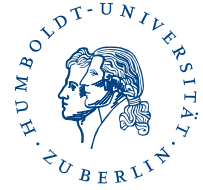


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Architecture Proposal for Anonymous Reputation Management for File Sharing (ARM4FS)

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Architecture Proposal for Anonymous Reputation Management for File Sharing (ARM4FS)

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Abstract: Social Network Services (SNS) and Web 2.0 technologies increasingly contribute to future service architectures. To exploit the inherent opportunities of the fact that every peer can contribute to the service (even malicious peers) new quality assurance procedures are needed. Reputation information can be a core component of these. The SNS builds on the contributions of volunteers who have a legitimate interest in protecting their privacy and who prefer to submit their contribution anonymously.

We present an architecture for an anonymous reputation management system, studied in depth for the example of a file sharing application (ARM4FS). We focus on the mechanisms of a reputation subsystem, and on interfaces to find, check and update reputation information in an anonymous way. The peer-to-peer distribution technology in the underlying file sharing system is outside the scope of this paper.

Keywords: Social Network Services (SNS), Web 2.0, Security, Anonymization, Reputation Management, File Sharing.

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