



1. Open a terminal window.
2. Edit the `~/.ssh/config` file.  
If you don't have a `config` file, create one.
3. Add an alias for each identity combination for example:

```
Host workid
  HostName bitbucket.org
  IdentityFile ~/.ssh/workid
Host personalid
  HostName bitbucket.org
  IdentityFile ~/.ssh/personalid
```

4. Close and save the file.

Now, you can substitute the alias for portions of the repository URL address as illustrated in the following table:

DVCS	Default address	Address with alias
Git	<code>git@bitbucket.org:&lt;accountname&gt;/&lt;reponame&gt;.git</code>	<code>git@<b>alias</b>:&lt;accountname&gt;/&lt;reponame&gt;.git</code>
Mercurial	<code>ssh://hg@bitbucket.org/&lt;username&gt;/&lt;reponame&gt;/</code>	<code>ssh://hg@<b>alias</b> /&lt;username&gt;/&lt;reponame&gt;/</code>

There are lots of ways to use SSH aliasing. Another common use case may be the situation where you are using Bitbucket and GitHub on the same machine. The [codingbadger](#) suggested the following configuration for that use case:

```
# Default GitHub user
Host github.com
  HostName github.com
  PreferredAuthentications publickey
  IdentityFile ~/.ssh/personalid

# Work user account
Host bitbucket.org
  HostName bitbucket.org
  PreferredAuthentications publickey
  IdentityFile ~/.ssh/workid
```

If you google for "ssh aliases" or "ssh aliasing" you may find examples that suit you needs better.

## Configure compression for Mercurial

When sending or retrieving data using SSH, Git does compression for you. Mercurial does not automatically do compression. You should enable SSH compression as it can speed up things drastically, *in some cases*. To enable compression for Mercurial, do the following:

1. Open a terminal window.
2. Edit the Mercurial global configuration file (`~/.hgrc`).
3. Add the following line to the UI section:

```
ssh = ssh -C
```

When you are done the file should look similar to the following:

```
[ui]
# Name data to appear in commits
username = Emma <emmapl@atlassian.com>
ssh = ssh -C
```

4. Save and close the file.

## Load each key into the appropriate Bitbucket account

Load each public key into the corresponding account. If you have an account with a repository you access from two identities, you can load two keys into that account – one for each identity. Use the following procedure to load each key into your Bitbucket accounts:

1. From your avatar in the bottom left, click **Bitbucket settings**.  
Bitbucket displays the **Account settings** page.
2. Click **SSH keys**.  
The **SSH Keys** page displays. If you have any existing keys, those appear on this page.
3. Back in your terminal window, copy the contents of your public key file.  
For example, in Linux you can `cat` the contents.  
`$ cat ~/.ssh/id_rsa.pub`

In Mac OSX, the following command copies the output to the clipboard:

```
$ pbcopy < ~/.ssh/id_rsa.pub
```

4. Back in your browser, enter a **Label** for your new key, for example, `Default public key`.
5. Paste the copied public key into the **SSH Key** field:

### Add SSH key

Label

Key\* 

```
ssh-rsa
AAAAAB3NzaC1yc2EAAAADAQABAAQBAQCjA7gV45fkPt+GQJEwrCXf36Ffdn
w3UPw2R2t9j20UZubnhlp9yw7kMEDk2ZU2oBOcFW9Dphl78DR2TRT4hvh
BLyzirmQ3ycdLxiM73oExZGGP7cl0PRbvntQZQlvigsynPph5HMKVaNRsXlgl
QvynooYJvd+ZI2omNTQTPCCOBIGkd9DYgb+Y/jdvyCXDB+JhA98qMd4KEd
hr7rPwn8Ld6dWDYValqbkisfTZV9H4U3Ik2WDaWA/Z6iVow1SLswPoG+1k4V
RD2Z5C7a8iaQBrWD0XjQUNWCcxeUpVXudr8dzLShZN6qBotL+1irsqilNIOCK
8WP4XAsjWxMri4v7 emmap1@atlassian.com
```

**Already have a key?**  
Copy [your key](#) to your clipboard with: `cat ~/.ssh/id_rsa.pub | pbcopy`

**Problems adding a key?**  
Read our [knowledge base](#) for common issues.

6. Press **Add key**.  
The system adds the key to your account. Bitbucket sends you an email to confirm addition of the key.

## Ensure the ssh-agent is running and loaded with your keys

Most modern operating systems (and GitBash) start a ssh-agent running for you. However, it is important you know how to check for a running agent and start one if necessary.

