vFire 9.10

Installation Guide

Version 1.0
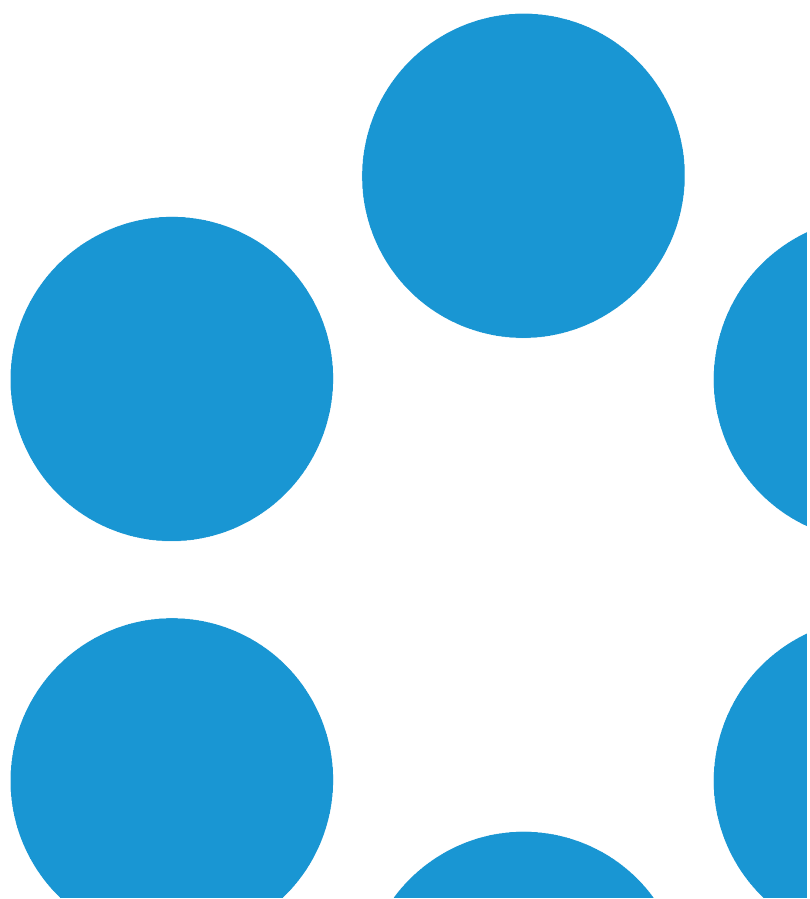
Table of Contents

Version 1.0
© Alemba 2018

Version Details

This document supports the latest version of the product. The table below contains version details for this and previous document versions.

Version Number	Date	Details
1.0	31 January 2018	This document describes how to install or upgrade to vFire 9.10. There are no significant changes from earlier software releases.

Copyright

About this Guide

This guide describes the steps detailing how to install the latest version of vFire.

> This version of the guide contains instruction for the latest version of the vFire software. For earlier versions of vFire Core please refer to earlier versions of the guide as outlined in the version table.

Intended Audience

This guide is written for system administrators responsible for installing vFire.

Standards and Conventions

The following standards and conventions are used throughout the guide:

	Prerequisites, including security rights and access you may need prior to completing the task. Prerequisites are also highlighted in a shaded box.
	Information related to the current topic that may be of particular interest/significance. Notes are also highlighted in a shaded box.
	Warnings. These are also highlighted in a shaded box.
Field name	Fields are highlighted in bold text.

Installing or Patching

Alemba ships two different software installations for each release:

- vFire Core Setup 9xx.exe (for example vFire Core Setup 970.exe)
- vFire Core Patch 9xx.msi (for example vFire Core Patch 970.msi)
- Maintenance Package

The 'Setup' is used for installing new systems or upgrading from previous versions, such as v8 to v9. The 'Patch' is used for upgrading systems on the same versions to a new dot release, such as v9.1.5 to v9.7.0.

Download the installation files for the appropriate version release from **www.alemba.help.**

If you are viewing a release other than a beta or GA release, you will also see a maintenance package. This is used to upgrade from point releases within the same version, such as v9.6.1 to 9.6.2.

There are different circumstances when they can be used as outlined below.

What I want to achieve	What I need to do
I want to create a brand new vanilla System	Install the latest vFire Core Setup 9xx.exe then use the Server Console system creation wizard.
I have an existing v9.x.x system and I want to upgrade it (on the same server)	Always take a backup of your system and database before preforming an upgrade. Install the latest vFire Core Patch 9xx.msi. The vFire Patch Tool will upgrade the system files and database.

What I want to achieve	What I need to do
I have a v8 System I want to upgrade	The minimum version from which you can upgrade from v8 to v9 is v8RP40. If you have a version earlier than this, you must upgrade to v8RP40 before attempting to upgrade to v9.
	Always take a backup of your system and database before preforming an upgrade.
	Follow the instructions in **Appendix D: Upgrading from vFire 9.2 or Below**.
I have a v9.x.x system, and I want to upgrade it and move to a new server at the same time.	Always take a backup of your system and database before preforming an upgrade.
	1. Install the latest vFire Core Patch 9xx.**msi** on the old server and upgrade the database.
	2. Decommission the old server - turn off the vFire Core Services and IIS Admin Service, and set their Startup Type setting to **Manual**.
	3. Install the latest vFire Core Setup 9xx.**exe** on the new server.
	4. On the new server, create a new system using the Server Console system creation wizard.
	5. During system creation, point to the existing database, and when ask if you wish to upgrade the database, select **No**.
	If upgrading a system on v9.2 or below, please follow the instructions in **Appendix D: Upgrading from vFire 9.2 or Below**.

What I want to achieve	What I need to do
I would like to upgrade between minor point releases.	Always take a backup of your system and database before preforming an upgrade. You can upgrade between minor point releases (e.g. 9.5.2 to 9.5.4) by applying the **Patch MSI** or the **Maintenance Package**. The Maintenance Package contains files to be manually applied, and in doing this you will not need to run through a full patch upgrade process. Instructions for the maintenance package are in **Using the Maintenance Package**. This only applies to version 9.4.0 and higher. Due to the typical nature of enhancements between releases, the maintenance package is not suitable for upgrading from the Beta (x.x.0) to GA (x.x.1) version of the software. The maintenance package is not suitable for upgrading from 9.7.1 to 9.7.2, due to the nature of some of the enhancements in the 9.7.2 release. Instead, you should use the standard upgrade process. Any upgrades from 9.7.2 to any version up to 9.7.9 can be done using the maintenance package. It is also unsuitable for upgrading to 9.7.10. If you are upgrading to this version, or from any version lower to any version higher, please use the standard upgrade process. The maintenance package is not available for upgrades from 9.9.1 to 9.9.4, due to Alemba API upgrades which are not represented in the maintenance package. Instead, you should use the standard upgrade process.

Polling Services

Installing vFire Core installs the polling services automatically. The polling service in this version of vFire Core comprises eleven Windows services.

vFire Services

All vFire services must use the same service account, and that account must be able to access the database.

The following table lists these services and provides a brief description of the tasks each service performs.

Service	Tasks performed by the service
Administrative	Parent service for all vFire Core services
Config Portability	Processing configuration portability export and import
Connector	Service for connectors, such as Federated CMDB and Event Management
Core	A number of tasks including: • Executing escalation and depreciation tasks • Sending Knowledge review notification • Sending Bulletin Board activation notification • Creating scheduled requests • Activity log and session expiry tasks • Creating Calls or Requests when CMDB Thresholds are exceeded
Custom	Running custom polling logic
Escalation	Processing service level management events
Indexing	Text Indexing
Messaging	A number of tasks including: • Generating User Surveys • Sending and receiving email and pager messages

Service	Tasks performed by the service
AI Ops	Processing AI Ops rules
Reporting	Processing scheduled reports
Workflow	Activating Tasks including: • Reset delay times • Close delay tasks when target time is reached • Close active tasks set to auto close • Activate task dependencies on closure • Close redundant tasks • Reopen recursive tasks

Setting the Polling Service Startup Type

vFire 9 Administrative Service	Automatic	Local System
vFire 9 Config Portability Service	Automatic	Local System
vFire 9 Connector Service	Automatic	Local System
vFire 9 Core Service	Automatic	Local System
vFire 9 Custom Service	Manual	Local System
vFire 9 Escalation Service	Automatic	Local System
vFire 9 Indexing Service	Automatic	Local System
vFire 9 Messaging Service	Manual	Local System
vFire 9 Proactive Analysis Service	Automatic	Local System
vFire 9 Reporting Service	Manual	Local System
vFire 9 Workflow Service	Automatic	Local System

You can set a service startup type to be automatic or manual. This is done on the **Services** window.

1. Open **Control Panel** from the Windows Start menu.

2. Select **System and Security** and then **Administrative Tools**.

3. From the **Administrative Tools** list, select **Services** to bring up the Services window.

4. Right-click the service you want to set, and select **Properties** from the menu displayed. The **<Service Name> Properties** window appears.

5. From the Startup type list, select:
   - **Automatic** to start the service automatically
   - **Manual** to enable system admins to run the service when required
   - **Disabled** to prevent the service from running

Some services will start automatically when the vFire Core server is re-started unless the startup type is set to **Manual**.

Stopping a Polling Service

To manually stop a service:

1. Open **Control Panel** from the Windows Start menu.

2. Select **System and Security** and then **Administrative Tools**.

3. From the **Administrative Tools** list, select **Services** to bring up the Services window.

4. Right-click the service you want to stop, and select **Stop** from the menu displayed.

Installing vFire Core

You only need to perform the install operation on the server. Although each Analyst will be prompted to automatically download the vFire Core ActiveX controls, there is no need to install software on any client machines.

