

Network Partitioning Effects on Ripple Transactions

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Semester Project

May 2019

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Contents

1	Introduction	2
2	What is Ripple?	2
3	Design	2
4	Recover Ripple Graph	3
	4.1 Ripple network	3
	4.1.1 Gateways	3
	4.2 Validator network	3
5	Recover Internet Graph	3
	5.1 Caida dataset : Nodes + links	3
	5.2 Caida dataset : ASes and BGP	3
6	Matching Ripple and Caida	3
	6.1 Problem with IP addresses	3
	6.2 Solution by considering only gateways	3
	6.3 Matching	3
7	Analysis	4
	7.1 Transactions	4
8	Results	4
9	Future work	4

1 Introduction

 $Subject \, + \, Problematic \, + \, Background$

2 What is Ripple?

Explain Ripple network + Ripple API

3 Design

Small introduction on graph (Ripple + Caida = Final graph to be analysed)

4 Recover Ripple Graph

4.1 Ripple network

Explain API function used + limitation on server capability + explain graph result

4.1.1 Gateways

Definition of gateways + explain why there are important

4.2 Validator network

Explain what validation network is + Explain that we do not consider it in analysis

5 Recover Internet Graph

Introduction to Caida

5.1 Caida dataset : Nodes + links

Explain first try. Present dataset + explain limitation due to computation time

5.2 Caida dataset: ASes and BGP

Explain second try. Solve computation problem. Explain processing + graph result

6 Matching Ripple and Caida

6.1 Problem with IP addresses

Explain incompatibility. No IP address in Ripple $=\xi$ Impossible to recover AS

6.2 Solution by considering only gateways

Restrict analysis on gateways. Consider trafic goes to gateways

6.3 Matching

Explain how to complete Ripple graph using Caida. Explain result of final graph

7 Analysis

7.1 Transactions

Explain transactions dataset and how to use them

8 Results

Explain results

9 Future work