2023 RoEduNet Conference: Networking in Education and Research

Contribution ID: 27

Type: Paper presentation

Real-Time Notifier for Blockchain Events

Thursday 21 September 2023 16:40 (20 minutes)

Blockchain technology gained much traction in the last few years. These decentralized databases offer security, immutability, and scalability across various applications. Decentralized applications generate vast amounts of data, known as events, that are recorded on the blockchain and are public to anyone. Some people may see opportunities for financial gains in these events and would like to know when they occur. This paper proposes a solution to process and deliver those events as real-time alerts to the users. It uses existing technologies such as message queues, multi-threading, and asynchronous processing and integrates them into a scalable architecture. The results we achieved in this paper show that for an evenly distributed network traffic, which does not entirely consists of transaction bursts, the proposed solution offers reliability, efficiency, and a suitable delivery time to those wishing to integrate it into their projects. With time, this solution, or improved architectures, may form the basis of the following big-data architectures for processing blockchain events.

Authors: CARABAS, Costin (University POLITEHNICA of Bucharest); Mr PARIS, Cristian-Tănase (University POLITEHNICA of Bucharest); TAPUS, Tapus (Computer Science, Politehnica University of Bucharest, Romania. Soran Technical College, Erbil Polytechnic University, Iraq)

Presenter: Mr PARIS, Cristian-Tănase (University POLITEHNICA of Bucharest)

Session Classification: Session B

Track Classification: Technologies for Future Internet