

A Message Driven System for Business Process Workflow Automation

Indian Space Research Organization at its National Remote Sensing Centre (NRSC) has developed and implemented software for automating the Business Process Workflows. The processes involved in the assembly line are seamlessly combined into a workflow through an asynchronous network message driven invocation calls. Prominent features include an indigenously developed job prioritization algorithm and a resource driven workload distribution methodology. The software is currently operational for automating the remote sensing data product generation workflows. However, it can be customized for meeting the requirement of other users.

Salient features

- Developed using Java and can be deployed on any high end computing platform
- Supports different file formats as inputs to the system
- Mechanism to store the business rules into a knowledge base
- Asynchronous message driven interfaces between the processes involved in the workflow
- Automatic job prioritization to reduce the overall turnaround time
- Efficient Job distribution methodology taking into account the available computational nodes
- Improved throughputs from systems due to efficient job loading methodology
- Workflow history maintenance and tracking of orders
- Operator interfaces in case of emergencies
- In process monitoring and analytics
- Predictable timelines for delivery of products

Applications

- Business process automation
- In process monitoring, visualization and analytics

Potential Users

- State and Central Government organizations involved in providing services to citizens
- Private organizations carrying out business in publishing, health care, logistics and other services involving workflows
- Manufacturing companies required to carry out complex processes to accomplish a product

TECHNOLOGY TRANSFER FROM ISRO

ISRO is looking to offer the know-how to capable industries in India with adequate experience and infrastructure. Interested parties are requested to write immediately with details of their present activities and product lines, capabilities, technical expertise, computational infrastructure, their own product assessment and their plans for implementing this technology.

For further details, please contact:

Head

Technology Transfer & Industry Interface Division

Planning and Projects Group

National Remote Sensing Centre, ISRO

Balanagar,

Hyderabad -500 037

E mail: yagnaraman_k@nrsc.gov.in

Ph:040-23884014

