vFire 9.10

Upgrade Guide

Version 1.0
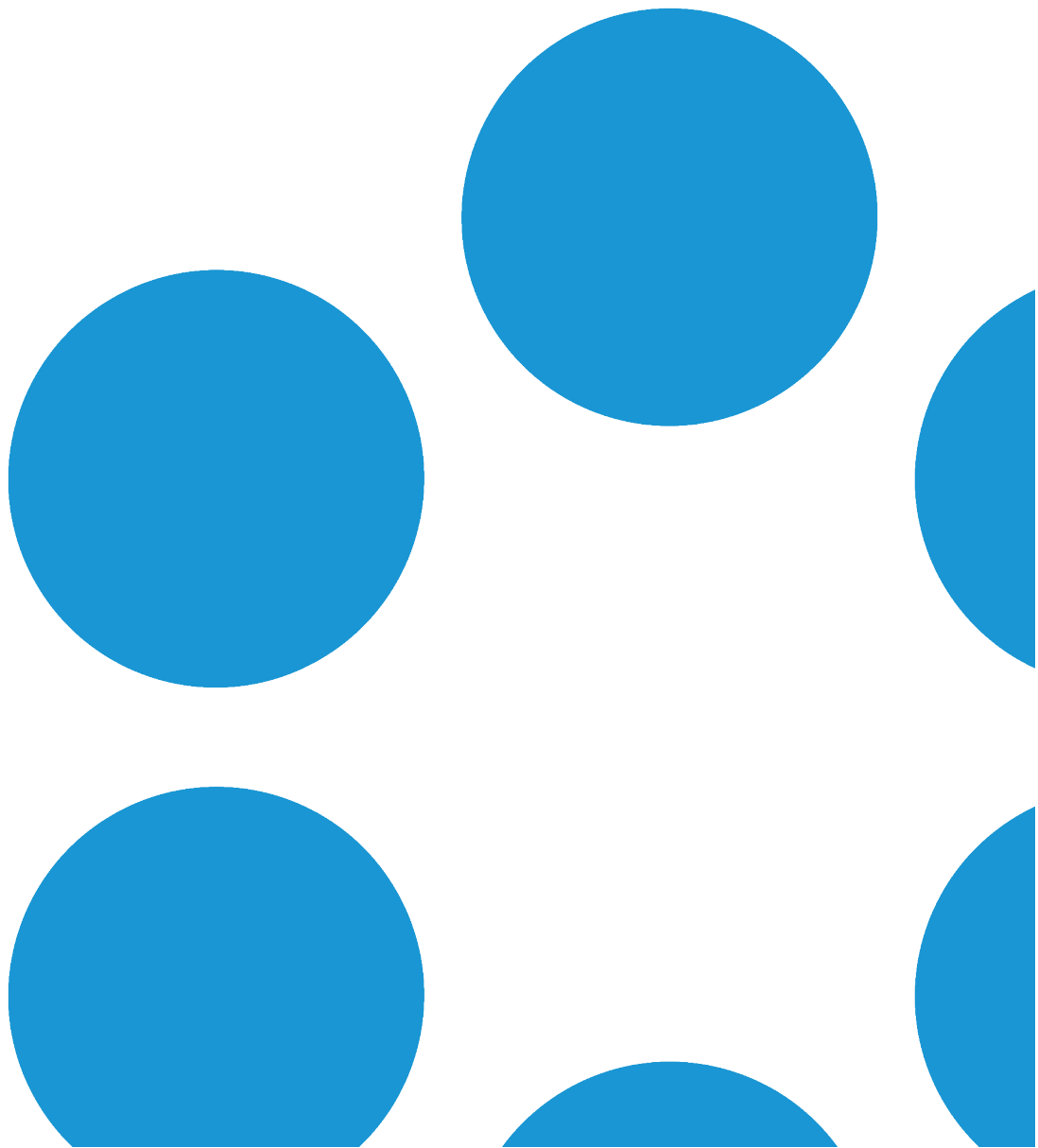
Table of Contents

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 or within vFire 9.10. An additional checkbox was introduced recently (in 9.9.4) that allows you to "Overwrite locally customized system files". If you are unaware of this checkbox, and want to know more, see page 35 for more details.

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 in the online help**.
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 in the online help**.

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.

Upgrading Your System

You can upgrade your system using the vFire Core Patch Tool. It is recommended that you read this section fully before applying a patch.

Enhanced Upgrade Process

Upgrading (also sometimes known as patching) your vFire Core System can be very time consuming for system owners. Enhancements introduced in 9.2.1 have sped up this process.

The automated upgrade of a system requires a series of actions which copy physical files and run database scripts (which is the most time consuming component). In order to improve the speed of upgrading, the upgrade process was changed in 9.2.1 so that only an incremental upgrade process will run, making only the changes required by the new version and removing redundant steps in the schema upgrade in the database scripts. The result of this is that the upgrade process is faster and it is easier to see specifically what is being updated in each version.

> The first time you upgrade to a 9.2 version, the current patch process will be executed to bring the system to 9.2.0 and then the incremental process will be used onwards. Upgrading from 9.0.X or 9.1.X to 9.2.1 will still take a similar time to upgrade as previous upgrades. Upgrading from 9.2.0 to 9.2.1 or any future higher version will be much faster.

File Changes

Prior to 9.2.1, the upgrade files were located in the Config directory (typically c:\Program Files\Alemba\vFire\System1\Config. There is now a new directory underneath the existing config directory named 9201 (for 9.2.1) for the changes to this specific version. An XML file defines how these scripts are run. There is a new (additional) file format for running scripts from the upgrade tool. Script files can either be run as an existing SCP file or as a new XML format.

✋ Before you start

Create a backup of your databases before upgrading as the Patch Tool **will not** backup your database.

Backup your system files and registry settings as the Patch Tool **will not** create a backup. Ideally, create a snapshot or backup of the virtual web server, enabling a swift and simple rollback should the need arise.

Close the vFire Core Server Console and ensure that you are not logged in before running the upgrade otherwise an error will occur.

If you are performing an upgrade from a version lower than 9.2.0, it will invalidate your existing license key. You must have an updated license key to run vFire Core. Contact Alemba Support for more details if necessary.

1. Ensure that your system meets the prerequisites outlined in the **Prerequisites Guide**.

2. Familiarize yourself with the information in the **Installing or Patching** section, on .

3. **Install the vFire Patch Tool** (). If you have already installed it, simply run through the wizard again.

4. Create a backup as described on .

5. Carry out a **Screen Pre-upgrade**, if necessary, as described on .

6. Run the vFire Patch Tool, as described on .

7. Apply the license key, if necessary, as described on .

8. Should the need arise, roll back the upgrade as described on

If you are using vFire Officer & Portal, you must disable the constraints before upgrading vFire Core, and enable them again when the upgrade is complete. You then need to upgrade Officer & Portal to ensure that you have a compatible version. See the **technical note** on the website.

Considerations When Upgrading to 9.3 or above

This section describes extra steps required after upgrading to vFire 9.3 and higher, if the features and functions listed below were in use prior to upgrade.

vFire App

If the vFire app is enabled in your environment, it needs to be re-enabled after upgrading to 9.3 by re-configuring the web.config file.

1. Download the **vFire Core 9.2.1 mobile hotfix pack** which contains all the necessary files. Alemba Support will provide you with this.

2. Extract the contents.

3. Stop all vFire Core services. You will need to exit vFire Core, stop all vFire Core services and restart IIS.

4. Open the folder which contains your vFire Core installation.

If you installed 9.2 from a clean install, the location will be **C:\Program Files (x86)\Alemba\vFire**

If you upgraded vFire Core from an older version (pre 9.2), the location will be **C:\Program Files (x86)\VMware\Service Manager**

The location may be different if you have used customized install locations.

5. In the mobile pack, navigate to the **RootFiles** subdirectory and copy:

   `Infra.Rules.dll`

   to:

   C:\Program Files (x86)\Alemba\vFire

   (or the equivalent location if your settings are customized or showing older file names). You will be prompted to replace the existing file. Confirm the replacement.

6. In the mobile pack, navigate to the **System Files\Bin** subdirectory and copy the following:

   `Infra.API.dll`

   `Infra.Rules.dll`

   to:

   C:\Program Files (x86)\Alemba\vFire\System1\Bin

   (or the equivalent location if your settings are customized or showing older file names). You will be prompted to replace the existing files. Confirm the replacements.

7. In the mobile pack, navigate to the **SystemFiles\Config** subdirectory and copy:

   `queries-mobile.sql`

   to:

   C:\Program Files (x86)\Alemba\vFire\System1\Config

   (or the equivalent location if your settings are customized or showing older file names). You will be prompted to replace the existing file. Confirm the replacement.

8. In the mobile pack, navigate to the **SystemFiles\Config\90201** subdirectory, and copy:

```
patch-default-values.xml
```

to:

C:\Program Files (x86)\Alemba\vFire\System1\Config\90201

(or the equivalent location if your settings are customized or showing older file names)

9. In **C:\Program Files (x86)\Alemba\vFire** (or equivalent), select **serverconsole.msc** to open the Server Console.

10. Select the web server that you are configuring. (In our example, it is System1.)
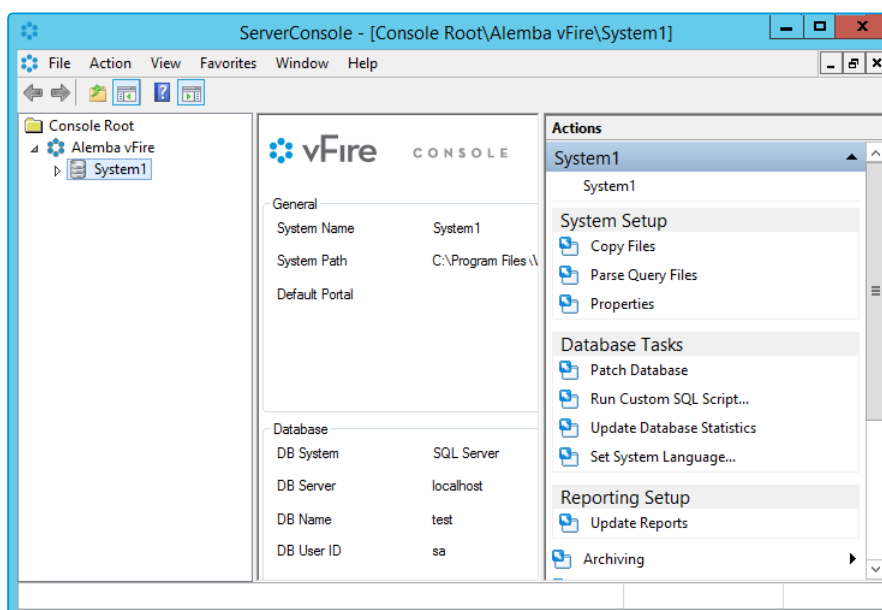
11. Select **Run Custom SQL Script** from beneath **Database Tasks** in the **Actions** menu on the right of the window.
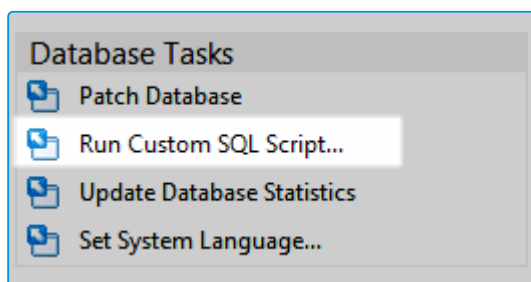
12. This opens the **Run Custom SQL Script** window. Navigate to the **C:\Program Files (x86)\Alemba\vFire\System1\Config\90201** folder if necessary.

13. The file type at the bottom of the window will be showing 'Script File (*.scp)' change this to XML File (*.xml) to display xml files.
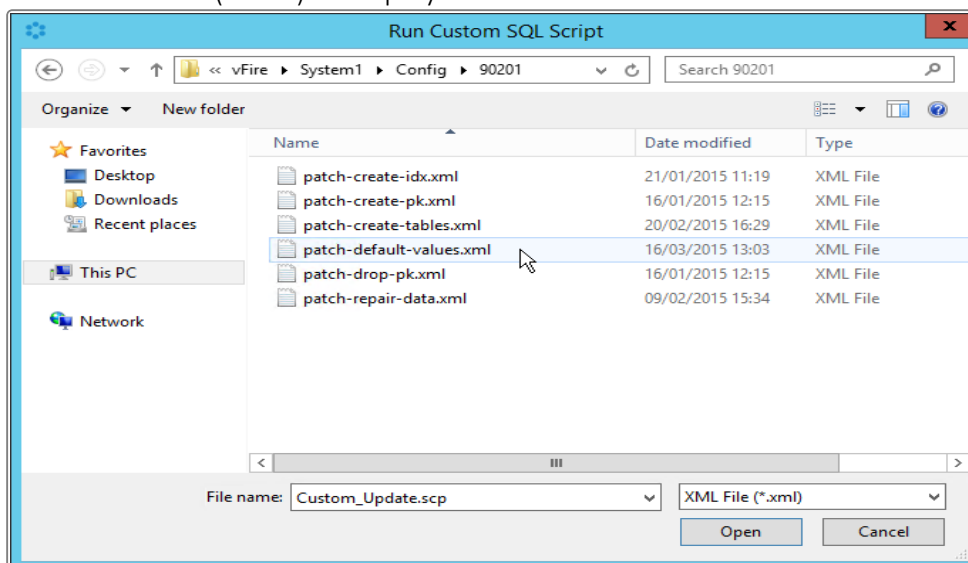
14. Select **patch-default-values.xml**. This will run the script.
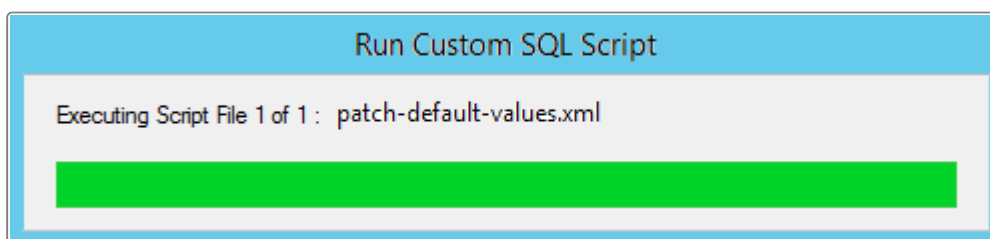
15. When this is complete, you will be asked if you want to run any more scripts. Select No.

