Windows XP Embedded User's Guide for Eaton XP-702 with Visual Designer

Introduction

The Eaton® XP-702 family is made up of high performance yet cost-effective operator interface (OI) products. The XP-702 family carries on Eaton's operator interface tradition of performance in balance with ease of use. The XP-702 family sets the standard for hybrid OI systems by combining the flexibility of Microsoft's® Windows® 2009 Standard Embedded (XP based) operating system with the stability and reliability achieved through the solid-state hardware design and exclusive Protect Mode™ that provides protection for the operating system and software.

The XP-702 family provides the performance and flexibility of PC based operator interfaces without the associated complexity of a PC on the plant floor. With integrated high-speed Ethernet ports, serial ports, USB ports, removable CompactFlash, and PCI, the XP-702 models can be adapted for a wide variety of user requirements.

The XP-702 family of products configured with the Visual Designer[®] software provides a range of solutions ranging from basic operator monitor and control functions to full SCADA software capabilities and built-in Web Serving.

Whether replacing hard-wired pilot devices and pushbuttons or providing machine control and high end SCADA functions, the XP-702 will suit a wide range of user requirements.

The remainder of this document describes some of the operating system features of the XP-702 system.

Protect Mode

The Eaton XP-702 family of products has a unique and exclusive Protect Mode feature that safeguards the integrity of files stored on the C:\ partition of your operating system. This feature ensures that data and operating system files cannot be modified by anyone or corrupted by unexpected power disruptions. As a result, you can be confident that the XP-702 meets your rigorous industrial environmental requirements and can be protected against all unauthorized alterations.

When enabled, Protect Mode actively protects your XP-702 unit from unwanted change. As changes are made to data and files they appear to be saved but in reality they are saved in volatile memory. This means that when the XP-702 is restarted, all of the changes will be deleted from memory and the last information saved in the **C:**\partition will be used. With this in mind, all changes made that are to be stored in the **C:**\partition must be saved or committed so that the next time the XP-702 is restarted the new data will be available. Types of data stored on the C:\partition include the XP-702 Runtime software and communications drivers, time/date data, Ethernet port settings, and all Windows registry settings and operating system functionality.

Notes:

- The D:\drive is reserved for user data and is not protected by the Protect Mode feature. Data and program files can be easily added, modified and deleted in this storage area.
- If extensive changes are made to the C:\partition without a subsequent reset or execution of
 a Protect Mode Save operation, volatile memory may become full resulting in system errors.

Protect Mode Save Operation

While the Eaton XP-702 unit's Protect Mode is active, the unit is protected against any changes to data stored on the **C:** partition. In order to save desired data changes to the **C:** partition, the Protect Mode Save operation must be run.

It is good practice to shutdown and re-start the XP-702 in preparation to making permanent changes to the **C:**\partition. This step will ensure that all data stored in volatile memory is cleared so that no unexpected corruption or changes will take place on your **C:**\drive. Once the XP-702 has been restarted, make your changes and then save the changes by selecting **Start>All Programs>Protect Mode Manager**. From the Protect Mode Manager window select the Protect Mode Save tab and click on the "Commit" button.

Once the Protect Mode Save operation has been launched, the changes that affect the **C:** drive will be saved and then the XP-702 unit will automatically shutdown and restart, back in Protect Mode.



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Disabling Protect Mode

It is possible for the user to disable the Protect Mode feature of the XP-702. Reasons for doing so include the need to install a software program that is very large or one that requires multiple reboots to complete its installation. To do so, open Protect Mode Manager by selecting **Start>All Programs>Protect Mode Manager**. From the Protect Mode Manager window select the **Advanced** tab and click on the "Disable Protect Mode Save" button. The system will then reboot and flush any pending changes to the protected C:\ partition. Upon reboot Protect Mode will be disabled and while in this mode the XP unit will behave like any other Windows PC, meaning that it is subject to all forms of malware including viruses, and adware and it must be shut down through the normal Windows shutdown mechanisms to prevent potential corruption of the operating system.

