

# VMware Workstation Tech Preview 2023

Pre-Release software Windows and Linux PCs  
(x86\_64)

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## QUICK START

- Log into the [Tech Preview Community](#)
- Download and install the Workstation 2023 Tech Preview from the links provided in the Community
- Create some new virtual machines and install some guest operating systems!
- Support for newer Linux 6.x kernels, new encryption scheme and new API and CLI options
- Share your experience in our community forum, in a blog, in a video, or any other public format.
- Private Feedback can be directed to [ws-beta@vmware.com](mailto:ws-beta@vmware.com)

## About This Guide

Thanks for your interest and help to improve VMware Workstation!

We're excited about what we've been working on and would love to share with the community where we're at with this year's release.

With new features to support Windows 11, new graphics capabilities, and other useful features like auto-start VMs, we're gearing up for a new major release of Workstation.

## How to Download

VMware Workstation Tech Preview 2023 can be downloaded from the following link:

<https://communities.vmware.com/t5/Workstation-2023-Tech-Preview/ct-p/ws-tp2023>



## Installing Workstation

Installing Workstation is the same as always. Download and run the setup.exe on Windows or .bundle file on Linux.

Note that a system cannot have Workstation 17, 16 or 15 and this Tech Preview installed at the same time. As such, it's recommended in Windows to go to Add-Remove Programs > Find VMware Workstation > 'Modify' > and 'Remove' to uninstall before running setup.exe to install Tech Preview '23

For Linux, open a terminal `su root` and run `vmware-installer -u vmware-workstation` ([KB Link](#))

## What's New?

### Virtual Trusted Platform Module Support with OVF Import/Export

In order to support Windows 11 requirements, a Trusted Platform Module is required. However, OVFTool does not currently support VMs with a TPM in the proper way. In this release, we've added the capability to take a VM that requires a TPM (such as Windows 11) and export it via OVFTool. During export, a 'placeholder' TPM device is created to satisfy the template requirements while protecting the user's sensitive information stored on the vTPM device of the source VM.

### Manage VTPM and Encrypted VM with vmrun and vmrest

Both the local vmrun CLI and the vmrest REST API now support power operations on encrypted VMs and those with vTPMs. Vmrun also includes support for the 'gui' flag for encrypted VMs.

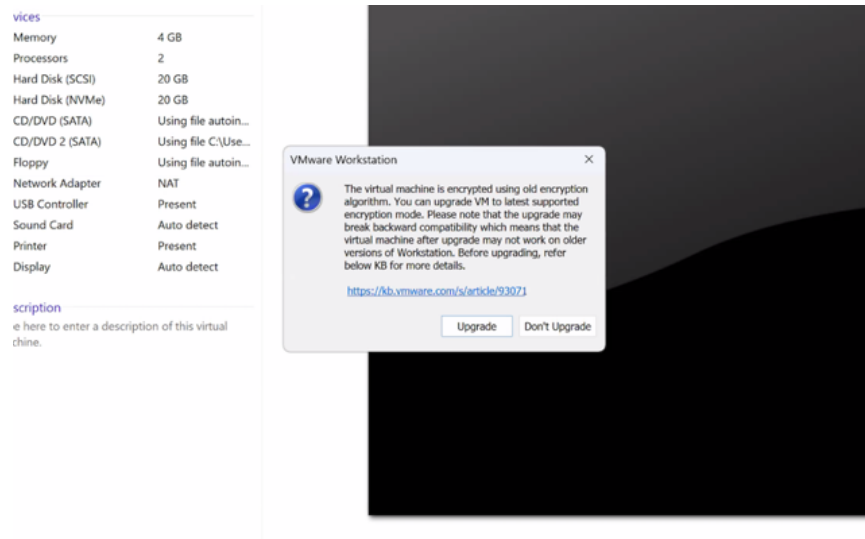
### Virtual Hardware version 21

New VMs are created with Virtual Hardware Version 21 which has a number of under-the-hood improvements, including NVMe 1.3 support, and Linux kernel 6.x support.

