

# Vagrant Documentation

Welcome to the documentation for Vagrant - the command line utility for managing the lifecycle of virtual machines. This website aims to document every feature of Vagrant from top-to-bottom, covering as much detail as possible.

## Install Vagrant

To get started with Vagrant, download the appropriate installer or package for your platform from our [Vagrant downloads page](#). Install the package with the standard procedures for your operating system.

The installer automatically adds vagrant to your system path so that it is available in terminals.

## Command-Line Interface

Almost all interaction with Vagrant is done through the command-line interface.

The interface is available using the vagrant command, and comes installed with Vagrant automatically. The vagrant command in turn has many subcommands, such as vagrant up, vagrant destroy, etc.

If you run vagrant by itself, help will be displayed showing all available subcommands. In addition to this, you can run any Vagrant command with the -h flag to output help about that specific command. For example, try running vagrant init -h. The help will output a one sentence synopsis of what the command does as well as a list of all the flags the command accepts.

# Autocompletion

Vagrant provides the ability to autocomplete commands. Currently, the bash and zsh shells are supported. These can be enabled by running `vagrant autocomplete install --bash --zsh`.

## Box

Command: **vagrant box**

This is the command used to manage (add, remove, etc.) [boxes](#).

The main functionality of this command is exposed via even more subcommands:

- [add](#)
- [list](#)
- [outdated](#)
- [prune](#)
- [remove](#)
- [repackage](#)
- [update](#)

## Box Add

Command: **vagrant box add ADDRESS**

This adds a box with the given address to Vagrant. The address can be one of three things:

- A **shorthand name** from the [public catalog of available Vagrant images](#), such as "hashicorp/bionic64".
- **File path or HTTP URL** to a box in a [catalog](#). For HTTP, basic authentication is supported and http\_proxy environmental variables are respected. HTTPS is also supported.
- **URL** directly a box file. In this case, you must specify a **--name flag** (see below) and versioning/updates will not work.

If an error occurs during the download or the download is interrupted with a Ctrl-C, then Vagrant will attempt to resume the download the next time it is requested. Vagrant will only attempt to resume a download for 24 hours after the initial download.

## Options

- **--box-version VALUE** - The version of the box you want to add. By **default**, the **latest** version will be added. The value of this can be an exact version number such as "1.2.3" or it can be a set of version constraints. A version constraint looks like ">= 1.0, < 2.0".
- **--cacert CERTFILE** - The certificate for the CA used to verify the peer. This should be used if the remote end does not use a standard root CA.
- **--capath CERTDIR** - The certificate directory for the CA used to verify the peer. This should be used if the remote end does not use a standard root CA.
- **--cert CERTFILE** - A client certificate to use when downloading the box, if necessary.

- **--clean** - If given, Vagrant will remove any old temporary files from prior downloads of the same URL. This is useful if you do not want Vagrant to resume a download from a previous point, perhaps because the contents changed.
- **--force** - When present, the box will be downloaded and overwrite any existing box with this name.
- **--insecure** - When present, SSL certificates will not be verified if the URL is an HTTPS URL.
- **--provider PROVIDER** - If given, Vagrant will verify the box you are adding is for the given provider. By default, Vagrant automatically detects the proper provider to use.

## Options for direct box files

The options below only apply if you are adding a box file directly (when you are not using a catalog).

- **--checksum VALUE** - A checksum for the box that is downloaded. If specified, Vagrant will compare this checksum to what is actually downloaded and will error if the checksums do not match. This is highly recommended since box files are so large. If this is specified, **--checksum-type** must also be specified. If you are downloading from a catalog, the checksum is included within the catalog entry.
- **--checksum-type TYPE** - The type of checksum that **--checksum** is if it is specified. Supported values are currently "md5", "sha1", "sha256", "sha384", and "sha512".
- **--name VALUE** - Logical name for the box. This is the value that you would put into *config.vm.box* in your *Vagrantfile*. When adding a box from a catalog, the name is included in the catalog entry and does not have to be specified.

Checksums for versioned boxes or boxes from HashiCorp's Vagrant Cloud: For boxes from HashiCorp's Vagrant Cloud, the checksums are embedded in the metadata of the box. The metadata itself is served over TLS and its format is validated.

## Box List

Command: **vagrant box list**

This command lists all the boxes that are installed into Vagrant.

## Box Outdated

Command: **vagrant box outdated**

This command tells you whether or not the box you are using in your *current Vagrant environment is outdated*. If the *--global flag is present*, every installed box will be checked for updates.

This will show the latest version available for the specific provider type, which may be different than the absolute latest version available.

Checking for updates involves refreshing the metadata associated with a box. This generally requires an internet connection.

By default, if Vagrant has recently checked for a box that's out of date, it will cache that answer and not look up another update for one hour. This cached value can be ignored if the **--force** flag is used.

## Options

- **--force** - Check for updates for all installed boxes and ignore cache interval.
- **--global** - Check for updates for all installed boxes, not just the boxes for the current Vagrant environment.

## Box Prune

Command: **vagrant box prune**

This command **removes old versions of installed boxes**. If the box is currently in use vagrant will ask for confirmation.