It is recommended that the XP unit be removed from any plant network while Protect Mode is disabled and that all media connected to the unit for software installation are scanned for malware prior to attaching it to the unit. Once all desired changes have been made the user should place the XP unit back in Protect Mode through the Advanced tab of the Protect Mode Manager utility by clicking on the "Enable Protect Mode Save" button. This will force a reboot and return the XP unit to its protected state.

Downloading the Visual Designer Project

Setting the XP-702's IP Address

To download the Visual Designer project to the XP-702 over Ethernet you will first need to establish an Ethernet connection to the XP-702 unit. This can be done many ways from a simple point-to-point connection with a Cat 5 crossover cable or by using an Ethernet hub, switch, or router. Note that some PC's Ethernet ports will autosense the transmit/receive lines and provide internal crossover capability. If your PC has this feature you can use a standard Cat5 patch cable to connect to the XP-702. The XP-702's two Ethernet ports are configured at the factory for DHCP so that if it is connected to a router which provides the DHCP service or to a plant network it will automatically be assigned an IP address. In most applications the XP-702's IP address will be set to a static value. If you are unsure of how to set the XP-702's IP address please consult your local IT support personnel. Once you know what static IP address to assign the XP unit take the following steps:

- 1. Open Control Panel with **Start > Control Panel**, then double click to open the Network Connections dialog.
- Double-click on one of the Local Area Connection icons and scroll down in the connection items list to select Internet Protocol (TCP/IP) and then click on the "Properties" button.
- 3. Select the radio button labeled "Use the following IP Address:", then type in the IP address and subnet mask (Eg. 192.168.1.212 and 255.255.255.0) and click "OK"
- 4. Click OK to close the Local Area Connection Properties dialog, then close the Network Connections window.

Note that there are two Ethernet ports on the XP unit the one physically located next to the serial Comm2 port is listed as Local Area Connection 1 and is the 10/100 BASE-T port. The other is listed as Local Area Connection 2 and is the 10/100/1000 BASE-T port.

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Creating a Backup/Restore Point for your XP System

It is strongly recommended that the user backup the XP's operating system as soon as possible after the unit is received, powered up, and placed in Protect Mode. This is so that in the unlikely event of an unintentional corruption of the operating system, the user will be able to recover the unit to its original factory settings, with Visual Designer licensing intact. Because the Visual Designer runtime software license is unique to each XP unit, it is not possible for Eaton to provide an OS restore image that includes the Visual Designer software license. To prevent delays and costs that could result from the need to recover a unit's operating system without having a restore image that includes the Visual Designer license, Eaton provides a backup/restore utility free of charge on our website. It is provided in zipped format complete with an Instruction Leaflet (IL) which describes the use of this utility. This can be downloaded by going to www.eaton.com/oi and then browsing to the OI Software section and clicking on the Visual Designer Software icon in the Download section of that web page. Once the utility is downloaded the user can unzip the utility and use the MKRestore batch file to create a bootable USB memory drive with the install utility loaded.

Downloading to the XP-702 via Ethernet

Once you have an Ethernet connection established between your development PC and the XP-702 unit, make sure that the Remote Agent which opens by default at XP's startup is running. If it was shut down manually you can restart the Remote Agent with **Start > All Programs > Eaton > Visual Designer vX. Y> Remote Agent**. Then open your Visual Designer project on your PC and click on the Connect button on the Home tab of the Ribbon under the Remote Management Group. In the Network IP property type in the IP address of the XP-702 as shown below and click on the "Connect" button.

Project		
Import Embedded License	Target Station • Network IP: 192.168.1.20 • Serial Port: COM3 • Microsoft ActiveSync	

If your Ethernet connection is configured correctly the Status property will change to show "Connected to Visual Designer vX.Y" as shown below.



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Next, click on the "Project" tab on the left side of the Remote Management window. Verify that the target is set correctly to **D:\Cfg\APPL**. If it is not set correctly, click on the button labeled "..." to the right of the target property and select the D drive and browse to the **Cfg\APPL** folder.