> Do not put any third party software on the vFire Core server after installation without consultation with Alemba staff. Alemba cannot be held responsible for any problems encountered with our software caused by other programs installed on the vFire Core server. It is recommended that you install any third party software on a test server first and review the Alemba Knowledge Bank for any known issues.

For sites that are security conscious, Alemba recommends setting up SSL on the web server.

✋ Before you start

You will need a license key, provided by Alemba.

Ensure that your server meets the technical requirements for installing vFire Core, as outlined in the **Prerequisites Guide**.

Configure the server as described in the Prerequisites documentation.

For a brand new instance of vFire Core, you must create a blank database in your database engine.

Stop all vFire Core dependent Windows Services before running the installer to avoid an error 1603. From the Windows Start menu, select **Control Panel**, **Administrative Tools** and then **Services**.

Installing vFire Core will stop IIS and any dependent services. Ensure that you install vFire Core at a time when these services are not needed.

Starting the Installation

1. Log in to the Alemba vFire Self Service portal, select **Browse The Service Catalog**, and place an Order for the **vFire Core vx.x Setup File** (where x.x is the appropriate version number). After submitting the order you will receive an email with a link to download the software.

2. Download and extract the ZIP file **vFire Core Setup x.x** which consists of an executable setup file that will run the InstallShield program that installs vFire Core.

3. Right click on the file and select **Run as Administrator**.

4. The **User Account Control** window appears. You will be prompted to allow the vFire Core application to begin the setup process. Select **Yes** to proceed.

> An error message might display if, for example, you do not have the correct service pack for the operating system installed on your server, or the correct version of MMC. Check the **Prerequisites Guide** for more information about the minimum requirements for a vFire Core installation.

5. The first window of the **vFire Core InstallShield Wizard** will display.
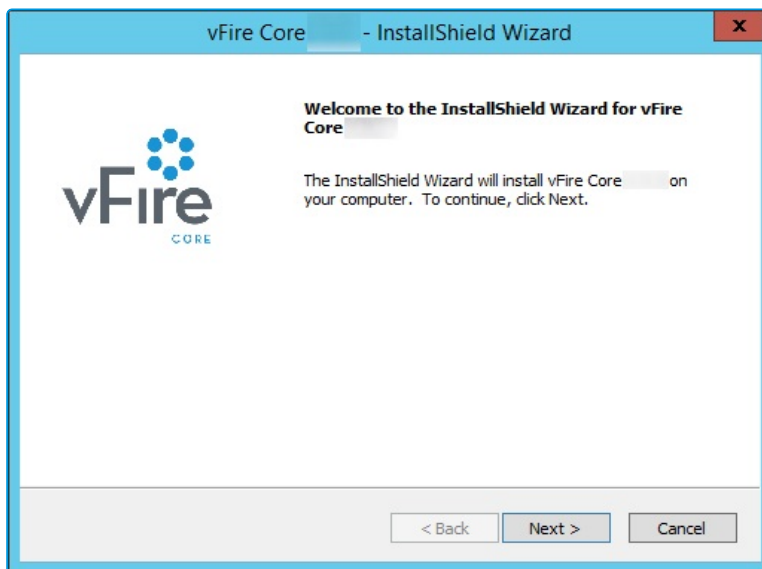
6. Select **Next** to continue.

7. In the vFire Core License Agreement window, read the terms and conditions.
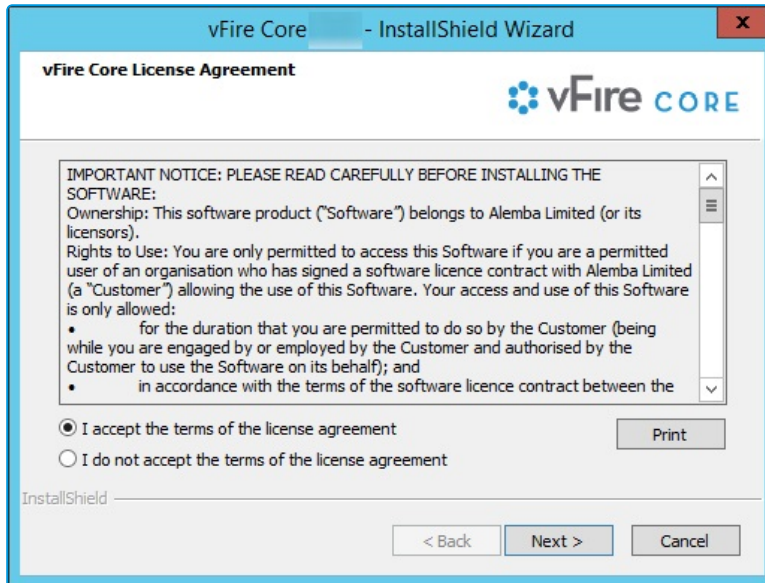
8. To print a copy of the license agreement, select **Print**. Accept the terms and then select **Next** to continue.

9. The **User Information** window displays the **User Name** and **Company**. These fields are automatically filled with your current login details. If required, modify this information.
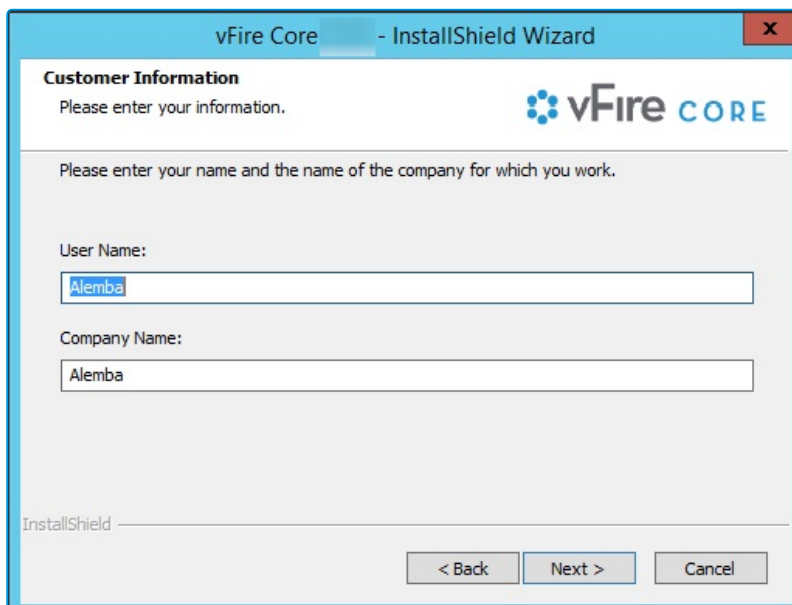
10. Select **Next** to continue.

11. The **Setup Type** window appears.
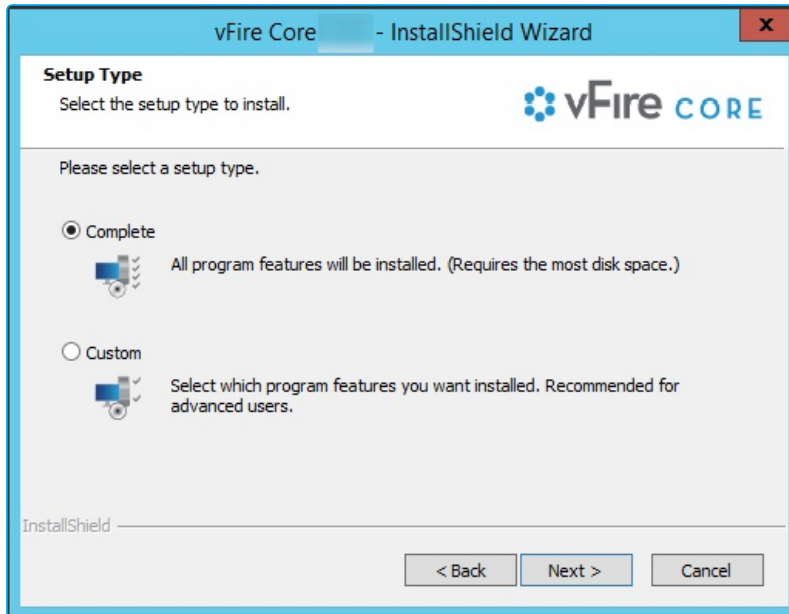
12. Select **Complete** to install vFire Core into the default directory: **C:\Program Files\Alemba\vFire**. This is the recommended option.

