

Remote Desktop & VDI — Complete End-User Guide

(Windows, macOS, iOS/Android — RDP to a company PC, RemoteApps/Workspaces, Citrix Workspace, VMware Horizon)

This “Bible-style” manual explains what remote access is, when to use each option, exact setup on all major platforms, display/USB/drive redirection, audio-video guidance, performance tuning, a deep troubleshooting cookbook, and what to send IT. It’s fully descriptive and self-contained (no ticket text embedded). Admin-only items are marked *(Admin)*.

0) Scope & Audience

- Staff who need to work on an internal Windows desktop or standardized VDI desktop/app from offsite or another office.
 - Covers: **RDP** (Remote Desktop to a specific Windows PC), **RemoteApps/Workspaces** (feed of apps/desktops), **Citrix Workspace**, **VMware Horizon**.
 - Assumes your org may require **VPN** and **MFA** before connecting.
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1) What to use—and when

- **RDP to a specific Windows PC** (your office machine):
Best when you must reach *that exact PC* (licensed software/hardware there). Requires that PC be **powered on**, **connected**, and **allowed for Remote Desktop**.
- **RemoteApps / Workspaces** (Azure Virtual Desktop / RDS):
You subscribe to a **workspace URL** and get published **apps/desktops** that run in the datacenter but feel local. Good for standardized apps and roaming users.
- **Citrix Workspace (VDI)**:
Enterprise virtual desktops/apps with strong optimizations (graphics, Teams/Zoom

offload). Good for large fleets, multi-monitor, peripherals.

- **VMware Horizon (VDI):**
Similar to Citrix—full desktops/apps with good graphics/audio and HTML fallback.

2) Pre-flight Checklist (do this before trying to connect)

- **Account & MFA** working; password not expired.
- **Network** is online; for hotels/cafés, complete the **captive portal** *before* launching remote tools.
- **VPN** connected if your org requires it (see your VPN manual).
- **Remote PC (for RDP)** is **on, not asleep**, connected to network, and **Remote Desktop enabled**.
- You have the **computer name/FQDN** (e.g., `PC-123.corp.example.com`) or the **gateway/workspace URL** your org provided.
- If prompted by the client, be ready to **trust company certificates** and **allow** screen/audio/drive access where appropriate.

3) RDP to a Company Windows PC (your own or assigned host)

3.1 Windows → Windows (built-in)

1. Press **Win+R**, type `mstsc`, Enter (opens Remote Desktop Connection).
2. In **Computer**, enter the **FQDN** of your office PC (or the Gateway address if instructed).
3. Click **Show Options**:
 - **User name**: your work account (often `you@company.com`).

- **Display:** choose resolution; tick **Use all my monitors** if needed.
 - **Local Resources:** enable **Clipboard**; optionally **Printers** and specific **Drives** (be mindful of data handling).
 - **Advanced:** set **Connect and don't warn me** only if policy allows; specify **RD Gateway** if your org uses one.
4. Click **Connect** → complete MFA/password prompts → verify you see your remote Windows desktop.
 5. To *save time next time*: click **Save As...** to create a **.rdp** file with your preferences.

3.2 macOS → Windows

- Install Microsoft's **Remote Desktop** client (aka "Windows App" on Mac).
1. Open the app → **Add PC** (for direct PC) or **Add Workspace** (for published resources).
 2. For a direct PC: enter **PC name** (FQDN), choose **User account** (or ask every time).
 3. **Display & Devices:** choose **Fit to window** or **Native** scaling; decide on **Microphone**, **Camera**, **Clipboard**, **Storage** redirection.
 4. Double-click the new tile to connect.