Remote Managemer	ıt 🛛 🛛 🔀
Target Project Import	Download your project to the target device
Embedded License	Local Settings/E0015771My Documents/Visual Designer v7.0 Projects/X/Tool_RTC\ Target: D:\Cfg\APPL\ Download V Only newer files Covenionad Keep user files Send Ele Send Ele
	OK Cancel

Once the target path is set make sure to uncheck the checkbox "Only newer files" then click the "Download..." button. An Execution Environment dialog will display informing you to verify that the target platform's license supports the Product Type configured. If the XP's license is sufficient to run the project, click on the "Yes" button which will begin the download operation. Note that the Status: property will update with every file downloaded. After all files have been successfully downloaded the Status will indicate "Files were sent successfully." To start the project on the XP you can either click on the "Run" button on the Remote Management dialog box on your PC or click on the "Start" button on the Remote Agent dialog on the XP.

You should make sure to perform a Protect Mode Save operation after you download to the XP-702 in order to permanently save the changes to Visual Designer's **Program Settings.ini** file on the C:\ drive that are made during the download process.

Downloading to the XP-702 USB Memory Device

You may also choose to manually load your Visual Designer project from a USB memory device rather than use the Ethernet transfer method. To do so you should take the following steps:

- Copy the entire project folder from your development PC to a USB memory device. Note that by default the project folder is stored under "My Documents\ Visual Designer vX.Y Projects" in a folder name matching the project name when it was created.
- Place the USB memory device in a USB port of the XP-702 and paste everything under the project folder (not including the project folder) into the **D:\Cfg\APPL** folder of the XP unit. (Eg. Alarm, Config, Database, Hst, Screen, Symbol, and Web folders plus the *APPNAME*.APP file; plus any user created files and folders under the project folder)
- 3. Open Visual Designer on the XP-702 **Start > All Programs > Visual Designer** *vX.Y* **> Visual Designer** *vX.Y*.
- 4. A Visual Designer error dialog should pop up saying "The Project was not found in the ..." This is normal, click "OK"
- 5. A Visual Designer warning dialog should then pop us saying "License not found!". This is also normal, click "OK"
- 6. The Visual Designer window will then display with no project selected. Click on the File Open icon on the Quick Launch toolbar or click the Visual Designer icon in the upper left corner of the window and select "Open Project" from the drop list.
- 7. Browse to the D:\Cfg\APPL folder of the XP and select the .APP file located in that folder then click on the button labeled "Open".

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- 8. Another Visual Designer license warning dialog may pop up. If it does click "OK"
- Once the project loads and shows in the Project Explorer section you may close the Visual Designer application. This step will properly configure the **Program Settings.ini** file on the C:\ drive.
- Perform a Protect Mode Save operation. Go to Start > All Programs > Protect Mode Manager and select the Protect Mode Save tab and click the "Commit' button.

Automatically Starting the Visual Designer Project

The Visual Designer project is set to automatically run when the XP-702 boots up. If you wish to have the user manually start the project you will need to remove the **Startup** shortcut from the Windows startup folder. To do so take the following steps:

- 1. From the XP click Start > All Programs > Windows Explorer
- Browse to the folder "C:\Documents and Settings\All Users\Start Menu\Programs\Startup" and delete the StartUp shortcut icon from that folder.
- 3. Close the Windows Explorer window and perform a Protect Mode Save operation. **Start > All Programs > Protect Mode Manager** then select the Protect Mode Save tab and click the "Commit" button.

After the XP saves the changes to Windows partition it will reboot, and automatically launch the Remote Agent but not the Visual Designer project. The user can then click on the Start button of the Remote agent to manually launch the Visual Designer project.

Updating the Visual Designer Version

For proper runtime operation, it is critical that the version of Visual Designer running on an XP unit match the version of Visual Designer used to develop the runtime application. On new XP units the operating system image may have an older version of Visual Designer runtime software than the version currently available from the Eaton website. Because some users choose not to update their development software to the latest version available, the version of Visual Designer runtime software which comes installed on a new unit may be newer than the version they are currently using for development. For these reasons it is important to follow the recommended procedure for installing the correct version of Visual Designer runtime files on an XP unit when the development and runtime versions don't match.

Checking the Current Version of Visual Designer

To check the runtime version on an XP or on your development PC you follow the same process.

