

Tom Nicolai & Kati Mozygemba

User Manual QualiAnon – Tool for the anonymization of text data (v1.3)

University of Bremen – Qualiservice Technical Report QS-TR-2-2023 Empfohlene Zitierung / Suggested Citation:

Nicolai, Tom & Mozygemba, Kati (2023): QualiAnon User Manual, v1.3 Qualiservice Technical Report 2-2023, Bremen, doi: https://doi.org/10.26092/elib/2576

Software available at: https://github.com/pangaea-data-publisher/qualianon

Wir entwickeln die Software permanent weiter, so dass Sie ggf. aktuellere Einträge im in folgendem Support-Dokument (living document) finden: <u>https://docs.google.com/document/d/1fLLYvsgXjh_p9p_E1fhikkIPQb19VUiltbRgaWQoD-M/edit#heading=h.3vpz66t09gfa</u>

© FDZ Qualiservice, Oktober 2023

Impressum Forschungsdatenzentrum (FDZ) Qualiservice Universität Bremen SOCIUM – Forschungszentrum Ungleichheit und Sozialpolitik Mary-Somerville-Str. 7 UNICOM - Gebäude D-28359 Bremen Germany



Webseite: <u>https://www.qualiservice.org</u> E-Mail: <u>info@qualiservice.org</u>

Inhalt

1	Intr	oduction	5
	1.1	Getting started	7
	1.2	Release notes	7
	1.3	Citation	7
2	We	lcome screen	7
	2.1	New project	8
	2.2	Open project	8
3	Mai	n project window	8
	3.1	Window menu	9
	3.1.	1 File	9
	3.1.	2 Edit	9
	3.1.	3 Window	9
	3.1.	4 Help	9
	3.2	Project structure tabs	9
	3.3	Document area1	0
	3.4	Buttom tab area1	0
	3.5	Status line1	0
4	Cre	ate and edit categories1	0
	4.1	Create a new category1	1
	4.2	Organize categories1	1
	4.3	Create labels for a category1	2
	4.4	Edit labels of a category1	2
	4.5	Edit the choices of a label1	3
	4.6	Load a list for label1	4
	4.7	Load a list for label lookup1	4
	4.8	Using custom lists for replacement1	7
5	Wo	rking with replacements and markers1	8
	5.1	Add a marker with a new replacement1	9
	5.2	Populate labels from a replacement list	21
	5.3	Mark multiple occurrences of a word or phrase with a new replacement2	23
	5.4	Add markers to an existing replacement2	24

0	8.1 8.2 8.3 8.4 8.5	ject directory and files Directory layout Get the exported documents Reuse categories for another project Archive a project securely Remove the originals, but keep the labels	.35 .35 .36 .36
0	8.1 8.2 8.3	Directory layout Get the exported documents Reuse categories for another project	.35 .35 .36
0	8.1 8.2	Directory layout Get the exported documents	.35 .35
0	8.1	Directory layout	.35
0			
0		ject directory and files	.35
8	Pro		
7	Cre	ating and configuring exports	.34
6	Fine	d text	.33
	5.11	Remove replacement with all related markers	.32
	5.10	Remove multiple markers	.31
	5.9	Remove a marker	.30
	5.8	Edit a replacement	.29
	5.7	Find replacement and label information for a marker	.28
	5.6	Reassign markers to another replacement	.26
	5.5	Change marker to selection	0

1 Introduction

Research concerned with living persons usually contains sensitive information. Due to this sensitivity the processing of this kind of research data requires to take legal regulations as well as ethical standards into account. Anonymization and pseudonymization are central instruments to fullfill these requirements to protect personal rights of research participants, researchers and third persons. Both instruments are therefore common in empirical research with and about humans - independent of subject and discipline. However, protecting research data is only one side of the coin when you think of data sharing and reuse. Hiding, or deceiving information might prevent research or lead to wrong results. Especially if data are supposed to be shared for scientific re-use, researchers have to deal with two potentially conflicting interests: protecting personal data and enabling further research.

To address both – data protection and scientific re-use – the Research Data Center Qualiservice developed the concept of "Flexible Anonymization" (Kretzer 2013¹, Mozygemba & Hollstein 2023²), replacing sensitive personal data with more abstract information relevant for further research on different levels of abstraction, which is included in QualiAnon – a tool for the anonymization of text data.

QualiAnon allows for semi-automatic anonymization/ pseudonymization keeping the user in control. It enables to mark and replace sensitive information and allows for differnt levels of abstraction as well as for replacements on case basis or on study level (i.e. across all cases). QualiAnon provides versions of anonymized datasets on different abstraction levels. The user can establish systems of replacement categories, that can be shared and further developed and thus be the basis for topic related anonymized data is also possible. The tool allows for the integration and creation of lists to support the replacement process; it allows to share and reuse the developed replacement categories, anonymized data, replacement lists, exports etc. are stored separately.

¹ Kretzer, S. (2013). Arbeitspapier zur Konzeptentwicklung der Anonymisierungs-/Pseudonymisierung in Qualiservice. https://wiso.genios.de/document/SSOA_47605

² Mozygemba, Kati & Betina Hollstein (2023): Anonymisierung und Pseudonymisierung qualitativer textbasierter Forschungsdaten – eine Handreichung. Qualiservice Working Papers 5-2023, Bremen, https://doi.org/10.26092/elib/2525

The tool works with a system of Universally Unique Identifiers (UUIDs) (see Figure 5). The anonymized interview ("blackened interview") contains the marker ID that is set in the original text during editing. The replacement ID refers to the translation selected in each case. Marker IDs and replacement IDs of a study as well as the original information are stored in another document.

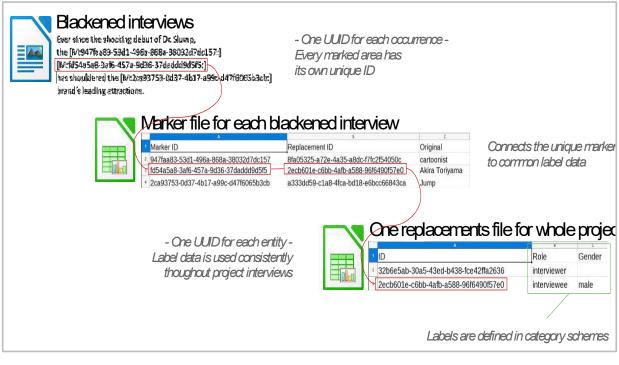


Figure 5: The data model of QualiAnon - connection of UUIDs

1.1 Getting started

QualiAnon runs on Windows, MacOS and Linux. It requires Java to run.