16. The database will update.
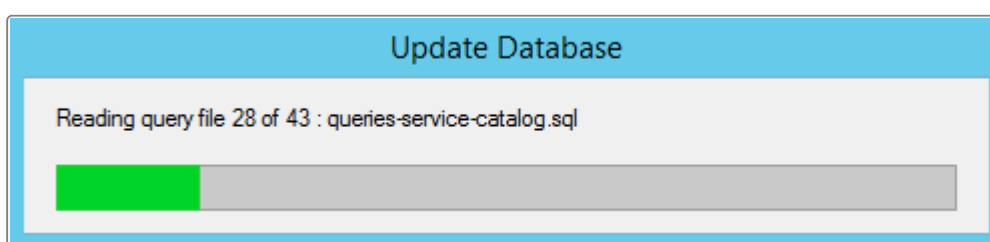
17. Close the Server Console when this is complete. Select Yes to save settings.
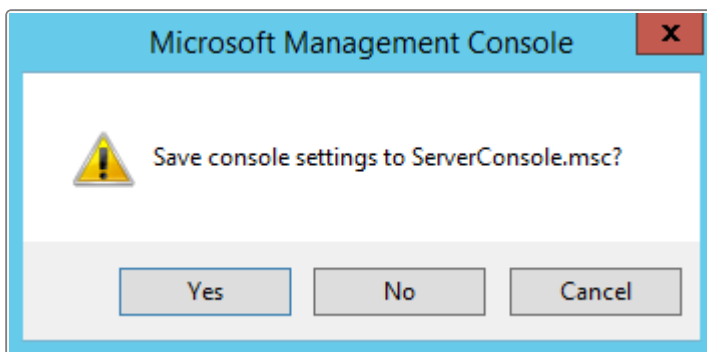
18. You will now need to restart the vFire Services. To do this, open the **Task Manager** and select the **Services** tab. Scroll down to locate the vFire Services if necessary.
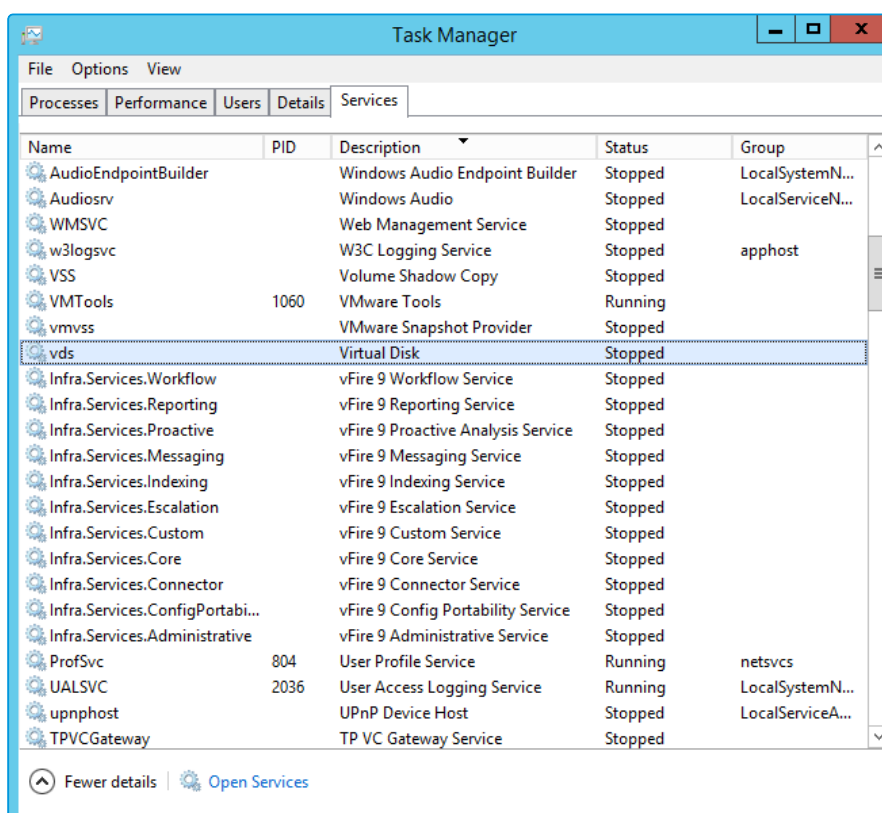
19. Right click and select **start** for each of the vFire services.

Reminder Columns on Calls Outstanding

If you are using reminder columns and are upgrading to 9.6 or above, you will need to remove and re-add them to your column configs after upgrading.

Search Fields on vFire Self Service Screens

After upgrading, existing Multi Value search fields that reference **External Suppliers**, and existing search fields that reference **SLA**, **OLA**, and **UC Agreements**, may stop working on Self Service submissions screens. These fields need to be removed and re-applied to the screen after the upgrade using **Designer**.

Personalized Column Configurations

Personalized column selections on the following search windows will need to be reconfigured after upgrade. Column selections on these search windows are reset to default as a result of the enhancement in 9.3.0 which extends the Configurable Column and Advanced Search functionality to these searches. Personalized columns will need to be reconfigured after upgrade.

Affected search windows: Organizations, Locations, Subscriber Groups, Contracts, Cost Centers, Jurisdictions, Knowledge Admin, Agreements, Bulletin Administration.

Integration Connectors

Connectors have been updated for vFire Core 9.3. Your existing integration settings will continue to function after upgrading to 9.3, with no additional steps required.

> The exception is existing SAM connectors. If you are integrating with SAM, see below to learn more.

All 18 connector files now come included with the vFire Core software, not just the free connectors. There has been no change to the licensing model for connectors. If you want to add a licensed connector to your integration platform, you no longer need to download the files, however you still need to purchase a license key.

SAM Connector

The minimum version of Java required for this integration is **Java 8 _64-bit_**. After upgrading to vFire 9.3, follow these steps:

1. Install Java Runtime Environment 8 for 64-bit on the vFire server. You can download JRE from the Java website (Windows x64 version):
   http://www.oracle.com/technetwork/java/javase/downloads/

2. Copy the file **Infra.Connector.Ionix.SAM.DomainManager.jar** from the vFire Core application root folder to the folder on the system environment variable CLASSPATH that was set during the initial SAM connector install.

Creating a Backup

Before upgrading you should create a backup so that the upgrade can be rolled back should the need arise.

For virtual servers

Create a snapshot or backup of the virtual web server and of the virtual database server.

For physical servers

1. Stop the vFire 9 Services. This can be done by stopping the vFire 9 Administration
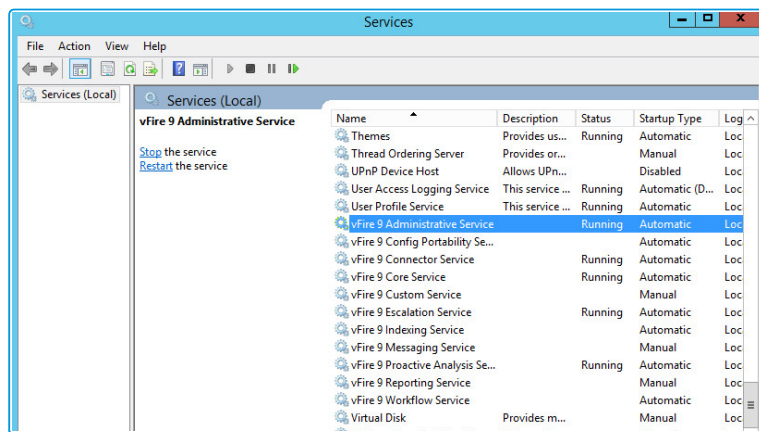
Service.

2. Stop the vFire application pools and websites.
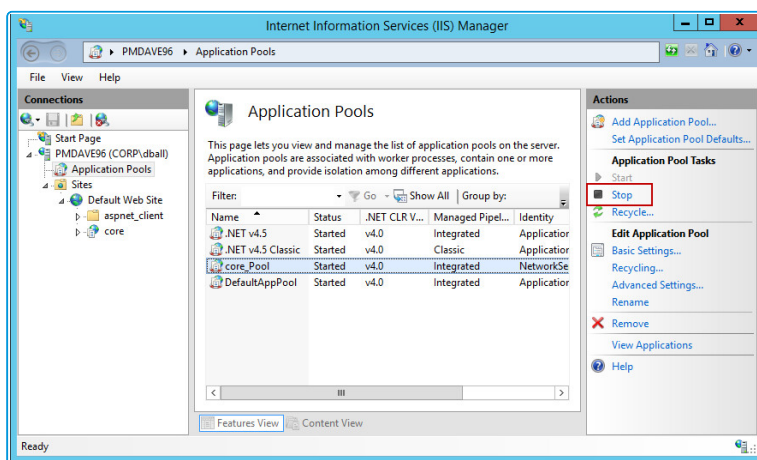
3. Create a backup of the system's database.

4. Create a backup of the vFire registry keys (e.g.: export to file HKEY_LOCAL_ MACHINE\SOFTWARE\Alemba\vFireCore)

5. Create a folder in the same location as the extracted zip file and backup the system directory (e.g.: C:\Program Files\Alemba\vFire**System1**) and the files in the **vFire** directory.

Create a new folder C:\Alemba\944Backup:
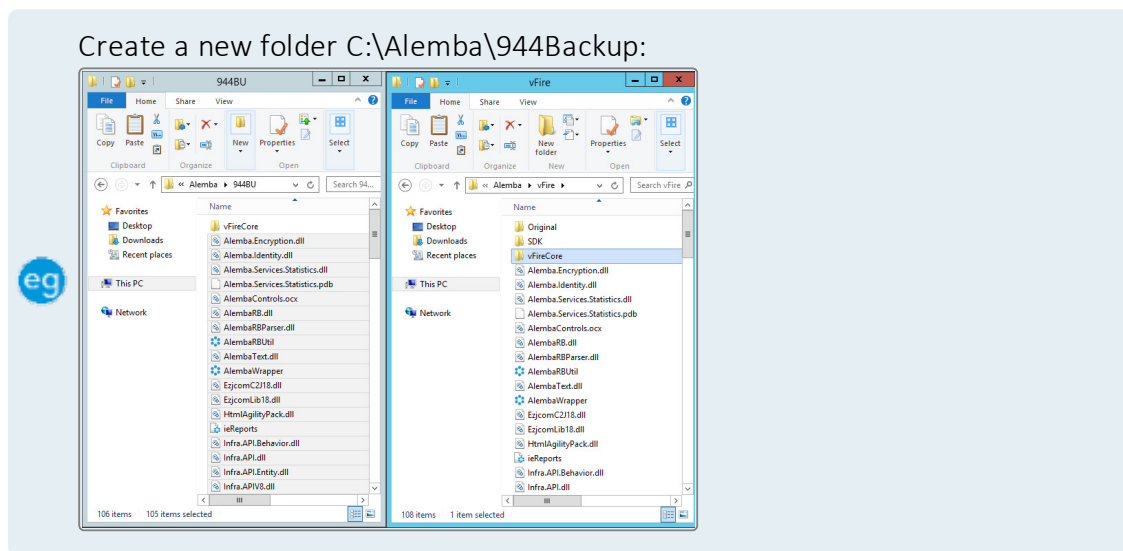
Rolling Back the Upgrade

If you need to rollback the upgrade and return your system to its previous version:

For virtual servers

Restore the web server and database server to the snapshot or backup you took prior to applying the upgrade.

For physical servers

1. Stop all vFire 9 Services. This can be done by stopping the vFire 9 Administration
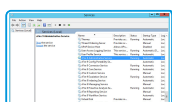
Service.
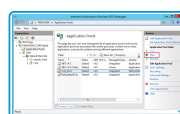
2. Stop the vFire application pools and websites.

