QuickStatements

Introduction: QuickStatements (QS) is a tool, written by Magnus Manske, that can edit Wikidata items based on a simple set of text commands. The tool can add and remove statements, labels, descriptions and aliases; as well as add statements with optional qualifiers and sources. The command sequence can be typed in the import window or created in a spreadsheet or text editor and pasted in. It can also be created by external code like Lua, called from a template and passed as a URL. Data edited in OpenRefine can also be exported to the QuickStatements format.

The tools: The QuickStatements tool has gone through several iterations and rewrites. You should always use the current version of this tool whenever possible. There are several QuickStatements versions available:

- **QuickStatements version 2** (**V2**) **rewrite** or **new interface** (current version)
- **Release history**
    - QuickStatements version 2 (V2) *original* or *old interface*
    - QuickStatements version 1 (V1) (no longer works)

Syntax between versions can vary slightly. The rest of the document will describe the syntax of the current version, but will mark parts which were not supported in the earlier versions.

Command sequence syntax:

This section describes syntax used since V1 version of the tool, sometimes referred to as **V1 commands**[1].

Add simple statement

You can specify the statements to add by typing/pasting into the tool's text area. Different parts of the statement are separated by a TAB or "|"[2] characters. Each command is in a new line, or separated by "||"[2] characters. Hint: You can also use a spreadsheet software such as Microsoft Excel or LibreOffice Calc; copying/pasting the cells should automatically insert TABs. Also text editors like Notepad++ allow replacement of any symbol by the TAB character (\t).

Each statement *MUST* consist of an entity, a property, and a value. An entity can be an item, a property, a lexeme[2], a form[2], or a sense[2]. A value can be another entity, a string, a time, a location, or a quantity, depending on the property type, or one of the special values `somevalue` or `novalue` (see Unknown or no values).

Formatting of each part:

- Items on Wikidata are always in the form Qxx. On Commons they are always in the form Mxx. In QuickStatements version 1 one could use an article name instead of the q-code, if one filled in a xxwiki value in the input box above the text area; the correct item number (if available) was retrieved automatically.
  Example: Q4115189 TAB P31 TAB Q1
  Meaning: add to **Wikidata Sandbox (Q4115189)**instance of (P31)Universe (Q1)
- Properties in the form Pxx.
- Lexemes in the form Lxxx.
- Forms in the form Lxxx-Fyy.
- Senses in the form Lxxx-Syy.
- Strings (including URLs, and numerical values of text fields, for example external-ID property values) *MUST* be in "double quotes". Many statements take values in *string* format, including external identifiers (like VIAF cluster ID (P214)), filenames (like image (P18)) or other page names (like Commons category (P373)).
  Example: Q41576278 TAB P373 TAB "Antoni Ignacy Mietelski"
  Meaning: add to **Antoni Ignacy Mietelski (Q41576278)**Commons category (P373)Antoni Ignacy Mietelski
  Caution: Some characters in the string seem to confuse the tool. Those include: "_" (underscore), " (double quote), " " (spaces), "=", and possibly more. Adding URLs with those characters, like this one or this might fail. Strings and URLs with those characters might work when interacting with the tool through the interface but fail when interacting through URL.
- Monolingual text prefix text in "double quotes" with the language and a colon, e.g. `en:"Some text"`
  Example: Q1214098 TAB P1476 TAB pl:"Krzyżacy"
  Meaning: add to **The Knights of the Cross (Q1214098)**title (P1476)"Krzyżacy" (Polish)
- Time values *MUST* be in format eg `+1967-01-17T00:00:00Z/11`, where `/11` designates the precision. The precision is: 0 - billion years, 1 - hundred million years, ..., 6 - millennium, 7 - century, 8 - decade, **9 - year** (default), 10 - month, 11 - day, ~~12 - hour, 13 - minute, 14 - second~~.
  Example: Q41576483 TAB P569 TAB +1839-00-00T00:00:00Z/9
  Meaning: add to **Bronisław Podbielski (Q41576483)**date of birth (P569)+1839
  Use "+" for CE dates and "-" for BCE dates; and use at least 4 digits.
  Set an additional "/J" if you want to set the date in Julian Calendar (see this list to understand where this should be done).
  If submitting to the API, use "%09" instead of the TAB symbol, "%2B" instead of the "+" symbol, "%3A" instead of the ":" symbol, and "%2F" instead of the "/" symbol.

