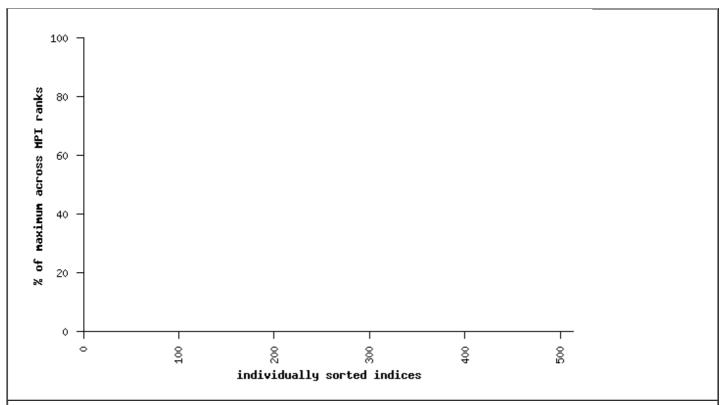
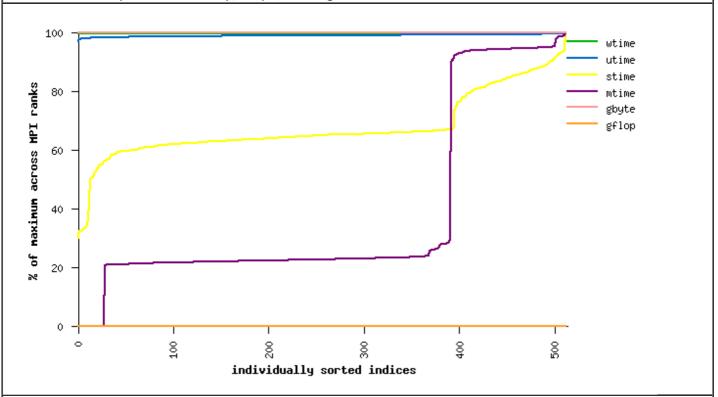
 Load Balance Communication Balance Message Buffer Sizes Communication			command: /jet/home/hpeng1/evan/qe-7.1/bin/cp.x -nb 4 -inp cp.in									
			odenam	e: unknown			state:			nknown		
			sername	e: hpeng1			group:					
			ost:	r110.ib.bridges (x86_64_Linux)			npi_task	(S: !	512 on 4 hosts			
			tart:	05/01/23/23:13:46			wallclock: 1.22323e+03 s			03 sec		
			top:	05/01/23/23:34:09			%comm: 0.5762683393173			931732		
			otal men	524.298240000002 mory: gbytes		l t	total gflop/sec:		0			
		S	witch(se	nd):	0 gby	tess	witch(re	ecv):	0	gbytes		
Computation			Communication									
Event Count Pop % of MPI Time												
	vator Ototica	•	MPI_Bcast MPI_Comm_size MPI_Reduce MPI_Recv MPI_Allreduce MPI_Comm_create MPI_Send MPI_Comm_split MPI_Comm_split MPI_Comm_dup MPI_Comm_dup MPI_Comm_free MPI_Sendrecv MPI_Sendrecv MPI_Resend									
HPM Cou Event	nter Statist	ics Ntask	/ 6	Avg		N.A	in(rank)	1	N/s	ax(rank)		
			I		detail, 1.1317			<u> </u>	IVIC	ax(i ai ik)		
				Ncalls		1	Time	Max Time	%MPI	%Wall		
MPI_Bcas		4096	1912372	421.272	0.0	00e+00						
MPI_Bcas		3584	1905376	354.619	0.0	00e+00	1.150e-01	9.83	0.06			
MPI_Redu		65536	521752	329.007	1.4	62e-04	1.171e-01	9.12	0.05			