13. Select **Custom** to specify a different directory on your computer as the installation directory.

14. Select **Next** to continue.

15. If you have selected **Custom**, the **Choose Destination Location** window is displayed. To change the folder in which vFire Core is installed, select **Browse**. Choose an installation folder from the directories list.
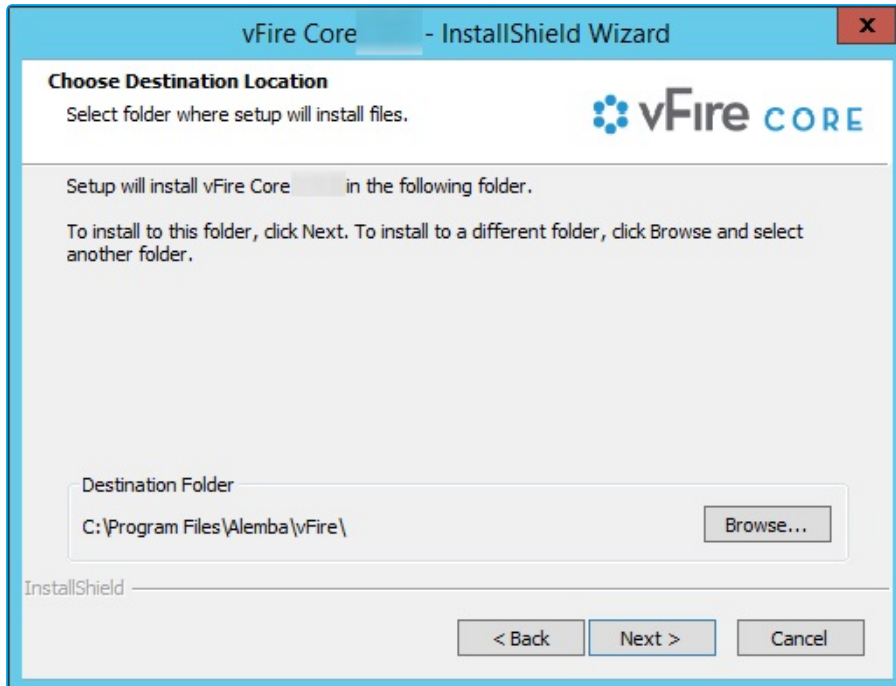
16. Select **Next** to continue.

17. If you are performing a **Custom** install, you also need to complete the **Select Features** window. The only option is vFire Core, which is selected by default.
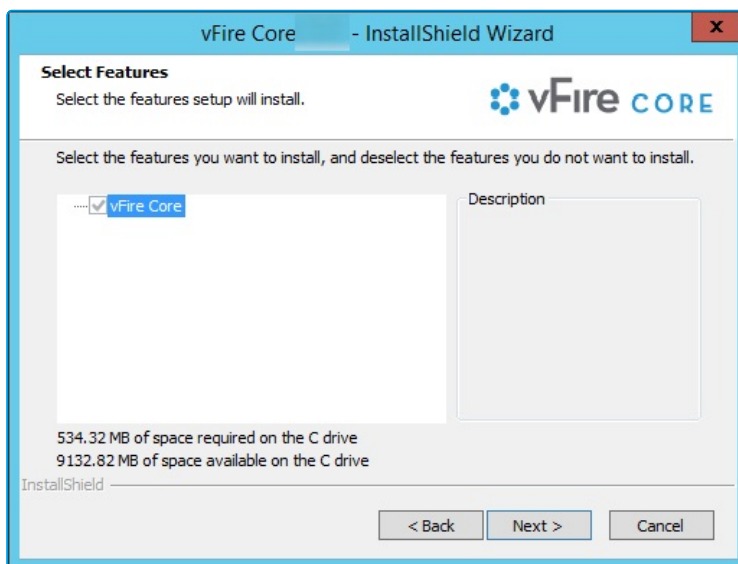
18. Select **Next** to continue.

19. In the **Ready to Install the Program** window, select **Install** to proceed with the installation.
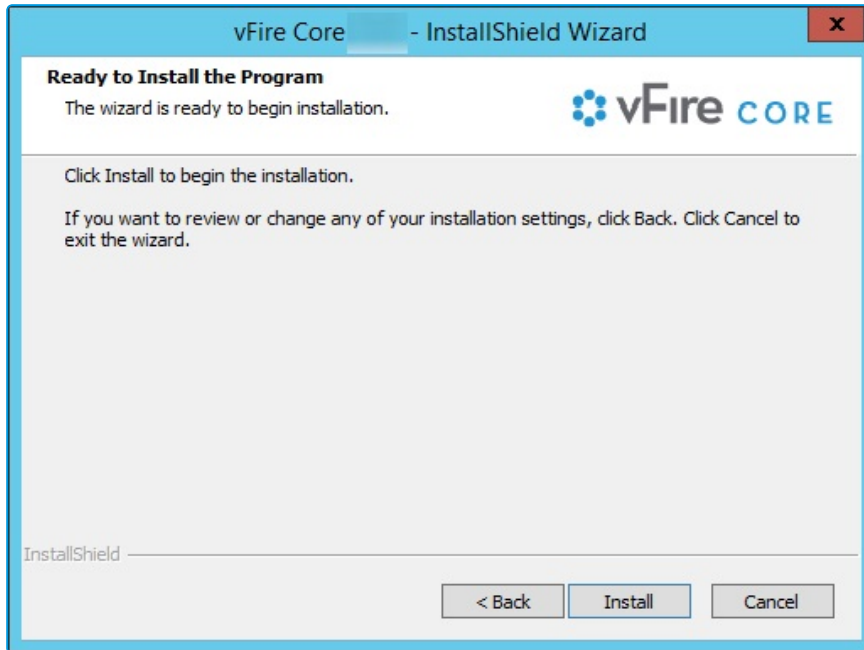
20. You will then get a window informing you that IIS needs to be stopped in order to continue. Select **Yes** to stop IIS and all dependent services and continue with installation.

21. The vFire Core files are copied to the computer. This may take several minutes. You will be prompted that IIS must be stopped if this has not already been done. Select **Yes** to continue.
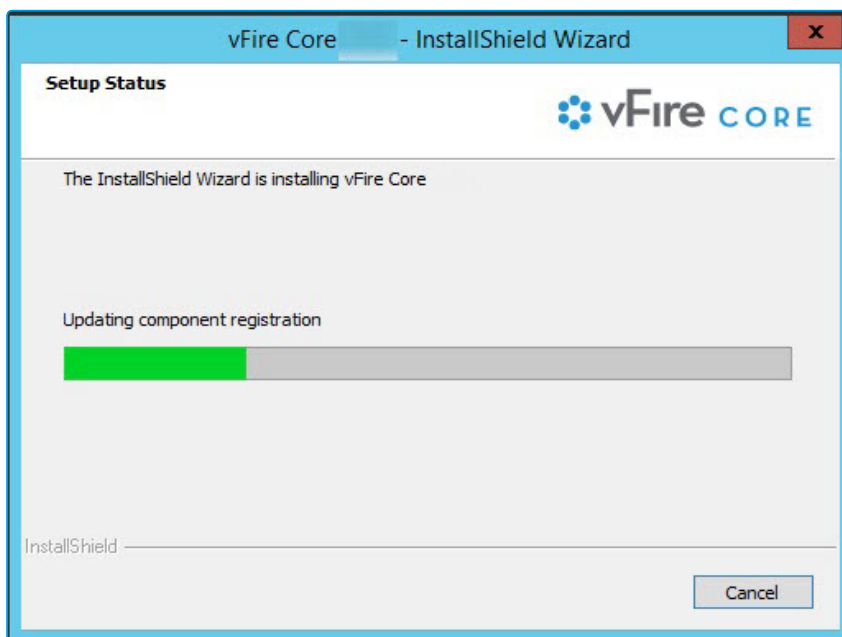
22. Once installation is complete, the **InstallShield Wizard Complete** window appears.
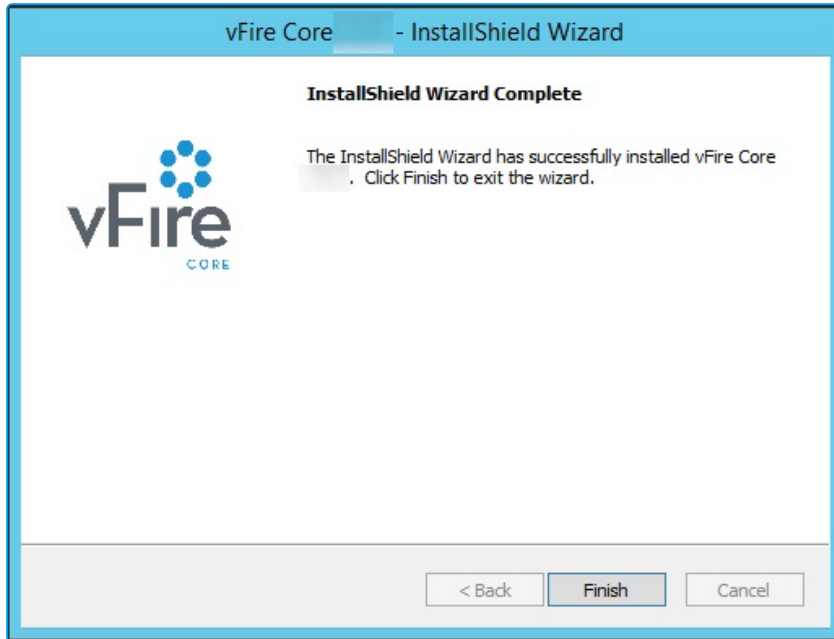
23. Select **Finish** to exit the InstallShield Wizard. The installation process for vFire Core is complete. The next step is to open the vFire Core Server Console to create and configure your new system.

Creating a New vFire Core System

Creating a vFire Core system from a blank database is performed through the Server Console after installing vFire Core.

Follow the steps outlined in **Creating a New System** in the **vFire Core Server Console Guide**.

