

Methods and System to Control the Data Processing Workflows in Distributed Environment with Asynchronous Message Driven Mechanism

A production workflow includes an ordered sequence of tasks to be executed that needs to be distributed on multiple computational nodes. Each task is assigned by a sender application to a receiver application running on a computational node through a message. On receiving the message, the receiver application sends and sends an acknowledgment to the message and schedules the sub tasks associated with the task. The sender application on receiving the acknowledgment removes the message from the queue otherwise the messages are stored in the database. On completion of the sub tasks the receiver application generates a message and the sender application on receipt of the message takes up the next task in the sequence and generates a message to another application. The sender application keeps on generating messages till all the tasks are completed in the

sequence. The methods adopted in this invention provides persistence and guaranteed delivery of messages thereby improving the quality of service in transaction processing systems that are managing complex workflows.

Technology Transfer from ISRO

ISRO is willing to offer the knowhow of this technology to suitable entrepreneurs / industries in India. Capable manufacturing industries interested in acquiring this knowhow may write with details of their present activities, requirements and plans for implementation, infrastructure and technical expertise available with them, their own market assessment, if any, and plans for diversification to the address given below: