

## ABSTRACT

Router is a computer network tool that sends packets of data over a network or the Internet to the destination, through a process known as routing. Importance of such a router makes the router as a device it is important that two different networks can be connected.

Whether the problem to the existence of fixed network realized or when a router does not have a problem. So the result keeksitensinya networks disrupted, for example, the download failed due to a network Link from the router to drop out, etc.. At the end of the project with the title "CARP FOR Redundant Router in the design NETWORKS INTERNET ITTELKOM" is one way to add keefisien a local network and overcome the problems described above, where the router is configured using the CARP Protocol pfsync and working together to provide router redundancy, But the operating system is used FreeBSD. This router is functioning as the master and the other as a backup. When the master router failure in connection to the internet it will automatically take over by the backup router. Thus the connection running again taken over by the backup router. So when we hit the master router interference or damage and we still have a spare router that can function as the master router.

From the results of the research can be concluded that the average downtime for the switch router is 6 ms, and it does not affect service to the network. CARP has a router with firewall and anti-spoofing so that it can increase keamanan network

Keyword : Router, CARP, pfsync, Redundant, Master, Backup.