3.3 Keep the host reachable (RDP)

- The remote PC must **stay awake** (ask IT to set power policy or enable "wake for network").
 - You must be in the **Remote Desktop Users** group on that PC (Admin task).
 - **Network Level Authentication (NLA)** is usually required—use current clients and valid credentials.
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4) RemoteApps & Workspaces (feed of apps/desktops)

- If your org provides a **Workspace URL**:
 1. Windows: open **Remote Desktop** → **Workspaces** → **Subscribe** and paste the workspace URL; sign in.
 2. macOS: **Add Workspace** → paste URL; sign in.
 - Your published **apps/desktops** appear as tiles. Launch them like local apps; they run in the datacenter and respect your **clipboard**, **printers**, and (optionally) **local drives** per policy.
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5) Citrix Workspace (VDI)

1. Launch **Citrix Workspace**.
 2. If prompted, add your **Workspace URL** and sign in (MFA may apply).
 3. Your **Apps** and **Desktops** appear; **star** favorites.
 4. **Display**: use **Full-screen**; enable **multi-monitor** in preferences if supported; pick primary monitor.
 5. **File access**: first launch may ask to allow access to **local files**—allow **Read-only** or **Full** only if permitted.
 6. **USB/Peripherals**: some devices (headsets, smart cards) can be redirected; others are optimized natively by Citrix (e.g., Teams offload).
 7. If performance stutters: reduce resolution in the Citrix session, close heavy local apps, or switch networks (Ethernet beats Wi-Fi).
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6) VMware Horizon (VDI)

1. Launch **Horizon Client**.
2. Click **Add Server** → enter your **Connection Server** (e.g., horizon.company.com).

3. Sign in; choose your **Desktop** or **App** pool.
 4. **Display**: choose **All monitors**, **Full-screen**, or a **Custom** size.
 5. **Protocols**: **Blast** or **PCoIP**—Blast often performs best on varied networks; try the other if you see artifacts.
 6. **USB**: enable redirection only when necessary; for storage, prefer cloud drives in-session (OneDrive/SharePoint) rather than raw USB mapping for security.
 7. **HTML fallback**: you can often connect via a browser if the client isn't installed (features may be limited).
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7) Clipboard, Drives, Printers, and USB (what's allowed)

- **Clipboard**: Copy/paste text usually works. Large file copy may be blocked; use OneDrive/SharePoint inside the session to move files.
 - **Drives**: Map local drives only if policy permits; otherwise use cloud shares to move data.
 - **Printers**: Your default printer may map into the session; for reliable office printing use the **in-session** corporate print queues.
 - **USB**: Only redirect devices that are approved and necessary; never redirect unknown USB. Security tools may block redirection.
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8) Audio/Video Calls in Remote Sessions

- **RDP**: Prefer to run Teams/Zoom on your **local** device; pure RDP does not natively offload A/V well.
- **Citrix/VMware**: Use the vendor's **Teams/Zoom optimization** if provided; you'll see better A/V with lower CPU.
- For high-stakes meetings: use **Ethernet**, close other bandwidth-heavy apps, and reduce the remote session resolution if needed.

9) Performance & Display Optimization

- **Go full-screen** and match resolution to your monitor; avoid odd scales (e.g., 125% on macOS Retina can blur).
- For flaky Wi-Fi, prefer **5 GHz/6 GHz** or **Ethernet**.
- In RDP **Experience** settings, disable wallpaper/animations on slow links.
- If you see **black screen** on connect: try a smaller starting resolution, then increase inside the session.
- Multi-monitor: RDP supports `/multimon`; ensure your client setting uses **All monitors** if allowed.

10) Troubleshooting Cookbook (symptom → fix)

10.1 “Remote Desktop can’t connect” (or “Gateway unavailable”)

- Confirm **VPN** if required; complete captive portal first.
- Verify the **hostname/FQDN** and that the remote PC is **powered on**.
- Ensure your **account** has permission (Remote Desktop Users) and that **Remote Desktop is enabled** on the host (Admin task).
- Try the **IP address** (temporary test) to rule out DNS issues.
- On macOS client failures, remove and re-add the PC/workspace; check certificate prompts.

