

# **Protector.Net Installation/ Upgrade Guide**

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# Protector.Net Installation/Upgrade Guide

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Protector.Net software application version number 2.9.x or greater

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# Table of Contents

UL 294 / S319 Compliance Notices .....	iv
Introduction .....	v
Warranty .....	vi
Hartmann Controls Software - End User Licence Agreement .....	vii
Copyright .....	x
1. Getting Started .....	1
Overview .....	1
Server Prerequisites .....	1
Operating Systems Supported .....	1
Installation Procedures .....	2
New Installation Protector.Net .....	2
Upgrading Protector.Net .....	7
System Monitor .....	7
Frequently Asked Questions .....	8
Client Installation .....	9
Supported Browsers .....	9
Accessing the Server .....	10
Frequently Asked Questions .....	11
2. Upgrading Protector.Net .....	12
Download the Latest Version of Protector.Net .....	12
Prerequisite Installation .....	12
Upgrade Installation .....	12
Panel Firmware Updates .....	12
Troubleshooting Firmware Update Problems .....	15
Frequently Asked Questions .....	16
3. Where to go From Here .....	18
4. Support .....	19

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# UL 294 / S319 Compliance Notices

This product complies with the following UL294 Access Control Performance Levels when installed as part of the Listed Protector.Net system :

- Endurance Level IV (100,000c)
- (100,000c)

Wiring methods shall be in accordance with the National Electrical Code (ANSI/NFPA70), CSA C22.1, Canadian Electrical Code, Part I, Safety Standard for Electrical Installations, Part I, local codes, and the authorities having jurisdiction. All interconnecting devices must be UL Listed, low-voltage Class 2 power limited. The minimum permissible wire size to be used shall not be less than 26 AWG (0.24 mm<sup>2</sup>).

Products have been evaluated for “Indoor Use” only, and to be installed within the “protected” or “restricted” area. This product is not intended for outside wiring as covered by Article 800 in the National Electrical Code, NFPA 70. Products are not intended to be installed or mounted in air-handling spaces. Products are intended to be installed by manufacturer trained service installers only.

All recommended connected peripherals such as power supplies, UPS/battery backups, PoE switches, electrified strikes, readers require to be UL Listed.

Please refer to the Protector.Net UL Reference document for more comprehensive information available via the installation USB drive or downloadable from our website. Hard copy of the Protector.Net UL Reference Manual document is available – call for pricing.

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# Introduction

Hartmann Controls is proud to present our Protector.Net Access Control software. This guide is designed to assist you in planning, installing and configuring your new access control system. This document strictly only covers installation related material. For additional information on installing and configuring Protector.Net, please consult the Protector.Net Tech Guide.

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# Warranty

**Hartmann Controls Access Control System: 2-Year Full Warranty .** Hartmann Controls warrants all Controllers manufactured by Hartmann Controls Corp. and are free from defects in material and workmanship for the period of (2) years. This warranty also covers some non-manufactured peripheral products sold by Hartmann Controls such as Readers, proximity cards/key tags. All other peripheral products are covered by a 30-day manufacturer's warranty. The warranty period for the Hartmann Controllers is 2 years from date of purchase. Hartmann Controls Corp will repair or replace defective equipment upon return to its facility. If it is identified that the warranty was breached in any way, Hartmann Controls Corp. will not warrant any damage that occurred during shipping or handling, or damage caused by a repair or an attempt to repair by any person other than those authorized by Hartmann Controls. This warranty covers normal industrial use and does not cover defects or damage to any product which, in the sole opinion of Hartmann Controls Corp. has been subject to improper installation, unauthorized modification, misuse, neglect, abuse, or abnormal operating conditions, improper storage, or which has been attributable to acts of God such as lightning and flooding.. Installation, which is not in accordance with the installation instructions, published by Hartmann Controls, will void the warranty. This warranty does not cover defects or damage caused by a product, which is not approved by Hartmann Controls Corp. and is connected to its system.

The said warranty only applies to the original purchaser and is and shall be in lieu of any and all other warranties.

## Note

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**Claim Procedure.** In order to obtain warranty performance, the purchaser must contact Hartmann Controls Corp. to obtain an RMA number. Unauthorized returns will be refused and returned to the sender at the sender's expense. **Do not ship any defective product back before receiving an RMA number.** Upon receiving goods, Hartmann Controls Corp. will assess the condition of the returned defective merchandise and, if found to be defective, will be repaired/replaced and shipped back. If the merchandise is found to be non-defective, the merchandise will be returned to the sender and subject to applicable return freight charges.

## Note

If a replacement product is required for the functionality of the system, Hartmann Controls Corp. will overnight the replacement item at the purchasers expense and the purchaser will be invoiced for items being replaced. Once the defective merchandise is received and if found to be defective and if within the limits of warranty, Hartmann Controls Corp. will credit the replacement item invoice. If the product is found to be non-defective, Hartmann Controls will ship the merchandise back at the expense of the purchaser.

### **Information Required For RMA.**

- Product Type
- Model of the Panel
- Problem Reported
- Geological location

## Note

The proof of date of purchase may be required before warranty service is rendered.

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# Chapter 1. Getting Started

## Overview

Protector.Net is a modern HTML5 web-based client/server access control system. The server application is designed to be installed on stand-alone PC and may be accessed using one or more clients via a web browser. The Protector.Net server software consists of:

- **Protector.Net Web Server:** The Web Server's responsibility is to host the web application and facilitate client access to managing your access control system.
- **Protector.Net System Monitor:** The System Monitor allows you to view the status and offers limited control over the web server and backup/restore utilities.
- **Microsoft SQL Server Database:** The Protector.Net software is designed to back onto a local or remote Microsoft SQL Database. You may opt to use the free (included) SQL Express 2012 or your own pre-installed instance of Microsoft SQL. Please note; we do not support non-Microsoft SQL Databases and a minimum version of 2008 is recommended.

## Server Prerequisites

The Protector.Net application server is designed to run on a modern PC running Microsoft Windows 7 or newer. Windows 10 or Windows Server 2012 is recommended for optimal performance.

