

RCT:

The figures below present the weak and strong scaling behavior of EnTK on the Stampede2 machine. Each experiment was repeated 3 times to find the error bars representing 95% confidence interval. Both experiments met the expectations.

Figure 1 shows the results of the strong scaling experiment. TTX decreases linearly with the increase in the number of cores. This is because there are more available resources for the fixed number of tasks.

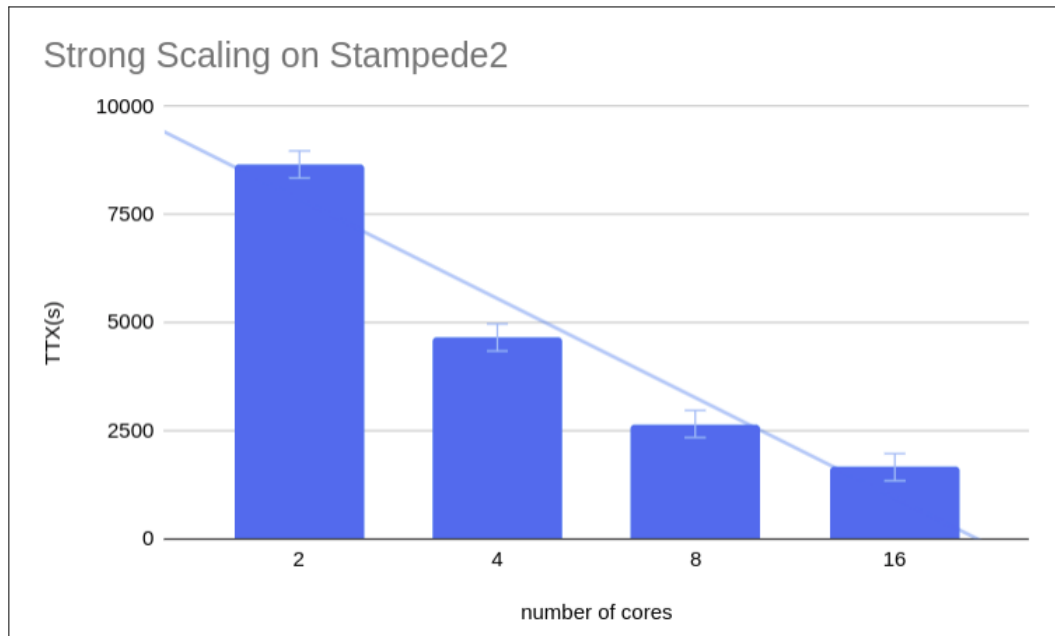


Figure 1

Figure 2 shows the results of the weak scaling experiment. Figure 3 shows a close up of figure 2. TTX increases non-linearly and gradually because EnTK does not have ideal weak scaling. This is due to delays in the Executor module of the RTS Agent. The results align with the expectations.

