMI panel. During the installation process, you will be prompted for the installation location for the application. It is recommended to install to the default location (\HardDisk\VisionView).

Note: To uninstall the VisionView application from the panel, navigate to the Control Panel, select **Remove Programs** and select the Cognex VisionView application from the list.

Configure InduSoft Web Studio

1. From the PC, launch the InduSoft Web Studio (typically found by clicking *Start menu > InduSoft Web Studio x.x > InduSoft Web Studio x.x*).
2. Create a new Project. Insert a Screen worksheet, and place a button within the Screen. This button is used to launch VisionView in the HMI panel.

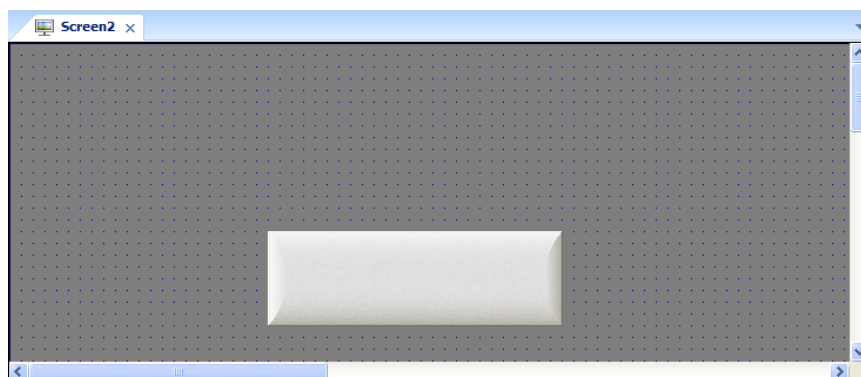


Figure 2-1: Insert a Button

- Double-click the button. The Object Properties dialog appears.

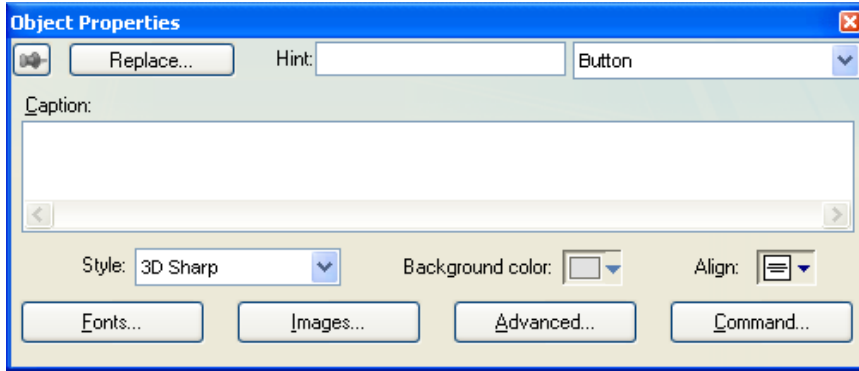


Figure 2-2: Object Properties Dialog

- Click the **Command** button. The dialog displays the Command screen.

