

Banja Luka stock exchange

The screenshot displays the BLSE Online web application interface. At the top, there is a navigation bar with tabs for 'Add Tab', 'My Securities', 'Current Price List', 'Trades', 'Indices', 'Orders', 'Prices', 'Turnover', and 'Chart'. Below this, several windows are open:

- My Securities:** A window with 'Add', 'Remove', and 'Rename' buttons, and a list of securities.
- Current Price List - Funds:** A table showing fund prices and changes.
- [EINP-R-A] : Orders:** A table showing order details for EINP-R-A.
- [BLBP-R-A] : Chart - 1 year:** A chart window for BLBP-R-A.

S	Symbol	Mode	Price	Change	BB	BA	Max	M
	BLBP-R-A	SloCont	12.2	-0.16%	12.2	12.22	12.2	
	BLKP-R-A	SloCont	6.52	-0.61%		6.55	6.55	
	BRSP-R-A	SloCont	9.04	0%	9.01	9.7		02.06.08 9.01
	EINP-R-A	SloCont	26.23	0.38%	24	28	26.5	26 26 10:31:31 26.5
	EKVP-R-A	SloCont	6.7				6.71 6.71	09:31:33 6.7
	INVP-R-A	SloCont	0.17					
	JHKP-R-A	SloCont	4.7					
	KRIP-R-A	SloCont						

BLSE Online

User
Manual

English
version

TABLE OF CONTENTS

BLSE Online	4
Hardware Requirements	4
Software Requirements	4
BLSE Online Interface	5
The Look	5
Data Delay	5
Window Management	5
Price List	5
Details About Individual Security	6
Search	6
Symbol Tracking	6
My Securities	7
Multiple Worksheets	7
Workspace Layout	7
User Profile	8
Bug Report	8

BLSE Online is a Web application for real-time trading tracking. Some of the key characteristics are:

- Up to several times less network bandwidth usage¹,
- Intuitive interface,
- Complete freedom in creating custom workspaces.

HARDWARE REQUIREMENTS

- **Minimum:** Pentium 4 at 1GHz, 256 MB RAM, *dial-up* Internet access, 17" display
- **Recommended:** Pentium 4 at 2GHz, 512 MB RAM, broadband Internet access, 20" display

SOFTWARE REQUIREMENTS

BLSE Online is a thin-client application, so the only software that is needed on the client side is a web browser. The application makes use of some advanced AJAX technologies and the last browser version is strongly recommended. Our recommendation is Mozilla Firefox 3 RC1 (or newer). Follows the list of supported browsers (ordered by performance):

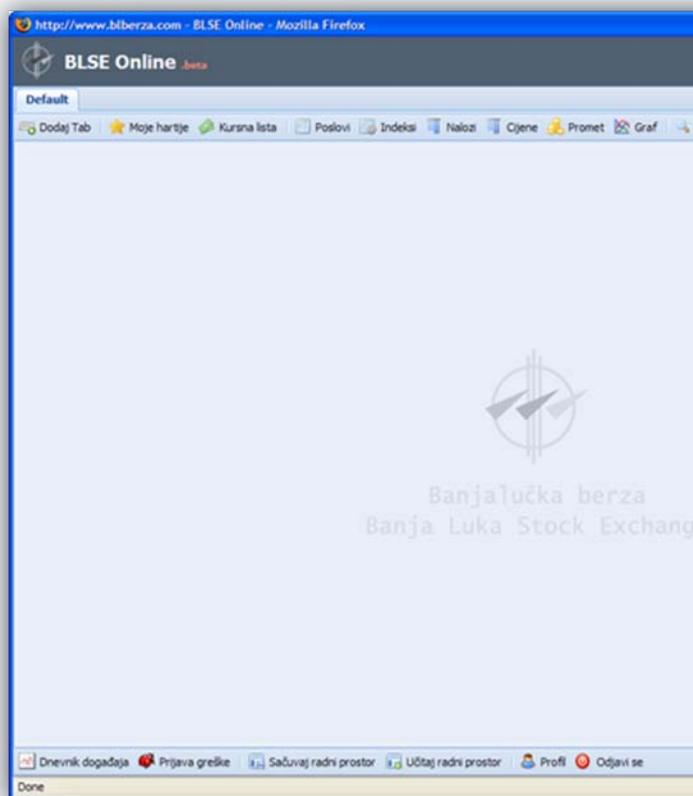
- Mozilla Firefox 3+
- Safari 3+
- Mozilla Firefox 2
- Internet Explorer 6+
- Opera 9



¹ During the trading, compared to the old version of BLSE Online application

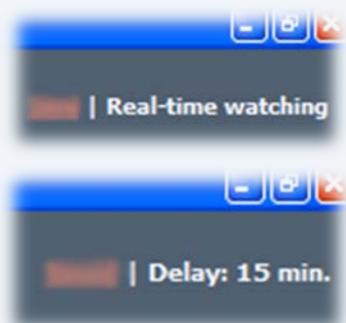
BLSE ONLINE INTERFACE

THE LOOK



DATA DELAY

Depending on what package you subscribed for, in the upper right corner of the page you can find the information on how late the displayed data is behind the data in the trading system.



