Memory Debugging Parallel Applications on BlueGene Ed Hinckel Totalview Technologies

Managing the per-node memory usage of simulations and applications is an important task both as one ports codes from other distributed memory architectures to the BlueGene and as one scales up an application to take better advantage of the BlueGene platform. When developers are undertaking these tasks it is important that they be able to understand memory usage patterns across the cluster, across the different modules and components that make up their application, and between different phases of their program's execution. This talk will show them how to do this using the highly graphical and interactive memory debugging capabilities provided as part of the TotalView debugger. This talk will also touch briefly on other debugging topics of interest to ScicomP participants such as the status of support for the Cell and LANL RR's hybrid architecture.