

SplitChainer Usermanual

Version 24.03.2013

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Preface

Split Chainer is a program for square dancing rotation. The goal in developing this program was to achieve a good mix of dancers. Therefore dancers will be addressed individually. A dancer can sign up as present, pausing or absent. Simultaneously it is possible that two dancers chain themselves. SplitChainer will now always put these chained dancers as a couple in a Square. SplitChainer does not put this couple simultaneously IN and OUT. So it can happen that one dancer of a couple is OUT, the other dancer continues IN. In this case, SplitChainer will rotate another dancer as (temporary) partner. If both dancers of one couple are IN, then SplitChainer will rotate them as a couple in a square.
Additionally SplitChainer rotates different dance levels. So if your dancing event consists of alternately different dance levels, SplitChainer will always consider only the dancers who can dance at least at the appropriate level. So if MS / MS / PLUS are danced, SplitChainer will rotate all MS dancers OUT, if PLUS is called. The next tips (MS-MS) these MS dancers will be rotated preferred IN by SplitChainer.

SplitChainer thus attempts to achieve a "perceived" justice, which has absolutely nothing to do with chance. And that is the art that is so difficult to achieve. With SplitChainer you have a program in your hands that not only provides a simple operation, but is also very fast and very flexible.

Installation

How to install and start SplitChainer.

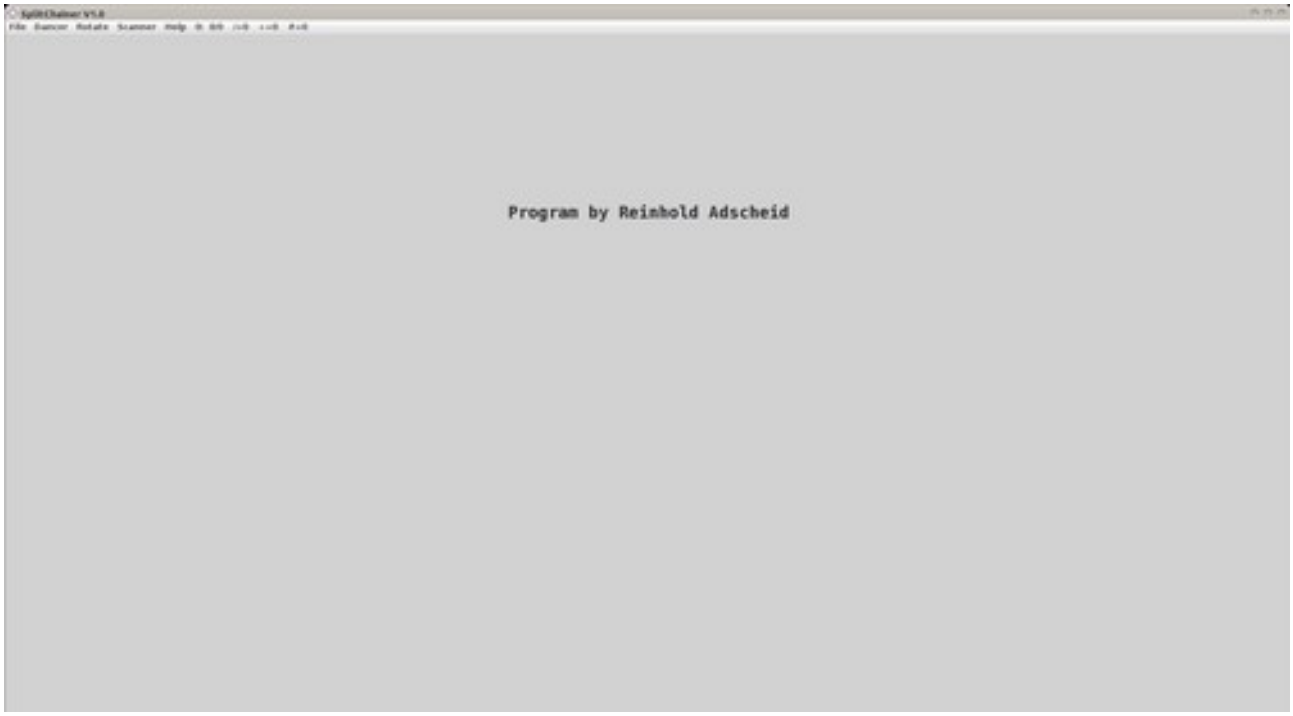
Windows

The file SplitChainer.zip can be handled by normal means. Windows is equipped with all tools to do this. Extract all entries at any place on your hard disk. From the resulting files only a few are of interest to you:

```
SplitChainer+
            +splitchainer.bat
            +splitchainer_de.bat
            +splitchainer_en.bat
            +splitchainer.sh
            +splitchainer_de.sh
            +splitchainer_en.sh
```

All files ending with .bat are for use within windows, those ending with .sh are for UNIX. All files with “en” in the name start SplitChainer in the English version. The standard, splitchainer.bat, is identical with the English version. splitchainer_de.bat starts a German version.

By double clicking on one of the above three files you start SplitChainer. SplitChainer responds then with the following screen:



Congratulation: Your installation of SplitChainer was successful. You

may now enter your license.

UNIX

The file SplitChainer.zip can be handled by normal means. UNIX is equipped with all tools to do this. Extract all entries at any place on your hard disk. From the resulting files only a few are of interest to you:

```
SplitChainer+
            +splitchainer.bat
            +splitchainer_de.bat
            +splitchainer_en.bat
            +splitchainer.sh
            +splitchainer_de.sh
            +splitchainer_en.sh
```

All files ending with .bat are for use within windows, those ending with .sh are for UNIX. All files with “en” in the name start SplitChainer in the English version. The standard, splitchainer.sh, is identical with the English version. splitchainer_de.sh starts a German version.

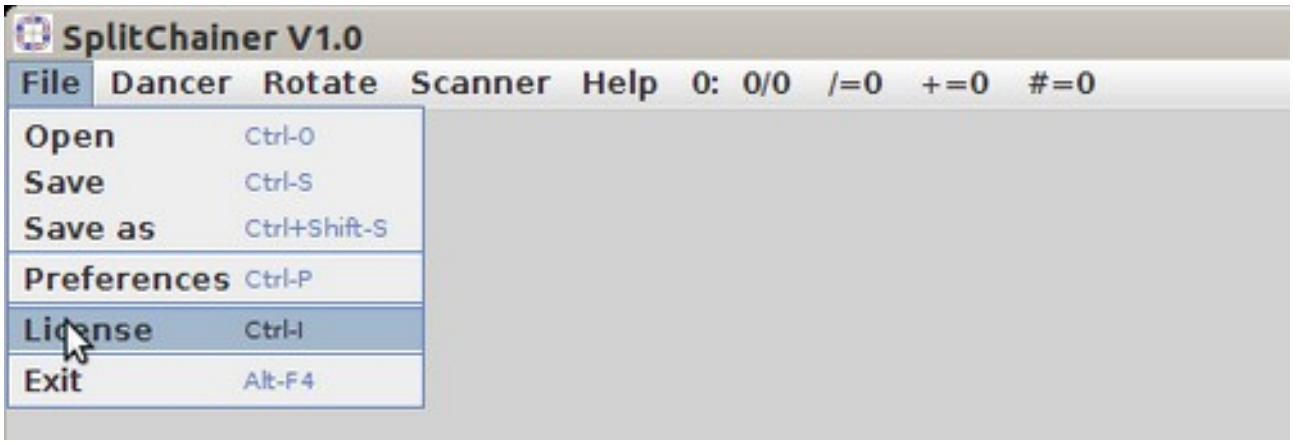
By double clicking on one of the above three files you start SplitChainer. SplitChainer responds then with the following screen:



Congratulation: Your installation of SplitChainer was successful. You may now enter your license.

Enter license

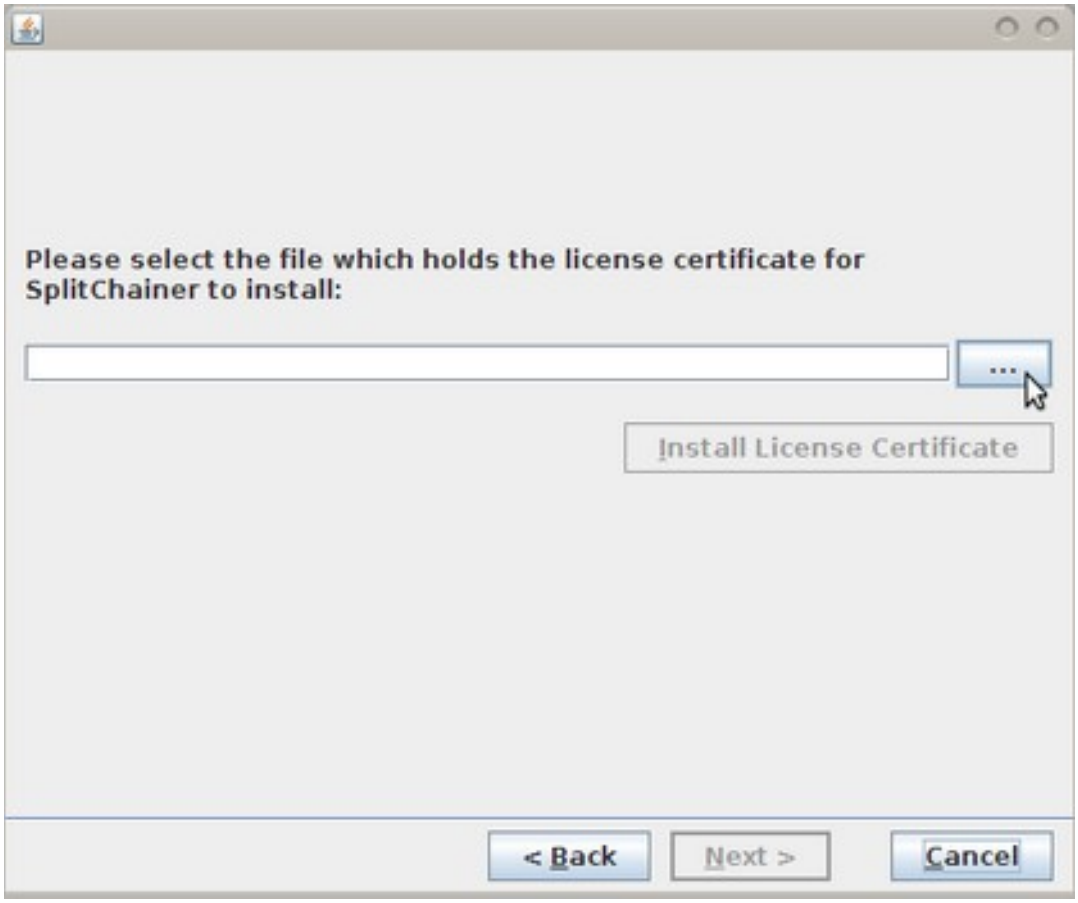
Start SplitChainer and choose File → License



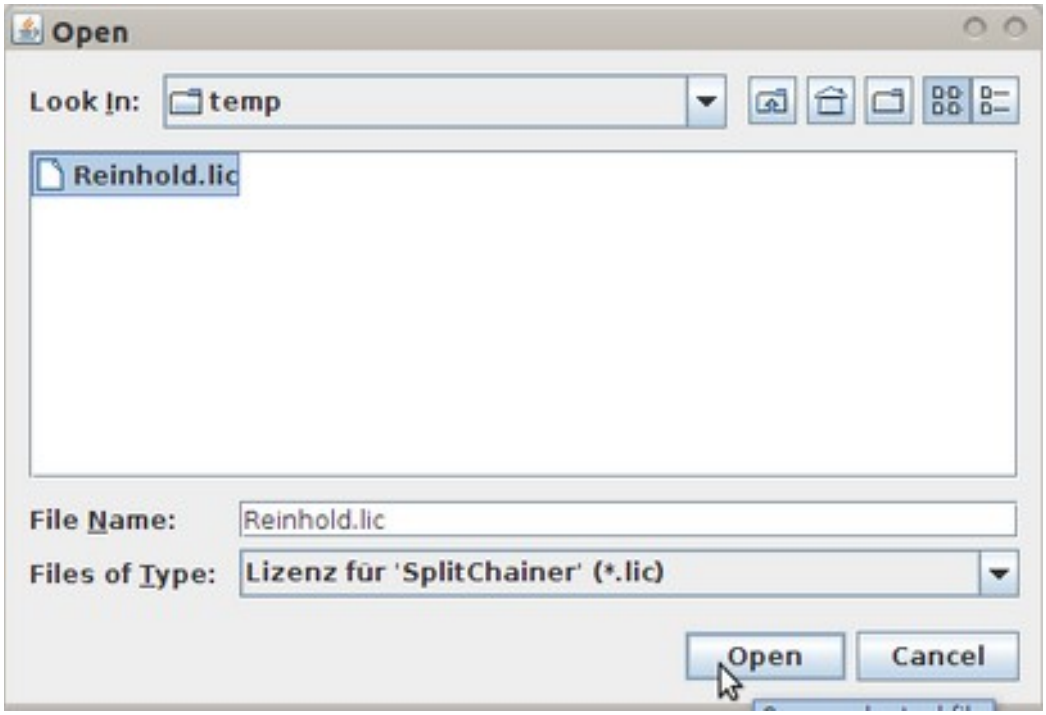
In the next window choose “(Re-)Install a license certificate” and click “Next >”



