Stonito Lotto

User guide
2025

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Welcome to Stonito Lotto

Deep Learning has proven its ability to solve various problems, including handwriting recognition, speech recognition, and computer vision. The algorithms are a reproduction of the human brain, which is the most powerful engine. The network may capture the latent structure in any dataset better than a human being possibly could. However, the results seem somehow magical for someone who is not familiar with this class of algorithms. Randomness adds to the dimensionality of a model. This software uses a new model to predict lottery numbers using the history of past draws as a training set. Lotto is a very popular and widespread game based on guessing numbers. The lottery principle is simple: people buy tickets that contain a list of combinations that bet over a finite set of numbers. A draw happens eventually at a fixed date and time. The gains depend upon how well the ticket combination matches the winning numbers. The jackpot is when the ticket has the winning combination.

Deep Learning

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Model we use

Inputs for an AI lotto prediction are the former rounds' drawn numbers.
Simply put, input for current round numbers prediction are the numbers drawn in the last draw (or several of the last draws, as per settings).
The result that the network is returning is the probability of each number appearing in a winning combination in the future draw.
In addition to this network, the software features another neural network. Based on a history of past draws, this network can reveal to us how well any combination of numbers relates to previous winning combinations.
Remember, artificial intelligence is better than natural intelligence (ours) because it is not distracted but knowledge and understanding of the problem as it simply analyzes input and output data. That approach is preferred when dealing with inherently stochastic processes as random events certainly are.

Getting Started

Unlike many other lottery programs that generate random numbers or follow strict rules deciding on statistics, Stonito Lotto picks the best numbers to play based on artificial mind retrospection on the previous draws. Stonito Lotto helps you play the lottery with more control and not rely on sheer chance only.

Don't expect this software to win you a jackpot by doing just a few clicks. No matter how hard and long you train the network success is not guaranteed. The correct use of this software is simply a valuable tool that helps you in the process of choosing your combination of numbers. After adding each number to your combination, you will be able to check how your number relates to the previous draws, and finally how your combination could be concluded to look best considering past draws.

The numbers that Stonito Lotto picks up could easily be called "smart" numbers. When you play "smart" numbers, the program does all the work for you. There is no need for you to provide any data or do any calculations.

You adapt system settings and then manually pick the numbers ordered by statistical and artificial intelligence preference, which you think are the best choice.

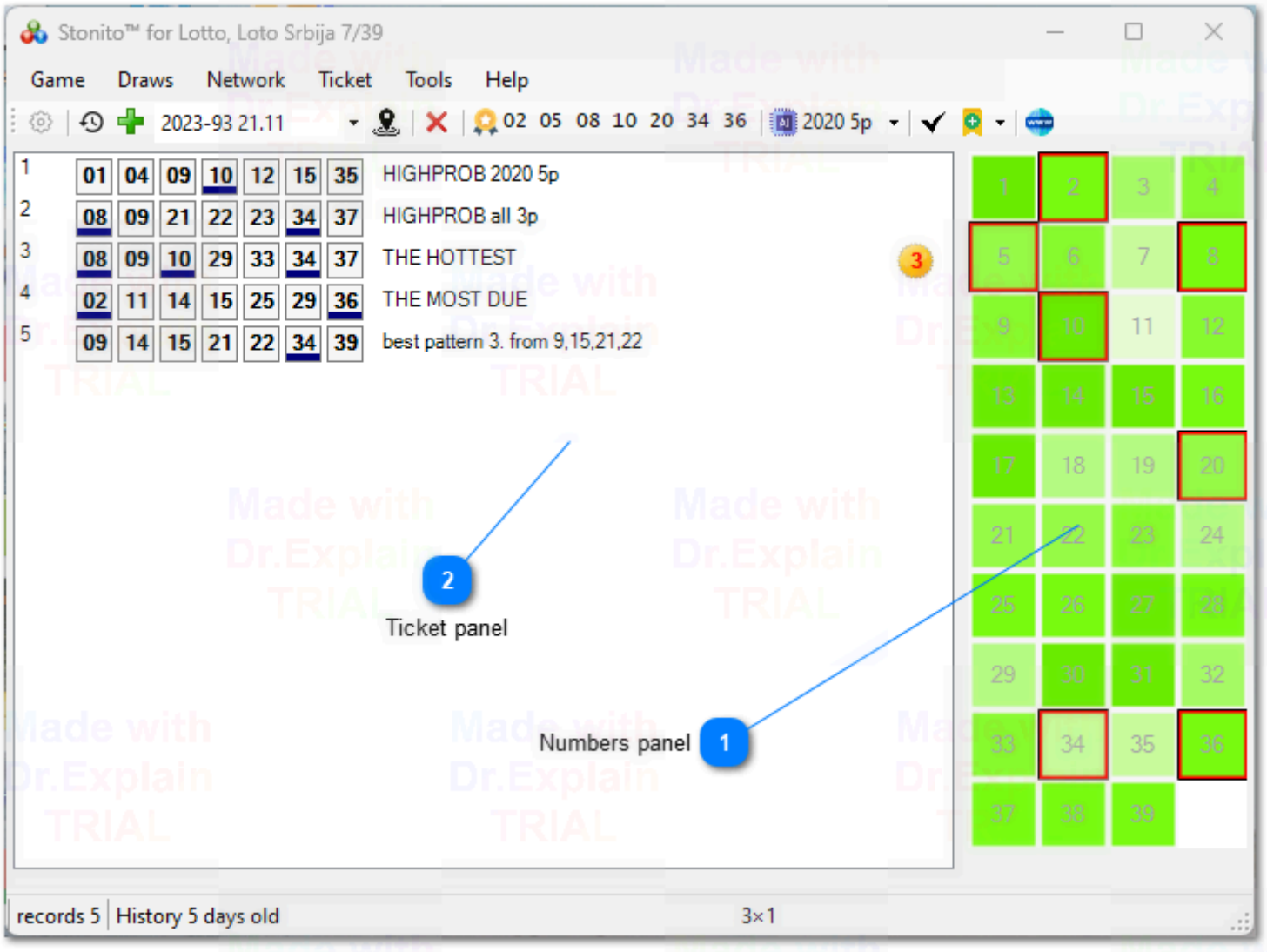
Stonito Lotto gives you two choices as to how to create your lottery tickets. To generate ticket combinations you may use a wheeling system, or add them manually. A large selection of wheeling systems comes with the program.

The program also checks your lottery tickets for winning numbers.

The QuickStart in this section shows you how to quickly get started using Stonito Lotto to play the lottery with more control.

Stonito Lotto runs on any computer with a Windows operating system with .NET Framework 4.8 installed.

The main form is probably the best place to start our introduction.



1 **Numbers panel**

All numbers are shown in a table.

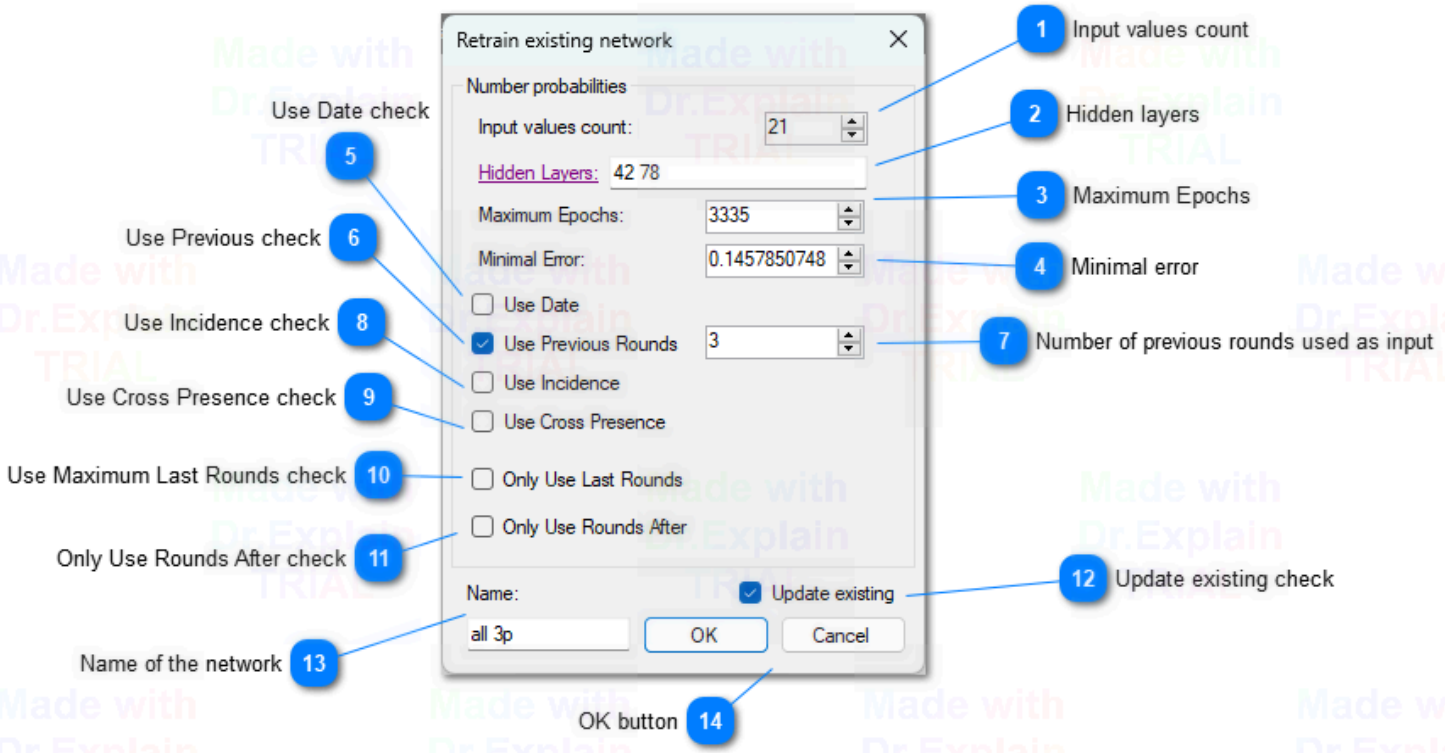
Winning numbers (if known) are marked with dark borders. Numbers in selected combination from a Ticket panel are marked with inside borders and they are in bold letters.

