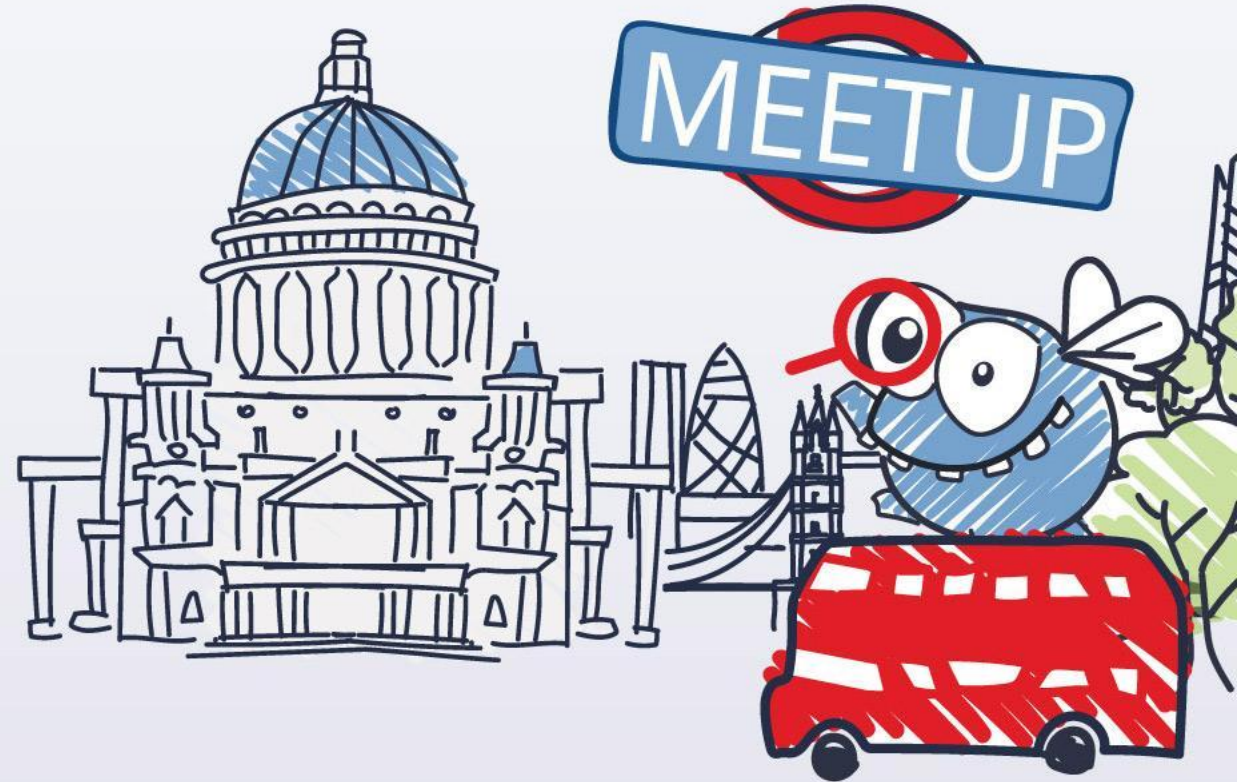


Exactpro Open Source Strategy

Maxim Rudovsky
20th June 2018



Build Software to Test Software

- Automated testing (and analysis of results) wherever possible
- We develop our own tool suite we use & create new tools as needed
- Test Automation is in our DNA, our tool set is a key part of our added value
- Open Source software underpins all our testing tools software



Automated monitoring, analysis and reporting



Automated testing
Compares intended and actual results



75K messages / second from a single CPU core
Measures latencies in microsecond range



Automated End-to-End clearing system testing



A variety of algos simulating end-clients will run and see how system performs



Efficient GUI automated testing solution

Open Source software underpins our testing tools software



We've used QuickFIX/J (a full featured messaging engine for the FIX protocol and a 100% Java open source implementation of the popular C++ [QuickFIX](https://www.quickfixj.org/) engine) as our first FIX engine



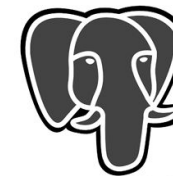
<https://www.quickfixj.org/>

To store all messages, we use:

- MySQL, the world's most popular open source database, which many of the world's largest and fastest-growing organizations rely on to save time and money powering their high-volume Web sites, business-critical systems and packaged software, and
- PostgreSQL, a powerful, open source object-relational database system that uses and extends the SQL language combined with many features that safely store and scale the most complicated data workloads.



<https://www.mysql.com/>



<https://www.postgresql.org/>

To develop our test tools' user interfaces, we've relied on a set of frameworks.

90% of our desktops and servers run on Linux.

We've always wanted to give back to the Open Source community. To celebrate 20th anniversary of Open Source Initiative in 2018, Exactpro goes Open Source this year.