### Note

It is possible to install the Protector.Net software on a shared PC, however where possible, we do recommend a standalone installation for optimal performance and reliability. It is also possible to install Protector.Net on a virtual machine, off-site, or in the cloud. For more information regarding Panels communicating with the Panel through the internet, please see the applicable chapter in our Tech Guide.

- 2GHz or faster 32-bit (x86) or 64-bit (x64) processor. Two or more cores recommended.
- 4GB RAM for 32-bit and 4GB RAM for 64-bit .
- 1GB Free Hard Drive Space (Additional space required for database).
- Windows 7 Home or Higher (Windows 7 Starter Not Supported). Windows 10 Supported.
- Microsoft .Net Framework 4.5 Full.
- Microsoft SQL Server 2008 or SQL Server 2008 Express or Higher (SQL Express installation available from the Protector.Net Installer).

### Note

The computer specifications are the minimum standards for a basic system. When a system includes a large number of clients (10+), controllers (50+), and/or users (2000+), additional server power is strongly recommended.

## Operating Systems Supported

### Note

Please note this refers to operating systems able to run the server software. Clients are supported regardless of OS version as long as HTML5 is supported. For more information on supported client web browsers, please see the section called “Supported Browsers”

**Table 1.1. Supported Operating Systems**

Operating System	Notes
Windows 10 Professional (32 and 64 bit)	
Windows 10 Home (32 and 64 bit)	
Windows Server 2012 (Any Version)	
Windows 8 Professional (32 and 64 bit)	
Windows 8 Home (32 and 64 bit)	
Windows 7 Professional (32 and 64 bit)	
Windows 7 Home(32 and 64 bit)	
Windows Server 2008 R2	

The following operating systems are unsupported. Protector.Net cannot be successfully installed on these operating systems:

**Table 1.2. Unsupported Operating Systems**

Operating System (Not Supported)	Notes
Windows XP (any version)	Missing hostable web core
Windows Vista (any version)	Missing hostable web core
Windows 8/7 Starter Edition	Missing components
Windows 7 Home Basic	Missing components
Windows Server 2003 (any version)	Missing hostable web core
Windows RT	ARM Specific

## Installation Procedures

This section covers the installation of Protector.Net and some frequently asked questions.

### New Installation Protector.Net

1. Locate and run the file called "ProtectorNet.exe" on your installation media or download and run the installer from our website.
2. Upon running the Installer for the first time, you will be presented with a screen outlining all the components required for installation. If a required component is not installed, it will be checked off automatically in the list of things to install. If you are unsure of which components to install, we recommend installing all checked components.

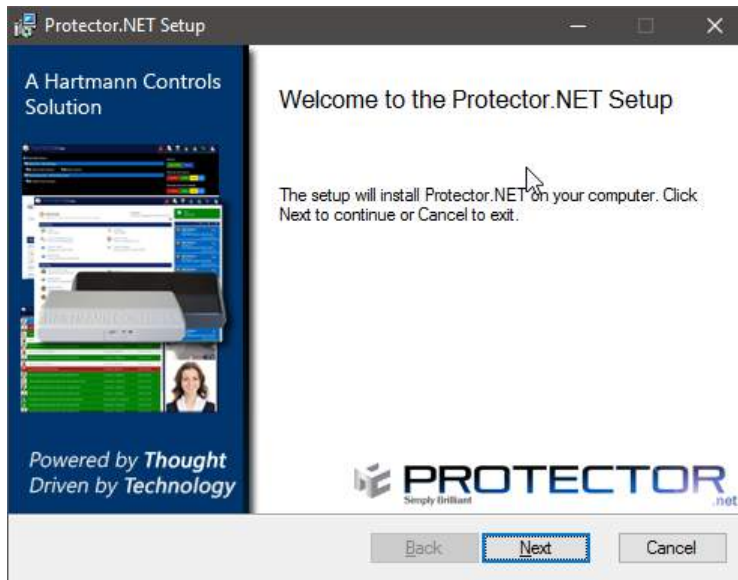
**Figure 1.1. Protector.Net Initial Installation Screen**



If you are installing from a USB Stick or DVD, the required components are often located directly on the installation media. In the event you are using a web installer, the required files will be downloaded from the internet.

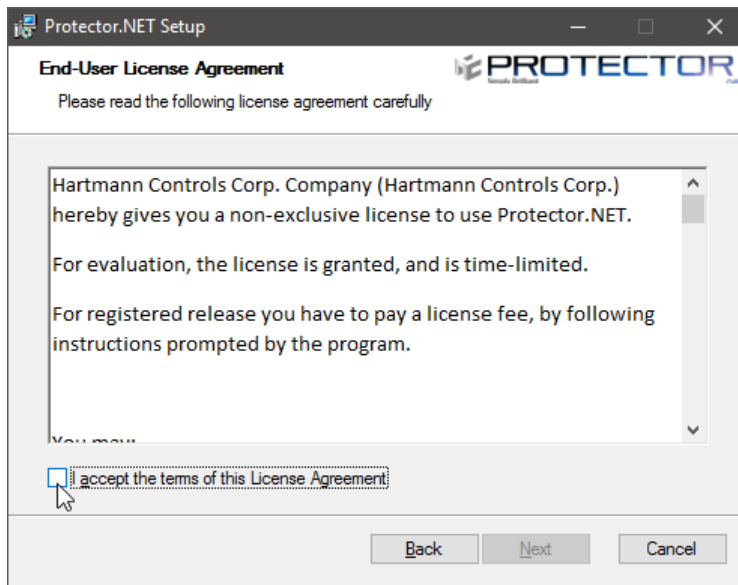
3. If prompted to start download for any components such as Microsoft SQL, click Start. This may take a while depending on the speed of your Internet connection.
4. If any components fail to install, restart the computer and try again. If they continue to fail, please see the applicable chapter in our Tech Guide.
5. Once all prerequisites are installed, the installer will automatically launch the Protector.Net application installer.