3. Restore the system directory and files from the backup location you created prior to upgrading.

4. Restore the database from the backup.

5. Restore the registry keys from the backup.

6. Restart the vFire 9 services.

7. Restart the vFire website and application pool (IISreset)

Installing the Patch Tool

Before you can run an upgrade, you have to download the vFire Core Patch Tool and install it on your system.

✋ Before you start

You must have .NET Framework 4.5.2 to install the Patch Tool.

❗ Oracle databases are not supported for vFire 9.9 and above.

1. Log in to the Alemba website and select the downloads tab. Download **vFireCorePatchxx** (where xx is the appropriate version number).

2. Extract the contents.

3. Copy the **vFireCorePatchxx.msi** file to a temporary location, such as your desktop, and double-click on it to start the Patch Installer wizard.
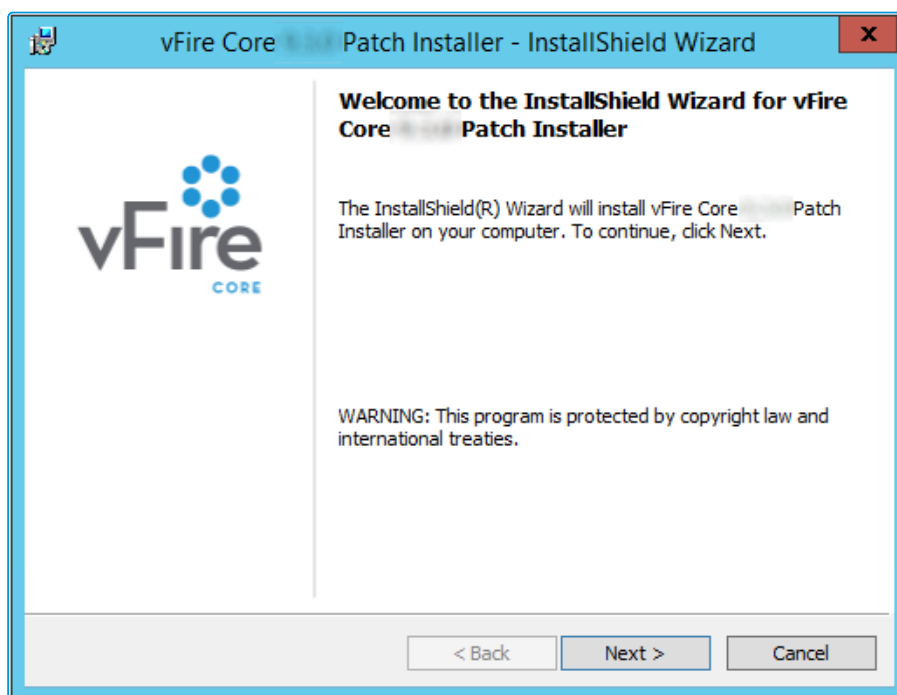
4. The **License Agreement** window is displayed. Read the details and accept the terms, before selecting **Next** to continue.
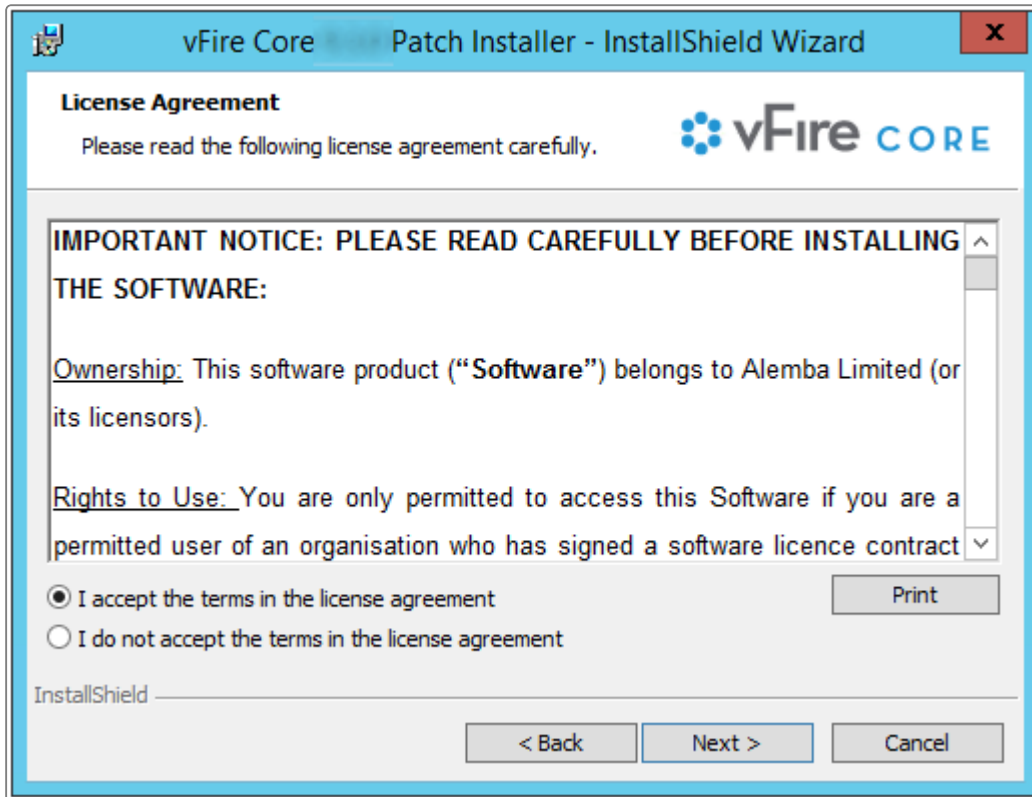
5. On the **User Information** window, enter your name and organization.

6. Select **Next** to continue.

7. On the **Setup Type** window, you can select the type of setup you want.

8. Select **Complete** to install the upgrade files in the installation directory. The directory will depend on server configuration and which version was previously installed. An example of an old installation directory would be C:\Program Files (x86)\VMware\Service Manager.

   Select **Custom** to change the directory in which you wish to install the upgrade files.

9. Select **Next** to continue.

10. In the **Ready to Install the Program** window, select **Install**.
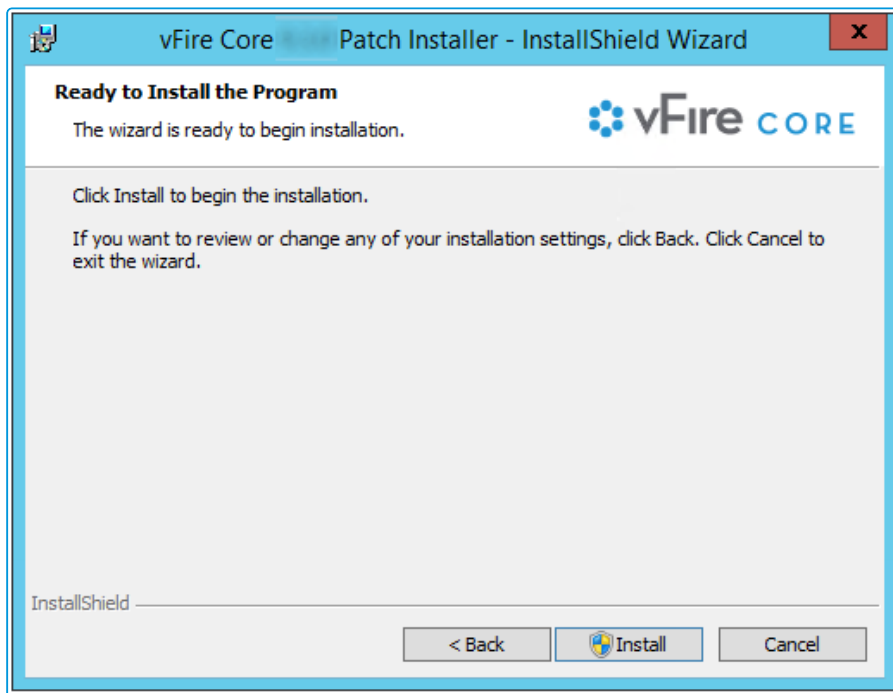
11. If you receive a confirmation box, select **Yes** to continue.

12. Select **Finish** when the installation is complete.
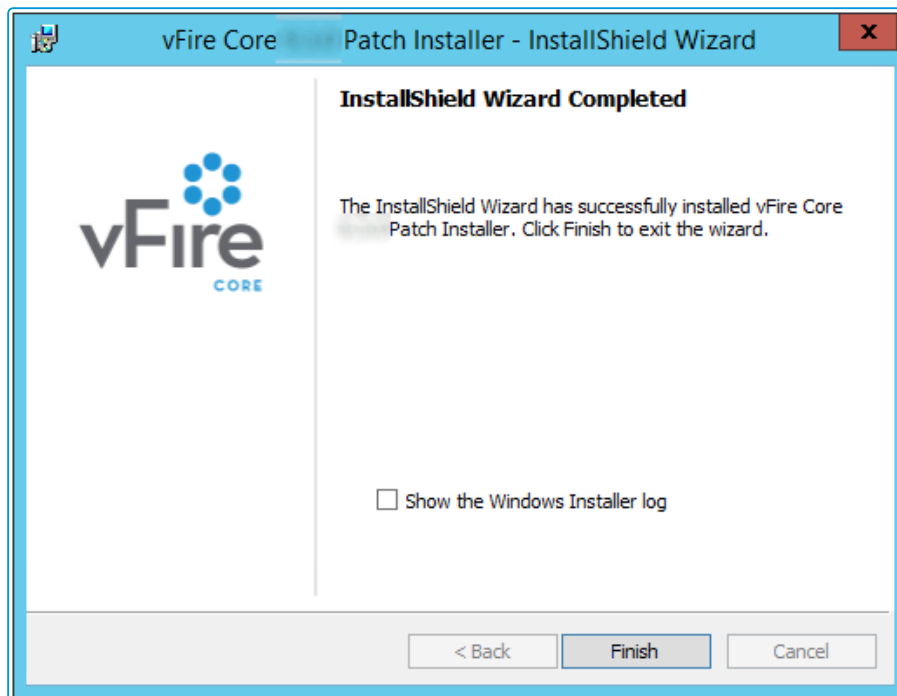
You can now perform a **screen pre-upgrade**, as explained on page 29, and the **full upgrade**, as explained on page 35.

Screens Pre-Upgrade

You can run a pre-upgrade process that performs part of the upgrade process in advance, making the actual upgrade much faster.

The upgrade process run by the Alemba vFire Patch Tool performs several tasks, covering file replacement and database updates, including on occasion screen design updates. When these apply to multiple screens, and those screens have been modified using the vFire Designer, the upgrade can take a long time. This is due to the complexity of in-place modification of a screen design that is held in a single database field, and the often large number of screens to process. The result may be an extended period of system unavailability while the upgrade is under way.

By performing those screen updates in advance, you can reduce the upgrade time significantly, minimizing down time. The upgraded versions do not override the current screen design, but are stored in a location that is not used by the live system. Analysts and Users can therefore continue to work while the pre-upgrade is performed. All that the full upgrade has to do is swap the old and new screen designs, which is a simple and speedy process.

FAQ

From what version can I use the pre-upgrade feature?

This feature was introduced in 9.2.1, and can only be used when upgrading from that version upwards. If you try to run it on a version prior to 9.2.1, you will receive an error. For any upgrades from versions prior to that, you should run the full upgrade.

How do I run the pre-upgrade?

When you run the Alemba vFire Patch Tool, you will see a checkbox labeled "Screens pre-upgrade only". If you check this, the only thing that the upgrade will do is take any modified screens and store an upgraded version of them in a place that does not affect the live system.

If you run the upgrade without this checked, the full upgrade will run, and any pre-upgraded screens will become the active versions of those screens.

? Can I run the pre-upgrade more than once?

You can run the pre-upgrade as many times as you like before running the full upgrade, which is useful if you change the design of a screen after running the pre-upgrade. In this circumstance if you do not re-run the pre-upgrade, the screen will be upgraded during the full upgrade which may increase upgrade time. To bring up the Screens Pre-Upgrade option simply double click on the downloaded patch msi file, when prompted select to Modify the install, and run through the wizard until the Patch Tool window is displayed.

? Why can't I see the pre-upgrade option?

Once you have fully upgraded the system, the pre-upgrade option will not be available, as by that point it would have nothing useful to do.

? Can I run the pre-upgrade on my live system?

Yes. That is exactly what it has been designed for. All installed files remain unchanged by this process, as do all database tables other than those in which the screen designs are stored. Anyone using the screens being upgraded will not be impacted, as the design in use is not changed by the process. An upgraded copy of that design is simply stored in an unused location in that table.

? Can I continue to run the old version of the system after a pre-upgrade has been run?

Yes. The system will continue to behave as before, as the system does not use the location in which the upgraded versions of the screens are stored.

? Can I still run the upgrade without using the new pre-upgrade option?

Yes. The upgrade will run exactly as before. You can do this if you don't mind how long the upgrade takes, or if you only have a few screens that have been modified. Otherwise, you are best advised to run the pre-upgrade first.

