

Trust Propagation in SOA Topologies

Ruchith Fernando, Rohit Ranchal, Bharat Bhargava
Department of Computer Science, Purdue University
West Lafayette, IN

rfernand@cs.purdue.edu, rranchal@purdue.edu, bb@cs.purdue.edu

Abstract—This work identifies a set of common service topologies and explores how service trust changes based on various types of service interactions within those topologies. The notion of a passive service monitor is utilized in monitoring service interactions, which is configured with a set of trust management algorithms. Details of the design and implementation of a RESTful service monitoring framework, and experiments conducted with it are provided.

Index Terms—SOA, REST, Trust



1 INTRODUCTION

1.1 SOA Patterns

1.2 Passive Monitoring

1.3 Trust Propagation

2 DESIGN

3 IMPLEMENTATION

4 EXPERIMENTS