

# UNIVERSITAS INTERNASIONAL BATAM

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Undergraduate Thesis  
Bachelor of Computer Science Program  
Even Semester 2018/2019

## **ANALYSIS AND NETWORK ACCESS CONTROL DESIGN AND DESIGN USING PACKETFENCE USING NETWORK DEVELOPMENT LIFE CYCLE METHOD**

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### **ABSTRACT**

In the development of the world of telecommunications is currently very rapid with an increase in the need for services that are very fast and efficient. Likewise with data communication on a LAN network that contains several clients who want to transfer data to each other through local and outside local networks. But there are some parties who are not given the right to not be able to participate in the exchange of information due to certain reasons. Thus Network Access Control is the main point for individuals or organizations. Here the author uses the Packetfence application to be able to count on things that don't want to be like data theft, spam and others. If these things happen in a large organization or company, it will certainly be a very bad impact. The solution is that the author uses the Packetfence application to become a means of network monitoring and to manage VLAN networks on a network. VLANs are useful for separating networks into different segments and reducing the size of broadcast domains. To design Packetfence, researchers use the Network Development Life Cycle method or commonly called NDLC as the Network Access Control design flow using the Packetfence application. This method also aims to get optimal results resulting in the final design according to the process of the method.

Keywords: Computer Networks, Network Security, LAN, VLAN. Network Development Life Cycle, PacketFence.