

CCR : A Model for Sharing Reputation Knowledge Across Virtual Communities

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Abstract

Information sharing is a key objective in the age of Internet and virtual communities. Reputation information is an important part of a user's identity and is both a sensitive and desired data for communities to share. At the same time, a reputation that a user has gained at some point in time can leverage her state in new communities. Communities use various trust and reputation models to compute the internal reputation of their members and each model may represent and quantify reputation in different manners. This paper introduces the Cross-Community Reputation (CCR) model that enables to bridge the gap between communities. The CCR model identifies the fundamental terms required for a meaningful sharing of reputation information among communities and proposes means to make them feasible. The model describes the actions taken in response to a request for CCR in three major stages – evaluation of preconditions, conversion of reputation values, and the matching of reputation attributes. The CCR model inherently supports policies specified by both communities and users. 1