- 1. Go to https://www.java.com
- 2. Download the latest release of Java 8 and install according to the instructions
- Download the latest release of QualiAnon (quali-anon-v1.2.2.jar) from <u>https://github.com/pangaea-data-publisher/qualianon/releases</u>. The repository is not openly accessible. Please drop us a message with your email or github user name and we will grant you access. Contact us at <u>https://www.qualiservice.org/en/contact.html</u>.
- 4. Open quali-anon by double-clicking the jar-file. Alternatively, use the command-line of your OS: "java -jar quali-anon-v1.2.2.jar"

QualiAnon will probably not run on newer or older versions of Java. Also, alternative Java distributions might not work. If QualiAnon does not launch correctly, check if there might be other Java versions installed on your computer and uninstall them.

1.2 Release notes

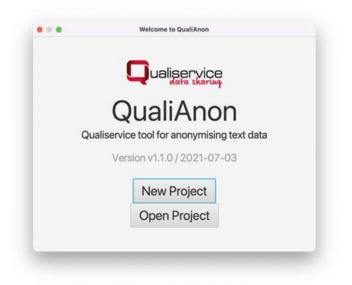
Please see <u>https://github.com/pangaea-data-publisher/qualianon/releases</u> for release notes and changelog.

1.3 Citation

Use the following citation to reference QualiAnon in your works:

Tom Nicolai, Kati Mozygemba, Susanne Kretzer, Betina Hollstein (2021): QualiAnon - Qualiservice tool for anonymizing text data (version 1.1.0). Qualiservice. University of Bremen. Software available at: <u>https://github.com/pangaea-data-publisher/qualianon</u>

2 Welcome screen



2.1 New project

New Project	t	
Project name	1	
Location	/Users/tom/Dccuments/Marum/github/anonymizer-tool	Browse

2.2 Open project

Select the project folder to open an existing project.

3 Main project window

File Edit Window Help Documents Replacements Categories Exports Image: Comparison of the second seco	
Log ×	
eated new project Example 101	

3.1 Window menu

3.1.1 File

- **Open Project**: Closes the current project and opens another project.
- **Close Project**: Closes the current project and returns to the welcome screen.
- **Save File**: Saves changes to the currently displayed document.
- Save All Files: Saves changes to all documents in the project.
- Import Document: Import one or multiple documents into the project. QualiAnon imports documents in the .docx format, which can be created with Microsoft Word or LibreOffice/OpenOffice. If your documents are in other formats, you can use these applications to convert them before the import. During import, QualiAnon copies the file(s) into the project folder. Your original files will not be modified.
- **Quit**: Close the application.

3.1.2 Edit

- **Undo**: Undo the last operation.
- **Redo**: Redo the last operation that was undone. Undo and redo can be used to roll back and forth multiple times.
- Find: Search for text across all interviews in the project.
- **New Category**: Edit the category scheme used for anonymization in the project (see 2.2).
- **New Export**: Create a new export of the project documents with applied anonymization settings.

3.1.3 Window

- **Show Message Log**: Display the log window at the bottom area.
- Close Active Bottom Tab: Close the currently showing tab on the bottom area.
- **Close All Bottom Tabs**: Close all the tabs displayed on the bottom area.

3.1.4 Help

- User Manual: display the online version of this document in a browser
- Qualiservice Website: open <u>www.qualiservice.org</u>
- QualiAnon @ Github: open the related github page, <u>https://github.com/pangaea-</u> <u>data-publisher/qualianon</u>. Download the latest release, submit bug reports, discuss future enhancements to the tool.

3.2 **Project structure tabs**

On the left side there are three tabs containing the project structure.

- **Documents**: list with all documents that were imported into the project. A double click on an entry shows the document in the document area on the right.
- **Replacements**: list with all replacements in the project, sorted by category.
- **Exports**: list with all exports and detailed anonymization settings.

3.3 Document area

On the right side, the content of documents is displayed. This is the main area for working on anonymization. The area can hold multiple opened documents which can be switched by their tabs.

3.4 Buttom tab area

The bottom area can hold a variety of tabs, which help with anonymization. E.g. the message log, search results or a list of markers.

3.5 Status line

On the very bottom there is the status line. It displays the last application message on the left. On the right you can toggle the selection mode:

- **Words**: When selecting text in the document view, the selection is automatically extended to word boundaries. Single words can be selected with a single click.
- **Characters**: Selection is possible on the character level.

4 Create and edit categories

Categories are the classes of entities to be anonymized, the general schema of the anonymization. Depending on your project, you might want to set up different categories, e.g. Person, Location, Occupation, Disease.

Categories can be assigned a color for display within documents. They comprise labels (free text or choice) to describe the anonymized entity on different levels.

4.1 Create a new category

ory								
Grau	•							
up: <none></none>								
d Remove	Style: The		View					
	kup: <nane></nane>	kup: <nane></nane>	kup: <nane></nane>	kup: <none></none>	kup: <nane></nane>	kup: <none></none>	kup: <none></none>	kup: <none></none>

1. Select from the menu: Edit -> New Category. This will create a new category and display the "Categories" tab.

4.2 Organize categories

	eplacements Categorie	es Exports	
Person			
New categor	у		
	Rename		
	Delete		
	Move up		
	Move down		

Right-click on a category name to open the context menu:

- **Rename**: change the name of the category, all usages will be updated
- **Delete**: remove the category and all usages
- Move up / Move down: change the order of categories

4.3 Create labels for a category

		xample 101 - QualiAnon		
File Edit Window Help				
Documents Replacements Categories	Exports			
Person New category				
Labels				
Color: Grau Add label				
Listlookup: <none></none>				
Load Remove Style: T	ee 🔻 View			
			Words	

- 1. Right-click "Labels" within a category to open the context menu
- 2. Select "Add label"

There are two types of labels, either free text entry (text) or multiple choice from an enumeration (choice). New labels are always of type "text". To provide choices for a label, see next section.

4.4 Edit labels of a category

	Categories Exports	
Person	Color-Colore Landbourde	
 Labels 		
Role (text)		
New label (text)		
Color: ##cc3333	Add choice	
List lookup: <none></none>	Rename	
Load Remove	: Delete - View	
(approximately)	Move up	
	Move down	

Right-click on a label to open its context menu.

- Add choice: provide a value for the label. When adding the first choice to a label, it is converted from "text" to "choice" type. You can add multiple choices to each label to restrict the entry options.
- Rename: rename the label and its usages
- **Delete**: remove the label and its usages
- Move up / Move down: change the order of labels

4.5 Edit the choices of a label

Right-click on a choice to open its context menu.

- **Rename**: rename a choice (usages are not updated, yet)
- **Delete**: remove a choice from a label (usages are not updated, yet)
- Move up / Move down: change the order of choices

4.6 Load a list for label

File Edit Window Help	
Documents Replacements Categories Exports	
Person Labels Role (text)	
 Gender (chcice) 	
Female	
Male Rename Diverse Delete	
Color: #cc3333 Move up List lookup: <none: down<="" move="" td=""><td></td></none:>	
Load Remove Style: The - View	
	Select Words

Right-click on a choice to open its context menu.