2 Ticket panel

These are numbers for a ticket for a selected round.
Software remembers all your tickets with a round you played so you can check them any time later. Wins are detected and marked appropriately.
On a particular image the winning combination matches highest probability combination and we have a jackpot.

Neural Network

You don't have to possess a profound understanding of how neural networks work to effectively use **Stonito Lotto**.
Understanding a basic configuration options will suffice.



1 Input values count

This value represents the number of inputs in the neural networks. This number is calculated based on the network settings and what types of input data it will use.

2 Hidden layers

Every Neural Network has at least two layers: one is the input layer, and the second is the output layer. They are implied and not seen here. Hidden layers are the layers interconnecting those input and output layers. Each hidden layer is represented only by the number of nodes it comprises. Every number represents the hidden layer with a particular number of nodes, starting from the input layer. The more layers you add, the network will be more complex. A complex network needs more time to train but can catch more intricate relationships between input and output data.

3 Maximum Epochs

This is related to the training of the network. When this number of epochs is reached the training is stopped. One epoch is similar to one generation.

4 Minimal error

This is also related to the training. When the minimal error is reached, the training is stopped. The error doesn't converge to zero because the prediction is not a deterministic problem.

5 Use Date check

Use date of the drawing as in input

6 Use Previous check

Use previous drawing numbers as inputs

7 **Number of previous rounds used as input**
Defines how many previous rounds are used as inputs for training and inference. For example, if the numbers pool is 39, value of 3 meaning that in training for every round three previous will be used as inputs, that makes 87 input values in total.

8 **Use Incidence check**
Use counts of each number is present in previous draws as inputs

9 **Use Cross Presence check**
Use table of mutual presence of pairs of numbers in all previous draws

10 **Use Maximum Last Rounds check**
History may be quite large, so including all the draws in training would lead to a lot of processing burden. It makes sense to limit the training to the last number of drawings. It's up to the user to find out the optimal number for a particular game.

11 **Only Use Rounds After check**
Similar as previous, but only limit the date after which the draws are considered. This date does not limit the number of drawings actually included in training otherwise.

12 **Update existing check**
If checked, the new network will not be created, but the existing will be updated. Otherwise, new network will be created and current network will be saved.

13 **Name of the network**
This text is used to identify the network in the list of trained networks for particular system. It is saved upon completing training process only.

14 **OK button**
Initiate process of training network. It may take some time. During the process the current values of epoch and error are updated for each finished epoch.

You are advised to use multiple networks with various settings and keep track of how well they perform in the future games.
You can adjust them any time you want.

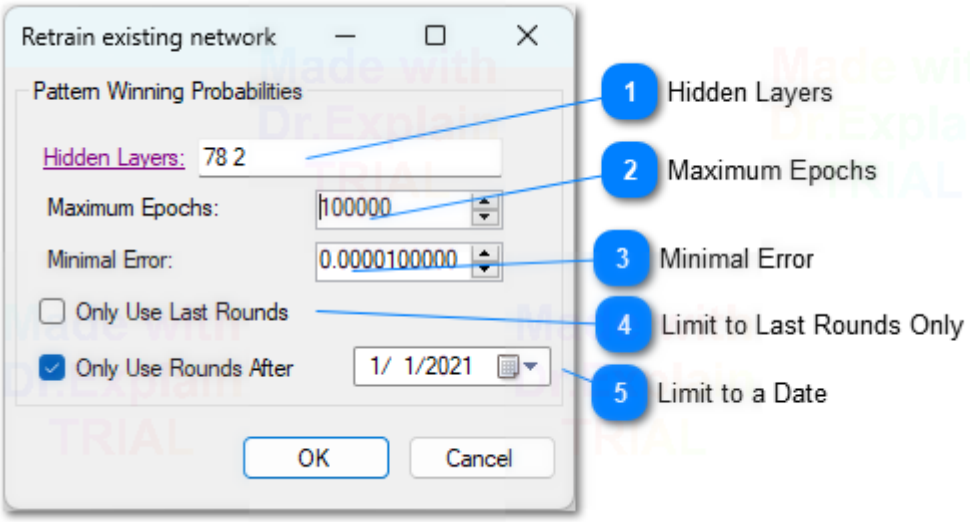
To add a new network to the particula game just uncheck the `Update existing` checkbox.
After the training is completed, newly created network will be selected as active.

You can opt to delete the selected network from main menu. Deleting network is necessary only if you want to decrease the number of networks. Otherwise you can easily update settings and name of the network and retrain it to replace existing network.

In the main menu there is also an option to `Train all networks`, which is used to retrain all the networks in a succession. The last that will be retrained is the network for patterns.

Neural Network for Pattern

Setting and training this network differs very little from the main neural network described in previous topic. This network has less parameters and is much simpler to train and use.
Using this trained network you will be able to check any given combination in terms of how good it looks as a jackpot combination, based on previous draws.



1 Hidden Layers
The internal structure of neural networks represented by count of nodes in layers between input and output layers.

2 Maximum Epochs
The training will finish when this number of epochs is reached.

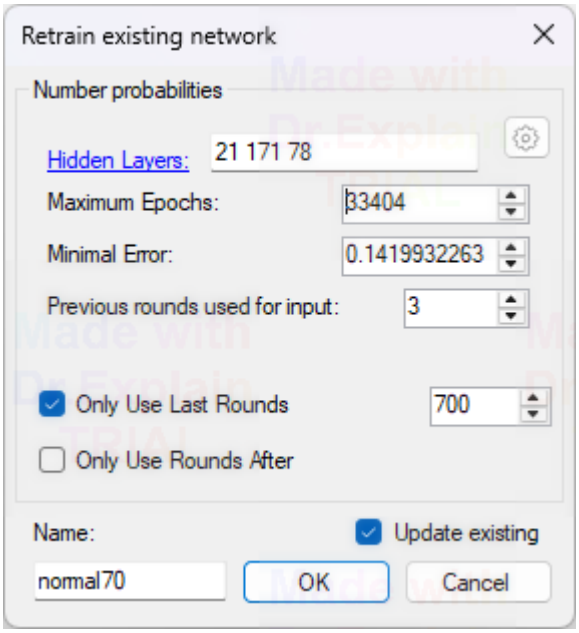
3 Minimal Error
The training will finish when the last error value is less or equal to this value.

4 Limit to Last Rounds Only
If checked, the value entered limits the history draws used for training of the number to a last value rounds.

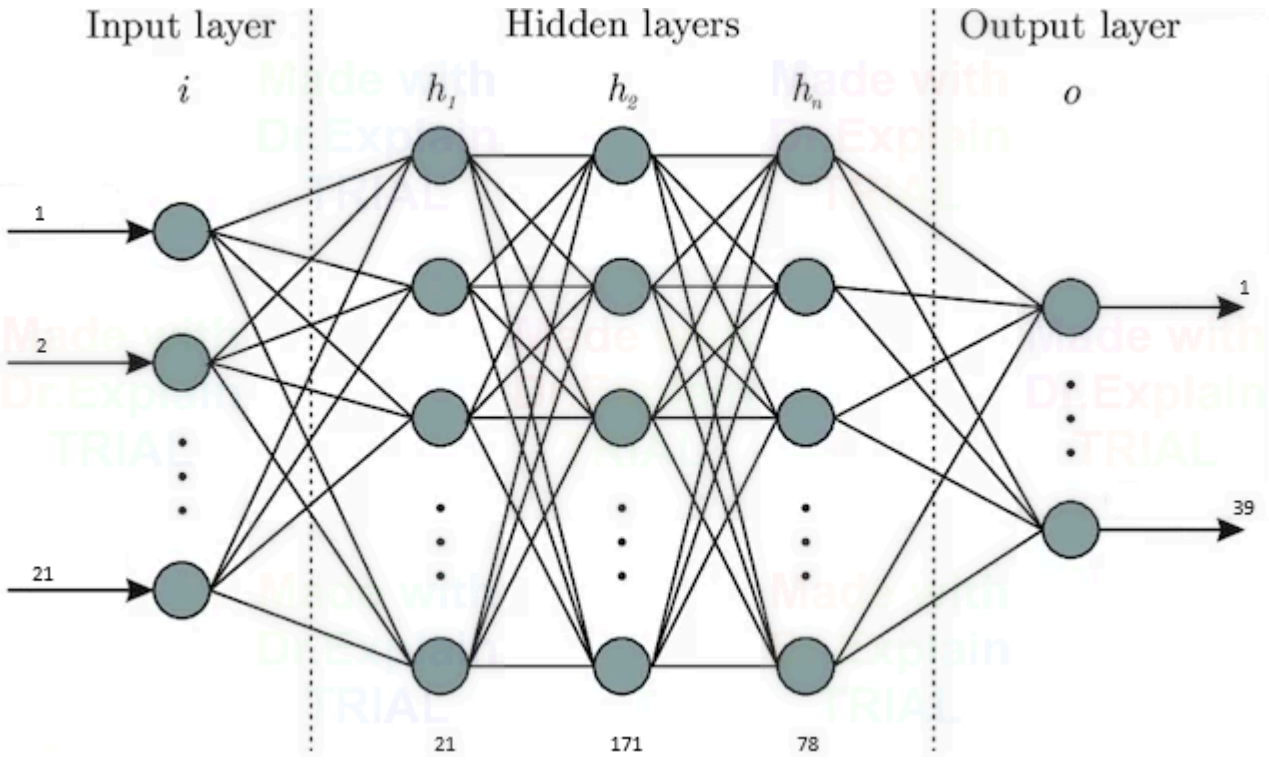
5 Limit to a Date
If checked, the set of history draws is limited only to a draws coming after a selected date.

