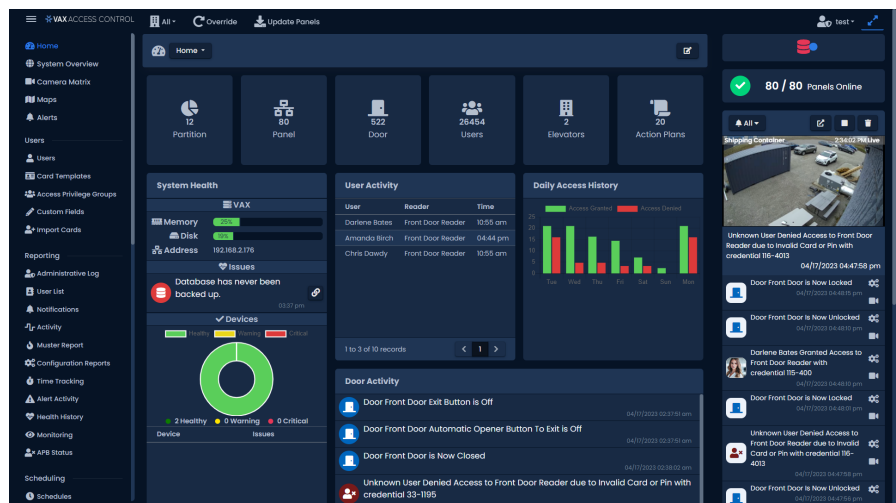




Access Control System ver. 3.3

XX274-40-07



Vicon Industries Inc. does not warrant that the functions contained in this equipment will meet your requirements or that the operation will be entirely error free or perform precisely as described in the documentation. This system has not been designed to be used in life-critical situations and must not be used for this purpose.

Document Number: 8009-8274-40-07 Product specifications subject to change without notice. Issued: 9/25 Copyright © 2025 Vicon Industries Inc. All rights reserved.

Vicon Industries Inc.

Tel: 631-952-2288 Fax: 631-951-2288

Toll Free: 800-645-9116

24-Hour Technical Support: 800-34-VICON

(800-348-4266) UK: 44/(0) 1489-566300

www.vicon-security.com

Table of Contents

Introduction	iv
Vicon Software - End User License Agreement	v
Copyright	vii
1. Getting Started	1
Overview	1
Server Requirements	1
Operating Systems Supported	2
Installation Procedures	2
New Installation VAX	2
Upgrading VAX	8
System Monitor	8
Frequently Asked Questions	9
Client Installation	10
Supported Browsers	10
Accessing the Server	11
Frequently Asked Questions	11
2. Upgrading VAX	13
Software Upgrades	13
Download the Latest Version of VAX	13
Prerequisite Installation	13
Upgrade Installation	13
Panel Firmware Updates	13
Troubleshooting Firmware Update Problems	15
Frequently Asked Questions	15
3. Where to Go From Here	17
4. Support	18

Introduction

Vicon is proud to present Vicon Access Control (VAX). This guide is designed to assist you in planning, installing and configuring your new access control system. Although we have gone to great lengths to ensure the installation process is intuitive and straight forward, we do recommend reading this guide in its entirety before installing a Vicon Access Control access system. Thank you for your business.

Vicon Software - End User License Agreement

IMPORTANT-READ CAREFULLY: This End-User License Agreement ("EULA") is a legal agreement between you (either an individual or a single legal entity) and Vicon with which you acquired the Vicon software product(s) identified above ("SOFTWARE"). The SOFTWARE includes Vicon software, and may include associated media, printed materials, "online", or electronic documentation and internet based services. Note: Any software, documentation, or web services that are included in the SOFTWARE, or accessible via the SOFTWARE, and are accompanied by their own license agreements or terms of use are governed by such agreements rather than this EULA. This EULA is valid and grants the end-user rights ONLY if the SOFTWARE is genuine. By installing, copying, downloading, accessing or otherwise using the SOFTWARE, you agree to be bound by the terms of this EULA. If you do not agree to the terms of this EULA, you may not use or copy the SOFTWARE, and you should promptly contact Vicon for instructions on return of the unused product(s) in accordance with Vicon return policies.

1. SOFTWARE PRODUCT LICENSE

The term "COMPUTER" as used herein shall mean the HARDWARE, if the HARDWARE is a single computer system, or shall mean the computer system with which the HARDWARE operates, if the HARDWARE is a computer system component.

2. GRANT OF LICENSE

Vicon grants you the following rights, provided you comply with all of the terms and conditions of this EULA:

Installation and Use: Except as otherwise expressly provided in this EULA, you may install, use, access, display and run only one (1) copy of the SOFTWARE on the COMPUTER. The SOFTWARE may not be used by more than the number of genuine licensed copies registered with Vicon.