> ❓ **Can I make changes to my screens via the designer once I have run the pre-upgrade?**

> Yes. You may make changes to your screens via the designer once the pre-upgrade has been run. However, you should run the pre-upgrade again in order to save time during the full upgrade.

✋ Before you start

Ensure that your system meets the prerequisites outlined in the **Prerequisites Guide**.

Familiarize yourself with the information in the **Installing or Patching** section, on page 7.

1. **Install the vFire Patch Tool** (page 24). If you have already installed it, simply run through the wizard again.

2. The **Screens Pre-upgrade** window is displayed.
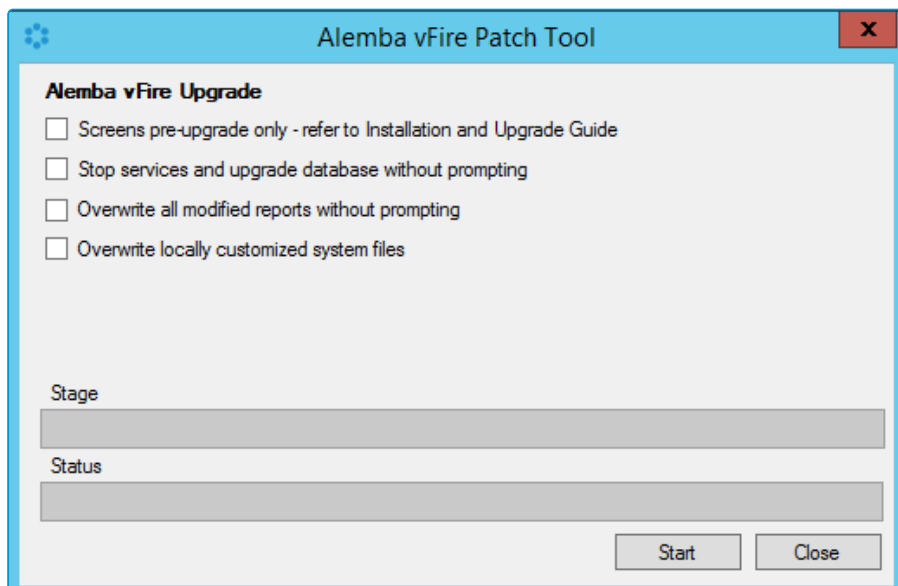
3. Select the **Screens Pre-upgrade** box to run a screen pre-upgrade.

4. The following window is displayed when the pre-upgrade is complete.
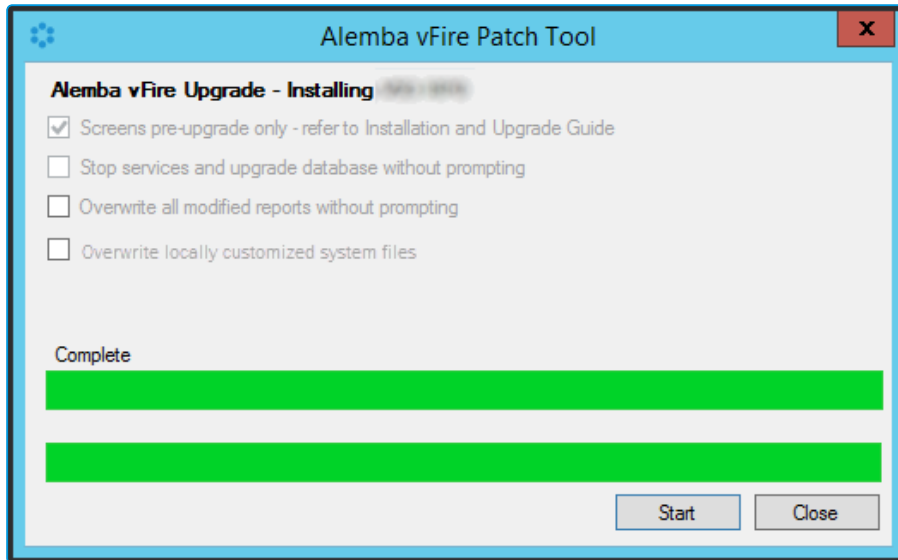
5. Now you can either upgrade the system by running the upgrade, as described on , or close the window.

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.
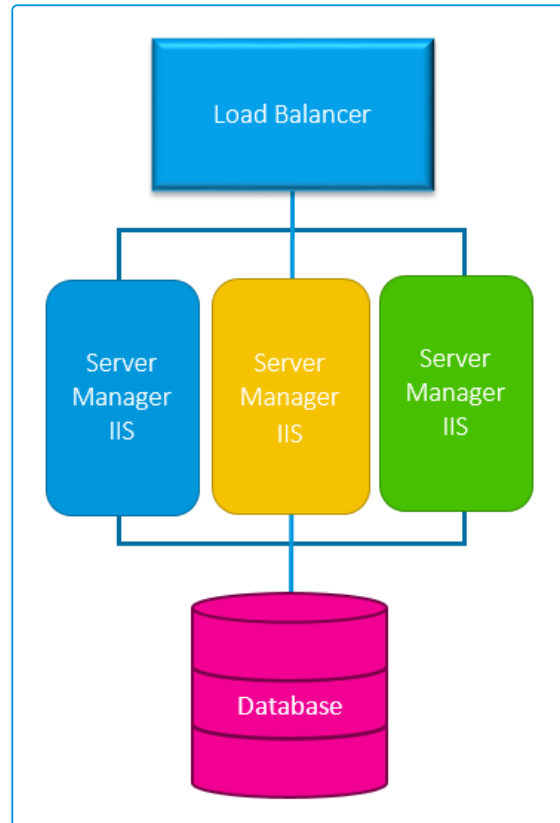
1. Install vFire Core on each web server.

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`
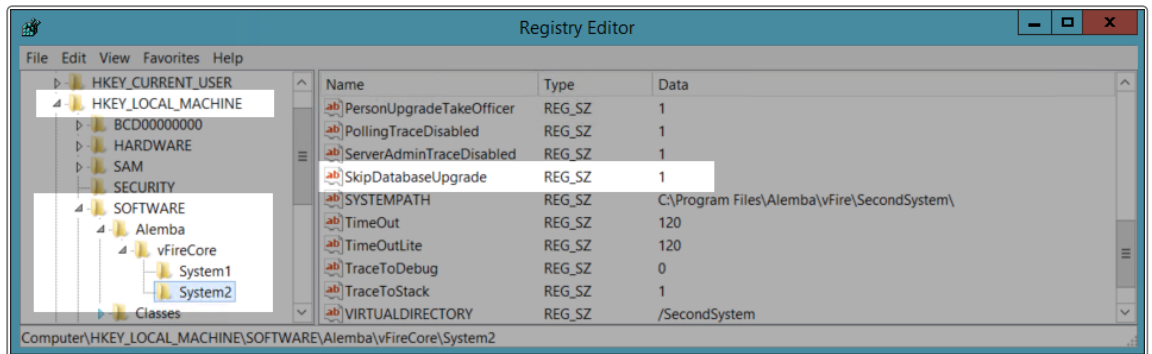
> If **upgrading** in a multi-server environment, the upgrade only needs to be run once on the shared database. On the second and subsequent servers, make sure that you select **No** if prompted to upgrade the database.

Running the vFire Patch Tool

Once you have installed the vFire Patch Tool and run the Screens Pre-upgrade, you run the vFire Patch Tool to upgrade your system.

✋ Before you start

Ensure you have created a backup or snapshot, as described on page 21. The Patch Tool **will not** backup your database, system files, or registry keys.

Close the vFire Core Server Console and any other windows on the server, before running the upgrade otherwise errors may occur.

Ensure that your system meets the prerequisites outlined in the **Prerequisites Guide**.

Familiarize yourself with the information in the **Installing or Patching** section, on page 7.

Familiarize yourself with the **Screen Pre-upgrade** feature, as described on page 29.

If you are upgrading from a version lower than 9.2.0, it will invalidate your existing license key. You must have an updated license key to run vFire Core. Contact your Account Manager for more details if necessary.

Oracle databases are not supported for vFire 9.9 and above. Attempting to patch an Oracle database system to 9.9 or above will error and fail.

1. **Install the vFire Patch tool** (page 24). If you have already installed it, simply run through the wizard again.

2. The **Alemba vFire Patch Tool** window is displayed.
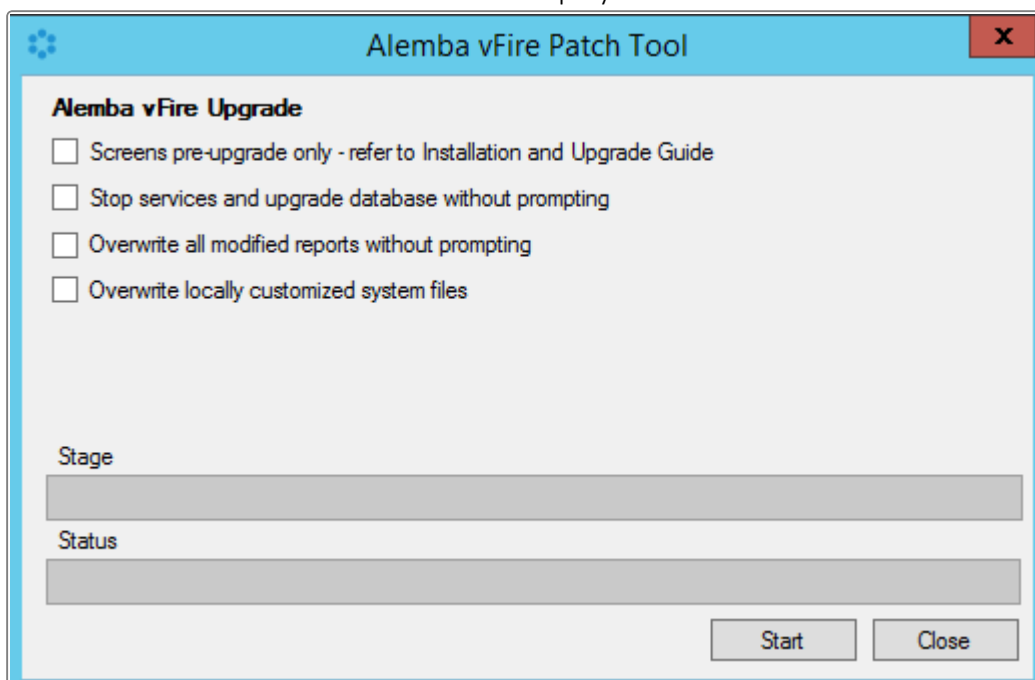
3. Complete the details.

Screens pre-upgrade only	Select this checkbox if you want to pre-upgrade your screens in preparation for an upgrade at a later time. If you have already run the screen pre-upgrade, or do not need one, make sure that this box is unchecked.

> When the **Screens pre-upgrade** checkbox is selected, your system is not upgraded. You can find out more about screens pre-upgrade on page 29.

Stop services and upgrade database without prompting	If you want to run the patch tool in silent mode, meaning you will not be prompted for input while the patch tool runs, select this and the following checkboxes. If not selected, the upgrade will pause and present a prompt requesting permission to stop the **IISAdmin** service and **vFire services**, and later on another prompt asking if you want to upgrade the database. If selected, Yes is automatically selected at both prompts.

|	
Overwrite all modified reports without prompting	If you want to run the patch tool in silent mode, meaning you will not be prompted for input while the patch tool runs, select this and the previous checkboxes. If not selected, the patch will pause and present a prompt asking if you want to overwrite modified reports. Selecting this check box will automatically select Yes at this prompt.
Overwrite locally customized system files	If you have customized files, select this option to move the customized files into a **System/Customizations** folder as part of the upgrade, and upgrade all of the files in the system to the latest version. You can then re-apply the customizations to the upgraded version of the files.
	Prior to 9.9.4, all customized files were merged unchanged as part of an upgrade process. Customers with customizations were, effectively, running systems combining files with different release versions. A large number of files were upgraded in the base system as part of the 9.9 release, which could potentially cause problems for customers running systems with files from previous releases. For this reason, it is strongly recommended that if you have customized files, you select the checkbox and re-apply customizations where necessary when the upgrade is complete.
	If the upgrade detects that a file in the System folder has been changed/customized, the file will be moved into the Customizations folder. It will not move folders, or files that do not require replacement or updating. Any htm\javascript files copied from the maintenance package will be treated as a customization if it is not also copied into the original folder. Any unknown files will be ignored. Blank custom files are unaffected.

> If you run several upgrades, selecting this option each time, customized files found in each of the upgrades will be added to the same Customizations folder. For this reason, it is a good idea to archive the contents of this folder after each upgrade/before the next, to declutter the folder.

