Technician’s guide to instant support

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1 Introduction

VNC Connect’s instant support capability allows you to remotely access an end user’s computer, see their screen, and take control of their keyboard and mouse, even if they don’t, or can’t, have remote access software installed.

This document is for IT professionals (“technicians”) who provide technical support on demand to the computers of colleagues and customers (“end users”).

This guide details the steps you and an end user must take in order for you to start a remote control session, and then perform actions such as rebooting, performing administrative operations and transferring files.

1.1 Requirements

This guide assumes the following:

- You have a set of RealVNC account credentials.
- You are a named technician for your team.
- The latest version of VNC Viewer is already installed on your computer.

If you encounter problems with any of the above, please contact your system administrator.

2 Starting a session

2.1 Signing in to VNC Viewer

When running VNC Viewer for the first time, you may encounter a ‘first-run dialog’. If you do, simply skip through it until you see the following screen:
Click **Sign in** and enter your RealVNC account credentials. The **Instant support** button appears, meaning you can now start an instant support session:

![VNC Viewer interface with Instant support button](image)

### 2.2 Generating and entering a session code

To connect to an end user’s computer, you must both take certain steps.

1. Open VNC Viewer and click the **Instant support** button. Make a note of your download URL and 9 digit session code:

![Instant support session - VNC Viewer](image)

2. Ask the end user to visit the download URL and download the disposable app. The end user sees:

![RealVNC disposable app](image)
3. Have the end user download and run the app, and enter the 9-digit session code. You can share this code over the phone, via IM/email, or however you usually communicate with colleagues and customers. **Note:** A session code can only be used once, so you must repeat these steps each time you start a session.

The end user sees:

![Session Code Entry Screen](image)

4. After entering the session code, the end user is presented with a privacy warning. Once they accept, their screen will be shared and automatically appear on your computer.

The end user sees:

![Privacy Warning Screen](image)
3 Controlling an end user’s computer

3.1 Interacting with the VNC Viewer session window

The end user’s desktop appears in a session window on your screen. As soon as this happens, you can control it:

If you have more than one session underway at once, each will appear in their own session window:

You can drag a session window around your desktop in the usual way, as well as minimize or maximize it.
3.2 Using your mouse and keyboard

To control the end user’s computer, simply move your cursor onto the session window.

As soon as your cursor moves over their desktop, you are in control; your cursor movements become their cursor movements, and your mouse clicks and keyboard inputs become theirs.

During the session, the end user is still able to view and interact with their desktop. An always-visible End Session button is displayed on their screen:

Note: If you are connected to a Windows computer, you must elevate before performing advanced operations such as locking the screen, switching user account, or rebooting the remote computer. See Requesting elevated privileges on an end user’s computer for more information.

3.3 Using the VNC Viewer toolbar

At the top of the session window, you’ll notice a thin grey line. Move your cursor onto this line to reveal the VNC Viewer toolbar:

The VNC Viewer toolbar allows you to perform the following tasks.

<table>
<thead>
<tr>
<th>Name</th>
<th>Icon</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full screen</td>
<td></td>
<td>Toggles between full screen and windowed mode.</td>
<td></td>
</tr>
<tr>
<td>Scale to 100% / Scale</td>
<td></td>
<td>Selects whether your view of the end user’s desktop automatically scales to the size of your session window.</td>
<td>This button allows you to choose between two of the most common scaling options. For more, click the Preferences toolbar button and select the Options tab.</td>
</tr>
<tr>
<td>Feature</td>
<td>Description</td>
<td>Note</td>
<td></td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Send Ctrl+Alt+Del</td>
<td>Sends a Ctrl+Alt+Del to the end user’s computer.</td>
<td>Sending a Ctrl+Alt+Del through your keyboard will only affect your own computer, even if you are controlling the end user’s desktop.</td>
<td></td>
</tr>
<tr>
<td>Transfer files</td>
<td>Allows you to transfer files between the end user’s computer and your own.</td>
<td>See Transferring files to and from an end user’s computer.</td>
<td></td>
</tr>
<tr>
<td>Chat</td>
<td>Allows you to send a text-based chat message to the end user.</td>
<td>See Sending a text-based chat message to an end user.</td>
<td></td>
</tr>
<tr>
<td>Elevate permissions</td>
<td>Allows you to gain elevated privileges on the end user’s Windows computer.</td>
<td>Only visible when connected to a Windows computer.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>See Requesting elevated privileges on an end user’s computer.</td>
<td></td>
</tr>
<tr>
<td>Reboot remote computer</td>
<td>Reboots the end user’s Windows computer, and automatically resumes the session when the computer restarts.</td>
<td>Only visible when connected to a Windows computer.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>See Rebooting an end user’s Windows computer.</td>
<td></td>
</tr>
<tr>
<td>Session information</td>
<td>Displays information about the session, such as the end user’s IP address.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Properties</td>
<td>Allows you to change session settings (e.g. change picture quality or choose from multiple scaling options).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>End session</td>
<td>Disconnects you from the end user’s computer.</td>
<td>Once disconnected, the only way to reconnect is to follow the steps in Generating and entering a session code in full.</td>
<td></td>
</tr>
</tbody>
</table>
3.4 Requesting elevated privileges on an end user’s computer

On Windows, your session must be granted elevated privileges before you can reboot the end user’s computer, or interact with UAC prompts, the login/lock screen, and privileged applications such as administrative command prompts.