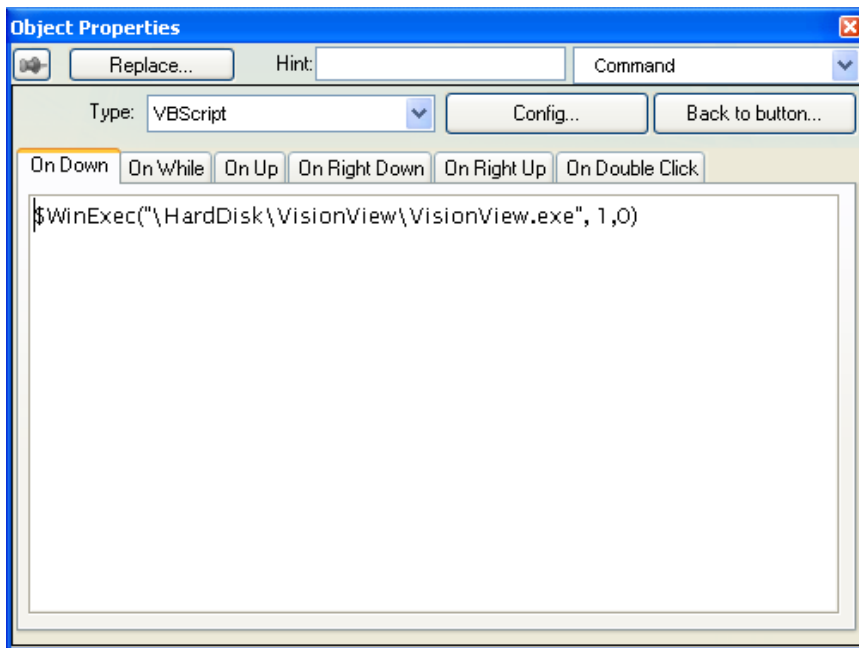


Figure 2-3: Object Properties Dialog: Command Screen

- Select **VBScript** from the Type drop-down list. Click the **On Down** tab, and enter \$WinExec("\\HardDisk\\VisionView\\VisionView.exe", 1,0) in the tab.

Note:



- Optionally, one or more command line arguments can be appended to the VBScript. For details, refer to [Command Line Arguments on page 5](#).
- For more information on the WinExec function, refer to the InduSoft Web Studio documentation.

- Close the dialog, and save the Project.
- Install **CEView** from the PC to the panel. Refer to the InduSoft Web Studio documentation for detailed instructions on this process (refer to *Installing the Software* topic).



Note: By default, CEView is located in the following directory:

C:\\Program Files (x86)\\InduSoft Web Studio v7.x\\Redist\\WinCE 5.0\\x86\\bin\\CEServer.exe

8. Install the InduSoft **Project** from the PC to the panel. Refer to the InduSoft Web Studio documentation for detailed instructions on this process (refer to *Configuring the Development Station* topic).

Note: The Project can only be downloaded to a folder within CEView.

9. Once the Project is successfully installed to the panel, close the InduSoft Web Studio on the PC.
10. Start **CEView** to launch the Project on the panel.
11. Click the button in the Project. You can now launch VisionView on the panel.

Command Line Arguments

By default, the VisionView application is launched in full-screen and topmost mode, without a windowed frame. The following optional command line arguments may be appended to the VBScript to launch the VisionView application in different modes.

Table 2-1: Command Line Arguments

Argument	Description
-bounds:x,y,w,h	Launches the VisionView application as a sub-region of the screen. The x and y values represent the coordinate positioning of the screen. The w and h values represent the pixel height and width of the screen. Minimum values: 640 (width) and 430 (height). VBScript Example: \$WinExec("HardDisk\VisionView\VisionView.exe -bounds:0,0,640,430", 1, 0)
-windowed	Launches the VisionView application with a windowed frame that has Minimize, Maximize and Close buttons. In this mode, the VisionView application's Minimum and Close buttons (displayed in the lower right of the Run Mode screen) are not displayed. The VisionView application is allowed to be hidden behind other windows. VBScript Example: \$WinExec("HardDisk\VisionView\VisionView.exe -windowed", 1, 0)
-nottopmost	The VisionView application is allowed to be hidden behind other windows. VBScript Example: \$WinExec("HardDisk\VisionView\VisionView.exe -nottopmost", 1, 0)
-nomimize	The VisionView application's Minimize button (displayed in the lower right of the Run Mode screen) is not displayed. VBScript Example: \$WinExec("HardDisk\VisionView\VisionView.exe -nomimize", 1, 0)

Note:

- When appending command line argument to the VBScript, a space is required before the argument.
- If the command line argument is not formatted properly, the VisionView application will ignore it.
- If more than one argument is appended, they must be separated with a space. For example, when "-bounds:x,y,w,h" and "-windowed" arguments are appended, the VBScript should be:
\$WinExec("HardDisk\VisionView\VisionView.exe -bounds:0,0,640,430 -windowed", 1, 0).
- When specifying the bounds, spaces are not permitted within the argument. If less than the minimum value is specified for the width and/or height, VisionView uses the minimum value for the screen size. For example, if "-bounds:0,0,600,430" is specified, the screen size will be 640 x 430.
- When the VisionView application is launched using the "-windowed" command line argument and not maximized, the window may be moved. However, if moved, it may not be resized dynamically and the Minimize and Close buttons will not be displayed within the VisionView application.

License

License the VisionView Application

To deploy the VisionView application on the panel, you must purchase and install a license. To install a license, launch the VisionView application, click the green key button in the Cognex VisionView Setup screen, enter the Activation ID provided by Cognex in the Enter the Activation ID screen, and click **OK**.

