Scaling performance cpus = 1 cpus = 2cpus = 4cpus = 8cpus = 16 cpus = 32 300s dataset = panacea seed = 0100s 50s 300s dataset = panacea seed = 14 Wall-clock time (lower is better) 100s Software 1 grb thread 30s 16 grb threads 2 grb threads 4 grb threads 300s 8 grb threads dataset = panacea seed = 2100s **X** 30s 300s dataset = panacea seed = 3專 100s 袁 30s Problem size in basic operations