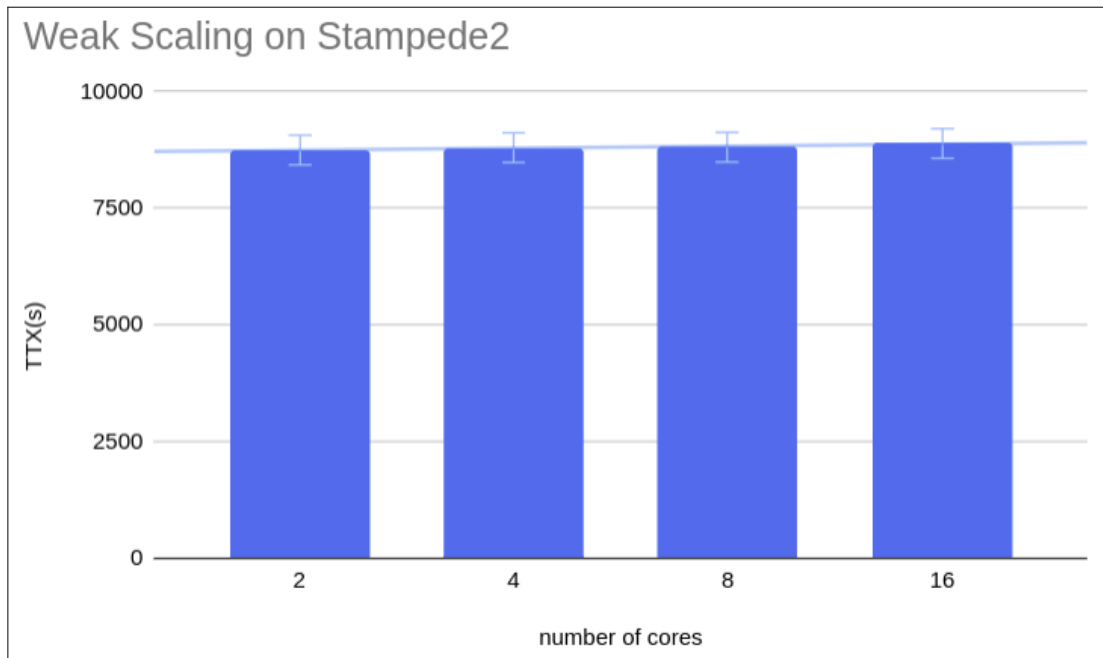


Figure 2

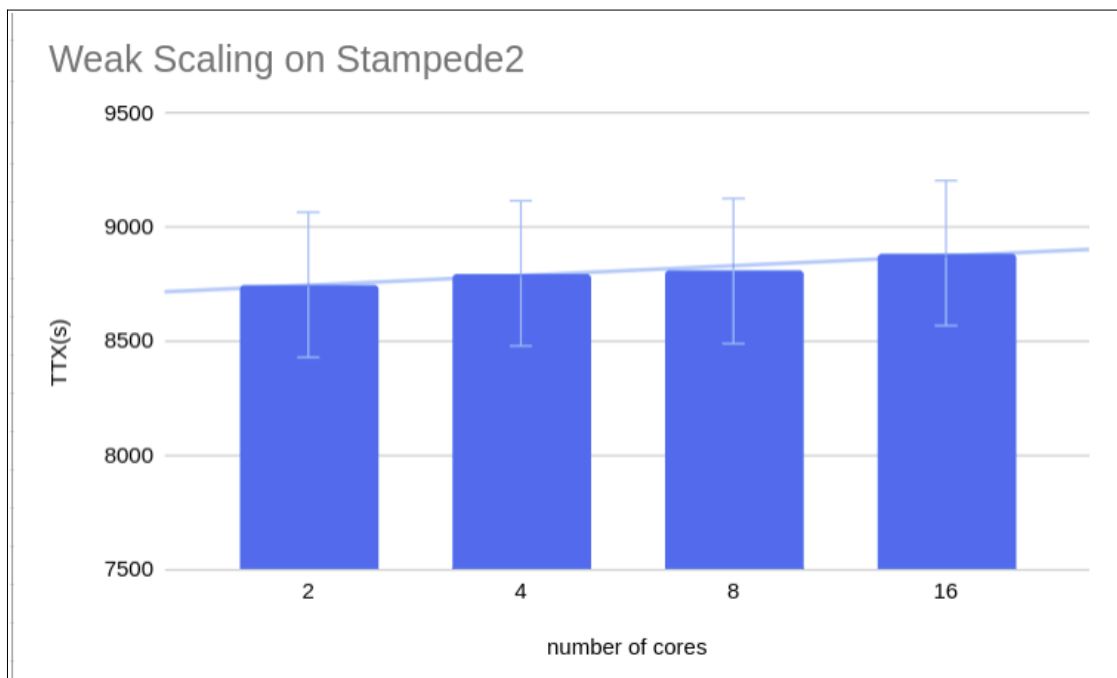


Figure 3

Other:

-Read most of the code for DeepDriveMD

Resources:

[1] Hyungro Lee, Heng Ma, Matteo Turilli, Debsindhu Bhowmik, Shantenu Jha, Arvind Ramanathan (2019), GitHub repository, <https://github.com/radical-collaboration/DeepDriveMD>