

Secured Land Title Transfer System in Australia using VPN based Blockchain Network

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Abstract—Blockchain technology has evolved as a secure method for storing important private and public record transactions. Transfer of land title is one such important public record. To this end, a blockchain-based system is proposed in the context of NSW (New South Wales) Australia in this paper. However, due to the decentralized and distributed nature of the blockchain network, it is prone to several security attacks. We have focused on the routing attacks, particularly on the delay attacks for the blockchain network. A VPN (Virtual Private Network) based blockchain network is proposed and implemented in this paper to mitigate the routing attacks. The results show that the proposed VPN-based blockchain network outperforms the traditional blockchain-based network in the presence of a routing attack

Keyword— Blockchain, land records, VPN, routing attacks, Hyperledger Fabric

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