

Sandpiper Development Setup (Linux Fedora)

Environment

Host OS: Windows 10

Target OS: Fedora31 (VirtualBox/Vagrant)

Steps

(1) **Install VirtualBox 6.1.8 ("Windows hosts")**

<https://www.virtualbox.org/wiki/Downloads>

(2) **Install Vagrant 2.2.9 ("Windows 64-bit")**

<https://www.vagrantup.com/downloads.html>

(3) **Create a new Vagrant file for Fedora31**

Open Windows PowerShell Terminal (PS prompts not shown)

```
cd $HOME
mkdir Vagrant/Fedora31
cd Vagrant/Fedora31
vagrant init generic/fedora31
vagrant up
```

(4) **Enable SSH**

On Windows, Vagrant uses its own SSH client if one is not already installed (and found in the PATH).

```
Vagrant ssh-config
Vagrant ssh
```

We're now in the virtual machine and have a command prompt

```
$ [vagrant@fedora31 ~]$
```

(5) **Install Git (Fedora)**

```
$ git version # if a version shown, skip install
https://git-scm.com/downloads
$ sudo dnf install git
```

(6) Install Go (Fedora 32 is required for go1.14)

```
$ sudo dnf install -y golang
$ go version
go version go1.13.10 linux/amd64
$ export PATH=$PATH:$HOME/go/bin # add this to your $HOME/.bashrc
```

(7) Install PostgreSQL 12

```
$ sudo dnf upgrade -y
$ sudo reboot

$ sudo dnf install
https://download.postgresql.org/pub/repos/yum/reposrps/F-31-x86_64/pgdg-
fedora-repo-latest.noarch.rpm
$ sudo dnf install postgresql12 postgresql12-server
$ sudo /usr/pgsql-12/bin/postgresql-12-setup initdb

$ sudo systemctl start postgresql-12
$ sudo systemctl enable postgresql-12
$ sudo systemctl status postgresql-12

$ sudo -u postgres psql -c "alter user postgres with password 'strongpass'"
$ sudo passwd postgres # enter the same strong password as above

$ sudo -u postgres psql -l # should list the databases
$ sudo egrep '^(local|host).*(^5)$' /var/lib/pgsql/12/data/pg_hba.conf

if this displays any rows, you will need to edit the "pg_hba.conf" file...

$ sudo vi /var/lib/pgsql/12/data/pg_hba.conf # you know "vi", right?
Change "ident" or "peer" to "md5" in these lines:
```

local	all	all		md5
host	all	all	127.0.0.1/32	md5

```
$ sudo systemctl restart postgresql-12
```

(8) Install Taskfile.dev

```
$ cd $HOME
$ curl -sL https://taskfile.dev/install.sh | sh
```

(9) Get Sandpiper from GitHub

```
$ cd $HOME
$ git clone https://github.com/sandpiper-framework/sandpiper.git
```

(10) Compile Sandpiper

```
$ cd $HOME/sandpiper
$ go mod download
$ task build
```

(11) Create and Initialize Database

```
$ task init
$ mv cmd/cli/api-primary.yaml cmd/api/config.yaml
```

(12) Test Server

```
$ task server
you should see `http server started on ...`
ctrl-c # to stop server
```

(13) Follow instructions in Testing Workbook**(14) Finally, be sure to close the vagrant VM**

```
$ exit # to log out of linux
C:\> vagrant halt
```