4. Select **Start** to commence the upgrade.

5. If you have not selected **Stop services and upgrade database without prompting**, or if you have not already stopped services, you will be prompted to stop **IISAdmin** and **vFire services**. Select **Yes**.
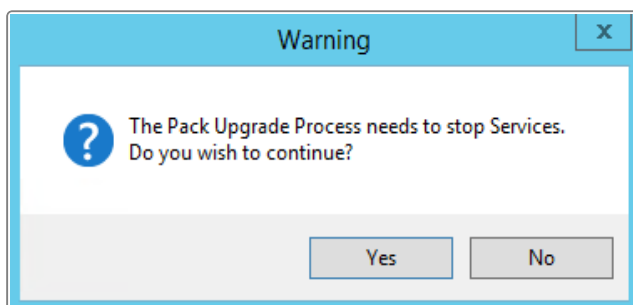
6. If you do not ensure that the console is closed before you begin (as mentioned on), you will see the following warning message, or similar.
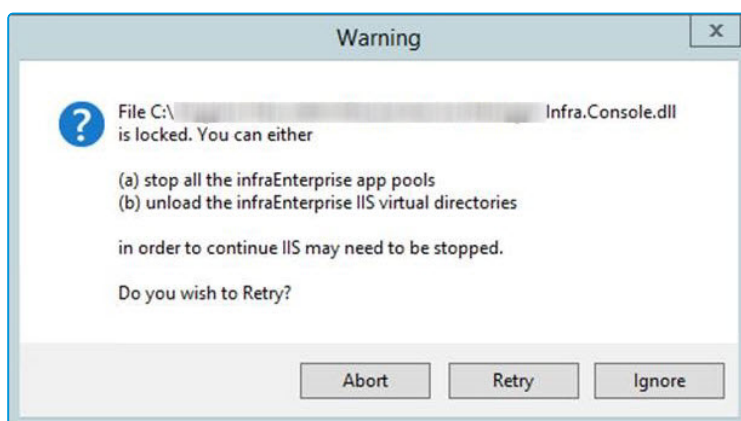
You need to make sure that the Server Console is not in use on that web server (either by the current windows login or another).

7. The patch tool will upgrade the databases. You will receive a confirmation dialog box warning you of this if you have not selected **Stop services and upgrade database without prompting**. Select **Yes** to upgrade the databases. Selecting **No** will cancel the installation process, as the database upgrade is an essential step in the upgrade installation. If you select **No**, you will need to run the process again.

8. The patch tool will update reports that ship with vFire Core. If you have not selected **Overwrite all modified reports without prompting**, or if you have modified the shipped reports, you will be asked whether to overwrite the modified report. Select **Yes** to update and restore the report to default. Selecting **No** will skip the report meaning modifications are retained but the report is not upgraded and therefore may no longer function properly after upgrade.

9. Once the upgrade has been completed, you will see the following window.
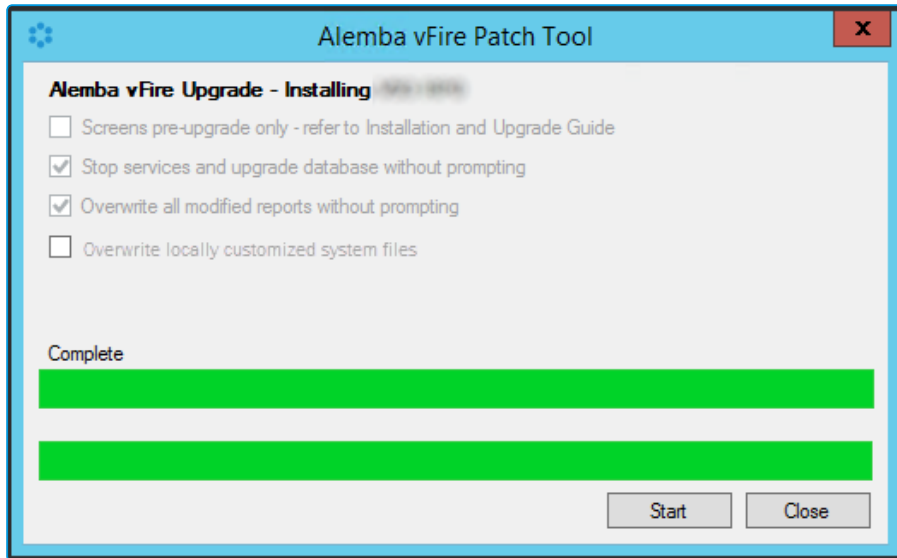
10. Select **Close** to exit the wizard.

Applying the License Key

If you are applying a patch to a system version lower than 9.2.0, you will need a new license key, which will be provided by Alemba Support or your Account Manager.

1. After the patch is complete, open the Server Console.
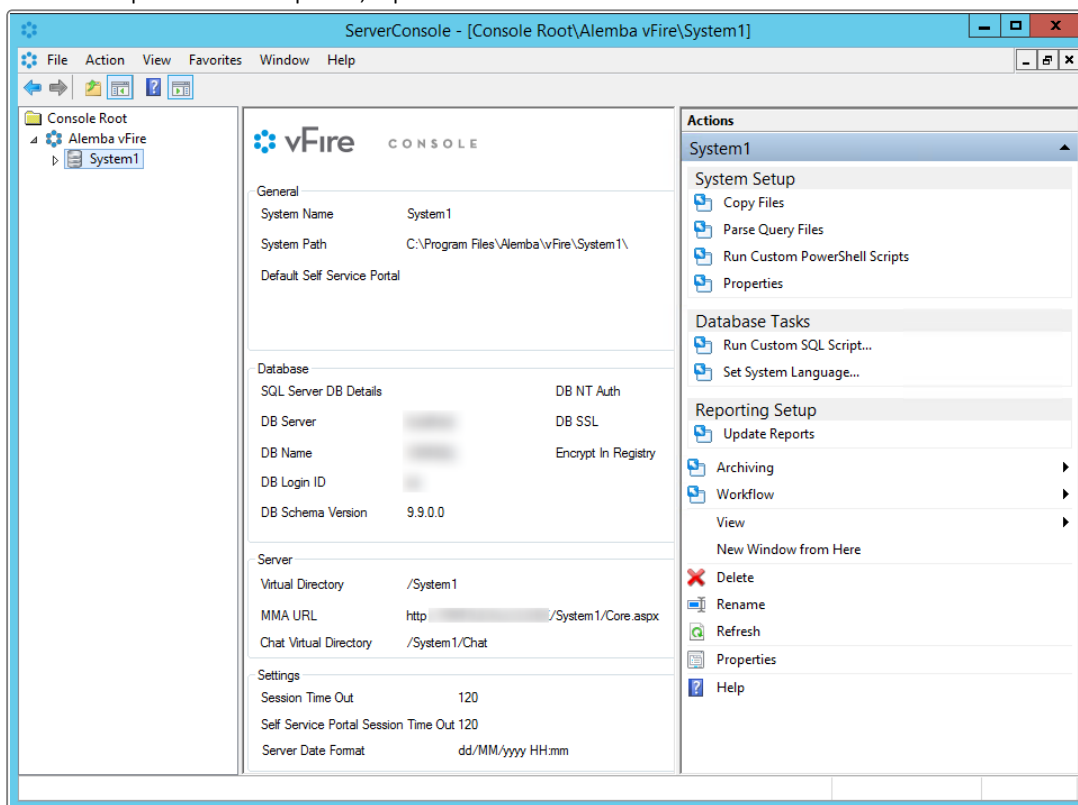
2. Select your system name and then select **Properties** from the **Actions** column on the right hand side to open the properties window.

3. Select the **Licence** tab.
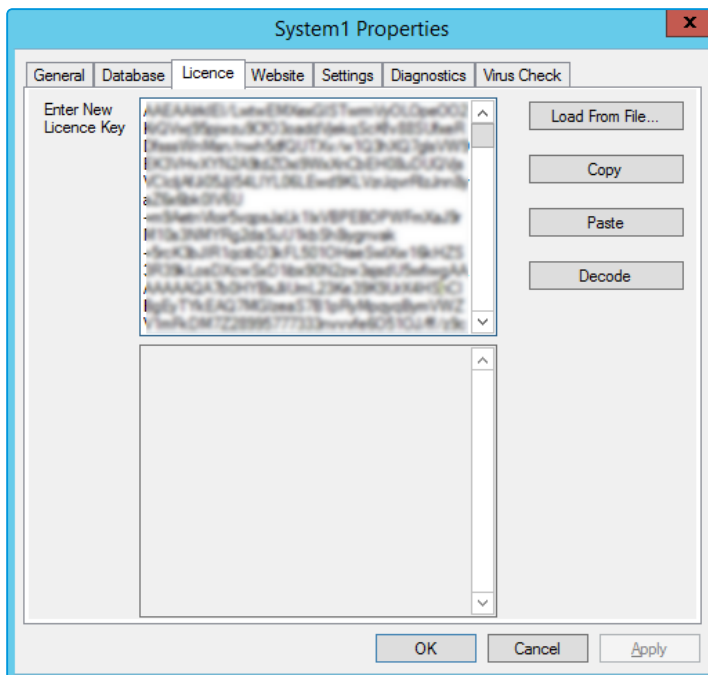
4. Paste the new license key in the box and select **Decode**. Check that the license information is correct, and then select **OK**.

Should the need arise, roll back the upgrade as described on

Upgrading Officer & Portal

You need to ensure that your version of Officer & Portal is compatible with the version of vFire Core. Any version of vFire Core 9.x will be compatible with any 9.x version of vFire Officer & Portal, regardless of the third release digit, unless otherwise stated in the release notes.

The Maintenance Package

From version 9.4, you can upgrade between minor point releases (e.g. 9.6.2 to 9.6.4) by applying a **Maintenance Package**, and in doing this you will not need to run through a full upgrade process.

✋ Before you start

Note the following before you use the maintenance package. For further advice on how to upgrade, see .

> Only use the maintenance package if you are confident of the version you are currently running, and that you are only attempting to complete a minor point upgrade.

> 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.

> You cannot use the maintenance package to upgrade to 9.7.2, due to the nature of the fixes and enhancements introduced in this release. This also means that you cannot use it to upgrade from 9.7.1 to any of the higher 9.7 release versions. You can use it from 9.7.3 onwards.

> Users should be notified that the system will be down during upgrade.

The steps involved are as follows:

1. **Create a backup** of the database and system files, or create a snapshot of the virtual servers.

2. **Download** the Maintenance Package from **www.alemba.help**.

   > ✋ You will need to register to access this download.

3. **Install the Maintenance Package**.

4. **Confirm the patch**.

If necessary, you can **roll back** the maintenance package to restore a previous version.

Creating a Backup

Before installing the maintenance package you should create a backup so that the upgrade can be rolled back should the need arise.

For virtual servers

Create a snapshot or backup of the virtual web server and of the virtual database server.

For physical servers

1. Stop the vFire 9 Services. This can be done by stopping the vFire 9 Administration
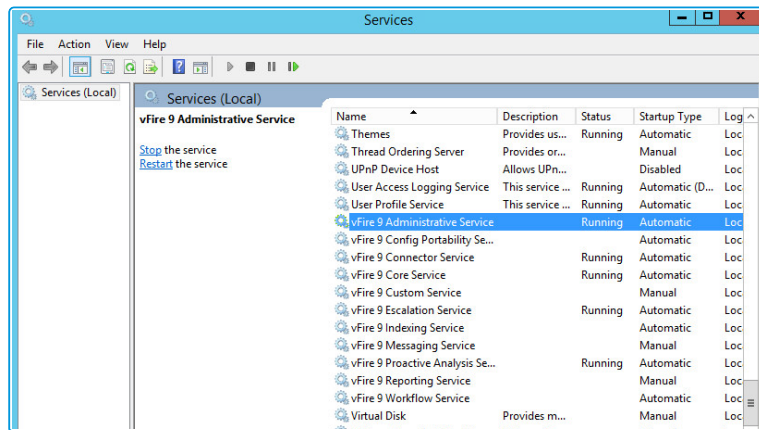
   Service.

2. Stop the vFire application pools and websites.

3. Create a backup of the system's database.

4. Create a folder in the same location as the extracted Maintenance Package and backup the system directory (e.g.: C:\Program Files\Alemba**vFire**\System1) if your system is System1`.
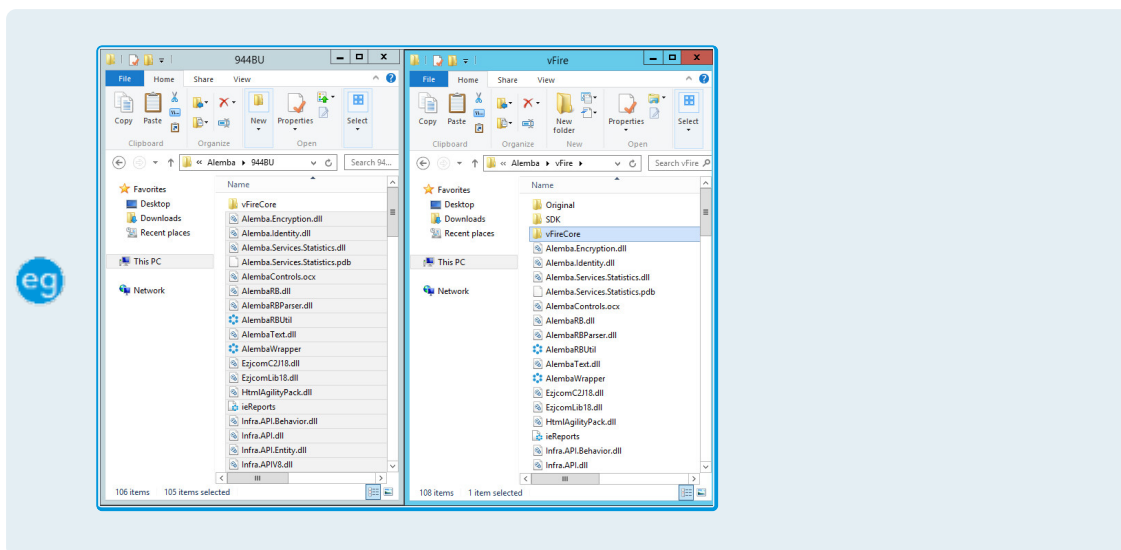
Installing the Maintenance Package

You need to download the maintenance package from **www.alemba.help**.

