

SSH Tunneling with Proxy

```
% GIT_TRACE=1 GIT_CURL_VERBOSE=1 git push
21:32:14.216308 exec-cmd.c:139          trace: resolved executable path from Darwin stack: /Applications/Xcode
21:32:14.216594 exec-cmd.c:238          trace: resolved executable dir: /Applications/Xcode.app/Contents/Devel
21:32:14.216949 git.c:460                trace: built-in: git push
21:32:14.218655 run-command.c:655       trace: run_command: unset GIT_PREFIX; ssh git@github.com 'git-receive
Everything up-to-date
```

I experienced slow git push operations, with delays occurring during the ssh git@github.com phase. To address this, I configured SSH to use a proxy.

To use corkscrew for SSH tunneling, you'll first need to install it. On macOS, you can use Homebrew with the command: brew install corkscrew.

~/.ssh/config:

```
Host *
    UseKeychain yes
    AddKeysToAgent yes
    IdentityFile ~/.ssh/id_rsa
    ProxyCommand corkscrew localhost 7890 %h %p
```

Log:

```
% ssh root@138.201.174.0 -vvv
**Proxy Settings Detected:**
- HTTP_PROXY: http://127.0.0.1:7890
- HTTPS_PROXY: http://127.0.0.1:7890
```

```
OpenSSH_9.8p1, LibreSSL 3.3.6
debug1: Reading configuration data /Users/lzwjava/.ssh/config
debug1: /Users/lzwjava/.ssh/config line 1: Applying options for *
debug1: Reading configuration data /etc/ssh/ssh_config
debug1: /etc/ssh/ssh_config line 21: include /etc/ssh/ssh_config.d/* matched no files
debug1: /etc/ssh/ssh_config line 54: Applying options for *
debug2: resolve_canonicalize: hostname 138.201.174.0 is address
debug3: expanded UserKnownHostsFile '~/.ssh/known_hosts' -> '/Users/lzwjava/.ssh/known_hosts'
debug3: expanded UserKnownHostsFile '~/.ssh/known_hosts2' -> '/Users/lzwjava/.ssh/known_hosts2'
debug1: Authenticator provider $SSH_SK_PROVIDER did not resolve; disabling
debug3: channel_clear_timeouts: clearing
debug1: Executing proxy command: exec corkscrew localhost 7890 138.201.174.0 22
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debug1: identity file /Users/lzwjava/.ssh/id_rsa type 0
debug1: identity file /Users/lzwjava/.ssh/id_rsa-cert type -1
debug1: Local version string SSH-2.0-OpenSSH_9.8
debug1: Remote protocol version 2.0, remote software version OpenSSH_9.6p1 Ubuntu-3ubuntu13.5
debug1: compat_banner: match: OpenSSH_9.6p1 Ubuntu-3ubuntu13.5 pat OpenSSH* compat 0x04000000
debug2: fd 5 setting O_NONBLOCK
debug2: fd 4 setting O_NONBLOCK
debug1: Authenticating to 138.201.174.0:22 as 'root'
debug3: record_hostkey: found key type ED25519 in file /Users/lzwjava/.ssh/known_hosts:164
debug3: record_hostkey: found key type RSA in file /Users/lzwjava/.ssh/known_hosts:165
debug3: record_hostkey: found key type ECDSA in file /Users/lzwjava/.ssh/known_hosts:166
debug3: load_hostkeys_file: loaded 3 keys from 138.201.174.0
debug1: load_hostkeys: fopen /Users/lzwjava/.ssh/known_hosts2: No such file or directory
debug1: load_hostkeys: fopen /etc/ssh/ssh_known_hosts: No such file or directory
debug1: load_hostkeys: fopen /etc/ssh/ssh_known_hosts2: No such file or directory
debug3: order_hostkeyalgs: have matching best-preference key type ssh-ed25519-cert-v01@openssh.com, using Host
debug3: send packet: type 20