Mandatory Activation: THIS SOFTWARE CONTAINS TECHNOLOGICAL MEASURES THAT ARE DESIGNED TO PREVENT UNLICENSED OR ILLEGAL USE OF THE SOFTWARE. The license rights granted under this EULA are limited to the first year (1 year) after you first run the SOFTWARE unless you supply information required to activate your licensed copy in the manner described during the setup sequence (unless Vicon has activated for you). You can activate the SOFTWARE through the use of telephone; toll charges may apply. You may also need to reactivate the SOFTWARE if you modify your HARDWARE or alter the SOFTWARE.

Back-up Copy: YOU MAY MAKE A SINGLE BACK-UP COPY OF THE SOFTWARE. You may use the back-up copy solely for your archival purposes and to reinstall the SOFTWARE on the COMPUTER. Except as expressly provided in this EULA or by local law, you may not otherwise make copies of the SOFTWARE, including the printed materials accompanying the SOFTWARE. You may not loan, rent, lease, lend or otherwise transfer the DVD or back-up copy to another User.

Reservation of Rights: Vicon reserves all rights not expressly granted to you in this EULA.

3. DESCRIPTION OF OTHER RIGHTS AND LIMITATIONS

Consent to Use of Data: You agree that Vicon may collect and use technical information gathered in any manner as part of the product support services provided to you, if any, related to the SOFTWARE. Vicon may use this information solely to improve their products or to provide customized services or technologies to you. Vicon may disclose this information to others, but not in a form that personally identifies you.

Database Information: The information stored in the database and/or database backup files can only be accessed via the Vicon licensed SOFTWARE. Any attempts to access the database information

via unlicensed and/or unauthorized access will terminate this license agreement. Vicon provides no direct access to the database information.

Additional Software/Services: The terms of this EULA apply to Vicon updates, supplements, and add-on components of the SOFTWARE that Vicon may provide to you or make available to you after the date you obtain your initial copy of the SOFTWARE, unless other terms are provided along with such Supplemental Components. Limitations on Reverse Engineering, Decompile and Disassembly. You may not reverse engineer, decompile, or disassemble the SOFTWARE.

Separation of Components: The SOFTWARE is licensed as a single product. Its component parts may not be separated for use on more than one computer. **Single EULA:** The package for the SOFTWARE may contain multiple versions of this EULA, such as multiple translations and/or multiple media versions (e.g., in the User documentation and in the software). In this case, you are only licensed to use one (1) copy of the SOFTWARE.

Termination: Without prejudice to any other rights, Vicon may cancel this EULA if you do not abide by the terms and conditions contained herein. In such event, you must destroy all copies of the SOFTWARE and all of its component parts. **Trademarks:** This EULA does not grant you any rights in connection with any trademarks or service marks of Vicon or its suppliers.

4. UPGRADES

If the SOFTWARE is labeled as an upgrade, you must be properly licensed to use a product identified by Vicon as being eligible for the upgrade in order to use the SOFTWARE ("Eligible Product"). For the purpose of upgrade(s) only, "HARDWARE" shall mean the computer system or computer system component with which you received the Eligible Product. SOFTWARE labeled as an upgrade replaces and/or supplements (and may disable, if upgrading a Vicon software product) the Eligible Product which came with the HARDWARE. After upgrading, you may no longer use the SOFTWARE that formed the basis for your upgrade eligibility (unless otherwise provided). You may use the resulting upgraded product only in accordance with the terms of this EULA and only with the HARDWARE. If the SOFTWARE is an upgrade of a component of a package of software programs that you licensed as a single product, the SOFTWARE may be used and transferred only as part of that single product package and may not be separated for use on more than one computer.

5. INTELLECTUAL PROPERTY RIGHTS

All title and intellectual property rights in and to the SOFTWARE (including but not limited to any images, photographs, animations, video, audio, music, text and incorporated into the SOFTWARE), the accompanying printed materials, and any copies of the SOFTWARE, are owned by Vicon or its suppliers. The SOFTWARE is licensed, not sold. All title and intellectual property rights in and to the content that is not contained in the SOFTWARE, but which may be accessed through use of the SOFTWARE is the property of the respective content owner and may be protected by applicable copyright or other intellectual property laws and treaties. Use of any on-line services which may be accessed through the SOFTWARE may be governed by the respective terms of use relating to such services.

6. EXPORT RESTRICTIONS

You acknowledge that the SOFTWARE is subject to U.S. and Canadian export jurisdiction. You agree to comply with all applicable international and national laws that apply to the products, including the U.S. & Canadian Export Administration Regulations, as well as end-User, end-use and destination restrictions issued by U.S., Canadian and other governments.

7. ADDITIONAL PROVISIONS

FOR THE LIMITED WARRANTIES, LIMITATION OF LIABILITY, AND OTHER SPECIAL PROVISIONS, PLEASE REFER TO THE ADDITIONAL PROVISIONS PROVIDED AND/OR OTHERWISE WITH THE SOFTWARE. SUCH LIMITED WARRANTIES, LIMITATION OF LIABILITY AND SPECIAL PROVISIONS ARE AN INTEGRAL PART OF THIS EULA.

