

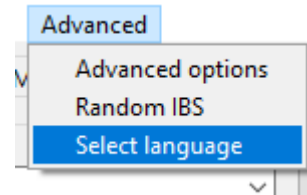
CaseSolver

New features in v1.7

by Øyvind Bleka, Oslo University Hospital

with the help of Lourdes Prieto

Language module



Select or construct a language



Only example

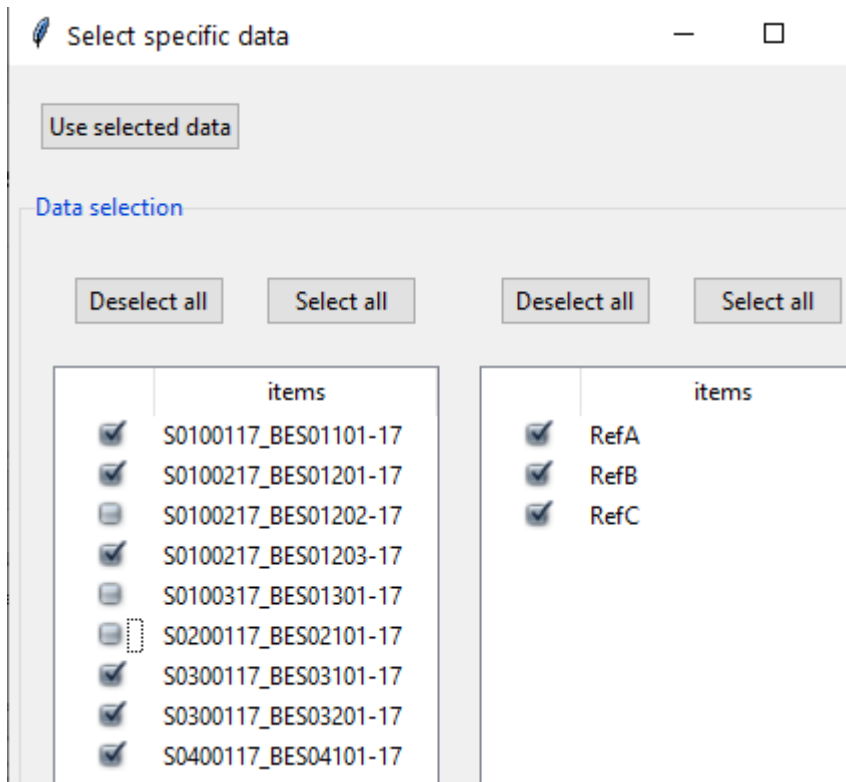
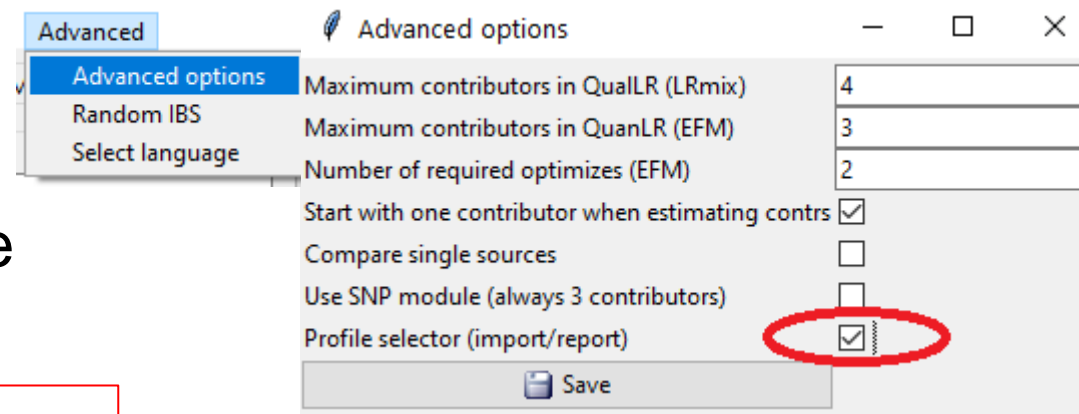
Simply fill in an excel spreadsheet with words and sentences:

	A	B	C	D	E	F
1	Key	English	Norwegian	Spanish	Chinese(Simplified)	
2	file	File	Fil	Archivo	文件	
3	settings	Settings	Innstillinger	Parametros	设定	
4	setup	Setup	Oppsett	Preparar	设定	
5	options	options	valg	opciones	选项	

New profile selector

- 1) When importing data from a case
- 2) When creating report

NB: deselected profiles are not stored elsewhere
(the names of these **could** be stored in report)