 Open the Visual Designer editor with Start > All Programs > Eaton > Visual Designer vX.X > Visual Designer vX.X.



Starting Visual Designer on XP unit

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2. Go to the Help tab on the Ribbon and click on the About icon.



Selecting Help About



Help About Window

3. If the runtime version, Service Pack number, Patch number or Build Number do not agree then you need to install the version of software that the project was developed in, i.e. the version of Visual Designer that is running on the development PC.

Updating the Visual Designer Runtime on an XP-702 Unit

1. Before beginning the update process you should first disable Protect Mode on the XP unit. Note: Before disabling Protect Mode it is strongly recommended that you have a good backup of the XP's operating system. If you have not already done so, refer to the previous section in the document titled "Creating a Backup/Restore Point for your XP System" Protect Mode, when enabled, prevents permanent or unwanted change to the XP's Windows operating system. For large changes to the Windows operating system, such as installing a large new program, the user has the ability to disable Protect Mode on the XP, and then after installing the program, to re-enable Protect Mode to insure operational reliability of the unit. To disable Protect Mode open XP's Protect Mode Manager Start > All Programs > Protect Mode Manager (top of the list). In the Protect Mode Manager window click the Advanced tab as shown below and click on the button labeled Disable Protect Mode. This will cause the XP unit to reboot.



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Disabling Protect Mode

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- 2. Once the unit has booted up, Protect Mode is no longer active. Important Note: With Protect Mode disabled the XP unit can be thought of as a normal Windows Industrial PC but without Anti-Virus software or the latest Microsoft Security Updates. Care should be taken to not expose the XP to the risk of Virus infection by removing it from any network and making sure any USB memory devices used on the unit while running without Protect Mode have been scanned for viruses and other malware. Also, avoid removing power from the unit during installation or removal of software as this may result in a corrupted File Allocation System. All reboots should be done through the Windows shutdown options.
- Now with Protect Mode disabled, uninstall the current version of Visual Designer by opening Control Panel and selecting Add or Remove Programs.

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🕝 Back + 🕥 + 🎓 🔎 Se	arch 😥 Fold	ders 👬 -			
Address 🔂 Control Panel				~	🔁 G0
See Also 🗇	2	Ġ.	2		^
(i) Help and Support		Accessibility Options	Add Hardware	Add or Remove	
			.	Programs	
	Administrative Tools	BDE Administrator	CSNW	Data Sources (ODBC)	~

Add or Remove Programs

4. In the Add Remove Programs dialog select the Visual Designer vX.X and click on the **Remove** button.

5	Currently installed programs: 📃 Show	up <u>d</u> ates	Sort b	y:
Change or Remove	🥪 Microsoft Silverlight	Size	20.38MB	^
Programs	Sentinel System Driver Installer 7.5.1	Size	1.04MB	
.	Studio PDF2 (novaPDF 7.2 printer)	Size	171.00MB	
Add New Programs	🚺 Visual Designer v7.0	Size	245.00MB	_
r -	<u>Click here for support</u> information.	Used	<u>rarely</u>	
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Add/Remove <u>W</u> indows Components	To change this program or remove it from your computer, click Change or Remove.	hange	Remove	

Uninstall Visual Designer

 You will get an error dialog as shown below indicating no Windows Installer can be found. Click the **OK** button.

Visual Designer v7.0	<u> </u>
Error 1706.No valid source could be found for product Visual Designer v7.	0. The Windows Installer cannot continue.

Error Dialog

- 6. You will next get a confirmation dialog asking you "Do you want to completely remove the selected application and all of its features?" Click the **Yes** button.
- 7. Windows will begin uninstalling Visual Designer. When complete a Window stating that the uninstall process is complete will be displayed. Click the **Finish** button.

