

**NAME**

xfreerdp - FreeRDP X11 client

**SYNOPSIS**

**xfreerdp** [file] [options] [/v:server[:port]]

**DESCRIPTION**

**xfreerdp** is an X11 Remote Desktop Protocol (RDP) client which is part of the FreeRDP project. An RDP server is built-in to many editions of Windows. Alternative servers included xrdp and VRDP (VirtualBox).

**OPTIONS**

**/a:addin**[,options], **/addin:addin**[,options]

Addin

**/action-script:file-name**

Action script (default:~/config/freerdp/action.sh)

**/admin**, **/console**

Admin (or console) session

**+aero**

desktop composition (default:off)

**/app:path** or **||alias**

Remote application program

**/app-cmd:parameters**

Remote application command-line parameters

**/app-file:file-name**

File to open with remote application

**/app-guid:app-guid**

Remote application GUID

**/app-icon:icon-path**

Remote application icon for user interface

**/app-name:app-name**

Remote application name for user interface

**/app-workdir:***workspace path*

Remote application workspace path

**/assistance:***password*

Remote assistance password

**/auto-request-control:**

Automatically request remote assistance input control

**+async-channels**

Asynchronous channels (experimental) (default:off)

**+async-input**

Asynchronous input (default:off)

**+async-update**

Asynchronous update (default:off)

**/audio-mode:***mode*

Audio output mode

**+auth-only**

Authenticate only (default:off)

**-authentication**

Authentication (experimental) (default:on)

**+auto-reconnect**

Automatic reconnection (default:off)

**/auto-reconnect-max-retries:***retries*

Automatic reconnection maximum retries, 0 for unlimited [0,1000]

**+bitmap-cache**

bitmap cache (default:off)

**/bpp:***depth*

Session bpp (color depth) (default:16)

**/buildconfig**

Print the build configuration

**/cert:**[deny,ignore,name:*name*,tofu,fingerprint:*hash:hash as hex*[,fingerprint:*hash:another hash*]]

Certificate accept options. Use with care! \* deny ... Automatically abort connection if the certificate does not match, no user interaction. \* ignore ... Ignore the certificate checks altogether (overrides all other options) \* name ... Use the alternate <name> instead of the certificate subject to match locally stored certificates \* tofu ... Accept certificate unconditionally on first connect and deny on subsequent connections if the certificate does not match \* fingerprints ... A list of certificate hashes that are accepted unconditionally for a connection

**/cert-deny**

[deprecated, use /cert:deny] Automatically abort connection for any certificate that can not be validated.

**/cert-ignore**

[deprecated, use /cert:ignore] Ignore certificate

**/cert-name:***name*

[deprecated, use /cert:name:<name>] Certificate name

**/cert-tofu**

[deprecated, use /cert:tofu] Automatically accept certificate on first connect

**/client-build-number:***number*

Client Build Number sent to server (influences smartcard behaviour, see [MS-RDPESC])

**/client-hostname:***name*

Client Hostname to send to server

**/clipboard:**[use-selection:*atom*]

Redirect clipboard. \* use-selection:<atom> ... (X11) Specify which X selection to access. Default is CLIPBOARD. PRIMARY is the X-style middle-click selection. (default:on)

**/codec-cache:**[rfx|nsc|jpeg]

Bitmap codec cache

**-compression, -z**

compression (default:on)

**/compression-level:***level*

Compression level (0,1,2)

**+credentials-delegation**

credentials delegation (default:off)

**/d:***domain*

Domain

**-decorations**

Window decorations (default:on)

**/disp**

Display control

**/drive:***name,path*

Redirect directory <path> as named share <name>. Hotplug support is enabled with `/drive:hotplug,*`. This argument provides the same function as "Drives that I plug in later" option in MSTSC.