- Location coordinates in the form of `@LAT/LON`, with LAT and LON as decimal numbers.
  Example: Q3669835 TAB P625 TAB @43.26193/10.92708
  Meaning: add location to San Dalmazio (Q3669835)
- Quantity in the form of `amount~toleranceUxx`[2], with amount and tolerance being a rational numbers and Uxx being the item number of a `unit` (Qxx). Unit and tolerance values are optional. Don't leave any spaces in the quantity definition.
  QuickStatements version 1 used different syntax for Quantity: `amount[lower,upper]Uxx`, with amount, lower and upper being a rational numbers.
  `lower`, `upper` are optional and *MUST* be either both present or both absent. When present, they should be enclosed in square brackets and separated by `,`
  `amount`, `lower` and `upper` *MUST* use `.` as decimal separator, *MUST NOT* use any thousands separator and *MAY* be prefixed by "+" or "-".
  `10`, `10U11573`, `-10[-12.5,-7.5]`, `0[-5,5]U11573` are all valid quantities (where U11573 indicates metre (Q11573))
  Quantities with tolerance *MAY* be entered as `1.2~0.3` in QuickStatements version 2, which is the same as `1.2[0.9,1.5]` in QuickStatements version 1 and means 1.2±0.3. [3]
- `somevalue` for *unknown value* Help
- `novalue` for *no value* Help. Both `novalue` and `somevalue` should be used without double quotes around it. Both of those statements do work as part of item creation statements using CREATE and LAST keywords.

Add statement with qualifiers

Each statement "triplet" can be followed by an unlimited number of "qualifiers pairs" of property TAB value.

> Example: Q41577083 TAB P570 TAB +1600-00-00T00:00:00Z/7 TAB P1319 TAB +1586-00-00T00:00:00Z/9
>
> Meaning: add to **Gian Federigo Bonzagna (Q41577083)**date of death (P570)16. centuryearliest date (P1319)+1586

Add statement with sources

Each statement can be followed by an unlimited number of "source pairs" to add references of source property TAB value. The source property is identical to the "normal" property, except it uses the form Sxx instead of Pxx.

> Example: Q22124656 TAB P21 TAB Q6581097 TAB S143 TAB Q24731821 TAB S813 TAB +2017-10-04T00:00:00Z/11

Meaning: add to **Gotō Ichijō (Q22124656)**sex or gender (P21)male (Q6581097) with reference imported from Wikimedia project (P143)Commons Creator page (Q24731821)retrieved (P813)4 October 2017

By default, all sources will go into the same "reference group" (a block of property/value pairs). If you want to create more than one reference group in a single command row, simply prefix the first source property of the new group with an exclamation mark: "!Sxx" instead of "Sxx". (In the first reference group, the "!" is optional and will not influence the outcome.)

Notes:

- Existing statements with an exact match (property and value) will not be added again; however additional references might be added to the statement.
- You can mix qualifiers and references in the same statement. Just use Sxx instead of Pxx when using sources.
- In QuickStatements version 1 each source claim represented an individual reference, i.e. they were not grouped within one reference; it works properly now in QuickStatements version 2.

Adding labels, aliases, descriptions and sitelinks

As with adding simple text statements, each command must consist of an item, a command, and a string in double quotes.

