

[Management Tools](https://cloud.google.com/products/management/) (https://cloud.google.com/products/management/)

[Cloud Shell](https://cloud.google.com/shell/) (https://cloud.google.com/shell/) [Documentation](#)

# Limitations and restrictions

[Google Cloud Shell](https://cloud.google.com/shell/docs/) (https://cloud.google.com/shell/docs/), as of the latest release, has the following known limitations and restrictions.

## Custom installed software packages and persistence

The virtual machine instance that backs your Cloud Shell session is not permanently allocated to a Cloud Shell session and terminates if the session is inactive for an hour. After the instance is terminated, any modifications that you made to it outside your `$HOME` are lost.

Consider [customizing your environment](#)

([https://cloud.google.com/shell/docs/configuring-cloud-shell#environment\\_customization\\_script](https://cloud.google.com/shell/docs/configuring-cloud-shell#environment_customization_script)) if you'd like to have your configurations persist across sessions.

## .bashrc content

Cloud Shell may produce errors if the `.bashrc` file is modified or deleted. It should at least contain the following:

```
if [ -f "/google/devshell/bashrc.google" ]; then
  source "/google/devshell/bashrc.google"
fi
```

## Slow connection performance

Connecting to a Cloud Shell for the very first time involves creating your home disk and can currently take up to 25 seconds. Subsequent connections to existing virtual machine instances take about five seconds. However, if you haven't used Cloud Shell for a week, connection performance will be slower since the home directory needs to be restored from an archive.

## Browser support

Cloud Shell supports the latest versions of Google Chrome, Mozilla Firefox, Microsoft Edge, Microsoft Internet Explorer 11+ and Apple Safari 8+. Safari in private browser mode is not supported.

## Large file transfer

File transfer will sometimes be slow for large files. It's recommended to use `gcloud alpha cloud-shell scp` or the editor to transfer large files.

## Usage limits

**Warning:** Violating the [Terms of Service \(https://cloud.google.com/terms/\)](https://cloud.google.com/terms/) will result in Cloud Shell being disabled for your account.

This constitutes activity that adversely impacts Google Cloud Platform services, other customers' or their end users' use of services, or the Google network used to provide these services. Coin mining and network scanning using Cloud Shell are strictly prohibited.

**Cloud Shell inactivity:** If you do not access Cloud Shell for 120 days, your home disk will be deleted. You will receive an email notification before its deletion and simply starting a session will prevent its removal. Please consider a different solution on [Google Cloud storage \(https://cloud.google.com/products/storage/\)](https://cloud.google.com/products/storage/) for sensitive data you wish to store long term.

**Non-interactive usage:** Cloud Shell is intended for interactive use only. Non-interactive sessions will be ended automatically after a warning. Note that Cloud Shell sessions are capped at 12 hours, after which sessions are automatically terminated. You can use a new session immediately after.

**Weekly usage:** Cloud Shell also has weekly usage limits. If you reach your usage limit, you'll need to wait until the specified time (listed under Usage Quota, found under the three dots menu icon) before you can use Cloud Shell again.

**Restoring a session after a service limit violation:** If your session is terminated or cannot be established because you exceeded a service limit, Cloud Shell will display an error with a link to

a form that allows you to appeal the limit violation. Click the feedback link and submit the form with more information about the tasks you were performing before your session was terminated.

## What's next

- [Learn about the Cloud Shell VM](https://cloud.google.com/shell/docs/how-cloud-shell-works) (https://cloud.google.com/shell/docs/how-cloud-shell-works)
- [Start Cloud Shell](https://cloud.google.com/shell/docs/using-cloud-shell) (https://cloud.google.com/shell/docs/using-cloud-shell)

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