CIS*3260 F21: How to run Rails on the Server

Concepts

- Rails is available on a course server
  cis3260.socs.uoguelph.ca
  - You need to sign into it using a VPN if off campus (which we all are)
  - To set up a VPN from off campus to access computers on campus,
    go to CCS and they have an info page describing the process
  - Once you have the VPN set up, you can ssh onto cis3260.socs.uoguelph.ca using your email name (before the @) and password
- From the rails guide you create a rails project by running "rails new project_name"
  - However, if you try this on the cis3260 server you will get a permissions error
  - To avoid this, from within the rails project directory, you have to run the commands

    ```
    bundle config --local disable_platform_warnings true
    bundle install --path vendor/bundle
    ```

  - The first command disables irrelevant warning from being thrown
    - This line can be skipped if you don't mind having warning show up that don't apply
  - The second command is vital; it installs any required ruby gems in the local project folder, as opposed to installing them system wide
    - This allows you to use the 'new' parameter with rails
- You may also have to update the server's "yarn" program by running

  ```
  yarn add –check–files
  ```

- You will receive a port number (between 30,000 and 40,000) so as not have the servers conflict with each other, and to allow the TA to access your webpage
- To run the Rails server you first need to add the cis3260 server as a host in the config env variable by entering the following line at the end of the Rails.application.configure method in the file config/environments/development.rb

  ```
  config.hosts << "cis3260.socs.uoguelph.ca"
  ```

- Then to actually start the server using a port number (here the port number = 32,000)
  run the following on the Linux command line in your Rail code's directory:

  ```
  rails server –d –p 32000 –b 0.0.0.0
  ```

- To access your Rails run webpage through the port you set up your VPN and access the webpage as

  ```
  https://cis3260.socs.uoguelph.ca:<your port #>/page_name
  ```

Note: The versions of Ruby and Rails on the server are ruby 2.5 and rails 6.0.3.3

- *so any applications ported over from another dev environment will have to have the ruby 2.5 ruby gems installed for it to run properly*
- *again, this is done using the "bundle install" command from inside the project*

Procedures

Setting up the Rails server code (within which your website/app can be created)

Sign on to the server `cis3260.socs.uoguelph.ca`

- use ssh through a campus VPN (see CCS to set one up at home)

Create the directory within which the Rails server can be be setup

- use md and the directory name of your choice
- cd to the newly created directory

Inside the directory you can create your Rails project by running

```
rails new project_name
```

Rails will then create many files and subdirectories within which your website/app can be written

After this completes, move to the newly created project directory, i.e., [*Update*]

- cd to the newly created directory, `project_name`

From there, run the following commands to set up the appropriate environment to run Rails:

```
bundle config --local disable_platform_warnings true
```

- This takes a few minutes, let it finish

```
bundle install --path vendor/bundle
```

```
yarn add –check–files
```

[*Update*]

Note: yarn changed its interface to use 'add' instead of 'install', hence the update

Now, near the end of the file `config/environments/development.rb`, add the config.hosts line as follows:

```
Rails.application.configure do
  …
    config.hosts << "cis3260.socs.uoguelph.ca"      ← add line
end
```

Finally, you may have to run

```
rails webpacker:install
```

- This takes a few minutes, let it finish

Using the Rails server

After writing your apps/websites inside the Rails framework, you are ready to run the server!

To run the Rails server, use the command from inside the project directory

```
rails server –d –p 32000 –b 0.0.0.0
```

To access your Rails run webpage through the port, make sure your VPN is running and access the webpage as

```
http://cis3260.socs.uoguelph.ca:<your port #>/page_name
```