Match Matrix sorting

Data Match Matrix Match List (Qual.LR) Match List (Quan.LR) Matches Deconvoluted

Further

Export Rotate MatchMatrix Sort by Column name Sort by Row name Sort by Match degree Don't truncate Truncate

.	Sample Name	S0300117_BES03201-17	S0100217_BES01202-17	S0300117_BES03101-	S0100217_BES01201-	S0100217_BES01203-17	S0200117_BES02101-17
#1	RefA	0.56	0.91	0.54	0.91	0.91	0.91
#2	RefB	1	0.6	1	0.62	0.6	0.65
#3	RefC	0.5	0.89	0.48	0.91	0.91	1
#4	Unknown 1	0.59	0.57	0.59	0.59	0.59	0.59

- “Sort by Match degree” is based on the sum of the proportions.
- Sorted tables also shown in Report.

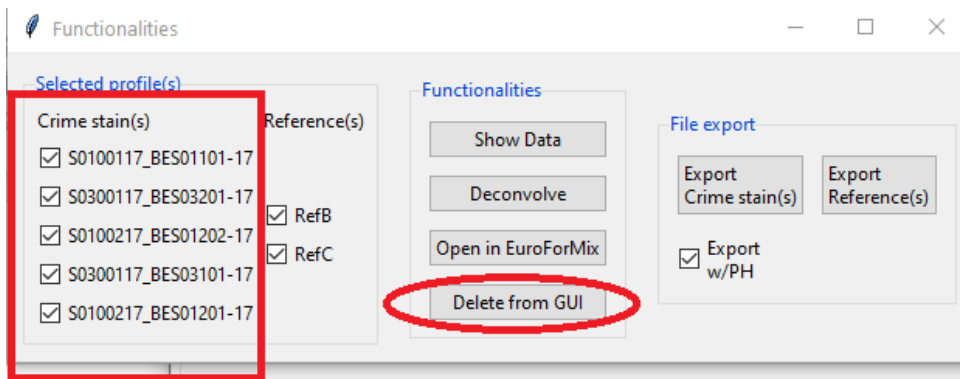
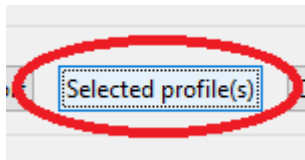
Delete profiles from GUI

1) Deleting reference profiles

- The profile will be removed from both “**MatchStatus**” and “**Matches**” table

2) Deleting evidence profiles (can only be done before **Compare**)

- The profiles are removed from GUI and not recorded elsewhere
 - Names of these **could** be stored in report for instance.



Improved handling of single source matches

1. Showing “Matches” for single source profiles
2. MatchNetwork always based on candidates in “Matches” table
3. New method to search (partial) single source profiles:
 - **Requires deletion** of reference profiles from GUI
 - Removed from **MatchStatus** and **Matches**
 - Single source profiles only “compared” if reference in **MatchStatus removed**.

1) Show single source matches in “Matches” (without searching)

Advanced options

Maximum contributors in QuallR (LRmix)	4
Maximum contributors in QuanLR (EFM)	3
Number of required optimizes (EFM)	2
Start with one contributor when estimating contrs	<input checked="" type="checkbox"/>
Show single sources in Matches	<input checked="" type="checkbox"/>
Use SNP module (always 3 contributors)	<input type="checkbox"/>
Profile selector (import/report)	<input type="checkbox"/>