**Figure 1.2. Protector.Net Application Installer**



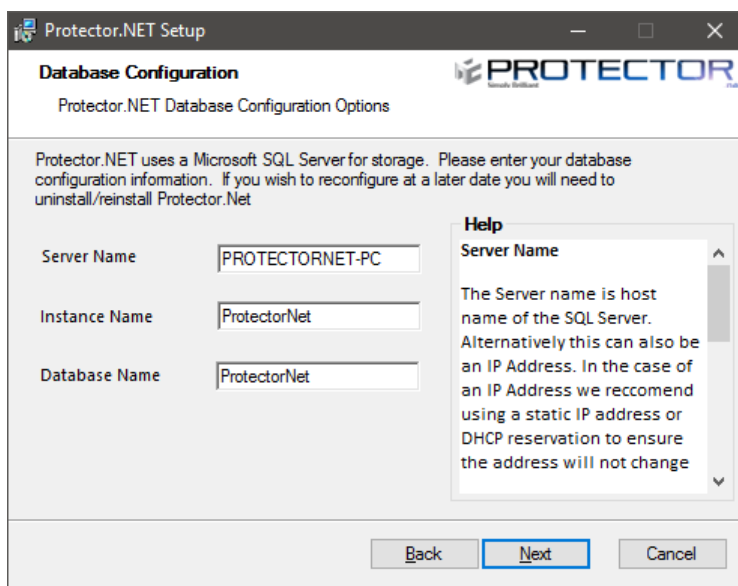
After the Protector.Net Installer has loaded, click the **Next** button to continue.

6. On the following screen, please read and accept the License Agreement. This agreement must be accepted in order to proceed with the Protector.Net installation. Click **Next**.

**Figure 1.3. Protector.Net License Agreement**

7. The next step is to choose the installation type:

- **Typical installation** uses the default SQL Server and service configuration. This is recommended for Users who are not using an external SQL Server and don't have any custom requirements for service configuration.
  - **Advanced Installation** is recommended for Users who wish to use an external SQL Server or may need advanced configuration options for domain environments. You are given far more control over various Protector.Net configuration options.
8. **[Advanced Installation Only]** Database Configuration allows you to override the default SQL Server connection settings. This is commonly used if an external SQL database is being used.

**Figure 1.4. Protector.Net SQL Configuration**

- **Server Name:** The Server Name is host name of the SQL Server. Alternatively this can also be an IP address. In the case of an IP address, we recommend using a static IP address or DHCP reservation to ensure the address will not change.
  - **Instance Name:** The Instance Name is an optional identifier generally used with SQL Server Express products or in cases where there may be more than one SQL Server installation on a single machine (not databases).
  - **Database Name:** The Database Name is the unique name given to the database within the SQL Server.
9. **[Advanced Installation Only] Service Configuration** allows you to modify the User/password and ports used by the various Windows services.

**Web Server Service:** The web server service is responsible for providing the web based interface and APIs. The **Listening Port** is the port the server will listen on for web communications, by default is **11001**.

**Communication Server Service:** The communication service is used to communicate with the **Panels** on **Port 9876**. This can be changed if port 9876 is being used by another service.

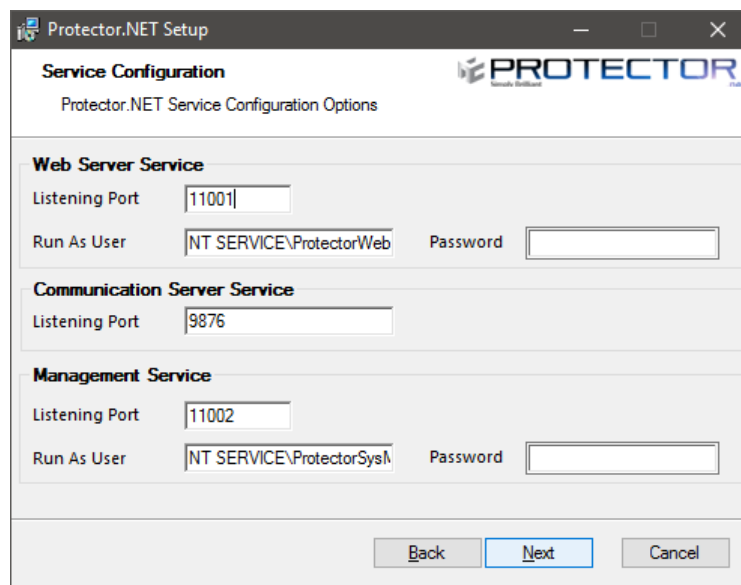
**Management Service:** The service the **System Manager UI** will run as. The **Listening Port** is the port the server will listen on for management communication, by default is **11002**.

**"Run As User":** The **Run As User** text box in each service above is the User the service will be run as. By default we use a **Service User** built into Windows.

### **Warning**

In domain environments a **Domain Service User** or a **Local Administrator Account** may be needed to run the services.

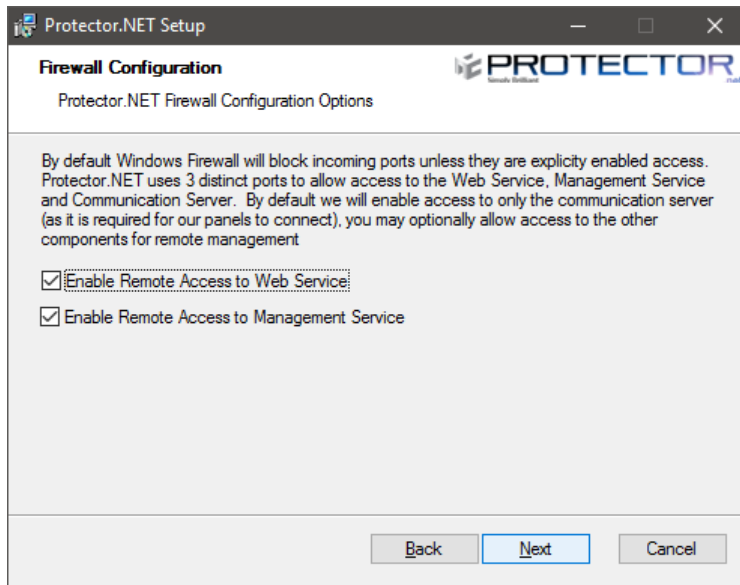
**Figure 1.5. Protector.Net Service Configuration**