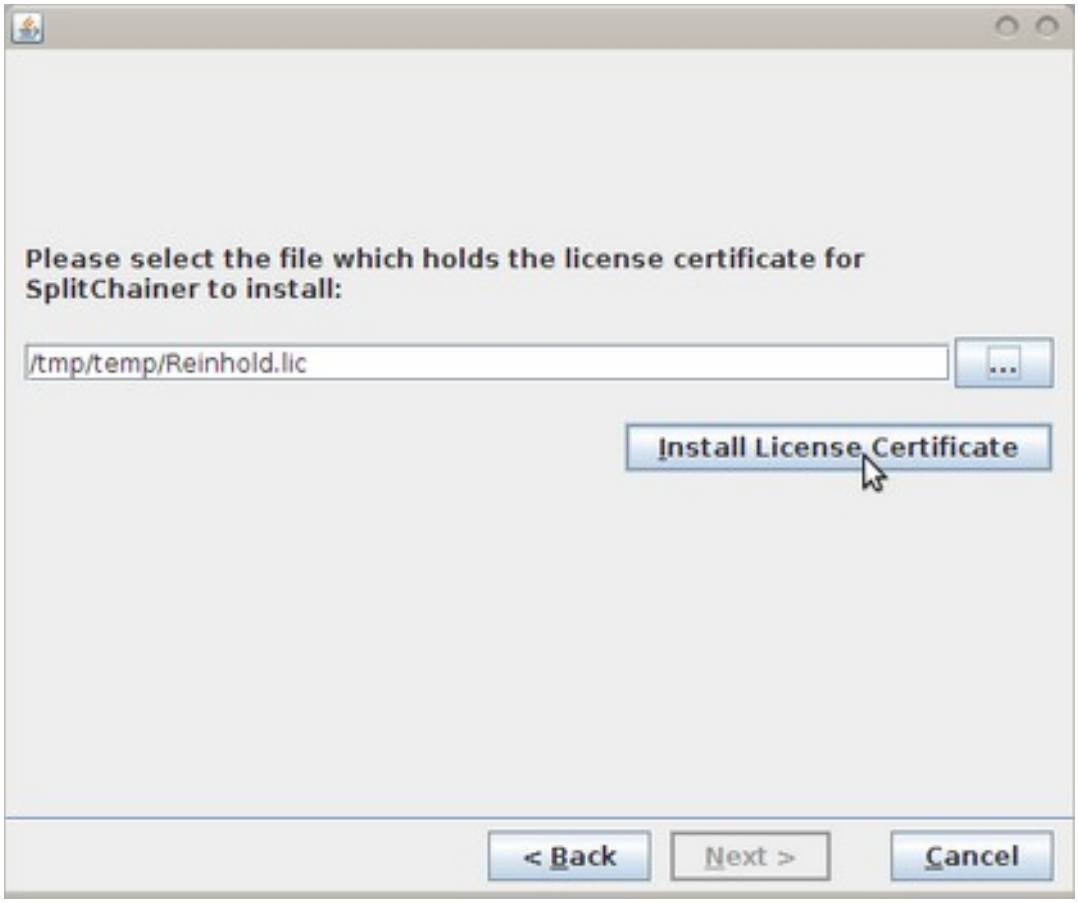
Now you need to choose your license file. To do this click the button “...” (in picture below the mouse cursor is on the button)



This opens the “Open” dialog. Use this dialog and click to the location of your license file, select it and click “Open”:



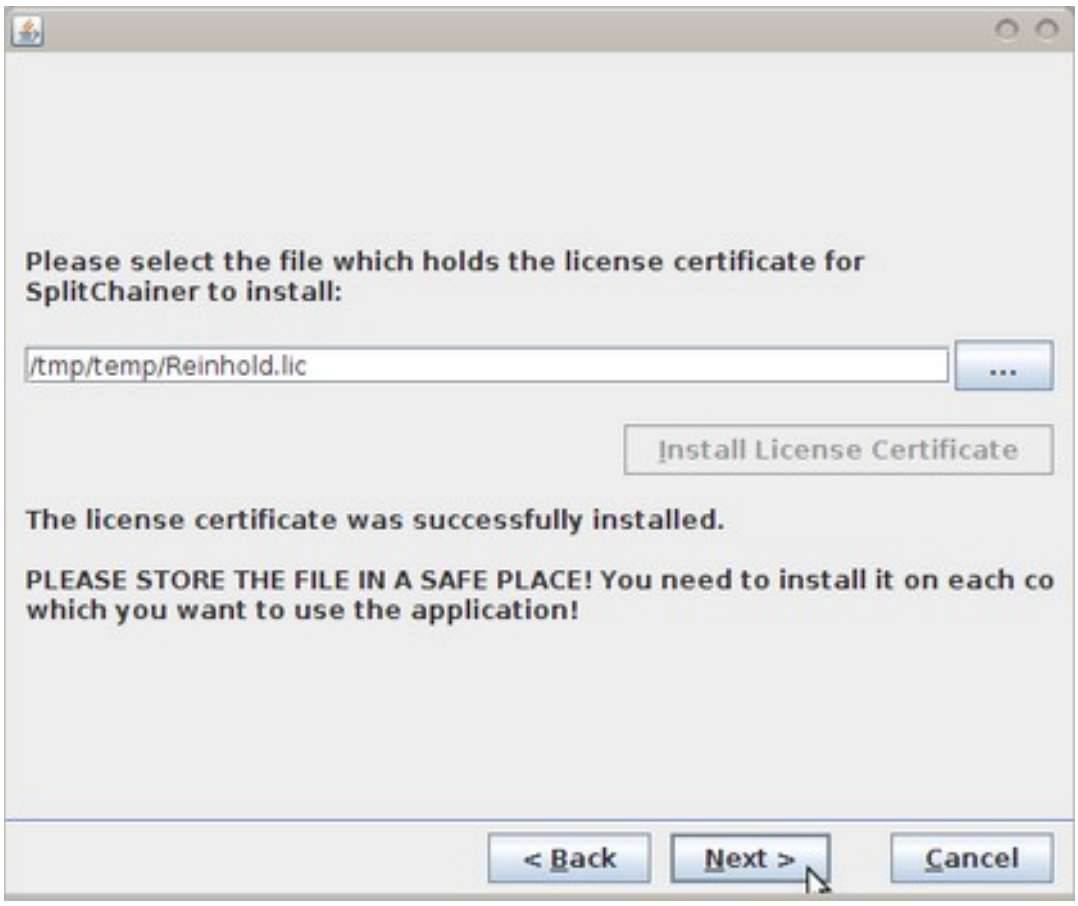
The dialog “Open” will close and the complete path to the selected license file is shown in the input area. Now click on “Install License Certificate”:



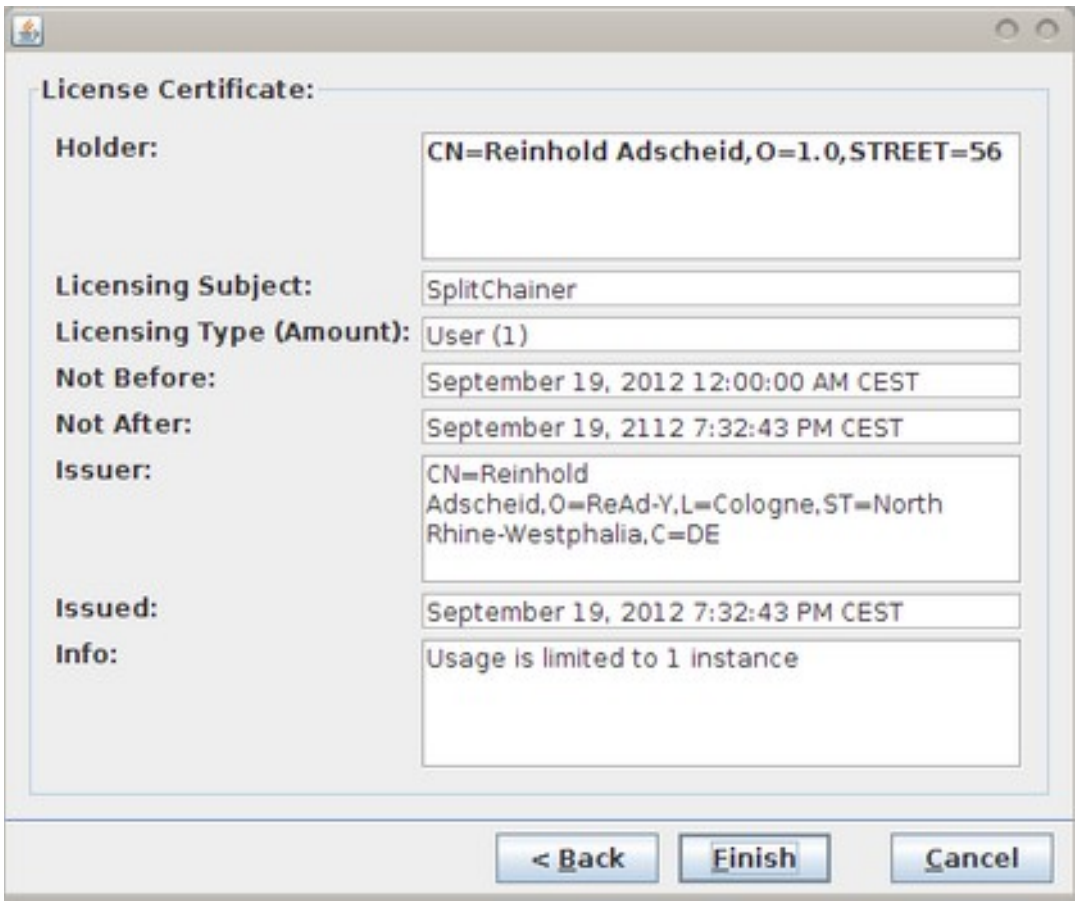
You now get the message

The license certificate was successfully installed!

PLEASE STORE THE FILE IN A SAFE PLACE!



Click on “Next >” and you get complete information about your newly installed license certificate:



After restarting SplitChainer all your licenses are available.

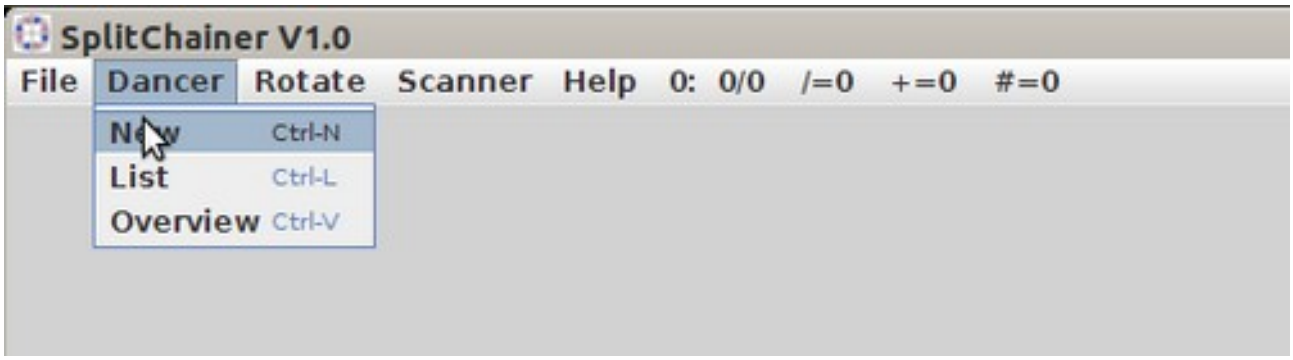
Handling

In this chapter you will learn how to create dancers, set them present/absent/pausing and how you can rotate.

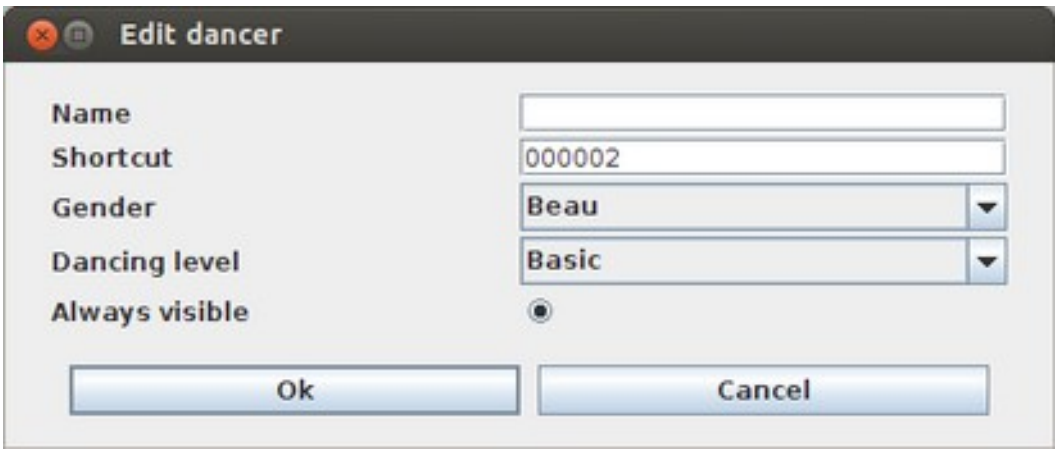
Create a dancer

Start SplitChainer. On the upper rim of the window you find the menu bar.