Installing and Upgrading on Multiple Web Servers

vFire Core can be installed on more than one web server all accessing the same database with the load distributed using a load balancer as illustrated below.
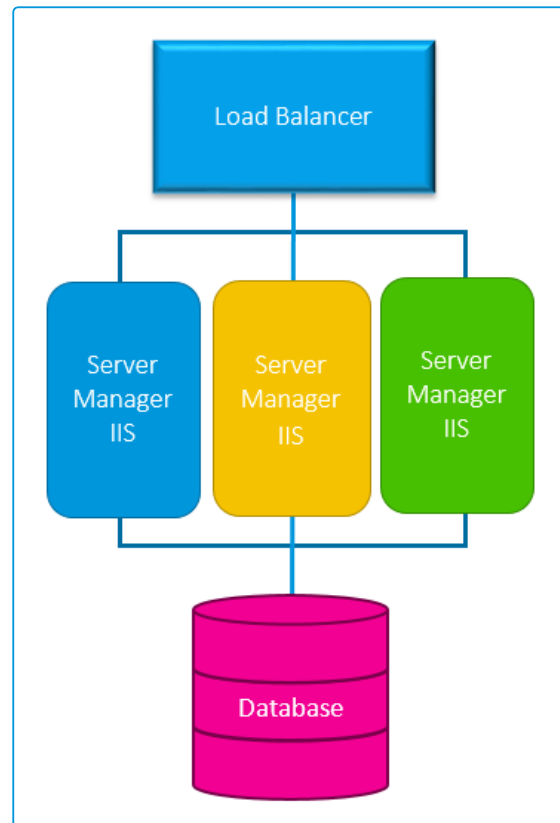
1. Install vFire Core on each web server.

2. Create and configure a new system on each of those servers, ensuring they all point to the same database.

3. On all but one of the servers, disable vFire services and database upgrade:

   - Stop all **vFire services** and set their "Start Up" property to **Manual**; except for the vFire 9 Administrative Service.

   - Ensure the vFire 9 Administrative Service is running and its Start Up property is set to **Automatic**.

- In the registry key, disable database upgrade via registry string
  `SkipDatabaseUpgrade` = **1**
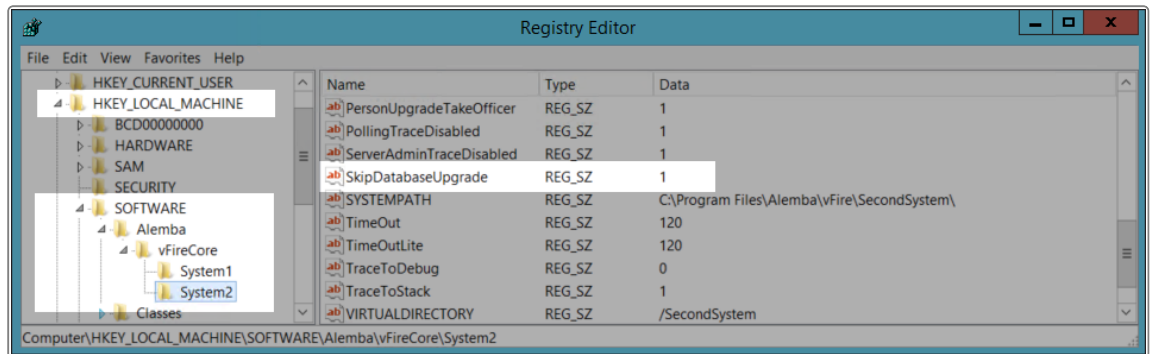
If **upgrading** in a multi-server environment, the upgrade only needs to be run once on the shared database. On the second and subsequent servers, make sure that you select **No** if prompted to upgrade the database.

Uninstalling vFire Core

You would normally uninstall vFire Core before you install a new version. Uninstalling vFire Core will stop IIS and any dependent services. **You do not need to uninstall if you are performing a patch or upgrade**.

✋ Before you start

Ensure that no vFire Core files are being used or open. Files are found in the default directory C:\Program Files\Alemba\vFire or another directory you have specified.

1. Start the Windows **Control Panel**, and select **Programs**. From the Programs window, select **Programs and Features**. A list of installed programs will be displayed.
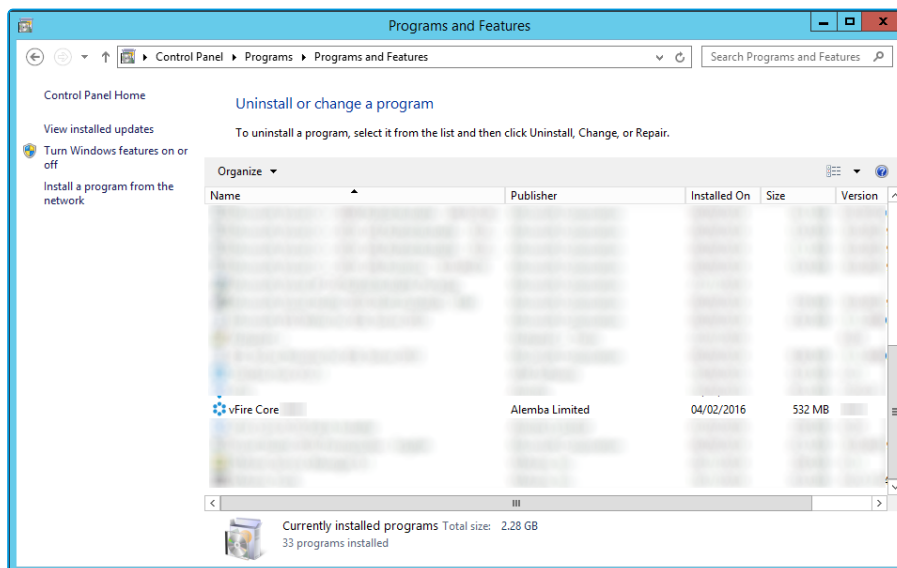
2. Select **vFire Core**. To remove the application, right-click and select **Uninstall**.

3. A message prompting you to confirm that you want to uninstall vFire Core appears. Click **Yes** to continue with the uninstallation.

4. If you have any open programs, you will be prompted to close them. Select whether or not to automatically close applications and click OK.
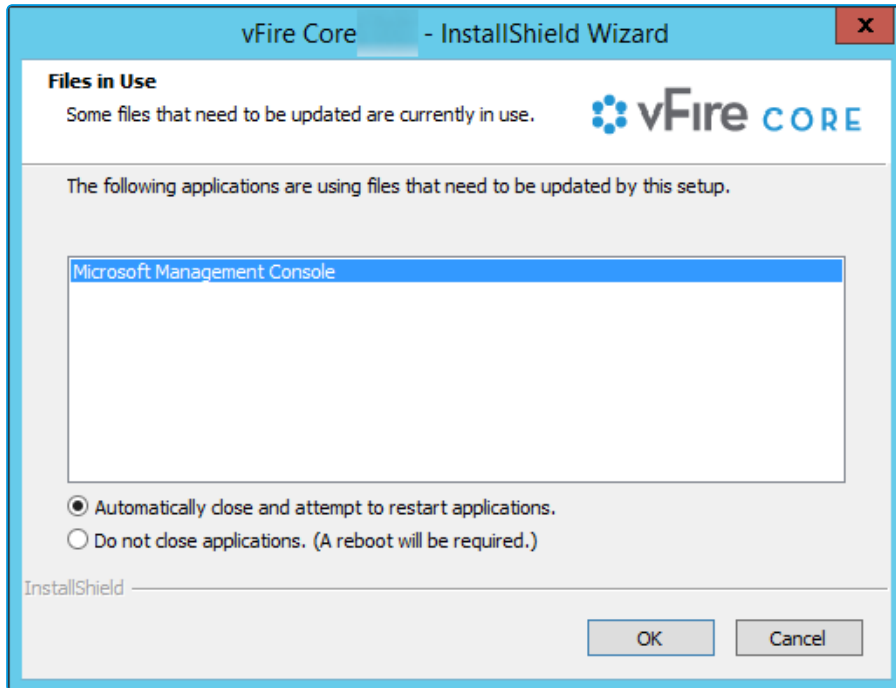
5. After validation is complete, a message prompting you to confirm to stop IIS and all dependent services appears.
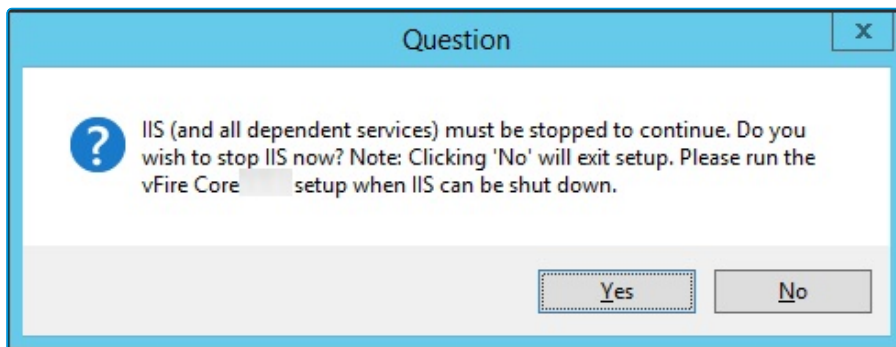
6. Click **Yes** to stop IIS and all dependent services and continue with the uninstallation, or click **No** to abort the process.

