

2008 Abaqus Austria Regional Users' Meeting
Advanced Seminar on Monday, November 10

Most Efficient Use of Abaqus Software – Functionality & Hardware-resources

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In recent years cluster computing and multi-core chips have made parallel execution more and more affordable and allowed users outside the research community to consider large scale parallel machines for execution of scientific and engineering codes. In keeping with this trend, SIMULIA have been working to make these types of architectures accessible to Abaqus users. In this seminar we will present some improvements in parallel execution of Abaqus/Standard. Two basic points will be addressed. The first is whether or not compute clusters, and parallel execution in general, is something you should be considering for your Abaqus jobs. The second point is to show, through examples, some of the factors that must be considered in deciding how to use a cluster for Abaqus/Standard. Recent advances in the solver technology and linear dynamics capabilities will be presented as well. Also we will discuss general convergence issues in nonlinear solution procedures, and how to help Abaqus/Standard to obtain converged solution.

