

ABSTRACT

High availability is a method where servers in one availability zone can always be used even if there is a problem with one of the servers. High availability implementation can be done using a cluster on the server, and one of the clusters that is often used is AWS EC2.

AWS EC2, or Amazon Web Services Elastic Compute Cloud, is a cloud service created by Amazon to provide storage capacity securely and scalably. Developers use AWS EC2 to build large-scale cloud computing. AWS EC2 has complete control over compute resources and can run Amazon's proven computing environment.

After implementing a high availability system and conducting testing, the results of the Availability calculation obtained are 99.87861%. Based on the Level of Availability, the Availability calculation results obtained are included in the "two nine" level or 99% availability level.

Keywords: *AWS EC2, cloud computing, high availability.*