## Options

- **--provider PROVIDER** - The specific provider type for the boxes to destroy.
- **--dry-run** - Only print the boxes that would be removed.
- **--name NAME** - The specific box name to check for outdated versions.
- **--force** - Destroy without confirmation even when box is in use.
- **--keep-active-boxes** - When combined with **--force**, will keep boxes still actively in use.

## Box Remove

Command: **vagrant box remove NAME**

This command removes a box from Vagrant that matches the given name.

If a box has multiple providers, the exact provider must be specified with the **--provider** flag.

If a box has multiple versions, you can select what versions to delete with the **--box-version** flag or remove all versions with the **--all** flag.

## Options

- **--box-version VALUE** - Version of version constraints of the boxes to remove. See the documentation on this flag for box add for more details.
- **--all** - Remove all available versions of a box.
- **--force** - Forces removing the box even if an active Vagrant environment is using it.
- **--provider VALUE** - The provider-specific box to remove with the given name. This is only required if a box is backed by multiple providers. If there is only a single provider, Vagrant will default to removing it.

## Box Repackage

Command: **vagrant box repackage NAME PROVIDER VERSION**

This command repackages the given box and puts it in the current directory so you can redistribute it. The name, provider, and version of the box can be retrieved using `vagrant box list`.

When you add a box, Vagrant unpacks it and stores it internally. The original **\*.box** file is not preserved. This command is useful for reclaiming a **\*.box** file from an installed Vagrant box.

## Box Update

Command: **vagrant box update**

This command updates the box for the current Vagrant environment if there are updates available. The command can also update a specific box (outside of an active Vagrant environment), by specifying the **--box** flag.

Note that updating the box will not update an already-running Vagrant machine. To reflect the changes in the box, you will have to destroy and bring back up the Vagrant machine. If you just want to check if there are updates available, use the `vagrant box outdated` command.

### Options

- **--box VALUE** - Name of a specific box to update. If this flag is not specified, Vagrant will update the boxes for the active Vagrant environment.
- **--provider VALUE** - When **--box** is present, this controls what provider-specific box to update. This is not required unless the box has multiple providers. Without the **--box flag**, this has no effect.

## Cloud

Command: `vagrant cloud`

This is the command used to manage anything related to [Vagrant Cloud](#).

The main functionality of this command is exposed via subcommands:

- [auth](#)
- [box](#)
- [provider](#)
- [publish](#)
- [search](#)
- [version](#)

## Cloud Auth

Command: `vagrant cloud auth`

The cloud auth command is for handling all things related to authorization with Vagrant Cloud.

- [login](#)
- [logout](#)
- [whoami](#)

## Cloud Auth Login

Command: `vagrant cloud auth login`

The login command is used to authenticate with [HashiCorp's Vagrant Cloud](#) server. Logging in is only necessary if you are accessing protected boxes.

Logging in is not a requirement to use Vagrant. The vast majority of Vagrant does *not* require a login. Only certain features such as protected boxes.

The reference of available command-line flags to this command is available below.

### Options

- `--check` - This will check if you are logged in. In addition to outputting whether you are logged in or not, the command exit status will be 0 if you are logged in, or 1 if you are not.
- `--logout` - This will log you out if you are logged in. If you are already logged out, this command will do nothing. It is not an error to call this command if you are already logged out.
- `--token` - This will set the Vagrant Cloud login token manually to the provided string. It is assumed this token is a valid Vagrant Cloud access token.

### Examples

Securely authenticate to Vagrant Cloud using a username and password:

```
$ vagrant cloud auth login
```

```
# ...
```

Vagrant Cloud username:

Vagrant Cloud password:

Copy

Check if the current user is authenticated:

```
$ vagrant cloud auth login --check
```

You are already logged in.

Copy

Securely authenticate with Vagrant Cloud using a token:

```
$ vagrant cloud auth login --token ABCD1234
```

The token was successfully saved.

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## Cloud Auth Logout

Command: `vagrant cloud auth logout`

This will log you out if you are logged in. If you are already logged out, this command will do nothing. It is not an error to call this command if you are already logged out.

## Cloud Auth Whoami

Command: `vagrant cloud auth whoami [TOKEN]`

This command will validate your Vagrant Cloud token and will print the user who it belongs to. If a token is passed in, it will attempt to validate it instead of the token stored on disk.

## Cloud Box

Command: `vagrant cloud box`

The cloud box command is used to manage life cycle operations for all box entities on Vagrant Cloud.

- [create](#)
- [delete](#)
- [show](#)
- [update](#)

## Cloud Box Create

Command: `vagrant cloud box create ORGANIZATION/BOX-NAME`

The box create command is used to create a new box entry on Vagrant Cloud.

### Options

- `--description DESCRIPTION` - A full description of the box. Can be formatted with Markdown.
- `--short-description DESCRIPTION` - A short summary of the box.
- `--private` - Will make the new box private (Public by default)

## Cloud Box Delete

Command: `vagrant cloud box delete ORGANIZATION/BOX-NAME`



The box delete command will *permanently* delete the given box entry on Vagrant Cloud. Before making the request, it will ask if you are sure you want to delete the box.

