





VFC Installation Guide v5.1

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Overview

Welcome to the VFC Installation Guide. This document describes the technical requirements of VFC and how to install the software. Please see the separate VFC User Guide for operating instructions and the FAQ for answers to common questions and troubleshooting suggestions.

VFC5 Technical Requirements

VFC has the following technical requirements:

- PC running Microsoft Windows 7 SP1 or later *
- 1024x768 display or better
- Minimum 100MB free space (more will be required for virtual machines)
- VMware Workstation/Player v12 or later
- Hardware meeting VMware minimum requirements:
- 64-bit x86 Intel or AMD Processor from 2011 or later
- 1.3GHz or faster core speed
- 2GB RAM minimum/4GB RAM recommended
- Admin permissions to install VFC and mount/unmount images
- VFC Mount software (provided) or appropriate third-party mount tool
- USB port (for dongle)

* It may also possible to run VFC on other UEFI based operating systems with an appropriate Microsoft Windows virtualisation/compatibility tool. We understand that this may work well but are unable to formally support this at this time

VFC Components

VFC is distributed as a ZIP file. This contains VFC documentation in PDF format and software installers for both 32-bit and 64-bit VFC. We recommend using the 64-bit version wherever possible. The latest version of VFC can always be downloaded at: <u>vfc.uk.com/downloads</u>

The software distribution includes the following components:

- VFC application
- VFC License Manager *
- VFC Mount Tool *
- VMWare v5.1.4 VDDK component
- PWB5 password bypass definition file
- Dongle driver installer (green dongle only)
- PDF documentation

* These tools are installed automatically alongside VFC. They may be accessed via the Start Menu or found in the application folder





VFC Dongle

VFC requires a USB software dongle to function. Please note that an active dongle is also required to access most VFC downloads and software updates. The current VFC dongle is either white or blue and does not require any drivers to function. To install the dongle, simply connect it to a USB port and allow Windows to detect the new hardware.

The older VFC dongle is green. If you have a green dongle, please see the PDF file supplied with VFC for dongle installation instructions.

Please ensure your dongle is installed correctly before attempting to use VFC.



TIP: To download the latest VFC release, you must have either a valid VFC dongle or an offline download link from our support team.





Downloading latest VFC using License Manager

If VFC is not already installed, you can access downloaded it using VFC License Manager. This tool is installed alongside VFC and is also available as a public download from the website. To use VFC License Manager proceed as follows:

- 1. Open the VFC download page in your browser: <u>https://vfc.uk.com/downloads</u>
- 2. Scroll to the bottom
- 3. Select VFC License Manager and download it

Available Downloads

Please select from the following downloads. If you cannot find the download you require, please follow the instructions above:

Download	Description
VFC Quick Start Guide	VFC Quick Start Guide
VFC User Guide	VFC User Guide
VFC License Manager	VFC License Manager for use with VFC v3, v4 and v5 $$

- 4. Ensure your dongle is connected
- 5. Start VFC License Manager
- 6. Click Query Dongle and allow your dongle to be detected (if this fails, see FAQ)

Dongle Information		
Dongle SN:	00000	Query Dongle
Current License		
Expiry Date:	01/05/2020	
Days Remaining:	53 days	
Product/SKU:	VFC5 Full	Download VFC

- 7. Click Download VFC
- 8. Scroll to the bottom of the page and click the desired software download

TIP: If the Product/SKU field displays "[Legacy]", please update your license first. Please see the below for instructions.