- **Rename**: rename a choice (usages are not updated, yet)
- Delete: remove a choice from a label (usages are not updated, yet)
- Move up / Move down: change the order of choices

4.7 Load a list for label lookup

QualiAnon can load a number of standardized lists to fill labels automatically based on the anonymized words. It comes preconfigured with lists for occupations (ISCO-08) and economic activities (NACE-08) from the EU RAMON server, the classification of diseases (ICD-10) and a list of German cities and regions. It can also load custom lists from xlsx files.

Documents	Replacements	Categories:	Exports		
Occupatio	on				
Labels					
Color:	Grau				
Listico	kup: <none></none>				
Lo	ad Remove	Style: The		View	

Press the "Load" button within a category to start the import.

name monore la	6		
eg × 18:56 INFO: Download list et l	ISCO-08 Occupations 2008 NACE-08 Economic Activities 2008 ICO-10 Diseases and Related Health Problems ICD-10-0M Diseases and Related Health Problems (German) SOTYP Stadt- und Gemeindebp (German) CLASETXML General Clasht, JML, General Clasht, JML, SX Sheet	Import List SCO-08 International Standard Classification of Occupations, 2008 version Download Instructions 1. Open in your browser: https://icc.eutopa.eu/eurostat//amon/incmenclatures/index.cfm?TargetUH=LST_CLS_DLD&Str 2. Select the XML download link 4. Save the file to your computer Import the downloaded file CL_JSCO08_[_].xml	
		Cancel Import file	

- 1. Select a list type from the left.
- 2. On the right, you are given instructions on the download and preparation of list files.
- 3. Press "Import file" to select the prepared file and start the import.

cuments Re	placements	Categories	Exports:	
Occupation				
Labels				Import Lookup List
Color:	Grau	•	-	
List lookup:	<none></none>		Import and	create missing labels?
Load	Remove	Style:	2	
			The following Level 1 Level 2 Level 3 Level 4 Level 5	labels are defined in the file: Abbrechen OK.

4. Depending on the list, QualiAnon will create a number of labels.

File Edit Window Help	b		
Documents Replacements	Categories Exports		
Occupation Labels Color: Grau	-		
List lookup: CL_ISCO08_		ml	
Load Remove	Style: Tree •	View	

- 5. Select a style: "List" is useful for non-hierarchical lists, like the list of German cities and regions. "Tree" is good for hierarchical lists, like ISCO, NACE, ICD.
- 6. Select "View" to preview the list content.
- 7. To remove a list from a category, select "Remove".

If your computer is disconnected from the Internet, you can use a different computer to download list files. Either copy the URL from the browser or message log into a text file and transfer it with a USB stick, or install QualiAnon on the connected computer. Then transfer the

downloaded files with a USB stick to the disconnected computer and continue with "Import file".

It is possible to use lists in combination with additional labels, so that you can fill some labels from the list and add additional information manually. Just add more labels as described above.

4.8 Using custom lists for replacement

You can easily use your own lists of replacements with QualiAnon.

1. QualiAnon expects custom lists in the XLSX format with a simple format definition:

Cell A1: Citation information, source of data

Row 2: Header row

Rows 3 and following: Data rows

The following screenshot shows an example replacement table following this format.

		👗 🗅 💼 - 🧉 🏘 🕨		
Lib	eration Sans 🛛 10 pt 💟	FKUA.		▋╤╪╧
A8	fx Σ • =			■
	A	В	C	D
1	Demo name replacemen	ts		
2	Real name	Pseudonym		2
3	Angela Merkel	Marlon		
4	Jens Spahn	Peter		10
5	Steffen Seibert	Jannes		
6	Saskia Esken	Isabell		f>
7	Markus Söder	Matthias		
8				
9				
10				
			1	1

- 2. Save the XLSX file outside of the QualiAnon project folder. During import, QualiAnon will copy the file into the project.
- 3. In QualiAnon, create a new category or use an existing category for your replacement list (see section 4).
- 4. Import your custom XLSX file as described in section 4.6. Select "Custom XLSX Sheet" when asked for the kind of list.
- 5. QualiAnon will read the file and offer to create a label for each column in the file with the name given in the header row of the XLSX file.

File Edit Window Help Documents Replacements Categories Exports		
and an and a second		
	Spahn und die Masken ×	
▼ Person Labels Color: Grau ▼ List lookup: <none> Load Remove Style: Tres ▼ Verv</none>	 Bundesgesundheitsminister: Angela Merkel nimmt Jen Maskenverteilung in Schutz Der Bundesgesundheitsminister hat Kritik wegen angel Masken für Bedürftige erneut zurückgewiesen. Auch di verteidigt sein Vorgehen. 7. Juni 2021, 11:48 Uhr Aktualisiert am 7. Juni 2021, 11: ZEIT ONLINE, dpa, AFP Import Lookup List Import and create missing labels? Import and create missing labels? The following labels are defined in the file: Real name Pseudonym Pseudonym 	blich minderwertiger ie Bundeskanzlerin 2:38 Uhr Quelle: tsminister Jens Spahn nmen. Die Vorwürfe nderwertige Masken nız vorsichtig zu hrer Partei nach tilich darum, "die "". warum Vorwürfe teffen Seibert. "Die ran gehen, uns tellt, zu widmen." hatte zuvor Vorwürfe Corona-Masken spahn-masken-verteilung-vernichtung-fac (gewiesen. "Es war einem ngliederungshilfe - CDU-Spitze, die

6. Verify the result of the import with the "View" button on the category.

	• • •	Person List Lookup	
File Edit '		Search: Find	_
Documents R			
Person	Real name	Pseudonym	
 Labels 	Angela Merkel	Marion	
	Jens Spahn	Peter	
	Steffen Seibert	Jannes	
	Saskia Esken	Isabell	
List lookur.	Markus Söder	Matthias	
Load			
		nt	tung-fac
		Cancel	
noved replacem	pent	Select Wo	ords

You can now start to create replacements supported by your list, as described in section 5.

5 Working with replacements and markers

In QualiAnon, replacements are distinct entities to be anonymized, e.g. a specific person or a specific location. A replacement is of one category and can be annotated with the labels defined within the respective category.

A marker is an occurrence of a replacement within a document. E.g. a person (represented by a replacement) occurs in a document several times with different words. Sometimes the full name may be mentioned, sometimes only the last name. Each occurrence has a separate marker which is connected to the same replacement.

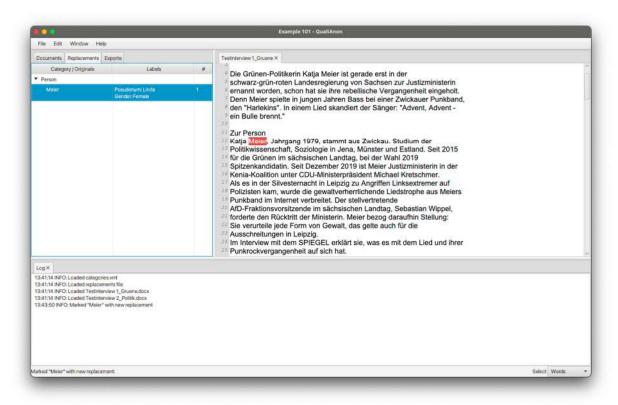
	Example 101 - QualiAnon
File Edit Window	
Decurrents Replacements Exports Testinterview 1_Gruene Testinterview 2_Politik	Testinterview 1, Gruene X Quelle: https://www.spiegel.de/politik/deutschland/katja-meier-saechsische-justizministerin-im-interview-ueber-punkwergangenheit-a-1303581.html Die Grünen-Politikerin Katja Meier ist gerade erst in der schwarz-grün-roten Landesregierung von Sachsen zur Justizministerin ernannt worden, schon hat sie ihre rebellische Vergangenheit eingeholt. Denn Meier spielte in jungen Jahren Bass bei einer Zwickauer Punkband, den "Harlekins". In einem Lied skandiert der Sänger: "Advent, Advent - ein Bulle brennt." Zur Person Katja Meier Jahrenan 1979 stammt aus Zwickau. Studium der Politikwiss Search for unmarked occurrences Kenia-Koc Alse es in c Polizisten Punkband ArtD-Frakti Show replacement Show replacement Show all markers for replacement Show all marker Delete marker
Leg X 2303-34 INFO: Loaded categories.xml 2303-34 INFO: Loaded replacements file 2304-30 INFO: Saved dicoument Testinterview 1_Gruene 2304-03 INFO: Inported document Testinterview 1_Gruene.docx 2305:03 INFO: Saved document Testinterview 2_Politik 2305:03 INFO: Inported document Testinterview 2_Politik.docx 2305:05 INFO: Saved replacements file	

5.1 Add a marker with a new replacement

- 1. Select a word or phrase in a document.
- 2. Open the context menu with a right mouse button click and select "Add marker with new replacement"

000		Example 101 - Qua	TAnon	
File Edit Window Help				
Documents Replacements Exports		Testinterview 1_Gruene ×		
Festinterview 1_Gruene		Quelle:		
Testinterview 2_Politik		https://www.spiegel.de/politik/	leutschland/katja-meier-saechsische-justizmini	sterin-im-interview-ueber-punkve
	Category Psaudonym Gender	New Replacem	wit	
Log×	-			
13-41:14 INFO: Loaded categories.xml 13-41:14 INFO: Loaded replacements file 13-41:14 INFO: Loaded Testiniterview (Guerrer, 13-41:14 INFO: Loaded Testiniterview 2_Politik.dt				
aded Testinterview 2_Politik.dccx				Select Words

- 3. Select a category and fill in the labels.
- 4. Press "Insert"



The marker is now inserted into the document, highlighted in the color of the category. The related replacement can be inspected in the replacements tab.

5.2 **Populate labels from a replacement list**

If a category is supported by a replacement list, you do not have to fill the labels by hand.

1. For categories with a replacement list, you have the option to do a "List Lookup".

File Edit Window Hel	p									
Documents Replacements	Categories	Exports	Spahn und die Masken ×							
 Person 			1	New Replacement)		
▼ Labels										
Real name (text)										
Pseudonym (text)										
Color: #996699										
List lookup: Demo name	N	lew Repla	acement for "Spal	าท"						
Load Remove								n		
	Ca	tegory	Person		*					
	Rei	al name				List Lookup				
	Pse	eudonym								
						Cancel	Insert			
		_	aus SPD unu OI	position um angeu	lich minderwei	uge Corona-n	lasken	-		
			22 <https: p="" www.ze<=""></https:>	it.de/politik/deutsch	land/2021-06/j	ens-spahn-ma	sken-ver	teilung-ver	michtung-fa	3(
			>		OL I HI			-		
			 ²³ für Menschen m ²⁴ übrigens eine Id 				n. "Es wa	ir		
			25 Sonderkontinger				ngshilfe			
			26 Masken zu verte	ilen", sagte Spahn	vor Beratunge	n der CDU-Sp	itze, die			
			27 toile in Draconz							

2. The list is filtered by your current selection in the text. You can change the filter in the top right search field.

File Edit		Person List Lookup		
	ern in text: Spahn		Search: Spahr	Find
Person	Real name		Pseudonym	-
✓ Labels Jens Spahn		Peter		
Real nar				
Pseudor				
Color:				_
List lookup				
Load				
CINNER				
				htung-fac
				_
				_
			Cancel	lect.

3. On selection of an entry, the labels of the replacement are populated.

File Edit Window He	lp							
Documents Replacements	Categories	Exports	Spahn und die Masken ×					
Person Labels		-	New Replacem	ent				
Real name (text)	i							
Pseudonym (text)								
Color: 🗮 #996699								
List lookup: Demo name	° N	lew Repla	acement for "Spahn"					
Load Remove							n	
	Ca	itegory	Person	*				
	Re	al name	Jens Spahn		List Lookup			
	Ps	eudonym	Peter					
					Cancel	Insert		
			aus orb und opposition un	rangeblich mingerwei		Contraction of the local division of the loc	-	
			22 <https: <="" p="" politik="" www.zeit.de=""></https:>				rteilung-verr	ichtung-fac
			> 23 für Menschen mit Behinden	ing und Obdachlasa z	urückaowioso	n "Eo wa		
			²⁴ übrigens eine Idee des Arbe			11. ES We	11	
			25 Sonderkontingent an Obdac					
			26 Masken zu verteilen", sagte	Spahn vor Beratunge				

5.3 Mark multiple occurrences of a word or phrase with a new replacement

File Edit Window Help	Example 101 - QualiAnon	
He Edit Window Help Documents Replacements Exports	Testinterview1_Gruene X	
Category / Originals Labels #	Die Grünen-Politikerin Katja Meier ist gerade erst in der schwarz-grün-roten Landesregierung von Sachsen zur Justizministerin ernannt worden, schon hat sie ihre rebellische Vergangenheit eingeholt. Denn Meier spielte in jungen Jahren Bass bei einer Zwickauer Punkband, den "Harlekins". In einem Lied skandiert der Sänger: "Advent, Advent - ein Bulle brennt." Zur Person Katja Miraul, lahrnann 1979 etammt aus Zwickau. Studium der Politikwi Add marker with new replacement für die G Search for unmarked occurrences Kenia-K Ohange marker to selection Als es in Polizist. Show replacement Sie veru Zustzministerin in der Michael Kreitschmer. ADD-Frai Show all markers for replacement Sie veru Ausschr Im Interview mit dem SPIEGEL erklärt sie, was es mit dem Lied und ihrer Punktore.	
Leg X 341:14 INFD: Loaded categories xml 341:14 INFD: Loaded reglacements file 341:14 INFD: Loaded Testiterview J_Ciruene.docx 341:11 INFD: Loaded Testiterview J_Dollik.docx 343:50 INFD: Marked "Meier" with new replacement 346:37 INFD: Undo marked "Meier" with new replacement		
do marked "Meler" with new replacement		Select Words