Network Performance

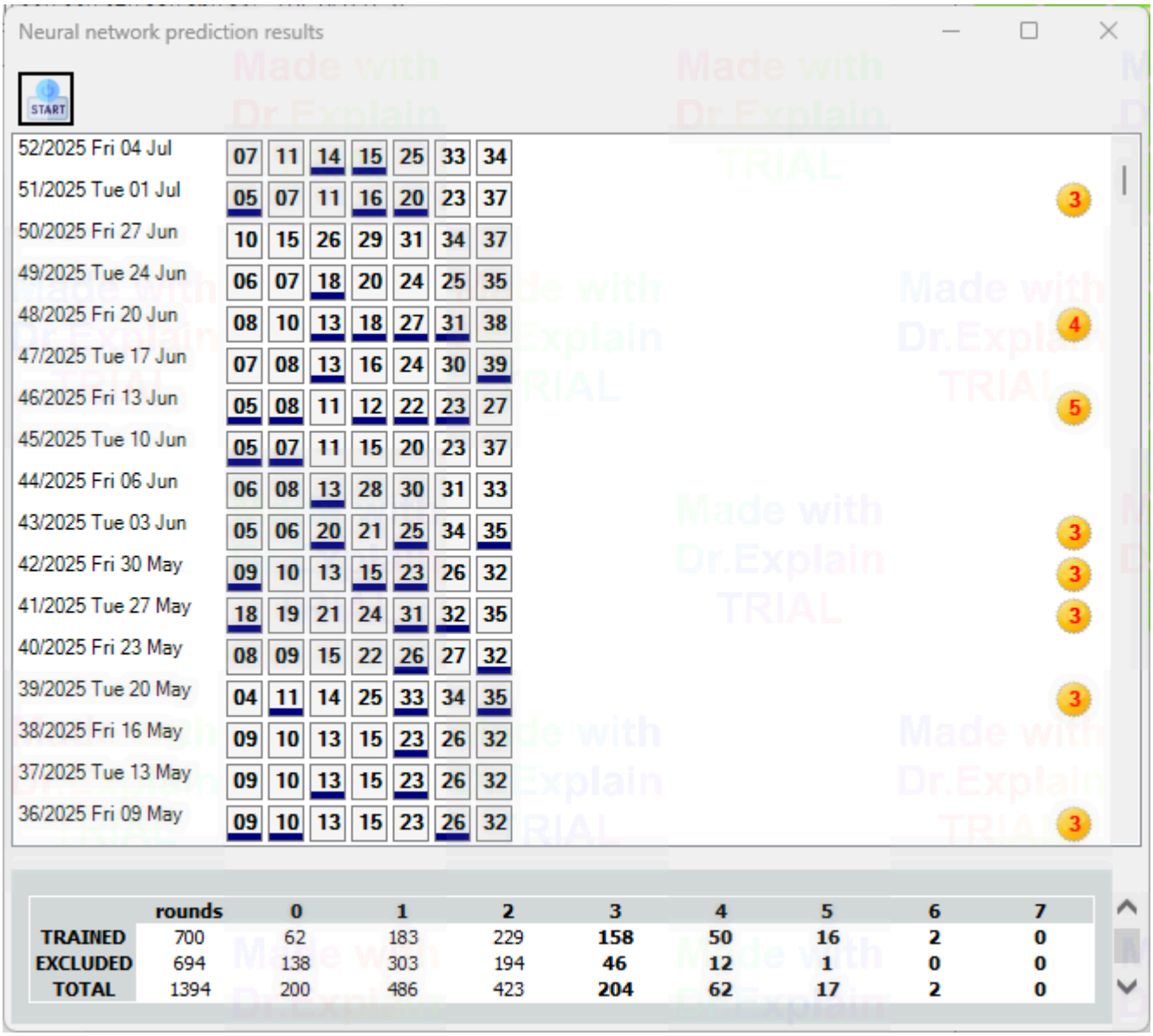
For an example system of Lutrija Srbije Loto 7/39, I trained the network using this setup.



There were three hidden layers, with 21, 171, and 78 nodes respectively. The input layer has 21 nodes (3 times 7) and the output has 39 nodes.
Every node in one layer is connected with all the nodes of the adjacent layers, and those connection weights are what are adjusted in the training process to produce the best possible results on the training set.
There is no way to tell which configuration of hidden layers is the best, so this is only one of the myriad of possibilities.



The network finished training after 33404 epochs (or steps), reaching a minimal error of 0.141... which is a relatively high value of error, meaning its performance on the training set will not be perfect either.
For the training, I used the last 700 rounds, which is approximately half of the whole history. The network stopped because one of the criteria for stopping was reached, namely the number of epochs without significant improvement.



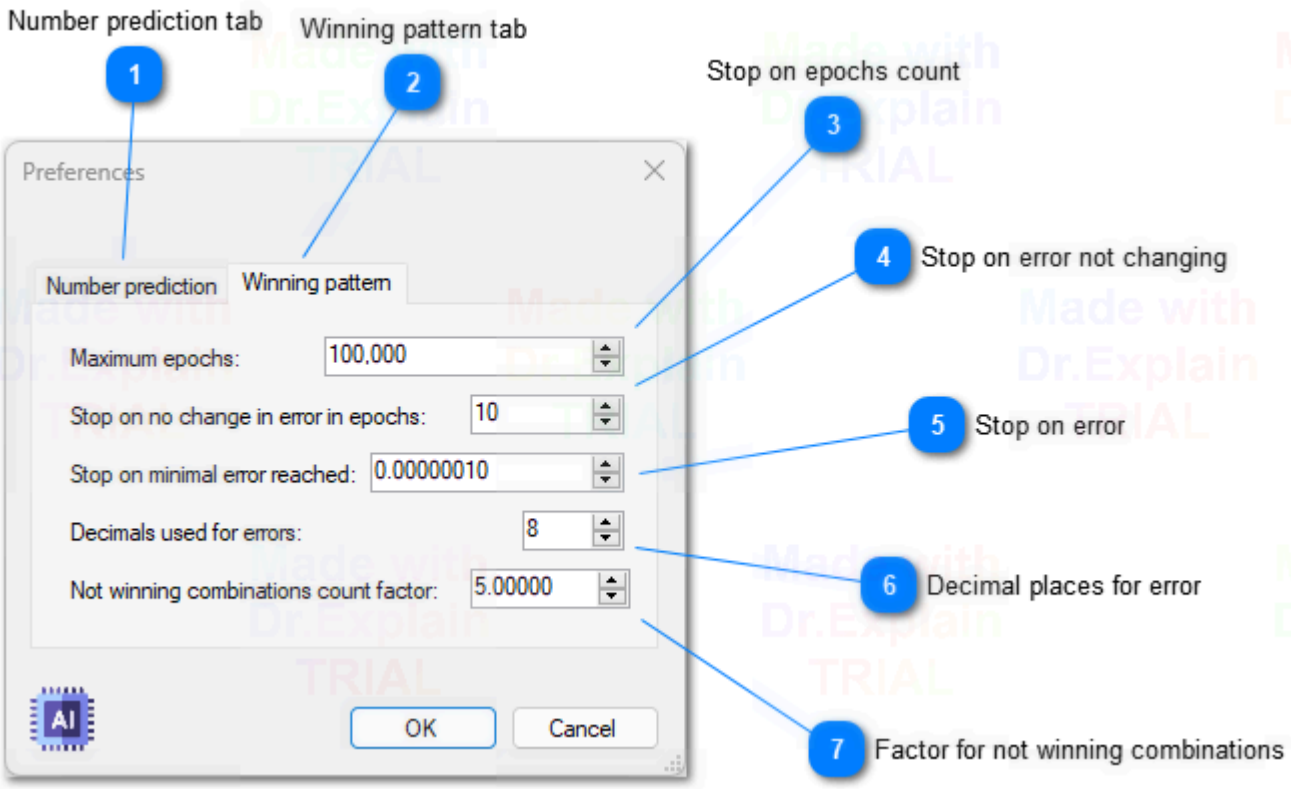
Here are the results of the trained network prediction over the whole history.

