



## Issues in Advanced Computing: A US Perspective

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**Abstract.** I give a review of the situation in USA in the field of supercomputing. After the necessary distinction between advanced- and high-performance computing, I sketch both the various program areas (networking, grid computing, scalable numerical tools, etc.) and the major advanced computing science initiatives, from the data-intensive science (virtual observatories, digital sky surveys, bioinformatics, etc.) to complex systems science (multi-physics/multi-scale numerical simulations with related problems of code verification and validation).

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