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Project of Distributed Algorithms **IMPLEMENTATION OF CYCLON OVER THE AKKA FRAMEWORK**

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Abstract

The topic of this work is the implementation of Cyclon, a decentralized peer-to-peer protocol for gossiping over the Akka framework [URL AKKA REF]. The goal of Cyclon is to build a network that can resist against crash of a great part of its node without collapsing in a series of disconnected clusters. This document will explain first the theoretical basis of the protocol, then our implementation of it. The last part of this work will be focused on the statistical result of this project.

1 INTRODUCTION

The goal of this work is to implement a simulation of a peer-to-peer network running the Cyclon gossiping's protocol, for the project of Distributed Algorithms, by Alberto Montresor. The network is strongly decentralized and consist in a large number of peer clients and one or more tracker server, whose function is to allow new peers to connect into the network. Now will follow a list of fast description of the topics of every section of this document