MPTCP Security Analysis

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Abstract

Abstract goes here

Acknowledgements

I want to thank...

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Multipath TCP introduction

- 1.1 Overview
- 1.2 Benefits

Deployment analysis

- 2.1 Performance, security and reliability
- 2.2 Middleboxes compatibility
- 2.3 Supported platforms
- 2.4 Deployment status

The protocol design

- 3.1 Transmission Control Protocol (TCP)
- 3.2 Extending TCP to MultiPath
- 3.2.1 Control plane
- 3.2.2 Data plane

Security

- 4.1 Networking security overview
- 4.2 MPTCP residual threats
- 4.3 The ADD_ADDR attack
- 4.3.1 Concept
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Executing ADD_ADDR attack

- 5.1 Testbed
- 5.2 Scapy tool
- 5.3 Results analysis
- 5.4 Limitations and future work

Implementing MPTCP v1.0

- 6.1 The Linux Kernel implementation
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- 6.2.4 IPv6 considerations
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Conclusions