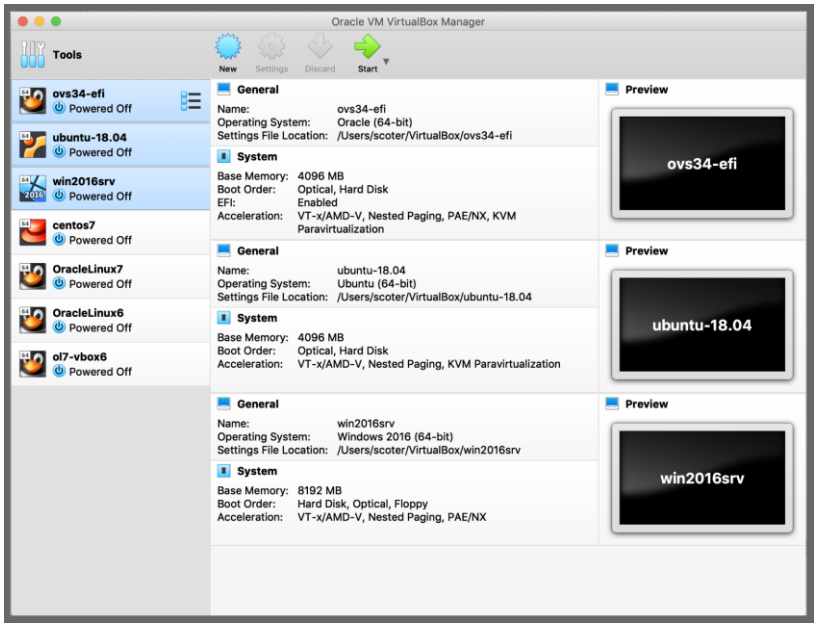
ORACLE

Oracle VM VirtualBox

Oracle VM VirtualBox is an open source, cross-platform, virtualization software that allows multiple operating systems to run concurrently on a single device. Developers use VirtualBox to deliver code faster by running and testing different operating systems on their laptop. IT teams and solution providers use VirtualBox to reduce operational costs and shorten the time needed to securely deploy applications on-premises and to the cloud. Designed for IT professionals and developers, Oracle VM VirtualBox runs on Windows, macOS, Linux, and Oracle Solaris systems and is ideal for testing, developing, demonstrating, and deploying solutions across multiple platforms on a single device.

Easy to Use, Fast and Powerful, Extensive Platform Coverage

Designed for use on systems ranging from ultra-books to high-end server class hardware, Oracle VM VirtualBox is lightweight and easy to install and use. Yet, under the simple exterior lies an extremely fast and powerful virtualization engine. With a formidable reputation for speed and agility, Oracle VM VirtualBox contains innovative features to deliver tangible business benefits such as significant performance improvements, a more powerful virtualization system and a wider range of supported guest operating system platforms.



ORACLE VM VirtualBox

Key benefits

Lower operation costs by reducing the number of required desktop and server configurations

Simplify development environments by running the same solution on any x86 laptop

Automate deployments to the cloud

Fast track application development, quality assurance and testing

Easily create secure and encrypted workspaces

Enable remote workers to access restricted applications securely

Simplify software distribution by embedding applications inside a VirtualBox VM

Run almost any type of application on existing machines

Build a multi-tier demonstration system on a single portable machine

Extend the lifetime and usefulness of existing computers

Run legacy platforms and applications on modern hardware

Image Caption 1. Oracle VM VirtualBox Manager screen.

Easy to use

- *Import from Oracle Cloud Infrastructure* - The Oracle VM VirtualBox Manager now supports importing Oracle Cloud Infrastructure Instances to Oracle VM VirtualBox and get the same running as Virtual Machines. This functionality facilitates the experience of using VirtualBox as the development platform for the cloud.
- *Easily export to Oracle Cloud Infrastructure* - The Oracle VM VirtualBox Manager supports exporting of virtual machines to Oracle Cloud Infrastructure as Emulated or Paravirtualized Instances and allowing the creation of multiple virtual machines without re-uploading of the same Virtual Machine (VM).
- *Support for Nested Virtualization* - Nested virtualization enables a hypervisor, such as Oracle VM VirtualBox or KVM to be installed, on an Oracle VM VirtualBox guest. VMs can then be created and run in the guest VM.
- *VirtualBox Guest Additions* - Installed inside the guest virtual machine, the Guest Additions provide a more natural user experience. For example, guest windows can be easily resized to arbitrary resolutions, made full-screen or even operate in seamless mode. Data can be copied and pasted to and from, and between, concurrently running machines and the host platform. This functionality is controllable as bi-directional, uni-directional, or disabled.
- *Guest Control File Manager* - The Guest Control File Manager enables a guest VM user to transfer files between the guest and host.
- *VirtualBox Manager* - The Oracle VM VirtualBox Manager supports virtual machines moving on local storage.
- *Virtual Machine Cloning Process* - Options while cloning virtual machines include retaining the hardware UUID, MAC address policy, and disk image names.
- *Cloud Profile Manager* - A tool that enables and configure details of your Oracle Cloud Infrastructure service account to be configured using VirtualBox.
- *Shared Folders* –A host platform's filesystem can be shared with the guest to facilitate cross-platform computing.
- *Multi-touch support* – Hosts supporting multi-touch interfaces can deliver this capability to their guests.
- *Flexible Networking options* – Oracle VM VirtualBox offers a rich range of networking models from easy-to-use NAT networking, to fully functional Bridged networking, and specialist Internal and Host-only networking.
- *IPv6* – IPv6 is offered as an option in most networking modes alongside IPv4.