Copyright

Copyright © 1998 - 2025 Vicon All rights reserved.

Information in this document is subject to change without notice. The software outlined in this document is provided under license agreement. The software may only be used in accordance with the terms expressed by Vicon.

No part of this documentation may be reproduced or transmitted in any form or by any means except for the User's benefit of operating the software without the express written permission of Vicon.

Vicon Industries Inc.

Phone: 800-645-9116

631-952-2288

Website: www.vicon-security.com

Chapter 1. Getting Started

Overview

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

- **VAX Web Server:** The Web Server's responsibility is to host the web application and facilitate client access to managing your access control system.
- **VAX System Manager:** System Manager's responsibility is to manage backing up and restoring the database, managing multi tenant configuration and general server configuration.
- **VAX System Monitor:** The System Monitor allows you to view the status and offers limited control over the web server and backup/restore utilities.
- **Database Provider:** VAX uses a relational database to store the configuration and notifications from the access control system. It can be configured to use either of the following databases:
 - **Microsoft SQL Server Database:** The VAX software can be configured to use a local or remote Microsoft SQL Database. You may opt to use the free (included) SQL Express 2019 or your own pre-installed instance of Microsoft SQL. Please Note: A minimum version of 2008 is required.
 - **Postgres:** The VAX software can be configured to use a local or remote PostgreSQL database. You may opt for the installer to install it, or use your own existing instance. Please Note: A minimum of Postgres v12 is required.

Server Requirements

The VAX application server is designed to run on a modern PC running Microsoft Windows 10 or newer. Windows 10 or Windows Server 2019 is recommended for optimal performance.

Note

It is possible to install the VAX 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 VAX on a virtual machine, off-site, or in the cloud. For more information regarding Panels communicating with the Panel through the internet, please see ???.

- 2GHz or faster 32-bit (x86) or 64-bit (x64) processor. Two or more cores recommended.
- 4GB RAM for 32-bit and 64-bit.
- 10GB free Hard Drive space (additional space required for database).
- Windows 10 Home or Higher (S mode Not Supported). Windows 11 and Windows Server 2012+ are supported.
- Microsoft .Net Framework 4.8.1.
- Microsoft SQL Server 2016 or SQL Server 2016 Express or higher (SQL Express installation available from the VAX 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
Windows 11 Professional (32 and 64 bit)
Windows 10 Professional (32 and 64 bit)
Windows 11 Home
Windows 11 Enterprise
Windows Server 2016 (any version)
Windows 10 Professional (32 and 64 bit)
Windows 10 Home (32 and 64 bit)

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

Table 1.2. Unsupported Operating Systems

Operating System (Not Supported)	Notes
Windows XP (any version)	Missing host-able web core
Windows Vista (any version)	Missing host-able web core
Windows 8/7 Starter Edition	Missing components
Windows 7	End of Life
Windows 10/11 S edition	Does not support non-Microsoft apps
Windows RT	ARM Specific

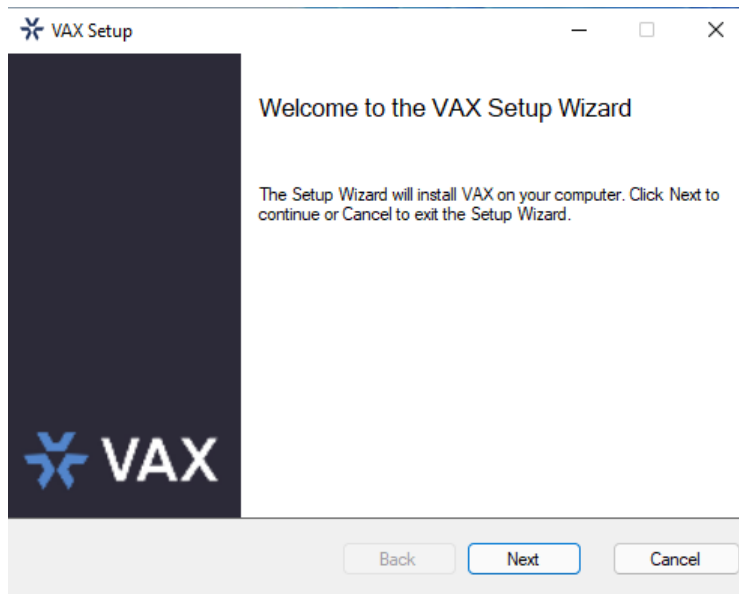
Installation Procedures

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

New Installation VAX

1. Locate and run the file called "VAX.exe" on your installation media or download and run the installer from our website.
2. On older operating systems, the installer may require an installation of .NET Framework 4.8.1. If needed, the installer will execute the bundled .NET framework installer prior to launching the VAX installer. Once the necessary prerequisite is installed, the installer will automatically launch the VAX application installer.