7. If **Yes** is selected, removal of vFire Core files will start

8. After this is complete an **Uninstall Complete** confirmation window will be displayed.
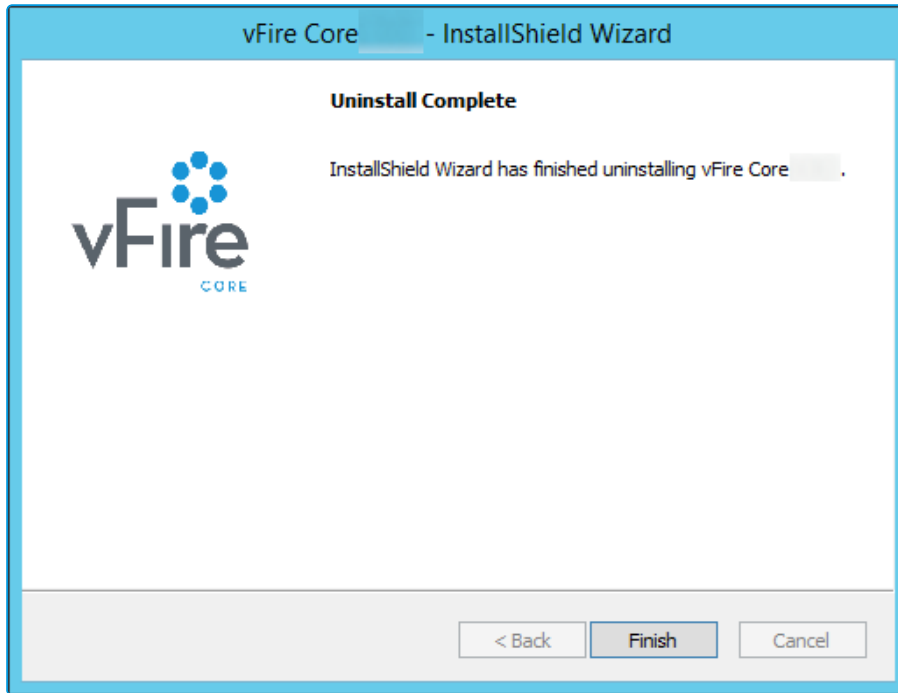
9. Select **Finish**. vFire Core is now uninstalled.

Troubleshooting and FAQ

Why are some vFire Core files left on the server when I uninstall vFire Core?

If any vFire Core files are left open or are being used, those files will not be uninstalled because of Microsoft Explorer's restrictions. Before you uninstall vFire Core, ensure that no vFire Core files are being used or open. Files are found in the default directory C:\Program Files\Alemba\vFire or another directory you have specified.

I am getting error messages when I run Chat.

One of the most common reasons for error messages and Chat working incorrectly is incorrect configuration of your virtual directory. Ensure that your system is pointing to the correct virtual directory and, if you have several systems, that they are each pointing to their own.

My Chat analysts are not showing as online.

Ensure that your system is pointing to the correct virtual directory.

**Should vFire be added to the antivirus exclusion list?**

Yes, exclude the vFire Core virtual directory and install location from antivirus scans and real-time monitoring.

I have received an error with the prefix "Error Running PowerShell Script" or the "Alemba.zip package".

Errors referencing PowerShell or the Alemba.zip package relate to PowerShell 5, required for using the Alemba API; and the Alemba API package itself. The Alemba API package is not required to run vFire 9.7, and you can run the scripts again in your server console. See **Running Custom PowerShell Scripts** in the online help for more details.

? My system is crashing on upgrade (Windows Server 2008).

When you upgrade from 9.2.1 or below, the upgrade process should automatically change vFire Core system app pool settings to use .NET 4.5.2 (.NET CLR version **v4.0**) as well as changing the Managed Pipeline Mode to **Integrated**. When you upgrade from 9.2.3 or below, the upgrade process should automatically change the vFire Core system app pool setting Enable 32-Bit Applications to **False**.

The following settings are correct:

Advanced Settings		? X
(General)		
.NET CLR Version	**v4.0**	
Enable 32-Bit Applications	False	
Managed Pipeline Mode	Integrated	
Name	test_Pool	
Queue Length	**65535**	
Start Mode	OnDemand	
CPU		
Limit (percent)	0	
Limit Action	NoAction	
Limit Interval (minutes)	5	
Processor Affinity Enabled	False	
Processor Affinity Mask	4294967295	
Processor Affinity Mask (64-bit c	4294967295	
Process Model		
▷ Generate Process Model Event L		
Identity	**ApplicationPoolIdentity**	
Idle Time-out (minutes)	**60**	
Idle Time-out Action	Terminate	

If these settings are incorrect, you need to manually change the **Application Pool** settings in Internet Information Services (IIS) as follows:

- **.NET CLR Version** to **v4.0**
- **Enable 32-Bit Applications** to **False**
- **Managed Pipeline Mode** to **Integrated**

I am having problems with my GA release, having upgraded from the Beta.

You cannot upgrade from Beta to GA using the maintenance package. You must carry out a full upgrade.

Files are no longer attaching to emails, or I am receiving errors regarding the size of file attachments that I did not receive before.

The maximum size of an attachment is set in several places. If it is less than 2gb, it can be set in the **System Settings** window in Admin. If it is larger than that, it must be set in the web.config and the IIS. When you upgrade, some of those settings can be overwritten and need to be set again.

? I am receiving IIS Errors.

If the Virtual Directory was not correctly created for a System, it will not appear in the vFire Core Server Console or the server registry and therefore the upgrade process cannot change the app pool settings automatically. This will cause the system to crash. The following settings are incorrect:
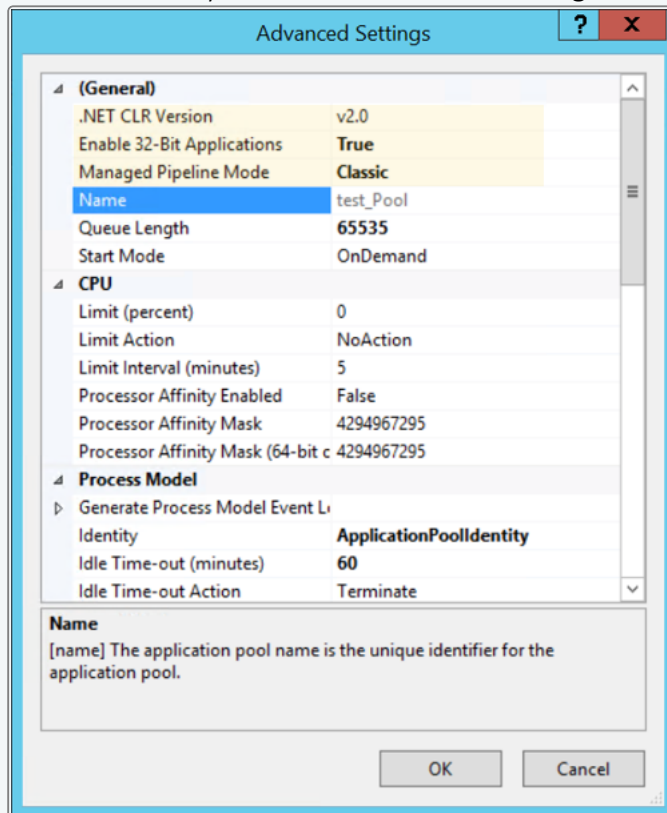
? I cannot see other Members of Chat.

See the solution for "I am receiving IIS Errors".

? I cannot find the "Forgotten Password" settings.

The default "Forgotten Password" setting on the vFire Self Service login window in 9.7 is that "Click here for reminder" is displayed. Upgrading your system to 9.7 will reset this setting to this default.

The **Forgot Password** settings were maintained in the **Self Service Settings** window prior to this release. These are now managed in **Designer** by configuring the "Click here for Password Reminder" label in the **Portal Screens Login** screen.
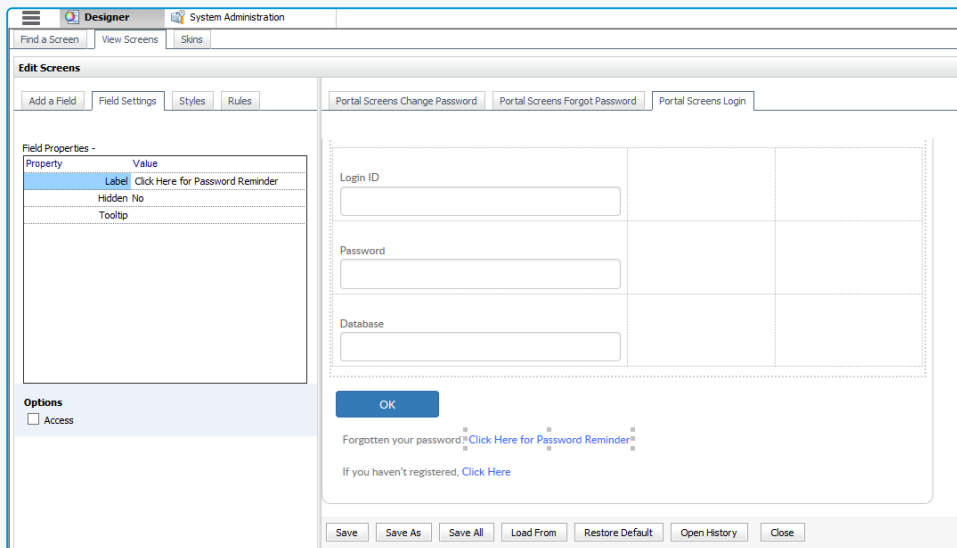
If you choose to hide the link, ensure that you reword the preceding text "Forgotten your password" so that it still makes sense to the user.

I am having problems with Text Searches.

Searches that rely on the vFire Indexing Service, such as text searches and Matching Panel, may not return expected results after upgrading.

Symptoms include:

- Text searching in Search screens does not return records created since upgrade.

- Matching Panel does not return call or KB results when filtering by call description text. However, when filtering by fields only, results are returned.