WINDOW MANAGEMENT

The data that the application offers is organized into windows of different types. Types of these windows can be seen in the upper toolbar. A window is opened by clicking the proper button (when it opens in the center of the worksheet), or by dragging the button and dropping it to the place where we want the window to open. Window size and position can be changed after its creation.

One worksheet can contain up to 10 windows, which can consist various types of information, such as:

- Information about traded securities,
- Information about trades,
- Market depth (by order and by price),
- Indices values,
- Turnover,
- Price charts.

PRICE LIST

Serversko vrijeme: 3:10:13

Kursna lista - Trgovane hartije

S	Oznaka	Mod	Cijena	Promjena	NK	NP	Max	Min	Otv	Zatv	VPT
	APBL-R-A	SloCont	0,0024	-7,69%	0,0024	0,0024	0,0024	0,0024	0,0024	0,0024	10:30:23
	BANJ-PQ1	SloCont	100	0%		100	100	100	100	100	09:31:23
	BLBP-R-A	SloCont	12,24	0%	12,21	12,7	12,24	12,24	12,24	12,24	09:31:23
	BLXB-O-A	SloCont	88,815	0,5%		88,815	88,815	88,815	88,815	88,815	12:30:44
	BLPV-R-A	SloCont	0,6	-7,69%		0,6	0,6	0,6	0,6	0,6	11:21:13
	BOKS-R-A	SloCont	1,3	0%	1,2	1,3	1,32	1,3	1,32	1,3	11:05:44
	CJAL-R-A	Fix1	0,24	0%	0,24	0,5	0,24	0,24	0,24	0,24	12:01:23
	EINP-R-A	SloCont	25,85	3,4%	26	26,24	26,1	24,01	24,01	26,1	11:01:33
	EKBL-R-A	SloCont	1,2	-1,64%	1,15	1,31	1,2	1,2	1,2	1,2	09:31:23
	EKVP-R-A	SloCont	6,71	0%	6,71		6,71	6,71	6,71	6,71	09:31:23

Upon creation, *Price List* window contains information about securities that are involved in trading during the active trading day. By clicking on the window-type button, located in the upper right corner of the window, you can change the pricelist type, or you can select one of your own security selections (*My Securities*). Fast switching of window types is available from the keyboard, by selecting shortcut numbers (1 to 9), or letters (A to Z). Like for the most of the other windows, the table it contains can be reordered by a column of choice, and the order of columns can be changed, too.

	LTP	Trades	Volume	Value
3	100	1	15	1500
3	12.2	1	20	244
7	6.5	7	979	6381
6	0.59	1	450	266
6	1.3	23	264068	343040
1	26.5	4	216	5666
4	1.2	1	4265	5118
1	6.71	1	20	134

- 1 - Traded Securities
- 2 - Funds
- 3 - Bonds
- 4 - Active - Continuous
- 5 - Active - Auctions
- 6 - Market Imbalance
- A - My securities 1
- B - My securities 2

BLSE Online is a real-time watching application, which means that data changes will show in all open windows almost instantly² (or delayed by appropriate amount, depending on what package you subscribed for). A changing value is highlighted by a temporary change of the background color:

- Rising values are highlighted by green background,
- Falling values are highlighted by red background,
- New rows and rows that change are highlighted by yellow color.