Open Source Initiative

To promote and protect open source software, projects and communities

<https://opensource.org/>

Exactpro Open Source strategy



The screenshot shows the Exactpro website header with the tagline 'Build Software to Test Software'. The main article title is 'Exactpro Announces Management Buyout from London Stock Exchange Group'. Below the title are navigation tabs for 'Exactpro releases' and 'Industry news'. The article text includes the date 'JAN 17, 2018' and a summary: 'Exactpro Systems Limited and its subsidiaries ("Exactpro"), announce that EXPLORE123 Limited, a company incorporated by the founders of Exactpro, has completed the acquisition of Exactpro from the London Stock Exchange Group ("LSEG") on undisclosed terms.' A sidebar on the right promotes 'EXTENT-2018: Software Testing and Trading Technology Trends' with a 'Pre-Register now!' button and social sharing options for Facebook, LinkedIn, Twitter, and Google+.

It is easier for us to implement our Open Source strategy now that we have completed the management buyout from the London Stock Exchange Group

<https://exactpro.com/news/exactpro/exactpro-announces-management-buy-out-london-stock-exchange-group>

Exactpro Open Source strategy



Control over their test harnesses is important for our clients.

Therefore our strategy has always been to license the software testing tools along with their source code to the clients.

To give our clients even more confidence in the software testing tools they use, this year we are rolling out several of our testing tools into Open Source.



Makes our software developers happier, too... 😊 😊 😊 😊

JackFish has been donated to Open Source

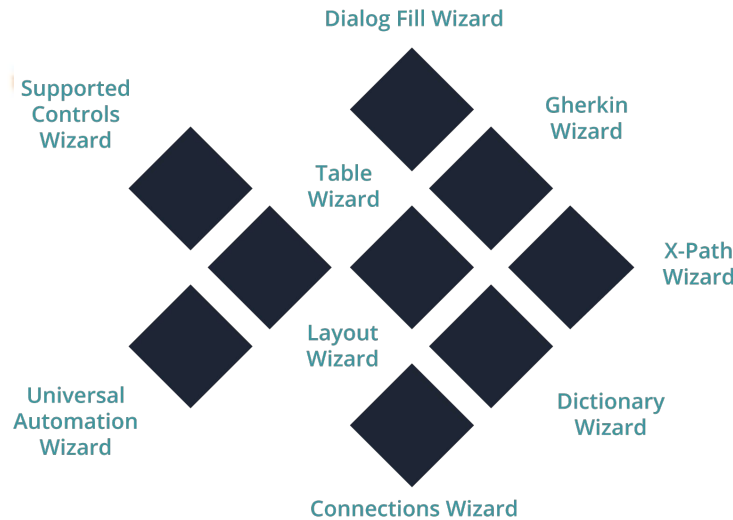


JackFish testing tool

We prefer to focus on API whenever possible.

Still, in some rare cases, UI test automation is also required.

Learn more here:



<https://exactpro.com/test-tools/jackfish>

<https://github.com/Exactpro/jackfish>

CLICK TO OPEN THE GITHUB PROJECT



JackFish is licensed under the Apache 2.0 license



Open source GUI test automation solution

4,327 commits | 27 branches | 21 releases | 5 contributors

Branch: master | New pull request | Find file | Clone or download

alexander.kruglov and ASitnikov tiny fix | Latest commit 3ecbd42 9 days ago

File	Commit	Time
TestProject	fix tests	6 days ago
api	tiny fix	6 days ago
core	Bug #49319 [Refactor wizard] Wizard is not correctly work at moving S...	6 days ago
csharp/UIAdapter	RM49692 [win-plugin] JF is not sees list items for ComboBox and can n...	6 days ago
gradle/wrapper	Add gradle folder	2 months ago
mocks	fix tests	6 days ago
plugins	RM49698 [win-plugin] JF is not sees Tables and can not work with them	6 days ago
.gitignore	Add files	2 months ago
build.gradle	Add files	2 months ago

Next steps



We plan to donate our tools Sailfish and Nostradamus in October 2018, before the SIBOS conference in Sydney, Australia:

Sailfish is an active real-time tool used for exchange, MTF and broker systems testing. It is also used as an exchange simulator for testing post-trade systems or smart derivatives.

It is a web-based application written in Java which supports simultaneous connections of multiple users for both incoming and outgoing streams.

Nostradamus



Predicts the testing metrics:

- time to fix / time to resolve (TTR)
- which defects get fixed
- which defects get rejected

Automatic recommendations on the probability of:

- a certain priority
- the area of testing
- a bug fix or reject



<https://www.sibos.com/about-sibos/sibos-2018-sydney>



Date: FEB 06, 2018

On 22-25 October 2018, Sydney will host Sibos - one of the world's premier financial services events. Exactpro is already scheduled to be part of the exhibition.

Exactpro is taking part in SIBOS for the third time in a row. Last year, Iosif Itkin, Exactpro co-founder and co-CEO, spoke on Disruptive Functional Testing in Toronto, Canada. The talk was based largely on Exactpro's work with LCH, T2S, clearing and settlement systems worldwide. The participants could also visit Exactpro's stand at the exhibition area throughout the conference.

After the successful 1997 and 2006 events, the largest city in Australia will host SIBOS for the third time. Besides its iconic sights, Sydney is famous as a major financial and economic hub across the Asia-Pacific region. It provides a quarter of the national GDP, and is home to the headquarters of more than 90 banks. The Australian Securities Exchange and the Reserve Bank of Australia are also located in Sydney, making it well-set

[exactpro.com](https://www.exactpro.com)

Thank you!