

About Parallels Desktop 15

Parallels Desktop® 15 for Mac is the simplest, most powerful solution for running Windows and Windows applications on Mac® without rebooting. For more information, see the Parallels Desktop 15 for Mac documentation.

What's New in Version 15

Graphics

Graphics in Parallels Desktop 15 have been significantly improved compared to previous product versions.

- With the help of Apple Metal, Parallels introduces support for DirectX 11. Now you can run Autodesk 3ds Max 2020, Lumion, ArcGIS Pro 2.3, products from MasterSeries and more. You can also play many favorite games, including Madden NFL 19, Age of Empires: Definitive Edition, Anno 2205, Railway Empire, Space Engineers, Frostpunk, Risk of Rain 2 and many more.
- DirectX 3D graphics are now accelerated by the Apple Metal engine.
- Enhanced compatibility with new Linux distributions due to Virtio GPU that supports sliding mouse (when Parallels Desktop captures the guest OS mouse cursor), dynamic resolution (when the screen resolution changes dynamically if you resize the virtual machine window) and multimonitor support—even without Parallels Tools.
- Support for DRM-based graphics required by recent versions of major Linux distributions.

Performance

Despite continuous performance improvements every year and almost native performance in many scenarios, we managed to make the product even faster and efficient.

- Some applications can use DirectX 11 and thus are much faster, compared to being unusably slow in previous versions.
- 3D graphics are up to 15% faster.
- Microsoft Office applications are up to 80% faster.
- User interface is more responsive.

Getting ready for macOS 10.15 Catalina

- Get even more graphics power with the release of macOS® 10.15 Catalina. Play more DirectX 11 games including FIFA 19, Fallout 4, Elite Dangerous, Prey (2017), Crysis 3,

Anno 1800 and more.

- Improved support for Apple Pencil® drawing capabilities when you work with Windows applications on iPad® using Sidecar:

Tilt support for Apple Pencil.

Double-tap Apple Pencil to get new Touch Bar options:

- Toggle between Pen, Eraser and Mouse modes.
- Easily take a snip, enable Windows Tablet mode or open the Windows onscreen keyboard from Touch Bar.

Hardware

- Support for non-volatile memory express (NVMe) disk controller—the next generation of storage controllers. NVMe is more virtualization friendly and effective than AHCI. NVMe leverages not just solid-state storage but also modern multicore CPUs.
- Support for Intel HDA audio card:
 - Supports up to 8/2 channels (out/in), 192kHz sample rate and 32-bit samples.
 - Improved sound quality of VoIP phones.
 - Support for “jack sense.”
 - Automatic detection when the microphone is muted. If access to the Mac® microphone is not allowed by the user or macOS preferences, Windows shows the microphone as muted.
 - Automatic detection when sound output is disabled. If it is disabled in the virtual machine settings, Windows also shows sound output as disabled.
- Support for Bluetooth Low Energy. This allows you to use more devices, including Logitech Craft, IrisPEN and some IoT devices (such as smart home appliances and smart bands).

Version of the Bluetooth driver is 4.0.

Convenience

- Boot Camp–based virtual machine improvements:
 - Windows became more stable on startup.
 - Resolved the issue with Boot Camp–based virtual machines becoming broken due to hard disk reconfiguration.
 - Improved support for major Windows updates. When Windows installs a major update in a virtual machine, Parallels Desktop offers to complete update installation in Boot

Camp natively.

- New Boot Camp icon is used instead of the Windows 10 icon for Boot Camp–based virtual machines.

- When reverting to a snapshot, Parallels Desktop offers to save current VM state as a new snapshot.
- Though dragging and dropping images has been supported from the very beginning, some of the latest macOS screenshots cannot be simply dragged to Windows because of the new format. We have enhanced drag-and-drop functionality—now you can drag screenshot previews, images from Safari, Photos and other macOS applications and drop them to your Windows applications.
- Completely redesigned keyboard layouts support improving several aspects, including:
 - Excel shortcuts “Ctrl” + “+” and “Ctrl” + “-“ are now supported.
 - Improved support for JIS keyboard.
 - Fixed input with CAPS LOCK on for most of non-English layouts.
- Now you can send files from macOS as attachments using the default email application in Windows. Right-click a macOS file, point to **Share > More > Send with Windows Email App**.