- To add a **label** in a specific language to an item, use "Lxx" instead of a property, with "xx" as the language code.
  Example: Q340122 TAB Lpl TAB "Cyprian Kamil Norwid"
  Meaning: add Polish label "Cyprian Kamil Norwid" to Cyprian Norwid (Q340122)
- To add an **alias** in a specific language to an item, use "Axx" instead of a property, with "xx" as the language code.
  Example: Q340122 TAB Aen TAB "Cyprjan Kamil Norwid"
  Meaning: add English alias "Cyprjan Kamil Norwid" to Cyprian Norwid (Q340122)
  Tip: Multiple aliases can be added at the same time by separating them with the pipe character ("|"). Warning: This does not work when creating a new item (magnusmanske/quickstatements_rs#3)
  Example: Q340122 TAB Aen TAB "Cyprian Kamil Norwid|Cypryan Kamil Norvid"
- To add a **description** in a specific language to an item, use "Dxx" instead of a property, with "xx" as the language code.
  Example: Q340122 TAB Dde TAB "polnischer Dichter"
  Meaning: add German description "polnischer Dichter" to Cyprian Norwid (Q340122)

- To add a **sitelink** to a specific page on a site to an item, use "Sxxx" instead of a property, with "xxx" as the site (e.g. enwiki, commonswiki).
  Example: Q340122 TAB Szhwiki TAB "塞浦路斯·諾爾維特"
  Meaning: add sitelink to Chinese Wikipedia (塞浦路斯·諾爾維特) to Cyprian Norwid (Q340122)

If you want to remove a label/alias/description/sitelink, the value has to be an empty string and the rest of the command will be the same.

Item creation

You can create new items by inserting a line consisting only of the word "CREATE". To add statements to the newly created item, use the word "LAST" instead of the Q number, and the statement will be added to the last created item.

An example for creating a new item, adding a sitelink, and setting a label:

> **CREATE**
>
> **LAST TAB Sfrwiki TAB "Le croissant magnifique !"**
>
> **LAST TAB Lfr TAB "Le croissant magnifique !"**
>
> **Meaning: create a new item with a link to French Wikipedia w:fr:Le croissant magnifique! and with French label "Le croissant magnifique!"**

Properties may be created in the same way with "CREATE_PROPERTY" followed by a TAB or | and the entity type, e.g. one of: `commonsMedia`, `globe-coordinate`, `wikibase-item`, `wikibase-property`, `string`, `monolingualtext`, `external-id`, `quantity`, `time`, `url`, `math`, `geo-shape`, `musical-notation`, `tabular-data`, `wikibase-lexeme`, `wikibase-form`, `wikibase-sense`. This is mostly of use on third-party Wikibase instances, as property creation is restricted on Wikidata.

Item merging

You can merge two items. The newer item will be merged and (if successful) redirected into the older item.

MERGE TAB Q1 TAB Q2

Removing statements

You can remove specific statements by prefixing a line with "-"[2].

> **Example: -Q4115189 TAB P31 TAB Q1**

Meaning: remove from Wikidata Sandbox (Q4115189)instance of (P31)Universe (Q1)

Dates with precision>9 can be removed via their specific date:

```
-Q98426308      P585 +1988-05-11T00:00:00Z/11
```

Dates with precision≤9 may use either 00-00 or 01-01 as their month-date value, so it may be necessary to attempt to remove both:

```
-Q98426308      P585 +1988-01-01T00:00:00Z/9
-Q98426308      P585 +1988-00-00T00:00:00Z/9
```

In addition you may remove statements with a specific statement ID using the following syntax:

-STATEMENT TAB Q1$00000000-0000-0000-0000-000000000000

The statement ID can be received by:

- The source code of any entity page, where the ID may be found in the `<div>` elements with "wikibase-statementview" class
- API
- name of statement node in RDF which may be queried by query service (you need to replace the - after entity ID with $)

Comments

Every command can have a comment at its end, which will be inserted into the edit summary for the command[2]. Use the `/* ... */` syntax. ~~Before this a TAB *MAY* be inserted.~~ Spaces around the comment will be removed before processing. The tool splits adding of a claim and its reference in two edits. When using the "version 1 format" import it seems not to be possible to add a comment for the edit adding the reference. The comment is added to the edit adding the claim (if the claim does not exist yet and is added at all).

Example: Q4115189 TAB P31 TAB Q1 /* This is a comment. */

Meaning: add to Wikidata Sandbox (Q4115189)instance of (P31)Universe (Q1), with "This is a comment." in the edit summary.

CSV file syntax

Commands

In QuickStatements version 2, one can also cut and paste a properly structured CSV file as an alternative to the syntax introduced in QuickStatements version

1. The file will specify commands (columns) to execute and their data (rows). The first line is a header row describing how the data in each column is to be interpreted.