`TRAINED` stands for a set of rounds included in the training. It is normal that the trained network has better performance on that set. During the training network tries to adjust its internode connection coefficients to have the best possible results on the training set. If the network has broken the system, the results of this training set would be all 7.

`EXCLUDED` stands for a set of rounds that are not part of the training set. For this test, they are similar to future rounds, unknown to the network as they were not part of the training set. But they nevertheless were drawn in the past by the same system, so they are a good prediction of how this network will perform in the future too.
You notice also that even on the training set there are some rounds with zero winning numbers. However, there are also significant wins.

Training Settings

Stonito Lotto makes use of two different types of neural networks:
1. Number Prediction, network used for calculating probabilities of each number appearing in a next rounds, with predefined input values.
2. Winning Pattern, network used to calculate similarity of any combination with previous winning combinations. Input is a combination, and output is a probability (0-1).



1 Number prediction tab

Number prediction This tab page is for setting up the networks used for getting number prediction. Result of those network are the probabilities (0-1) for each number to appear in the next draw.

2 Winning pattern tab

Winning pattern This is tab page for setting Winning Pattern Networks. They have the same settings as the Number Prediction Networks, except for the last (at the bottom) setting. The result of it is a similarity (0-1) of any combination to the previous winning combinations.

3 Stop on epochs count

The training will stop regardless of minimal error if this number of epochs is reached.

4 Stop on error not changing

Error changes on each epoch. The training will stop if the error representation in defined number of decimal places doesn't change in this count of epochs.

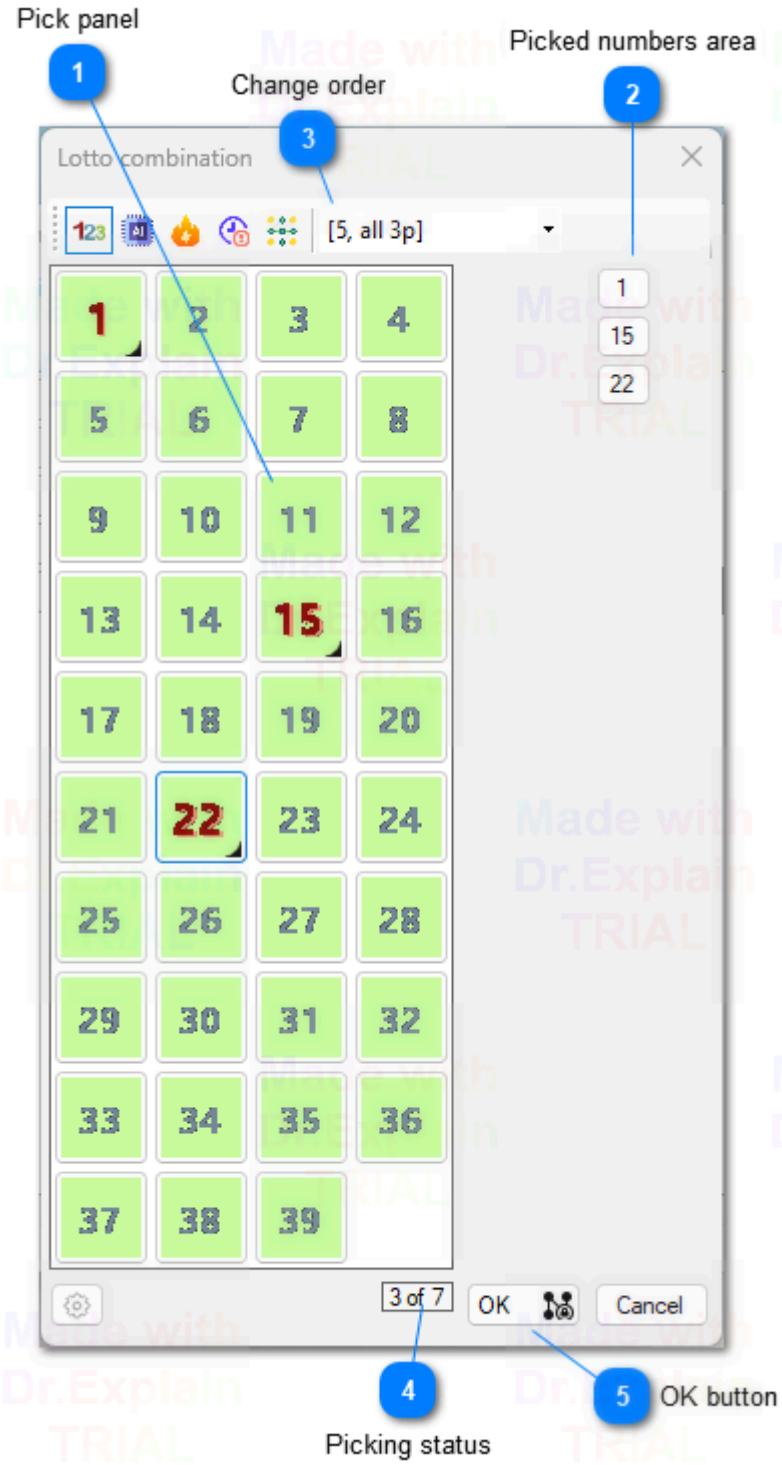
5 **Stop on error**
The training will stop if the minimal error is reached, regardless of epoch count.

6 **Decimal places for error**
Defines how many decimal places are used to represent an error counted in every epoch.

7 **Factor for not winning combinations**
Used only for winning pattern network. It defines how many non-winning combinations are included in training set. For example, if you have 1000 combination in history draws, factor 2.0 means that the training set will include 2000 non-winning random combinations and 1000 winning. The factor 2.5 would make for 2500 non-winning combinations.

Ticket

The purpose of this software is to help you pick the best numbers to play.
And this software accomplishes that in a unique, easy-to-use manner.
All picking happens in the same dialog form.



1 **Pick panel**
By clicking on the number in the main panel you pick that number. If you click on the already picked number you unpick it. Picked number are visibly marked in this panel.

2 **Picked numbers area**
By clicking on the number in tha picked numbers area you unpick it. That number is removed from this area and it's status updated in the Pick panel accordingly.

3 Change order

Clicking this button opens the menu for switching between different orders of buttons keeps the collection of already picked numbers. It is an intuitive and the fastest way for selecting the numbers by consulting AI and statistics with no special effort. The available orders are explained in more detail here.

4 Picking status

How many numbers were picked out of how many were required.

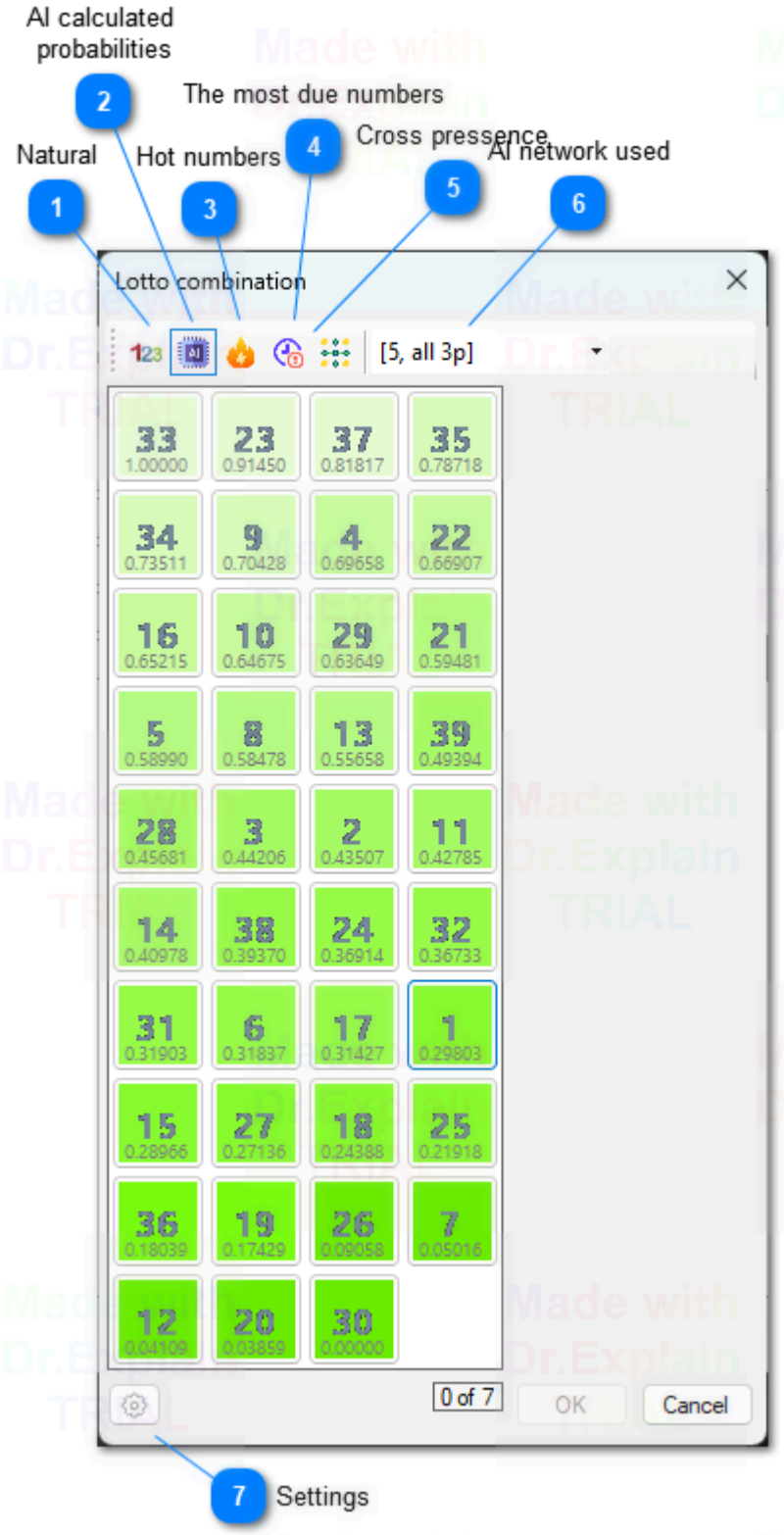
The same form is also used for wheeling and full systems so the count of numbers to pick may be greater than the actual drawn numbers for the particular lotto game.