1. Read the **prerequisites** to ensure that the maintenance package is suitable for the upgrade that you are performing.

2. Create a new folder C:\Alemba on the Web Server.

3. Extract the Maintenance Package to the Alemba folder .
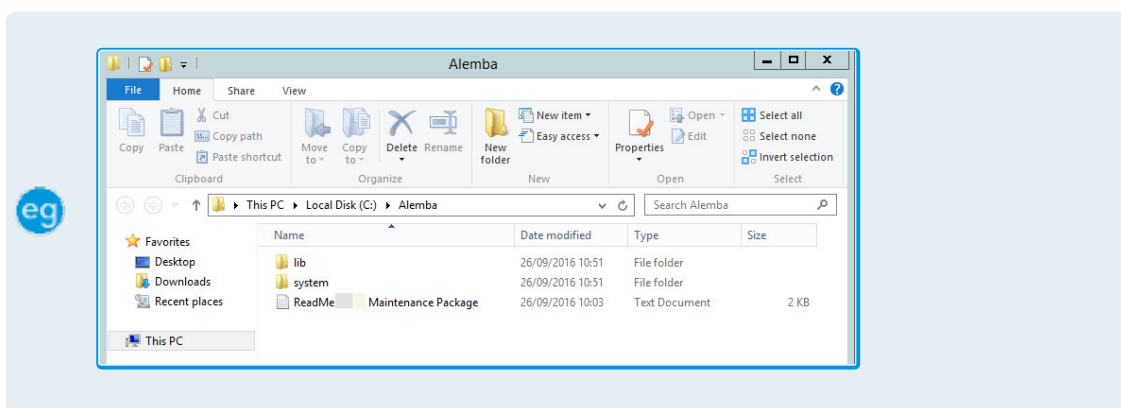
If you have multiple Web Servers the Maintenance Package will need to be uploaded and extracted to a folder on **each** Web Server.

4. **Stop the vFire 9 Services**. This can be done by stopping the vFire 9 Administrative Service.
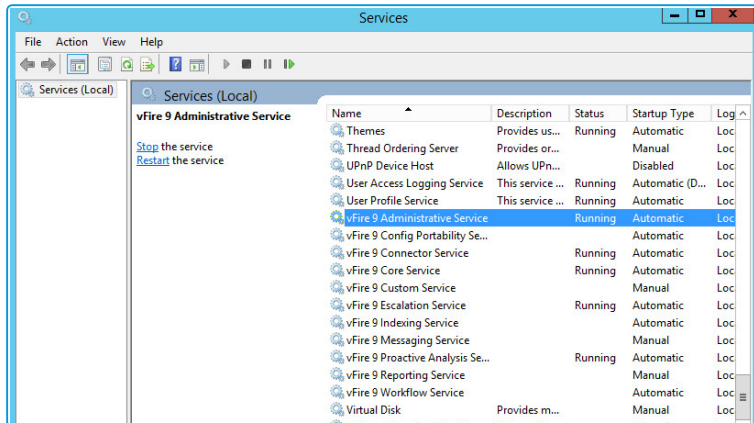
5. **Stop the vFire application pools and websites**. (If you see VSM application pools/websites, you should stop these.)
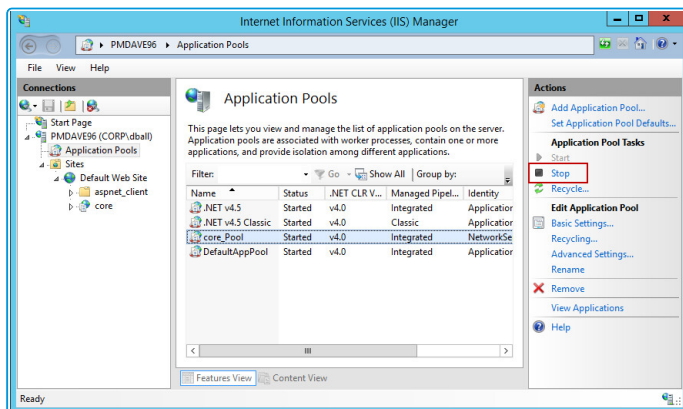
6. Copy all files from the **LIB** folder in the Maintenance Package to the **root** directory.
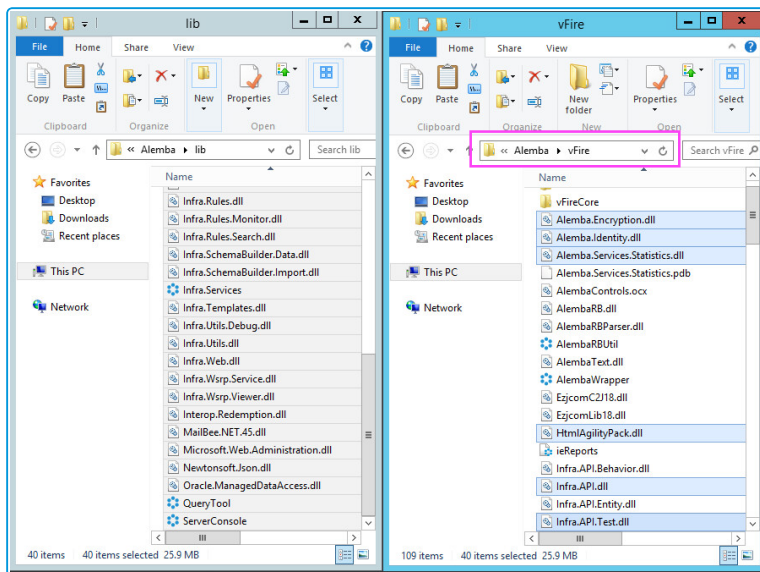
7. Copy all files from the **LIB** folder in the Maintenance Package to the vFire system's **BIN** directory (replacing any existing ones).

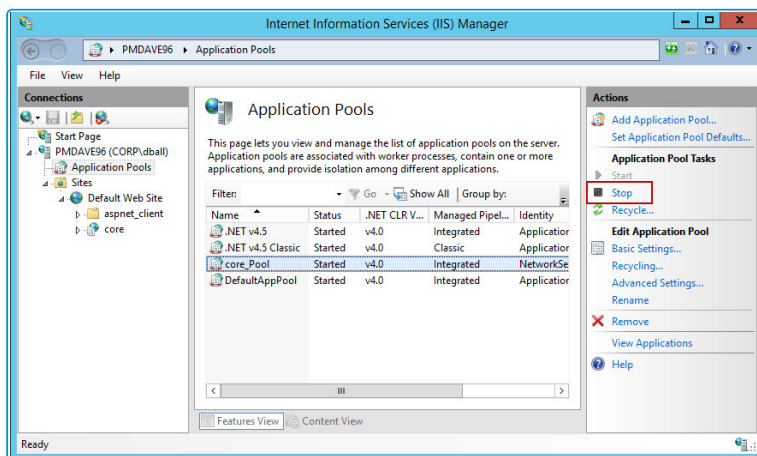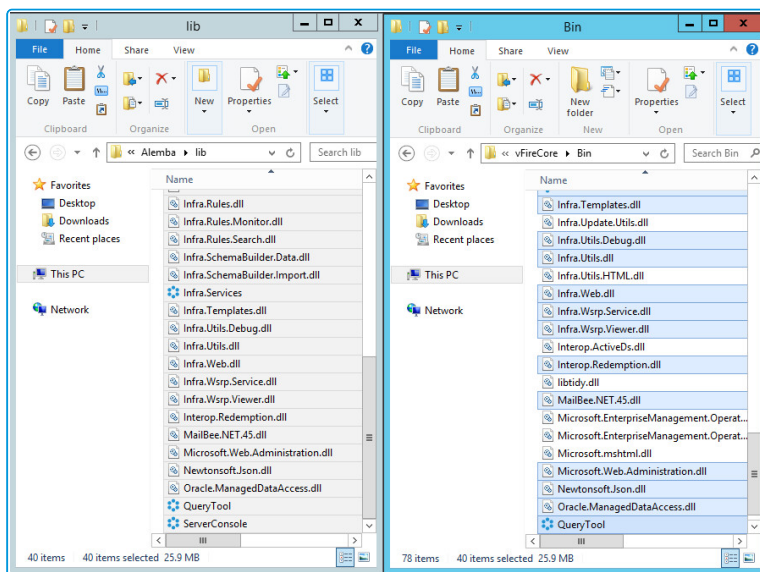8. Within the **System** folder in the Maintenance Package there may be sub folders, such as **Config**, **Search** and so on. Copy the files in the System folder, and all subfolders and their contents to your vFire system directory, maintaining the folder structure.

> This process will only update the files in your **existing** vFire Systems. If you wish to create new vFire Core systems at this patch level you will also need to copy

the System sub folders to the **Original** directory.

9. Copy all files from the **application** folder in the Maintenance Package to the **root** directory.
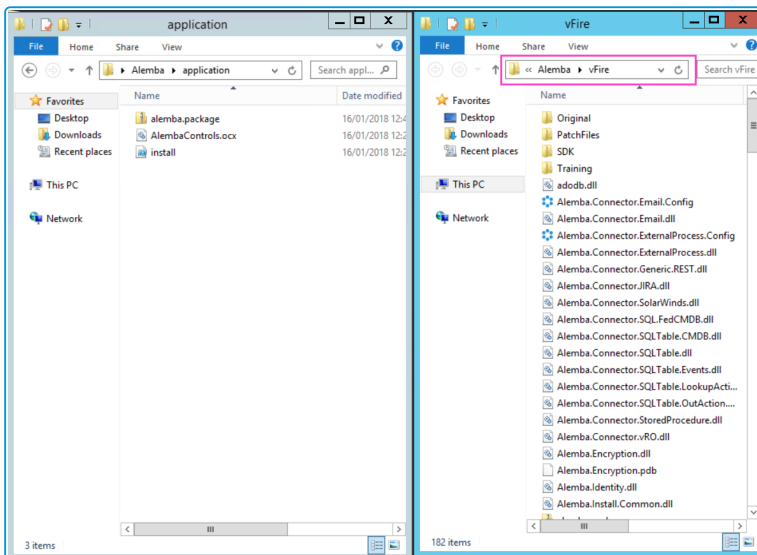
10. Open the vFire Core Server Console, select the vFire Core System.

11. Run the **Run Custom Powershell Scripts** task and select the **install.ps1** file in the **root** directory.

> If you have multiple Web Servers, you will need to run the custom powershell script on each Web Server to which you wish to you apply the Maintenance Package.

12. Still in the vFire Core Server Console, select the **vFire Core System** and then run the **Patch Database** Database Task.
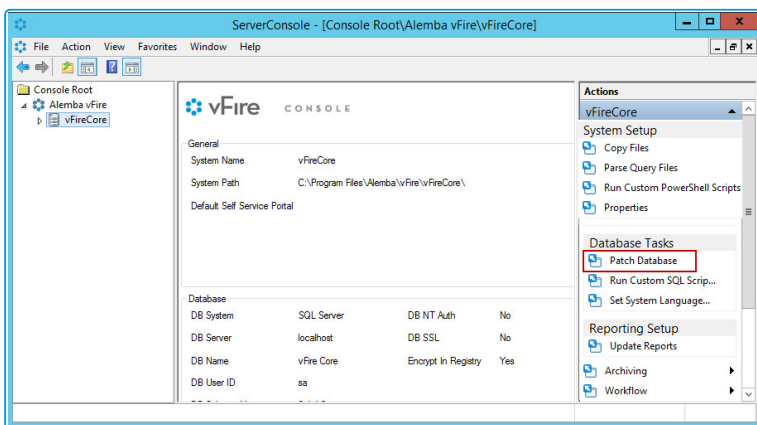
> If you have multiple Web Servers using the same database, you will only need to patch the dtabase on the first Web Server to which you apply the Maintenance Package. On each of the other Web Servers in your environment you will need perform Steps 1 to 8, and for Step 12 you need to run the **Parse Query Files** action under **System Setup** actions instead.

13. Start the vFire 9 Services.

14. Restart the vFire Website and Application Pools (IISreset).

15. Analysts should clear the Local Browser Cache (CTRL+ALT+1).

Next, you need to confirm the patch.

Confirming the Patch

This is the final step in using the Maintenance Package to upgrade between minor point releases.

