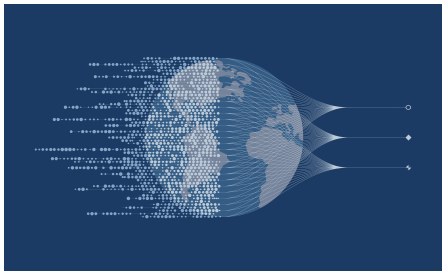

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# : An asynchronous Transceiver Continuous Data (CD) approach for SHI raw data distribution

In this research, we will present our recent developments of using streaming platforms in Continuous Data (CD) distribution. This research aims to utilize an asynchronous and loosely connected framework between senders and receivers for the transfer of the continuous raw data of the seismic, hydro-acoustic and infrasound (SHI) stations. We will demonstrate the implementation using various types of message brokers, including RabbitMQ, Kafka and Apache Pulsar. Also, the received data will be stored in a SQLite searchable, daily, file-based, serverless, zero-configuration and transactional SQL database engine. Additionally, data storage and indexing solutions, such as PostgreSQL, Oracle, or Elasticsearch, will be investigated and explored to enhance the comparison and provide a broader perspective. Furthermore, the advantages and disadvantages of the proposed work will be discussed. Finally, a detailed comparison between the message brokers used will be presented.

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