ABSTRACT

DEVELOPMENT WEB CLUSTERING OF LINUX BASED AT PADJADJARAN UNIVERSITY

By

WIDIANTO
10108904

The ever changing technology and internet growth is forcing education system to make the manually made application into “online-based application”, with expectation that student can easily get the informations. With many students using online technology, the amount of traffic on internet and intranet rised dramatically. The work load on server rised quickly so that server would be overloaded in short time. Server overloads became main problem that must be solved. This problem usually solved by upgrading into more advanced servers. In example, by upgrading the CPU or increasing the amount of Memory. This solution is not scalable, because when the loads increased, network administrator should do more server upgrade, if this continues can cause downtime more often.

The better solution is using more servers (clustering), clustering is building reliable servers system and scalable with more than one server. It’s reliable because in request processing, the requests are not only handled by one server, but it can be processed by many servers. It’s scalable because when the loads increase, network administrator can easily add another server. Process of replacement and server specification upgrade can be done more easily. If a server overloaded and the specifications not met, can be easily upgraded by adding more server without stopping the service.

In this paper the authors present an analysis and design clustering for web using algorithm load balancing and round robin. The analysis showed clustering method or methods of many servers can build a reliable and sclabale system of service, and able to improve the performance of web applications.

Keywords: downtime, maintenance, performance, reliable, scalable, server, implementation.