National University of Singapore

EE4204 Lab Report

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1 Introduction

This document presents a series of plots from network simulation experiments.

2 Message Size vs Throughput

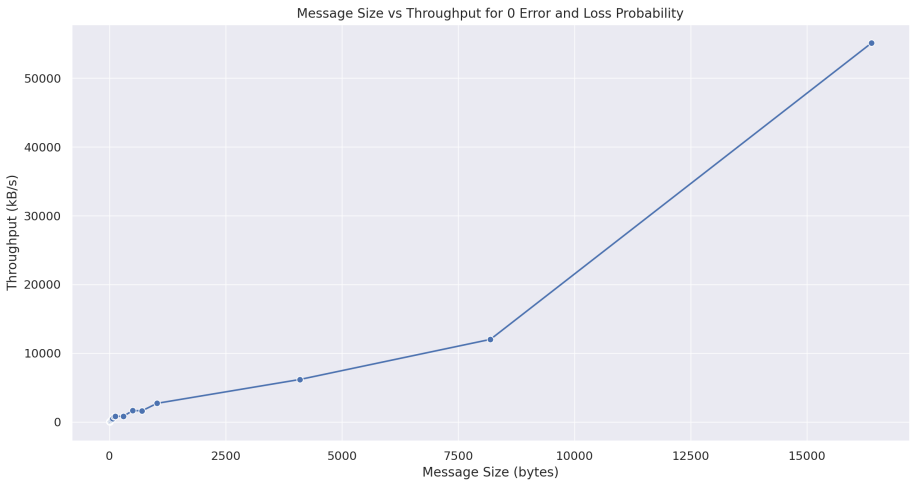

Figure 1: Throughput as a function of message size for a scenario with zero error and loss probabilities. The throughput increases with message size, indicating efficient utilization of network resources in error-free conditions.

3 Error Probability vs Throughput (Message Size 1024, Loss Prob 0)

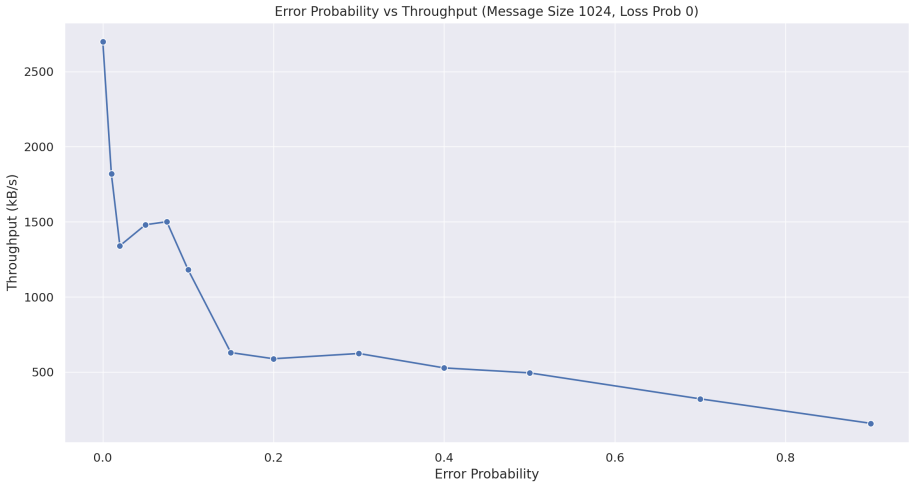

Figure 2: Throughput as a function of error probability for message size 1024 bytes with zero loss probability. As the error probability increases, throughput decreases, showing the impact of errors on network performance.

4 Message Size vs Throughput for Different Error Probabilities (Loss Prob 0)

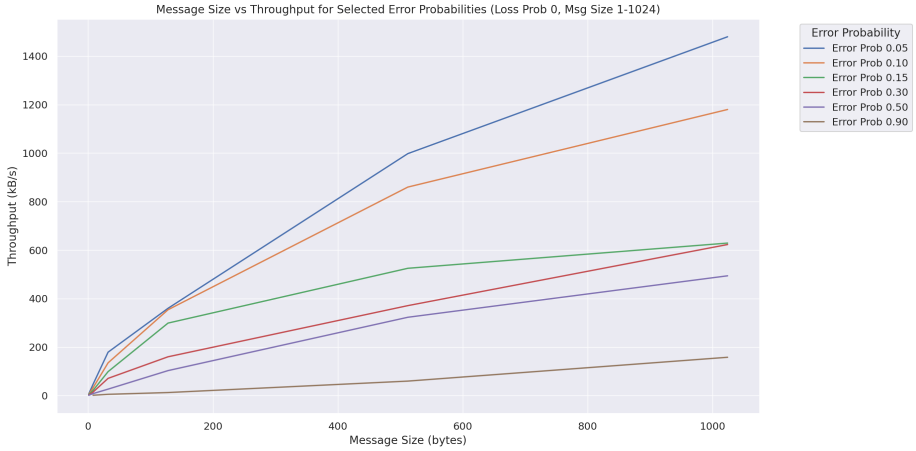

Figure 3: Throughput as a function of message size for different error probabilities, with loss probability held at zero. Each line represents a different error probability, illustrating the varying impact on throughput.

5 Loss Probability vs Throughput for Different Timeout Times (Message Size 1024)

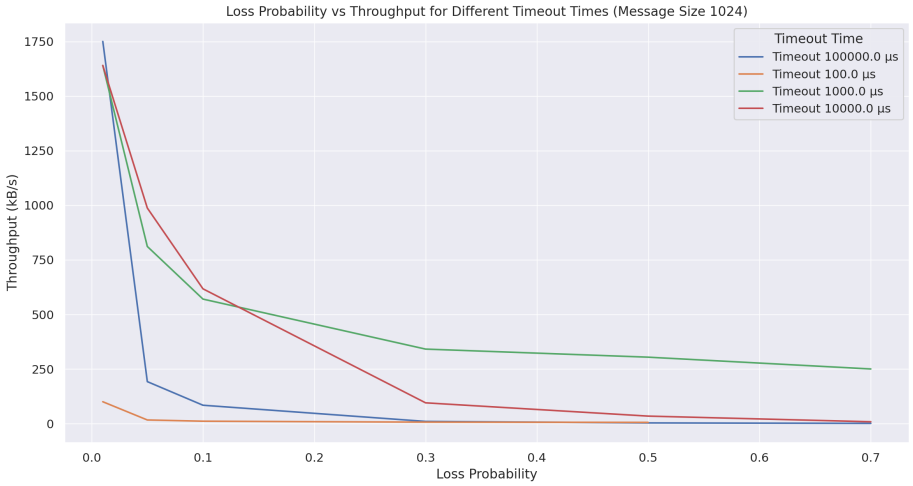

Figure 4: The impact of loss probability on throughput for message size 1024 bytes and different timeout settings. Higher loss probabilities significantly reduce throughput, especially for shorter timeouts.