10. The next step is to configure **Windows Firewall** to allow outside access. By default **Windows Firewall** will block incoming ports unless they are explicitly enabled access. Protector.Net uses 3 distinct ports to allow access to the Web Service and Management Service. Please note the installer will at your discretion allow access through the built in Microsoft Windows firewall, if you are

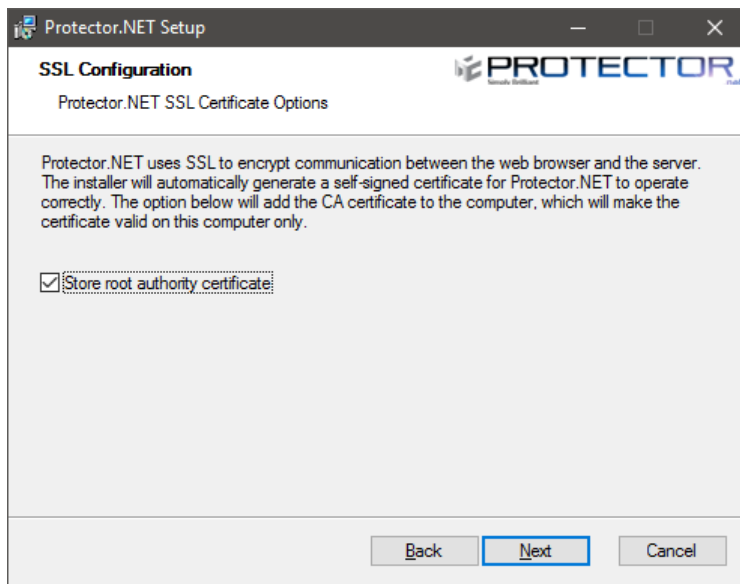
using a third party firewall; additional steps may be required to permit access. Please check your firewall documentation for additional clarification.

**Figure 1.6. Protector.Net Firewall Configuration**



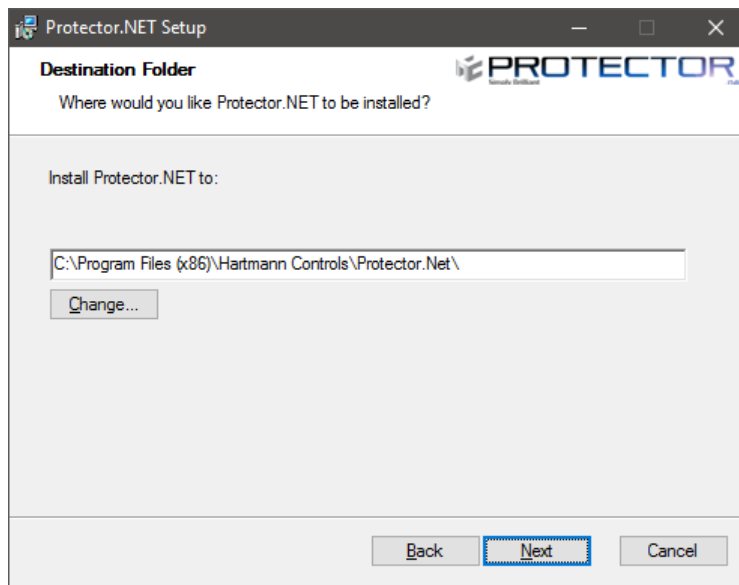
11. Next you can choose if we will store the SSL self signed certificate as a root authority. This can prevent self signed certificate errors on some web browsers when selected. For more information, please see the applicable chapter in our Tech Guide.

**Figure 1.7. Protector.Net Installation SSL Configuration**



12. The next step is to select the installation directory where you would like the Protector.Net application to be installed.



**Figure 1.8. Protector.Net Installation Directory Configuration**

13. You have now completed the configuration portion of the installer. Click **Install** to perform Protector.Net installation and **Finish** when the installation completes.

## Upgrading Protector.Net

Periodically updates are released to Protector.Net to enhance features, fix bugs or improve compatibility. Protector.Net does not offer separate upgrade packages. Our standalone installer is capable of installing a new software instance or upgrading an existing instance of the Protector.Net software.

### Upgrade Installation

Depending on how you've installed Protector.Net, the procedure for upgrading the Protector.Net software may require some steps not covered in this section. Please see Chapter 2, *Upgrading Protector.Net* for more details on these extra steps. We recommend doing a backup of your Protector.Net database prior to upgrading. For more information about backing up your database, please see the applicable chapter in our Tech Guide. We also recommend stopping the Protector.Net service via **System Monitor** prior to installation. Please note, if the installer does not contain a newer version than the currently installed version, you will not be given the option to perform upgrade.

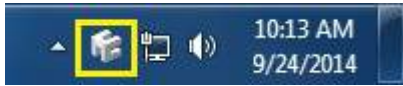
### Updating Firmware

In some cases, in order to utilize the latest version of Protector.Net, a firmware update is also required on the Panels (please, see the applicable chapter in our Tech Guide).

## System Monitor

**System Monitor** is a tray application that shows you the status and offers limited control over the web server process. It can give you several useful shortcuts when the icon is right clicked. It will also show you the current version of your Protector.Net software.

Once Protector.Net is installed on the server, the system monitor icon will sit in the system tray (by the clock, highlighted below). If you do not see this icon, it may be hidden. You can use the arrow icon in the system tray to display hidden icons. You can also launch the System Monitor from the start menu of the computer Protector.Net is installed on.



To view the System Monitor, simply click on the icon and a small window will appear near your system tray (pictured below).