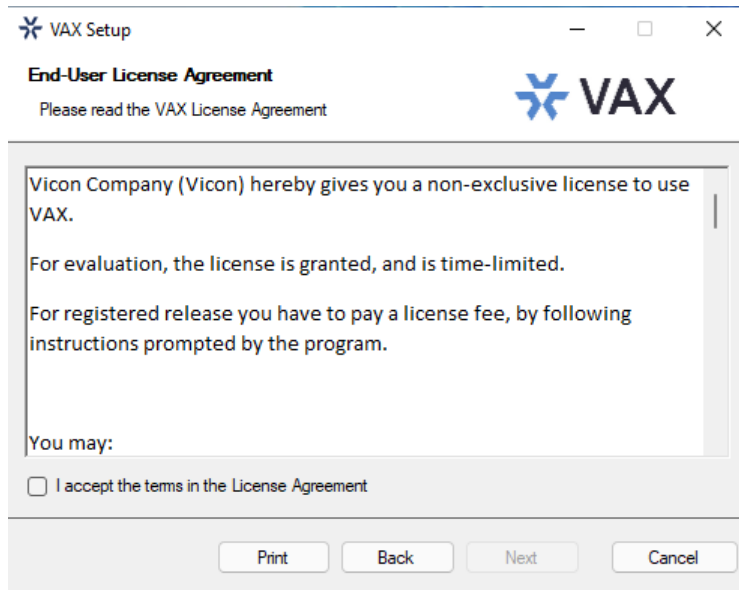
Figure 1.1. VAX Application Installer



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

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

Figure 1.2. VAX License Agreement



4. The next step is to choose the installation type:
 - **Typical installation** is recommended for normal installations. It uses the default settings for the listening ports, uses the local NT SERVICE accounts for the services, creates inbound rules for the listening ports in Windows Firewall and generates a self-signed certificate.
 - **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 VAX configuration options.

- The Database Selection page allows you to select which database provider to install or use and allows you to configure the connection settings VAX will use to access the database.

Figure 1.3. VAX Database Selection

- Database Provider:** Either SQL Server or PostgreSQL can be used as the database. For new installations, we would recommend to use SQL Server. If upgrading an existing installation, these fields should auto populate.

Note

It is recommended to use SQL Server when hosting the database on the same machine as the VAX software.

- Install New Server / Use Existing Server:** If you have an existing installation of the database provider, you can select it in the **Server** drop down field. Otherwise you can select **Install New Server** to install the selected database provider and configure it for use with VAX.
- Server:** The Server field allows to you to enter the address of the database server. If SQL Server and Use Existing Server is selected, the Server field drop down will show a list of detected instances of SQL Server.

If you are updating an existing installation, the Server field will populate with the existing configured SQL server.

- Database:** The Database Name is the unique name given to the database within the database server. The drop down will show a list of databases that it detected in the selected server.
- Username:** An optional field for the username to authorize the software to access the database. This field is not required for basic installation and is used for authorizing to your own external database provider.
- Password:** An optional field for a password to authorize the software to access the database. This field is not required for basic installation and is used for authorizing to your own external database provider.

- [Advanced Installation Only]:** Communication Setup allows you to modify the ports used by the software to host web services and communication servers.

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

Panel Communication: The web server service hosts a server to communicate with our panels. The **TCP/UDP Port** is the port the server will listen on for panel connections; by default this is **9876**.

System Manager: The system manager service is responsible for managing database backups and server configuration. The **HTTPS Port** is the port the server will listen on for management communication; by default this is **11002**.

7. **[Advanced Installation Only]:** Service Configuration allows you to configure the accounts used to host the Web Server and System Manager services. The **Local** option will use NT SERVICE accounts, which are special virtual Windows accounts used to host services. The **Managed Service Account** option is used for Active Directory integration to permit the services access to query the domain. Creating Managed Service Accounts is outside the scope of this installation manual.

Figure 1.4. VAX Service Configuration

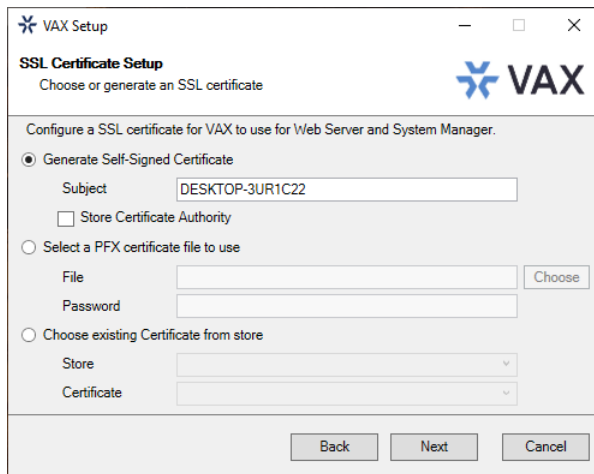
The screenshot shows a 'Service Configuration' dialog box. At the top, it says 'Service Configuration' and 'Configure Windows accounts used to run VAX services.' The VAX logo is on the right. The 'Service Type' section has 'Local' selected. The 'Web Server Service' section has 'Username' set to 'NT SERVICE\VAXWebServer'. The 'System Manager Service' section has 'Username' set to 'NT SERVICE\VAXSysManager'. There are 'Back', 'Next', and 'Cancel' buttons at the bottom.