Communication Event Statistics (100.00% detail, 1.1317e–04 error)										
	Buffer Size	Ncalls	Total Time	Min Time	Max Time	%MPI	%Wall			
MPI_Bcast	4096	1912372	421.272	0.000e+00	1.108e-01	11.67	0.07			
MPI_Bcast	3584	1905376	354.619	0.000e+00	1.150e-01	9.83	0.06			
MPI_Reduce	65536	521752	329.007	1.462e-04	1.171e-01	9.12	0.05			
MPI_Bcast	3072	2008908	300.459	0.000e+00	1.120e-01	8.32	0.05			
MPI_Reduce	2048	1900668	115.050	4.387e-05	1.091e-01	3.19	0.02			
MPI_Bcast	2560	1954876	113.919	0.000e+00	7.832e-02	3.16	0.02			
MPI_Allreduce	24	1532828	110.840	9.537e-07	1.120e-01	3.07	0.02			
MPI_Bcast	65536	767624	109.897	3.910e-05	9.195e-02	3.04	0.02			
MPI_Comm_create	0	59048	106.291	4.005e-05	2.811e-01	2.95	0.02			
MPI_Reduce	1792	1874048	101.851	3.982e-05	1.150e-01	2.82	0.02			
MPI_Reduce	1536	1874048	98.632	3.696e-05	1.121e-01	2.73	0.02			
MPI_Bcast	8192	1846416	94.150	5.007e-06	1.288e-01	2.61	0.02			
MPI_Recv	8192	826444	67.929	0.000e+00	1.246e-01	1.88	0.01			
Load balance by task: HPM counters										



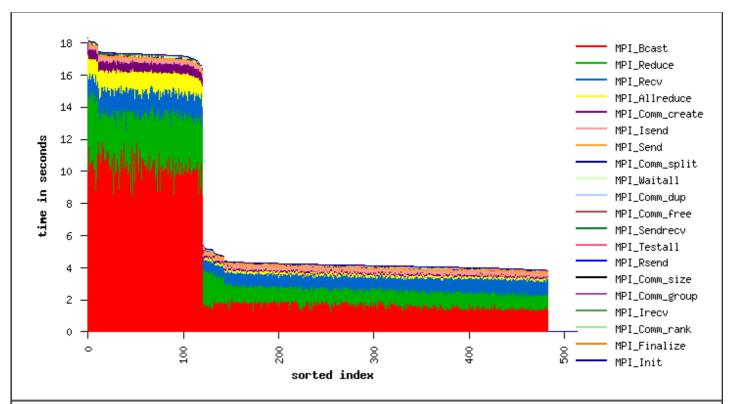
<u>by MPI rank, by MPI time</u>

Load balance by task: memory, flops, timings



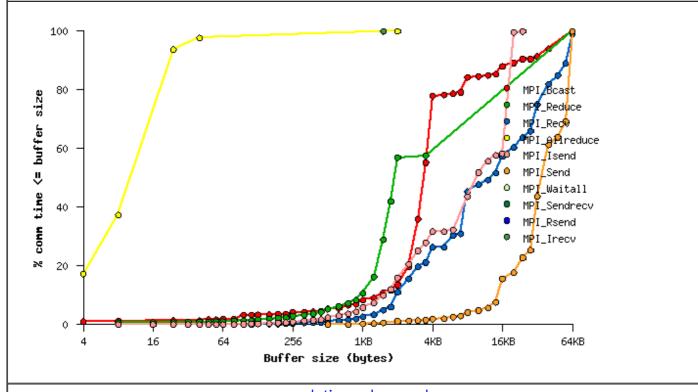
<u>by MPI rank, by MPI time</u>

Communication balance by task (sorted by MPI time)



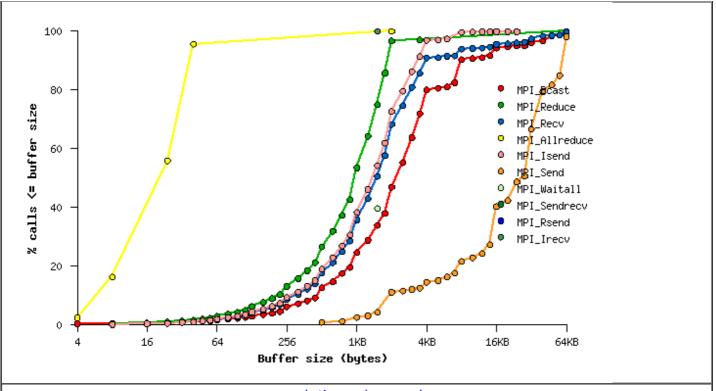
<u>by MPI rank , time detail by MPI time , time detail by rank , call list</u>





cumulative values, values

Message Buffer Size Distributions: Ncalls



cumulative values, values

Communication Topology: point to point data flow

None

data sent, data recv, time spent, map_data file map_adjacency file

Switch Traffic (volume by node)

None

Memory usage by node

