

**THE ANALYSIS OF WIRELESS LAN PERFORMANCE  
BETWEEN  
DIRECT SEQUENCE SPREAD SPECTRUM (DSSS)  
AND  
FREQUENCY HOPPING SPREAD SPECTRUM (FHSS)**

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## **ABSTRACT**

This paper deals with the concept and the application of Wireless LAN technology. The purpose of this project is to evaluate the concept and the application of the Wireless LAN technology focus on the type of frequency. The analysis of the project is based on the simulation model of Wireless LAN network using OPNET MODELER 8.1 software. The model was designed to analyze the performance of Direct Sequence Spread Spectrum (DSSS) and Frequency Hopping Spread (FHSS).

The scenario consists of a wireless and a wire line network. The site\_1 of subnet0 and subnet1 and site\_2 of subnet0 and subnet\_1 each contain 5, 10, 15 or 20 wireless stations; all stations comply with the wireless LAN (802.11) protocol. The Access Point nodes in site\_1 and site\_2 of subnet\_0 connect to the server's. The Access Point nodes in site\_1 and site\_2 of subnet\_1 are to communicate with servers at the remote site via IP cloud. The results for the model network were performed in the graph which has been generating by the software itself. The performance issues of the Wireless LAN were covered for throughput of the Wireless LAN.

All the results were obtained to show the performance issues for DSSS and FHSS.

# TABLE OF CONTENTS

CONTENTS	PAGE
Declaration	in
Acknowledgement	iv
Abstract	v
List of Figure	xiii
List of Table	xi
List of Abbreviations	xii
CHAPTER 1 PROJECT BACKGROUND	
1.1 Introduction	1
1.2 Objectives of the Project	2
1.3 Scope of the Project	3
1.4 Organization of the Thesis	3
CHAPTER 2 WIRELESS LAN (WLAN)	
2.1 Background of Wireless LAN	4
2.2 AD Hoc (Peer to Peer) Mode Vs Infrastructures Mode	4
2.3 Medium Access Control	7
2.4 MAC Frame Exchange	7
2.5 Basic Access Mechanism	7
2.6 Centrally Controlled Access Mechanism	8
2.7 Model Features	

## CHAPTER 3 WIRELESS NETWORKING TECHNOLOGIES

3.1	Introduction	13
3.2	Narrowband	13
3.3	Spread Spectrum	13
3.4	Frequency Hopping Spread Spectrum (FHSS)	14
3.5	Direct Sequence Spread Spectrum (DSSS)	16

## CHAPTER 4 METHODOLOGY

4.1	Introduction	19
4.2	The Flow Chart of Project	20
4.2.1	Define the Project	21
4.2.2	Develop the Network Model	26
4.2.3	Setting the Attributes and Configure the Attributes	32
4.2.4	Execute the Simulator	44
4.2.5	Observation and Analysis of Results	46

## CHAPTER 5 RESULTS AND DISCUSSION

5.1	Result	48
5.2	Discussion	58

## CHAPTER 6 CONCLUSION

6.1	Conclusion	62
6.2	Future Development	63

## REFERENCES

## APPENDIX