

**APPLICATION OF CLOUD COMPUTING FOR E-LIBRARY BY  
RESTRICTING ACCESS THROUGH GLOBAL POSITIONING SYSTEM (GPS)  
AND IP ADDRESS**

**ABSTRACT**

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*The library is a place where we can search and read about the knowledge that exists throughout the world. In some countries, the library is in the form of a website. In the library the Adisutjipto College of Technology has a facility that is intended for students to access practical work reports and final project reports. But the facility is limited by the number of computers provided by the library. Therefore, it is necessary to improve the quality of the Adisutjipto College of Technology library by creating an e-library website by utilizing cloud computing technology. In addition, if the reader wants to open this website with their respective devices then the reader must authenticate using the location or IPaddress that is being used. Based on the results of testing e-library can be accessed using computers, smartphones, and laptops that have plug-ins to support software for access, in this case the browser. Access restrictions through the Global Positioning System (GPS) are successfully applied to e-libraries, while restrictions with IP Address are based on the IP network address that is applied to the wireless access points in the Adisutjipto College of Technology. Google Drive used for cloud computing applications e This library can only be used as a data store.*

*Keywords: E-Library, Cloud Computing, Location Authentication, Network Authentication.*