debug1: SSH2_MSG_KEXINIT sent
debug3: receive packet: type 20
debug1: SSH2_MSG_KEXINIT received
debug2: local client KEXINIT proposal
debug2: KEX algorithms: sntrup761x25519-sha512@openssh.com,curve25519-sha256,curve25519-sha256@libssh.org,ecdh
debug2: host key algorithms: ssh-ed25519-cert-v01@openssh.com,ecdsa-sha2-nistp256-cert-v01@openssh.com,ecdsa-s
debug2: ciphers ctos: chacha20-poly1305@openssh.com,aes128-ctr,aes192-ctr,aes256-ctr,aes128-gcm@openssh.com,ae
debug2: ciphers stoc: chacha20-poly1305@openssh.com,aes128-ctr,aes192-ctr,aes256-ctr,aes128-gcm@openssh.com,ae
debug2: MACs ctos: umac-64-etm@openssh.com,umac-128-etm@openssh.com,hmac-sha2-256-etm@openssh.com,hmac-sha2-5
debug2: MACs stoc: umac-64-etm@openssh.com,umac-128-etm@openssh.com,hmac-sha2-256-etm@openssh.com,hmac-sha2-5
debug2: compression ctos: none,zlib@openssh.com,zlib
debug2: compression stoc: none,zlib@openssh.com,zlib
debug2: languages ctos:
debug2: languages stoc:
debug2: first_kex_follows 0
debug2: reserved 0
debug2: peer server KEXINIT proposal
debug2: KEX algorithms: sntrup761x25519-sha512@openssh.com,curve25519-sha256,curve25519-sha256@libssh.org,ecdh
debug2: host key algorithms: rsa-sha2-512,rsa-sha2-256,ecdsa-sha2-nistp256,ssh-ed25519
debug2: ciphers ctos: chacha20-poly1305@openssh.com,aes128-ctr,aes192-ctr,aes256-ctr,aes128-gcm@openssh.com,ae
debug2: ciphers stoc: chacha20-poly1305@openssh.com,aes128-ctr,aes192-ctr,aes256-ctr,aes128-gcm@openssh.com,ae
debug2: MACs ctos: umac-64-etm@openssh.com,umac-128-etm@openssh.com,hmac-sha2-256-etm@openssh.com,hmac-sha2-5
debug2: MACs stoc: umac-64-etm@openssh.com,umac-128-etm@openssh.com,hmac-sha2-256-etm@openssh.com,hmac-sha2-5

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debug2: compression ctos: none,zlib@openssh.com
debug2: compression stoc: none,zlib@openssh.com
debug2: languages ctos:
debug2: languages stoc:
debug2: first_kex_follows 0
debug2: reserved 0
debug3: kex_choose_conf: will use strict KEX ordering
debug1: kex: algorithm: sntrup761x25519-sha512@openssh.com
debug1: kex: host key algorithm: ssh-ed25519
debug1: kex: server->client cipher: chacha20-poly1305@openssh.com MAC: <implicit> compression: none
debug1: kex: client->server cipher: chacha20-poly1305@openssh.com MAC: <implicit> compression: none
debug3: send packet: type 30
debug1: expecting SSH2_MSG_KEX_ECDH_REPLY
debug3: receive packet: type 31
debug1: SSH2_MSG_KEX_ECDH_REPLY received
debug1: Server host key: ssh-ed25519 SHA256:+5SaMkJXG9yZrsYjXgxFfRZpzb6qjc/arFG2Nk4Vv48
debug3: record_hostkey: found key type ED25519 in file /Users/lzwjava/.ssh/known_hosts:164
debug3: record_hostkey: found key type RSA in file /Users/lzwjava/.ssh/known_hosts:165
debug3: record_hostkey: found key type ECDSA in file /Users/lzwjava/.ssh/known_hosts:166
debug3: load_hostkeys_file: loaded 3 keys from 138.201.174.0
debug1: load_hostkeys: fopen /Users/lzwjava/.ssh/known_hosts2: No such file or directory
debug1: load_hostkeys: fopen /etc/ssh/ssh_known_hosts: No such file or directory
debug1: load_hostkeys: fopen /etc/ssh/ssh_known_hosts2: No such file or directory
debug1: Host '138.201.174.0' is known and matches the ED25519 host key.