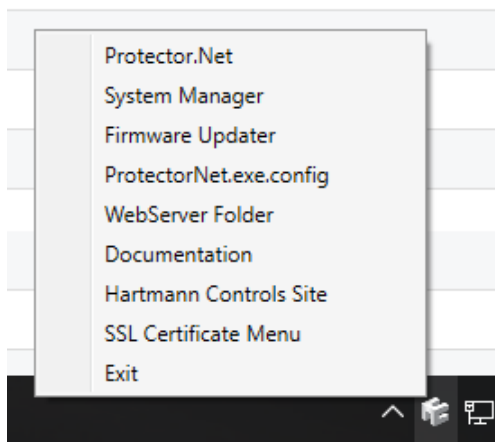
**Figure 1.9. System Monitor Window**



Once the System Monitor window is open, you can use the **Start** and **Stop** buttons to start and stop the Services used by Protector.Net. This can be useful if the database or web service don't start automatically.

**Tip**

If you right click on the System Monitor icon, you'll get several useful shortcuts.



## Frequently Asked Questions

**Q: Do I have to use SQL Express 2012 or can I use my own database software?**

- A:** We support any Microsoft SQL Server from 2008 to present, however when using our software to install SQL Express, you can be assured it is configured optimally for our system. If you choose to use your own database server instance, you will need to ensure the correct privileges and protocols are available for connection. This is something we generally only recommend for technicians or network Administrators who are well versed in the installation and configuration of SQL Server. Also please note different versions of SQL have different operating system and PC requirements. If you choose to use a different version, please ensure your PC meets the requirements for that version.
- Q: Do you support Windows Vista or Windows XP operating systems?**
- A:** At this time there is no plan to support operating systems earlier than Microsoft Windows 7. We are committed to ensuring the software works with future versions of Microsoft Windows.
- Q: I received an SQL error during Protector.Net installation. What should I do?**
- A:** As part of the Protector.Net installation, you are required to provide the correct SQL information which the installer uses to configure a number of Protector.Net database and security options. If this information is incorrect, it will need to be corrected before you are able to successfully install the Protector.Net software. If you have chosen to install SQL Express as part of the Protector.Net installation, the settings should automatically be populated. However if you have chosen to use a custom database version and/or instance, you will need to manually populate these settings.
- Q: What is the maximum database size supported?**
- A:** The maximum database size is a direct limitation of the version of SQL installed, not the Protector.Net software. If you have used the default SQL Express 2012 installation, the maximum database size is 10GB. Earlier versions of SQL Express prior to 2008 generally had a limitation of 2GB.
- Q: Is Protector.Net 32-bit or 64-bit?**
- A:** Protector.Net is a 32-bit application designed to run both in native 32-bit operating systems and on 64-bit operating systems capable of 32-bit emulation (x64). There is no plan to support a native 64-bit installation as the Protector.Net software will not benefit from the increased addressing 64-bit provides.

## Client Installation

Protector.Net supports client connectivity via web-based access. As a result, there is no Protector.Net client software to install; rather you use your web browser to access the Protector.Net server.

## Supported Browsers

The list of browsers supported is by no means a comprehensive list. These are browsers that receive testing by Hartmann Controls: Although other browsers may work, we do not provide technical assistance with them. We are always looking for user feedback in deciding what browsers to provide first class support for and we will expand the list of supported browsers as their market share dictates.

**Table 1.3. Protector.Net Browser Support**

Browser	Version	Supported	Notes
Google Chrome	24.0+	Yes	Hartmann Control's browser of choice
Mozilla Firefox	20.0+	Yes	
Microsoft Internet Explorer 11	10.0+	Yes	Note: IE10 in Metro UI (Windows 8) is not supported. The desktop version however is fully supported

Browser	Version	Supported	Notes
Microsoft Internet Explorer	6.0 to 9.0	No	No HTML5 Support
Microsoft Edge	20.0+	Yes	Note: Some issues with browsing to localhost address via DNS name. IP address or remote client work fine.
Apple Safari	5.0 (Mac/Windows)	Untested	
Apple Safari	6.0 (Mac)	Untested	
Blackberry Mobile	Any	Untested	
Epiphany (Linux)	Any	Untested	
Konquerer (Linux)	Any	Untested	
Opera (Any OS)	Any	Untested	Untested although newer webkit based version (11.0+) may work
Puffin (IOS/Android)	Any	Untested	Will work with some advanced manual setup, but poor end User experience

## Accessing the Server

Once you have ensured you have a browser that supports the Protector.Net software, accessing the Protector.Net software is very simple. If you are accessing the server from the PC it has been installed on, a start menu link is provided; otherwise you will need to enter the address manually into your web browser.

### Accessing Protector.Net From the PC the Server Software is Installed on:

During installation a shortcut is placed in your start menu for Protector.Net. The link for Protector.Net can be located by clicking Start -> All Programs -> Protector.Net and finally clicking on "**Launch Protector.Net.**"

### 📄 Windows 8/8.1 Users

Windows 8/8.1 hides the shortcut by default within the Metro UI start screen. The shortcut can be located by typing '**Launch**' within the start screen and selecting '**Launch Protector.Net**'. If you wish, you can pin this shortcut permanently to your start screen by right clicking and selecting '**Pin To Start.**'

### Accessing Protector.Net From a Remote PC:

Open your web browser and within the address bar enter the address of the Protector.Net Server using the format: **https://NameOfTheComputer:11001**

Alternatively, you can use the IP address of the server if the server is using a static IP address using the format: **https://192.168.1.100:11001**

### Example 1.1. Accessing Protector.Net server remotely

`https://ComputerName:11001` (default port is 11001)



Once you have entered the address, press Enter to navigate to the Protector.Net software.

## Frequently Asked Questions

**Q: Why is browser XXX not supported?**

**A:** Web browsers although similar in appearance differ greatly in terms of features. We at a minimum require HTML5 support and many standard compliant browsers not listed in our supported list, will work just fine with our software. In order to provide the best possible experience, we do provide a set of recommended browsers. Browsers not mentioned in the recommended list may work fine but should issues occur, we do only provide technical support for browsers listed as supported.