- The IN_CL_DOCUMENTS table is empty in the vFire database after upgrade.

- No results are returned in Call Search when performing a text search using the Logical option.

This occurs under the following conditions:

- The vFire Indexing Service is set to 'Manual' startup and/or was not running at time of upgrade

- The vFire Indexing Service was manually started after upgrade

- The vFire Core system is installed at the file location: <InstallDrive>:\Program Flies\Alemba

This is a known issue in vFire Core 9.3 and above, whereby the vFire Indexing Service does not start properly after upgrading.

To resolve the issue, restart the vFire Indexing Service on the application server where vFire Core is installed.

For further information, refer to knowledge article **1182** in the Alemba Support Self Service Portal.

The upgrade has caused Wrapper/Controls Errors.

The maintenance package will always replace the wrapper/controls with the latest version. If your end users cannot download the wrapper and controls to their local system(s), they will receive errors when using the wrapper/controls.

You should deploy them by using the MSIs in the vFireCoreControlsXXX.zip or vFireCoreControlsXXXx64.zip for the 64-bit version.

My application pool settings appear differently to the ones displayed in the Installation/Upgrade documentation.

During install or upgrade of the API, the installer will create a Web Application and corresponding Application Pool for the Alemba.Web and Alemba.API web services.

If the a Web Application is already configured for the installation directory, the installer will use that Web Application and the corresponding Application Pool.

The installer will override settings for .Net CLR Version, Enabled 32-Bit Applications, Managed Pipeline Mode, Start Mode and Idle Timeout. These

> settings will be applied to whichever application pool is linked to the Alemba.API and Alemba.Web Web Applications.
>
> These Web Applications should be configured with dedicated Application Pools, per the default configuration.

Upgrading Oracle Systems - 9.9 Onwards

> ❗ Oracle systems cannot be upgraded to 9.9 or above.

The Maintenance Tool will check through every system to see if the database is Oracle. If *any* system are Oracle, you will get a popup message: "Upgrade Failed. Oracle databases are not supported." and the process will stop there.

If you have several vFire systems in the server and any one of them is Oracle, you cannot just upgrade the SQL system, even when you set registry key "SkipDatabaseUpgrade = 1" on the Oracle system.

> If you have multiple Oracle systems in the server, the message: "Upgrade Failed. Oracle databases are not supported." will only appear once.

Temporary Root Files

When first executing the MSI, it places the temporary "Rootfiles" and "Systemfiles" folders in the root folder.

When you get the popup message: "Upgrade Failed. Oracle databases are not supported." and click OK, the temporary "Rootfiles" and "Systemfiles" folders will remain in the root folder.

They will remain in the root folder even after uninstalling the maintenance patch from Control Panel. This is pre-existing behaviour and has not been modified in 9.9.

Creating New Systems with Oracle Databases

From 9.9. onwards, you cannot create any new systems with Oracle databases.

The Server Console > Properties > Database tab > "DB System" dropdown field has been removed. The "DB System" label has been renamed to "SQL Server DB Details". The

remaining fields now default to SQL Server fields (e.g: DB Server, DB Name, DB Login ID, DB Password)

Running 9.9 MSI on an Oracle System

Do not run 9.9 MSI (or above) on Oracle system.

Since 9.4, after running the MSI, server console will be inaccessible (throw an MMC error when opened). This error will go away once the upgrade is complete. However, if you are attempting to upgrade an Oracle system, the upgrade will halt mid procedure, and the Server Console will be stuck with the MMC error.

Logging on to vFire Core

You can log onto vFire Core using Internet Explorer 11 (or Internet Explorer 9 if using Windows Vista) from any machine, including the server.

✋ Before you start

You must have installed the system on the server and created a system using the vFire Core Server Console.

vFire Core is designed to be used in **Internet Explorer**. Using other browsers is not recommended and may give unpredictable results.

If you access vFire Core from a client machine with Windows Vista installed, you should enable **Protected** mode on the Internet Explorer settings. This can be done through the option under the Security tab on the Internet Options. Otherwise the vFire Core login page will display behind the Internet Explorer page, and you will have to highlight it by selecting the vFire Core application on the Windows task bar.

vFire Core uses CAB files to download ActiveX controls. Some organizations may not allow CAB files to be downloaded because of Internet Explorer Security Settings. Ensure that the options that relate to file downloads are enabled.

Launching the Application from the Browser

To launch the application from the browser, type your URL as follows:
http://machinename/Virtual Directory/core.aspx

Replace	with
http	**https** if you have selected **Use SSL** when creating the virtual directory in the vFire Core Server Console
machinename	the domain name or IP address of the web server, load balancer, or publicly accessible website
Virtual Directory	the name of the virtual directory you specified in the vFire Core Server Console

📝 core.aspx is the name of the page that launches the wrapper executable.

Downloading CAB Files

vFire Core uses CAB files to download ActiveX controls from the web server. These are self-contained files used for application installation and setup. In a CAB file, multiple files are compressed into one file. Data compression is performed across file boundaries, significantly improving the compression ratio and therefore decreasing download time.

On accessing vFire Core for the first time, Cabinet Files (CAB Files) are downloaded from the web server to the client machine before the Login window appears.

> The download folder is held in **C:\\<WindowsFolder>\\Downloaded Program Files**, where **WindowsFolder** is the folder in which Windows is installed. The name may differ, depending on your version of Windows.

If you are not using the direct MSI installation of client components, the following controls are downloaded:

| File Name	Description
AlembaWrapper.cab	This contains an executable that runs on the client machine when you log into vFire Core. The wrapper contains and manages all the browser windows generated from running vFire Core, giving it a self contained desktop application feel. It also removes the reliance on the Internet Explorer browser and associated navigation problems.
AlembaControls.cab	This contains the control elements such as Q/D fields, that are used in the everyday running of the system.

> CAB Files are only downloaded the first time you access a page with an ActiveX control due to version control on these files.

When the download is complete, you will be prompted to install the controls.

Installing the ActiveX Controls

1. When prompted, select **Install**.

2. Select **Yes** to allow the Microsoft windows to make changes to your computer.
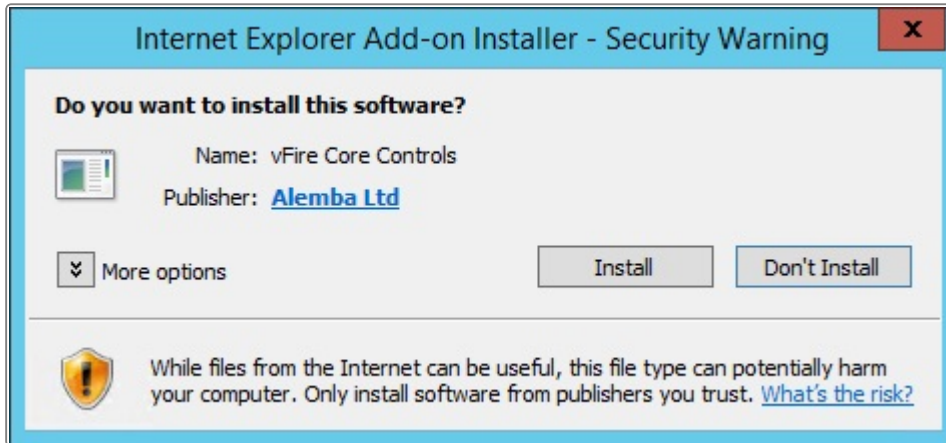
3. When installation is complete, you may be prompted to restart your computer. This is not necessary. If prompted to restart your computer, select No.

4. You will then be prompted to download the vFire Core Wrapper.

5. Select **Yes** to allow the Microsoft windows to make changes to your computer...

6. Select **Install**. When installation of the wrapper is complete, you may again be prompted to restart your computer. This is not necessary. If prompted to restart your computer, select No.

7. When the install is complete, the vFire Core login window appears.

Logging in

In the vFire Core login window, specify your **User Name** and **Password**. If Single Sign On (SSO) is enabled, the login window does not appear and you are logging in automatically.

Prerequisites Checklist

The recommended requirements for the new vFire system are as summarized below. If you have any queries or require further information, consult the relevant sections in the **Prerequisites**, **Install** and **Upgrade** documentation.

Element	Requirement	Check?
Application Server	**Operating System:**	

Operating System	IIS Version	Hardware	Additional Requirements
Windows Server 2008 R2 (64-bit)	IIS 7.5	64-bit	.NET 4.5.2; MMC 3.0 or above; PowerShell 5
Windows Server 2012	IIS 8.0		
Windows Server 2012 R2	IIS 8.5		
Windows Server 2016	IIS 10.0		

Hardware Requirements (minimum/recommended):

Hardware	Minimum Requirement (per system)	Recommended Requirement (per system)
CPU	2 CPU Cores	4 CPU Cores
Memory	1 GB RAM	4 GB
HD	1 GB of available space	2 GB of available space

Roles/Features:

Please see the Installation & Upgrade Guides.

Hardware Requirements:

Element	Requirement			Check?
		Hardware	**Minimum Requirement (per system)**	**Recommended Requirement (per system)**
		CPU	2 CPU Cores	4 CPU Cores
		Memory	1 GB RAM	4 GB
		HD	1 GB of available space	2 GB of available space

Roles/Features:

Please see the **vFire 9.9 Installation & Upgrade Guides**.

