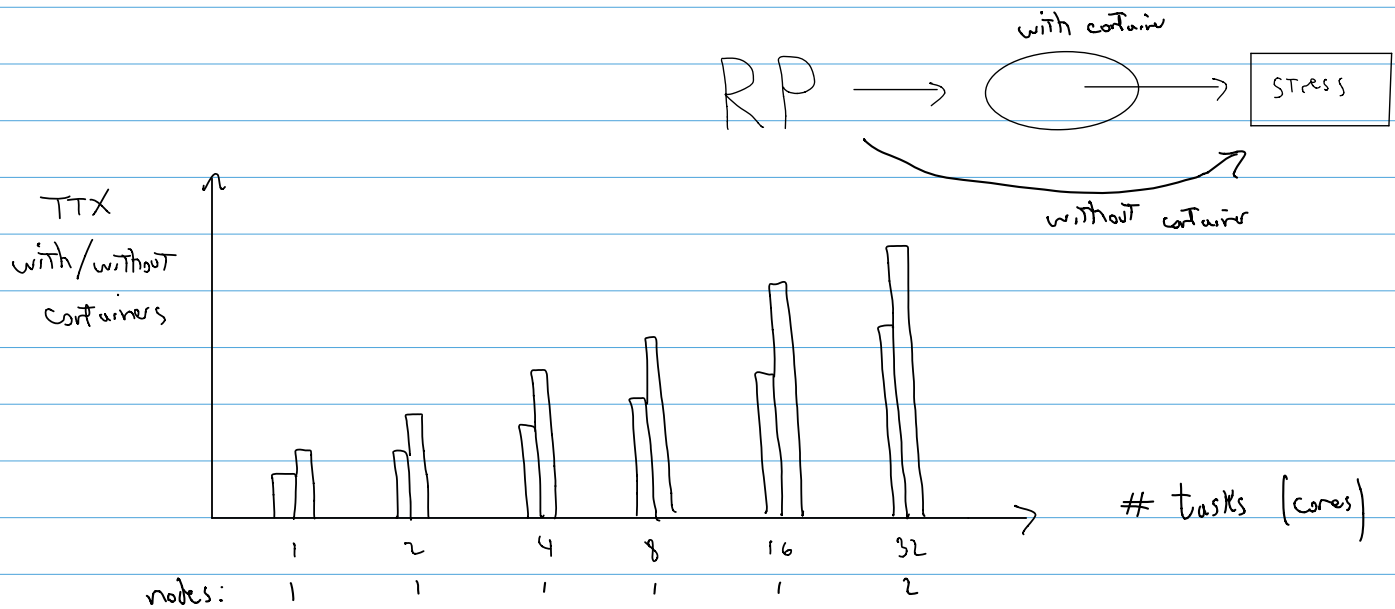


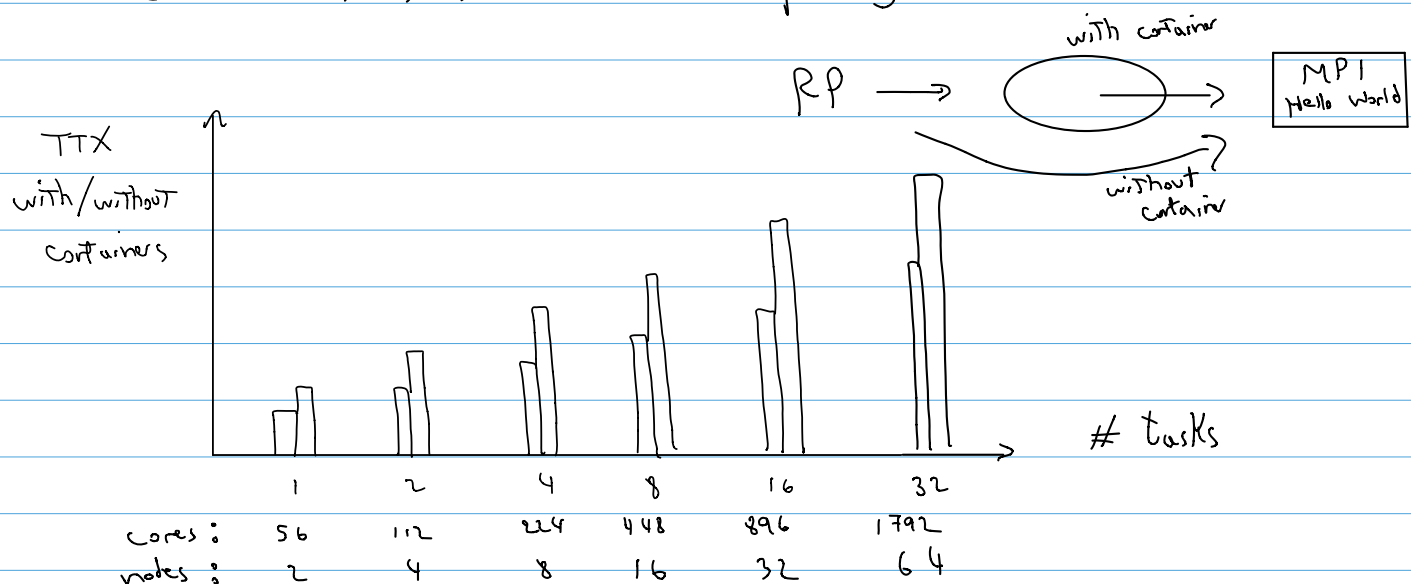
Experiment 1 : Single-core tasks

Execute stress command concurrently through RP on Bridges with 1, 2, 4, 8, 16, 32 cores (1-2 nodes) with and without containerizing the executable. Bar plot TTX and compare the container overhead.



Experiment 2 : Multi-core distributed memory

Same as before but with a simple MPI application like Hello World. We will scale the task like: 1, 2, 4, 8, 16 tasks using 2, 4, 8, 16, 32 nodes respectively



Variable to be measured : TTX with/without containerisation

	tasks	Cores	Nodes
Experiment 1	1	1	1
	2	2	1
	4	4	1
	8	8	1
	16	16	1
	32	32	2
Experiment 2	1	56	2
	2	112	4
	4	224	8
	8	448	16
	16	896	32
	32	1792	64

Note: XSEDE Bridges has 28 cores per node, 168 nodes max.

What are we expected to see from these experiments?