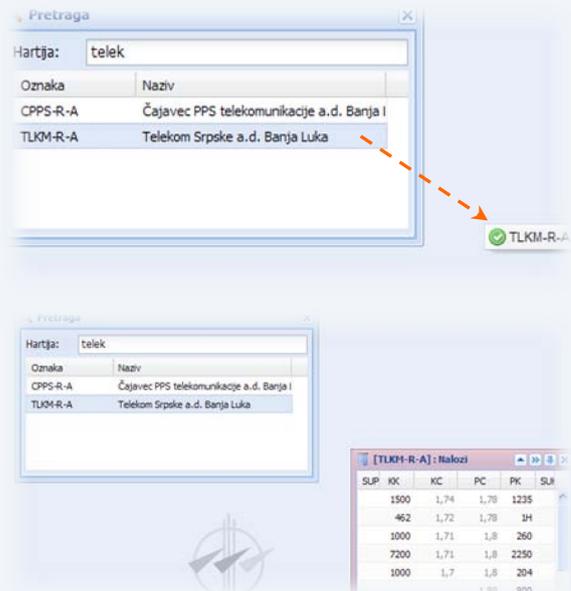
350	11,31	12,4	20
100	11,3	12,4	30

09:31:26	20	11.61	232,2
12:49:37	437	11.9	5200,3

DETAILS ABOUT INDIVIDUAL SECURITY

Information on trading for one security can be obtained by dragging one row from a window that contains the security of interest (e.g. any security row in the pricelist table, or any security row in the search window) and dropping it somewhere on the workspace. By doing so, a new window that shows market depth for the security is opened. Other information for this security can be reached by changing the window type.

² There is a minimum delay of about 5 seconds from the moment of changes in trading system



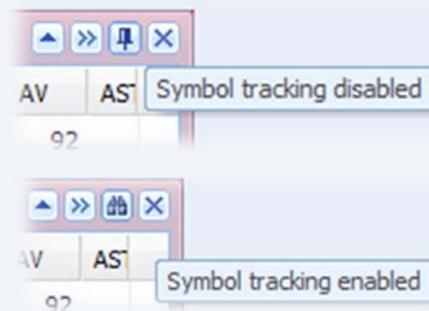
Also, security can be dropped into one of the already open windows, when the information that is currently displayed within that window will be substituted by the appropriate information about the new (dropped) security.

SEARCH

From the search window, you can easily find any security you need. When you find a security, just drag it somewhere on the workspace, or into some existing window.

SYMBOL TRACKING

Sometimes it is useful to have a set of windows that will always show the information about the currently selected security from pricelist window. This can be achieved by enabling the *watching symbol* option for appropriate window (second rightmost button in the upper right corner of a window).

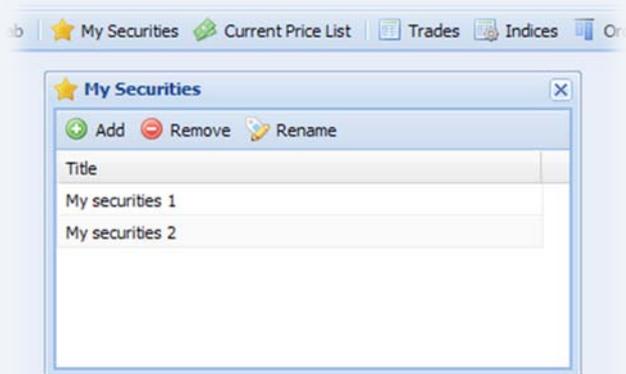


By default, symbol tracking is enabled for empty windows, and it is disabled for windows on which the security has been explicitly set (by drag and drop). Of course, only

windows that show the details about securities have this option.

MY SECURITIES

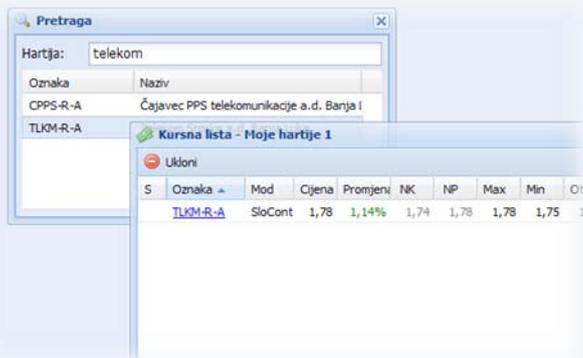
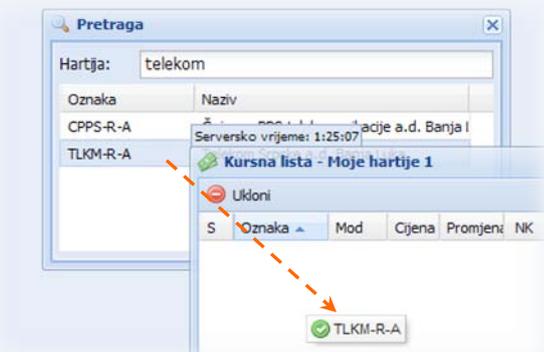
You can easily create your own lists of securities that you watch (*My Securities*), and those lists are saved on the server side, separately for each user. Lists are managed in the *My Securities* window. Here, you can add new list, or rename or delete existing one.