Save

Data Match Matrix Match List (Qual.LR) Match List (Quan.LR) Matches Deconvoluted

Further

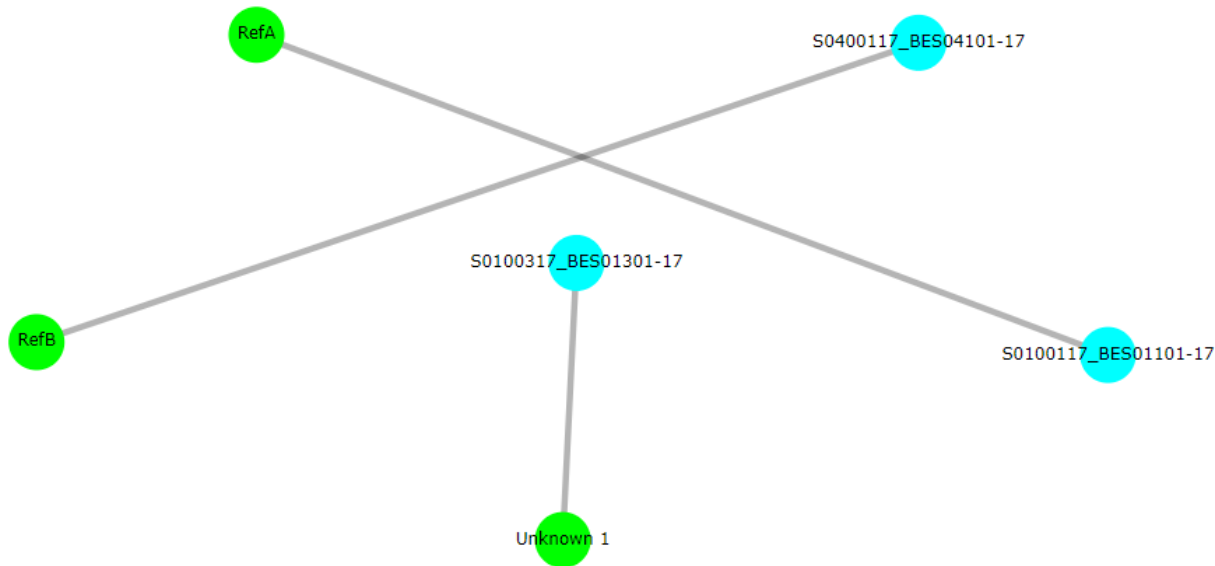
Deconvolve all Export Show Match Network Show for Mixtures Show for Single sources Sort by #

.	Evidence	Reference(s)	Num contr.
#1	S0400117_BES04101-17	RefB	1
#2	S0100317_BES01301-17	Unknown 1	1
#3	S0100117_BES01101-17	RefA	1
#4	S0300117_BES03201-17		3
#5	S0100217_BES01202-17		2
#6	S0300117_BES03101-17		3
#7	S0100217_BES01201-17		2
#8	S0100217_BES01203-17		2
#9	S0200117_BES02101-17		3

2)

Show MatchNetwork for
all candidates in “Matches”

(even single sources)



3)

Searching (partial) Single Source profiles by **deleting** corresponding **MatchStatus** reference

An example

Thanks to Lourdes Prieto

Want to remove Unknown 1 because it's from a partial profile

Evidence profile(s) and Reference profile(s)

	Sample Name	Match Status	AMEID2S1338	CSF1PO	PENTA D
#1	18-01897-03.01	Unknown 1	X 17/20		15
#2	18-01897-09.03-REP	Unknown 2	X 17/20	11/12	12/15
#3	18-01897-09.03	Unknown 2	X 17/20	11/12	12/15
#4	518-01897-04.01	Unknown 2	X 17/20	11/12	12/15
#5	18-01897-05.01	Unknown 2	X 17/20	11/12	12/15
#6	18-01897-05.02	Unknown 2	X 17/20	11/12	12/15
#7	18-01897-05.03	Unknown 2	X 17/20	11/12	12/15
#8	18-01897-06.05	Unknown 2	X 17/20	11/12	12/15
#9	18-01897-06.06	Unknown 2	X 17/20	11/12	12/15
#10	18-01897-06.07	Unknown 2	X 17/20	11/12	12/15

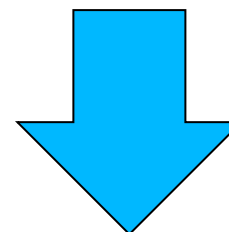
	Sample Name	AMEL	D3S1358	PENTA D	TH01
#1	Unknown 1	X/X	18/18	15/15	6/7
#2	Unknown 2	X/X	18/18	12/15	6/7
#3	Unknown 3	X/Y	15/15	9/9	7/9.3

Allele dropping out

Calculate RMP Calculate IBS Calc. Evid concordance Add/E

Concordance of reference profiles (IBS)

