1145-VF-2870 Robert S. Owor* (robert.owor@asurams.edu), 504 College Drive, Albany, GA 31705, and Zephyrinus C. Okonkwo and Anilkumar Devarapu. A Scalable Pluggable Cryptographic Algorithm for Enterprise Blockchain Sub-Channels.

In this paper, we review the state of pluggable Cryptographic algorithms for Enterprise Blockchains. Cash Fault Tolerant (CFT) and/or several variants of Byzantine Fault Tolerant (BFT) protocols are increasing being used in enterprise blockchain systems. Privacy and Security in Enterprise-Grade Permissioned Blockchain networks is accomplished by the use of sub-channels which are set up to enable communication among only approved blockchain nodes. When the number of transactions becomes large, initiation, establishment, communication, and dissolution of sub-channels can become expensive, time consuming and prohibitively slow for Enterprises requiring fast and efficient smart contracts and transaction processing. We propose the development of pluggable pre-programmed standardized sub-channels which can greatly increase the efficiency and speed of initiation, establishment, communication, and dissolution of communications sub-channels (Received September 25, 2018)