

Q-flow3.0

suite of WORKFLOW
tools for BUSINESS
PROCESS AUTOMATION

Q-flow3.0



Q-flow is a suite of workflow tools which make it possible to design and automate an organization's business processes.

With Q-flow, an organization can improve the efficiency of those processes which allow it to reach its strategic goals, while improving control over these processes, thereby making them more effective.

These features qualify Q-flow as a complete Business Process Management tool.

a tool
to make your world
easier



What does workflow mean?

Workflow is a term for a business process. Its use has extended to all that is linked to computer science tools that contribute to the automation and process controls.

What is a business process?

It is a structured set of tasks that collectively contribute to reach an organization's objectives. [ISO]

The business processes of an organization are part of their culture. They are registered and extended in procedures manuals, flow charts and even verbally.

They are the operational bases of a company, and their success depends strongly on the efficiency of the administration of those processes. Poor management of the processes causes high costs, low productivity and inadequate response times, in the face of opportunity as well as in the face of threats.

What is workflow software?

It is a computer science tool that enables the control of the organization's business processes, optimizing them, automating them and generating information to ensure the continuous improvement of said processes through the course of time.

Q-flow is a Business Process Management (BPM) tool.

Many times the word workflow is associated with an Enterprise Application Integration (EAI). EAI is the use of software to integrate computer science applications. The EAI processes do not include the participation of persons.

What is Q-flow?

Q-flow is a BPM tool: it has a high integration capacity with other systems, but goes much further. Q-flow allows the business processes that an organization carries out to reach their strategic goals to be modeled and executed automatically.

It does not aim to only solve technological problems, like the EAI tools, but rather seeks for the improvement of daily processes within the organization, which include, in addition to the participation of computer science systems, human participation.



ten reasons why you should choose Q-flow

- Uses the Internet navigator and the e-mail Inbox, therefore does not require installation in the computers of the users who participate in the workflows.
- Does not require programming to define the processes, interact with documents, manage structured information and carry out complex validations.
- Save the investment: it allows you to reuse the already existing computer systems in your organization.
- Service Oriented Architecture (SOA)
- Strong integration capacity with:
 - Active Directory
 - Office 2003 y 2007
 - Sharepoint Portal Server y WSS (Windows Sharepoint Services)
 - Windows Workflow Foundation (WWF)
 - Exchange
 - Windows Vista
- Transparent Integration with the company's security system, mail system, document repository, information sources and transaction systems.
- Tool with user interface presented in several languages, adaptable to the user's language
- Tool with process designs suitable for users with computer science knowledge as well as for users in charge of organization and methods.
- Storage of a process's trajectory in a related data base, allowing for the operation of all the information generated during the process's cycle.
- Monitoring and administration of the processes



Characteristics of Q-flow

- Capacity to alter running processes, generating new versions and impacting the processes that are being executed.
- Automatic generation of process forms, with the possibility of using automatically generated or customized forms.
- Use of application data, custom process roles and attachments with control over document changes (check-in and check-out) and version maintenance.
- Capacity to show or hide data according to the step and security profile of the current user.
- Possibility of assigning a domain to the application data, in such a way that the entered data is valid according to its format or with the company's information system.
- Use of basic workflow classes (Start, milestone, task, question, notification, evaluation, finalization, sub workflow initiation – subordinate or not -, parallel branch and unification).
- Specialized steps for the management of documents, data interaction and integration with the components of the organization.
- Use of alerts, reminders and automatic work assignments, based on work times, fixed date or dates specified by the users or calculated in a previous step.
- Graphs to visualize the status of the processes and capacity to examine detailed information of the tasks or the involved participants.
- Control over changes in the process models, implementing check-in and check-out operations, which eases the collaboration between several people in the design process without suffering loss of information caused by poor management of the changes.
- Hierarchic organization of the processes and related elements through a hierarchic structure of packets that favor reuse and security.
- Possibility of defining, for access to the packets, several types of authorizations in a security scheme based on roles.

Q-flow 3

automatització
d'instruments

Q-flow 3

Q-flow is a complete group of computer science tools that provide an integral workflow solution for today's business.

Particularly developed for the operational areas of a company, whose central function implies the development and establishment of efficient procedures, Q-flow allows a company to delineate in detailed form the processes of the company and immediately implement its automation.

This suite of tools that can be quickly implemented only requires the process's participants to access their company's electronic mail system and Internet navigator.

Q-flow offers a simple path for the implementation of a solid process automation solution, integrating itself completely to the existing organization, and becoming an invaluable tool that avoids processes to deviate from their course and are completed in the established timeframe.

Its capacity for monitoring and managing the historical processes allows for the systematic control of the time consumed in the diverse activities of the company, with the addition of an ample variety of process and user statistics.

Q-flow provides bi-directional communication with the company's computer systems, which makes it possible for other applications to initiate workflows or participate in them, and which workflows in process use information stored in the organization's databases, initiate applications or reuse components developed by the company or others.

