

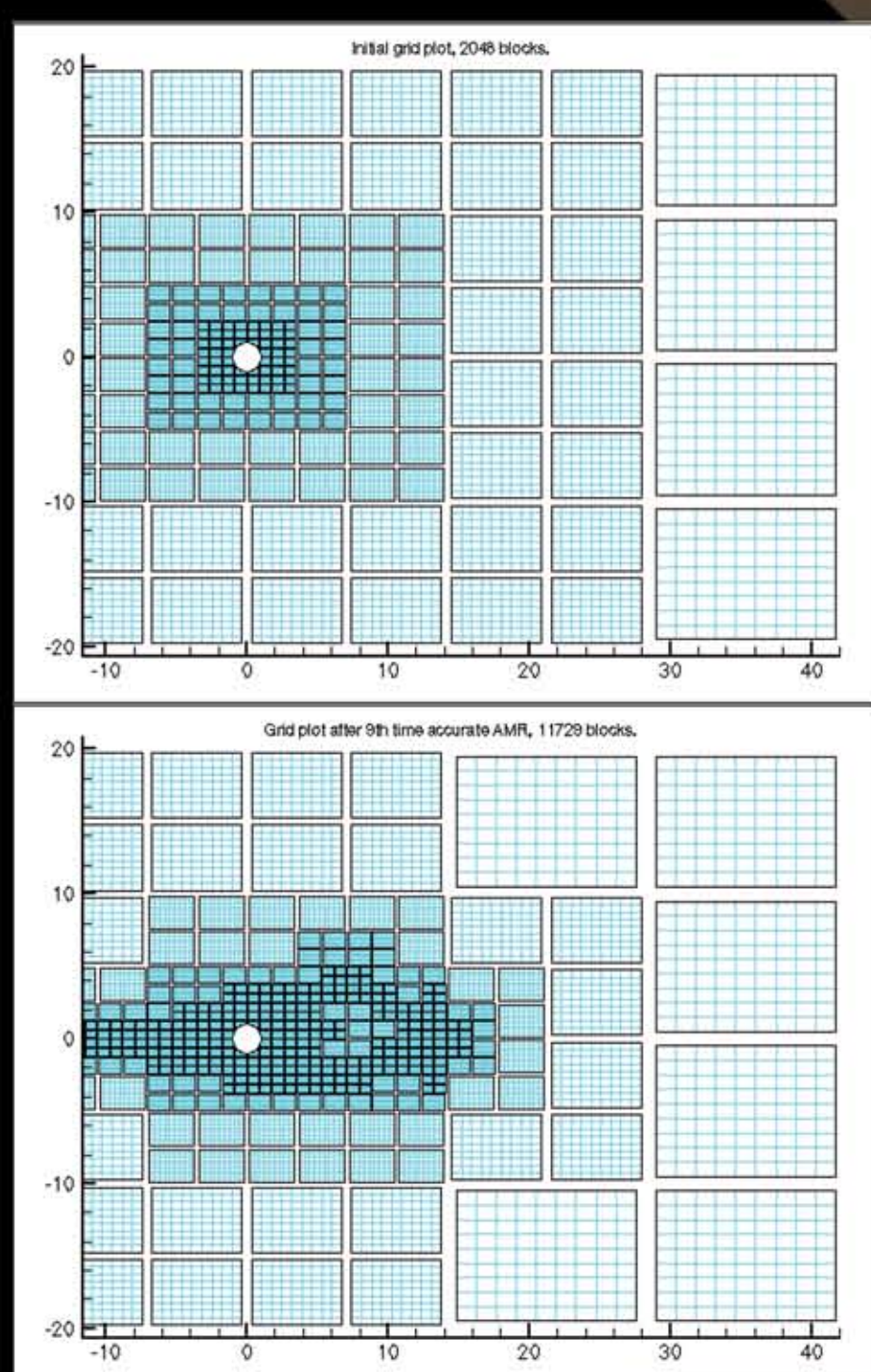
20 Years - Unleashing the Power of HPC

2019 SC18

1998 Chair
Dennis Duke
 Orlando, FL



A 64 node PC-based Beowulf cluster



Adaptive mesh simulation of stellar coronal mass ejection

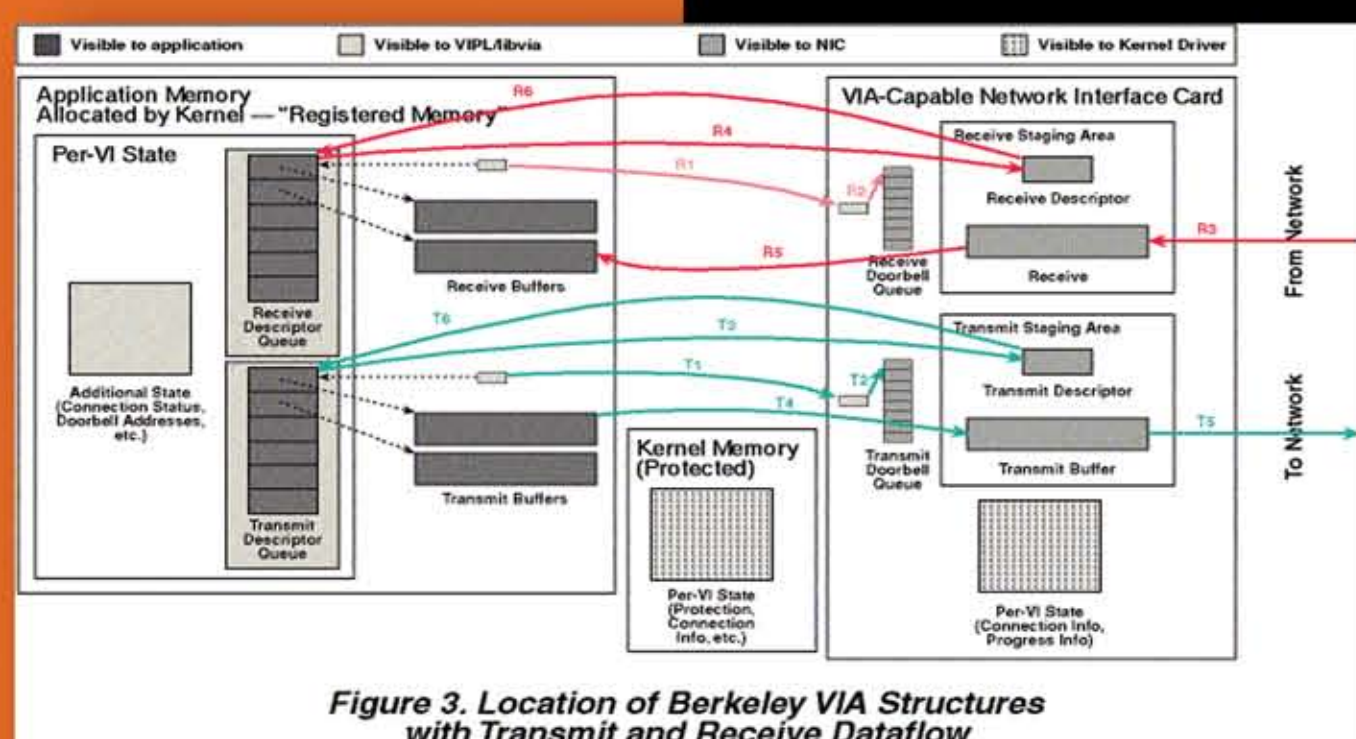


Figure 3. Location of Berkeley VIA Structures with Transmit and Receive Dataflow

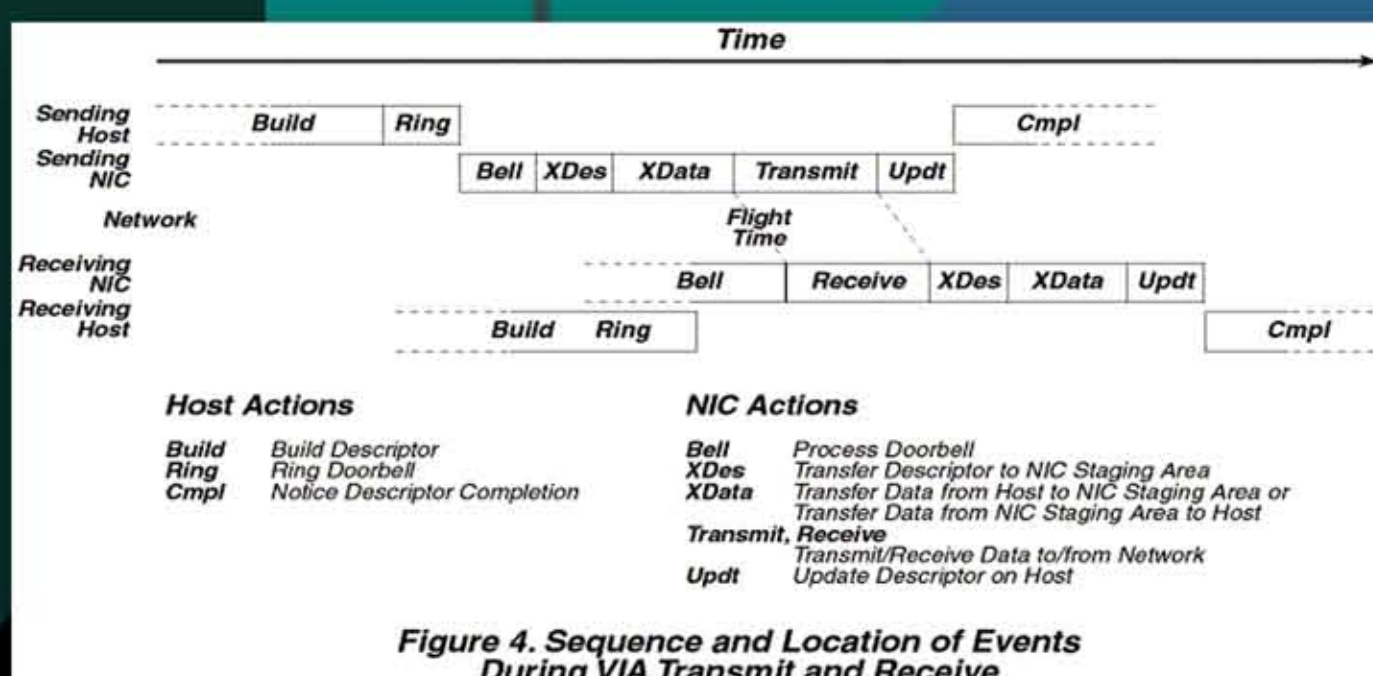


Figure 4. Sequence and Location of Events During VIA Transmit and Receive

Virtual Interface Architecture (VIA) communication events

1998

Notable Systems first mentioned this year in the proceedings:

- Beowulf clusters
- ASCI Blue Pacific
- Sun UltraSPARC II

Notable Processors

- HP P-8000
- IBM PowerPC 604
- Intel Pentium II

Not mentioned in the proceedings after this year:

- DEC AlphaStation

Noteworthy Architecture Topics

- Hardware multithreading
- Parallel MATLAB
- Virtual Interface Architecture (VIA)
- NetCDF and HDF parallel I/O and file systems
- Automatically Tuned Linear Algebra System (ATLAS)

Notable Operating Systems

- Cougar OS
- Intel Paragon OS
- TOS

Notable Programming Languages

- LAPI
- MPI-2/MPI-IO
- OpenMP