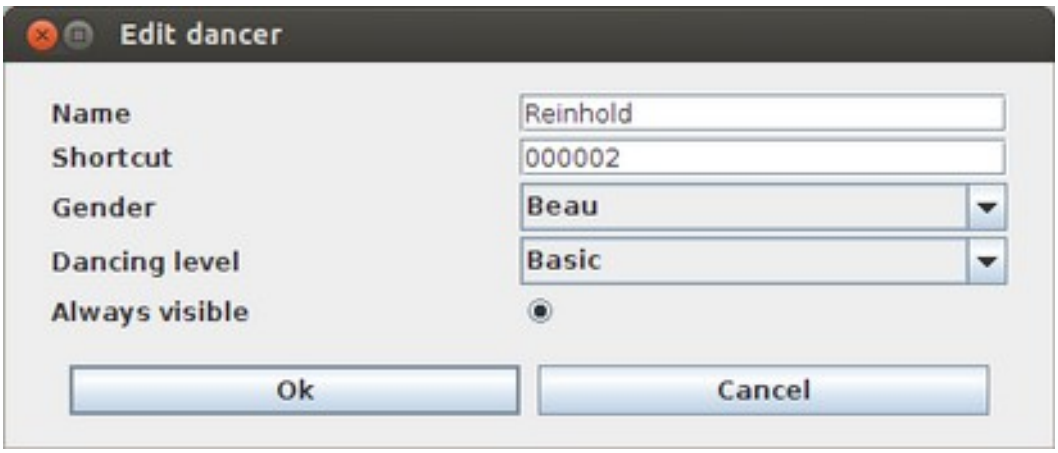
Click on “Dancer” and choose “New”:



You can also reach this by simultaneously pressing the keys Ctrl-N. A dialog appears which asks for the data of the new dancer:

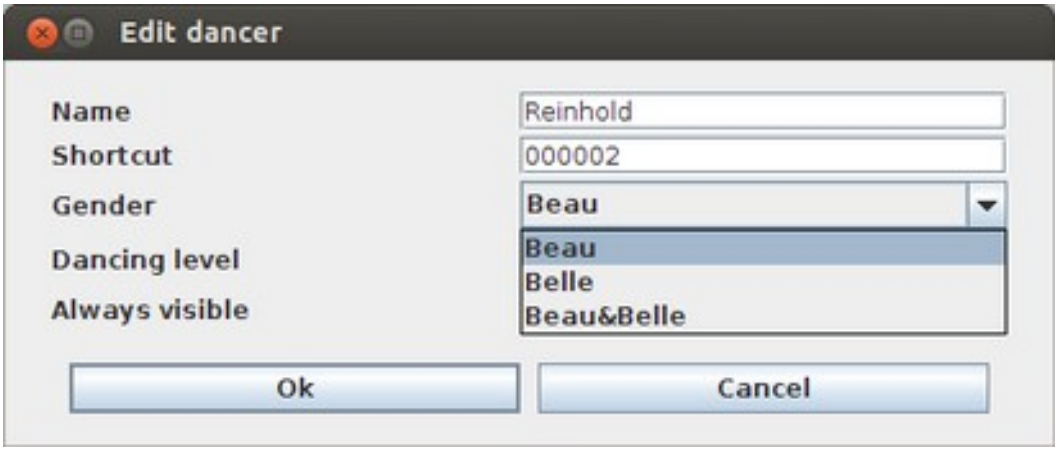


Please enter the name of the dancer; the shortcut is preassigned with a useful value which is not needed if you use SplitChainer without a scanner (but still very important).

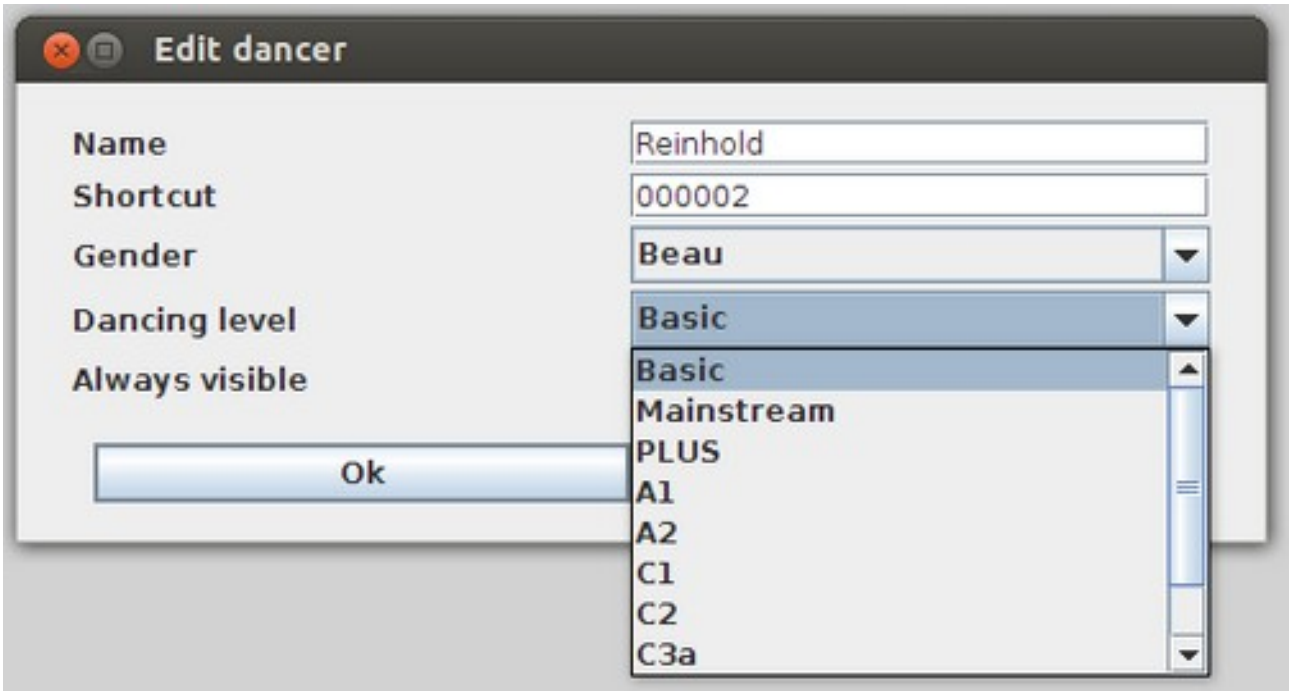


Now choose a gender by clicking the corresponding combo box. You will get a small menu which offers three possibilities.

Gender	Description
Beau	Dancer dances only as man
Belle	Dancer dances only as woman
Beau&Belle	Dancer dances both positions: man as well as woman

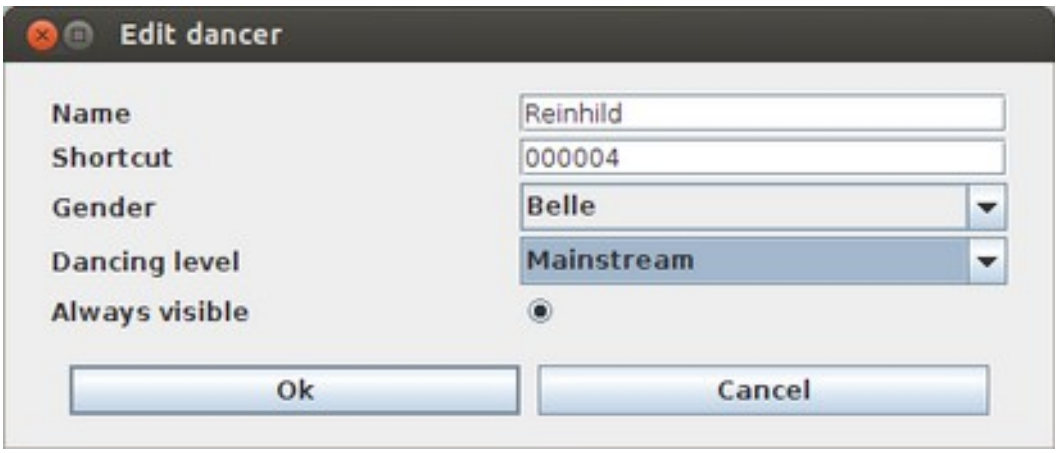


Proceed in a similar way when choosing the dancing level.

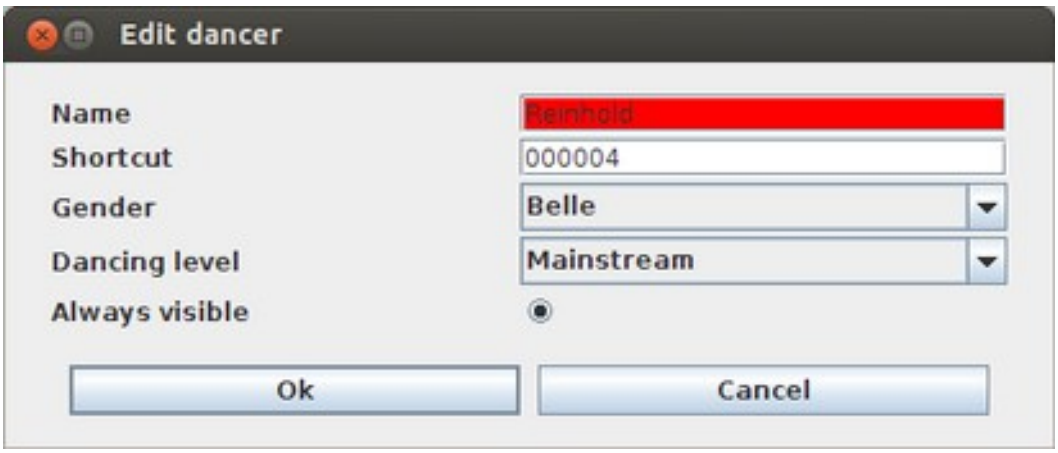


After having entered all values please click “Ok”.

Now create another dancer. This time it shall be a Belle and her name shall be “Reinhild”.



Do not press “Ok” right now but change the name of this dancer. Replace for instance “hild” by “hold”:

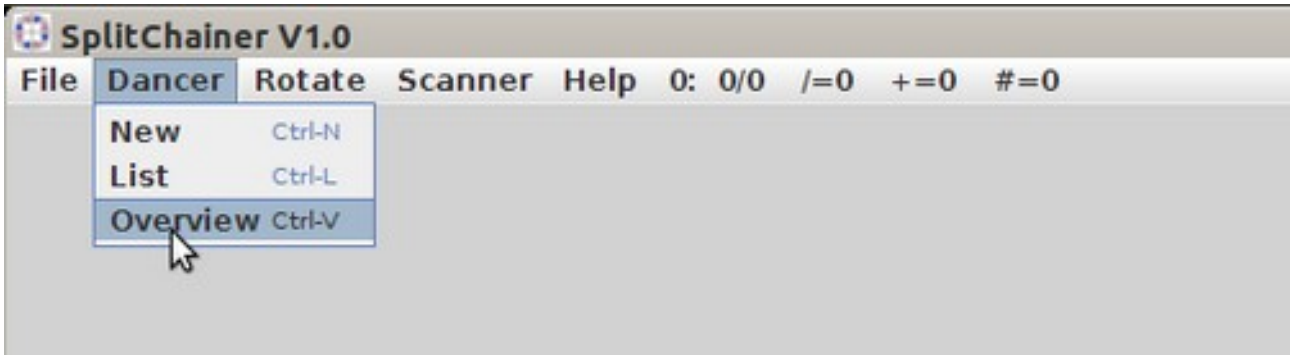


By changing the background color to red SplitChainer will give you a hint that the name entered will lead to problems. In this case: The name exists already. Change the name back to “Reinhild” and watch the change of the background color to white again and press “Ok”.

Normal usage

Without scanner

Now we would like to have an overview of all dancers. Click within the menu “Dancer” on “Overview” or use the hotkey Ctrl-V:

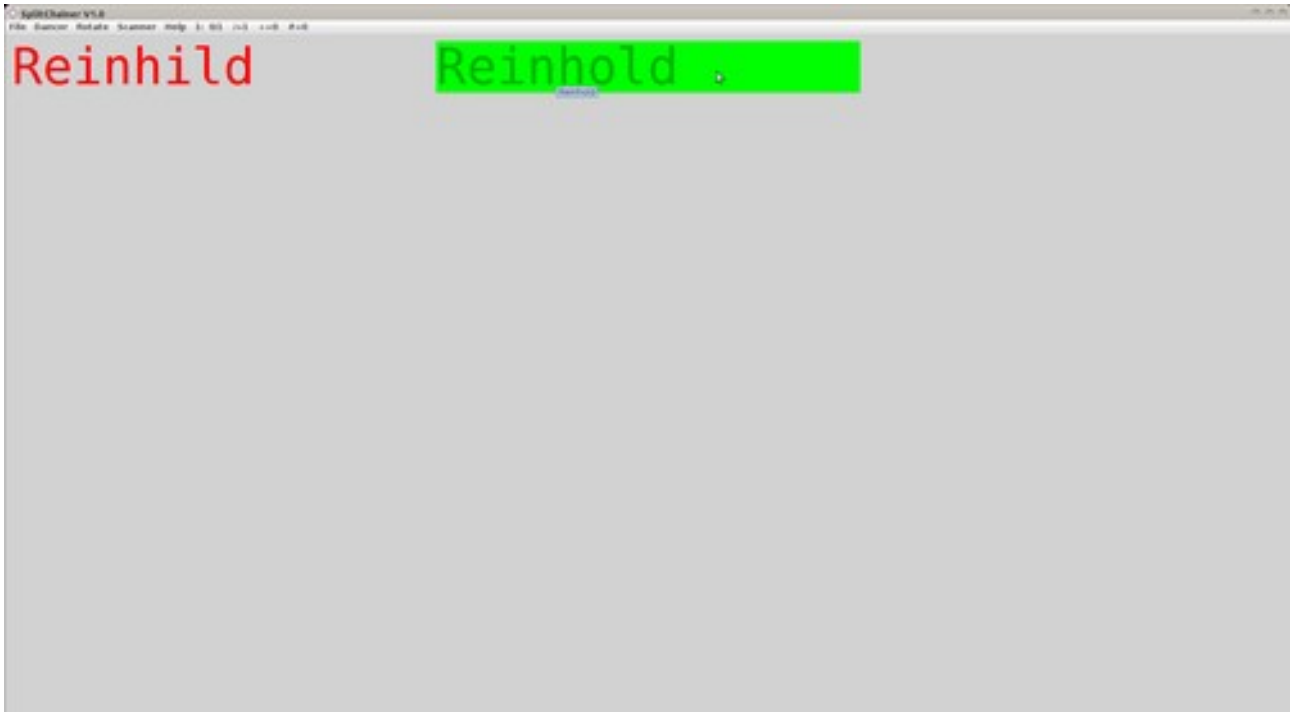


You will get the following screen:



Both dancers will be shown. As they are not present they are shown in red. And as you said “Always visible” they are shown here. If not, you said not “Always visible”.

