

NAME

gitcredentials - providing usernames and passwords to Git

SYNOPSIS

```
git config credential.https://example.com.username
myusername
git config credential.helper $helper $options
```

DESCRIPTION

Git will sometimes need credentials from the user in order to perform operations; for example, it may need to ask for a username and password in order to access a remote repository over HTTP. This manual describes the mechanisms Git uses to request these credentials, as well as some features to avoid inputting these credentials repeatedly.

REQUESTING CREDENTIALS

Without any credential helpers defined, Git will try the following strategies to ask the user for usernames and passwords:

1. If the `GIT_ASKPASS` environment variable is set, the program specified by the variable is invoked. A suitable prompt is provided to the program on the command line, and the user's input is read from its standard output.
2. Otherwise, if the `core.askpass` configuration variable is set, its value is used as above.
3. Otherwise, if the `SSH_ASKPASS` environment variable is set, its value is used as above.
4. Otherwise, the user is prompted on the terminal.

AVOIDING REPETITION

It can be cumbersome to input the same credentials over and over. Git provides two methods to reduce this annoyance:

1. Static configuration of usernames for a given authentication context.
2. Credential helpers to cache or store passwords, or to interact with a system password wallet or keychain.

The first is simple and appropriate if you do not have secure storage available for a password. It is generally configured by adding this to your config:

```
[credential ] -P -- https://example.com
username = me
```

Credential helpers, on the other hand, are external programs from which Git can request both usernames and passwords; they typically interface with secure storage provided by the OS or other programs.

To use a helper, you must first select one to use. Git currently includes the following helpers:

cache

Cache credentials in memory for a short period of time. See [git-credential-cache\(1\)](#) for details.

store

Store credentials indefinitely on disk. See [git-credential-store\(1\)](#) for details.

You may also have third-party helpers installed; search for `credential-*` in the output of `git help -a`, and consult the documentation of individual helpers. Once you have selected a helper, you can tell Git to use it by putting its name into the `credential.helper` variable.

1. Find a helper.

```
$ git help -a | grep credential-
credential-foo
```
2. Read its description.

```
$ git help credential-foo
```

- Tell Git to use it.

```
$ git config --global credential.helper foo
```

If there are multiple instances of the `credential.helper` configuration variable, each helper will be tried in turn, and may provide a username, password, or nothing. Once Git has acquired both a username and a password, no more helpers will be tried.

CREDENTIAL CONTEXTS

Git considers each credential to have a context defined by a URL. This context is used to look up context-specific configuration, and is passed to any helpers, which may use it as an index into secure storage.

For instance, imagine we are accessing <https://example.com/foo.git>. When Git looks into a config file to see if a section matches this context, it will consider the two a match if the context is a more-specific subset of the pattern in the config file. For example, if you have this in your config file:

```
[credential ] -P -- https://example.com
username = foo
```

then we will match: both protocols are the same, both hosts are the same, and the pattern URL does not care about the path component at all. However, this context would not match:

```
[credential ] -P -- https://kernel.org
username = foo
```

because the hostnames differ. Nor would it match `foo.example.com`; Git compares hostnames exactly, without considering whether two hosts are part of the same domain. Likewise, a config entry for <http://example.com> would not match: Git compares the protocols exactly.

CONFIGURATION OPTIONS

Options for a credential context can be configured either in `credential.*` (which applies to all credentials), or `credential.<url>.*`, where `<url>` matches the context as described above.

The following options are available in either location:

helper

The name of an external credential helper, and any associated options. If the helper name is not an absolute path, then the string `git credential-` is prepended. The resulting string is executed by the shell (so, for example, setting this to `foo --option=bar` will execute `git credential-foo --option=bar` via the shell. See the manual of specific helpers for examples of their use.

username

A default username, if one is not provided in the URL.

useHttpPath

By default, Git does not consider the path component of an http URL to be worth matching via external helpers. This means that a credential stored for <https://example.com/foo.git> will also be used for <https://example.com/bar.git>. If you do want to distinguish these cases, set this option to true.

CUSTOM HELPERS

You can write your own custom helpers to interface with any system in which you keep credentials. See the documentation for Git's [credentials API](#)^[1] for details.

GIT

Part of the [git\(1\)](#) suite

NOTES

- credentials API
file:///usr/share/doc/git/html/technical/api-credentials.html

