Peer-to-Peer computing systems provide frameworks for running distributed computations and exchanging document/data files between a large set of participants, who can be flexibly and dynamically connected with each other via industry- and university-level networks or via the Internet. Because of the size, autonomy and high volatility of their resources, P2P computing platforms raise major challenging issues (deployment, security, manageability, etc.) for researchers and engineers. But they also propose new fault tolerance and scalability features which raise a lot of expectations and make them potential alternative to classical client-server infrastructures for large-scale systems.