The default email application can be changed in Windows settings.

- Improved USB automatic connection. Prior to Parallels Desktop 15, when a USB device connected to a virtual machine for a repeated time, Windows might treat this device as new and initiate driver installation. Now Parallels Desktop stores history for USB devices and connects a device to the same USB port every time, so users are not bothered with driver installation on repeated device connection.
- Parallels Desktop saves your Parallels account credentials to Mac Keychain. Next time you need to sign in, your account credentials will be autofilled from Keychain.
- Similar to the CD/DVD icon in the virtual machine title bar, other devices like camera, microphone and speakers now have indication when they are disabled.
- Upgrade to Windows 10 Adviser. In January 2020, Windows 7 will reach the end of extended support (no more security patches). A new menu item for Windows 7 users opens an assistant with the details on how to upgrade to Windows 10.
- New Parallels Desktop users might have issues understanding Coherence mode. We have created a dialog that appears with animation to explain how a virtual machine works in this view mode.
- Installing Windows updates is a resource-consuming operation. To improve the user experience with the product, new Windows 10 virtual machines will have Windows Updates paused for 7 days.

If required, you can resume updates in Windows settings.

- If a user updates or upgrades Parallels Desktop manually while a previous version is

running, installer now offers a button to quit Parallels Desktop in one click, instead of making the user do it manually.

- Improved Download Windows 10 dialog. It was not obvious what to do if you wanted to cancel the download. In this version, we added the “Cancel” button.

Look and Feel

- Improved Boot Camp import process.
 - If you do not boot to Boot Camp natively for one month, Parallels Desktop recommends that you should import Boot Camp to a standalone virtual machine. If all required Windows applications work correctly in this virtual machine, you can remove the Boot Camp partition to save disk space on the Mac hard disk.
 - New dialogs were created.
 - Added “Import” button to the Free Up Disk Space dialog.
- Windows switches to Coherence more seamlessly. Login, Shutdown, Black (on slow virtual machines) and some other Windows screens are now hidden behind the Parallels Desktop dialog.
- The icons for Windows 10 Modern applications used by Parallels Shared Applications were improved and are now easier to recognize.

For Parallels Desktop 15 Pro Edition and Business Edition Only

- Connect external physical disks to a virtual machine as internal disks. This functionality allows you to:
 - Install Windows or another OS to this disk.
 - Boot to the OS installed on that disk.
 - Use non-native Boot Camp installations (e.g. restore using WinClone).

Limitations: if the disk has an Apple partition scheme or Apple File System (HFS+ or APFS), the disk cannot be connected to a Windows virtual machine to prevent data loss.

- Support for virtual trusted platform module (vTPM). Now you can add TPM to your virtual machine configuration. It can be used by some Windows security features such as BitLocker or Windows Hello.
- Support for Python 3.0 in the Parallels Virtualization SDK.

For Parallels Desktop 15 Business Edition Only

- Added the ability to restrict users to change the virtual machine view mode with a macOS administrator (or custom) password.

- Now the virtual machine configuration (*config.pvs* file) can be protected from being changed with an administrator or custom password.
- Support for DNS requests over TCP in the Shared Networking mode.
- Now you can save time and network load by deploying virtual machines in the archived (.pvmz) format.
- Users working in the Single Application mode are no longer bothered with Parallels Desktop notifications.
- More control over support tickets for administrators of a business account:
 - By default, all account administrators can see all support tickets.
 - License administrators can create support tickets.
 - Account administrators or ticket creators can add watchers to a particular ticket.
 - Watchers will receive email notifications about the ticket updates.

More details at <https://kb.parallels.com/124709>

What's Deprecated or Removed from Parallels Desktop 15

More than 5 million users rely on Parallels Desktop around the world. That's why our goal is to ensure that our engineering teams are focused on providing the greatest benefit to the largest number of users. In addition to expanding Parallels Desktop functionality, we must ensure that an extensive list of existing features continues to work flawlessly in the ever-changing environment of Mac and Windows. For this reason, we must prioritize our engineering efforts.

This year we decided to deprecate or remove little-used or not-used features from Parallels Desktop. The Parallels Team uses statistics collected from those who agreed to participate in the Customer Experience Program. If you care about usage scenarios being counted, please make sure you have it enabled in the Parallels Desktop Preferences.