5 OK button

When you pick enough numbers the OK button will be enabled. If you have picked less numbers than the drawn numbers for the particular lotto game then clicking you will be taken to the Smart Combination Completion dialog.

Picking Numbers

Picking numbers is as easy as clicking a mouse. The statistical values inobtrusively follow in the process.
Artificial intelligence probabilities for all pretrained networks, statistically most due and most hot numbers, cross presence of numbers are all there at your disposal.
Different colors are for different ranks of probability.
There are 10 different ranks for numbers in each order. Lighter colors signify greater values.



1 Natural

Order of numbers is a natural one.

2 AI calculated probabilities

The numbers are presented ordered by a highest value of probability of appearing in the next round, normalized between zero and one. So, zero value doesn't mean that this number is predicted as impossible to be drawn in the next draw, rather as a number with lowest probability of all other numbers. Similarly, value of one does'nt mean the number will be drawn for sure in the next round. It simply stands for the number with the highest probability of being drawn.This order is active in the image above.

3 Hot numbers

The number that was drawn the most time in the previous draws is on the top position, the number drawn the least times is at the bottom.

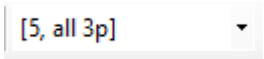
4 The most due numbers

The number that is the most due to be drawn up is on the top position, the number that is the least due is at the bottom. How much the number is due to be drawn is determined by an average frequency of its appearance in the past draws compared with how many last rounds it failed to appear. So, the number at the top is the one that has the greated difference between these two values.

5 Cross pressence

This is special ordering, it changes whenever currently picked combination changes. The number that was present the most time in the last draw with all the currently picked numbers is at the top. If the currently picked numbers were not part of any winning combination in the history, this order is meaningless and the value for each numbers is NaN. With no picked numbers, the order is the same as for Hot numbers order. But with every picked or unpicked number this order changes.

6 AI network used



This selection points to the network that is actually used in the "AI calculated probabilites" order.

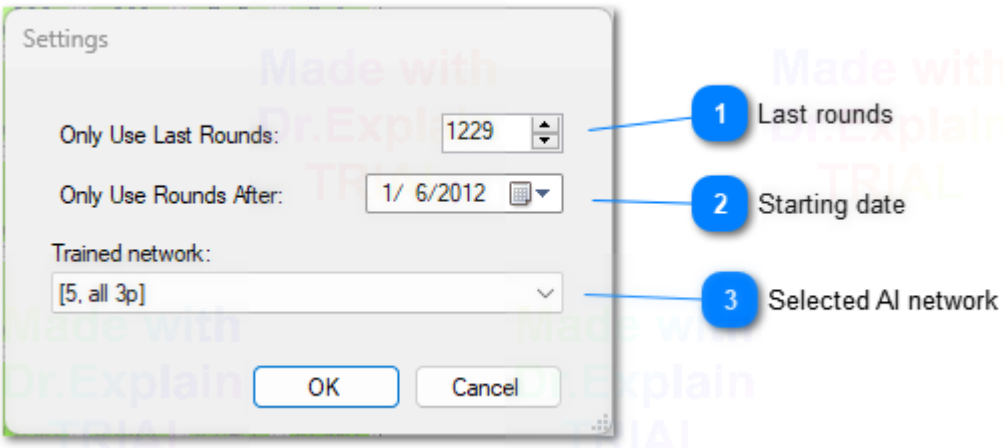
7 Settings

The picking order may be based on all previous draws in the history or for its subset. This form is explained in more detail here.

You can switch to different orders during number picking, and order of numbers on the left pane will change, but picked up combination is preserved. That's how you can select some number according to probability, and then switch to Hot order and select some numbers according to that criteria and so on.

Settings

This form can limit the statistical calculation to the subset of the history draws for the particular game.



1 Last rounds

How many last rounds is used for statistical calculations. Also used for Cross presence evaluations.

2 Starting date

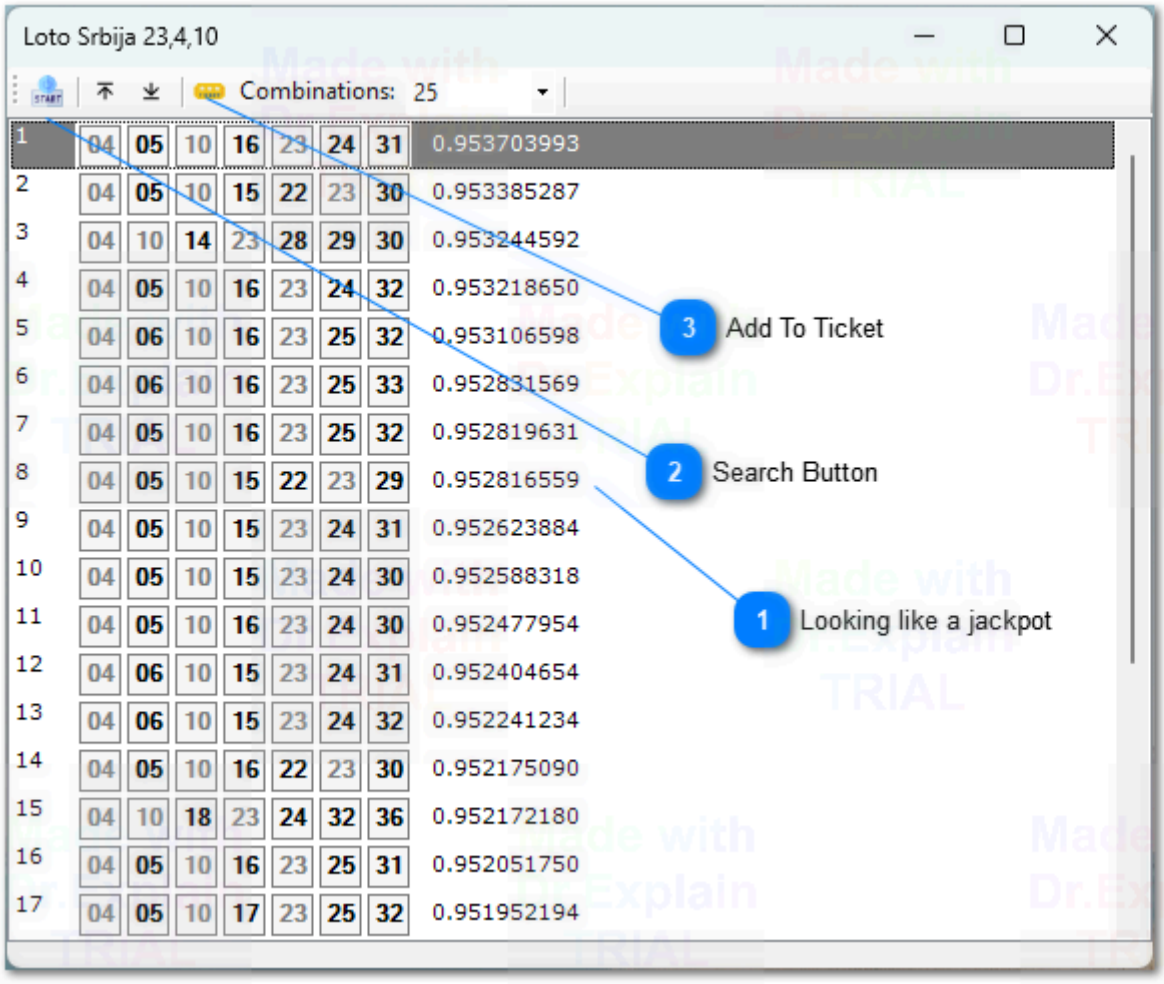
Only draws after the set date will be used for statistical calculations.

3 Selected AI network

Basically the same effect as the combobox in the Picking numbers form.

Smart Combination Completion

This is where our Neural Network for Pattern is used.
The form contains the fixed length list (25) that are selected from a list of all possible combinations that contain the preselected numbers.
In your picking process you can open as many of those forms as you like.
They will all close when you close the picking form, or you can close them manually if you wish.