Downloading latest VFC from within VFC

VFC can also be used to directly download the latest VFC release and updates. If VFC is already installed, please following the instructions below to access the VFC downloads:

- 1. Ensure your dongle is connected
- 2. Start VFC
- 3. Click the **About** Tab
- 4. Click Download VFC



5. Scroll to the bottom of the page and select the desired download

Available Downloads

Please select from the following downloads. If you cannot find the download you require, please follow the instructions above:

Download	Description
VFC Quick Start Guide	VFC Quick Start Guide
VFC User Guide	VFC User Guide
VFC License Manager	VFC License Manager for use with VFC v3, v4 and v5
VFC v5	Current commercial release. Update GPR feature to support Windows 'online' accounts
VFC PWB5 definition file	Latest PWB5.BIN definition for VFC v4.50.x and v5.x

Offline access to VFC downloads

In some cases, it may not be possible to download VFC from the computer that has the VFC dongle connected. In this case, please contact VFC Technical support for a time-limited offline download link.





VFC Installation

Please follow the instructions below to install VFC:

- 1. Confirm your VFC dongle is connected
- 2. Extract the VFC ZIP file:



3. Open either the x86 (32-bit) or the x64 (64-bit folder).

TIP: Both 32-bit and 64-bit versions of VFC have identical features. The 32-bit version is provided for environments that do not yet support 64-bit software. We recommend using the 64-bit version of VFC wherever possible.

4. Locate the VFC5 Setup v5.x.x.xxx.msi file and double click on it:



5. When prompted, click Next:







- 6. Read the applicable VFC License Agreement (several versions are provided depending on your customer type and location), click **I Agree** and then **Next** again.
- 7. Select an installation folder. The defaults are:

32-bit VFC on 32-bit system: C:\Program Files\MD5 Ltd\VFC5 32-bit VFC on 64-bit system: C:\Program Files (x86)\MD5 Ltd\VFC5 64-bit VFC on 64-bit system: C:\Program Files \MD5 Ltd\VFC5

- 8. Click **Next** again
- 9. Follow the on-screen prompts to complete the installation

Installation of VMware VDDK

VFC is designed to be used with the VMware Workstation/Player virtualisation products. It requires a component called the VMWare VDDK to function. VFC is currently supplied with v5.1.4 of the VDDK. This is located in the VFC ZIP file. To install the VDDK, please proceed as follows:

- 1. Navigate to the folder containing the VFC installation components
- 2. Locate the VMWare-vix-disklib-xxxxx file and double click on it:



3. Follow the on-screen prompts to install the software with default settings

Installing VMware

Please see the VMware documentation for instructions on how to install VMware Workstation/Player. For maximum compatibility with VFC, we recommend installing VMware using the default settings.





Running VMware as Administrator

VFC requires forensic image files to be "mounted" as an emulated physical disk. This scenario requires that VMware operate with elevated (or "administrator" privileges). This allows VMware to access the emulated physical disk used by VFC.

To run VMware with administrator privileges, please proceed as follows:

- 1. Locate the VMware application shortcut
- 2. Right click on it and select **Properties**
- 3. On Windows 10, click Advanced, select Run as administrator and then OK

🏂 VMware Playe	er Properties	×		
Security	Details	Previous Versions		
General	Shortcut	Compatibility		
VM	ware Player			
Target type:	Application			
Target location:	VMware Player			
Target:	iles (x86)\VMware\VMw	vare Player\vmplayer.exe''		
Start in:	"C:\Program Files (x86)\	.VMware \VMware Player''	Advanced Properties	×
Shortcut key: Run:	None Normal window	~	Choose the advanced properties you want for this shortcut.	
Comment:			Run as administrator	
Open File Loo	cation Change Ico	n Advanced	This option allows you to run this shortcut as an administrator, while protecting your computer from unauthorised activity.	
			Run in separate memory space	
	ОК	Cancel Apply	OK Cance	1





4. On older systems, click Compatibility, select Run as administrator and then OK

Security	Details	Previous Versions
General	Shortcut	Compatibility
his program isn't running the com	working correctly on the patibility troubleshoote	nis version of Windows, r.
Run compatibilit	y troubleshooter	
w do I choose c	ompatibility settings ma	anually?
Compatibility mod	e	1997 () () () () () () () () () (
Run this prog	ram in compatibility mo	de for:
Windows 8		~
THING TO U		
Settings		
Reduced cold	ourmode	
8-bit (256) colou	r v	
Run in 640 x	480 screen resolution	
Disable full-sc	reen optimisations	
Run this prog	ram as an administrator	r -
Change hig	gh DPI settings	
Change sett	ings for all users	





