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# uniDDS: A unified Data Distribution Approach for the International Monitoring System

The International Monitoring System (IMS) consists of 337 facilities, 321 monitoring stations and 16 laboratories, built and distributed worldwide. These facilities send different types of raw data in near real time to the International Data Center (IDC) using a dedicated Global Communications Infrastructure (GCI) that provides timely and reliable transmission of IMS data. IDC distributes IMS data, IDC bulletins and reports to member states. Currently, different types of processes and tools are used for information distribution based on type of data or reports generated. Maintaining and monitoring of such processes has flexibility, scalability, efficiency and performance problems, as both data volume and number of recipient states increases. The aim of this poster is to present a unified, flexible, reliable, efficient and distributed framework for data distribution based on Data Distribution Service (DDS) and Complex Event Processing (CEP), in order to overcome these challenging issues. The details of the proposed methodology, implementation, experimental results, advantages, and limitations of this approach are presented. Finally, future directions and recommendations are discussed.

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