**Q: Do I require Windows 7 or newer on the client?**

**A:** No. One of the benefits to web-based software is the flexibility it offers for connectivity. The client software is not limited by operating system but rather by the browser installed on the client machine. Windows XP is generally the oldest version of Windows we would recommend and Mac and Mobile platforms are fully supported as long as a supported web browser is used.

**Q: Can I access Protector.Net without using SSL (HTTPS protocol)?**

**A:** No. For the sake of security, we do not support unencrypted connections.

**Q: I'm using an unsupported browser and there are graphical anomalies or issues attempting use the Protector.Net software. How do I resolve?**

**A:** Use a supported browser. We do not provide support for any browser not listed as supported. However if you feel there would be a benefit in supporting a browser not in our supported list, we would love to hear from you. At a very minimum, HTML5 will always be required.

**Q: I'm using Internet Explorer 10 which is listed as supported but I am still experiencing graphical anomalies or issues with the Protector.Net software. How do I resolve?**

**A:** Internet Explorer has a feature called Compatibility Mode which is enabled by default for Intranet (not public facing) sites. To achieve the best experience in Internet Explorer browsers, we recommend this feature be disabled for our application.

**To disable Compatibility Mode in Internet Explorer 10, refer to the following steps:**

1. Open Internet Explorer and press F12 to open the Developer Tools.
2. At the very top of the new Window you will see two drop-down lists, one labelled 'Browser Mode' and one labelled 'Document Mode'. Ensure Browser Mode is IE10 (or higher) and Document Mode is IE10 Standards (or higher).
3. In Internet Explorer 11, click on the gear icon on the top right of the web browser window.
4. Select "Compatibility View Settings".
5. Ensure the checkbox labeled "Display Intranet sites in Compatibility View" is not selected.

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# Chapter 2. Upgrading Protector.Net

This chapter covers the process of upgrading Protector.Net, the pre-requisites for upgrading, and how to update the firmware on the Panels (the door and elevator control boards).

Periodically updates are released to Protector.Net to enhance features, fix bugs or improve compatibility. Protector.Net does not offer separate upgrade packages. Our standalone installer is capable of installing a new software instance or upgrading an existing instance of the Protector.Net software. All licensed instances of Protector.Net are entitled to software updates as they are released.

## Download the Latest Version of Protector.Net

Visit our Protector.Net downloads page at:

<http://www.hartmann-controls.com/Downloads>

You'll be prompted for credentials to download; please contact Hartmann Controls for these details.

## Prerequisite Installation

In order to upgrade Protector.Net, the following requirements will need to be met.

- Upgrade must be performed on the computer that Protector.Net is currently installed on.
- You must be logged in as the same Windows Login that installed Protector.Net (due to database permissions).
- If the upgrade includes a firmware update for the panels, UDP port 9876 must not be blocked.

## Upgrade Installation

The procedure for upgrading the Protector.Net software is identical to that of a fresh install. (Please, see the section called "Installation Procedures"). We recommend doing a backup of your Protector.Net database prior to upgrading. For more information about backing up your database, please see the applicable chapter in our Tech Guide. We also recommend stopping the Protector.Net service via **System Monitor** prior to installation.

### Note

During installation, it's advised you click "advanced" and ensure information such as the database connection look correct.

## Panel Firmware Updates

Periodically when we enhance Protector.Net, firmware upgrades to your Panels will be required with the software updates. Updating a Panel's firmware is a relatively straight forward process.

### Warning

While in firmware update mode Panels are non-functional. They will not respond to card presentations, do not generate notifications and place the Door into a lock-down state. To limit the impact this has on your site, we suggest only placing 1 Panel at a time into Firmware Update Mode.

1. When a Panel attempts to connect to the Protector.Net application and the firmware is found to be out of date, you will see an indicator above the notification window that 1 or more Panels require a firmware update.

**Figure 2.1. Firmware Out of Date Notification**

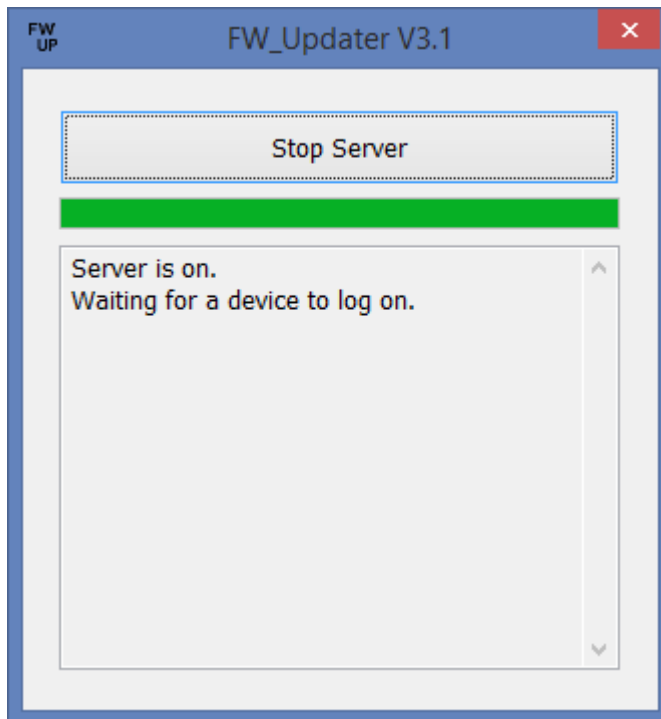


2. In order to update your Panel you will need to launch the Firmware Update Utility located within your start menu. The link for the firmware update utility can be located by clicking Start -> All Programs -> Protector.Net and finally clicking on "**Firmware Update Utility**".

### **Windows 8/8.1 Users**

Windows 8/8.1 hides the shortcut by default within the Metro UI start screen. The shortcut can be located by typing 'Firmware Update' within the start screen and selecting 'Firmware Update Utility'. If you wish you can pin this shortcut permanently to your start screen by right clicking and selecting 'Pin To Start'.