1 Looking like a jackpot

This is number in a range 0-1, where 1 represents the highest measure of looking like a jackpot (based on previous draws).

2 Search Button

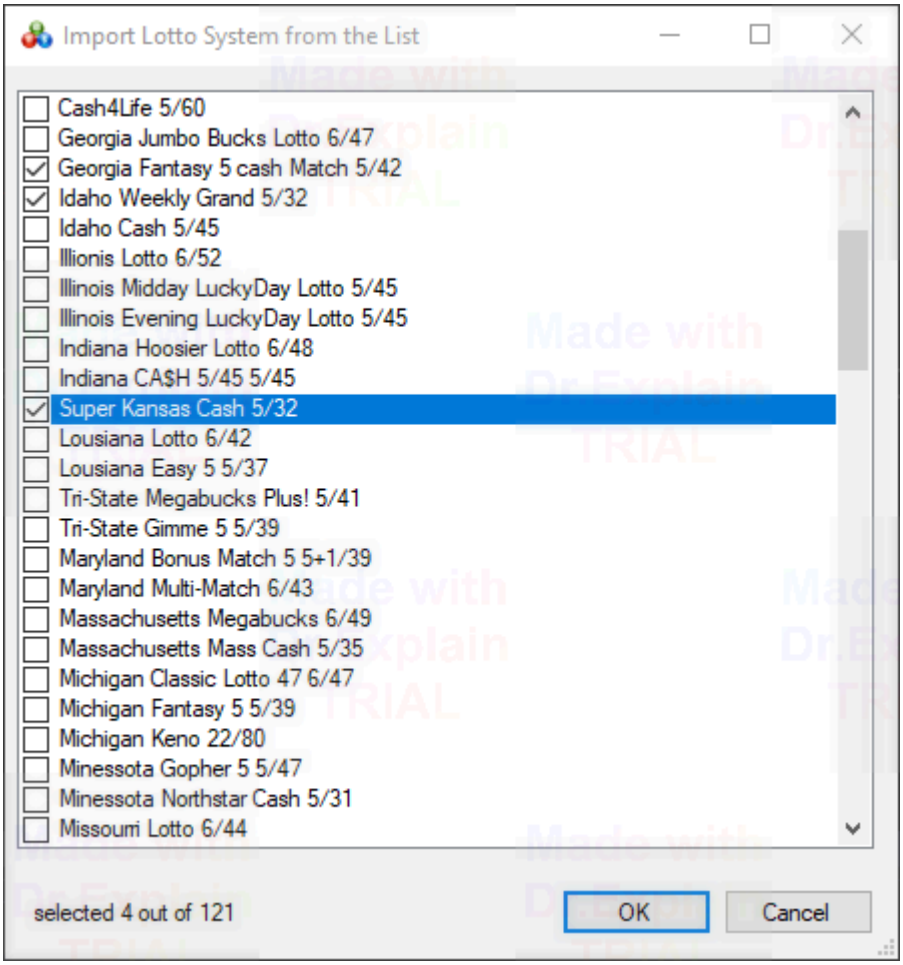
This is a button to restart search process. All possible combinations containing preselected numbers are checked for their likeability using trained Neural Network for Pattern.
You defines how many of the best looking combination will be included in a list. This process is automatically performed on opening the form. The number of combinations is preset to 25. If you change that number you will have to click this button to rerun the whole process.

3 Add To Ticket

You may select one or more combination from the list and click this button, and those combination will be added to your current ticket. Pressing SHIFT and clicking the mouse or pressing SHIFT and one of the arrow keys (UP, DOWN, LEFT, and RIGHT) extends the selection from the previously selected item to the current item. Pressing CTRL and clicking the mouse selects or deselects an item in the list.

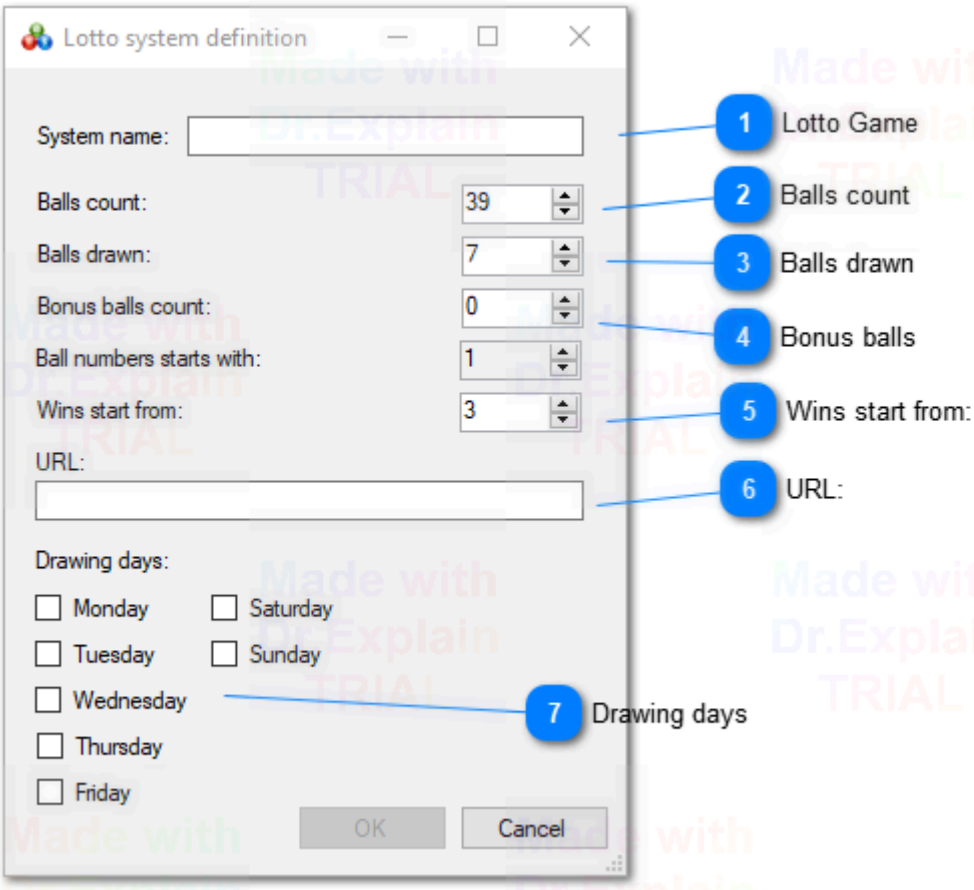
First run

After installation on first run Stonito Lotto does not have any lotto game installed.
First you are presented with a choice of using any of the predefined lotto games in your collection of games.



This is done by simply selecting one or more from the list.
All of them come with an extensive history of drawings going back decades in the past.
You will maybe have to add a few most recent rounds but it is not a tedious task.

If you don't want to import any of the lotto games from the list, than you will be presented the choice to add one game manually.



1 Lotto Game
Name of the Lotto game as a game identifier in Stonito Lotto

2 Balls count
Total number of balls used in drawing. They always start from the number 1

3 Balls drawn
How many balls are picked in the main drawing.

4 Bonus balls
Are the bonus balls used. Stonito Lotto supports only bonus ball(s) that are drawn from the balls left after main drawing was finished. In the case of special bonus balls, that are drawn independently there is no reason to be treated as part of a drawing.

5 Wins start from:
Every combination in a ticket that has more or the same count of matches with a winning combination will be specially marked in the list.

6 URL:
Here you define the URL on which the particular game has information about previous drawings. It is available to be opened in browser by simple button click from the main form toolbar.

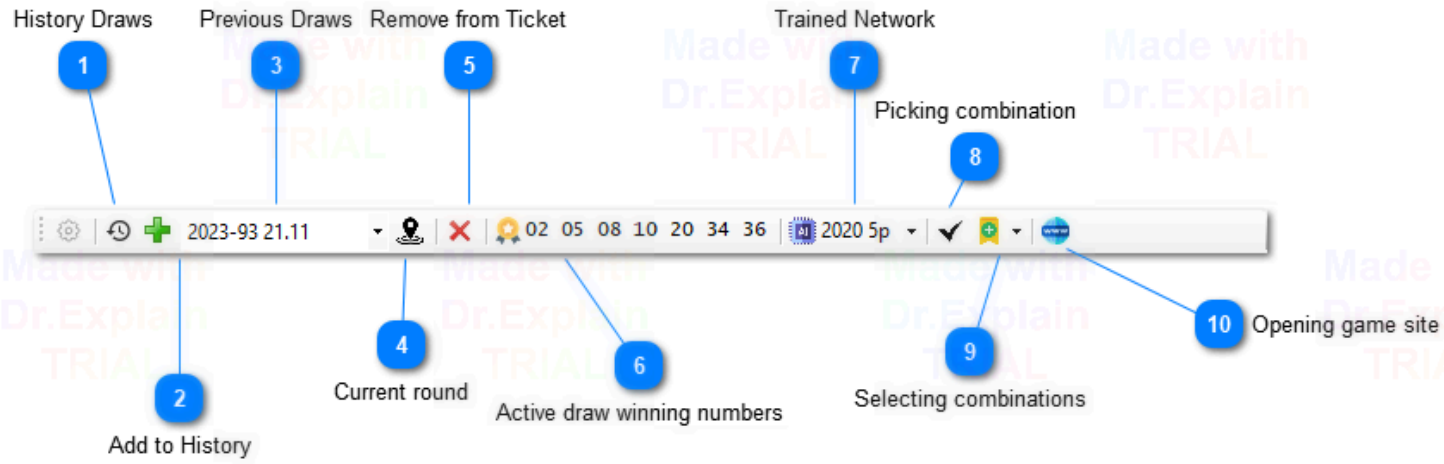
7 Drawing days
Here is defined on which days in the week drawings are made. This is important when catching up with history drawings, next drawing date is calculated considering those days.