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- 8. Once you have uninstalled Visual Designer you must locate the installation files used to install Visual Designer on your development PC and copy them to a USB Memory stick (scan first for viruses and other malware). If you cannot locate the installation files you can re-download them from the Eaton website at **www.eaton.com/oi** then go to the OI Software section, and click on the Visual Designer Software under the Software Downloads section. After the download is complete you can then unzip the installation files to your memory stick.
- Insert the memory stick into one of the XP's USB ports and open the folder to view the files and browse to the Disk1 directory and double-click on the Setup.exe icon



Launch Setup.exe

- 10. Once the installation begins you will be prompted to select the language to use for installing the software where the default is English (United States). Select the language and click **OK**.
- Next, you may be prompted to install any prerequisite software components that are not as yet installed on the XP unit. If prompted, click on the **Install** button.
- 12. Once the prerequisite components have installed completely you'll come to the Installation Welcome Screen. Click Next>. Note: On smaller XP screens, like the 8" and 10" models, the resolution of 800x600 is too small to show the entire dialog and the Next> button may be difficult to click without a mouse. You can grab the lower part of the title bar and move the window to the top of the screen in order to cleanly click on the buttons. For this reason it is recommended to connect a mouse to the XP unit during this software installation process.
- 13.Next you'll be presented with the License Agreement Screen. Once you've read the license you should click on the Yes button to agree to the license and proceed.



License Agreement screen

- 14.On the Customer Information screen you can modify the User Name and Company Name properties then click **Next>**
- 15.On the Choose Destination Location dialog it is recommended to go with the default location of C:\Program Files\Eaton\Visual Designer vX.X. Click Next>.
- 16.On the Select Features dialog, *uncheck* the optional installation components as shown below (Demos, Symbol Library, Runtime for Windows Embedded Compact, Runtime for Windows Embedded Standard, Windows Mobile, Collaboration Tools) then click **Next>**.

Select the features you want to install, and deselect the g Program Files C Denso Denso WOPC Comparents WOPC Comparents Workson Works Contact Comparent Windows Mobils Standard Windows Mobils Standard Wobile Access Fusitine Contact Standards Wobile Access Fusitine	features you do not want to install. Description A Illinary of prenade but such as parabeltons, together such as parabeltons, together such as parabeltons, together indicator lights, and so on.
333.72 MB of space required on the C drive 2277.61 MB of space available on the C drive	

Select Features screen

- 17. On the next dialog, click **Install** to begin the installation process.
- 18.After the "Installation Wizard Complete" dialog is displayed. Click **Finish** to close the dialog.
- 19. After the Visual Designer software has been updated you will need to update the shortcuts in the Start Menu. To do this you should open Windows Explorer Start > All Programs > Windows Explorer.
- 20.Open the folder C: Documents and Settings All Users Start Menu Programs Eaton Visual Designer vX.X and select both Remote Agent and Startup shortcuts and copy them to the Windows clipboard as shown in the figure below.



Copy Shortcuts from Visual Designer folder in Start Menu

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- 21. Next select the **Startup** folder under the same **C:\Documents** and **Settings\All Users\Start Menu\Programs** folder and paste the two shortcuts there. You will get confirmation dialog boxes indicating that you're replacing the versions that are already in that folder. Confirm by clicking **Yes to All**.
- 22.Now you need to re-Enable Protect Mode on the XP unit. To enable Protect Mode open XP's Protect Mode Manager **Start > All Programs > Protect Mode Manager** (top of the list). In the Protect Mode Manager window click the **Advanced** tab and click on the button labeled **Enable Protect Mode**. This will cause the XP unit to reboot. Once it reboots Protect Mode is once again active protecting the operating system from unwanted change, malware, or sudden power loss and the XP unit's Visual Designer software version matches that of the development PC.

Web Server Setup

The XP-702 has Internet Information Services installed and set up to support Visual Designer's built-in web serving feature. The Visual Designer factory installed license allows for 1 simultaneous web client connection but may be field-upgraded on the XP-702 to allow for up to 256 simultaneous web client connections. The IIS settings point to the **D:\Cfg\APPL\Web** folder as the default web location so that if the user loads their project to the **D:\Cfg\APPL** folder, the projects web pages will all be placed in the **Web** subfolder so that no changes are required to the IIS settings for the web serving feature to work.

Changing the Default Web Folder for IIS

If for some reason the user wishes to place their Visual Designer application folder in a different location then they must take the following steps to relocate the default web folder on the XP.

