macOS Unlocker V3.0 for VMware Workstation

IMPORTANT

1. Use a release from the Releases section of this GitHub repository. https://github.com/DrDonk/unlocker/releases
2. Always uninstall the previous version of the Unlocker before using a new version or running an update on the VMware software. Failure to do this could render VMware unusable.
3. You use this software at your own risk and there are no guarantees this will work in future versions of VMware Workstation.

1. Introduction

Unlocker 3 is designed for VMware Workstation 12-16 and Player 12-16.

Version 3 has been tested against:

- Workstation 12/14/15/16 on Windows and Linux
- Workstation Player 12/14/15/16 on Windows and Linux

It is important to understand that the unlocker does not add any new capabilities to VMware Workstation and Player but enables support for macOS that is disabled in the VMware products that do not run on Apple Hardware. These capabiltiites are normally exposed in Fusion and ESXi when running on Apple hardware. The unlocker cannot add support for new versions of macOS, add paravirtualized GPU support or any other features that are not already in the VMware compiled code.

What the unlocker can do is enable certain flags and data tables that are required to see the macOS type when setting the guest OS type, and modify the implmentation of the virtual SMC controller device. The patch code carries out the following modifications dependent on the product being patched:

- Fix vmware-vmx and derivatives to allow macOS to boot
- Fix vmwarebase.dll or .so to allow Apple to be selected during VM creation
- Get a copy of the macOS VMware Tools for the guest
- Fix the UEFI ROM files to allow Leopard and Snow Leopard client versions to be installed

In all cases make sure VMware is not running, and any background guests have been shutdown.

The code is written in Python with some Bash and Command files.

2. Prerequisites

The code requires Python 3.6 to work. Most Linux distros ship with a compatible Python interpreter and should work without requiring any additional software.

Windows Unlocker has a packaged minimal version of the Python and so does not require Python to be installed.

3. Windows

On Windows you will need to either run cmd.exe as Administrator or using Explorer right click on the command file and select "Run as administrator".

- win-install.cmd - patches VMware
- win-uninstall.cmd - restores VMware
- win-gettools.cmd - retrieves latest macOS guest tools

4. Linux

On Linux you will need to be either root or use sudo to run the scripts.

You may need to ensure the Linux scripts have execute permissions by running chmod +x against the 2 files.

- lnx-install.sh - patches VMware
- lnx-uninstall.sh - restores VMware
- lnx-gettools.sh - retrieves latest macOS guest tools

5. VMware Downloads

These URLs will link to the latest versions of VMware's hosted products:

- VMware Fusion https://vmware.com/go/getfusion
- VMware Workstation for Windows https://www.vmware.com/go/getworkstation-win
- VMware Workstation for Linux https://www.vmware.com/go/getworkstation-linux
- VMware Player for Windows https://www.vmware.com/go/getplayer-win
- VMware Player for Linux https://www.vmware.com/go/getplayer-linux

6. VMware Tools

The unlocker provides a script to get the VMware tools. There can be newer releases available which can be downloaded from these URLs if the script has not yet been updated:

- Mac OS X 10.5 - 10.10 https://customerconnect.vmware.com/en/downloads/details?downloadGroup=VMTOOLS10012&productId=491
- macOS 10.11+ https://customerconnect.vmware.com/downloads/info/slug/datacenter_cloud_infrastructure/vmware_to

ols/11_x

These URLs require a VMware login to download.

Version 15 and 16 of Workstation do recocnise the darwin.iso files and the tools can be installed in the usual way by using the "Install VMware Tools" menu item .

Earlier versions of VMware Workstation and Player do not recognise the darwin.iso via install tools menu item. You will have to manually mount the darwin.iso by selecting the ISO file in the guest's settings.

7. EFI Patcher

VMware will not allow the client (non-server) Leopard and Snow Leopard verions of Mac OS X to be installed due to Apple's EULA. This is implememted in the virtual EFI firmware and this can be patched to override the check if you want to use the client versions.

Please see the efi-readme file for details on patching the ROM files used by VMware products.

8. Alternative patcher

I would recommend using auto-unlocker instead of this unlocker as it is a better solution if Python is an issue and actively supported by Paolo here on GitHub.

https://github.com/paolo-projects/auto-unlocker

9 Thanks

Thanks to Zenith432 for originally building the C++ unlocker and Mac Son of Knife (MSoK) for all the testing and support.

Thanks also to Sam B for finding the solution for ESXi 6 and helping me with debugging expertise. Sam also wrote the code for patching ESXi ELF files and modified the unlocker code to run on Python 3 in the ESXi 6.5 environment.

History

27/09/18 3.0.0

- First release

02/10/18 3.0.1

- Fixed gettools.py to work with Python 3 and correctly download darwinPre15.iso

10/10/18 3.0.2

- Fixed false positives from anti-virus software with Windows executables
- Allow Python 2 and 3 to run the Python code from Bash scripts

14/05/21 3.0.3

- New simpfiled code for development and deployment
- Removed Python 2 support and requires minmal Python 3.8

01/06/21 3.0.4

- Fixed embedded Python error on Windows

12/10/21 3.0.5

- Updated gettools.py to directly download tools from new repo
- Added URLs to get Mac OS X legacy and macOS current tools
- Added URLs to get latest VMware hosted products
- Made minimum Python version 3.6 from 3.8 for Linux

14/10/21 3.0.6

- Ensure errors are displayed on Windows if CMD file is run from Explorer

22/10/21 3.0.7

- Tested with Player and Workstation 16.2.0
- Tested with Windows 11 as host
- Do not try to copy vmware-vmx-stats if Player is installed as it is not shipped with Player