Move the mouse pointer over the text “Reinhold” and click once. This changes “Reinhold” to be present, indicated by the color green:



As long as you keep the mouse pointer over a text the background color will have the corresponding color while the text will be a little bit darker. Please click again once with the mouse pointer over “Reinhold”:

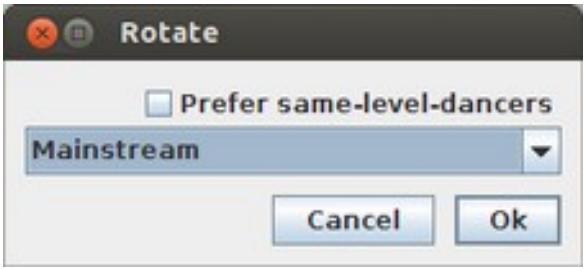


“Reinhold” is still present but wants to skip one tip, and after this tip he wants to dance again. The color blue indicates this. Click again on the text “Reinhold”. This changes the color of the text to red and Reinhold would be absent. Click now as often as necessary to turn the color back to blue and set “Reinhold” again present, but skipping the next tip.

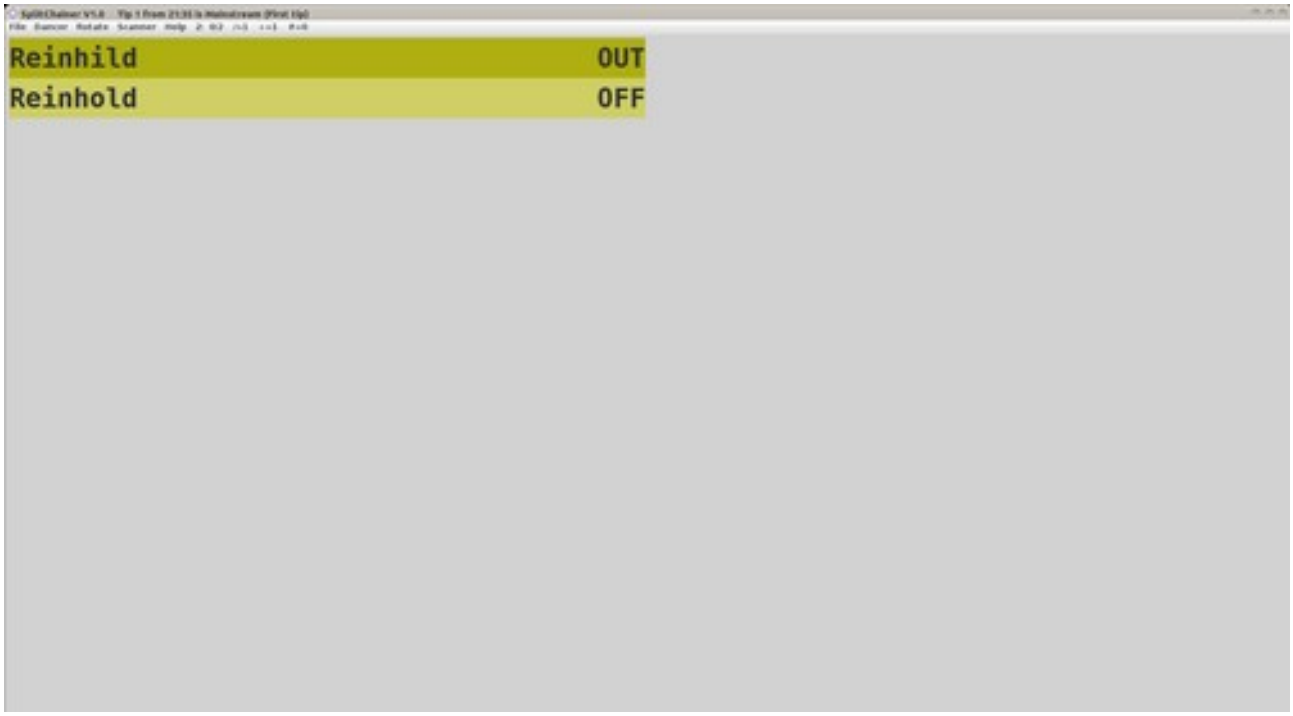
Additionally move the mouse pointer over the text “Reinhild” and click once. Now Reinhild is present, indicated by the color green, and she wants to dance the next tip:



Now we have two dancers present and one of them wants to skip the next tip. With this number of dancers we can already rotate a tip. In order to do this click in the menu bar on “Rotate” and choose “Rotate (other level)”. You can also use the hotkey Alt-R. In both cases a small window appears offering a possibility to choose the level of the next tip:



As both dancers are capable of dancing Mainstream choose “Mainstream” and click “OK”. The result is the following screen called “Couplescreen”:



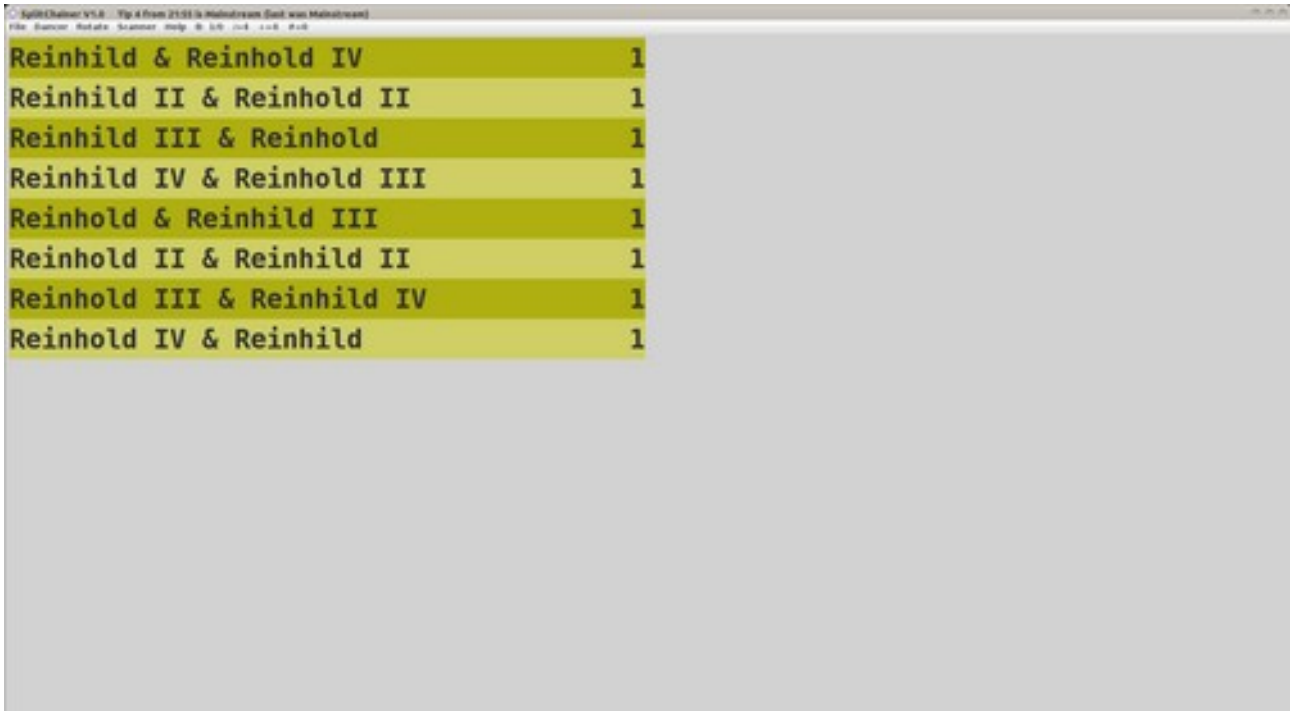
There are not enough people present to form a complete square. Therefore “Reinhild” who wants to dance, is shown as “OUT” while “Reinhold” who wanted to skip the tip is listed as “OFF”.

Create six other dancers, 3 Beaus and 3 Belles and set all of them present by using Ctrl-V and click them “green”. Now eight dancers are present. Notice that “Reinhold” is automatically set to “present”. These 8 dancers are sufficient to form a complete square. Now use “Rotate (same level)” or the hotkey “Ctrl-R” as we have chosen the correct dancing level the last time.



What is the meaning of “Prefer same-level-dancers”? If your dancing event has mixed dancing levels, Like MS-MS-PLUS, you perhaps want MS-level dancers to dance during MS tips. PLUS level dancers can dance each tip so MS should dance during MS tips. Enabling this option will additionally prefer MS dancers during MS tips. They are already preferred as they could NOT dance during PLUS tips. This enhances their chance to dance during MS tips.

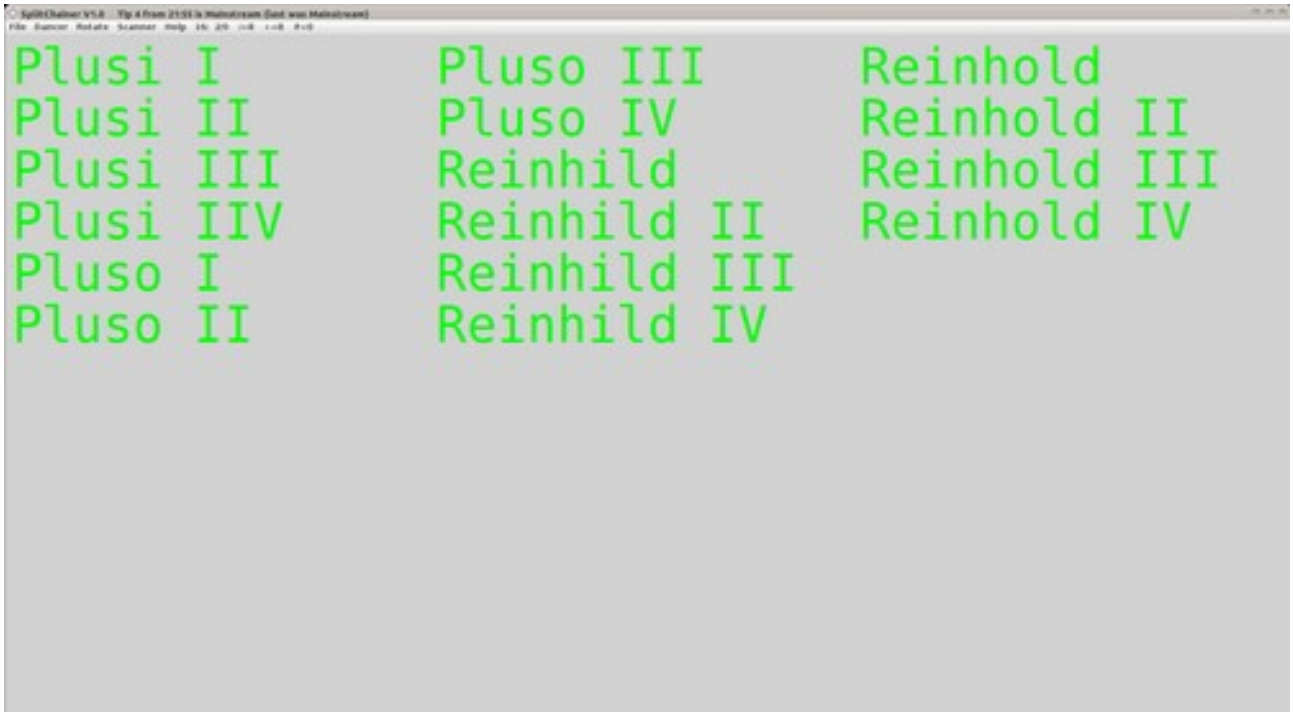
Pressing “OK” you will get a picture similar to the following (depending on the result of the random draw):



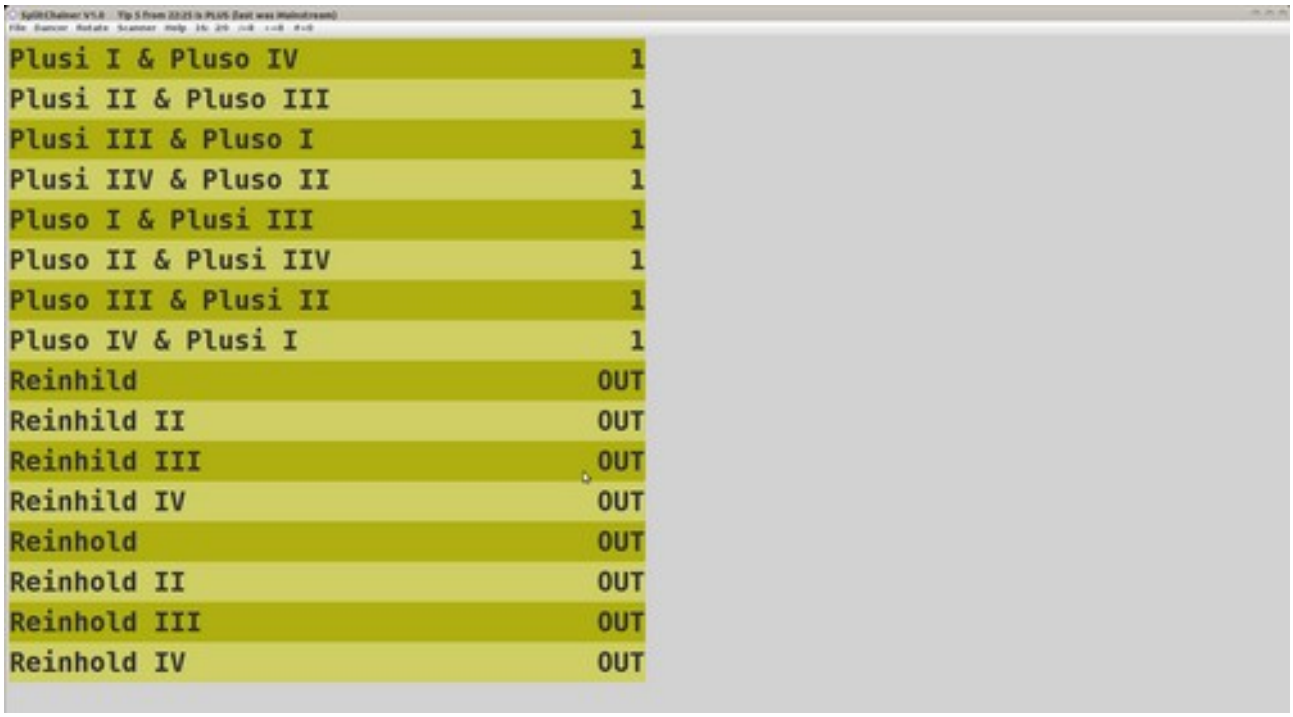
Each line displays a “Couple”. This couple dances in the square with the number shown on the right side of the line. The example above shows in the first line “Reinhild” and “Reinhold IV” forming a couple. They dance together with other couples in square 1.