**Figure 2.2. Firmware Update Utility**

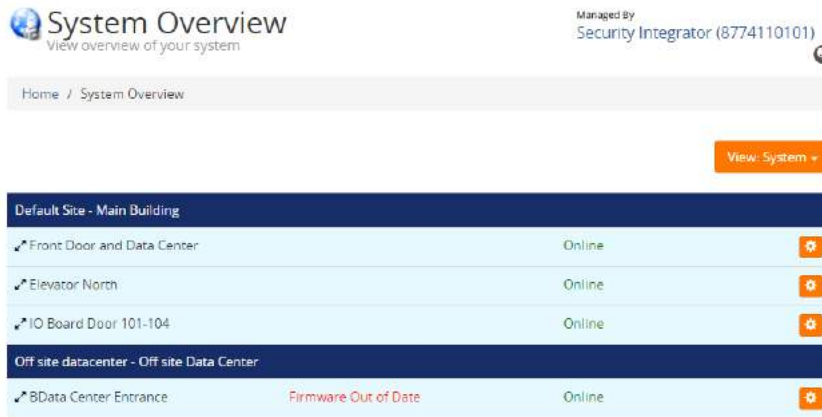


3. In order for a Panel to have its firmware updated we must place it into Firmware Update Mode. To do this we will navigate to the System Overview page in the software. Click on the "x/x Panels Online" box above the Notifications area **or** on the home page, scroll down to the section titled **System** and click on **System Overview**.



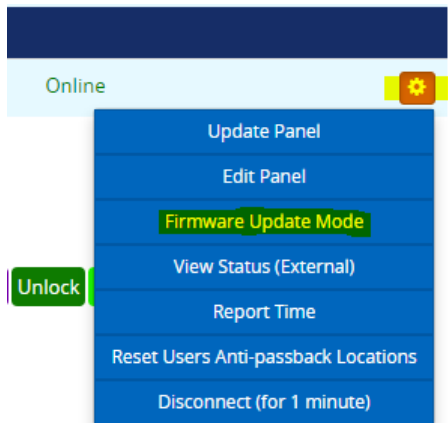
4. On the System Overview you will see a list of all Panels in your system. Any Panels that require a firmware update will have a message displayed next to its name.

**Figure 2.3. System Overview Showing Firmware Out of Date Message**



5. The next step is to place your Panels into Firmware Update Mode. This can be accomplished on the System Overview page.

- a. On the right side of Panel, click on the orange gear icon, pictured below. A context menu will appear.



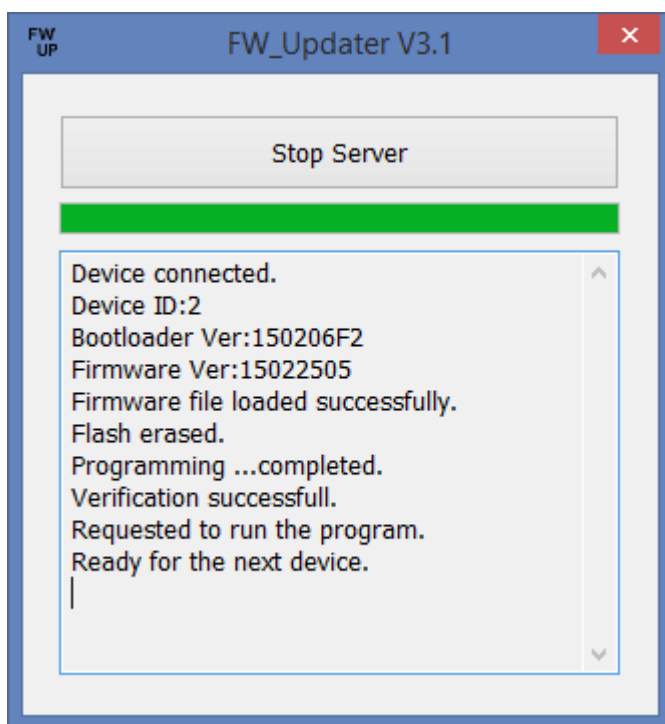
- b. Select 'Firmware Update Mode' from the context menu.
- c. The Panel will now disconnect and attempt to connect to the Firmware Update Utility.

**Note**

The Firmware Update Utility can only update 1 Panel at a time. If a Panel is sent into Firmware Update Mode but does not connect to the Firmware Updater for 60 seconds, the Panel will reboot back into normal operating mode.

6. The Firmware Update Utility will accept incoming connections from Panels in firmware update mode on **UDP Port 9876** and automatically apply the latest matching firmware for your Panel. Once complete, the firmware update utility will instruct the Panel reboot into normal mode, at which point the Panel will resume normal operation and the firmware update utility will begin listening for the next Panel.



**Figure 2.4. Firmware Update Utility Successful Update**

- Once all of your Panels are online within the Protector.Net application and you are no longer seeing 'Firmware Out of Date Notifications', you may close the firmware update utility.

### **Warning**

After the firmware is updated on each panel, you must perform a panel update in order to overwrite any old and potentially incorrect data on the controllers.

- After all Panels have had their firmware updated, the 'Update Mode' status icon above the notifications window will disappear automatically, or you can refresh the page.

## Troubleshooting Firmware Update Problems

**Panel Doesn't Connect to the Firmware Update Utility.** If the Panel does not connect to the firmware update utility after being placed into update mode by our software, ensure there isn't any third party firewall blocking UDP port 9876. Ensure there are no enterprise firewall solutions between the server and the Panel on the network blocking UDP port 9876. If these obsoletes appear clear but there is still no connection to the Firmware Updater:

- Open Firmware Update Utility from the start menu (if not already open).
- You will need physical access to the Panel. Unplug the Cat5 cable to the Panel, press and HOLD SW3 (enter). While holding SW3, plug the Cat5 back into the Panel. Once it powers up and you see the LCD change from 'SW3: Stored IP' to 'Panel IP', release SW3. You have now manually placed the Panel into firmware update mode.
- Check the Firmware Update Utility for activity. When the update is successful you may resume normal operation.

If none of the above results in the Panel successfully updating, please contact Hartmann Controls support. See Chapter 4, *Support*.

## Frequently Asked Questions

**Q: How can I check if my Windows login can upgrade Protector.Net?**

**A:** To check if your account has the right permissions, we can simply make a connection to the Protector.Net database and see if we're denied or granted access. This may require the assistance of IT staff or Hartmann Controls.

1. Open a command line with administrator privileges (right click cmd.exe, 'Run as Administrator'.)
2. At the command line, type: 'SQLCMD -S .\PROTECTORNET' (your instance name may be different). Click 'ENTER'.
3. At the '1>', type 'USE PROTECTORNET' and press 'ENTER'.
4. At the '2>', type 'GO' and press 'ENTER'.

If you see the message "Changed database context to 'ProtectorNet'.", your Windows account has permission to upgrade Protector.Net.

**Figure 2.5. Command Prompt: Backup**



```
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.

C:\Windows\system32>SQLCMD -S .\PROTECTORNET
1> USE PROTECTORNET
2> GO
Changed database context to 'ProtectorNet'.
1> -
```

If you see the message "The server principal "computer/user" is not able to access the database "protectornet" under the current security context", your Windows account does not have permission to upgrade Protector.Net.

**Q: My Windows login doesn't have permission to upgrade Protector.Net; how do I find out which account does?**

**A:** Due to the manner that SQL database permissions work, when Protector.Net is initially installed, the Windows login installing the software gets implicit permission to access the database. Likely (but not always), we can find this user account name by checking a log file generated by the MS SQL installer.

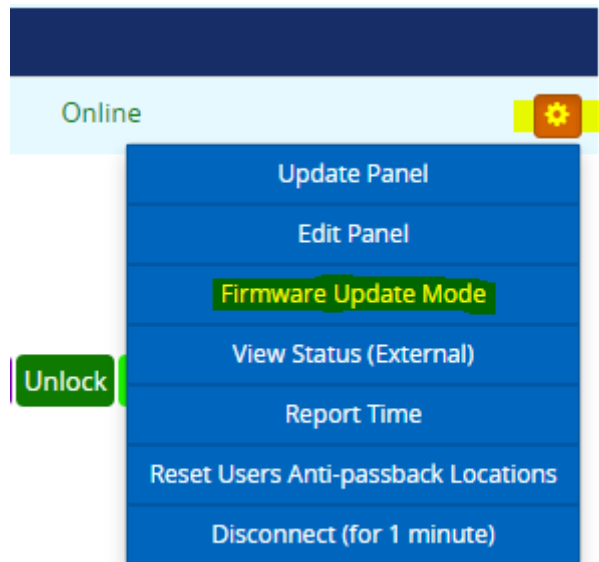
1. Browse to your installation directory of SQL server (usually located in "C:\Program Files \Microsoft SQL Server").
2. Use the search bar to search all folders for a file called "sql\_common\_core\_Cpu64\_1.log" or "sql\_common\_core\_Cpu32\_1.log". Open the file in notepad.
3. Once you've opened the file, use the 'find' function and look for the string "appdata". The first result should show the path to the user directory of the correct Windows login.

If the Windows login is unavailable, or does not exist anymore, please contact Hartmann Controls.

**Q: How can I test if UDP port 9876 is unblocked for a firmware update?**

- A:** Prior to performing an upgrade, you can remotely place a Panel into 'Firmware Update Mode'. This will flash the firmware on the Panel to the same version it currently has. On larger multi-site systems, its advised you perform this test to at least one Panel on each site. To perform this test:
1. You will need to be logged into the computer with Protector.Net server software installed.
  2. Open the Firmware Updater from the start menu, located in the Protector.Net sub folder, Or in Windows 8 search for "Firmware Updater".
  3. Browse to the System Overview page in Protector.Net. From here, click on the gear icon next to a Panel you'd like to test. A drop-down menu will appear.
  4. From the drop-down menu, select "Firmware Update Mode". The Panel will now disconnect and be placed into firmware update mode.
  5. Switch over to the Firmware Update Utility. Monitor the window for activity. If the Panel fails to connect to the updater, please contact Hartmann Controls or your System Administrator.

**Figure 2.6. System Overview: Firmware Update Command**



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# Chapter 3. Where to go From Here

Once you've installed or upgraded Protector.Net; the Protector.Net Tech Guide is also installed into the server along side our application. This guide contains all other information about configuring Protector.Net.

You can access the guide via two methods once Protector.Net is installed/updated.

1. In Windows 7, a shortcut to the Protector.Net Tech Guide PDF file is placed in the Start Menu in the folder Protector.Net. It will be called "Protector.Net Documentation".
2. In Windows 8, the shortcut will be located on the Metro Start Screen. The shortcut will be called "Protector.Net Documentation".
3. You can also browse directly to the Protector.Net Tech Guide PDF. It will be located "C:\Program Files (x86)\Hartmann Controls\Protector.Net\Documentation". The file will be called "ProtectorNet.pdf".

## **Note**

Your installation directory may differ slightly from the above.

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# Chapter 4. Support

## **End Users:**

Hartmann Controls generally does not directly deal with end users as we rely on our trained network of dealers and installers to service our products in the field. If your system requires service we recommend contacting your dealer/installer. If you do not know who your dealer is you can contact Hartmann Controls Corp and we will assist you in finding a local dealer.

## **Dealers/Installers:**

Hartmann Controls world class support is available to dealers Monday to Friday between 9AM and 5PM est to assist with any installation related issues you may have.

## **Website**

Hartmann Controls offers a number of technical guides and resources via our website: <http://www.hartmann-controls.com>

## **Email**

Email support is available through our website at <http://www.hartmann-controls.com/Company/Contact>. Please allow 24 - 48 business hours for responses.

## **Phone**

If time sensitive support is required, we do offer both local and toll-free support numbers during normal business hours. Outside our regular business hours, please allow 24 to 48 business hours for response. You may reach us at:

- **Toll Free (North America only):** (877) 411-0101
- **Local Support:** (705) 719-6705
- **Fax:** (705) 792-5632