Below you can find two lists: one is for deprecated features and the other for removed.

Deprecated features continue working in Parallels Desktop 15 but will no longer be supported and will be removed in the next versions of Parallels Desktop.

Removed features are no longer available in Parallels Desktop 15. They were removed either because they are no longer supported in the latest operating systems or not used at all (<50 vs 5 million users around the world).

Most of these features are not business critical, and there are alternate ways to achieve the desired effect.

Deprecated Features

- *Adding Windows applications to LaunchPad*

This functionality is no longer supported because the API is no longer available in macOS 10.15 Catalina. There's no way to easily remove non-App Store applications from LaunchPad.

- *Coherence for Linux*

Your Linux virtual machine may work in Coherence mode but this view mode is no longer supported. According to the statistics, it's a rarely used feature but rather complicated to support. Instead, we've decided to invest more resources in running Linux in Window mode, Linux 3D acceleration, etc.

- *Keeping Internet Explorer and Edge passwords in Mac Keychain*

We think it's a useful feature because it allows you to share passwords among virtual machines, but we cannot support it anymore because of the internal changes in Windows browsers. It already doesn't work in Internet Explorer and will likely stop working in Edge soon.

Removed features:

- *Using self-made encryption plugins*

Parallels Desktop allows you to encrypt your virtual machine data. By default, it is done with the AES encryption algorithm. But you could also use your own encryption plugin. This functionality is removed, as it was not used.

- *Checkbox in virtual machine configuration to control access to your current location*

In the latest versions of macOS, access to your current location is controlled per application via the system policy. An additional checkbox in the virtual machine configuration could be useful only if a user wants to allow access to location in one virtual machine and prohibit in others. However, this checkbox was removed due to very low usage.

- *Windows 8 notifications in the macOS Notification Center*

As most users switched to Windows 10 (where this feature doesn't work), it was removed from the code and testing. If you think you need this feature in Windows 10, please let us know on the Feature Suggestions Forum.

- *Power menu for Windows 8.1 in Coherence*

As most users switched to Windows 10 (where this feature doesn't work), it was removed from the code and testing. If you think you need this feature in Windows 10, please let us know on the Feature Suggestions Forum.

- *Showing cloud storage drives in the Windows Office "Save As" menu*

This feature doesn't work in modern Office packages—only in Office 2013. If you use Microsoft Office 2013, you can still save files to the Mac-connected cloud folders that are displayed in File Explorer as Shared Folders.

- *Call with iPhone by right-clicking a phone number in Internet Explorer*
This feature was removed due to low usage.
- *macOS “Share” menu in the Internet Explorer context menu*
This feature was removed due to low usage.
- *Finder tags for Parallels Desktop*
This feature was removed due to complaints and low usage.
- *Spoken commands*
This feature was removed because Apple is introducing Voice Control in macOS 10.15 Catalina, which offers far more possibilities. We’d better invest resources into it.
- *Switching the level of 3D acceleration for Windows*
A special checkbox in configuration of Windows virtual machines allowed you to disable or change the level of 3D acceleration in Windows. Most users worked with the default setting and the checkbox was removed due to very low usage.

Now Parallels Desktop supports either DirectX 10 or DirectX 11.0 for Windows, depending on the version of macOS installed on your Mac. If you have macOS 10.14.4 Mojave or later, Parallels Desktop supports DirectX 11.0.

Known Issues

- There are some known issues with Parallels Desktop 15 working in macOS 10.15 Catalina. You can find their description at <https://kb.parallels.com/124705>
- Frame rate is limited to 60 fps on Mac computers with macOS 10.15 Catalina.

System Requirements

- Any Mac computer with an Intel Core 2 Duo, Core i3, Core i5, Core i7, Core i9, Intel Core M or Xeon processor.
- Mac operating system: macOS 10.15 Catalina*, macOS 10.14 Mojave, macOS 10.13 High Sierra or macOS 10.12 Sierra.
- 4 GB of memory (8 GB recommended).
- 500 MB of disk space on the boot volume (Macintosh HD) for Parallels Desktop installation.
- Additional disk space for virtual machines (SSD drives recommended for better performance). For example, for Windows 10 you need at least 16 GB of disk space.
- Internet connection (for product activation, some features, etc.).

*Once macOS 10.15 Catalina is officially released, you may need to update Parallels Desktop.

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