

# COLLABORATIVE BPM AT THE EGYPTIAN STOCK EXCHANGE

## Bonita Open Solution at the Egyptian Exchange (EGX): Improved Customer Satisfaction and More Efficient IT Processes

"As a complete Business Process Management suite, Bonita Open Solution streamlined our processes and helped us get the same amount of work accomplished faster and with fewer steps." - Mahmoud Refky, Software Quality Assurance General Manager, EGX

### About the Premier Capital Market in the Middle East & North Africa Region

The Egyptian Exchange (EGX) was formed in 1992 and has headquarters in Cairo and Egypt. EGX operates a securities exchange and trading venue for member Egyptian and international firms and brokers to electronically buy and sell securities in Egypt. It lists and trades stocks, bonds, and mutual funds, and has the mission of operating and developing a high quality market for the benefits of its clients.

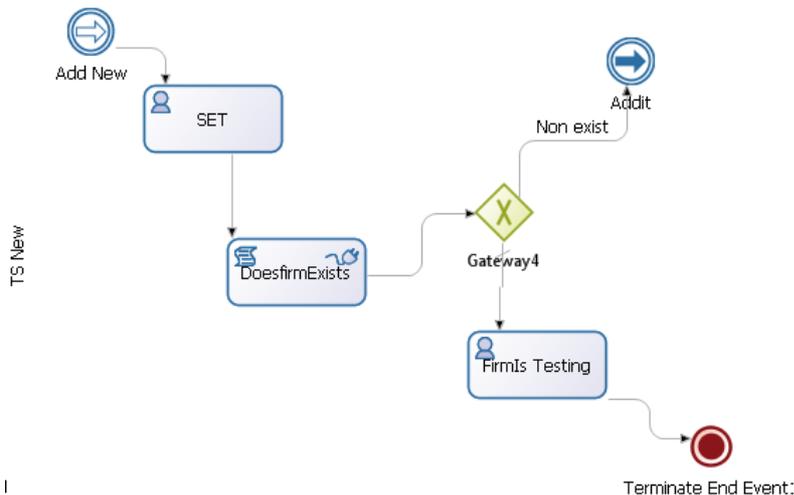
### Business Needs and the Process to be Automated

To trade on the Egyptian Exchange, EGX member firms are required to use the "FIX protocol," a standard messaging format developed to facilitate the exchange of information about securities transactions. Firms using FIX protocol first register with EGX to do testing in a test environment, get approval, and then are registered to operate on a FIX production server.

There were five EGX teams involved in documenting and then automating the process for FIX enrollment: Technical Support, Operations, Networks, Security, and IT.

All five teams collaborate to execute a detailed enrollment process:

1. EGX Technical Support receives a written request from a firm wishing to test on the EGX test environment. Technical Support then routes the request to Operations if the firm is not already approved to test on EGX's environment. The process map and corresponding form for this step can be seen below.



Process Map for Adding a New Firm to EGX's Test Environment



The Technical Support Team Registers the Firm Using the Form Above to Determine Whether the Firm is Already in Testing

2. Operations receives the request and determines the test server's IP and port which the firm will use to communicate with EGX.
3. The Network team receives this information and determines the source of the IP form. They then configure a user on the test server and allow the firm to access the test server on the EGX network. The firm's source IP is then sent to Security.
4. Security determines the firewall IP, and allows the firm access through the EGX firewall.
5. Technical Support sends a confirmation letter to the requesting firm with all connectivity details.

There are also timing issues to take into account in this process. Changes in the FIX gateway configuration have to be completed before the server is started, so the requesting firm's access needs to be activated the day before the test date. And when the test period is over, the test access must be terminated.

There is a separate process to remind team members that a firm has to be activated for testing. This process is automatically started everyday at 8:25 AM. It starts by checking the database (DB) for firms with a status of 'pending' and their allocated start date is less than or equal to today's date. There is also a separate deactivation process that is similarly executed.

## The Choice for Bonita Open Solution

EGX Quality Assurance reviewed three open source BPM solutions: ProcessMaker, Joget Workflow, and Bonita Open Solution. After several months of research, they chose Bonita Open Solution because it provided a complete BPM suite, with a robust design studio to model the EGX IT processes, and an interactive portal for the stakeholders from all five teams to manage the deployed enrollment process. After the selection of Bonita Open Solution, the members of the various EGX teams found the capabilities and interfaces of the studio and portal easy to use. The EGX Quality Assurance team also appreciated the support they received from the Open Source community when voicing their inquiries on BonitaSoft's community forum. EGX process designers also made extensive use of the rich set of connectors for linking with EGX's other databases and systems.

## Key Results

EGX was originally seeking a solution to serve as a repository for documenting their processes. Bonita Open Solution has fully met this requirement – and was further implemented to actually automate the entire enrollment procedure.

Before deploying Bonita Open Solution last year, EGX's Quality Assurance team spent time and effort to manually inspect their database to find firms that should be removed after the test period. This inspection and removal process is now done automatically and has saved EGX valuable resources.

After using the automated enrollment process successfully for over a year, EGX plans to automate three additional processes: a checklist process, a monitoring process and a stock index update process.

Mahmoud Refky, the Software Quality Assurance General Manager at EGX is very happy with these results. He notes, "This solution allows us to modify and improve our processes. Bonita Open Solution has changed the way we work with our member firms and revolutionized our enrollment process."