Note: This step is not possible (or necessary) when connected to a Mac.

To gain elevated privileges:

1. Press the **Elevate permissions** button on the VNC Viewer toolbar:

2. The following dialog appears:

![Elevate session permissions dialog]

If you *do not* have a set of administrative credentials for the end user’s computer:

1. Select **Prompt end user to provide administrative credentials**.
2. Instruct the end user to enter their own administrative credentials if necessary, and then confirm the UAC prompt.

   **Note:** You are not able to view/interact with the end user’s computer while the UAC prompt is active, so the end user *must* be present.

If you *do* have a set of administrative credentials for the end user’s computer:

1. Select **Elevate using these administrative credentials**.
2. Enter your administrative credentials.
3. If necessary, wait for the end user to confirm the UAC prompt.

   **Note:** You are not able to view/interact with the end user’s computer while the UAC prompt is active, so the end user *must* be present.
By default, the end user’s UAC prompt will look like this (though it may be configured to appear differently, or not at all):

3.5 Transferring files to and from an end user’s computer

VNC Connect allows you to upload files from your computer to the end user’s, and download the end user’s files to your own computer.

1. Click the **Transfer files** button on the VNC Viewer toolbar:

2. The **Remote file browser** dialog opens on your computer. The end user is unable to see this dialog, but they are warned via their chat/activity log that you are transferring files.

   You can navigate the end user’s computer using the folder tree on the left, then right click or use the toolbar to download a file to, or upload a file from, your computer:
3.6 Sending a text-based chat message to an end user

Text-based chat messages can be used to overcome a language barrier or leave an instruction for an end user who has left their desk during a session.

**Note:** Text-based chat messages remain on the end user’s screen after the session has ended, meaning any instructions you leave can be read when they return.

To leave a text-based chat message, click the Chat button on the VNC Viewer toolbar:

Your messages are displayed in the end user’s chat/activity log:

3.7 Rebooting an end user’s Windows computer

You may need to reboot the remote computer to solve the problem. Please note, if you are connected to a Windows computer, you must elevate before doing so, so the session can seamlessly resume. If you do not elevate, you will be disconnected and have to start over with a new session code.

**Note:** It’s not possible to reboot an end user’s Mac computer and seamlessly resume the session in this release. Please reboot as you would normally, and generate a new session code when the end user’s computer powers back on. We hope to introduce automatic resume for Mac soon.

To reboot a remote Windows computer and seamlessly resume the session, use the VNC Viewer toolbar’s **Reboot remote computer** button, rather than the remote computer’s desktop reboot facility:
If you do not have elevated permissions (see Requesting elevated privileges on an end user’s computer), pressing this button will prompt you to elevate the session. This ensures your session will seamlessly resume at the earliest possible opportunity:

![Elevate session permissions for reboot](image)

**Note:** The end user may be prompted to confirm your permissions can be elevated, before their system reboots.

### 4 Ending a session

Once you’ve made the necessary changes to the end user’s computer, you can use the VNC Viewer toolbar to end the session. To do so, click the **End session** button.

![End session button](image)

**Note:** Chat messages remain on the end user’s computer after you disconnect, allowing you to leave instructions if they have left their desk:

![Chat messages](image)

If you wish to reconnect, you must follow the steps in *Generating and entering a session code* in full.
5 Troubleshooting and support

5.1 Accessing your session history

In your RealVNC account, you can review your session history. To do so, visit the RealVNC online portal at www.realvnc.com, sign in using your RealVNC account credentials, and navigate to the Sessions page.

By default, all sessions completed in the last seven days are listed, most recent first. You can use the filters to see earlier sessions.

As well as viewing the session history online, you can download this information as a CSV file if you have an Enterprise subscription.

5.2 Accessing a detailed activity log

With an Enterprise subscription, you are able to drill down into an individual session and view a detailed activity log.

To do this, click the timestamp link for the session, or the three dots at the end of the session row:
The following events are recorded (if they occurred):

- Files transfer operations, including file names, and whether those operations succeeded
- Elevation requests, and whether operations succeeded
- Reboot requests, and whether operations succeeded
- Chat transcripts.