But why are there eight lines displayed? Eight dancers form a square consisting of 4 couples. So 4 lines would be enough. But compare the first line and the last line: In the last line “Reinhold IV” dances with “Reinhild” is displayed, while in line one “Reinhild” dances with “Reinhold IV” is displayed. This is the same couple, but each dancer is listed once at the beginning of the line. In this way each dancer can find himself/herself really fast: just look for the alphabetical order at the beginning of the line. Each dancer is displayed once at the beginning of the line. The rest of the line shows the name of the partner and the square number. That's it.

Now that you have created a complete square and rotated a Mainstream tip you want to rotate an event with changing dancing levels. For instance MS/MS/PLUS. Therefor you need to create eight other dancers, 4 Beaus, who can dance PLUS (they are called Pluso I-IV) and 4 Belles, who can dance PLUS (they are called Plusi I-IV). Switch to the overview screen by using the hotkey Ctrl-V and click all of them present (green). Your screen should look like this:

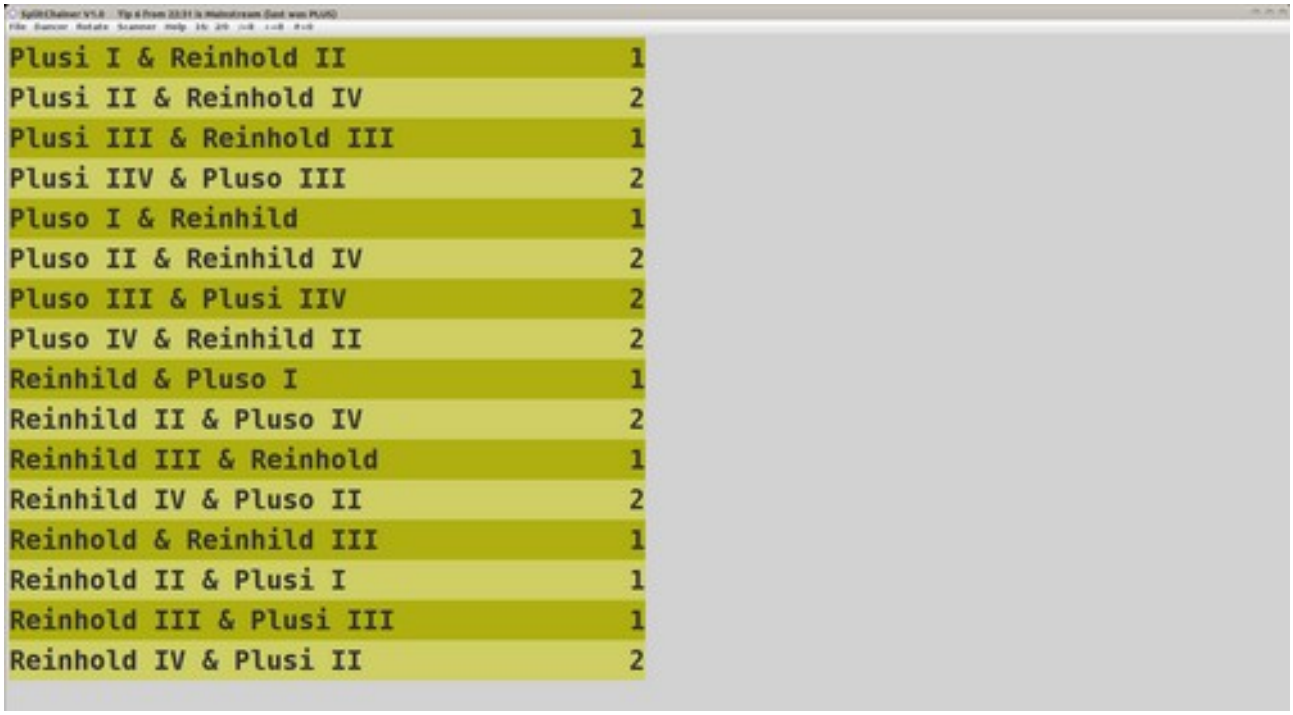


Now you want to rotate a PLUS tip. As your last choice was “Mainstream” you need to rotate with the hotkey Alt-R or “Rotate (other level)”. Choose “PLUS” and press “Ok”.



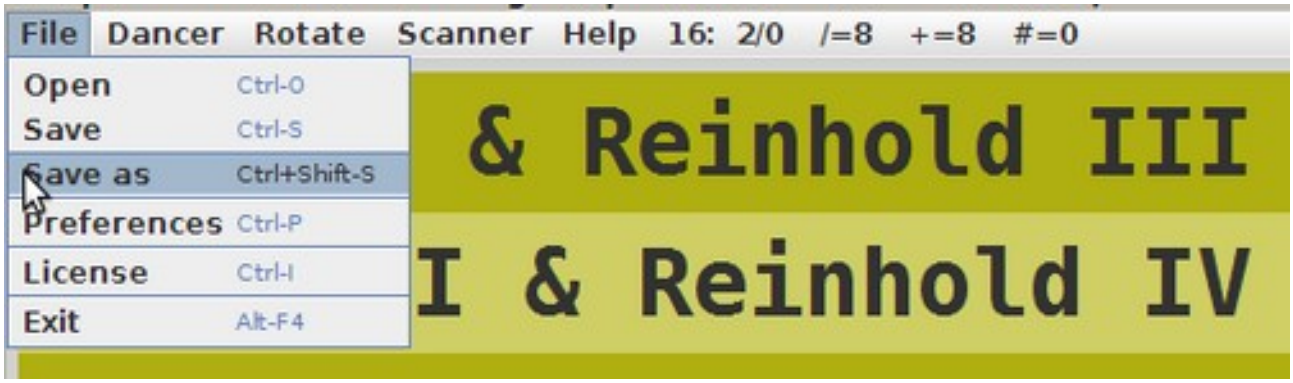
All Mainstream dancers are OUT, while all PLUS dancers will dance. After this PLUS tip there will be a Mainstream tip. Choose with Alt-R or “Rotate (other level)” Mainstream as the dancing level of the next

tip and click “Ok”:



Now all dancers can dance and SplitChainer mixes them in two squares.

Now we store the dancers into a file. This is done by clicking “Save as” or with the hotkey Ctrl-Shift-S:



You can choose any name for the file in the “Save”-Dialog and finally press “Save”. SplitChainer also stores the name of the last used file and offers this the next time. First change one dancer to be in another state. Now exit SplitChainer and start it again. Open a file by clicking on “Open” or with the hotkey Crtl-O. As you see the name just used is already preselected in the “Open”-Dialog and you do not have to do anything else but click on “Open”.

Notice: The following description is only valid if you have entered a valid license. The free test version does not offer this recovery.

After reading the file SplitChainer shows the following dialog:



Click on “Yes” and the previous state (before you quit SplitChainer) will be recovered. Each of your changes of the state is stored exactly at the moment when it is done. So if the computer runs out of power and shuts down you can easily and quickly recover the state of the dancers.

Prefer same-level-dancers

If your dancing event has different dancing levels the dancer with the higher dancing level can dance each tip. Those capable to dance the lower level can dance only if their level is called. To ensure, that they will be rotated in you can enable the “Prefer same-level-dancers” option. This options is always present, when you want to rotate a new tip. Enable it, and dancers of the tips dancing level will be preferred rotated in, those with higher dancing levels will have lower chance. The higher the difference of the dancers dancing level to the tip level this, the lower is their chance.

With scanner

In this chapter you learn how SplitChainer makes your dancing event free from problems and comfortable by using the barcode scanner.

Normal dancing

If you use a scanner the dancers can set themselves present, absent and pausing. This is done by using a barcode, which each dancer needs to have available. This barcode can for instance be glued to the back of each badge.

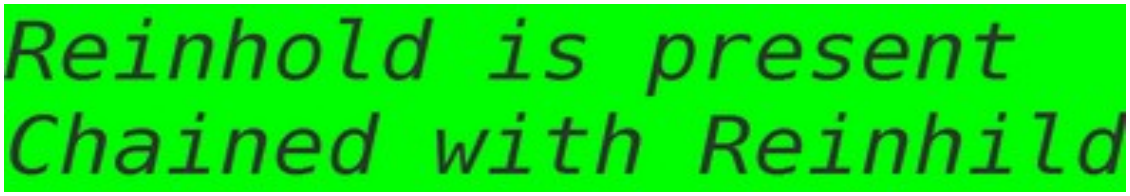




Above you see two examples of a barcode. These barcodes can be found everywhere nowadays. Nearly all goods are marked with them and the code is a worldwide accepted standard.

To take advantage of the usage of a barcode scanner all dancers need their own barcode. The dancer scans his personal code with the scanner and by doing so he/she changes his state:
absent → scan → present → scan → pausing → scan → absent.

That means: When the dancer arrives at the dancing event he scans his personal code to login (set himself present). SplitChainer answers with:



This kind of window is visible briefly and then disappears automatically. When the dancer scans his code again he will set himself to pausing and SplitChainer answers with:



Another scan leads to:



In this way all dancers can change their state completely alone. You as the operator of SplitChainer just need to rotate the squares.

A dancing event works like this: All dancers willing to dance log in and tell SplitChainer they are present by scanning their barcodes. They can immediately control the result with the answers of SplitChainer. As soon as a dancer wants to pause he scans his barcode once and controls the message of SplitChainer: he skips the next tip and will be automatically rotated for the following tip. If the dancer wants to stop dancing at the event or just wants to skip several tips he scans his barcode once and changes to “pausing” and scans his barcode once again. Now he is absent and SplitChainer will not rotate him any more until he scans his barcode again.

Chain/Couple

Now two dancers would like to be paired. This can also be done by scanning a barcode. A barcode on a special card which could be found near the scanner could be used for this. One side says “Chain” or “Couple” and the other shows the suitable barcode. Also this action will be accompanied by SpitChainer's comments. First you have to scan the barcode for “Chain”, then both dancers need to scan their barcodes. This is necessary to tell SplitChainer who wants to chain with whom.



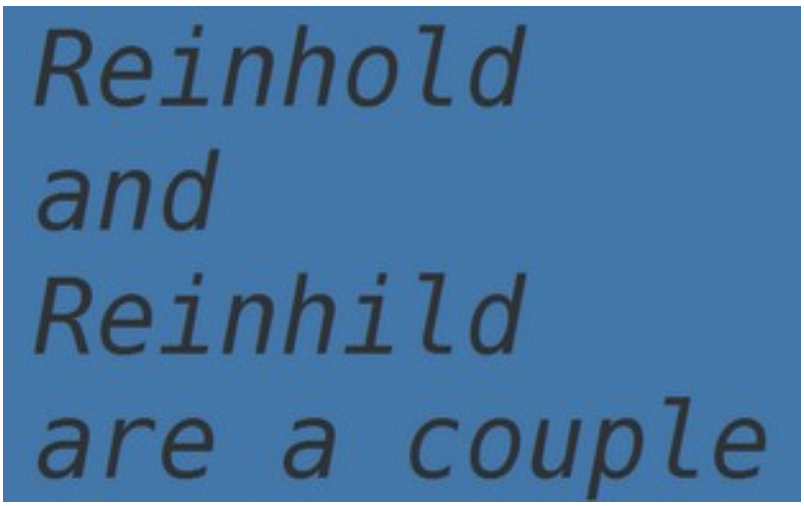
As in delivery status the barcode above shown is used for “Chain”ing dancers. After scanning this barcode SplitChainer answers with:



After this window has disappeared the first dancer can scan his barcode. SplitChainer answers:



As soon as this window has disappeared the second dancer can scan his barcode. SplitChainer answers:



Now “Reinhold” and “Reinhild” are a couple. SplitChainer will rotate them, when they are both “IN”, as a couple into a square.