Ranl	IBS	Comparison
1	33	Unknown 2 Unknown 1
2	20	Unknown 3 Unknown 2



Unknown 1 and 2 same contributor

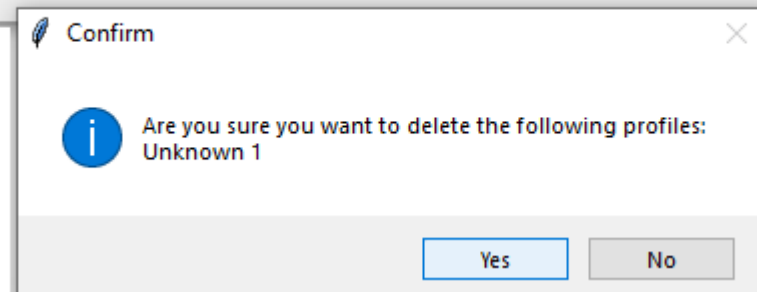
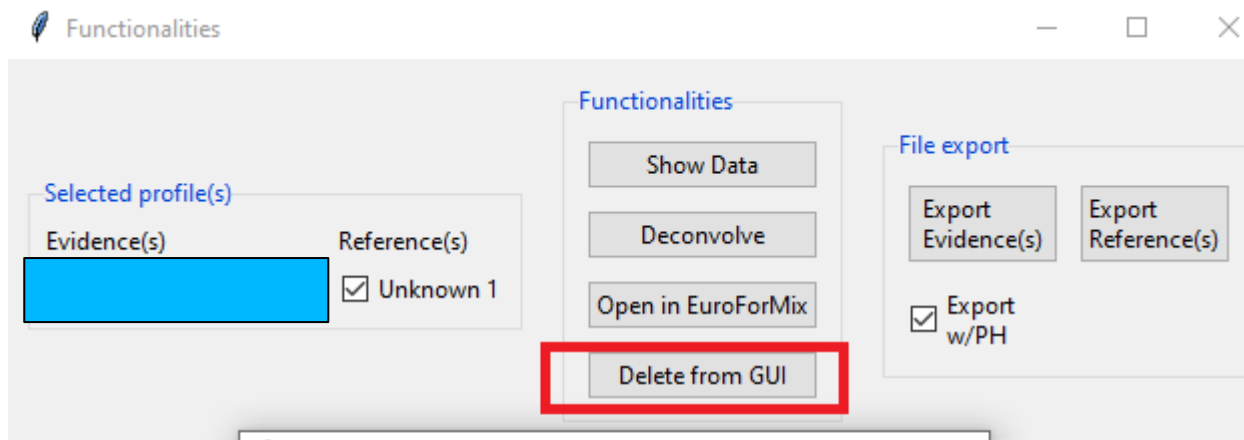
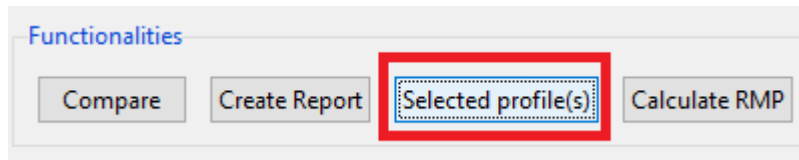
Data Match Matrix Match List (Qual.LR) Match List (Quan.LR) Matches

Further

Deconvolve all Export Show Match Network Show for Mix

	Evidence	Reference(s)	Num contr.
#1	18-01897-03.01	Unknown 1	1
#2	18-01897-09.03-REP	Unknown 2	1

Mark reference and do this:



Reference removed from: MatchStatus/Matches

Empty

Evidence profile(s) and Reference profile(s)

	Sample Name	Match Status	AMEL	D3S1358	D1S1656
#1	18-01897-03.01		X	18	12/15
#2	18-01897-09.03-REP	Unknown 2	X	18	12/15
#3	18-01897-09.03	Unknown 2	X	18	12/15
.....

	Sample Name	AMEL	D3S1358	D1S1656
#1	Unknown 2	X/X	18/18	12/15
#2	Unknown 3	X/Y	15/15	13/15

Data Match Matrix Match List (Qual.LR) Match List (Quan.LR) Matches Deconvolute

Further

Deconvolve all Export Show Match Network Show for Mixtures Show

	Evidence	Reference(s)	Num contr.
#1	18-01897-03.01		1
#2	18-01897-09.03-REP	Unknown 2	1

Perform Compare

Functionalities
Compare

Both Mixtures and single source profiles with empty MatchStatus are compared!

Single source profiles with empty MatchStatus will be compared

Data Match Matrix Match List (Qual.LR) Match List (Quan.LR) Matches Deconvoluted

Further

Export Rotate MatchMatrix Sort by Column name Sort by Row name Sort by Match degree Don't truncate Truncate

.	Sample Name	Unknown 2	Unknown 3	
#1	18-01897-03.01	0.97	0.47	
#2	18-01897-06.12	1	0.59	
#3	18-01897-07.04-REP	0.83	1	
#4	18-01897-07.04	0.91	1	
#5	18-01897-08.02	1	0.98	
#6	18-01897-07.02-REP	1	1	

Data Match Matrix Match List (Qual.LR) Match List (Quan.LR) Matches Deconvoluted

Further

Deconvolve all Export Show Match Network Show for Mixtures

.	Evidence	Reference(s)	Num contr.
#1	18-01897-03.01	Unknown 2	1
#2	18-01897-09.03-REP	Unknown 2	1