**+drives**

Redirect all mount points as shares (default:off)

**/dvc:***channel[,options]*

Dynamic virtual channel

**/dynamic-resolution**

Send resolution updates when the window is resized

**/echo, /echo**

Echo channel

**-encryption**

Encryption (experimental) (default:on)

**/encryption-methods:***[40,][56,][128,][FIPS]*

RDP standard security encryption methods

**/f**

Fullscreen mode (<Ctrl>+<Alt>+<Enter> toggles fullscreen)

**-fast-path**

fast-path input/output (default:on)

**+fipsmode**

FIPS mode (default:off)

**/floatbar**[:sticky:[on|off],default:[visible|hidden],show:[always|fullscreen|window]]

floatbar is disabled by default (when enabled defaults to sticky in fullscreen mode)

**-fonts**

smooth fonts (ClearType) (default:on)

**/frame-ack**:*number*

Number of frame acknowledgement

**/from-stdin**[:force]

Read credentials from stdin. With <force> the prompt is done before connection, otherwise on server request.

**/g:gateway**[:*port*]

Gateway Hostname

**/gateway-usage-method**:[direct|detect], **/gum**:[direct|detect]

Gateway usage method

**/gd**:*domain*

Gateway domain

**/gdi**:sw|hw

GDI rendering

**/geometry**

Geometry tracking channel

**+gestures**

Consume multitouch input locally (default:off)

**/gfx**[:RFX]

RDP8 graphics pipeline

**+gfx-progressive**

RDP8 graphics pipeline using progressive codec (default:off)

**+gfx-small-cache**

RDP8 graphics pipeline using small cache mode (default:off)

**+gfx-thin-client**

RDP8 graphics pipeline using thin client mode (default:off)

**+glyph-cache**

Glyph cache (experimental) (default:off)

**/gp:password**

Gateway password

**-grab-keyboard**

Grab keyboard (default:on)

**-grab-mouse**

Grab mouse (default:on)

**/gt:[rpc|http[,no-websockets]]|auto[,no-websockets]]**

Gateway transport type

**/gu:[[domain\]user|user[@domain]]**

Gateway username

**/gat:access token**

Gateway Access Token

**/h:height**

Height (default:768)

**-heartbeat**

Support heartbeat PDUs (default:on)

**/help, /?**

Print help

**+home-drive**

Redirect user home as share (default:off)

**/ipv6, /6**

Prefer IPv6 AAA record over IPv4 A record

**/kbd:Oxid or name**

Keyboard layout

**/kbd-lang:Oxid**

Keyboard active language identifier

**/kbd-fn-key:value**

Function key value

**/kbd-list**

List keyboard layouts

**/kbd-lang-list**

List keyboard languages

**/kbd-remap:**List of *key=value*,... pairs to remap scancodes

Keyboard scancode remapping

**/kbd-subtype:id**

Keyboard subtype

**/kbd-type:id**

Keyboard type

**/load-balance-info:info-string**

Load balance info

**/log-filters:tag:level[,tag:level[,...]]**

Set logger filters, see wLog(7) for details

**/log-level:[OFF|FATAL|ERROR|WARN|INFO|DEBUG|TRACE]**

Set the default log level, see wLog(7) for details

**/max-fast-path-size:size**

Specify maximum fast-path update size

**/max-loop-time:time**

Specify maximum time in milliseconds spend treating packets

**+menu-anim**

menu animations (default:off)

**/microphone[:[sys:sys,][dev:dev,][format:format,][rate:rate,][channel:channel]],****/mic[:[sys:sys,][dev:dev,][format:format,][rate:rate,][channel:channel]]**

Audio input (microphone)

**/monitor-list**

List detected monitors

**/monitors:id[,id[,...]]**

Select monitors to use

**-mouse-motion**

Send mouse motion (default:on)

**/multimon[:force]**

Use multiple monitors

**+multitouch**

Redirect multitouch input (default:off)

**+multitransport**

Support multitransport protocol (default:off)

**-nego**

protocol security negotiation (default:on)