10.2 Connects, then black screen or disconnects

- Lower the **resolution** or start windowed then full-screen.
- Disable **bitmap caching** and **persistent cache** (RDP options) and retry.

- Update the RDP/Citrix/Horizon client.
- Switch protocols (Horizon: Blast ↔ PCoIP).
- Try another network (hotspot) to rule out local firewall/ISP.

10.3 Credentials rejected / endless MFA prompts

- Re-enter **UPN** (you@company.com), not a short domain\User unless required.
- If you recently changed your password, sign out/in locally and try again.
- Delete saved credentials in the client and reconnect.

10.4 Can't find my office PC

- Ask a colleague at the office to confirm it's **on** and **on network**.
- If it sleeps, request **keep awake** policy or out-of-band power controls from IT.

10.5 Local files won't copy into session

- Use **OneDrive/SharePoint inside the session** instead of clipboard/drive mapping.
- Zip large folders before upload; avoid enormous single files over slow links.

10.6 Teams/Zoom laggy inside session

- Use **local** Teams/Zoom on your device if you're on RDP.
- On Citrix/VMware, ensure **optimization packages** are installed; then try lower session resolution and close background apps.

10.7 Multi-monitor not working

- Confirm the client is set to **Use all monitors**.

- Some stacks limit the number or total pixels; try **two displays** first, then add a third if supported.
- Re-order monitors in OS display settings (odd orders can confuse some clients).

10.8 USB device not recognized in VDI

- Redirect only once; unplug/replug after connecting.
- Some device classes (security storage) are **blocked by policy**; use approved alternatives.

10.9 Certificate warning

- Check the server name and fingerprint belong to your org. If anything looks off, **cancel** and escalate. Gateways should present **trusted** certificates.
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11) Security & Good Practice

- **Lock** or **log off** remote sessions when done; don't leave them open overnight.
 - **Save files** to company locations (OneDrive/SharePoint) rather than local redirected drives.
 - Don't store credentials in **.rdp** files unless policy allows.
 - Never approve unexpected MFA prompts.
 - Keep clients **up to date** (RDP app, Citrix Workspace, Horizon Client).
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12) What to Send IT (fastest resolution)

- **Who/where**: your name, time zone, callback.

- **What you're using:** RDP / Workspace / Citrix / Horizon; client version; device OS; on VPN or not.
 - **Target:** PC name/FQDN (for RDP) or Workspace/Server URL (Citrix/Horizon).
 - **When it started** and whether others are affected.
 - **Exact error text** and **screenshots**.
 - **Network:** home/office/hotel; Wi-Fi band or Ethernet; captive portal completed?
 - **Tried already:** VPN reconnect, alternate network, lower resolution, client update, cleared caches, saved creds removed.
 - **Session time** and any **log bundles** if requested (Citrix/Horizon clients have log export options).
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13) Paste-able Quick Replies (no links)

- **RDP basic:** "Open Remote Desktop → Computer = **PC-NAME .company .com** → Show Options → enable Clipboard; connect; use your UPN to sign in."
 - **Use all monitors:** "In the RDP/Citrix/Horizon client, set Display to use **All monitors** or Full-screen; start smaller if you get a black screen, then expand."
 - **After password change:** "Remove saved credentials in the client and sign in again with **you@company .com**."
 - **Files into VDI:** "Upload via **OneDrive/SharePoint** inside the session instead of clipboard—more reliable and compliant."
 - **Poor call quality:** "Run Teams/Zoom **locally** for RDP; for VDI use the **optimization** plugin, drop session resolution, and prefer **Ethernet**."
 - **Gateway unreachable:** "Complete any hotel/café **captive portal** first, then connect VPN (if required) and retry the client."
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Final Notes

- Most connection failures are **network/VPN** or **host availability**; confirm those first.
- For stubborn display issues, **reduce resolution**, **disable caches**, and **update the client**—these resolve many black-screen cases.
- Keep this manual next to your **VPN** and **Network & Wi-Fi** guides for an end-to-end remote-work toolkit