Process design with Q-flow

Process design with Q-flow is inspired in the natural form in which people conceive and mold business processes. Thus, Q-flow quickly integrates itself to the organization, optimizing the performance of its employees and their learning curve.

Q-flow's design tools allow for the detailed definition of the company processes to be automated, expressing them in the form of generic tasks through the use of questions, notifications, evaluations of conditions that may modify the course of the process and control points and finalization, among others.

The allow, furthermore, for the definition of roles, for example "Reviser" or "Authorizer" in such a way that the processes do not have to make a direct reference to the users who execute the tasks, but rather make reference to roles whose players may be determined in the moment the workflow is initiated. The user who will play a role can also be defined through some relation to the process.



Examples: the user who initiated the workflow, the user who administers the process.

In addition to the basic steps, Q-flow includes advanced steps that users with basic computer knowledge can incorporate into the process designs. These steps are not interactive, since their execution does not imply human participation, but rather execute automatic operations:

- Code: allows a C# code to be written. Q-flow compiles this code and executes it when the workflow reaches one of these steps.
- Office: manipulates Office 2003 and 2007 documents.
- XML: manipulates XML documents and can apply changes to them.
- Web services: interacts with web services.
- Integration: executes defined operations to operate with the organization's applications (web services, databases, ERPs, etc).

These steps make it possible to interact with external systems, thus taking advantage of the company's existing systems. It also allows for the construction of intelligent processes that include, for example, special calculations and complex operations.

Q-flow can interact with systems that implement interfaces in any of the following technologies:

- Componentes COM
- Web services
- Enterprise Services (MTS)
- Assemblies .Net
- Databases (OleDb o ADO.NET)

For the interactive steps, in which people participate, it is possible to define priorities, audit levels, and actions that automatically go off to prevent delays and other deviations from the desired performance, and to control expirations. The possible actions are:

- Send alerts
- Send reminders
- Delegate the task to another person who is in better condition to carry it out within the stipulated timeframe
- Modify the process trajectory once a certain amount of time has passed.



Web Site

Access to Q-flow business processes is carried out integrally through a website

This is divided into two parts: a main site that includes information on all the processes and tasks that the user who accesses it has permission to see, and a personal site that shows information about the tasks and processes of which the user is involved.

Q-flow Components



The Q-flow web site allows users to:

- Access the defined process models, to visualize workflows based on them or initiate new workflows.
- Examine workflow information and open tasks.
- Follow up on the development of processes.
- In the case of administrators, monitor the processes in course, delegate work, detain or restart processes, resend mail messages, and see statistics regarding the workflow motive, user workload or general process statistics.



- Count on statistics regarding load distribution, execution and process and user execution deviations.

- Access workflow views organized by different criteria to ease the work of operators and supervisors.
- Define which persons or groups will have access to the different branches of the packet structure.
- Define views in such a way that show the information required by the users, sorted in the way that suits them. This includes the definition of which columns (data) are shown in a view.



- Consult the views defined by the users and the views pre-defined by Q-flow
- Carry out advanced searches that can use diverse criteria, according to the nature of the searched element (process model, workflow, task, preventive action or others).
- Add and modify web parts to construct a personalized control panel for the users, with statistical graphs and specialized views defined by an administrator or another user.
- Temporarily detain or finalize workflows

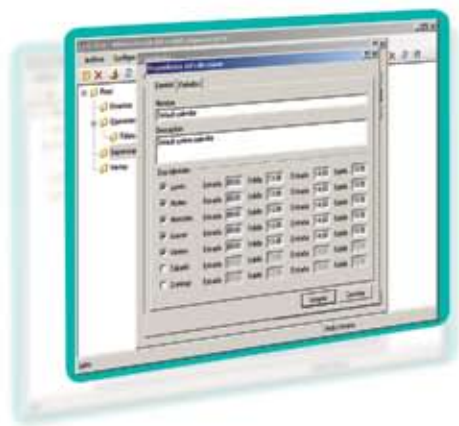


Organizational model administrator



The organizational model administrator allows the administrator to:

- Define access authorizations through a security model based on roles.
- Form the company's organizational chart, with all its divisions and related hierarchies
- Define substitutes with start and end dates, which Q-flow uses to automatically redirect a person's work so their substitute during the period the substitution lasts.
- Manage several different calendars, with distinct holidays and work schedules, in such a way that different users can be managed by different calendars.
- Enable the access to the users system defined in the organization's service directory, carrying out the simultaneous authentication with the following directory services or authentication providers:



- Microsoft Active Directory (Windows 2000, Windows 2003)
- Windows NT Domains
- LDAP

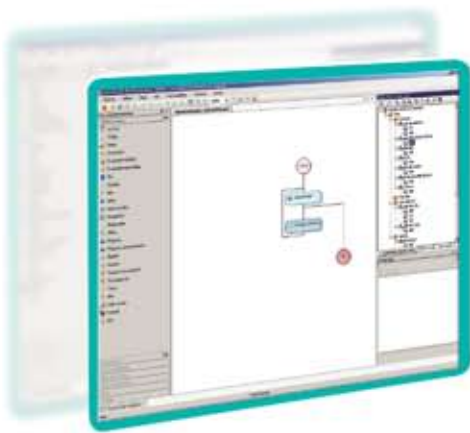
Workflow Motive

The workflow motive is a group of Windows services that takes charge of executing the workflows according to the process models in which they are based. The motive makes the workflows advance from one step to another, executing each step according to the specifications of the process model and sending messages to the users with notifications, questions, alerts and reminders.