Starting VFC for the first time

On start-up, VFC checks that a current license (dongle) is present and that the environment is compatible with VFC. Depending on your system configuration, several prompts may be displayed:

1. 64-bit systems may display a prompt to install the 64-bit version of the VMWare VDDK component:

64-bit VMware VDDK Required	\times
VFC requires the 64-bit version of 'vixDiskLib.dll' from the VMware VDDK installation.	
Would you like VFC to extract this file from 'C:\Program Files (x86)\VMware\VMware Virtual Disk Development Kit\bin\vddk64.zip'	
Yes No	

In this case, please click **Yes** to permit VFC to automatically extract and install the required component from the existing VMware VDDK installation.

2. On start-up, VFC will prompt you with the following warning dialog. This is required to ensure that the user is authorised to use VFC and is aware of their responsibility regarding third-party software licenses. Please tick the box to avoid the dialog being displayed again until the next VFC update:







Completed VFC installation

Following the above steps, VFC should load normally. The VFC user interface has several tabs along the top and shows the current license status at the bottom. Please see the **VFC User Guide** for detailed instructions on how to use VFC:

VM Modify Hardware Patc	h VM / Restore Points Password Bypass Standalone VM Se	ttings / Tools Mount / Explore VM License About
Guest OS		Quick Instructions -> If required, mount required disk image -> Click Disk button and select desired disk -> Select target partition (Windows systems will auto analyse if option is selected) -> Adjust detected OS and version as required -> Adjust virtual machine settings and name as required
Operating System Family: Microsoft Windows Operating System Version Autodetect	Muto-Analyse Partitions ✓	-> Make New VM -> Launch VM
Virtual Machine VM Name (.vmx): Virtual Disk Name (.vmdk) VM Start-up Date/Time:	New Virtual Machine New Virtual Disk 09/03/2020 I5:31:34	





Common installation troubleshooting steps

VFC has been designed to be compatible with a wide variety of system configurations and third-party image "mount" tools. Please find below some suggested troubleshooting steps for common installation problems:

1. "Could not find VMWare installation"

VFC requires VMware Workstation/Player v12 or later to function. If one of these products is not installed, the following message will be displayed on start-up. To resolve the problem, please install a supported VMware product:

Error!	×
VFC requires VMware to be installed.	
Could not find vieware installation.	
ОК	

2. Unable to validate VFC v5 license

VFC requires a current license (dongle) to function. If the dongle is not connected or is not functioning, VFC will report "Unable to validate VFC v5 license". Please check the dongle driver is installed (green dongle only) and then use VFC License Manager to troubleshoot this. This is described in the VFC FAQ.







3. "License system reports no license available?"

The message "License system reports no license available" typically indicates that no VFC v5 license has been assigned to your dongle. Please contact Technical Support to resolve this:



4. "Unable to load VMware VDDK library"

VFC is designed to be used with the VMware Workstation/Player virtualisation products. It requires a component called the VMWare VDDK to function. If this component is missing, the following error is displayed. Please see instructions above for how to install the VDDK component.

VMware V	DDK not available	×
	Unable to load VMware VDDK library. Please check configuration and then, if this problem persists, report it to Technical Support	
	ОК	

5. "Unable to start: VMware unsupported":

The message "Unable to start: VMWare is unsupported" indicates that VMware is either not installed or is before VMware v12. To resolve this problem, please update your VMware installation:

Unable to start	×
VFC has detected your version of VMware is unsupported.	
VFC requires VMware Workstation/Player v12 or later.	
We recommend you update your VMware application.	
ОК	ו