- 1. Open Control Panel and then open Administrative Tools
- 2. From the Administrative Tools folder open Internet Information Services
- 3. Expand the Local Computer folder then expand the Web Sites folder
- 4. Right-click on the Default Web Site and choose **Properties**
- 5. From the Default Web Site Properties dialog select the Home Directory tab
- Change the Local Path property by clicking the "Browse ..." button and navigate to and select the Web folder under your desired Visual Designer Project folder, then click the "OK" button.
- 7. Verify that the correct path is now shown in the Local Path property then click the "OK" button to close the default Web Site Properties dialog.
- 8. Close all remaining windows and perform a Protect Mode Save operation.

Connecting to the Visual Designer Web Server from a PC

In order to view the Visual Designer web pages over a network connection from a PC, you need to know three things:

- 1. The IP address of the XP running Visual Designer,
- 2. The name of Visual Designer's startup screen
- 3. A user name and password configured in the security settings of Visual Designer.

You can then open Microsoft Internet Explorer and in the address bar type in the address of the XP followed by a forward slash, followed by the name of the startup screen with a .html extension. For example, if the XP is at IP address 192.168.1.20 and the startup page of the running project is named "Startup" then the following would be the address line to get to the XP's starting web page:

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http://192.168.1.20/Startup.html

The following steps take place when it attempts to display the startup web page:

- 1. The startup web page HTML code is sent to the Internet Explorer browser
- In the header of the code the browser is notified that it needs a specific version of an OCX (ActiveX) control, named ISSymbol.ocx, installed and if it is not installed or if it is installed but is an older version than is required, Internet Explorer is directed to the Eaton web site to automatically install the ActiveX control.
- If the user is simultaneously on the Internet and connected to the XP, and depending on IE's security settings it will prompt the user to right click on the browser header to allow blocked ActiveX content. If the user does so it will download the ActiveX control and install it.
- 4. Once the correct version of the ActiveX control is installed the user will be asked to enter their User Name and Password configured in the Visual Designer security settings. If no security has been set up in Visual Designer the user named "Guest" with no password will suffice to open the web startup screen.

Manually Installing the Web Client ActiveX Control

If the PC trying to connect to the web server has Visual Designer installed then the ISSymbol.ocx is already installed. However in most cases Visual Designer will not be installed on the web client's PC. If the user is not connected to the web when first attempting to connect to the Visual Designer web server Internet Explorer will not be able to show the web page. In this case the user will have to manually install the ActiveX control to their PC.

Note: A bug in Visual Designer 7.0 installed an older version of the OCX control than is called for by the V7.0 web server. This is fixed in V7.0 Service Pack 1 but if you have V7.0 without the fix then the correct version of the OCX control will be installed from the Eaton website when you first try to connect to the web server, provided you are also connected to the Internet. If not connected to the Internet you will also need to manually install the ActiveX control.

To install the ActiveX control, follow these steps:

- Connect to the Internet and go to the Eaton Electrical web site's Operator Interface product section with the link www.eaton.com/oi
- 2. Select the link for Operator Interface Software
- 3. In the Software Downloads area click on the Visual Designer Software link.
- After providing your e-mail address you will be redirected to the Documentation Results screen where you can download the current Visual Designer Symbol Library (ISSymbolVM.cab).
- 5. After downloading the cab file you should be able to open it with any zip file utility and extract the entire CAB file contents to a temporary folder on your PC.
- 6. Run the Setup.exe file from the temporary folder, following the prompts to install it in the default location and to install all components when prompted.
- 7. After installation is complete click the "Finish" button.

You will then be able to connect to the Visual Designer web server from your PC's Internet Explorer application.

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Using the XP-702 to Serve the Web Client ActiveX Control

In some applications a remote user will not be able to be connected to the Internet and connected to the XP-702 simultaneously. Rather than force every remote user to manually install the web client ActiveX control it may be preferable to store the ISSymbolVM.cab file on the XP and have the ActiveX control automatically installed from the XP rather than from the Eaton Electrical web site. To set the XP to automatically serve the ActiveX control for first time PC's thin client, download the ISSymbolVM.cab file from the Eaton Electrical website as discussed in steps 1-4 from the previous section on "Manually Installing the Web Client ActiveX Control" and then take the following steps.