1. Confirm **System Files** have the correct Version number.
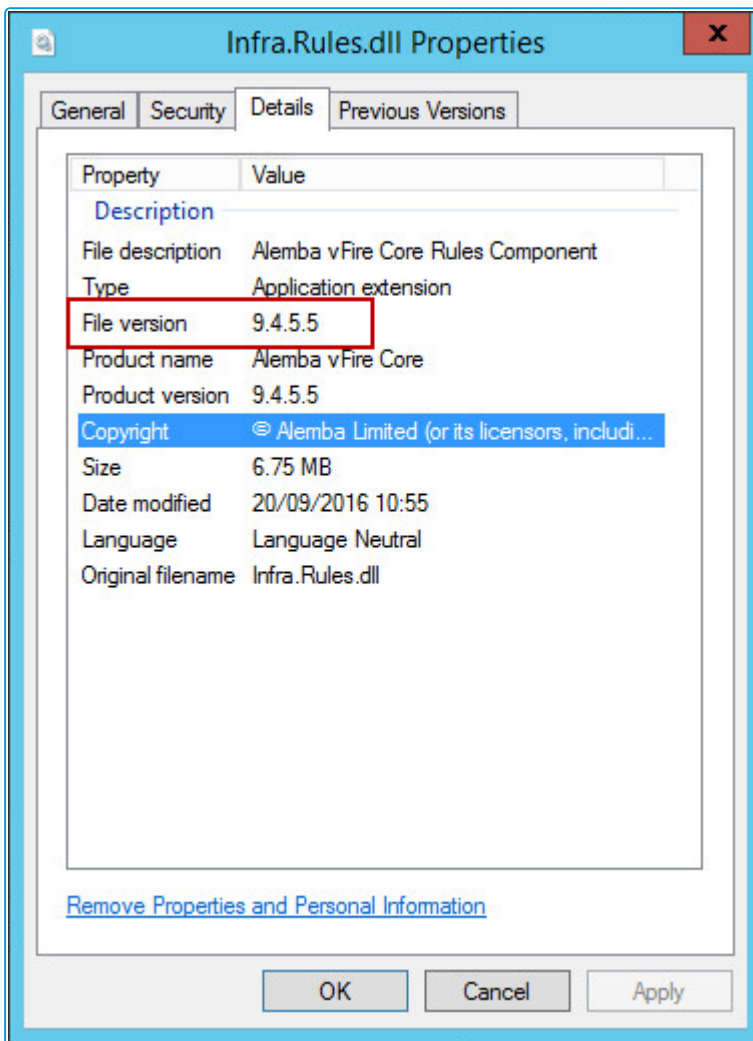
2. Confirm the **Version Number** in the **vFire Core** Database. (This may appear as, eg, 9.0805 for a 9.8.5.)
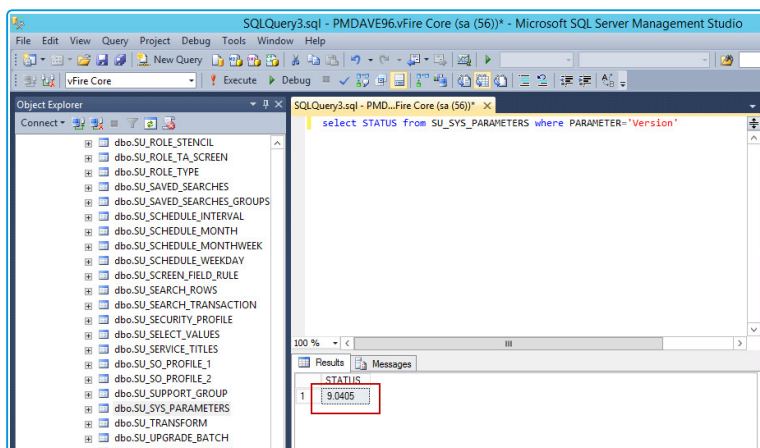
3. Confirm the **Server Console** is showing the correct **Schema Version** (may require you to restart the console).
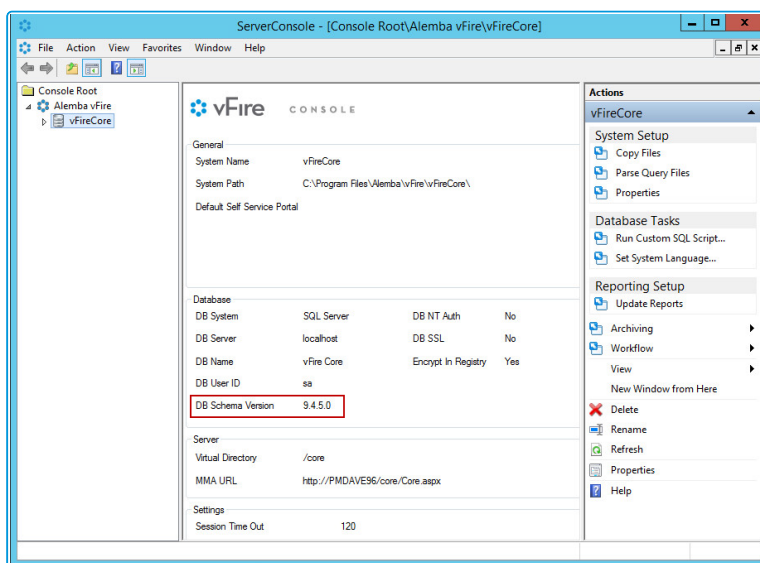
> **Wrapper Errors** - The maintenance package will always replace the wrapper/controls with the latest version. If your end users cannot download the wrapper and controls to their local system(s), you should deploy them by using the MSIs in the vFireCoreControlsXXX.zip or vFireCoreControlsXXXx64.zip for the 64-bit version.

Rolling Back the Maintenance Package

You can roll back the maintenance package and return your system to its previous minor version.

For virtual servers

Restore the web server and database server to the snapshot or backup you took prior to applying the maintenance package.

For physical servers

1. Stop all vFire 9 Services. This can be done by stopping the vFire 9 Administration Service.
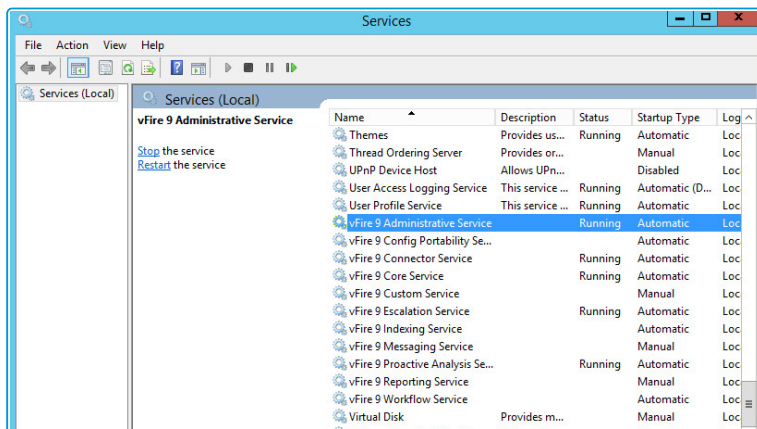
2. Stop the vFire application pools and websites.
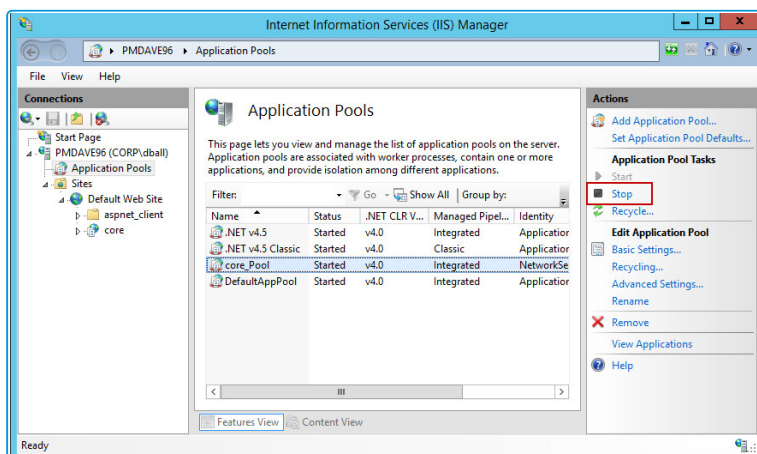
3. Restore the system directory and files from the backup location you created prior to upgrading.

4. Restore the database from the backup you made prior to applying the maintenance package.

5. Restart the vFire 9 services.

6. Restart the vFire website and application pool (IISreset).

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:

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:
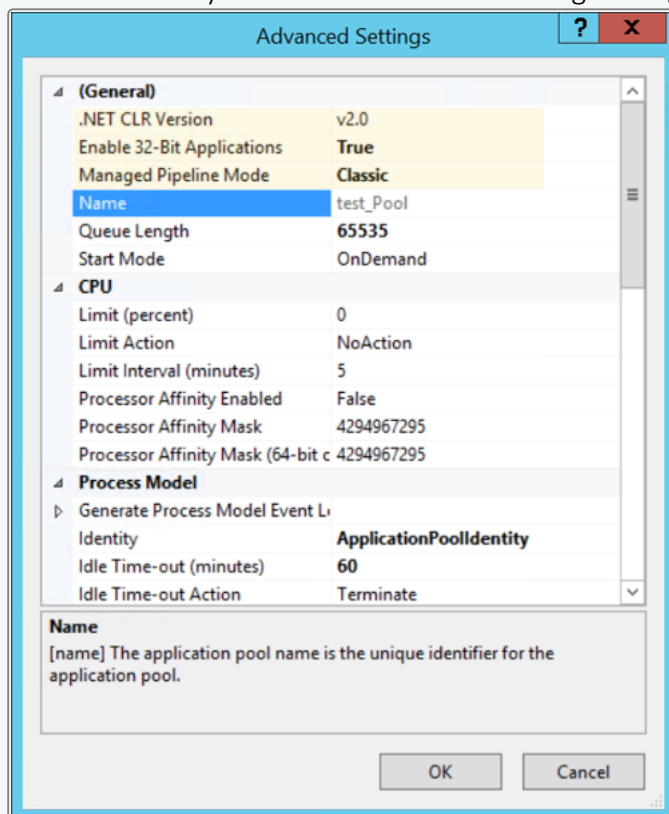
? I cannot see other Members of Chat.

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.
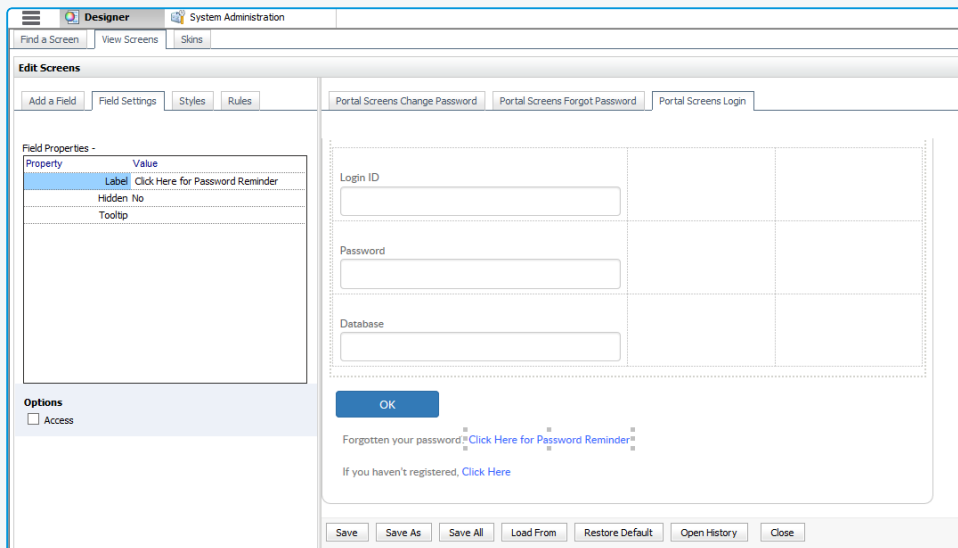
If you choose to hide the link, ensure that you reword the preceding text "Forgotten your password" so that it still makes sense to the user.

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.
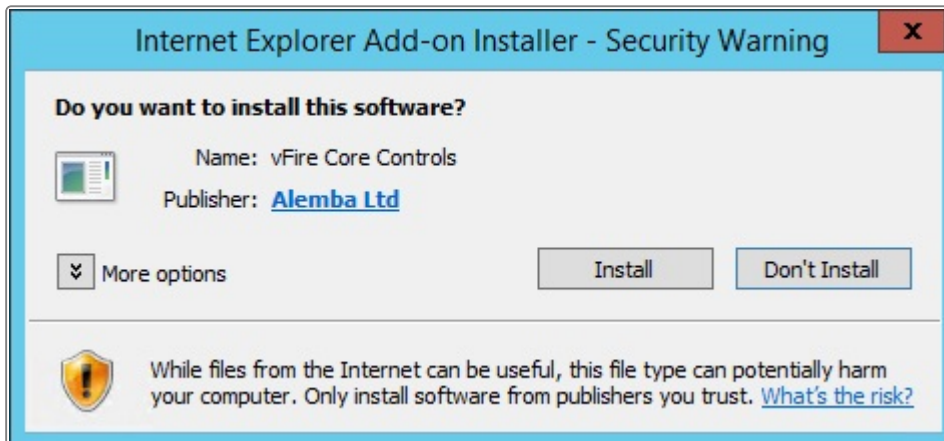
3. When installation is complete, you may be prompted to restart your computer. This is not necessary. If prompted to restart your computer, select No.