Additional Requirements:

- .NET 4.5.2
- Windows Management Framework v5.1

Element	Requirement	Check?
Database Server	Minimum Supported Versions: • SQL Server 2008 ❗ This is not supported if you are using the Alemba API. • SQL Servers 2012, 2014, 2016 (all 64-bit) Minimum Hardware Requirements: • Your database vendor's documentation should provide the minimum recommended hardware configuration required for the database version you intend to deploy. • It is recommended that you install vFire Core on a separate server to the database server. Additional Requirements: • You must enable the Full-Text and Semantic Extractions for Search feature needs as it is required for the Suggested Knowledge and Matching Panel features introduced in v9.8	

Element	Requirement	Check?
Database Account Permissions	Ensure that the Database Account has the required permissions: The **database login account** that is used for vFire during normal system operation and system upgrades must: • be a member of the **db_owner** group • be granted VIEW DATABASE STATE permission for the vFire database • have VIEW SERVER STATE permission on the database server • Have DB_DATAREADER permission on the master database The **db user** needs permission to execute **xp_regread** See Database Account Requirements for more details on how to do this.	
Exchange Server	Minimum Supported Versions: • Exchange 2010 • Exchange 2013 • Exchange 365 Email Protocols • Incoming Email: POP3, IMAP and MAPI • Outgoing Email: SMTP, MAPI While the MAPI protocol is supported, it is not recommended due to the severe constraints its design places upon the flexibility of the email functionality in vFire.	

Element	Requirement	Check?
Networking	The network location of the database server to the vFire Core server will have an impact on performance. Network switching and firewall configurations need to be considered in the design of the system, and are fully the responsibility of your infrastructure team. Alemba can only provide very limited guidance in this area, but can recommend third-party consultants to provide specialist advice.	
vFire Core Client	Minimum Supported Browsers: • Internet Explorer 11 (Internet Explorer 9 is supported with Windows Vista, with limitations) Required Add-On for installations not using vUA: • vFire ActiveX Controls (downloadable from application site or via MSI package)	
vFire Self Service Client	Minimum Supported Browsers for Windows 7, 8.1, 10 desktops: • Internet Explorer 11.0.9600.17031 • Firefox version 43.0.3 • Chrome version 47.0.2526 Minimum Supported Browsers for Mac desktops: • Safari version 11.0	
Nano Client	Minimum Supported Browsers for Windows 7, 8.1, 10 desktops: • Internet Explorer 11.0.9600.17031 • Firefox version 43.0.3 • Chrome version 47.0.2526 Minimum Supported Browsers for Mac desktops: • Safari version 11.0	

Element	Requirement	Check?
Active Directory Connectors	Minimum Supported Versions of Active Directory: • Microsoft Active Directory 2008 • Microsoft Active Directory 2012 Minimum Supported Versions of PowerShell • PowerShell v5.0 Multiple other connectors are also supported. See the Connector Matrix for more details.	
Infrastructure Map	The following is an example of the infrastructure relationships of a standard implementation of vFire Core. This diagram could differ significantly, depending on your internal infrastructure requirements and datacenter landscape.	

vFire App System Administrator Notes

The vFire app is designed to be an easy way for end users to access their calls, approvals, orders and asset lists. They can add notes and view the history of the call, action approvals, and view orders and assets, and, from 9.9.1, log calls.

First, check that your system meets the required prerequisites. Then ensure that your users have the access permissions required to allow them to log calls, and access appropriate call templates, services and assets.

vFire App Prerequisites

The vFire app is designed for users to log calls, and view their calls, approvals, order and assets. Before users can install the app on their mobile devices, you need to ensure that your system meets the following prerequisites, and configure your environment.

- The app uses the **Alemba API**, which is installed by default when you install/upgrade to 9.7 or above. However, if this is actively disabled by your system administrator, you cannot run the app.

- You must be using **vFire Core 9.10.1** or above (server version). If you are running a lower version of vFire Core, users may experience issues.

- The mobile device must be able to navigate to the **vFire HTML pages** delivered via IIS web services. This may require you to configure your firewall.

- Ensure that your authentication is correctly configured for the app. See the documentation on **Authentication** in the online help for more details.

- Users must have a **valid vFire login** account, and be flagged as a User and/or Analyst.

- Users must know their **system name and URL** to configure the settings when they first use the app, or change device.

- The app is currently available on Windows 8.1 and 10; iOS version 11; and Android version 6.0.1 phones or higher.

Tested Platforms

The app has been tested on the following devices. (Other devices are also supported.)

- Windows 10 Mobile - HP Elite X3
- iPhone 6+ running iOS 11
- Samsung Galaxy S5 running Android version 6.0.1

Compatibility Statement

Currently, the app is only available in English, and for the mobile phone types and platforms specified. We do not support other tablets or devices in this release. If in doubt, please assume that the prerequisites outlined above are accurate.

vFire App and Authentication

When users first attempt to log in to the app, they are prompted for the following information:

Server Name   The server ip address or server name

System Name   The system name, as defined in the server console, under Virtual Directory

HTTP Secure   Choose whether you want to use this setting

They should be informed of the appropriate entries for these settings.

They must also exist as Users in vFire Core, with a valid login id and password. If they are not already established users of vFire, you should also inform them of these details.

> From 9.9.1, the app supports windows authentication. For more details on using authentication, see the **Authentication** topic in the online help.

vFire App and Partitioning

The vFire app uses the same partitioning rules as the vFire Self Service portal.

Access Permissions

App user permissions are determined by the settings in the **Options Tab** in the user's **Self Service Portal role**.

To log calls, users must have **Log Calls** selected in the **Options Tab** of your **Self Service Portal** role.

Access to call templates when logging calls is determined by the permissions in the **Call Templates** tab of the user's **Self Service Portal** role, and, if used, by the **stream** and **status** of the call.

To see a service, the user must:

- Have a stakeholder role, and **Review Own** selected in the **CMDB** tab of their **Self Service Portal** role to see their own services.

- Have **Review All** selected in the **CMDB** tab of their **Self Service Portal** role to see all or their organization's services.

- Be the user specified in the **User** field on the **Service Details** window.

To see an asset, the user must:

- Have a stakeholder role, and **Review Own** selected in the **CMDB** tab of their **Self Service Portal** role to see their own assets.

- Have **Review All** selected in the **CMDB** tab of their **Self Service Portal** role to see all or their organization's assets.

- Be the user specified in the **User** field on the **CI Details** window.

When the call logged via the app is viewed in vFire Core, the logging method will be declared as 'Portal'.

Appendix A: Installing Client Components

When you navigate to vFire Core via the URL, the following components are automatically installed on the client machine if they are not found:

- vFire Core Controls
- vFire Core Wrapper

These components are located in the following location:

C:\WindowsFolder\Downloaded Program Files

where **WindowsFolder** is the folder in which Windows is installed. This is named differently in various versions of Windows.

> You may choose to install the wrapper and controls from the MSI instead for a number of reasons, including restrictions imposed by your organization security protocols. For more information, see below.

Installing Client Components from the MSI

32-bit MSI

Download the following file from the service catalog in alemba.help -

vFireCoreControls<version number>.msi, where <version number> refers to the software version number.

64-bit MSI

Download the following file from the service catalog in alemba.help -

vFireCoreControls<version number>x64.msi, where <version number> refers to the software version number.

> Installing the 64-bit version will also install the 32-bit version.

If you are working in Windows 8 or 10, you will always use the 64-bit wrapper and controls. If you are working in Windows 7, you will use the 32-bit wrapper and controls by default. You will need to create a shortcut to the 64-bit wrapper if you wish to use it.

It is not advised to try running the 64-bit wrappers on 32-bit environments as the two are incompatible. The benefits of running a 64-bit wrapper on a 64-bit OS is that they are designed to work together in terms of hardware resources. As such, you may find slight improvement in speeds and stability, however there are other external factors which might negate these improvements (eg, slow network speeds). In term of Windows 7, 64-bit is completely optional which wrapper you choose to install, however the network

Removing Client Components

Occasionally it may be necessary to reinstall the Wrapper and Controls if, say a new Wrapper or Control update has been released, or your current Wrapper or Control becomes corrupted and needs reinstalling.

This applies to automatic installs. If you have installed using the MSI, simply uninstall the program in the normal way.

Unregistering the wrapper

1. Select the Windows Start button. On the **start** page, type **cmd** to bring up the command prompt icon.

2. Select the command prompt icon to open the command prompt window.

3. Type the following command:

   ```
   cd C:\Windows\Downloaded Program Files\
   ```

   Your downloaded Program Files may be stored in a different location than 'Windows'. Ensure that the command above points to the correct folder.

4. Type the command:

   ```
   AlembaWrapper.exe –UNREGSERVER
   ```

Unregistering the controls

1. Select the Windows Start button. On the **start** page, type **cmd** to bring up the command prompt icon.

2. Select the command prompt icon to open the coregmmand prompt window.

3. Type the following command:

```
cd C:\Windows\Downloaded Program Files\
```

Your downloaded Program Files may be stored in a different location than 'Windows'. Ensure that the command above points to the correct folder.

4. Type the command:

```
regsvr32 /u AlembaControls.ocx
```

Appendix B: Adding ASP.NET to Windows 2008

If you are using Windows 2012, you should follow the instructions in the Installation Procedure section of this document, when adding ASP.NET. Follow the instructions below if using Windows 2008.