Split

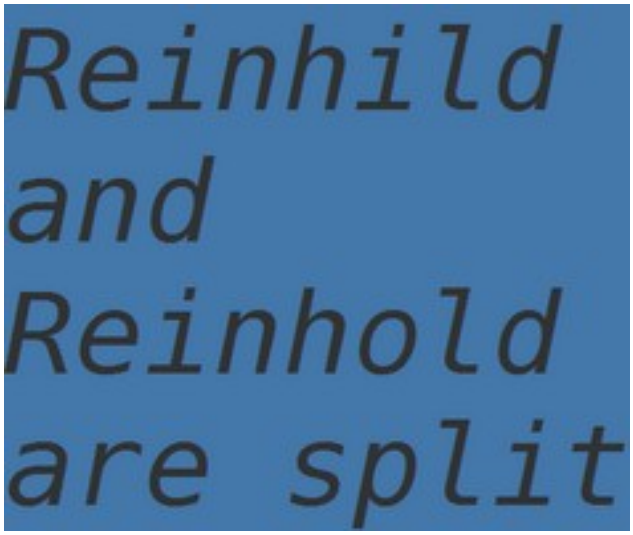
If the dancers want to “Split” again this can also be done by using the “Split” barcode. “Split”ing needs only the barcode of one dancer of the couple.



After having scanned the above barcode (delivery status) SplitChainer answers with:



Now either “Reinhold” or “Reinhild” needs to scan his barcode and SplitChainer answers:



List of all barcodes

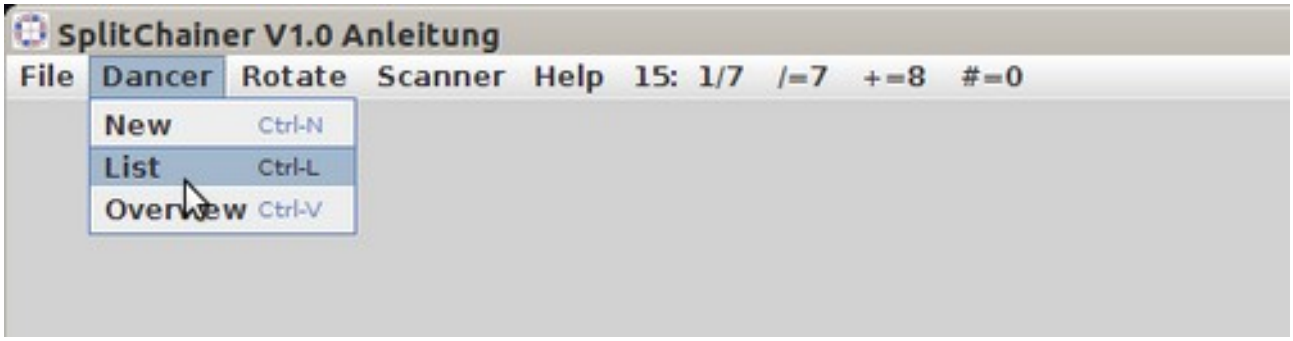
Action	Barcode	Barcode	Barcode	Description
Chain	999993	dancer1	dancer 2	Two dancers will be chained
Split	999994	dancer	N/A	Two chained dancers will be split
ToBeau&Belle	999995	dancer	N/A	Dancer changes his gender to Beau&Belle
ToBelle	999996	dancer	N/A	Dancer changes his gender to Belle
ToBeau	999997	dancer	N/A	Dancer changes his gender to Beau
rotate-other	999998	N/A	N/A	SplitChainer offers the selection of dancelevels and rotates a tip after confirming
rotatesame	999999	N/A	N/A	SplitChainer rotates a tip for the same dancing level
LevelUp	999992	dancer	N/A	Dancer changes his dancing level one level upwards, i.e.: MS to PLUS
LevelDown	999991	dancer	N/A	Dancer changes his dancing level one level downwards, i.e.: MS to Basic

Administration of dancers

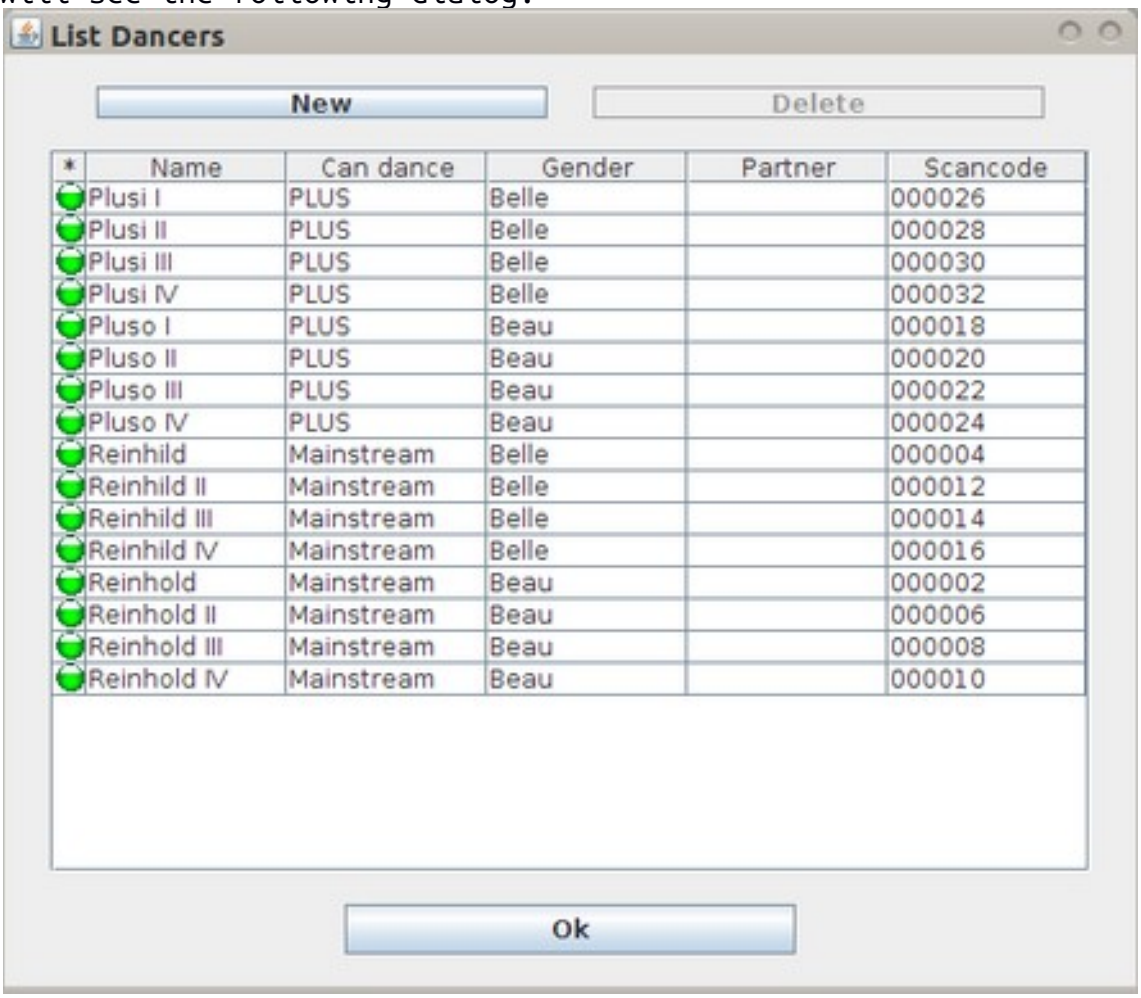
This chapter teaches you how to administrate the dancers with the help of the List Dancer Dialog.

Open the Dialog

Open the file created in chapter “Without scanner”. Use the menu bar and click “Dancer” and then “List” or by pressing simultaneous the keys Ctrl-L:



You will see the following dialog:

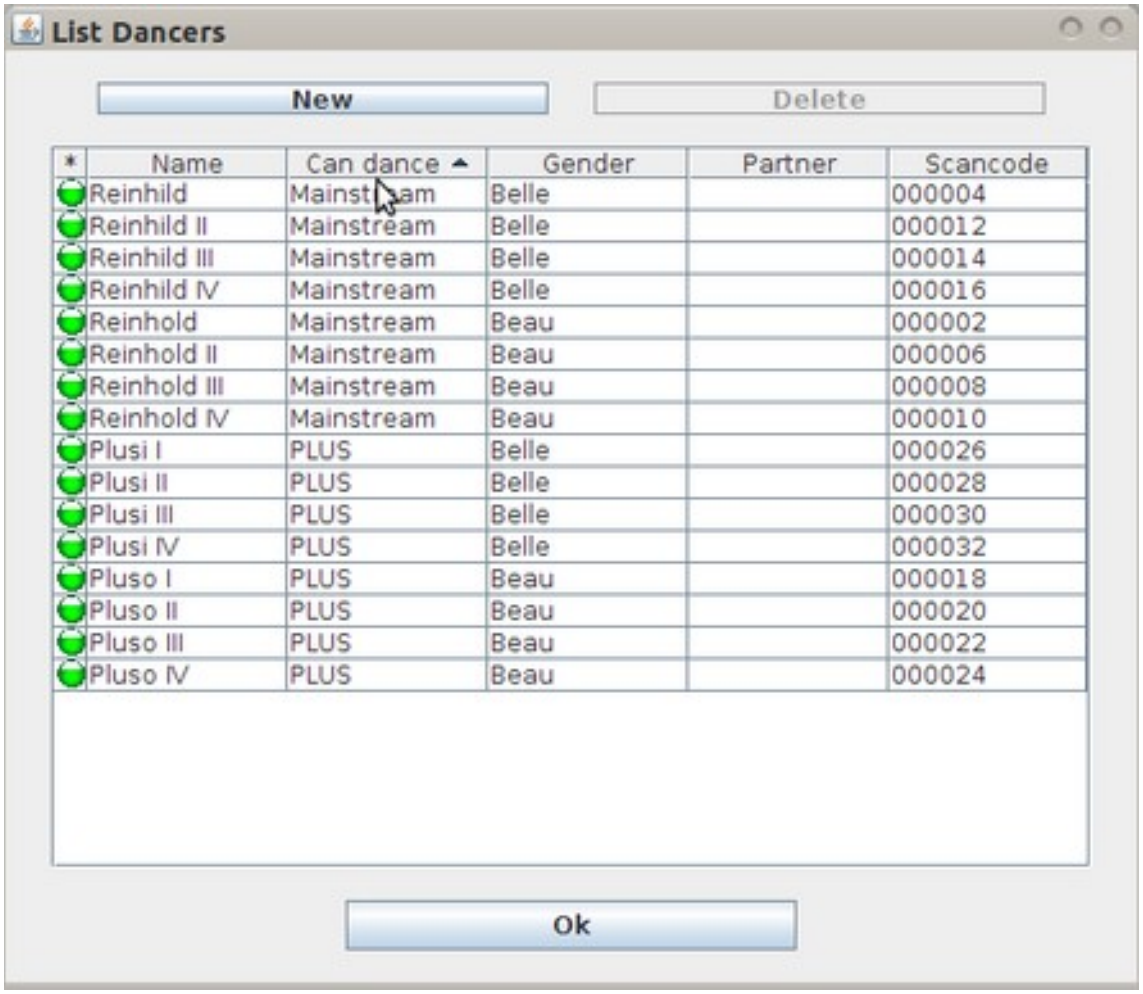


*	Name	Can dance	Gender	Partner	Scancode
	Plusi I	PLUS	Belle		000026
	Plusi II	PLUS	Belle		000028
	Plusi III	PLUS	Belle		000030
	Plusi IV	PLUS	Belle		000032
	Pluso I	PLUS	Beau		000018
	Pluso II	PLUS	Beau		000020
	Pluso III	PLUS	Beau		000022
	Pluso IV	PLUS	Beau		000024
	Reinhild	Mainstream	Belle		000004
	Reinhild II	Mainstream	Belle		000012
	Reinhild III	Mainstream	Belle		000014
	Reinhild IV	Mainstream	Belle		000016
	Reinhold	Mainstream	Beau		000002
	Reinhold II	Mainstream	Beau		000006
	Reinhold III	Mainstream	Beau		000008
	Reinhold IV	Mainstream	Beau		000010

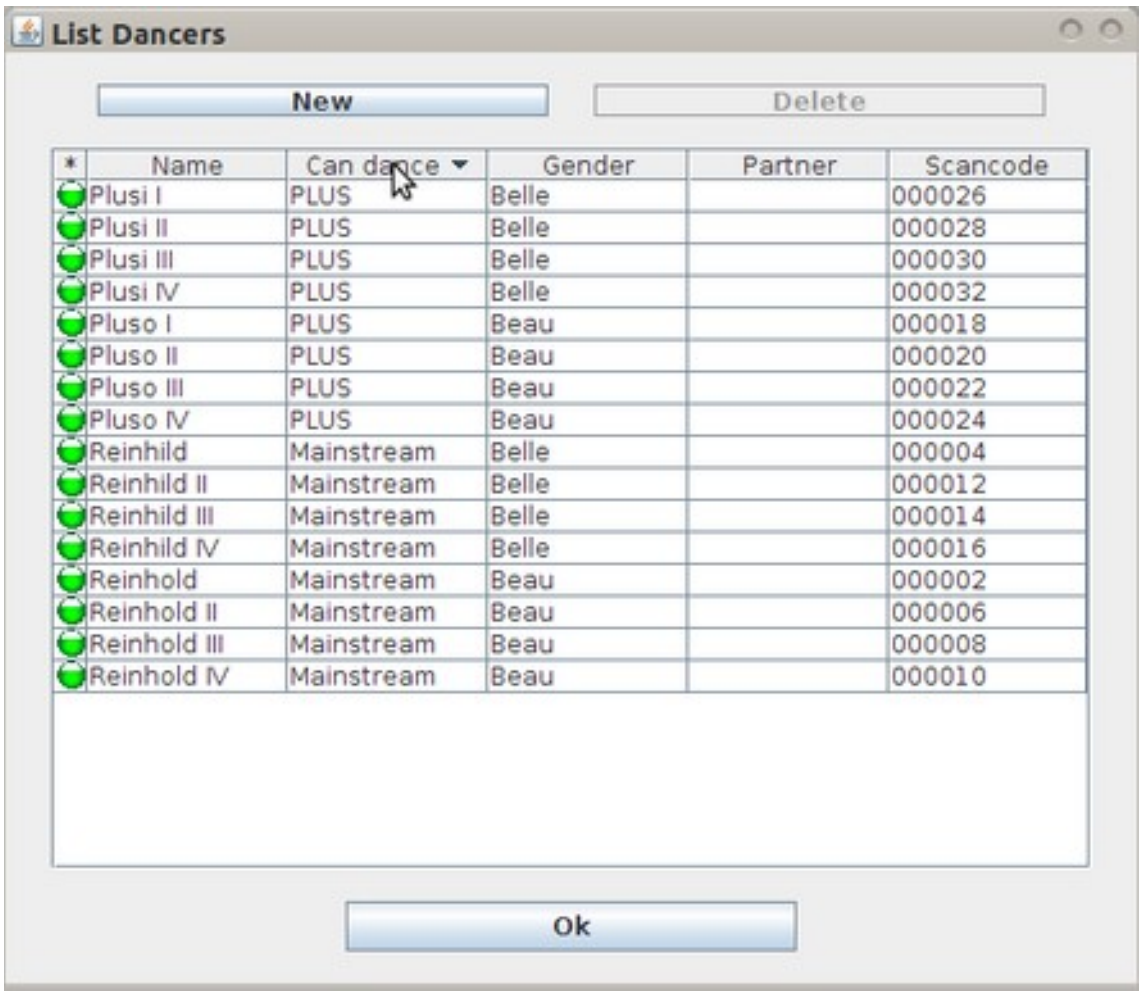
All information is available in a comprehensive way and you can change all these values.