**/network:[modem|broadband|broadband-low|broadband-high|wan|lan|auto]**

Network connection type

**/nsc, /nscodc**

NSCodec support

**+offscreen-cache**

offscreen bitmap cache (default:off)



**/orientation:***[0|90|180|270]*

Orientation of display in degrees

**+old-license**

Use the old license workflow (no CAL and hwId set to 0) (default:off)

**/p:***password*

Password

**/parallel:***[name[,path]]*

Redirect parallel device

**/parent-window:***window-id*

Parent window id

**+password-is-pin**

Use smart card authentication with password as smart card PIN (default:off)

**/pcb:***blob*

Preconnection Blob

**/pcid:***id*

Preconnection Id

**/pheight:***height*

Physical height of display (in millimeters)

**/play-rfx:***pcap-file*

Replay rfx pcap file

**/port:***number*

Server port

**-suppress-output**

suppress output when minimized (default:on)

**+print-reconnect-cookie**

Print base64 reconnect cookie after connecting (default:off)

**/printer:***[name[,driver]]*

Redirect printer device

**/proxy:***[proto://][user:password@]host:port*

Proxy settings: override env. var (see also environment variable below). Protocol "socks5" should be given explicitly where "http" is default.

**/pth:***password-hash, /pass-the-hash:password-hash*

Pass the hash (restricted admin mode)

**/pwidth:***width*

Physical width of display (in millimeters)

**/rdp2tcp:***executable path[:arg...]*

TCP redirection

**/reconnect-cookie:***base64-cookie*

Pass base64 reconnect cookie to the connection

**/redirect-prefer:***FQDN/IP/NETBIOS,[...]*

Override the preferred redirection order

**/relax-order-checks, /relax-order-checks**

Do not check if a RDP order was announced during capability exchange, only use when connecting to a buggy server

**/restricted-admin, /restrictedAdmin**

Restricted admin mode

**/rfx**

RemoteFX

**/rfx-mode:***[image|video]*

RemoteFX mode

**/scale:***[100|140|180]*

Scaling factor of the display (default:100)

**/scale-desktop:***percentage*

Scaling factor for desktop applications (value between 100 and 500) (default:100)

**/scale-device:**100|140|180

Scaling factor for app store applications (default:100)

**/sec:**[rdp|tls|nla|ext]

Force specific protocol security

**+sec-ext**

NLA extended protocol security (default:off)

**-sec-nla**

NLA protocol security (default:on)

**-sec-rdp**

RDP protocol security (default:on)

**-sec-tls**

TLS protocol security (default:on)

**/serial[:name[,path[,driver[,permissive]]]], /tty[:name[,path[,driver[,permissive]]]]**

Redirect serial device

**/shell:***shell*

Alternate shell

**/shell-dir:***dir*

Shell working directory

**/size:***widthxheight* or *percent%*[wh]

Screen size (default:1024x768)

**/smart-sizing[:widthxheight]**

Scale remote desktop to window size

**/smartcard[:str[,str...]]**

Redirect the smartcard devices containing any of the <str> in their names.

**/smartcard-logon**

Activates Smartcard Logon authentication. (EXPERIMENTAL: NLA not supported)

**/sound[:[sys:sys,][dev:dev,][format:format,][rate:rate,][channel:channel,][latency:latency,][quality:quality]],**

**/audio**[:*sys:sys*,][*dev:dev*,][*format:format*,][*rate:rate*,][*channel:channel*,][*latency:latency*,][*quality:quality*]  
Audio output (sound)

**/span**  
Span screen over multiple monitors

**/spn-class**:*service-class*  
SPN authentication service class

**/ssh-agent, /ssh-agent**  
SSH Agent forwarding channel

**/t:title, /title**:*title*  
Window title

**-themes**  
themes (default:on)

**/timeout**:*time in ms*, **/timeout**:*time in ms*  
Advanced setting for high latency links: Adjust connection timeout, use if you encounter timeout failures with your connection (default:9000)