- 1. Select a word or phrase in a document.
- 2. Open the context menu with a right mouse button click and select "Search for unmarked occurrences"

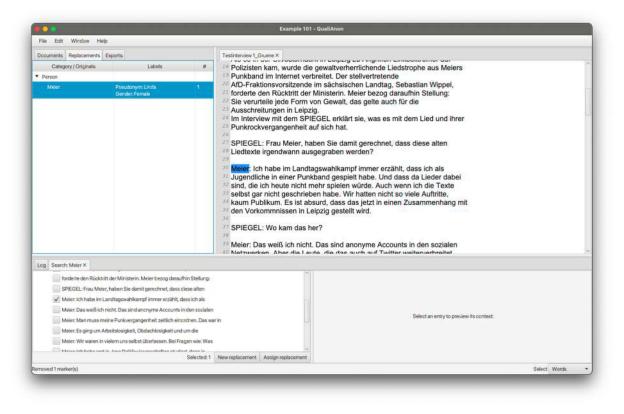
	Example 101 -	- QualiAnon
File Edit Window Help		
Documents Replacements Exports Festinterview 1_Gruene *	Testinterview 1_Gruene ×	ja Meier ist gerade erst in der
Testinterview 2, Politik	schwarz-grün-roten Lande ernannt worden, schon ha Denn Meier spielte in jung den "Harlekins". In einem ein Bulle brennt." Zur Person Katja Meier, Jahrgang 197 Politikwissenschaft, Soziolo für die Grünen im sächsis Spitzenkandidatin. Seit De Kenia-Koalition unter CDU Als es in der Silvesternach Polizisten kam, wurde die Punkband im Internet verb ATD-Fraktionsvorsitzende forderte den Rücktritt der M Sie verurteile jede Form v Ausschreitungen in Leipzi	sreglerung von Sachsen zur Justizministerin t sie ihre rebellische Vergangenheit eingeholt. ten Jahren Bass bei einer Zwickauer Punkband, Lied skandiert der Sänger: "Advent, Advent - logie in Jena, Münster und Estland. Seit 2015 chen Landtag, bei der Wahl 2019 szember 2019 list Meier Justizministerin in der J-Ministerpräsident Michael Kretschmer. ti in Leipzig zu Angriffen Linksextremer auf gewaltverherrichende Liedstrophe aus Meiers preitet. Der stellvertretende Imisaterin Landtag, Sebastian Wippel, Ministerin. Meier bezog daraufhin Stellung: on Gewalt, das gelte auch für die 9. GEL erklärt sie, was es mit dem Lied und ihrer
Log Search: Meier ×		
	kauer Punkband, um der	 Zur Person Katja Meirer, Jahrgang 1979, stammt aus Zwickau. Studium der Politikwissenschaft, Soziologie in Jena, Münster und Estland. Seit 2015 für die Grünen im sächsischen Landtag, bei der Wahl 2019 Spitzenkandidatin. Seit Dezember 2019 ist Meier Justizministerin in der Kenia-Koalition unter CDU-Ministerpräsident Michael Kretschmer. Als es in der Silvesternacht in Leipzig zu Angriffen Linksextremer auf Polizisten kam, wurde die gewaltverherrtichende Liedstrophe aus Meiers Punkband im Internet verbreitet. Der stellvertretende AfD-Fraktionsvorsitzende im sächsischen Landtag. Sebastian Wippel.

- 3. The search tab at the bottom shows all occurrences of the searched word or phrase over all documents in the project on the left side. On the right, you can inspect the context of each occurrence. Review all occurrences and set the checkboxes on the left side to include them for marking.
- 4. Press "New replacement" at the bottom of the search results to mark all checked occurrences and create one new replacement (see section 4.1, step 3)

5.4 Add markers to an existing replacement

If you have already created a replacement for an entity, all markers have to be assigned to this replacement. You should not have multiple replacements for the same entity. Otherwise you will run into trouble when exporting with the "counting" option and the data in the project will probably be inconsistent.

1. If you find another occurrence for an already created replacement, follow steps 1-3 of section 4.2.



- 2. Click on a replacement in the replacements tab to select it as a target for the new occurrences.
- 3. Press "Assign replacement" at the bottom of the search results to set markers related to the selected replacement.

5.5 Change marker to selection

In some cases, the markers you set might not comprise the whole entity. E.g. you mark the last name "Meier", but there is a case where the full name is given in the document.

		Example 101 - QualiAnon	
File Edit Window Help			
File Edit Window Help Documents Replacements E Category/Originals Person Meier	1	Testintaniwe 1.0:uses X Testintaniwe 1.0:uses X Titups://www.apinget.userputitivueuuscritanurkauja-meder-saecutsiscrie-jusuzministeriningangenheit-a-1303581.html Die Grünen-Politikerin Katja Meier ist gerade erst in der schwarz-grün-roten Landesregierung von Sachsen zur Justizministerininernant worden, schon hat sie ihre rebellische Vergangenheit eingeholt. Denn Meier spielte in jungen Jahren Bass bei einer Zwickauer Punkband, den "Hartekins". In einem Lied skandiert der Sänger: "Advent, Advent - ein Bulle brennt.* Zur Person Katta Meier Jahronana 1979. stammt aus Zwickau. Studium der Und Estland. Seit 2015 Wahl 2019 Spitzenkai Search for ummarked occurrences und Estland. Seit 2015 Wahl 2019 Spitzenkai Search for ummarked occurrences nuinksextremer auf Liedströmer. In Linksextremer auf Zurinsterini in der shael Kretschmer. I Liedströme zu seine Sie verunt Sie verunt Show all markers för replacement ju daraufini Stellung: uch für die ag. Sebastian Wippel, g daraufinisterini in ter Punkrockvergangenheit auf sich hat. SPIEGEL: Frau Meier, haben Sie damit gerechnet, dass diese alten Liedster irgendwan ausgearzbare werden?	ei view-ueuer-purikve
		Meier: Ich habe im Landtagswahlkampf immer erzählt, dass ich als Jugendliche in einer Punkband gespielt habe. Und dass da Lieder dabei sind, die ich heute nicht mehr spielen würde. Auch wenn ich die Texte selbst gar nicht geschrieben habe. Wir hatten nicht so viele Auftritte, kaum Publikum. Es ist absurd, dass das jetzt in einen Zusammenhang mit den Vorkommnissen in Leipzig gestellt wird.	
emoved 1 marker(s)			Select Words

To change the extend of a marker:

- 1. Select the correct range of words or characters. A part of the existing marker has to be within the selection for this to work.
- 2. Select "Change marker to selection" from the context menu.

