Grid computing is an interconnected computer system, where machines share resources that are highly heterogeneous. Reliability is the probability that a process will successfully perform
its prescribed task without any failure at a given point of time. Hence, ensuring reliable
transactions plays a vital role in grid computing. The main objective of the paper is to develop a
reliable and robust two way trust model for the Grid system. Thus the goals of this proposed
trust model are as follows. The Model should eliminate the incompatible and biased feed backs
of the recommenders. It should provide a two way trust mechanism so that the view points of
both consumers and providers are taken care of. It should also tune the direct trust calculation
to finer granularity by considering parameters such as context, job size and job complexity.
Finally, it should provide a ranked list of providers, so that the initiator can choose the most
trusted provider based on the availability. This proposed Model encompasses all the above said
features and it provides the most trusted reliable provider.

Reference

- Williamson O.E. [1993], “Calculativeness, Trust and Economic Organization”,, Journal of
  trust management systems and their applicability to grids’, Core GRID Technical Report
  Number TR-0064 URL: http://www.coregrid.net.
  grid environments”, Proceedings of the International Conference on Information Technology:
  Parallel and Distributed Processing Symposium (IPDPS’04), April 26–30, Santa Fe, NM, USA,
  pp.1783–1785.
  reputation management in p2p networks. ‘In WWW ’03: Proceedings of the 12th international
- Stakhanova N., Ferrero S., Wong J. and Cai Y., [2004], “A reputation-based trust
  management in peer-to-peer network systems,” in the ... International Workshop on. Database
  reputation-based trust model for distributed systems’, The IEEE Workshop on the Value of
  Security through Collaboration (SECOVAL), September 5–9, Athens, Greece, Vol. 1, Nos. 3–4,
- Tajeddine A, Ayman Kayssi, Ali Chehab, and Hassan Artail, [2007]," PATROL: a
  comprehensive reputation-based trust model", Int. J. Internet Technology and Secured
- Félix Gómez Mármol, Gregorio Martínez Pérez, [2009]," Computers & Security", Vol. 28,
  Nos. 7, pp.545-546.
  Models for Improved Reliability in Grid Computing’, in WSEAS transactions on computers, Vol
A Model for Providing List of Reliable Providers for Grid Computing

Index Terms

Computer Science

Distributed Computing

Key words

Trust

Reputation

reliability