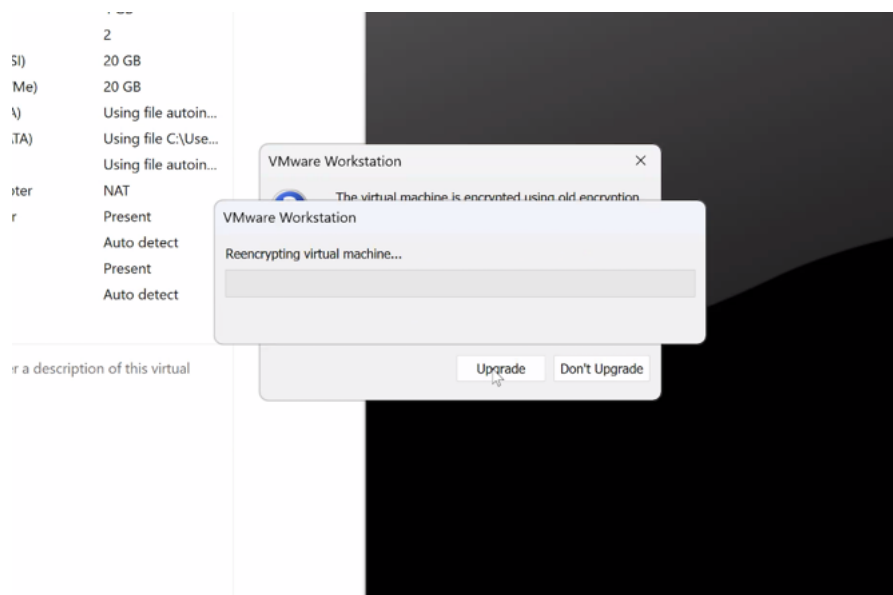
## Migrate from CBC to XTS Encryption Scheme

Newly installed VMs will be created with XTS, however VMs previously encrypted with the CBC schema will require migration. Note that this migration is compatible with vSphere 8, but not older versions of Workstation and Fusion (The Intel version of Fusion Tech Preview '23 is compatible with Workstation machines using XTS encryption)

- When launching a VM previously encrypted with the CBC scheme, you will receive a prompt to convert it:



- Upon clicking “Upgrade”:



- Once the operation is completed, the VM's encryption algorithm will have been updated from CBC to XTS

## OVFTool: Import and Export vTPM Equipped VMs

When creating VM Templates that have TPM devices, it's important not to store the data that exists within the vTPM storage space of the template source. Previously, Workstation would not allow for VMs with TPM devices to be exported, however now the option is available.

### Exporting

It's important to note that a user must manually decrypt the virtual machine and remove the vTPM device before exporting.

During Export, a TPM "Placeholder" will be used.

Upon Import, a new vTPM will be created as part of the new Import OVF walkthrough.

- From CLI via ovftool:

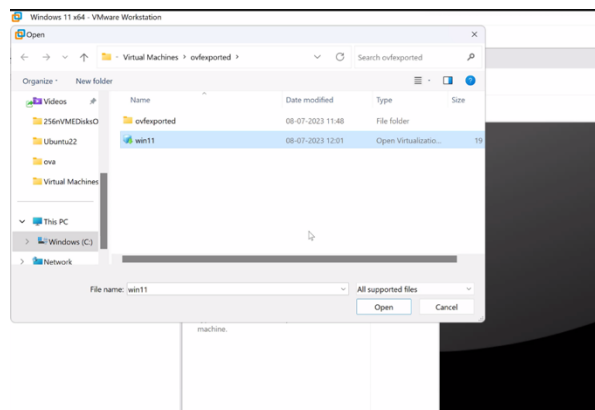
```
ovftool.exe
--exportFlags=extraconfig
--allowExtraConfig
--addDevice:vtpm
"C:\Users\path\to\source\Windows 11 x64.vmx"
"C:\Users\path\to\destination\win11.ovf"
```