5.6 Reassign markers to another replacement

If you have assigned markers to wrong replacements, or have created multiple replacements for the same entity, you can easily fix it.

			Example 101 - QualiAnon
File Edit Window Help			
Documents Replacements E	ports		Testinterview 1_Gruene ×
Documents Replacements Ei Category / Originals ▼ Person Katja Meier Meier	pperts Labels Pesudonym: Linda Gender: Female Pesudonym: Anne Gender: Divense	1	Quelle: https://www.spiegel.de/politiki/deutschland/katja-meier-saechsische-justizministerin-im-interview-ueber-punkve rgangenheit-a-1303581.html Die Grünen-Politikerin Katja Matori ist derade erst in der schwarz-grün-roten Landesregier annt worden, schon hat sie iht Denn Meier spielte in jungen Jahr den "Harlekins". In einem Lied skein Bulle brennt." Beir Bulle brennt." Search for umarked occurrences id, Change marker to selection Show replacement Zur Person Show all markers for replacement Spitzenkandidatin. Seit Dezember Edit replacement Boltikwissenschaft, Soziologie in für die Grünen im sächsischen La Show all markers for replacement Politikwissenschaft, Soziologie in für die Grünen im sächsischen La Bolt erplacement Beite marker Beite marker Venia-Koalition unter CDU-Ministerprasioent wicinaer kreisschmer. Als es in der Silvesternacht in Leipzig zu Angriffen Linksextremer auf Polizisten kam, wurde die gewallverherrlichende Liedstrophe aus Meiers Punkband im internet verbreitet. Der stellvertretende ADD-Fraktionsvorsitzende im sächsischen Landtag, Sebastian Wippel, forderte den Rücktritt der Ministerin. Meier bezog daraufhin Stellung: Sie verurelie jede Form von Gewalt, das gelte auch für die Ausschreitungen in Leipzig. Im Interview mit dem SPIEGEL erklärt sie, was es mit dem Lied und ihrer Purkrockvergangenheit auf sich hat. SPIEGEL: Frau Mei
			kaum Publikum. Es ist absurd, dass das jetzt in einen Zusammenhang mit
larked "Meier" with new replaceme	mt		Select Words

In this example, there are separate replacements for the same entity in the document (person Meier).

- 1. Select a marker to be reassigned.
- 2. Select "Show all markers for replacement" from the context menu.

5 8 8			Example 101 - QualiAnon			
File Edit Window H	Help					
Documents Replacements	s Exports		stinterview 1_Gruene ×			
Category / Originals	Labels	#	Quelle: https://www.spiegel.de/politik/deutschland/katja-meier-saechsische-justizmin	sterin-im-interview-ueher-nunkve		
Person Katja Meler	Pseudonym: Linda	1	rgangenheit-a-1303581.html			
Meier	Gender: Female Presetyme: Anne Gender: Diverse	1	Die Grünen-Politikerin Katja Meier ist gerade erst in der schwarz-grün-roten Landesregierung von Sachsen zur Justizministerin ernannt worden, schon hat sie ihre rebelilische Vergangenheit eingeholt. Denn Meier spielte in jungen Jahren Bass bei einer Zwickauer Punkband, den "Harlekins". In einem Lied skandiert der Sänger: "Advent, Advent - ein Bulle brennt." Zur Person Katja Meier Jahrgang 1979, stammt aus Zwickau. Studium der Politikwissenschaft, Soziologie in Jena, Münster und Estland. Seit 2015 für die Grünen im sächsischen Landtag, bei der Wahl 2019 Spitzenkandidatin. Seit Dezember 2019 ist Meier Justizministerin in der Kenia-Koalition unter CDU-Ministerpräsident Michael Kretschmer. Als es in der Silvesternacht in Leipzig zu Angriffen Linksextremer auf Polizisten kam, wurde die gewaltverherrlichende Liedstrophe aus Meiers Punkband im Internet verbreitet. Der stellvertretende AD-Fraktionsvorsitzende im sächsischen Landtag, Sebastian Wippel, forderte den Rücktritt der Ministerin. Meier bezog daraufhin Stellung: Sie verurtelie jede Form von Gewalt, das gelte auch für die Ausschreitungen in Leipzig.			
Markers: Meier ×						
Person Pseudonym: Testinterview 1_Gm			 https://www.spiegel.de/politik/deutschland/katj rin-im-interview-ueber-punkvergangenheit-a-1 			
✓ 4: Die Grünen-Po	olifikerin Katja Meler ist gerade erst in de		Die Grünen-Politikerin Katja Meleri schwarz-grün-roten Landesregierung von Sac ernannt worden, schon hat sie ihre rebelitsche Denn Meier spielte in jungen Jahren Bass bei den "Harlekins", In einem Lied skandiert der S ein Bulle brennt."	nsen zur Justizministerin Vergangenheit eingeholt. einer Zwickauer Punkband,		

- 3. A markers tab opens at the bottom. Review and check all markers that you want to reassign to another replacement.
- 4. Click on a replacement in the replacements tab to select it as the target.
- 5. Press "Reassign" at the bottom of the markers tab.

Alternatively, you can right click on a replacement in the replacements tab and select "Show markers" from the context menu. Then resume with step 3.

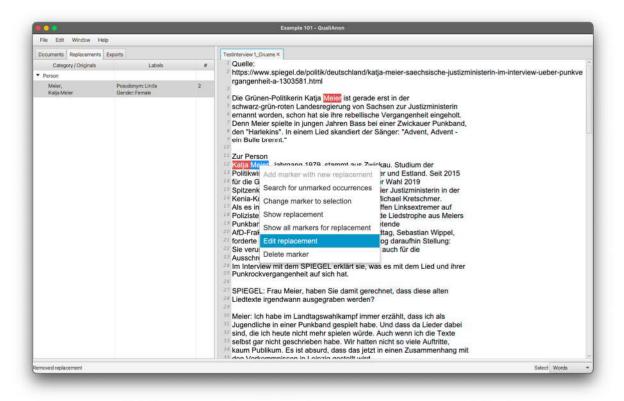
5.7 Find replacement and label information for a marker

File Edit Window Help			
File Edit Window Help Documents Replacements Ex Category / Originals Person Meier Katja Meier	Labels Labels Preudonym Linda Gender: Female	2	Testinterview 1_Gruene X Quelle: https://www.spiegel.de/politik/deutschland/katja-meier-saechsische-justizministerin-im-interview-ueber-punkve rgangenheit-a-1303581.html Die Grünen-Politikerin Katja Meter ist gerade erst in der schwarz-grün-roten Landesregierung von Sachsen zur Justizministerin ernannt worden, schon hat sie ihre rebellische Vergangenheit eingeholt. Denn Meier spielte in jungen Jahren Bass bei einer Zwickauer Punkband, den "Harlekins". In einem Lied skandiert der Sänger. "Advent, Advent - ein Bulie brennt." Zur Person Kenia-K, Change marker vitn new replacement für die Gearch for rumarked occurrences Kenia-K, Change marker to selection Als es if Show replacement Poliziste Show replacement Poliziste Show replacement
		 Punkba Show all markers for replacement ATD-Fra City Control Control	

- 1. Select a marker in a document
- 2. Select "Show replacement" from the context menu

QualiAnon shows the replacements tab with the corresponding replacement selected.

