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---------------------------------------------- PETSc Performance Summary:
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./axb2para_v5 on a arch-linu named beta with 8 processors, by bogdan Thu Nov 10 17:37:37 2011
Using Petsc Release Version 3.2.0, Patch 5, Sat Oct 29 13:45:54 CDT 2011

                         Max       Max/Min        Avg      Total
Time (sec):           7.719e+01      1.00010   7.719e+01
Objects:              3.800e+01      1.00000   3.800e+01
Flops:                1.895e+05      1.23482   1.756e+05  1.405e+06
Flops/sec:            2.456e+03      1.23476   2.276e+03  1.820e+04
MPI Messages:         3.700e+01      2.46667   2.075e+01  1.660e+02
MPI Message Lengths:  4.327e+06      6.46664   5.553e+04  9.218e+06
MPI Reductions:       7.400e+01      1.00000

Flop counting convention: 1 flop = 1 real number operation of type (multiply/divide/add/subtract)
                            e.g., VecAXPY() for real vectors of length N --> 2N flops
                            and VecAXPY() for complex vectors of length N --> 8N flops

Summary of Stages:   ----- Time ------  ----- Flops -----  --- Messages ---  -- Message Lengths --  -- Reductions
--
                        Avg     %Total     Avg     %Total   counts   %Total     Avg         %Total   counts
%Total
 0:      Main Stage: 7.7185e+01 100.0%  1.4052e+06 100.0%  1.660e+02 100.0%  5.553e+04      100.0%  7.300e+01
98.6%

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See the 'Profiling' chapter of the users' manual for details on interpreting output.
Phase summary info:
   Count: number of times phase was executed
   Time and Flops: Max - maximum over all processors
                   Ratio - ratio of maximum to minimum over all processors
   Mess: number of messages sent
   Avg. len: average message length
   Reduct: number of global reductions
   Global: entire computation
   Stage: stages of a computation. Set stages with PetscLogStagePush() and PetscLogStagePop().
      %T - percent time in this phase         %f - percent flops in this phase
      %M - percent messages in this phase     %L - percent message lengths in this phase
      %R - percent reductions in this phase
   Total Mflop/s: 10e-6 * (sum of flops over all processors)/(max time over all processors)
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Event                Count      Time (sec)     Flops                             --- Global ---  --- Stage ---
Total
                   Max Ratio  Max     Ratio   Max  Ratio  Mess   Avg len Reduct  %T %f %M %L %R  %T %f %M %L %R
Mflop/s
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--- Event Stage 0: Main Stage

MatSolve               2 1.0 2.9257e-01 1.0 0.00e+00 0.0 0.0e+00 0.0e+00 0.0e+00  0  0  0  0  0   0  0  0  0  0
0
MatLUFactorSym         1 1.0 2.1386e-04 1.8 0.00e+00 0.0 0.0e+00 0.0e+00 0.0e+00  0  0  0  0  0   0  0  0  0  0
0
MatLUFactorNum         1 1.0 7.6757e+01 1.0 0.00e+00 0.0 0.0e+00 0.0e+00 0.0e+00 99  0  0  0  0  99  0  0  0  0
0
MatScale               1 1.0 8.6851e-03 1.2 1.90e+05 1.2 0.0e+00 0.0e+00 0.0e+00  0100  0  0  0   0100  0  0  0
162
MatAssemblyBegin       3 1.0 1.7881e-02 7.4 0.00e+00 0.0 0.0e+00 0.0e+00 6.0e+00  0  0  0  0  8   0  0  0  0  8
0
MatAssemblyEnd         3 1.0 1.3084e-02 1.2 0.00e+00 0.0 9.6e+01 7.9e+03 2.7e+01  0  0 58  8 36   0  0 58  8 37
0
MatGetRow          21180 1.0 2.7702e-03 1.1 0.00e+00 0.0 0.0e+00 0.0e+00 0.0e+00  0  0  0  0  0   0  0  0  0  0
0
MatLoad                2 1.0 6.4540e-02 1.0 0.00e+00 0.0 9.4e+01 9.4e+04 2.4e+01  0  0 57 96 32   0  0 57 96 33
0
MatView                4 1.0 2.8978e-02 1.0 0.00e+00 0.0 0.0e+00 0.0e+00 4.0e+00  0  0  0  0  5   0  0  0  0  5
0
MatAXPY                1 1.0 1.9377e-02 1.1 0.00e+00 0.0 4.4e+01 8.6e+03 1.7e+01  0  0 27  4 23   0  0 27  4 23
0
VecCopy                2 1.0 1.0324e-04 1.4 0.00e+00 0.0 0.0e+00 0.0e+00 0.0e+00  0  0  0  0  0   0  0  0  0  0
0
VecSet                 2 1.0 9.1076e-05 1.5 0.00e+00 0.0 0.0e+00 0.0e+00 0.0e+00  0  0  0  0  0   0  0  0  0  0
0
VecAssemblyBegin       2 1.0 6.3229e-04 2.0 0.00e+00 0.0 2.8e+01 1.0e+01 6.0e+00  0  0 17  0  8   0  0 17  0  8
0
VecAssemblyEnd         2 1.0 1.6928e-05 5.5 0.00e+00 0.0 0.0e+00 0.0e+00 0.0e+00  0  0  0  0  0   0  0  0  0  0
0
KSPSetup               1 1.0 2.1458e-06 0.0 0.00e+00 0.0 0.0e+00 0.0e+00 0.0e+00  0  0  0  0  0   0  0  0  0  0
0
KSPSolve               2 1.0 7.7051e+01 1.0 0.00e+00 0.0 0.0e+00 0.0e+00 8.0e+00100  0  0  0 11 100  0  0  0 11
0
PCSetUp                1 1.0 7.6758e+01 1.0 0.00e+00 0.0 0.0e+00 0.0e+00 8.0e+00 99  0  0  0 11  99  0  0  0 11
0
PCApply                2 1.0 2.9257e-01 1.0 0.00e+00 0.0 0.0e+00 0.0e+00 0.0e+00  0  0  0  0  0   0  0  0  0  0
0
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Memory usage is given in bytes:

Object Type          Creations   Destructions     Memory  Descendants' Mem.
Reports information only for process 0.

--- Event Stage 0: Main Stage

              Viewer     3              2         1440     0
              Matrix    12             12      5810060     0
              Vector    10             10      1111600     0
      Vector Scatter     3              3         3108     0
           Index Set     8              8         5912     0
       Krylov Solver     1              1         1072     0
      Preconditioner     1              1          968     0
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======
Average time to get PetscTime(): 9.53674e-08
Average time for MPI_Barrier(): 3.38554e-06
Average time for zero size MPI_Send(): 4.50015e-06
#PETSc Option Table entries:
-A A_Uc_25.dat
-E E_Uc_25.dat
-ksp_type preonly
-log_summary
-ndim 84719
-pc_factor_mat_solver_package superlu_dist
-pc_type lu
#End of PETSc Option Table entries
Compiled with FORTRAN kernels
Compiled with full precision matrices (default)
sizeof(short) 2 sizeof(int) 4 sizeof(long) 8 sizeof(void*) 8 sizeof(PetscScalar) 16
Configure run at: Thu Nov 10 10:16:37 2011
Configure options: --with-debugging=0 --with-clanguage=c --with-mpi-dir=/usr/lib64/mpich2 --with-shared-
libraries=1 --with-scalar-type=complex --with-fortran-kernels=1 --download-superlu=yes --download-mumps=yes
--download-scalapack=yes --download-superlu_dist=yes --download-blacs=yes --download-f-blas-lapack=yes --download-
plapack=yes --download-parmetis=yes
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Libraries compiled on Thu Nov 10 10:16:37 2011 on tau
Machine characteristics: Linux-2.6.35.14-97.fc14.x86_64-x86_64-with-fedora-14-Laughlin
Using PETSc directory: /usr/local/z-petsc
Using PETSc arch: arch-linux2-c-opt
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Using C compiler: /usr/lib64/mpich2/bin/mpicc  -fPIC -Wall -Wwrite-strings -Wno-strict-aliasing -Wno-unknown-
pragmas -O  ${COPTFLAGS} ${CFLAGS}
Using Fortran compiler: /usr/lib64/mpich2/bin/mpif90  -fPIC -Wall -Wno-unused-variable -Wno-line-truncation -O   $
{FOPTFLAGS} ${FFLAGS}
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Using include paths: -I/usr/local/z-petsc/arch-linux2-c-opt/include -I/usr/local/z-petsc/include -I/usr/local/z-
petsc/include -I/usr/local/z-petsc/arch-linux2-c-opt/include -I/usr/lib64/mpich2/include -I/usr/include/mpich2-
x86_64
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Using C linker: /usr/lib64/mpich2/bin/mpicc
Using Fortran linker: /usr/lib64/mpich2/bin/mpif90
Using libraries: -Wl,-rpath,/usr/local/z-petsc/arch-linux2-c-opt/lib -L/usr/local/z-petsc/arch-linux2-c-opt/lib
-lpetsc -lX11 -Wl,-rpath,/usr/local/z-petsc/arch-linux2-c-opt/lib -L/usr/local/z-petsc/arch-linux2-c-opt/lib
-lsuperlu_dist_2.5 -lcmumps -ldmumps -lsmumps -lzmumps -lmumps_common -lpord -lparmetis -lmetis -lpthread
-lsuperlu_4.2 -lPLAPACK -lscalapack -lblacs -lflapack -lfblas -lm -Wl,-rpath,/usr/lib64/mpich2/lib
-L/usr/lib64/mpich2/lib -Wl,-rpath,/usr/lib/gcc/x86_64-redhat-linux/4.5.1 -L/usr/lib/gcc/x86_64-redhat-linux/4.5.1
-ldl -lmpich -lopa -lpthread -lrt -lgcc_s -lmpichf90 -lgfortran -lm -lm -ldl -lmpich -lopa -lpthread -lrt -lgcc_s
-ldl
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