- Via the UI using File > Export

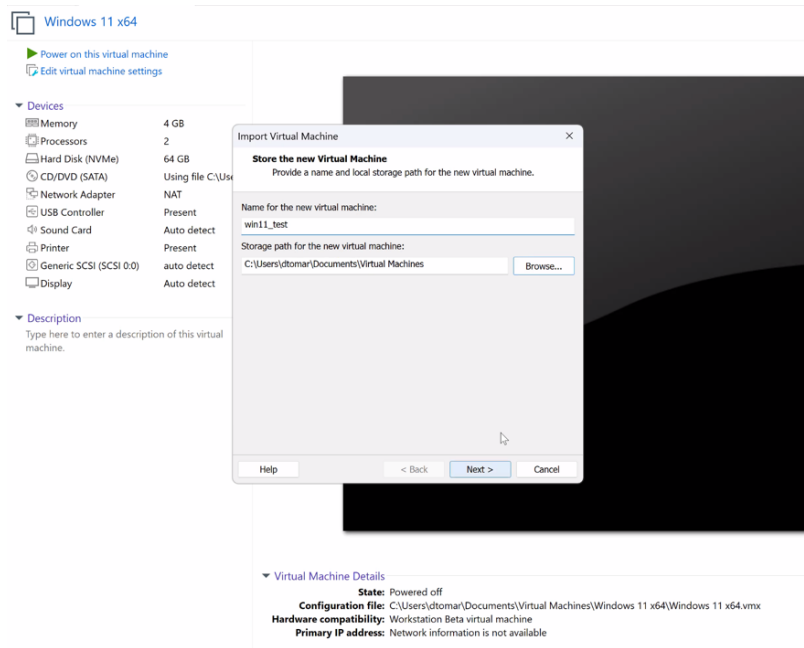
### Importing

Similar to Exporting, Importing can be done from the UI as well as the CLI.

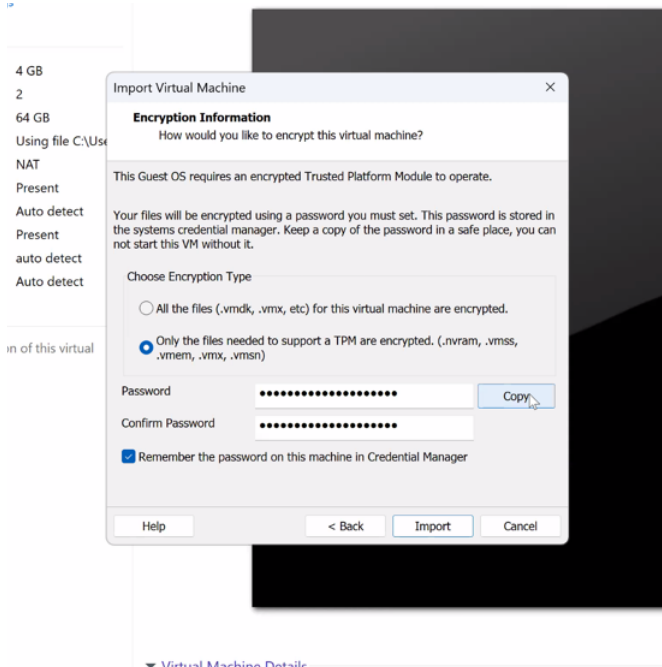
- Via the UI
  - Select File > Open > Choose your .ova/.ovf file



- Provide a Name and continue



- Now provide the Encryption details for the new VM



Once the Import completes, the VM is ready to use.

## Control Encrypted VMs from “vmrun” CLI using the ‘gui’ flag

VMRUN has been enhanced to support power on operations (Start, Stop, Reset, Suspend, Pause, Unpause) in GUI mode.

Run the vmrun command from the command prompt to get more details on the parameters and usage of the command.

When ‘vmrun start’ is invoked with the flag: ``-vp <password for encrypted virtual machine>``, the `--gui / --nogui` parameter is respected.

## Reporting Bugs

Of course, using it is only half the fun! We encourage users to share their experiences on our Community Forum, but you are not restricted from also sharing on personal blogs, videos, media, etc.

<https://communities.vmware.com/t5/Workstation-2023-Tech-Preview/ct-p/ws-tp2023>

If you prefer to not share such information in our public forum, you are welcome to reach out to the beta team directly by emailing: [ws-beta@vmware.com](mailto:ws-beta@vmware.com)  
We do read, but we may not respond to all email.



KNOWN ISSUES	
ISSUE	DETAIL OR WORKAROUND
SLES 15 and Oracle Linux 9.2 GOS installation gets stuck with default RAM, Processor values	<ul style="list-style-type: none"> <li>• Oracle Linux installation requires the following minimum resources:               <ul style="list-style-type: none"> <li>◦ 3GB RAM, 2 vCPU</li> </ul> </li> <li>• SLES 15 installation requires the following minimum resources to be assigned:               <ul style="list-style-type: none"> <li>◦ 2GB RAM and 2 vCPU</li> </ul> </li> </ul>
Changing the USB compatibility from 2.0 to 3.1 results into unrecoverable error	<ul style="list-style-type: none"> <li>• Power off the VM. Change the USB controller from 2.0 to 3.1. USB controller gets changed to 3.1 and power it on.</li> </ul>
Inconsistent behavior of Guest OS rendering UI when on/suspend/resume are triggered from vmrest	<ul style="list-style-type: none"> <li>• No workaround</li> </ul>