Sort

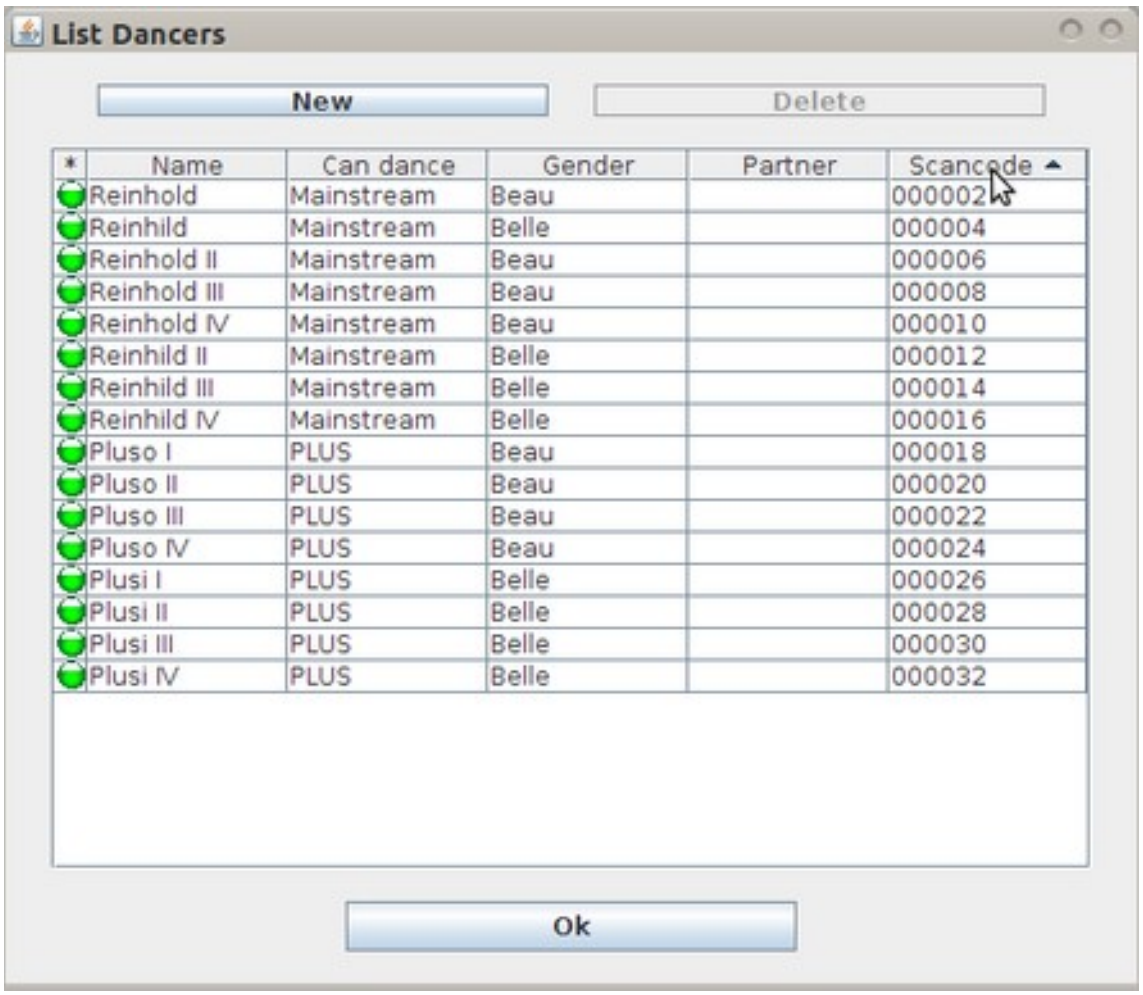
The default sorting is: the name in alphabetical order. But you can sort with different criteria. For this, you just need to click in the column header of the column you want to sort. Try it. Move the mouse pointer over the column header with the name “Can dance” and click once:



The list is now sorted ascending for the dancing level.
Now click another time in the column header “Can dance”.

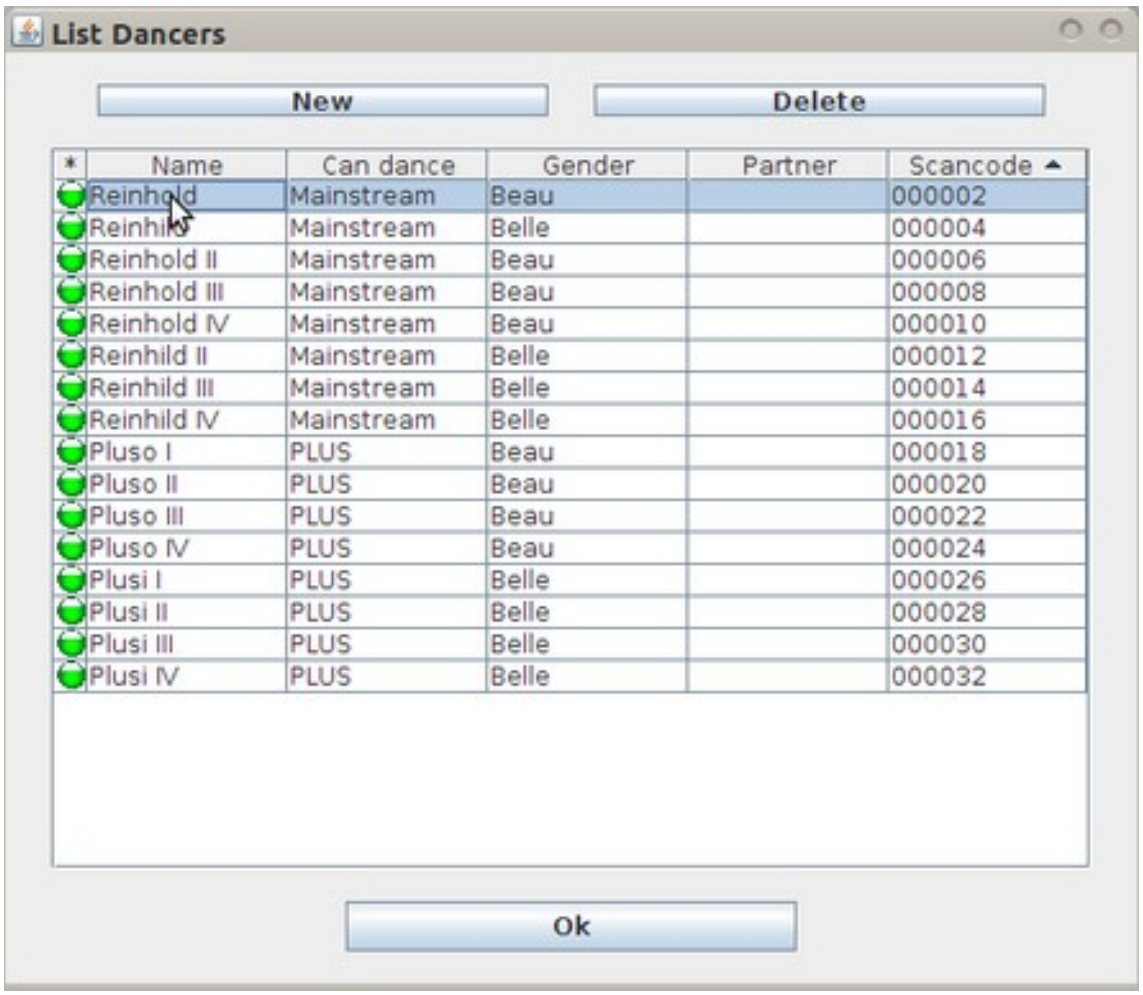


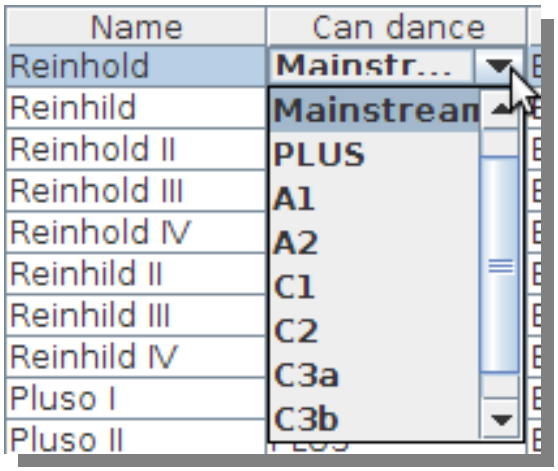
The list is now sorted descending for the dancing level. In this way you can sort each column, except the column “*”. If you click in the column header “Scancode” this will be the result:



Work with the dialog

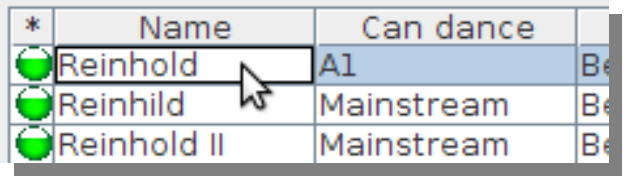
Now we want to change some data. Move the mouse pointer over the name “Reinhold” and click once. This you will see:
The entire line will be marked. This indicates that this line is selected. Only if a line is selected will the “Delete” button in the upper part of the dialog be activated. To see the difference use the keys Ctrl-Blank simultaneously. This deselects the entire line. The “Delete” button will be deactivated. Try it by repeatedly pressing the keys Ctrl-Blank to select and deselect the entire line.





If you want to change the dancer's dance level you need to move the mouse pointer over for example Reinhold's dance level and click once. A small popup menu shows up. With this menu you can chose a certain level as you did, when creating a dancer. The selected value is the actual dance level. If for instance you chose “A1” the popup menu will disappear and in Reinhold's line “A1” is displayed. This modification will be immediately stored in the file like every change. You do not need to store it yourself, SplitChainer does this automatically. In this way you can modify “Can dance” and “Gender” as in the dialog “Create Dancer”.

In order to change the name you need to click on the name field twice. Now you can change the name. To complete your changes just press the “Enter”- or “Return” key. You can also modify the “Scancode” in this way. Just double click on the



“Scancode” field and make your changes. Don't forget the “Return”- or “Enter”-key to finish your changes.

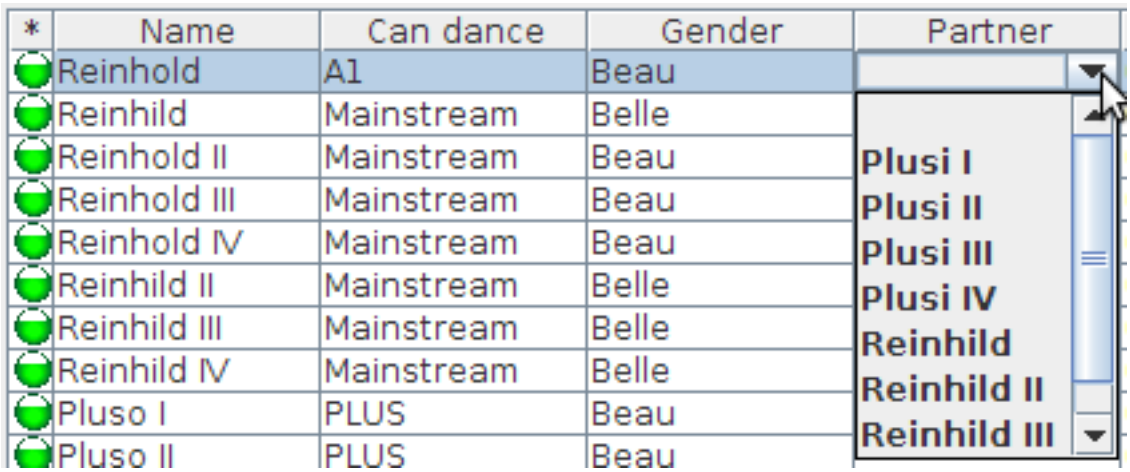


Within this dialog you are also able to change the presence of each dancer. To do this you need to click on the field in the column “*” of the line of the dancer you want to modify. Each time you click the status changes in the same manner as in the “overview” screen. The order is “Absent” red, “Present” green, “Pausing” blue and again “Absent” red.

