Lab 6: DevOps using Chef

Infrastructure as Code (IaC) is one of the key game changing ideas when it comes to managing IT infrastructure. Software industries today use tools that allow them to manage their IT infrastructure by writing code. Chef is one such tool that has revolutionized how we do IaC.

In this lab, you will learn the basics of Chef by completing the official Chef tutorial using the free VM they provide. Follow these steps:

Setup

- 1. Go to https://learn.chef.io/tutorials/learn-the-basics/ubuntu/.
- 2. Initialize the free Ubuntu VM for your use.

Tutorial

[For steps 3-5, take a snapshot after you run a chef command in the terminal and append the picture to a pdf. You will turn in this pdf on Moodle.]

- 3. Complete the Configure a resource section and the follow up exercises section.
- 4. Complete the Configure a package and service section and the follow up exercises section.
- 5. Complete the <u>Make your recipe more manageable</u> section and the follow up exercises section.

Synthesis

[Append your answers to the following questions to the pdf.]

- 6. Explain in a few lines how chef enables the Infrastructure as Code paradigm.
- 7. If you were to apply Chef to your senior project, what purpose might it serve? Would it be a good fit? On the contrary, if you think Chef is not a good fit for your project, then explain in a few lines what your senior project is about and why Chef has no use in your project. You will not receive a grade in this lab if you did not put in enough thoughts before answering this question.

Deliverables

Turn in the pdf on Moodle.