1. Open a terminal window and enter the appropriate command for your operating system.

GitBash

Mac OS X andLinux

```
$ ps | grep ssh-agent
5192 1 5192 5192 ? 500 19:23:34
/bin/ssh-agent
```

If for some reason the agent isn't running, start it by entering `eval ssh-agent` at the command line. You should only be running a single instance of `ssh-agent`. If you have multiple instances running, use the `kill PID` command to stop each of them. Then, restart a single instance.

```
$ ps -e | grep
[s]sh-agent
9060 ?? 0:00.28
/usr/bin/ssh-agent
-l
```

If the agent isn't running, start it by hand. The format for starting the command manually is:

```
$ eval ssh-agent $SHELL
```

`$SHELL` is the environment variable for your login shell.

2. List the currently loaded keys:

```
$ ssh-add -l
2048 68:ef:d6:1e:4b:3b:a3:52:6f:b0:c3:4b:da:e8:d1:9f /c/Documents and
Settings/manthony/.ssh/personalid (RSA)
```

3. If necessary, add your new key to the list:

```
$ ssh-add ~/.ssh/workid
Enter passphrase for /c/Documents and Settings/manthony/.ssh/workid:
Identity added: /c/Documents and Settings/manthony/.ssh/workid
(/c/Documents and Settings/manthony/.ssh/workid)
```

4. List the keys again to verify the add was successful:

```
$ ssh-add -l
2048 68:ef:d6:1e:4b:3b:a3:52:6f:b0:c3:4b:da:e8:d1:9f /c/Documents and
Settings/manthony/.ssh/personalid (RSA)
2048 1b:24:fe:75:4d:d2:31:a9:d5:4e:65:60:7c:60:7a:a3 /c/Documents and
Settings/manthony/.ssh/workid (RSA)
```

## Clone a repository using SSH and your alias configuration

To clone a repository with one of multiple SSH identities that you configured, you clone the repo and using your alias in the SSH URL. To try this for yourself, log into Bitbucket and do the following:

1. Navigate to the repository **Overview**.
2. Display the SSH URL.

For example, Bitbucket displays its tutorial URL as:

```
hg clone ssh://hg@bitbucket.org/tutorials/tutorials.bitbucket.org
```

3. Open a terminal window on your system.
4. Navigate to the directory where you store your repositories.
5. Enter the command but substitute your `config` alias appropriately.

For example, if you want to use your `personalid` alias to enter the clone you enter:

```
hg clone ssh://hg@personalid/tutorials/tutorials.bitbucket.org
```

The system clones the repository for you.

6. Change directory to the repository.
7. Display the contents of the repository's configuration.

```
$ cat .hg/hgrc
[paths]
default = ssh://hg@tutorials/tutorials/tutorials.bitbucket.org
```

Notice that the DVCS stored the URL you used for the clone; the URL that includes your alias. Now, moving forward for this repository, the DVCS uses the URL that includes the SSH alias.

## Change existing repositories from HTTPS to SSH (optional)

You can change existing repository configurations to use a SSH configuration that makes use of your multiple identities. You'll only need to do this for repositories that you have already cloned with HTTPS or for repositories where you want to change an existing SSH specification. For example, if you used SSH to clone a repository in the past and now want to set it up to use another SSH key.

## Git configuration

1. Open a terminal window.
2. Navigate to the repository configuration file (`REPO_INSTALLDIR/.git`).
3. Open the `config` file with your favorite editor.
4. Locate the `url` value in the `[remote "origin"]` section

```
[remote "origin"]
  fetch = +refs/heads/*:refs/remotes/origin/*
  url = https://newuserme@bitbucket.org/newuserme/bb101repo.git
```

In this example, the `url` is using the HTTPS protocol.

5. Change the `url` value to use the SSH format for your repository.  
When you are done you should see something similar to the following:

```
[remote "origin"]
  fetch = +refs/heads/*:refs/remotes/origin/*
  url = git@personalid:newuserme/bb101repo.git
```

## Mercurial Configuration

1. Open a terminal window.
2. Navigate to the repository configuration file (`REPO_INSTALLDIR/.hg`).
3. Open the `hgrc` file with your favorite editor.

```
[paths]
default =
https://newuserme@staging.bitbucket.org/newuserme/bb101repo
```

4. Change the `[paths] default` to:

```
[paths]
default = ssh://hg@bitbucket.org/newuserme/bb101repo
```

5. Save and close the file.

## Acknowledgment

My thanks to the [codingbadger](#) and to Charles on the Bitbucket team who helped me get my head around this technique. Any errors here are of my own making of course.