debug1: Found key in /Users/lzwjava/.ssh/known_hosts:164
debug3: send packet: type 21
debug1: ssh_packet_send2_wrapped: resetting send seqnr 3
debug2: ssh_set_newkeys: mode 1
debug1: rekey out after 134217728 blocks
debug1: SSH2_MSG_NEWKEYS sent
debug1: Sending SSH2_MSG_EXT_INFO
debug3: send packet: type 7
debug1: expecting SSH2_MSG_NEWKEYS
debug3: receive packet: type 21
debug1: ssh_packet_read_poll2: resetting read seqnr 3
debug1: SSH2_MSG_NEWKEYS received
debug2: ssh_set_newkeys: mode 0
debug1: rekey in after 134217728 blocks
debug2: KEX algorithms: sntrup761x25519-sha512@openssh.com,curve25519-sha256,curve25519-sha256@libssh.org,ecdh
debug2: host key algorithms: ssh-ed25519-cert-v01@openssh.com,ecdsa-sha2-nistp256-cert-v01@openssh.com,ecdsa-s

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debug2: ciphers ctos: chacha20-poly1305@openssh.com,aes128-ctr,aes192-ctr,aes256-ctr,aes128-gcm@openssh.com,a
debug2: ciphers stoc: chacha20-poly1305@openssh.com,aes128-ctr,aes192-ctr,aes256-ctr,aes128-gcm@openssh.com,a
debug2: MACs ctos: umac-64-etm@openssh.com,umac-128-etm@openssh.com,hmac-sha2-256-etm@openssh.com,hmac-sha2-5
debug2: MACs stoc: umac-64-etm@openssh.com,umac-128-etm@openssh.com,hmac-sha2-256-etm@openssh.com,hmac-sha2-5
debug2: compression ctos: none,zlib@openssh.com,zlib
debug2: compression stoc: none,zlib@openssh.com,zlib
debug2: languages ctos:
debug2: languages stoc:
debug2: first_kex_follows 0
debug2: reserved 0
debug3: send packet: type 5
debug3: receive packet: type 7
debug1: SSH2_MSG_EXT_INFO received
debug3: kex_input_ext_info: extension server-sig-algs
debug1: kex_ext_info_client_parse: server-sig-algs=<ssh-ed25519,ecdsa-sha2-nistp256,ecdsa-sha2-nistp384,ecdsa-
debug3: kex_input_ext_info: extension publickey-hostbound@openssh.com
debug1: kex_ext_info_check_ver: publickey-hostbound@openssh.com=<0>
debug3: kex_input_ext_info: extension ping@openssh.com
debug1: kex_ext_info_check_ver: ping@openssh.com=<0>
debug3: receive packet: type 6
debug2: service_accept: ssh-userauth
debug1: SSH2_MSG_SERVICE_ACCEPT received
debug3: send packet: type 50
debug3: receive packet: type 7
debug1: SSH2_MSG_EXT_INFO received
debug3: kex_input_ext_info: extension server-sig-algs
debug1: kex_ext_info_client_parse: server-sig-algs=<ssh-ed25519,ecdsa-sha2-nistp256,ecdsa-sha2-nistp384,ecdsa-
debug3: receive packet: type 51
debug1: Authentications that can continue: publickey,password
debug3: start over, passed a different list publickey,password
debug3: preferred publickey,keyboard-interactive,password
debug3: authmethod_lookup publickey
debug3: remaining preferred: keyboard-interactive,password
debug3: authmethod_is_enabled publickey
debug1: Next authentication method: publickey
debug3: ssh_get_authentication_socket_path: path '/private/tmp/com.apple.launchd.cTjjogIh4V/Listeners'
debug1: get_agent_identities: bound agent to hostkey
debug1: get_agent_identities: agent returned 3 keys
debug1: Will attempt key: /Users/lzwjava/.ssh/id_rsa RSA SHA256:bF6g9+hPW6crim36xewb/OPv1/Y34 explicit agent