Let us now take a closer look at the column “Partner”. In this column you can “chain” a dancer with another ”matching” one. What does “matching” mean? Each gender has two other matching genders, one of them matches, the other matches very well.

Gender	Matching Gender
Beau	Belle
Beau	Beau&Belle
Belle	Beau
Belle	Beau&Belle

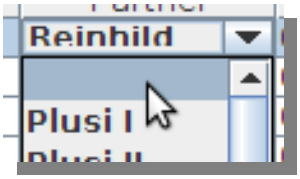
What does “matching really well” mean? A Beau and a Belle match always really well, during the dancing event SplitChainer keeps these two together. This will not be the case if one partner dances Beau&Belle. What can happen, is that during rotation SplitChainer decides this Beau&Belle needs to dance as the same gender as his/her partner. In this case these two dancers will not dance together. The next tip everything can have changed again and the Beau&Belle will be rotated as a matching gender, which will bring these two again together as a couple.
You will not find such possibilities in our example file, but feel free (and be animated) to play around.
And how is the “chain”ing done? Click in any line in the field “Partner”. The example below shows the line of “Reinhold”. A popup menu is shown, which offers you all “matching” dancers.



Choose “Reinhild”, which leads to the following result:

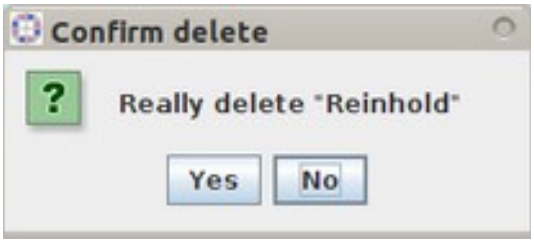


“Reinhold” and “Reinhild” are now a couple”. As they are “Beau” and “Belle” SplitChainer will put them as a couple in a square if both of them are “IN”.



To split them you need to select the “Blank” entry in the popup menu. This is always the first line and is shown above.
If you chain “Reinhold” with someone other than “Reinhild”, she will automatically be split from “Reinhold”. SplitChainer makes sure that no dancer will be chained with two others at the same time.
And also here: You do not need to save these changes as SplitChainer saves them automatically.

“Reinhold” is still selected, and because of this the button “Delete” is still active. Please click on “Delete”. For security reasons the following question needs to be answered:

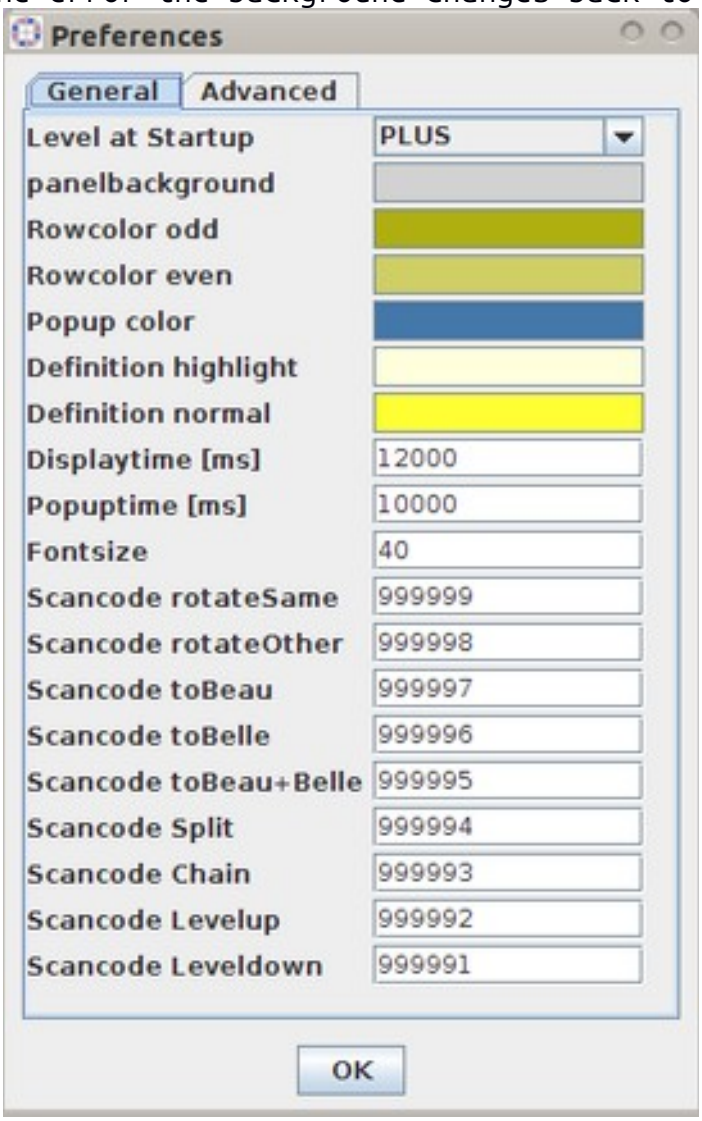


“Reinhold” will only be deleted if you click “Yes”. And again: This change will be saved automatically by SplitChainer. Click “No” and “Reinhold” will not be deleted.

Close the complete “List dancer” dialog by clicking “Ok”.

Preferences

The preferences control the layout and behavior of SplitChainer. To open the dialog use “File → Preferences” or press simultaneously Ctrl-P.
All incorrect inputs will be highlighted in this dialog. This is done by changing the background color of the affected fields to red. As soon as you correct the error the background changes back to white.



Also here you can change many values. Note that there exists another tab called “Advanced” with several other adjustments. The Advanced preferences control the behavior of SplitChainer while the values in tab “General” control the layout.
Here is a description of all values in tab “General”:

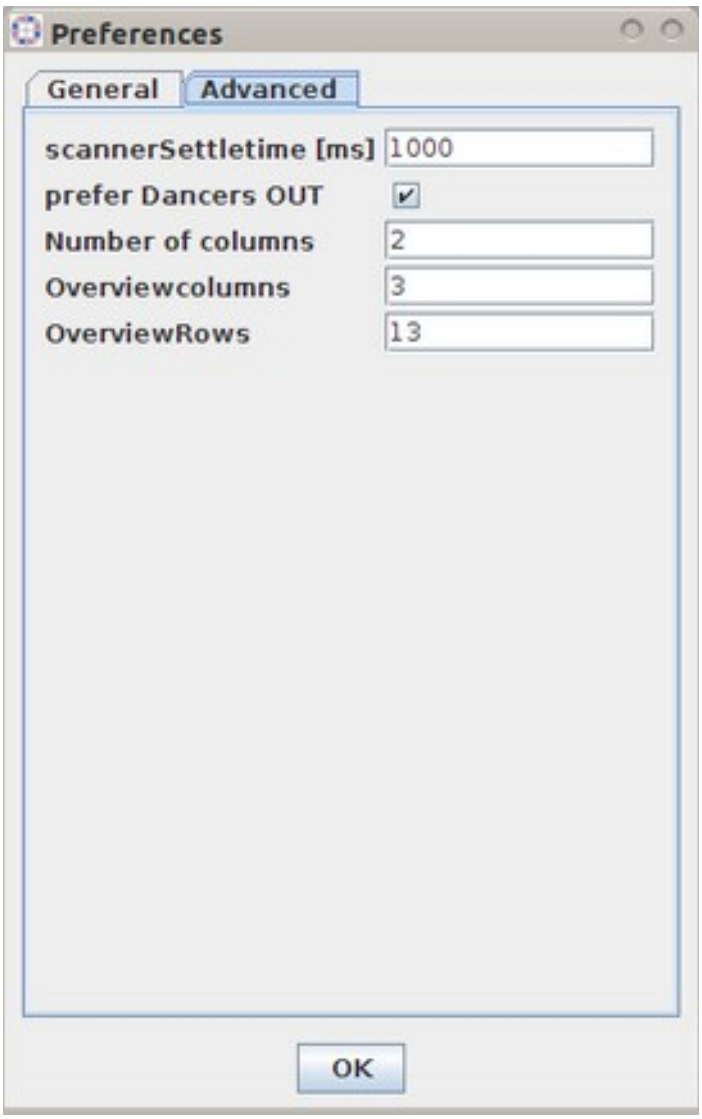
Name	Value	Description
Level at Startup	Dance level	This dance level will be used by Ctrl-R “Rotate (Same level)” at startup of

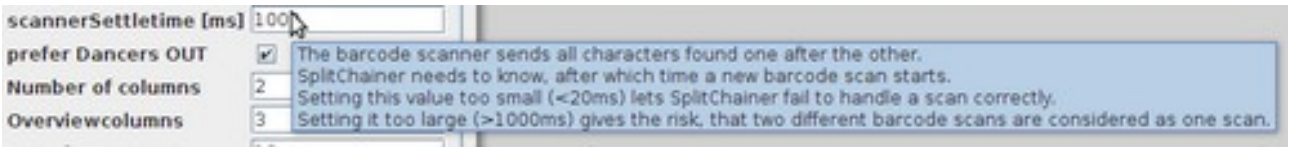
Name	Value	Description
		SplitChainer. After changing this with Alt-R, this new level will be used.
panelbackground	Color	Color of the background window
Rowcolor odd	Color	Color of the odd line in the couples screen.
Rowcolor even	Color	Color of the even line in the couples screen.
Popup color	Color	Color of the popups and the Open tip window
Definition highlight	Color	N/A
Definition normal	Color	N/A
Displaytime [ms]	Number	The time that one page of the couplescreen is shown. When more information is shown or the font is set quite small, you should select a higher value.
Popuptime [ms]	Number	The time that the scanner popups are shown
Fontsize	Number	Fontsize for the couplescreen
Scancode rotateSame	Number	Barcode for “Rotate (same level)”
Scancode rotateOther	Number	Barcode for “Rotate (other Level)”
Scancode toBeau	Number	Barcode for “Switch dancer to Beau”
Scancode toBelle	Number	Barcode for “Switch dancer to Belle”
Scancode toBeau&Belle	Number	Barcode for “Switch dancer to Beau&Belle”
Scancode Split	Number	Barcode for “Split”
Scancode Chain	Number	Barcode for “Chain”
Scancode levelup	Number	Barcode for “Dancer's dance level up”
Scancode leveldown	Number	Barcode for “Dancer's dance level down”

And here are the “Advanced” settings:

Name	Value	Description
ScannerSettletime[ms]	Number	If you hold the mouse pointer very long over this field without a movement a help will be displayed. See picture ScannerSettletime later on this page.
Prefer Dancers OUT	Check	If you hold the mouse pointer very long

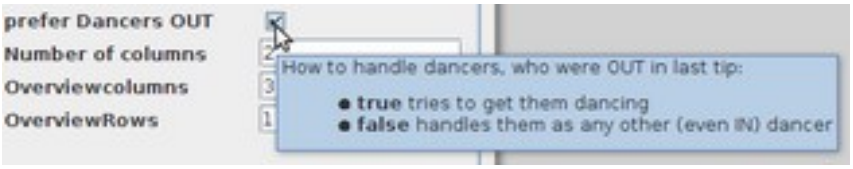
Name	Value	Description
		over this field without a movement a help will be displayed. See picture “Prefer Dancers OUT” later on this page.
Number of Columns	Number	The couplescreen can display the couples in columns. The larger your screen is the more columns can be used. If you increase the number of columns it might be necessary to reduce the fontsize (General-tab).
Overviewcolumns	Number	Number of columns in the “Overview” of dancers.
OverviewRows	Number	The fewer lines you configure the larger the font will be. You might need to decrease the number of columns above.
Autosplit	Check	Couples will be splitted after the next tip. You can couple but only for the next tip.





scannerSettletime

The default value is really a good choice. Change it with care.



Prefer Dancers OUT

Setting this to “False” might lead to the result that a dancer will be rotated “OUT” two consecutive times. This is only meaningful in case of

a dancing event with “mixed” dance levels (MS-MS-PLUS for instance).

Menu overview

Menu	Submenu	Shortcut	Description
File	Open	Ctrl-O	Open a file
	Save	Ctrl-S	Save a file
	Save as	Ctrl-Umschalt-S	Save a file with new name
	Preferences	Ctrl-P	Adjust colors and fontsizes
	License	Ctrl-I	Administrate your licenses
	Exit	Alt-F4	Exit
Dancer	New	Ctrl-N	Create new dancer
	List	Ctrl-L	List of all dancers and manage them
	Overview	Ctrl-V	Display the presence of all dancers
Rotate	Rotate (same level)	Ctrl-R	Rotate
	Rotate (other Level)	Alt-R	Rotate
	Open tip	Alt-T	Display Open tip
	Start Display	Ctrl-D	Display the result of last rotation (couplescreen)
	Stop Display	Alt-D	Stop displaying the couplescreen
Scanner			This is necessary for technical reasons (Usage of scanner)
Helf	About	Ctrl-A	Display version information

Acknowledgement

I want to thank Irene Ehlers (Cologne, Germany) and Victor Soland (Copenhagen, Denmark) for all their work when proofreading this document, the German and the English. They have spent many hours to read and to correct and, last but really not least, to improve this text by discussing even single words.

I want to thank all members of the square dance club L-town squeezer located in Langenfeld, Germany to be this patient. Several times during the development of SplitChainer something went really wrong and no one of them complaint.

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