8. **[Advanced Installation Only]:** SSL Certificate Setup allows you to generate or select an SSL certificate to use to host the Web Server and System Manager web services. The **Generate Self-Signed Certificate** option will generate a new certificate with the specified subject to use. Self-Signed certificates will generate a warning when browsing to the software, as the browser can't validate the issuer of the certificate. Selecting the **Store Certificate Authority** will remove this warning on the installation computer only, by storing the signing certificate as a certificate root.

The **Choose an existing Certificate from store** option will let you select a certificate from the Windows Certificate Store that has a valid private key. Certificates that have been imported into Windows will show here.

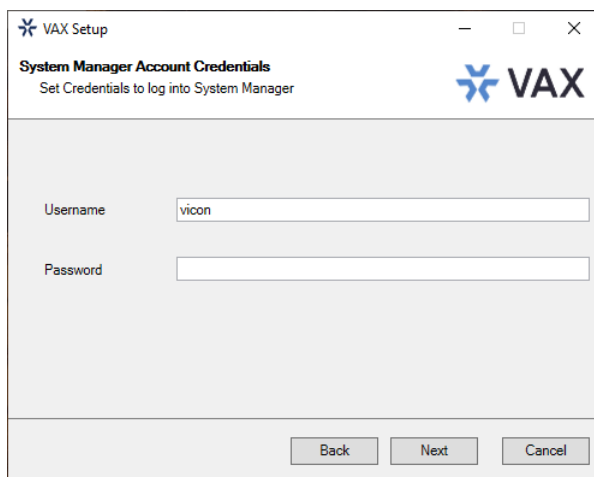
SSL Certificates can be managed after installation in System Manager under Settings → Certificates.

Figure 1.5. VAX SSL Certificate Setup

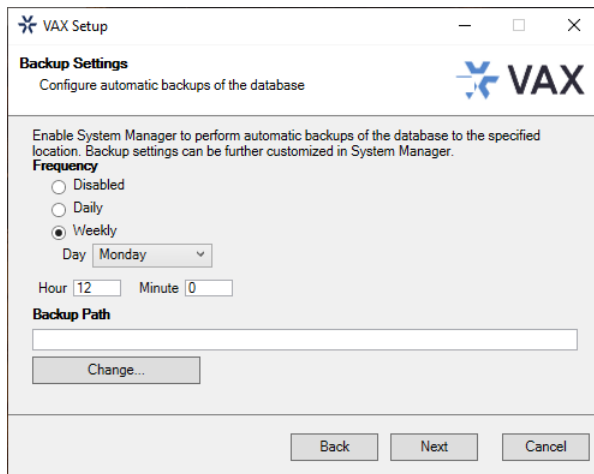


9. **[Advanced Installation Only]:** System Manager Account Credentials allows you to setup the initial Username and Password for the System Manager Access instead of the default.

Figure 1.6. VAX System Manager Account Credentials

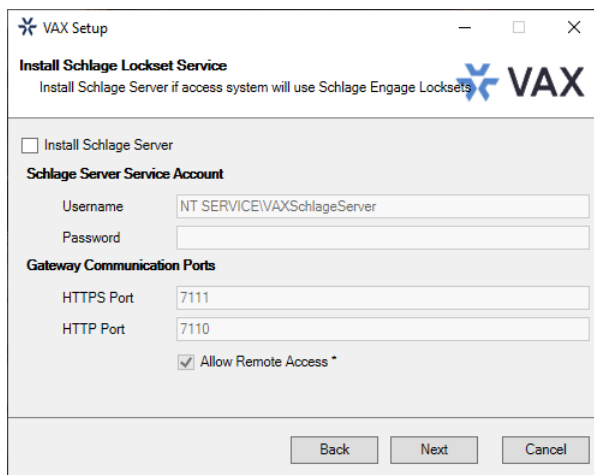


10. **[Advanced Installation Only]:** Backup Settings allows you to configure the automatic backups of the database. You can set the frequency and time of the backup and the path to the folder where it will store the file.