## Cloud Box Show

Command: `vagrant cloud box show ORGANIZATION/BOX-NAME`

The box show command will display information about the latest version for the given Vagrant box.

## Cloud Box Update

Command: `vagrant cloud box update ORGANIZATION/BOX-NAME`

The box update command will update an already created box on Vagrant Cloud with the given options.

### Options

- `--description DESCRIPTION` - A full description of the box. Can be formatted with Markdown.
- `--short-description DESCRIPTION` - A short summary of the box.
- `--private` - Will make the new box private (Public by default)

## Cloud Provider

Command: **`vagrant cloud provider`**

The cloud provider command is used to manage the life cycle operations for all provider entities on Vagrant Cloud.

- [create](#)
- [delete](#)
- [update](#)
- [upload](#)

## Cloud Provider Create

Command: **vagrant cloud provider create ORGANIZATION/BOX-NAME PROVIDER-NAME VERSION [URL]**

The provider create command is used to create a new provider entry on Vagrant Cloud. The url argument is expected to be a remote URL that Vagrant Cloud can use to download the provider. If no url is specified, the provider entry can be updated later with a url or the [upload](#) command can be used to upload a Vagrant [box file](#).

## Cloud Provider Delete

Command: **vagrant cloud provider delete ORGANIZATION/BOX-NAME PROVIDER-NAME VERSION**

The provider delete command is used to delete a provider entry on Vagrant Cloud. Before making the request, it will ask if you are sure you want to delete the provider.

## Cloud Provider Update

Command: **vagrant cloud provider update ORGANIZATION/BOX-NAME PROVIDER-NAME VERSION [URL]**

The provider update command will update an already created provider for a box on Vagrant Cloud with the given options.

## Cloud Provider Upload

Command: **vagrant cloud provider upload ORGANIZATION/BOX-NAME PROVIDER-NAME VERSION BOX-FILE**

The provider upload command will upload a Vagrant [box file](#) to Vagrant Cloud for the specified version and provider.

## Cloud Publish

Command: **vagrant cloud publish ORGANIZATION/BOX-NAME VERSION PROVIDER-NAME [PROVIDER-FILE]**

The publish command is a complete solution for creating and updating a Vagrant box on Vagrant Cloud. Instead of having to create each attribute of a Vagrant box with separate commands, the publish command instead asks you to provide all the information required before creating or updating a new box.

## Options

- **--box-version VERSION** - Version to create for the box
- **--description DESCRIPTION** - A full description of the box. Can be formatted with Markdown.
- **--force** - Disables confirmation when creating or updating a box.
- **--short-description DESCRIPTION** - A short summary of the box.
- **--private** - Will make the new box private (Public by default)

- **--release** - Automatically releases the box after creation (Unreleased by default)
- **--url** - Valid remote URL to download the box file
- **--version-description DESCRIPTION** - Description of the version that will be created.

## Cloud Search

Command: **vagrant cloud search QUERY**

The cloud search command will take a query and search Vagrant Cloud for any matching Vagrant boxes. Various filters can be applied to the results.

### Options

- **--json** - Format search results in JSON.
- **--page PAGE** - The page to display. Defaults to the first page of results.
- **--short** - Shows a simple list of box names for the results.
- **--order ORDER** - Order to display results. Can either be desc or asc. Defaults to desc.
- **--limit LIMIT** - Max number of search results to display. Defaults to 25.
- **--provider PROVIDER** - Filter search results to a single provider.
- **--sort-by SORT** - The field to sort results on. Can be created, downloads , or updated. Defaults to downloads.

## Cloud Version

Command: **vagrant cloud version**

The cloud version command is used to manage life cycle operations for all version entities for a box on Vagrant Cloud.

- [create](#)
- [delete](#)
- [release](#)
- [revoke](#)
- [update](#)

## Cloud Version Create

Command: **vagrant cloud version create ORGANIZATION/BOX-NAME VERSION**

The cloud create command creates a version entry for a box on Vagrant Cloud.

### Options

- **--description DESCRIPTION** - Description of the version that will be created.

## Cloud Version Delete

Command: **vagrant cloud version delete ORGANIZATION/BOX-NAME VERSION**

The cloud delete command deletes a version entry for a box on Vagrant Cloud. Before making the request, it will ask if you are sure you want to delete the version.

## Cloud Version Release

Command: **vagrant cloud version release ORGANIZATION/BOX-NAME VERSION**

The cloud release command releases a version entry for a box on Vagrant Cloud if it already exists. Before making the request, it will ask if you are sure you want to release the version.

## Cloud Version Revoke

Command: **vagrant cloud version revoke ORGANIZATION/BOX-NAME VERSION**

The cloud revoke command revokes a version entry for a box on Vagrant Cloud if it already exists. Before making the request, it will ask if you are sure you want to revoke the version.

## Cloud Version Update

Command: **vagrant cloud version update ORGANIZATION/BOX-NAME VERSION**

### Options

- **--description DESCRIPTION** - Description of the version that will be created.