Those are data needed to enter per each lotto game.

If you don't add at least one Lotto game to the software, program will close and on later run it will start the same procedure again.
If you have at least one Lotto game in the software then the main form will be presented to you after a few seconds.

Main Form

The **Stonito Lotto** main form will open the last game you used (or first defined if none) upon loading. Very important buttons are on the main toolbar and it is important to get to now them well.



1 History Draws

Form for maintaining a history of previous draws, with many useful tools.

2 Add to History

Form for adding drawings to the history. This procedure will be covered in next topic.

3 Previous Draws

List containing all previous draws in the history. If textbox is empty, it means ticket and winning combination are for the current draw. If not empty, ticket and a winning combination shown are for that draw selected from history.

4 Current round

Clicking on this button (when it is enabled) will return you to the current draw. It is enabled only when previous draw is selected from the history list. All previous draws are remembered with the ticket made for that round, so it can serve as a quite useful reminder.

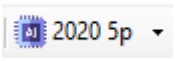
5 Remove from Ticket

Use it to quickly remove the lotto combination in a current ticket.

6 Active draw winning numbers

If current drawing is selected, this button enables you to enter winning combination, and that combination will be than saved in the history and be shown in the list of Previous draws. All combinations in the ticket will be checked for matches and results presented.

7 Trained Network



Define, train and modify neural network used for prediction. If this button does not have textual identification of the network prepended (as in above image) it means no network exists, so you must define one to be able to start using the program to make smart pick of numbers for your own ticket(s).

8 Picking combination

Shortcut for a form allowing you to easily pick your numbers with a dialog form explained in this topic.

9 Selecting combinations

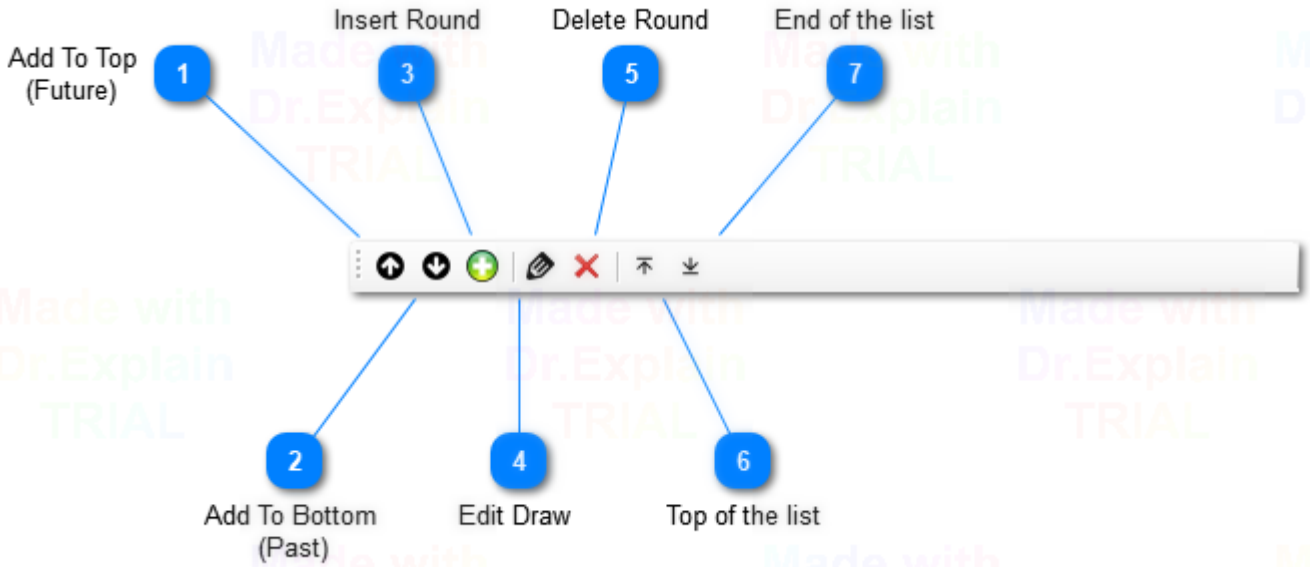
Drop down menu presenting you with option to add single combination, wheeling, full systems, or the most probable, the most hot, or the most due numbers combination(s).
You pick your numbers with a dialog form explained in this topic.

10 Opening game site

This button opens the browser with an URL you defined in system settings for that particular lotto game.

History Draws

The creation and maintaining of a substantial list of previous draws is an essential part of **Stonito Lotto**, as this list is crucial for good prediction.



1 Add To Top (Future)

Add one or more round to the top of the list. Orientation to the future is set to the dialog for entering new rounds.This means that every successive round entered will be placed on the top of the list

2 Add To Bottom (Past)

Add one or more round to the end of the list. Orientation to the past is set to the dialog for entering new rounds. This means that every successive round entered will be placed on the end of the list.

3 Insert Round

Inserts new draw in place of selected draw, date restrictions apply so new draw will have to fit between two adjacent draws. Also, renumbering happens automatically so newly inserted draw fits well with other existing draws.

4 Edit Draw

Update selected draw, similar dialog as with entering new.

5 Delete Round

Deletes selected round, the automatic renumbering of all draws affected happen automatically.

6 **Top of the list**

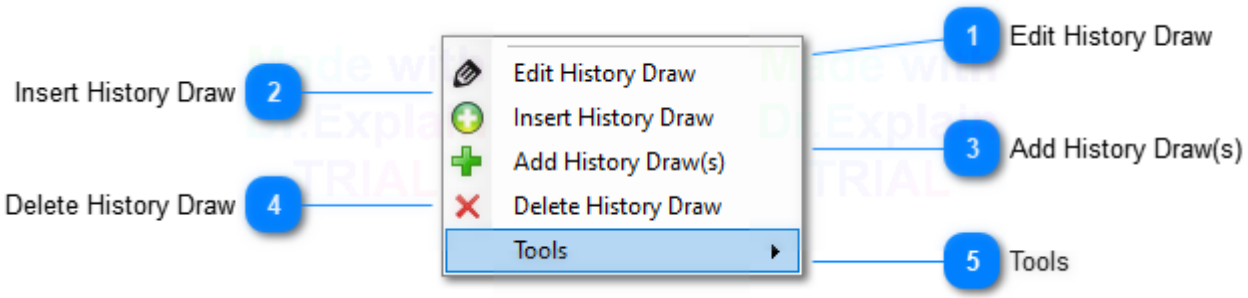
Go to Top of list

7 **End of the list**

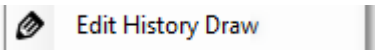
Go to Bottom of list

Context Menu

The creating and maintaining useful list of previous draws is very important part of Stonito Lotto, as it is essential for good prediction.

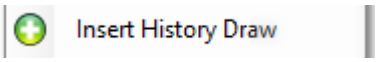


1 Edit History Draw



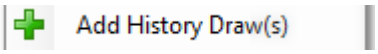
Change data about the selected history draw, similar when entering new.

2 Insert History Draw



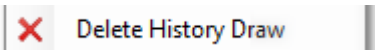
Inserts new history draw in the place defined by the currently selected draw. Date restrictions are enforced so newly inserted draw must fit to the existing draws. Also renumbering of other draws happen to adjust for newly added draw.

3 Add History Draw(s)



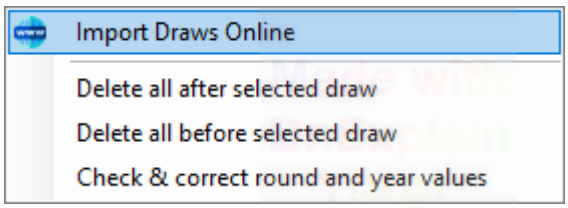
Append the list of history with one or more draws, to the bottom or the top of the list.

4 Delete History Draw



Deletes the round from the history. Also renumbering of other draws happen to adjust for newly added draw.