- 1. Copy the ISSymbolVM.cab file to the XP's default web folder.
- Open up the Visual Designer application on your development PC and go to the Project tab of the Ribbon and click on the Thin Client icon in the Web group.
- 3. In the Project Settings dialog web section click on the "Advanced..." button.
- 4. In the Advanced dialog change the ISSymbol URL property to point to the IP address of the target XP-702. For example, if the XP's IP address is set to 192.168.1.20, set the ISSymbol URL property to: http://192.168.1.20/. Once the correct URL is entered, click on "OK"
- Click on the round Visual Designer icon in the upper left corner of the development window and choose **Publish** (or from the Publish sub-menu **Save All as HTML**)
- After all screens have been published, connect to the XP and download the project as described in the section "Downloading to the XP-702 via Ethernet".

Managing Accounts and Changing Passwords

There is an account set up on your Eaton XP-702 unit when it was shipped from the factory; the **Administrator** account. The password for the **Administrator** account is **Administrator**.

Note:

- XP-702 passwords are case sensitive.
- XP-702 account names are not case sensitive.

The XP-702 is set up to automatically log in to the **Administrator** account, which is why the normal **Windows XP Security** dialog box does not appear upon boot-up.

If you are connecting your Eaton XP-702 unit to a larger network, you might want to modify the **Administrator** account name and password to protect the XP-702 unit from unauthorized access.

Modifying an Account Name and Password

You can modify the **Administrator** and any other account name password from the **User Accounts** utility in **Control Panel**.

Once the **Administrator** password has been successfully modified you must follow the **How to Disable/Change the Auto Logon Feature** section in order to continue to automatically log in to the Administrator account at boot-up.

Note: All changes made to the C:\ partition must be saved or committed so that the next time the XP-702 is restarted the new data will be available. Refer to the "Protect Mode Save Operation" section for additional information about saving files to the C:\ partition.

Using the Auto Logon Feature

The XP-702 Auto Logon feature is used to automatically log into a specified account name and password. By default, the Auto Logon feature is enabled and logs into the **Administrator** account, using **Administrator** as the account name and password.

If you want to change the Auto Logon features, refer to the descriptions below.

Note: You must have Administrative privileges in order to disable/change the Auto Logon feature.

How to Disable/Change the Auto Logon Feature

To disable or change the **Windows XP Auto Logon** feature you will need to know how to edit the Windows XP registry using **Regedit**. Extreme care should be exercised when making changes to the Windows XP registry. If you are not familiar or comfortable making changes to the registry, contact your local system or network administrator.

The following entries in the Windows XP registry can be modified to change the account, password, and domain used by the **Auto Logon Feature**:

- \HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\ CurrentVersion\Winlogon\DefaultUserName
- \HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\ CurrentVersion\Winlogon\DefaultPassword
- \HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\ CurrentVersion\Winlogon\DefaultDomain

To enable/disable the **Auto Logon Feature**, set the following registry entry to 1 or 0:

 \HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\ CurrentVersion\ Winlogon\AutoAdminLogin

How to Bypass the Auto Logon Feature

If you need to switch the logon user back to the **Administrator** account, you may bypass the Auto Logon feature by connecting a keyboard to your XP-702 and pressing the right **Shift** key while booting up. The **Windows XP Security** login dialog box appears, which allows you to enter a different account name and password.

Visual Designer's Remote Agent Utility

Visual Designer's Remote Agent utility is set to automatically start when the XP-702 starts. This utility is the connection that the development software uses for uploading, downloading, and online editing of the Visual Designer project. If for some reason you are unable to Connect to the XP-702 from the development software make sure that the Remote Agent has not been closed by the local XP user. There are only three buttons on the Remote Agent. The "Start" button will start the Visual Designer application or restart one that was closed. The "Setup" button allows the user to switch from the default TCP/IP connection to a Serial Port connection for connection to the development PC. The last button "Exit" will bring up a prompt box asking if you are sure you want to exit the Remote Agent utility, with "Yes" and "No" response buttons.