Adding ASP.NET Role Service

To add ASP.NET as a role service to your Windows Server 2008 machine:

1. Select Windows Start > Control Panel > Administrative Tools > Server Manager. The Server Manager window appears.

2. Select Server Manager > Roles > Web Server > Add Role Services. The Add Role Services window appears.
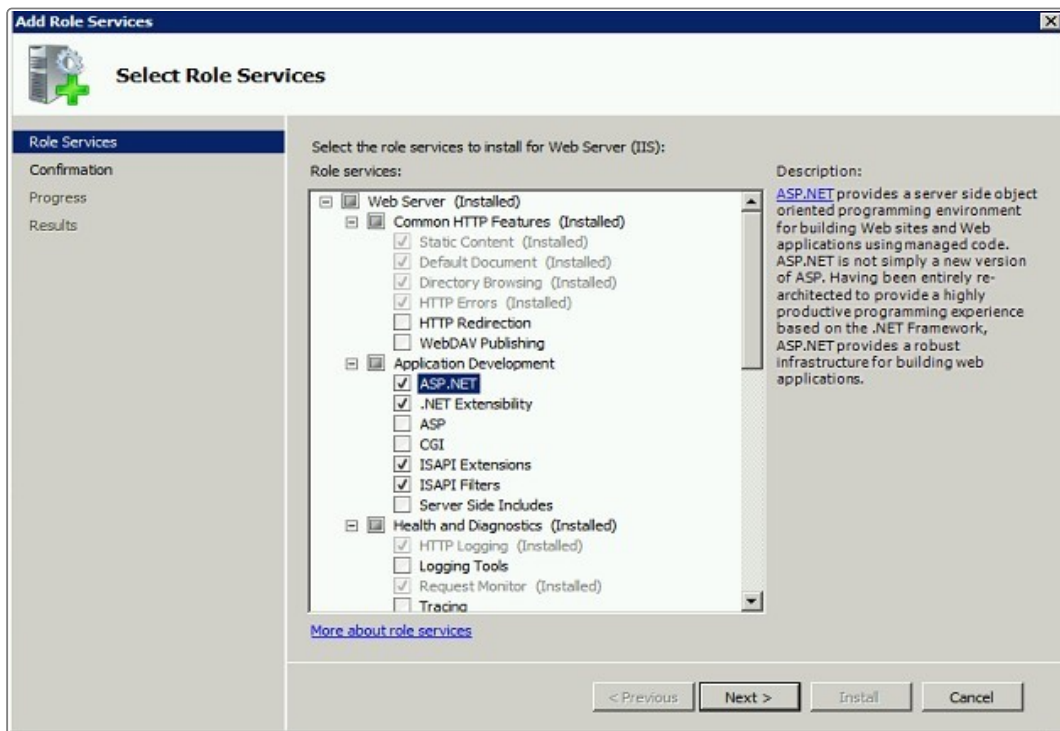
3. Select **Web Server > Application Development > ASP.NET**.

4. Select **Next** to complete adding the role service.

Appendix C: Configuring External Network Access to vFire

This topic explains how to configure vFire so users on a public network can access vFire Self Service and the vFire apps without needing to log into the corporate network.

Depending on organizational security requirements, the recommended environment and security configurations may differ. The most common security recommendation is to create a demilitarized zone (DMZ) containing a reverse proxy server buffered by firewalls.

> Work with your Network Administration teams to set up and configure reverse proxy servers, DMZ, and IIS redirection.

Three scenarios involving a DMZ are outlined in this topic and provide recommended configurations based on whether or not Windows Authentication is enabled on the vFire Core system within the secure network.

The three scenarios are:

- DMZ with a web Server where vFire Core is installed. The vFire Core system within the secure network may / may not have Windows Authentication enabled.
- DMZ with a reverse proxy server. The vFire Core system within the secure network has Windows Authentication disabled.
- DMZ with a reverse proxy server. The vFire Core system within the secure network has Windows Authentication enabled.

Ports to open in the firewalls

	HTTP	HTTPS	SQL
Ports	80	443	TCP 1433, UDP 1434

Option 1: Install a second vFire Core system on a Web Server in the DMZ

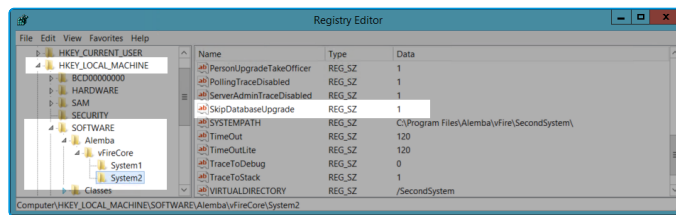| Internal network	The primary vFire Core system is installed on the internal server. It may or may not have Windows Authentication enabled; it has no effect on this configuration.

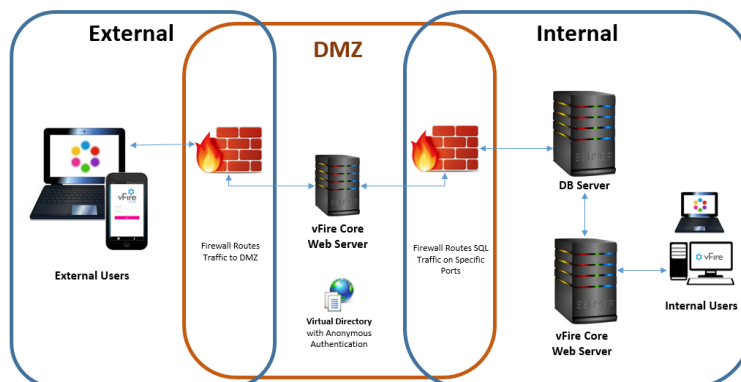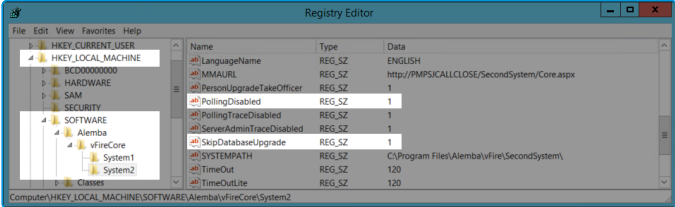| DMZ	A second web server is configured within the DMZ to act as a reverse proxy server.
	On this web server in the DMZ:
	• A vFire Core system is created that points to the same database as the internal vFire Core system.
	During system creation, when prompted to update the database, select **No**
	• In the virtual directory for this system, Windows Authentication is disabled and Anonymous Authentication is enabled.
	• All vFire Core services are stopped and their "Start Up" property is set to **Manual**; except for the vFire 9 Administrative Service.
	• The vFire 9 Administrative Service is running and set to **Automatic**.
	• In the registry key, database upgrade is disabled via registry string `SkipDatabaseUpgrade` = **1**
URL for External Users	The URL points to the server and virtual directory within the DMZ.

Option 2: Setup a Reverse Proxy Server in the DMZ. Authentication Disabled

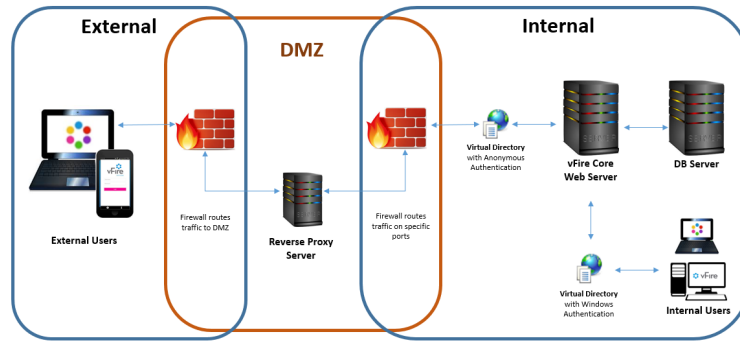|	
Internal network	The primary vFire Core system is installed on the internal server. Windows Authentication is not enabled.
DMZ	A reverse proxy server is configured within the DMZ. On this server in the DMZ: ● IIS is installed ● A virtual directory is created, with Windows Authentication disabled and Anonymous Authentication enabled. ● IIS is configured to redirect traffic to the vFire Core application server and virtual directory within the internal secure network.
URL for External Users	The URL points to the reverse proxy server and virtual directory within the DMZ.

Option 3: Setup a Reverse Proxy Server in the DMZ. Authentication Enabled

Internal network	The internal server's vFire Core system has Windows Authentication enabled. On the internal server: • A second vFire Core system is created that points to the same database as the primary vFire Core system. During system creation, when prompted to update the database, select **No** • In the virtual directory for the new system, Windows Authentication is disabled and Anonymous Authentication is enabled. • In the registry key for the new system, polling of services is disabled via registry string `PollingDisabled` = **1** • In the registry key for the new system, database upgrade is disabled via registry string `SkipDatabaseUpgrade` = **1**
DMZ	A reverse proxy server is configured within the DMZ. On this server in the DMZ: • IIS is installed • A virtual directory is created, with Windows Authentication disabled and Anonymous Authentication enabled. • IIS is configured to redirect traffic to the internal application server and the virtual directory that has Anonymous Authentication enabled.

URL for External Users	The URL points to the reverse proxy server and virtual directory within the DMZ.

Further Information

Product Information and Online Support

For information about Alemba products, licensing and services, visit **www.alemba.com**.

For release notes and software updates, go to **www.alemba.help**.

Up-to-date product documentation, training materials and videos can be found at **www.alemba.help/help**.

You may need to register to access some of these details.

Technical Support

For technical support, please visit: **www.alemba.com** and select the **vfire support** link. You will need to log in to the alemba self service portal to contact the Alemba Service Desk.

Comments and Feedback

If you have any comments or feedback on this documentation, submit it to info@alembagroup.com.