The workflow motive was implemented following a services oriented architecture (SOA), and was designed to take advantage of the hardware's power, using the capacity it needs without wasting resources that other applications may require.



Business process designer



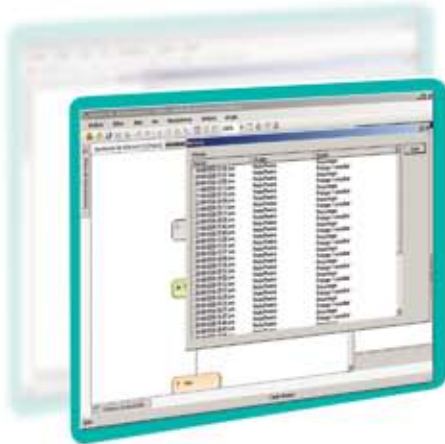
The Q-flow business process designer allows users to:

- Design processes in a detailed and intuitive manner.
- Describe the process, assigning properties to the steps, and relating them in order to form a sequence.
- Define application data and its scope within the process.
- Define roles and their participation within the process.
- Define a hierarchy structure to organize the information about the workflows.
- Define domains. Each application data is associated to a domain, which determines how the web site will show the application data, as well as the type of information (text, number, date, etc) and the possible values it may adopt.
- Link personalized forms to each step of the process and page that allows the process information to be visualized. These forms are ASP .Net pages. If personalized forms are not specified, Q-form automatically generates a form that shows the user's information.
- Define actions that are carried out when some event during the execution of a workflow is produced (for example, when an error in the workflow occurs or when the workflow changes status)
- Design and use worklets. A worklets is a group of steps for a process model, grouped in such a way that they can be used as a unit in several processes. This allows a group of steps in a process model to be grouped into a worklet so that they can be reused in other process models.
- Define operations to interact with existing systems, that can be reused in the design of various processes without depending on technically advanced knowledge of interacting with these systems





Auditing



Auditing support for organizational and process changes, including changes in the hierarchic relations, e-mail or log-on; and substitute activation, among others

Auditing of modifications carried out on the processes:

- Type of modification carried out
- Initiation of a new version's production and others

Auditing of operations:

- Detail of the operations carried out for the tasks or processes
- Types of delegations
- Reassignments
- Confirmation receipts, etc.



Auditing of data, roles and attachments:

- Detailed record of how an application data's final value was reached, storing all of the intermediate values.
- Storage of all the versions there were of an attached file during the execution of a workflow.



Auditing of the changes within an organization:

- Creation of users
- Changes in user groups or nodes
- Changes in user authorizations



Statistics

- Operative statistics for the Process Administrator or User Supervisor
- Average time or quantity of tasks carried out by the users in a certain process, during a certain period of time
- Workflow motive's workload
- A user or process's general workload
- Task distribution by status and user of a process
- Process status by milestone
- Data statistics based on other data
- Distribution statistics by process of workloads opened per user.

Q-flow Architecture

- Service Oriented Architecture (SOA)
- Q-flow is based on a four level architecture system, with no installation by the web client. Q-flow s divides into its presentation level the format data, establishing two sublevels in the user interface. Thus, it allows for the connection with multiple systems based on XML interchange and, at the same time, makes the format and function of the web interface independent from the application code.
- Q-flow includes skins and themes that one of these sublevels implement. These skins and themes can easily be personalized by personnel who are competent in computer sciences and who can thus completely modify the appearance of the website. The Q-flow architecture allows the personalization of the web site to be taken to a more advanced level, offering the possibility of adapting the web site to the company with the use of Q-flow's well defined components and interfaces which allow for the incorporation of the website's logic to the already existing systems.
- Capability of operational transactions, which are achieved by storing the workflow information in a related data base and not in the mail systems, making the reconstruction of mails possible in case of a restoration or loss of one or more mailboxes.

Extensibility

- Definition of new steps
- Design capacity, through web parts and digital dashboards that are personalized by the users
- Start and response of workflows from external applications
- Possibility of modifying the appearance of the web site through skins and themes
- Q-flow provides web parts that can be exported and imported from any site that uses the ASP .NET 2.0 web part model, for example Sharepoint Portal Server 2007, o an intranet portal designed with this technology



IntelliKon

Q-docs

Q-expeditive

Q-legal

www.urudata.com