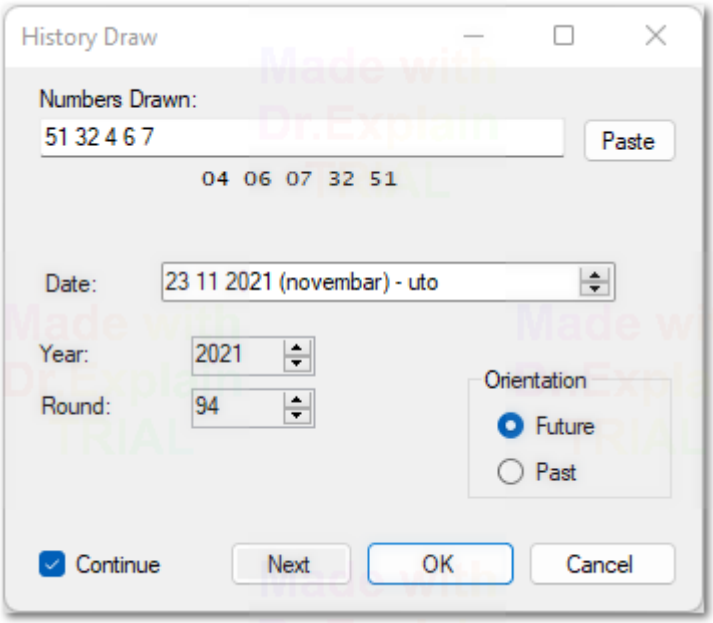
5 Tools



If you can find your game in the several supported websites (like alllotto.com), you will be able to automatically extract previous draws from those sites, on a current year basis.
Whenever you click on the button, it scans the external website and extracts and appends rounds missing in your history draw.
This option is available ony for registered users, relieves you of pain to manually fill the history list.
Other options are self-explanatory and are used for maintaining the history list.

Adding New

When adding new or editing old round combinations, we use the same form.
Although simple, this form has some useful and not so evident features explained below.



Numbers drawn are entered with a `SPACE` to separate them.
You may enter the numbers in any order you want.
Sorted numbers are shown below edit control and update on every change.
If a combination is not correct or not finished for the particular system settings the message appears below in red color explaining what combination is missing to be correct.
Everything checked, no duplicates, all numbers within the limits of the system, all numbers there.

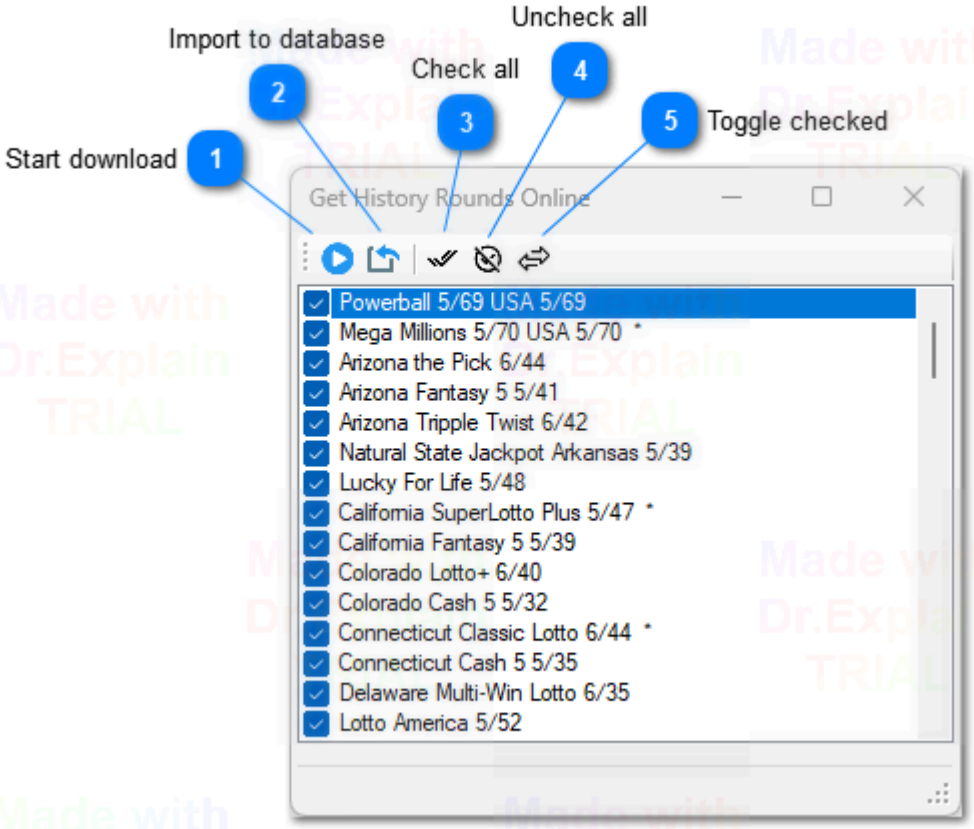
The date is set automatically upon clicking on the *Next* button. Next pertains to the next draw, not the next day. The next draw takes into consideration active days on which draws for that game are happening.

Orientation for the future or the past, designate do you enter numbers on the top (more recent) or after the end (older).
This orientation sets how you consecutively enter numbers, you will use *Future* if you enter draws from the oldest to the newest, and vice versa.
If *Continue* is checked, after entering one draw, the same dialog reappears allowing it to continue with the subsequent draw, until you hit the CANCEL button.

Paste button is not simply `Paste` from the `Copy&Paste` operation. Before actual pasting, pasted content is filtered for the main lotto games websites, to make it more acceptable to this edit box.
For example, commas are replaced with spaces, some markup characters are removed, etc. So, if you are copying a winning combination from some web page when you paste if the regular paste doesn't give you the desired result, you may try clicking this button instead.

Download online

History draws is the precondition for using artificial intelligence with Stonito Lotto software.
Probably the easiest way to obtain the history draws is through an automated download from the internet.



1 Start download

Click to download the available history rounds from the internet for the selected games. Only the new rounds (later than the last one already in the database) will be downloaded. It will take some time. Games that were unselected or didn't have any new rounds available will disappear from the list. The remaining games will show how many rounds are new and ready to import into the database.

2 Import to database

Click to import available history rounds into the database. After this operation, the database will be updated, and newly downloaded history rounds will be available.

3 Check all

Click to check all the games in the list.

4 Uncheck all

Click to uncheck all the games in the list.

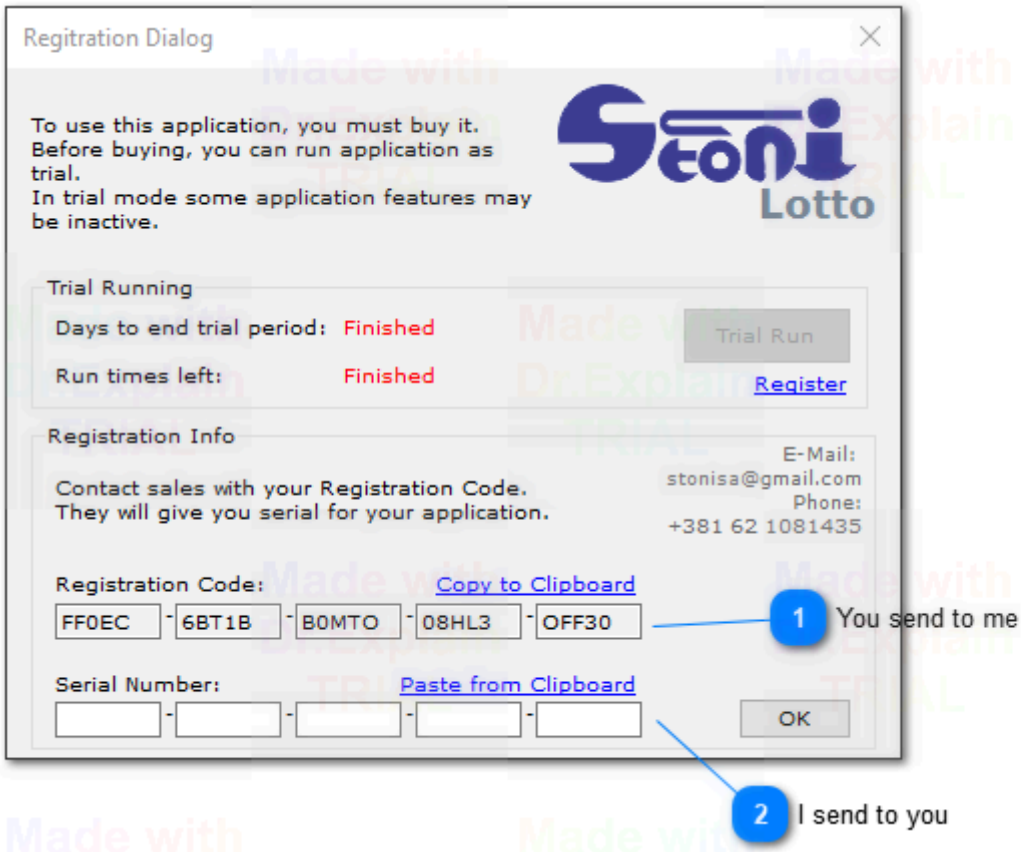
5 Toggle checked

Click to make all checked games unchecked and vice versa.

Registration

This software has a free trial period.
After that period has passed, the only option to continue using it is to pay for it.
The price for **Stonito Lotto** is 30 EUR and is payable using PayPal using the following link.

After payment, you may request a registration code for three different computers with no time frame restrictions.
I keep track of each payment and registration code request.
More registration codes are possible free of charge, particularly if the software is used for a longer time.



1 **You send to me**
Using Copy to Clipboard is preferred way for getting the registration code, as typo possibility is eliminated.

2 **I send to you**
The Serial Number I send you in response to your request should be entered here and then OK pressed to register the software on that computer for good.