debug1: Will attempt key: lzwjava@Zhiweis-MacBook-Air.local RSA SHA256:ibpUGVDyOYKQOQArPUs5ZSnpOoECaZJWSPWathO

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debug1: Will attempt key: /Users/lzwjava/Downloads/LightsailDefaultKey-ap-northeast-1.pem RSA SHA256:AQCwUpsE
debug2: pubkey_prepare: done
debug1: Offering public key: /Users/lzwjava/.ssh/id_rsa RSA SHA256:bF6g9+hPW6crim36xewb/OPv1/Y34 explicit agent
debug3: send packet: type 50
debug2: we sent a publickey packet, wait for reply
debug3: receive packet: type 60
debug1: Server accepts key: /Users/lzwjava/.ssh/id_rsa RSA SHA256:bF6g9+hPW6crim36xewb/OPv1/Y34 explicit agent
debug3: sign_and_send_pubkey: using publickey-hostbound-v00@openssh.com with RSA SHA256:bF6g9+hPW6crim36xewb/OPv1/Y34
debug3: sign_and_send_pubkey: signing using rsa-sha2-512 SHA256:bF6g9+hPW6crim36xewb/OPv1/Y34
debug3: send packet: type 50
debug3: receive packet: type 52
Authenticated to 138.201.174.0 (via proxy) using "publickey".
debug1: channel 0: new session [client-session] (inactive timeout: 0)
debug3: ssh_session2_open: channel_new: 0
debug2: channel 0: send open
debug3: send packet: type 90
debug1: Requesting no-more-sessions@openssh.com
debug3: send packet: type 80
debug1: Entering interactive session.
debug1: pledge: filesystem
debug3: client_repledge: enter
debug3: receive packet: type 80
debug1: client_input_global_request: rtype hostkeys-00@openssh.com want_reply 0
debug3: client_input_hostkeys: received RSA key SHA256:iw5lLSMAuL30RZCue+w7sbdXVODI/gJ+Jwua+mmBVGw
debug3: client_input_hostkeys: received ECDSA key SHA256:XKwEiSX70VqFOFCxJ0sU1/Au0bbyOSUaaQz/9WSe8Gc
debug3: client_input_hostkeys: received ED25519 key SHA256:+5SaMkJXG9yZrsYjXgxFfRZpzb6qjc/arFG2Nk4Vv48
debug1: client_input_hostkeys: searching /Users/lzwjava/.ssh/known_hosts for 138.201.174.0 / (none)
debug3: hostkeys_foreach: reading file "/Users/lzwjava/.ssh/known_hosts"
debug3: hostkeys_find: found ssh-ed25519 key at /Users/lzwjava/.ssh/known_hosts:164
debug3: hostkeys_find: found ssh-rsa key at /Users/lzwjava/.ssh/known_hosts:165
debug3: hostkeys_find: found ecdsa-sha2-nistp256 key at /Users/lzwjava/.ssh/known_hosts:166
debug1: client_input_hostkeys: searching /Users/lzwjava/.ssh/known_hosts2 for 138.201.174.0 / (none)
debug1: client_input_hostkeys: hostkeys file /Users/lzwjava/.ssh/known_hosts2 does not exist
debug3: client_input_hostkeys: 3 server keys: 0 new, 3 retained, 0 incomplete match. 0 to remove
debug1: client_input_hostkeys: no new or deprecated keys from server
debug3: client_repledge: enter
debug3: receive packet: type 4
debug1: Remote: /root/.ssh/authorized_keys:1: key options: agent-forwarding port-forwarding pty user-rc x11-f
debug3: receive packet: type 4
debug1: Remote: /root/.ssh/authorized_keys:1: key options: agent-forwarding port-forwarding pty user-rc x11-f

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debug3: receive packet: type 91
debug2: channel_input_open_confirmation: channel 0: callback start
debug2: client_session2_setup: id 0
debug2: channel 0: request pty-req confirm 1
debug3: send packet: type 98
debug1: Sending environment.
