

## VNC vs RDP: which remote desktop tool is the best?



Sometimes you need to access a computer from afar, and this is especially true now that so many of us are working remotely. Maybe you need to retrieve work files and documents or quickly take control of a co-worker's computer for ad-hoc support.

Luckily, this is all possible using either RDP or VNC, so let's break down the two methods so you can see their similarities and differences.

**Remote Desktop Protocol, or RDP**, is a proprietary protocol that allows its users to graphically control a remote computer. RDP is usually intended for 1:1 usage, and many remote computers can share the resources of a main computer through different profiles. Being Microsoft's proprietary protocol, RDP works only with Windows systems, although the [client](#) is available for nearly all operating systems such as Mac, Android, and Linux.

**Virtual Network Computing, or VNC**, is a graphical desktop sharing system that lets its users remotely control a computer while the main user can interact and watch. It is pixel-based, which means it is more flexible than RDP. VNC is platform-independent, which means it can easily be used across Mac, Windows, Linux, Raspberry Pi, and other platforms to share a desktop across different computers, and there are no limits in using VNC applications to connect to different computers on different platforms.

**Read more:** [What is VNC Remote Access Technology?](#)

Both technologies have similar goals, but their methods differ. These protocols were built to [remotely access a computer](#), which means displaying the desktop and communicating keystrokes and mouse actions. The user on the local computer or device triggers all these events remotely, even launching applications and observing the results.

## Similarities between RDP and VNC

- Both RDP and VNC allow you or your colleagues to access work computers from a remote location.
- VNC and RDP technologies both require client-side and server-side software to support communications. In all cases the server parts for both technologies needs to be configured to facilitate access and to set up credentials.
- They rely on peer-to-peer communication, which means that one computer can directly connect to a remote computer.
- Both support software that enables secure access and allows admin to manage users.

On the surface, then, the two methods sound very similar. But the differences between them are striking. While their goal of providing remote desktop capabilities to a computer or a device, the differences lie in the way that goal is realized.

## Differences between RDP and VNC

- A VNC server supports multiple platforms, allowing for shared screens and keyboards of Windows, Mac, Linux, and Raspberry Pi-run devices. They are designed to work on various operating systems. RDP is proprietary and only works for one specific operating system, meaning it's not the most compatible.
- RDP works as though the user has directly logged into the physical server and supports many remote users all logged into the same server. VNC connects a user to the computer itself by sharing its screen, mouse, and keyboard, so that when several users are connected to the same server, they can all see the same screen and type on the same keyboard.
- VNC provides robust device access through desktop sharing systems which allow the user to take full control of a remote computer. This greatly aids the productivity for individuals, organizations, and IT specialists.
- RDP logs into the computer, creating a virtual desktop session so that users can share the resources of the same computer between them, but this also means that it is not a screen-sharing platform. VNC is a screen-sharing tool that also lets the remote computer take control.
- RDP requires port forwarding to use over the internet so it's an exposed service. VNC's cloud connections are not.
- VNC is more suited to support use cases involving troubleshooting or remote working.

Both protocols provide access to remote desktops for quick and easy remote working and troubleshooting. The main difference is that RDP is a virtual session and VNC captures the physical display; you see exactly what the remote user sees.

If you are looking to incorporate broad implementation of a remote desktop tool, it is likely that the software you choose will need to function across an array of devices and operating systems, including mobile phones, PCs, Linux and iOS devices, and Mac computers. And if remote IT support is required, flexibility and compatibility are at the top of the list when choosing a solution.

## Conclusions

With so many people working from home at the moment with vastly different devices and the need for cross-platform support, VNC seems to be the clear choice.

VNC Connect is a VNC-based remote access solution that [fully secure out-of-the-box](#), with multiple security options. It supports regulatory compliance for GDPR, HIPAA, and PCI-DSS and is compatible across multiple platforms.

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