Figure 1.7. VAX Backup Settings

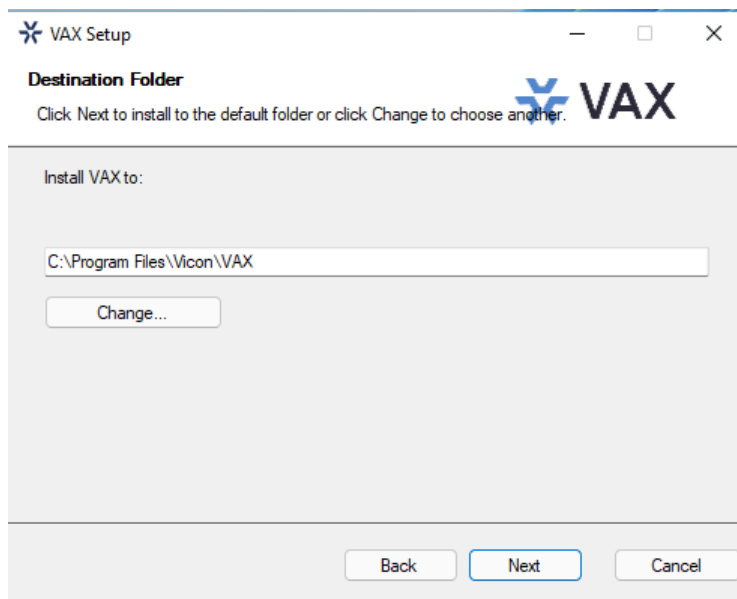
The screenshot shows the 'VAX Setup' dialog box with the 'Backup Settings' tab selected. The title bar reads 'VAX Setup'. Below the title bar, the text 'Backup Settings' is followed by 'Configure automatic backups of the database' and the VAX logo. The main content area contains the following elements: a paragraph stating 'Enable System Manager to perform automatic backups of the database to the specified location. Backup settings can be further customized in System Manager.'; a section titled 'Frequency' with three radio buttons: 'Disabled', 'Daily', and 'Weekly' (which is selected); a 'Day' dropdown menu set to 'Monday'; 'Hour' and 'Minute' input fields with values '12' and '0' respectively; a 'Backup Path' text input field; a 'Change...' button below the path field; and at the bottom, three buttons: 'Back', 'Next', and 'Cancel'.

11. **[Advanced Installation Only]:** Schlage Server is a separate service which communicates with Schlage Engage gateways and locksets. If you require the use of the Schlage lockset integration, check the **Install Schlage Server** option and customize the Schlage server ports or service accounts as required.

Figure 1.8. VAX Schlage Server

The screenshot shows the 'VAX Setup' dialog box with the 'Install Schlage Lockset Service' tab selected. The title bar reads 'VAX Setup'. Below the title bar, the text 'Install Schlage Lockset Service' is followed by 'Install Schlage Server if access system will use Schlage Engage Locksets' and the VAX logo. The main content area contains the following elements: an unchecked checkbox for 'Install Schlage Server'; a section titled 'Schlage Server Service Account' with 'Username' and 'Password' input fields (the username is 'NT SERVICE\VAXSchlageServer'); a section titled 'Gateway Communication Ports' with 'HTTPS Port' and 'HTTP Port' input fields (values are '7111' and '7110' respectively); and a checked checkbox for 'Allow Remote Access *'. At the bottom, three buttons: 'Back', 'Next', and 'Cancel'.

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

Figure 1.9. VAX Destination Folder

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

Upgrading VAX

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

Upgrade Installation

Depending on how you've installed VAX, the procedure for upgrading the VAX software may require some steps not covered in this section. Please see Chapter 2, *Upgrading VAX* for more details on these extra steps. We recommend doing a backup of your VAX database prior to upgrading. We also recommend stopping the VAX 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 an upgrade.

Updating Firmware

In some cases, in order to utilize the latest version of VAX, a firmware update is also required on the Panels.

System Monitor

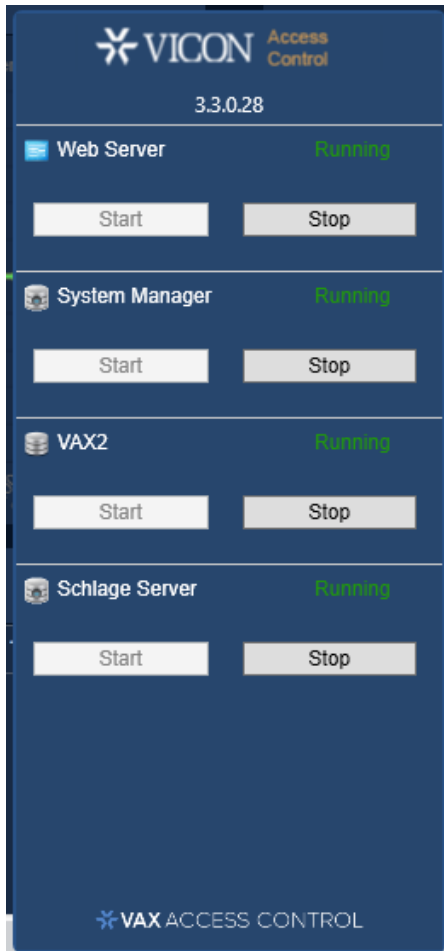
System Monitor is a tray application that shows you the status and offers limited control over the web server process. It can give you several useful shortcuts when the icon is right clicked. It will also show you the current version of your VAX software.