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 (within Requirement):

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.
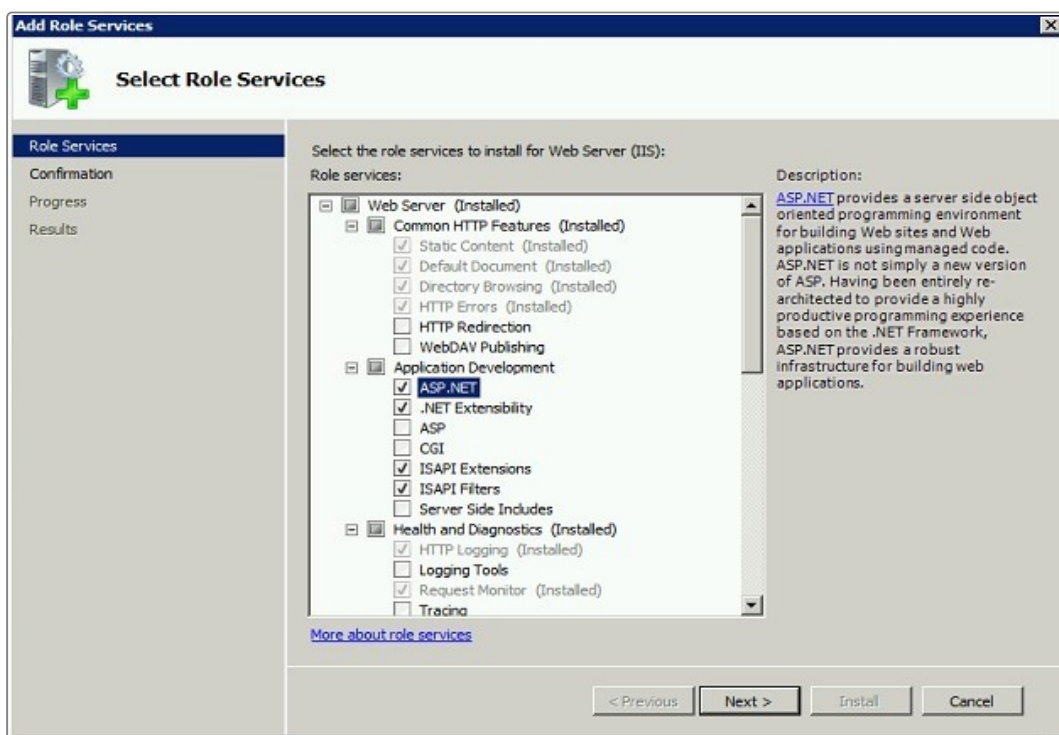
3. Select **Web Server > Application Development > ASP.NET**.

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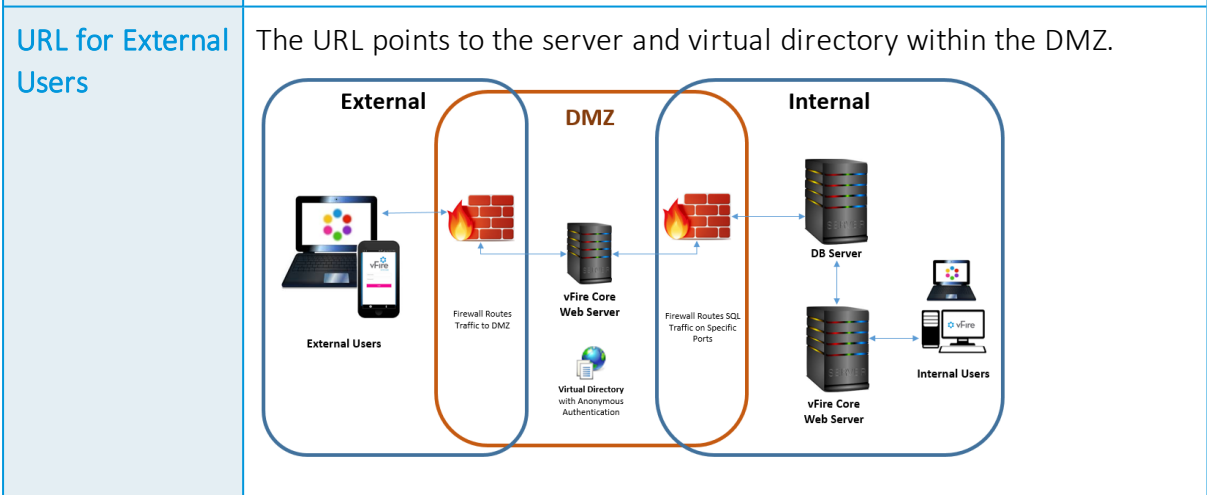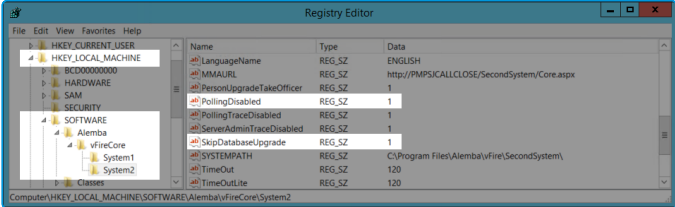
Option 2: Setup a Reverse Proxy Server in the DMZ. Authentication Disabled

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.
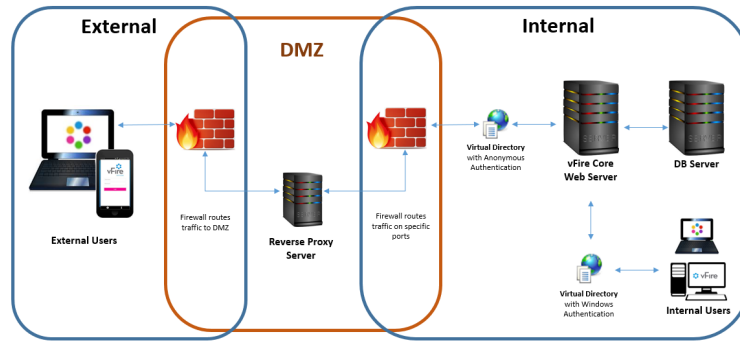
Appendix D: Upgrading from vFire 9.2 or Below

This topic describes three methods for upgrading vFire systems on 9.2 or lower.

Newer vFire **Setup** and **Patch** packages cannot be applied to web servers configured for 9.2 or below due to incompatible server requirements. Therefore vFire must be installed on a new web server that meets the updated server requirements as detailed in **Web Server Requirements in the online help**.

> It is assumed the database is on a separate server to the web server used by vFire, and that the database server is not being migrated as part of this activity.

Select a method

Select the method that best suits the business needs of the organization, taking into consideration how many web servers or VMs are available, and whether or not you want legacy folder structures, files, and registry keys on the new server.

Method	As described on	Complexity Level	Legacy Items	Multiple Servers Available
Method 1	page 83	Easy	Yes	No
Method 2	page 85	Easy	No	Yes
Method 3	page 86	Very complex	No	No

Method 1

Use this method if:

- There are only two servers available: the old server, and the new server the system is being migrated to.
- You do not mind legacy registry keys, folder structures, and files on the new server.

> Legacy items are harmless but redundant, and consume space unnecessarily.

✋ Before you begin

Ensure the new server meetings the Prerequisites.

Download the vFire Core Setup package that matches the version of the system on the old server.

Download the vFire Core Patch package for the version you wish to upgrade to.

On the new web server the system is migrating to

1. Install vFire by running the Setup package that matches the version of the system on the old server.

2. After vFire installation is complete, create a new vFire system using the System Setup Wizard in the vFire Server Console.

   - At the **Database** step, enter the existing database details.

   - If prompted to upgrade the database, select **NO**.

   - Complete the steps in the System Setup Wizard.

   Log into the new system and ensure it works before continuing

3. Install the Patch package of the version you wish to upgrade to.

4. Press **Run** on the Patch Tool, which launches automatically when InstallShield Wizard completes.

   - If prompted to upgrade the database, select **YES**.

5. When the Patch Tool completes, the system is ready to be used.

6. Once system links have been redirected to the new server, the old server can be decommissioned. If this is not immediately possible, ensure the vFire Services are **Stopped** and set to **Manual** on the old server to prevent conflicts.

Method 2

Use this method if:

- There are three servers available: the old server, a temporary server, and the new server the system is being migrated to.

- You prefer not to have legacy registry keys, folder structures, and files on the new server.

✋ Before you begin

Ensure the temporary server, and new permanent server, both meeting the Prerequisites.

Download the vFire Core Setup package that matches the version of the system on the old server.

Download the vFire Core Patch package for the version you wish to upgrade to.

On the temporary web server

1. Install vFire by running the Setup package that matches the version of the system on the old server.

2. After vFire installation is complete, create a new vFire system using the System Setup Wizard in the vFire Server Console.
   - At the **Database** step, enter the existing database details.
   - If prompted to upgrade the database, select **NO**.
   - Complete the steps in the System Setup Wizard.

   💡 Log into the new system and ensure it works before continuing.

3. Install the Patch package of the version you wish to upgrade to.

4. Press **Run** on the Patch Tool, which launches automatically when InstallShield Wizard completes.
   - If prompted to upgrade the database, select **YES**.

On the new web server the system is migrating to

5. Install vFire by running the Setup package for the version you wish to upgrade to.

6. After vFire installation is complete, create a new vFire system using the System Setup Wizard in the vFire Server Console.

- At the **Database** step, enter the existing database details.

- If prompted to upgrade the database, select **NO**.

- Complete the steps in the System Setup Wizard.

7. When the Patch Tool completes, the system is ready to be used.

Decommission the unneeded web servers

Uninstall vFire from the temporary web server once vFire is ready for use on the new server. Or, decommission the server. If this is not immediately possible, ensure the vFire Services are **Stopped** and set to **Manual.**

Once system links have been redirected to the new server, the old server can be decommissioned. If this is not immediately possible, ensure the vFire Services are **Stopped** and set to **Manual** on the old server to prevent conflicts.

Method 3

This method should not be used without assistance from Alemba Professional Services.

Use this method if:

- There are only two servers available: the old server, and the new server the system is being migrated to.

- You prefer not to have legacy registry keys, folder structures, and files on the new server.

Before you begin

Ensure the new server meetings the Prerequisites.

Download the vFire Core Setup package that is one version lower than the version you wish to upgrade to.

Download the vFire Core Patch package for the version you wish to upgrade to.

Create a blank database on the database server.

On the new web server the system is migrating to

1. Install vFire by running the Setup package of the version lower than the you wish to upgrade to.

   > **eg** If you want to upgrade to 9.7, install 9.6 at this step.

2. After vFire installation is complete, create a new vFire system using the System Setup Wizard in the vFire Server Console.
   - At the **Database** step, enter details of a new blank database (which should have been already created on the database server).
   - If prompted to upgrade the database, select **NO.**
   - Complete the steps in the System Setup Wizard.

3. Update the database details for the newly created system:
   - In the Server Console, select the newly created system and select **Properties.**
   - Select the **Database** tab and enter details for the database used by the system you are planning to upgrade.
   - Save the system properties and exit the Server Console.

4. Navigate to the directory where vFire is installed and update files as follows:
   - Overwrite the files in the **Original** directory with the files from vFire on the old web server.

     > **eg** Copy files from the Original directory on the old server: `C:\Program Files (x86)\VMware\Service Manager\Original`
     > Past files into the Original directory on the new server: `C:\Program Files\Alemba\vFire\Original`

   - Overwrite the files in the **system** directory with the files from vFire on the old web server.

     > **eg** Copy files from the system directory on the old server: `C:\Program Files (x86)\VMware\Service Manager\System1`
     > Past files into the system directory on the new server: `C:\Program Files\Alemba\vFire\System1`

5. Update the vFire registry keys:
   - Navigate to `HKEY_LOCAL_MACHINE\SOFTWARE\Alemba\vFireCore`
   - Find string **Version** and change the value to the version of your existing system.

     > **eg** Change `9.7.1` to `9.1.9` (where 9.7.1 is the vFire version installed on the new server, and 9.1.9 is the version of vFire on the old server).

6. Install the Patch package of the version you wish to upgrade to.

7. Press **Run** on the Patch Tool, which launches automatically when InstallShield Wizard completes.
    - If prompted to upgrade the database, select **YES**.

8. Navigate to the directory where vFire is installed copy files from the **Original** directory to the **system** directory.

> Only perform this step if standard system files were customized. This reverts all files to default.

> Copy files from the Original directory on the new server: `C:\Program Files\Alemba\vFire\Original`
> Paste files into the system directory on the new server: `C:\Program Files\Alemba\vFire\System`

9. The new system is ready to be used.

10. Once system links have been redirected to the new server, the old server can be decommissioned. If this is not immediately possible, ensure the vFire Services are **Stopped** and set to **Manual** on the old server to prevent conflicts.

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.