

1.2 Formulation Problem

Based on the problem Background what written above, the writer can conclude for several problems from what the writer simplify , as the following:

1. How to make a better systematic security for CCTV that is completely secure?
2. How to analyze that the security system of CCTV is not completely safe yet?
3. How to give the exclusive access between the CCTV and the admin?

1.3 Limitation Problem

In order for the topic discussion to be more directed and focused to makes it easier for the researchers to understand what the main purpose for this implementation, the limitation of the discussion problem is the following:

1. Network Security hardware is using the configuration of Mikrotik Router, as an internet access point.
2. The CCTV component is using only Hikvision CCTV IP type camera to grant access to the network IP address.
3. The network attack range is only limited within HTTP and RTSP range protocol.

1.4 Project Purpose

The purpose with doing the final project with the topic “Analyse and Implementation Network Security CCTV using Mikrotik with Penetration Testing Method (Pentest)” with the purpose is among others:

1. To increase the value security for the user who using this CCTV

2. Developing new improved security for the design topology in CCTV provided.
3. Knowing how to prevent upcoming cybercrime attacks from other network breaching access.
4. As a requirement for graduating Strata (S-1) at Universitas Internasional Batam.
5. For the writer to be able to demonstrate knowledge about the design network security for CCTV.

1.5 Project benefit

There is also benefit for final project named analysis and designing wireless security network CCTV using Mikrotik Router with penetration testing method and that is:

1. For user
 - a. To be able to learn how to hack or defend against cybercrime attacks in network.
 - b. Giving an upgrade to the security facility.
2. For researcher
 - a. To be able to gain about the method towards various of cybercrime attacks and network security in CCTV.
 - b. To find even more specific threat in the network security
3. For academic
 - a. To improve the topic knowledge about penetration security that are going be thought in the college.

- b. Giving a knowledge method to all of the upcoming students who is interested in this particular research.

1.6 Systematics Discussion

The following is a systematic discussion in a briefly made research

CHAPTER I INTRODUCTION

For this chapter briefly describes a clear and solid summary of the background of the problem, the formulation of the problem, the boundaries of the problem, the objectives of the project, the benefits of the project, and the systematic discussion of the report.

CHAPTER II LITERATURE REVIEW

In this chapter there is a literature review which is the consideration of the researcher towards this study and the theoretical basis relating to the making of the security network of the whole large topology for CCTV, can be in the form method of penetration testing related to the cybercrime or breaching attacks.

CHAPTER III RESEARCH METHODOLOGY

This chapter contains the methods applied to implement research and development of the final project. Describe about the way of manufacture used, which is based on the flow of researches, problem analysis, and system design.

CHAPTER IV IMPLEMENTATION

This Chapter will explain about the implementation of the final project. Defining the implementation of the topology security towards the CCTV and explaining each step of how the implementation works.

CHAPTER V CONCLUSION

This chapter is a closing chapter which is consists of conclusions from the whole report of this final project, finding all the source from the results of analysis and discussion about network security for CCTV.