Privacy and Security Issues in Access Control for Land Information Systems Towards Cloud Storage

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UgNLIS, Cadastre Data; Privacy; Security; Access Control and Cloud Platform

SUMMARY

The establishment of the Land Information

System is based on the need to replace, the archaic manual

land registration system with a reliable and secure Land

Information System that allows stakeholders to make reliable

and cost-effective decisions. In accomplishing these strategies,

MLHUD adhered to ISO 27001:2013 and Uganda National IT

Security Framework: 2014 as an Information security

management framework, which is to provide reliable and

secure Land Information System.

Land being a resource of utmost importance and there is

increasing need to host the LIS in the cloud, this has become

an attraction to cyber-attacks and hackers with primary

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of altering digitalized land and cadastral records. To secure the data in the land information systems, different access control mechanisms have been suggested by different scholars. The UgNLIS uses RBAC for user privileges and rights. As the LIS migrates to the cloud, there is need to implement the required access control systems and mechanisms to eliminate un-authorized access.

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