## CS633: Bonus Assignment

Group 14

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## 1 Results

We took the results by running the code on HPC2010 cluster. We have used python to get the box-plot.

## 1.1 Observations from the Boxplot

- 1. The topology-aware communication performs better due to the decreased number of inter-node communications. The inter-node communications are decreased since now only the leader process on every row performs inter-node communication. This is in contrast to unaware communication, where every process is involved in inter-node communication.
- 2. The time taken to execute on 24 processes is slightly higher.

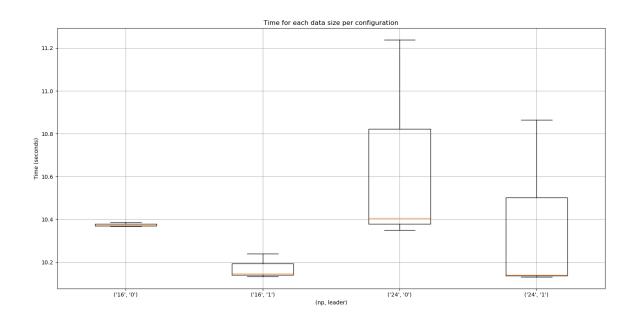


Figure 1: Boxplot of all configuations

**Note:** All three group members contributed equally to every section of the Assignment.