5.8 Edit a replacement



- 1. Select a marker
- 2. Select "Edit replacement" from the context menu

File Edit Window Help			
Documents Replacements decourses Replacements	Exports Eabels	#	Testinterview 1_Gruene × Quelle:
 Person Meier, Katja Meier 	Pseudonym: L Gender: Fern		https://www.spiegel.de/politik/deutschland/katja-meier-saechsische-justizministerin-im-interview-ueber-pun mangenbeit-a-1303581.html update zeplatement
	Updat Category Pseudorym Gerder	e Repla	lacement for "Katja Meier" Person Linda Fernale *
			Ausschre ^{Verder Hanker} Im Interview mit dem SPIEGEL erklärt sie, was es mit dem Lied und ihrer Punkrockvergangenheit auf sich hat. SPIEGEL: Frau Meier, haben Sie damit gerechnet, dass diese alten Liedtexte irgendwann ausgegraben werden? Meier: Ich habe im Landtagswahlkampf immer erzählt, dass ich als Jugendliche in einer Punkband gespielt habe. Und dass da Lieder dabei sind, die ich heute nicht mehr spielen würde. Auch wenn ich die Texte selbst gar nicht geschrieben habe. Wir hatten nicht so viele Auffritte, kaum Publikum. Es ist absund, dass das jetzt in einen Zusammenhang mit

3. Edit the labels and category of the replacement in the dialog

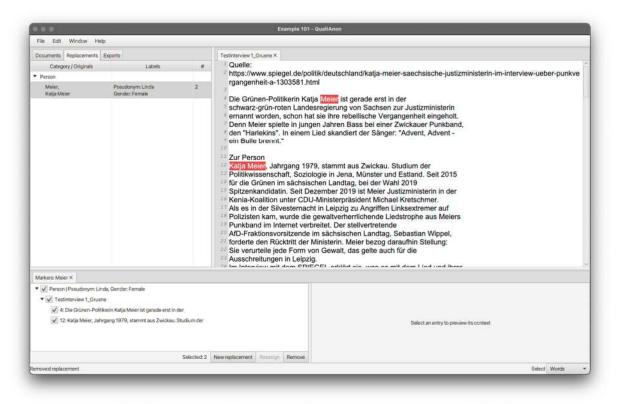
Alternatively, you can right click on a replacement in the replacements tab and select "Edit" from the context menu. Then resume with step 3.

5.9 Remove a marker

File Etric Window Help Documents Exponts Image: Category / Originals Labels Image: Category / Originals Image: Ca	nterview-ueber-punkve
Category / Originals Labels # Y Person Preudonym: Linda 2 Meinr, Katja Meier Preudonym: Linda 2 Ouelle: https://www.spiegel.de/politik/deutschland/katja-meier-saechsische-justizministerin-im-inrigangenheit-a-1303581.html Die Grünen-Politikerin Katja Meier Die Grünen-Politikerin Katja Meier Die Grünen-Politikerin Katja Meier Die Grünen-Politikerin Katja Meier Die Grünen-Politikerin Katja Meier Schwarz-grün-roten Landesregierung von Sachsen zur Justizministerin ermantt worden, schon hat sie ihre rebellische Vergangenheit eingeholt. Denn Meier spielte in jungen Jahren Bass bei einer Zwickauer Punkband, den "Harlekins". In einem Lied skandiert der Sänger. "Advent - ein Bulle brennt." Zur Person Zur Person Seach for unmarked occurrences Fürd ide C Spitzen Seach for unmarked occurrences wahl 2019 Se Kenia-K Change marker to selection Michael Kretschmer.	nterview-ueber-punkve
Person Meier Preson Meier Preson Meier Preson Conduct / Pres	nterview-ueber-punkve
Meier Peeudonyme Unda 2 Gerder-Female Die Grünen-Politikerin Katja Meier ist gerade erst in der Die Grünen-Politikerin Katja Meier ist gerade erst in der schwarz-grün-roten Landesregierung von Sachsen zur Justizministerin ernannt worden, schon hat ise ihre rebellische Vergangenheit eingeholt. Den Meier spielte in jungen Jahren Bass bei einer Zwickauer Punkband, den "Harlekins". In einem Lied skandiert der Sänger: "Advent, Advent - ein Bulle brennt." Zur Person Keila Meier Spitzen Sech for unmarked occurrences Kenia-K. Change marker to selection	
Als es in Poliziste Show replacement Punkkai Alto-Fra Alto-Fra Meier Edit replacement Sie ven, Delete marker Aussch, Delete marker Sie ven, Delete marker Sie ven, Sie v	
emoved replacement	Select Words

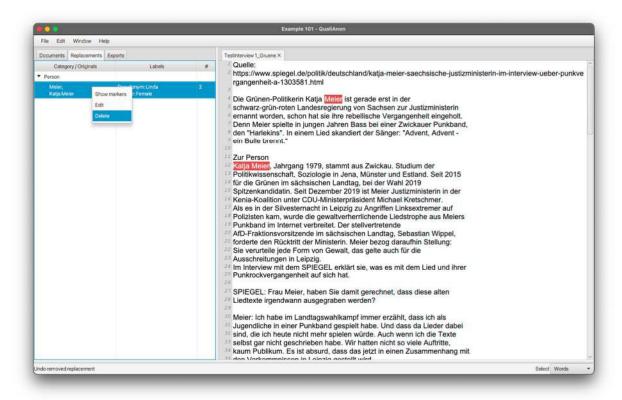
- 1. Select a marker
- 2. Select "Delete marker" from the context menu

5.10 Remove multiple markers



- 1. Use the "Show all markers for replacement" function, as explained in section 4.5.
- 2. In the bottom marker tab, review and check all the markers you want to remove
- 3. Press "Remove" at the bottom of the marker tab

5.11 Remove replacement with all related markers



- 1. Select a replacement from the replacements tab
- 2. Select "Delete" from the context menu

6 Find text

QualiAnon can search through all your documents within a project. Select from the menu: Edit -> Find