**/tls-ciphers**:*[netmon|ma|ciphers]*  
Allowed TLS ciphers

**/tls-seclevel**:*level*  
TLS security level - defaults to 1 (default:1)

**+enforce-tls1\_2**  
Force use of TLS1.2 for connection. Some servers have a buggy TLS version negotiation and might fail without this (default:off)

**-toggle-fullscreen**  
Alt+Ctrl+Enter to toggle fullscreen (default:on)

**/tune**:*setting:value,setting:value*  
[experimental] directly manipulate freerdp settings, use with extreme caution! (default:)

**/tune-list**  
Print options allowed for /tune

**/u:***[[domain\]user|user[@domain]]*

Username

**+unmap-buttons**

Let server see real physical pointer button (default:off)

**/v:***server[:port]*

Server hostname

**/vc:***channel[,options]*

Static virtual channel

**/version**

Print version

**/video**

Video optimized remoting channel

**/vmconnect:***vmid]*

Hyper-V console (use port 2179, disable negotiation)

**/w:***width*

Width (default:1024)

**-wallpaper**

wallpaper (default:on)

**+window-drag**

full window drag (default:off)

**/window-position:***xposxypos*

window position

**/wm-class:***class-name*

Set the WM\_CLASS hint for the window instance

**/workarea**

Use available work area

## ENVIRONMENT VARIABLES

wlog environment variable

xfreerdp uses wLog as its log facility, you can refer to the corresponding man page (wlog(7)) for more informations. Arguments passed via the */log-level* or */log-filters* have precedence over the environment variables.

## EXAMPLES

### **xfreerdp connection.rdp /p:Pwd123! /f**

Connect in fullscreen mode using a stored configuration *connection.rdp* and the password *Pwd123!*

### **xfreerdp /u:USER /size:50%h /v:rdp.contoso.com**

Connect to host *rdp.contoso.com* with user *USER* and a size of *50 percent of the height*. If width (w) is set instead of height (h) like */size:50%w*. 50 percent of the width is used.

### **xfreerdp /u:CONTOSO\JohnDoe /p:Pwd123! /v:rdp.contoso.com**

Connect to host *rdp.contoso.com* with user *CONTOSO\JohnDoe* and password *Pwd123!*

### **xfreerdp /u:JohnDoe /p:Pwd123! /w:1366 /h:768 /v:192.168.1.100:4489**

Connect to host *192.168.1.100* on port *4489* with user *JohnDoe*, password *Pwd123!*. The screen width is set to *1366* and the height to *768*

### **xfreerdp /u:JohnDoe /p:Pwd123! /vmconnect:C824F53E-95D2-46C6-9A18-23A5BB403532 /v:192.168.1.100**

Establish a connection to host *192.168.1.100* with user *JohnDoe*, password *Pwd123!* and connect to Hyper-V console (use port 2179, disable negotiation) with VMID *C824F53E-95D2-46C6-9A18-23A5BB403532*

### **+clipboard**

Activate clipboard redirection

### **/drive:home,/home/user**

Activate drive redirection of */home/user* as home drive

### **/smartcard:<device>**

Activate smartcard redirection for device *device*

### **/printer:<device>,<driver>**

Activate printer redirection for printer *device* using driver *driver*

### **/serial:<device>**

Activate serial port redirection for port *device*

**/parallel:<device>**

Activate parallel port redirection for port *device*

**/sound:sys:alsa**

Activate audio output redirection using device *sys:alsa*

**/microphone:sys:alsa**

Activate audio input redirection using device *sys:alsa*

**/multimedia:sys:alsa**

Activate multimedia redirection using device *sys:alsa*

**/usb:id,dev:054c:0268**

Activate USB device redirection for the device identified by *054c:0268*

**LINKS**

**<http://www.freerdp.com/>**

**AUTHOR**

The FreeRDP Team