Key Features

Available for Windows, macOS, Linux and Oracle Solaris host operating systems

Supports a wide range of guest platforms

Short learning curve graphical user interface

Powerful, scriptable command-line interface

Import and export virtual machines using OVF/OVA standards

Export Virtual Machines to Oracle Cloud Infrastructure

Import Instances from Oracle Cloud Infrastructure

Shared folders between guest and host

Seamless, resizable, and full screen window display modes

Video and 3D (OpenGL, DirectX) acceleration

Multiple virtual screen support

Powerful and flexible networking options

USB 1.1/2.0/3.0 and serial ports

NVMe, SAS, SATA, SCSI and IDE storage controllers

Built-in iSCSI initiator

Built-in Remote Display Server

Multi-generational branched snapshots

Linked and full clones

Controllable copy and paste

Screen-recording facility

Disk image encryption

HiDPI support

Drag and drop support

- *Virtual Media Manager* – Oracle VM VirtualBox supports the widest range of virtual disk formats from its own native (.vdi) format to those offered by Microsoft (.vhd), VMware (.vmdk), and Parallels (.vdd). Oracle VM VirtualBox GUI allows conversions between formats.
- *Video Capture* – A built-in recording mechanism of the guest's screen contents. Easy to start and stop, recording one or more virtual screens to the standard webm format.

Performance and Power Highlights

- *Intel and AMD hardware support* – Harnessing the latest in chip-level support for virtualization, Oracle VM VirtualBox supports recent AMD and Intel processors bringing faster execution times for everything from Windows to Linux and Oracle Solaris guests.
- *3D Graphics support* – Support for displaying 3D graphics in a guest has been improved; VBoxSVGA and VMSVGA are the new virtual graphical interface that boosts 3D performances.
- *Bi-Directional Drag and Drop support* – On all host platforms, Windows, Linux, and Oracle Solaris guests support "drag and drop" of content between the host and the guest. The "drag and drop" feature transparently allows copying or opening of files, directories, and more.
- *Disk Image Encryption* – VirtualBox allows data stored in hard disk images to be encrypted transparently for the guest. VirtualBox uses the AES algorithm and supports 128 or 256-bit data encryption keys.
- *High-performance storage I/O subsystem* – Oracle VM VirtualBox offers a wide range of virtual storage controllers including NVMe, SAS, SATA, SCSI, and IDE controllers. VirtualBox utilizes an asynchronous I/O virtual disk subsystem to achieve high-performance whilst maintaining high data integrity.
- *Built-in iSCSI Initiator* – Oracle VM VirtualBox includes an iSCSI initiator that allows virtual disks to exist as iSCSI targets. The guest sees a standard storage controller while disk accesses are translated into iSCSI commands and sent across the network.
- *Remote Display Protocol* – The unique built-in VirtualBox Remote Display Protocol (VRDP) enables powerful remote, graphical access to the console of the guest. Microsoft RDP-capable clients can connect to one or more remote monitors, with USB device redirection when using rdesktop-based clients. VRDP is also accessible over IPv6.
- *Serial and USB connections* – External devices can be connected to guests, with specific USB devices selected by a powerful filter mechanism. VirtualBox supports USB 1.0, USB 2.0 and USB 3.0 devices.
- *Virtual webcam* – On hosts with cameras, VirtualBox exposes a virtual webcam allowing guests running apps such as Skype or Google Hangouts to use the host camera.

Related Products

The following products complement Oracle VM VirtualBox:

- Oracle Linux
- Oracle Virtualization

Related Services

- Oracle VM VirtualBox Enterprise - Commercial Licenses and Support

- *High-Definition audio* – Guests enjoy the rich audio capabilities of an Intel high-definition audio card.
- *Full ACPI support* – The host's power status is fully available to the guest and ACPI button events can be sent to the guest to control the lifecycle of the virtual machine.
- *Multi-generational and branched snapshots* – Snapshots allow a user to revert to previous known states. Take a snapshot before installing software, then revert to the snapshot to recover the pre-installation state.
- *Guest automation* – The guest automation APIs allow host-based logic to drive operations in the guest including update of the Guest Additions.
- *Web services* – A Web service API enables remote control of VirtualBox by authorized clients.

Oracle VM VirtualBox licensing and support

- *Commercially supported platforms* – Oracle VM VirtualBox enables the option to install and run a broad range of host and guest platforms. Oracle offers commercial support for the most popular guest operating systems, providing customers with expert help when they need it.
- *VirtualBox Licensing Terms and FAQ* – Please read Personal Use and Evaluation License (PUEL) and FAQ to clarify Extension Pack usage on VirtualBox.

Please refer to the User Manual for complete information on the use of these and other new features in Oracle VM VirtualBox.

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