Once VAX 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 VAX 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).

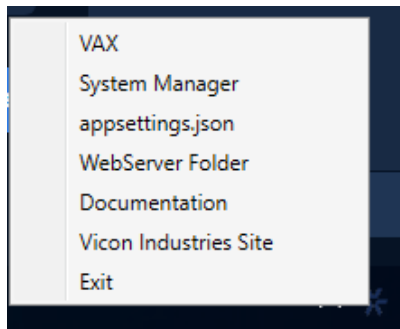
Figure 1.10. System Monitor Window



Once the System Monitor window is open, you can use the **Start** and **Stop** buttons to start and stop the Services used by VAX. 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 2019 or can I use my own database software?

- A:** We support any Microsoft SQL Server from 2016 to present or Postgres v12 or later; 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 you 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 10. We are committed to ensuring the software works with future versions of Microsoft Windows.
- Q: I received an SQL error during VAX installation. What should I do?**
- A:** As part of the VAX installation, you are required to provide the correct SQL information which the installer uses to configure a number of VAX database and security options. If this information is incorrect, it will need to be corrected before you are able to successfully install the VAX software. If you have chosen to install SQL Express as part of the VAX 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:** If you are using Postgres, there is no maximum database size. If you are using Microsoft SQL Server, the maximum database size is a direct limitation of the version of SQL installed, not the VAX software. If you have used the default SQL Express 2019 installation, the maximum database size is 10GB. Earlier versions of SQL Express prior to 2008 generally had a limitation of 2GB.
- Q: Is VAX 32-bit or 64-bit?**
- A:** VAX 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 VAX software will not benefit from the increased addressing 64-bit provides.

Client Installation

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

Supported Browsers

The list of browsers supported is by no means a comprehensive list. These are browsers that receive testing by Vicon Industries. 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. VAX Browser Support

Browser	Version	Supported	Notes
Google Chrome	24.0+	Yes	Vicon Industries' browser of choice
Mozilla Firefox	20.0+	Yes	
Microsoft Internet Explorer	11	Yes	Note: IE11 is required for certain camera integrations.

Browser	Version	Supported	Notes
Microsoft Internet Explorer	6.0 to 10	No	No modern 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	6.0+ (Mac/iOS)	Yes	

Accessing the Server

Once you have ensured you have a browser that supports the VAX software, accessing the VAX 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 VAX from the PC the Server Software is Installed on:

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

Accessing VAX from a Remote PC:

Open your web browser and within the address bar enter the address of the VAX 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 VAX server remotely

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



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

Frequently Asked Questions

Q: Why is browser 'X' 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 VAX 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 VAX 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 VAX 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.

Chapter 2. Upgrading VAX

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


Software Upgrades

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

Download the Latest Version of VAX

Visit our VAX downloads page at:

https://www.vicon-security.com/product_resources/vax

You'll be prompted for credentials to download; please contact Vicon Industries for  details.

Prerequisite Installation

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

- Upgrade must be performed from the computer on which VAX is currently installed.
- You must be logged in as the same Windows Login that installed VAX (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 VAX software is identical to that of a fresh install. (Please, see the section called “Installation Procedures”). We recommend doing a backup of your VAX database prior to upgrading. We also recommend stopping the VAX service via **System Monitor** prior to installation.

Note

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

Panel Firmware Updates

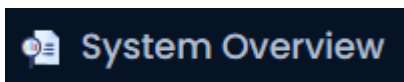
Periodically when we enhance VAX, firmware upgrades to your Panels will be required with the software updates. Updating a Panel's firmware is a relatively straightforward process.

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.

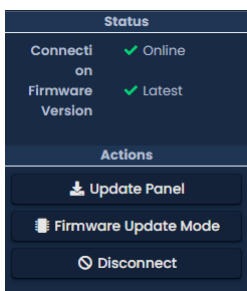
1. When a Panel attempts to connect to the VAX application and the firmware is found to be out of date, you will see an indicator at the bottom of the notification panel on the right side of the screen.

2. 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** in the left navigation menu, click on **System Overview**.

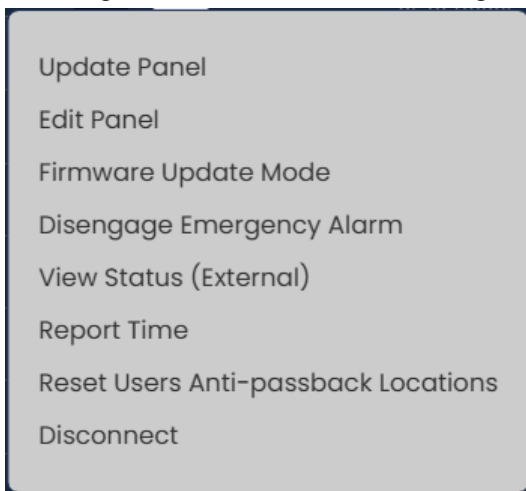


3. On the System Overview you will see a list of all Panels in your system. Any Panels that require a firmware update will show a Critical status and if you expand it, the **Firmware Version** will show Outdated.

