

Troubleshooting connectivity problems

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If you're having trouble connecting to GitHub, you can troubleshoot your connection, then use the GitHub Debug tool to diagnose problems.

Most often, connection problems occur because a firewall, proxy server, corporate network, or other network is configured in a way that blocks GitHub.

Allowing GitHub's IP addresses

Make sure your network is configured to allow GitHub's IP addresses. For more information, see "[About GitHub's IP addresses](#)."

Using a company or organization's network

If you're having connectivity problems on your company or organization's network, check with your network administrator to find out if the network has rules in place to block certain traffic. If there are rules in place, ask your network administrator to allow traffic to GitHub.

Troubleshooting the captcha

If you're unable to verify with the captcha:

- Ensure JavaScript is enabled on your browser.
- Ensure your browser is supported. If your browser isn't supported, upgrade your browser or install a supported browser. For a list of supported browsers, see "[Supported browsers](#)."
- Ensure your network configuration is not blocking <https://octocaptcha.com/> or <https://arkoselabs.com/>. If you're behind a corporate firewall, contact your IT administrator to allow those domains. To verify access to these domains, visit <https://octocaptcha.com/test> and ensure the text "Connection successfully made!" is displayed. Then, visit [Arkose Labs Demo](#) for a captcha test page, and ensure you are able to load the captcha.
- Ensure your browser does not have plug-ins or extensions that may be interfering with GitHub. If so, temporarily disable the plug-ins or extensions during captcha verification.

Switching cloning methods

Switching from cloning via SSH to cloning via HTTPS, or vice versa may improve connectivity. For more information, see "[Troubleshooting cloning errors](#)."

If you prefer to use SSH but the port is blocked, you can use an alternative port. For more information, see "[Using SSH over the HTTPS port](#)".

If you're encountering timeouts with SSH, see "[Error: Bad file number](#)."

Troubleshooting slow downloads and intermittent slow connections

GitHub does not throttle bandwidth per user.

If you're experiencing slow connections at certain times of day but not others, the slow speeds are most likely due to network congestion. Because GitHub cannot resolve network congestion, you should escalate the problem to your internet service provider.

Troubleshooting with GitHub Debug

If you've followed all of the troubleshooting suggestions above and are still having connection problems, you can follow the instructions on the GitHub Debug site to run tests and send a report to GitHub Support. For more information, see [GitHub Debug](#).

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