My Security list can be viewed:

- By selecting appropriate type of window in pricelist window,
- By dragging the list from *My Securities* window onto the workspace.

When you first create it, this list is empty and you need to populate it. This is done by opening the list, then dropping some securities into it, from some pricelist window, or from a search window.



MULTIPLE WORKSPACES



BLSE Online supports tabs, so it is possible to have multiple workspaces, with different watching settings for each of them. You can quickly switch between tabs, effectively increasing the number of windows you watch at the same time. Tab creation is as easy as selecting the *Add Tab* option from the upper toolbar and naming the new tab.

WORKSPACE LAYOUT



The number, the type and the positioning of windows, as well as tabs can be saved at server side by choosing *Save Layout* option. Later, you can easily restore your saved workspace at any time, by choosing *Load Layout* option.

USER PROFILE

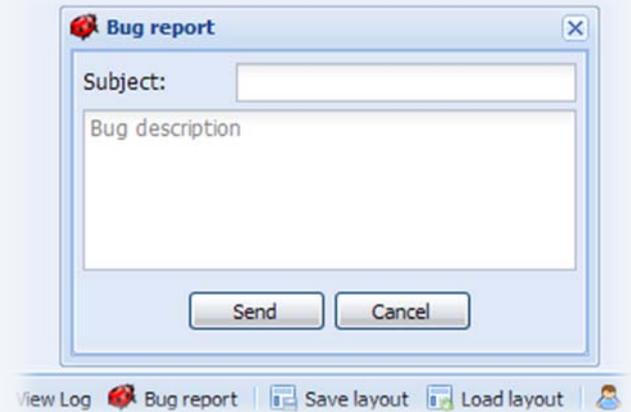
User information can be updated or corrected by choosing *Profile* option from the lower toolbar. Also, this is the place where you can change your password.



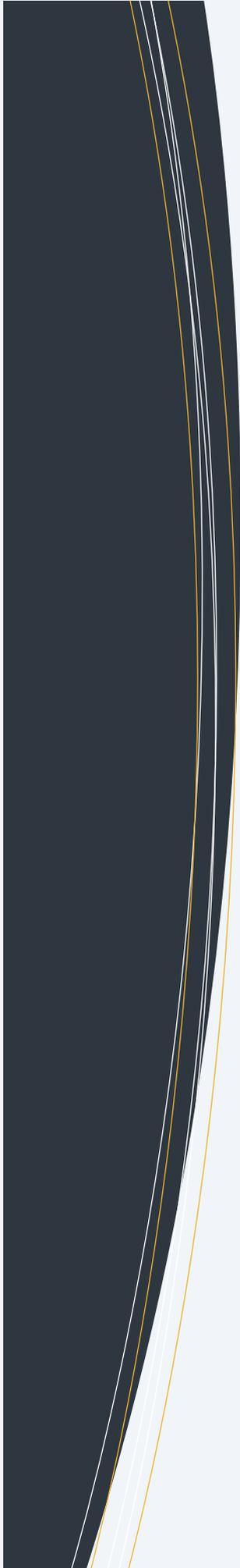
The image shows a 'User Profile' dialog box with a title bar containing a user icon and the text 'User Profile: [name]'. Below the title bar is a section titled 'User info' with a light blue background. This section contains several labeled text input fields: 'First Name:' with the value 'John', 'Last Name:' with the value 'Doe', 'Company:' with the value 'Microsoft', 'Email:' with the value 'john.doe@microsoft.com', 'Phone:' with the value '(123) 456-7890', and 'Address:' with the value '123 Main St, Seattle, WA 98101'.

BUG REPORT

When you notice a bug in the application, the easiest way to report it is by choosing *Bug Report* option from the lower toolbar. Here you just have to fill in the brief description (at least 5 characters long) and the detailed description of the bug (at least 15 characters long). By clicking the *Send* button, you are actually using a special service to send the bug report directly to the development team.



The image shows a 'Bug report' dialog box with a title bar containing a red bug icon and the text 'Bug report'. The dialog box has a close button (X) in the top right corner. It contains a 'Subject:' label followed by a text input field. Below this is a larger text area labeled 'Bug description'. At the bottom of the dialog box are two buttons: 'Send' and 'Cancel'. Below the dialog box, a toolbar is visible with icons for 'View Log', 'Bug report', 'Save layout', 'Load layout', and a user profile icon.



Petra Kočića bb
Banja Luka
+387 51 32 60 47 ph
+387 51 32 60 56 fax
www.blberza.com

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