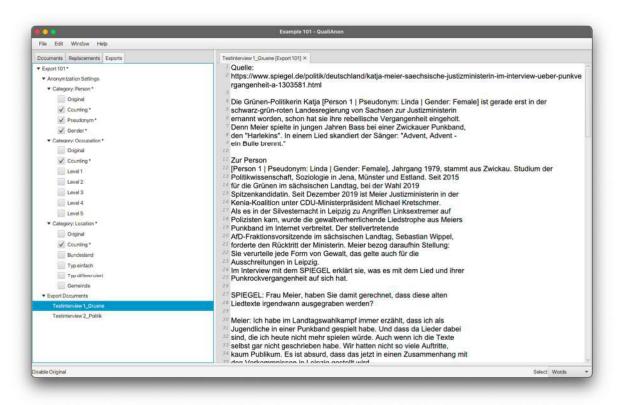
ocuments Replacements C	ategories Exports	Spahn und die Masken ×		
ahn und die Masken	• • •	Find		
	Find Search for text Filters	Unmarked Match case Whole words Active document		n
og × 5826 INFO: Loaded categorie 58277 INFO: Loaded Spahn un			Cancel Find	

- Search for text: the text you are looking for
- **Unmarked**: limit results to text that has no markers
- Match case: limit results to text with exactly the same capitalisation as in your search text
- Whole words: limit results to occurrences of whole words and omit occurrences that are only part of a word
- Active document: only search the active document and not all documents in the project

7 Creating and configuring exports

When QualiAnon exports the documents of a project, it replaces each marked word or phrase with the information given in the related replacement. Since the labels in their entirety may contain too much information, you can configure which labels to include in an export.

- 1. Create a new export from the menu: File -> New Export ...
- 2. Choose a name for the export



- 3. For each category, you can configure, whether
 - a. to display the original without any anonymization,
 - b. to use counting to automatically enumerate the anonymized entities, and
 - c. which labels to display.
- 4. Double click the entries under the "Export Documents" section to preview the export of the documents of the project.
- 5. When you are finished, open the context menu on the export item and select "Save settings & documents"

8 **Project directory and files**

The project folder is organized into different directories and files.

8.1 Directory layout

🖲 🔵 🧹 💫 Example 101	≣≎ ‱	• • •	⊙
Name	∧ Änderungsdatum	Größe	Art
anonymized	Gestern um 23:05		Ordner
Testinterview 1_Gruene.docx	Gestern um 23:04	6 KB	Word-Dokument
Testinterview 2_Politik.docx	Gestern um 23:05	8 KB	Word-Dokument
🖌 🚞 categories	Gestern um 22:45		Ordner
📄 categories.xml	Gestern um 22:45	1 KB	XML-Dokument
CL_ISCO08_20210210_160931.xml	Gestern um 16:09	169 KB	XML-Dokument
download-ref-sgtyp.xlsx	Gestern um 22:44	1,2 MB	3rd party formats
exports	Heute um 22:41		Ordner
v 💼 Export 101	Heute um 17:10		Ordner
profile.xml	Heute um 17:10	1 KB	XML-Dokument
Testinterview 1_Gruene [export].docx	Heute um 17:10	6 KB	Word-Dokument
Testinterview 2_Politik [export].docx	Heute um 17:10	8 KB	Word-Dokument
🗸 🚞 identification	Gestern um 23:05		Ordner
replacements.xisx	Gestern um 23:05	3 KB	3rd party formats
Testinterview 1_Gruene_markers.xlsx	Gestern um 23:04	3 KB	3rd party formats
Testinterview 2_Politik_markers.xlsx	Gestern um 23:05	3 KB	3rd party formats
ڬ 🚞 trash	Gestern um 23:02		Ordner

- anonymized: this folder contains the documents of the project with all marked text removed. Each marked word or phrase is replaced by an identified, e.g. [M:76ec5e26-a314-40ad-9a0e-566e4273b613:].
- **identification**: this folder contains the missing information from the documents in "anonymized". For each document, an xlsx table is saved which lists all marker identifier together with the original value and another identifier, which references the replacement. The file replacements.xlsx contains all these replacements with all the label values entered during anonymization.
- **categories**: this folder contains the category schema (categories.xml) and the imported list files.
- **exports**: for each export there is a subfolder containing the export settings (profile.xml) and the exported documents.
- trash: this folder stores deleted documents and exports.

8.2 Get the exported documents

After exporting (see section 5), the exported documents are stored in the export folder. Open the docx files to verify that they are correctly anonymized.

8.3 Reuse categories for another project

You might want to use the same category configuration for multiple projects. Copy the categories folder with its content from one project to another. Reopen the project in QualiAnon, so that the configuration is loaded.

8.4 Archive a project securely

To increase security, you can store your project separated at different locations. You need two independent storage locations.

- 1. Move the identification directory to location a)
- 2. Delete the trash folder
- 3. Delete the exported documents, but not the profile.xml files in the same directories
- 4. Move the folders anonymized, categories, and exports to location b)

8.5 Remove the originals, but keep the labels

You can open the xlsx files in the identification folder to remove sensitive information altogether. E.g. you might want to remove the originals from the [...]_markers.xlsx files. First, make a backup of the files you want to edit. Open the file, remove the data and save. Then, reopen the project in QualiAnon. QualiAnon can still work with labels, but can no longer display the originals.

9 Bug reports and feature requests

Join the QualiAnon github project to report bugs and request new features. Currently, the repository is not openly accessible. Contact us at <u>https://www.qualiservice.org/en/contact.html</u> to gain access.

https://github.com/pangaea-data-publisher/qualianon/issues

About Qualiservice.

The research data center Qualiservice archives qualitative social science research data from various disciplines and makes them available for scholarly reuse. Our services are secure, flexible, and research-oriented. They include personal and study-specific consulting, curation and preparation of your data for reuse and long-term archiving as well as the provision of archived research data and relevant contextual information. Internationally connectable metadata make datasets searchable and findable. Persistent identifiers (DOI) ensure sustainable citability of data and study contexts.

In June 2019, Qualiservice was accredited by the RatSWD and follows its criteria for quality assurance. Qualiservice is committed to the DFG guidelines for ensuring good scientific practice and also takes into account the FAIR Guiding Principles for Scientific Data Management and Stewardship and the OECD Principles and Guidelines for Access to Research Data from Public Funding.

Das Qualiservice-Konsortium:



PANGAEA – zertifiziertes Weltdatenzentrum



SOCIUM – Forschungszentrum Ungleichheit und Sozialpolitik



Staats- und Universitätsbibliothek Bremen

gesis



GESIS – Leibniz Institut für Sozialwissenschaften



Fachinformationsdienst Sozial- und Kulturanthropologie (FID SKA)





Gefördert von



Bundesministerium für Bildung und Forschung