debug3: Ignored env TERM_SESSION_ID
debug3: Ignored env SSH_AUTH_SOCK
debug1: channel 0: setting env LC_TERMINAL_VERSION = "3.4.19"
debug2: channel 0: request env confirm 0
debug3: send packet: type 98
debug3: Ignored env COLORFGBG
debug3: Ignored env ITerm_PROFILE
debug3: Ignored env XPC_FLAGS
debug3: Ignored env PWD
debug3: Ignored env SHELL
debug3: Ignored env __CFBundleIdentifier
debug1: channel 0: setting env LC_CTYPE = "UTF-8"
debug2: channel 0: request env confirm 0
debug3: send packet: type 98
debug3: Ignored env TERM_PROGRAM_VERSION
debug3: Ignored env TERM_PROGRAM
debug3: Ignored env PATH
debug1: channel 0: setting env LC_TERMINAL = "iTerm2"
debug2: channel 0: request env confirm 0
debug3: send packet: type 98
debug3: Ignored env COLORTERM
debug3: Ignored env COMMAND_MODE
debug3: Ignored env TERM
debug3: Ignored env HOME
debug3: Ignored env TMPDIR
debug3: Ignored env USER
debug3: Ignored env XPC_SERVICE_NAME
debug3: Ignored env LOGNAME
debug3: Ignored env ITerm_SESSION_ID
debug3: Ignored env __CF_USER_TEXT_ENCODING
debug3: Ignored env SHLVL
debug3: Ignored env OLDPWD
debug3: Ignored env GLOBAL_PROXY
debug3: Ignored env NO_PROXY
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debug3: Ignored env HOMEBREW_PREFIX
debug3: Ignored env HOMEBREW_CELLAR
debug3: Ignored env HOMEBREW_REPOSITORY
debug3: Ignored env INFOPATH
debug3: Ignored env HTTP_PROXY
debug3: Ignored env HTTPS_PROXY
debug3: Ignored env http_proxy
debug3: Ignored env https_proxy
debug3: Ignored env HTTP_PROXY_REQUEST_FULLURI
debug3: Ignored env HTTPS_PROXY_REQUEST_FULLURI
debug3: Ignored env ALL_PROXY
debug3: Ignored env SSL_CERT_FILE
debug3: Ignored env HOMEBREW_NO_AUTO_UPDATE
debug3: Ignored env GOOGLE_APPLICATION_CREDENTIALS
debug3: Ignored env DEEPSEEK_API_KEY
debug3: Ignored env MISTRAL_API_KEY
debug3: Ignored env CODESTRAL_API_KEY
debug3: Ignored env SPEECH_ENDPOINT
debug3: Ignored env DO_API_KEY
debug3: Ignored env GEMINI_API_KEY
debug3: Ignored env HERTZNER_API_KEY
debug3: Ignored env GROK_API_KEY
debug3: Ignored env _
debug2: channel 0: request shell confirm 1
debug3: send packet: type 98
debug3: client_repledge: enter
debug1: pledge: fork
debug2: channel_input_open_confirmation: channel 0: callback done
debug2: channel 0: open confirm rwindow 0 rmax 32768
debug3: receive packet: type 99
debug2: channel_input_status_confirm: type 99 id 0
debug2: PTY allocation request accepted on channel 0
debug2: channel 0: rcvd adjust 2097152
debug3: receive packet: type 99
debug2: channel_input_status_confirm: type 99 id 0
debug2: shell request accepted on channel 0