

## r-ssh

Dockerfile to install SSH client and [bindfs](#) on the top of [rocker/r-base](#), resulting in a minimal R environment to be able to SSH remote machines with the private keys mounted from the host.

This approach resolves the following two issues: \* you might want to avoid adding the SSH keys (sensitive information) to the Docker image \* mounting the SSH keys from the host results in file permissions not allowing you to actually use those.

This image does the following things to overcome these issues:

- install an SSH client
- install `bindfs` to be able to remount directories and files with updated permissions
- creates an `.ssh` and `.ssh-external` directories in the `docker` home folder
- adds a record in `/etc/fstab` to mount `/home/docker/.ssh-external` to the main SSH key folder with the right permissions

Please note that, unfortunately, it's not trivial to use this setup. You have to:

1. Mount the SSH keys from the host to the `/home/docker/.ssh-external` folder, e.g.:

```
docker run \  
-v '/home/username/.ssh/id_rsa:/home/docker/.ssh-external/id_rsa:ro \  
--rm -ti cardcorp/r-ssh
```

2. And as there's no running daemon to auto-mount, you have to do this manually as root:

```
mount -o nonempty -a
```

Alternatively, you can start R as `docker` after re-mounting the keys by:

```
docker run \  
-v '/home/username/.ssh/id_rsa:/home/docker/.ssh-external/id_rsa:ro \  
--rm -ti cardcorp/r-ssh \  
sh -c "mount -o nonempty -a;su docker -c \"R --vanilla\""
```