RUNA WFE – an Open Source Enterprise Business Process Management (BPM) System
General Description
Version 2.1

Contents

Formal Description
Purpose
RUNA WFE is an open source end-user oriented system for enterprise business process management.

Main Features
System:
- Managing business process definitions and instances
- Managing task lists
- Visualization of forms by task
- Running the system through a web interface
- Granting access to the system to bots (special computer applications)[1]
- User authorization and authentication

Process Designer:
- Editing a business process graph
- Creation and editing of task forms
- Creation and assignment of roles
- Creation of variables

RUNA WFE is an open source system, which reduces the cost of system acquisition and ownership and allows a user organization to develop and improve the product.

The RunaWFE project can be found on the SourceForge open source software developer site at http://sourceforge.net/projects/runawfe. On this site, you can download both the source code and a compiled version of the system, view messages and send messages to the forum and get the latest news on the project.

The russian web-site of the project is located at http://wf.runa.ru.

1 For example, bots can simulate the work of an enterprise employee

Informal Description

What the system does. The system assigns tasks to executors. The order of the tasks is determined by a business process graph that can be promptly changed by a manager or business analyst using a business process editor.

This system is a kind of conveyor transferred from a production environment to the office.
The system allows an employee to perform arriving tasks without worrying about the following:
– Getting the data needed to perform the task
– Transfer of the results to other employees
– Studying job descriptions
All you need to perform a task is brought to the screen by just clicking the task (for example, instructions on how to perform the task).

Executors can be both people and bots (special computer applications).
Using bots allows to integrate heterogeneous applications of the enterprise into a single corporate system.

The system allows to automate the document flow (though workflow systems are different from document flow systems, they have a lot in common).

The RUNA Consulting Group has been working on the system since October 2003. The system is now used in production by the RUNA Consulting Group (approximately 600 users with about 200 working concurrently)

For tasks fully performed by people (without bots) a box version of the system is available. The user can install the system from a distribution disk without assistance and start working at once (set up enterprise employees, load business processes, etc.). No programmer is required.

System Components

Components on the server side:
- RUNA WFE – the server
- Bot station

Components on the client side:
- Client (web interface)
- Graphical process designer
- Business process simulator
- Arriving task notification component

System component interaction:

The RUNA WFE server can be installed on one server.
Bot stations can be installed on several servers.

A browser on client computers gives access to the system's web interface (or a special component signaling the arrival of tasks; the system's web-interface is loaded into a browser opened in the window of this component).
Client computers can run a process editor and a business process simulator.

The RUNA WFE server contains definitions of loaded business processes and active business process instances.

Bot stations contain bots that poll the RUNA WFE server periodically.
If business process instances running on the RUNA WFE server contain tasks for bots, loaded onto the bot station, the bots perform these tasks and return the results to the RUNA WFE server.

By using a web interface, the user can:

- Load archive files with definitions of business processes into the system
- Create new instances of business processes
- Receive, filter, and perform tasks generated by business process instances
- Monitor the status of active business process instances

By using a web interface, the administrator can:

- Create and delete actors and groups of actors
- Include or exclude actors of the group
- Grant permissions on system objects to actors and groups of actors
- Terminate business process instances

By means of a process designer, an analyst can develop business processes and export them to archive files of the file system.

A business process simulator allows to test business processes in a test configuration on the analyst's computer without loading them into a production system.