Figure 2.1. System Overview Showing Firmware Out of Date Message



4. 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 blue gear icon. A context menu will appear.



- b. Select "Firmware Update Mode" from the context menu.
 - c. The Panel will now disconnect and attempt to update its firmware.

 **Note**

You can perform multiple firmware updates at the same time if needed.

5. The VAX server 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 server will instruct the Panel to reboot into normal mode, at which point the Panel will resume normal operation. If the panel does not connect to the server on UDP 9876 within 60 seconds, the panel will reboot.
6. Repeat the above process on all panels that indicate they require a firmware update. After all Panels have had their firmware updated, we recommend doing a update to all your Panels. The "Update

Mode" status icon on the Dashboard under Devices menu will disappear automatically, or you can refresh the page.

Troubleshooting Firmware Update Problems

Panel continues to show firmware out of date after placing it into firmware update mode. If a Panel continues to show it requires a firmware update after placing the panel into firmware update mode and coming back online, 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.

Panel does not come back online after placing into firmware update mode. If a panel does not come back online after several minutes, we recommend physically checking the LCD of the panel.

- If the LCD shows the message "Run Application Timeout", power down the panel by unplugging the Cat5 from the left side of the board. Press and hold the button labeled Enter (SW3) while plugging in the Cat5. This will place the panel back into firmware update mode.
- The LCD on the panel will show the current server address it is looking to update its firmware from; if you see this set as 192.168.2.10, it could indicate it had a problem during the update. Try the above suggestion or change the VAX server's IP address temporarily to 192.168.2.10 with a 255.255.255.0 subnet mask.

Frequently Asked Questions

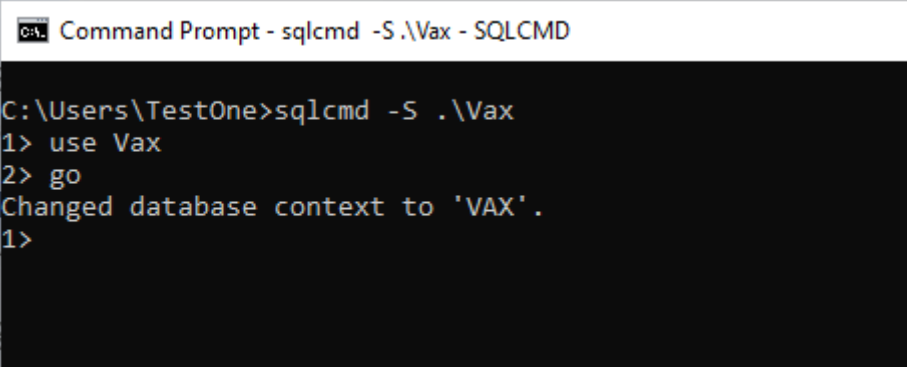
Q: How can I check if my Windows login can upgrade VAX?

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

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

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

Figure 2.2. Command Prompt: Backup



```
Command Prompt - sqlcmd -S .\Vax - SQLCMD
C:\Users\TestOne>sqlcmd -S .\Vax
1> use Vax
2> go
Changed database context to 'VAX'.
1>
```

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

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

A: Due to the manner that SQL database permissions work, when VAX 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 Vicon Industries.

Chapter 3. Where to Go From Here

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

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

1. In Windows 10 and 11, a shortcut to the VAX Tech Guide PDF file is placed in the Start Menu in the folder VAX. It will be called "VAX Documentation".
2. In Windows 8, the shortcut will be located on the Metro Start Screen. The shortcut will be called "VAX Documentation".
3. You can also browse directly to the VAX Tech Guide PDF. It will be located "C:\Program Files (x86)\Vicon\VAX\Documentation". The file will be called "SystemDocumentation.pdf".

Note

Your installation directory may differ slightly from the above.

Chapter 4. Support

End Users:

Vicon Industries does not generally support end users directly as we rely on our vast network of trained 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 Vicon Industries and we will assist you in finding a local dealer/installer.

Dealers/Installers:

Vicon Industries support is available to dealers Monday to Friday between 9AM and 5PM EST to assist with any installation related issues you may have.

Website

Vicon Industries offers a number of technical guides and resources via our website: <https://www.vicon-security.com>

Email

Email support is available through our website at <https://www.vicon-security.com/learn-and-support/support-and-sales-contacts/>. Please allow 24 - 48 business hours for a response.



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):** 800-348-4266