For example:

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017-11-03 11:29:25</td>
<td>Session code generated</td>
<td></td>
</tr>
<tr>
<td>2017-11-03 11:29:38</td>
<td>Session code entered</td>
<td></td>
</tr>
<tr>
<td>2017-11-03 11:29:42</td>
<td>Session started</td>
<td></td>
</tr>
<tr>
<td>2017-11-03 11:30:07</td>
<td>Files transferred</td>
<td>File transfer of Settings.dat completed successfully.</td>
</tr>
<tr>
<td>2017-11-03 11:30:22</td>
<td>Elevation requested</td>
<td></td>
</tr>
<tr>
<td>2017-11-03 11:30:35</td>
<td>Elevation result</td>
<td>User accepted elevation.</td>
</tr>
<tr>
<td>2017-11-03 11:30:35</td>
<td>Session resumed</td>
<td></td>
</tr>
<tr>
<td>2017-11-03 11:30:51</td>
<td>Session ended</td>
<td></td>
</tr>
</tbody>
</table>

You can download this information by clicking the **Download as CSV** link.
5.3 Error messages

An instant support session relies on three prior conditions being met:

1. You and the end user are both connected to the Internet at all times.
2. Neither of you have a proxy server/firewall that is blocking outgoing connections to RealVNC’s services (https://www.realvnc.com/en/connect/docs/realvnc-network-access.html).
3. RealVNC’s services are operational (visit https://realvnc.statuspage.io/).

If the above statements are correct and you still experience issues, see the tables below.

Error messages you may experience:

<table>
<thead>
<tr>
<th>Error message</th>
<th>Description</th>
<th>Fix</th>
</tr>
</thead>
<tbody>
<tr>
<td>There was a problem establishing this</td>
<td>VNC Viewer is unable to communicate with RealVNC’s services.</td>
<td>Ensure your Ethernet cable is plugged in. Otherwise, contact your</td>
</tr>
<tr>
<td>connection.</td>
<td></td>
<td>system administrator.</td>
</tr>
<tr>
<td>Session stopped by the end user.</td>
<td>The end user has pressed their End Session button.</td>
<td>If you need to reconnect, you must follow the instructions in</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Generating and entering a session code in full.</td>
</tr>
<tr>
<td>Timed out waiting for a response from the</td>
<td>VNC Viewer is unable to communicate with the end user’s computer.</td>
<td>Inform the end user their network may be down. Ask them to ensure</td>
</tr>
<tr>
<td>computer</td>
<td></td>
<td>their Ethernet cable is plugged in, or otherwise contact their</td>
</tr>
<tr>
<td></td>
<td></td>
<td>system administrator.</td>
</tr>
<tr>
<td>Timed out waiting for peer to join.</td>
<td>Your 9 digit session code has expired.</td>
<td>Close the dialog and click the Instant support button once more to</td>
</tr>
<tr>
<td></td>
<td></td>
<td>generate a new code.</td>
</tr>
<tr>
<td>Proxy:AuthenticationRequired</td>
<td>You are not authenticated to your proxy server correctly.</td>
<td>Authenticate to your proxy server. If you do not know the</td>
</tr>
<tr>
<td>Proxy:AuthenticationFailed</td>
<td></td>
<td>credentials, contact your system administrator.</td>
</tr>
<tr>
<td>Proxy: &lt;any-other-error&gt;</td>
<td>You are unable to communicate with RealVNC’s services due to your proxy</td>
<td>Contact your system administrator.</td>
</tr>
<tr>
<td></td>
<td>server settings.</td>
<td></td>
</tr>
<tr>
<td>NoMatchingCipherSuites</td>
<td>Your VNC Viewer settings are not compatible with your VNC Connect</td>
<td>Inform your system administrator that VNC Viewer has alwaysMaximum</td>
</tr>
<tr>
<td></td>
<td>subscription.</td>
<td>encryption set, but your team only has a Professional subscription.</td>
</tr>
</tbody>
</table>
Error messages *the end user may experience:*

<table>
<thead>
<tr>
<th>Error message</th>
<th>Description</th>
<th>Fix</th>
</tr>
</thead>
<tbody>
<tr>
<td>The session code does not match the software download</td>
<td>The end user has entered your 9-digit session code correctly, but the disposable app has been downloaded from an incorrect download URL.</td>
<td>Instruct the end user to obtain the app from the download URL in your instant support dialog.</td>
</tr>
<tr>
<td>This version is too old. Please download the software again.</td>
<td>The end user is trying to use an old version of the disposable app.</td>
<td>Instruct the end user to visit your download URL, and download the latest version of the app.</td>
</tr>
<tr>
<td>Incorrect session code entered</td>
<td>The end user has entered your session code incorrectly.</td>
<td>Ensure the end user knows your 9 digit session code, and has entered it correctly.</td>
</tr>
<tr>
<td>Proxy:AuthenticationRequired Proxy:AuthenticationFailed</td>
<td>The end user is not authenticated to their proxy server correctly.</td>
<td>Instruct the end user to authenticate to their proxy server. If they do not know the credentials, have them inform their system administrator.</td>
</tr>
<tr>
<td>Proxy: &lt;any-other-error&gt;</td>
<td>The end user is unable to communicate with RealVNC’s services due to their proxy server settings.</td>
<td>Instruct the end user to contact their system administrator.</td>
</tr>
</tbody>
</table>