📑 Remote Agent	: (v7.01)	×
Connection status:		
INot connected to re	emote client	
Log:		
		 ▼
Device connection (TCP/IP)	via Network	<u>S</u> tart
	S <u>e</u> tup	E <u>x</u> it
IP(s): 192.168.1.20		

Normally the user would not change the default behavior of the Remote Agent utility as it supports remote features that simplify the development process. However, if you wish to disable the auto-

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matic launch of the Remote Agent to prevent remote management you can delete the Remote Agent shortcut from the Windows Start Menu, Startup folder.

How to Remove the Remote Agent Auto Startup

To delete the Remote Agent shortcut from the Windows Start Menu follow these steps:

- 1. On the XP-702, Open Windows Explorer, **Start > All Programs >** Windows Explorer
- Browse to the folder "C:\Documents and Settings\All Users\Start Menu\Programs\Startup" and delete the Remote Agent shortcut icon (right-click > Delete)
- Close the Windows Explorer window and perform a Protect Mode Save operation. Start > All Programs > Protect Mode Manager then select the Protect Mode Save tab and click the "Commit" button.

After the XP saves the changes to Windows partition it will reboot, and no longer automatically start the Remote Agent.

The XP-702 FTP Server Setup

The XP-702 is set up to provide FTP server services. The default FTP site is named **Cfg** and its path is **D:'Cfg**. To connect to the FTP site from a PC over Ethernet you must know the IP Address of the XP and a valid user name and password. The user name **Administer** and password **Administrator** are configured by default. If, for example, the XP's IP Address were 192.168.1.20 you would open Windows Explorer on your PC and type in the following in the address bar:

ftp://192.168.1.20/Cfg

The following Log On dialog will display:

Log On	As 🔀	J
?	Either the server does not allow anonymous logins or the e-mail address was not accepted.	
	FTP server: 192.168.1.20	
	User name:	
	Password:	
	After you log on, you can add this server to your Favorites and return to it easily.	
A	FTP does not encrypt or encode passwords or data before sending them to the server. To protect the security of your passwords and data, use Web Folders (WebDAV) instead.	
	Learn more about using Web Folders.	
	Log on anonymously	
	Log On Cancel	

Type in the correct user name and password (**Note:** the user name is not case sensitive but the password is case sensitive) and click on the "Log On" button. If the name and password are entered correctly you will be able to view the contents of the D:\ drive on the XP unit as well as copy and paste files to and from any folder on that drive. **Note:** You may need to disable the Windows Firewall in Control Panel for the FTP connection to work.

How to Create Additional FTP Sites on the XP

It may be useful to allow remote FTP access to other areas of the XP. As an example, perhaps you wish to be able to view all files on the C:\ drive through the FTP server connection. To do this you would take the following these steps:

- 1. Open Control Panel then open Administrative Tools
- 2. Double-click on the Internet Information Services shortcut
- 3. Expand the Local Computer folder then expand the FTP Sites folder and select the Default FTP Site.
- With the Default FTP Site highlighted, from the toolbar click on Action>New>Virtual Directory..., which launches the Virtual Directory Creation Wizard
- 5. Click "Next" on the opening dialog.
- 6. On the "Virtual Directory Alias" dialog enter the name you wish to call your new FTP site, Eg. "C-Drive", then click "Next"
- 7. On the "FTP Site Content Directory" dialog click on the "Browse..." button to browse to the desired folder, Eg. "System(C:)", then click "OK"
- 8. Verify that the correct path shows in the Path property, then click "Next"
- 9. In the "Access Permissions" dialog choose if you want to allow both Read and Write access, then click "Next" (Note: Since the C drive is protected by the Protect Mode feature, allowing write access will not change anything permanently unless a Protect Mode Save operation is initiated after the write operation)
- 10. Click the "Finish" button to close the wizard.
- 11. Close all open windows and perform a Protect Mode Save operation to make these changes permanent.

After the system reboots users with valid password access will now be able to access the additional FTP sites.

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