For example, a column called P31 could contain the value Q5 to create a statement with property P31 and value Q5.

For some reason, *string values* need to be put in """triple double quotations""".

qid

> **Always the first column of commands: the values in the column should contain the id of the item or entity to edit. If the cell is left empty, a new item will be created. See the item creation sample below.**

The other columns may specify the following commands:

P1234

> **A property ID (uppercase) begins a new statement. The column value specifies the main value of the statement, in the same format as in QuickStatements version 1.**

qal1234

> **A lowercase "qal" followed by a property number (without "P") adds a qualifier to the current statement. The column value specifies the value of the qualifier, in QuickStatements version 1 syntax. There must be some "P" column before a "qal" column to specify which statement the qualifier is added to.**

S1234

> **An uppercase "S" followed by a property number (without "P") begins a new source for the current statement. The column value specifies the value of the source, in QuickStatements version 1 syntax. There must be some "P" column before an "S" column to specify which statement the source is added to.**

s1234

> **A lowercase "s" followed by a property number (without "P") adds another property-value pair to the current source. The column value specifies the value of the source, in QuickStatements version 1 syntax. There must be some "S" column before an "s" column to specify which source the property-value pair is added to.**

Len

An uppercase "L" followed by a language code sets the label in that language.

Dfr

An uppercase "D" followed by a language code sets the description in that language.

Ade

An uppercase "A" followed by a language code adds an alias in that language.

Senwiki

An uppercase "S" followed by a site ID adds a sitelink to that site.

#

A number sign character sets the edit summary (comment) of the preceding command. The tool splits adding of a claim and its reference in two edits. A comment can be added to the edit summary of each of them. For the claim by putting a "#" column between the columns for the claim and its reference, for the reference by putting a "#" column behind its columns. For example:

```
qid,P21,#,S143,s813,#
Q22124656,Q6581097,comment to claim adding
edit,Q24731821,+2017-10-04T00:00:00Z/11,comment to reference
adding edit
```

Item creation

To create a new item, the first element of the row needs to be empty, so the line starts with a `,`.

For example

```
qid,Len,Den,P31
,Regina Phalange,fictional character,Q95074
```

For example

creates a new item. Suitable for LibreOffice (paste in cell A1)

filename	label	description	qid,P31,Len,Den,P18

`Mona Lisa - the Louvre.jpg`	Mona Lisa	oil painting by Leonardo da Vinci in the Louvre, Paris	`=",Q3305213,"""&B2&""","""&C2&""","""""""&A2&"""""""""`
`Mona Lisa - the Louvre.jpg`	Mona Lisa	oil painting by Leonardo da Vinci in the Louvre, Paris	`,Q3305213,"Mona Lisa","oil painting by Leonardo da Vinci in the Louvre, Paris","""Mona Lisa - the Louvre.jpg"""`

Statement removal commands

Statement column headers may also begin with "-" to remove the statement. (Note that this is only valid in the header for the whole column, not in individual values.) Removing other column types is not yet supported and will result in an error when the command is run; however, sitelinks and labels can be removed by setting them to the empty string (without "-" in the column header).

`qid,P31,-P31`
`Q4115189,Q5,Q5`

Adds to the sandbox item a P31 value of human (Q5) and then removes that same statement again.

Commas and double quotes

Labels, descriptions, aliases and sitelinks do not need to be in double quotes unless they themselves contain commas (,) or double quotes (").

In this case, replace all double quotes with two double quotes (e.g. Toys "R" Us → Toys ""R"" Us) and then wrap the string in a pair of double quotes (e.g. "Toys ""R"" Us").

Samples: Toys "R" Us and Patterns, Predictors, and Outcome

```
qid,Len
Q4115189,"Toys ""R"" Us"
Q4115189,"Patterns, Predictors, and Outcome"
```

To add a string value containing double quotes ("), replace all double quotes with two double quotes ("").

As any string value, then wrap it in three double quotes ("""), e.g. """Toys ""R"" Us""".

Samples for Q4115189#P370, notably `Toys "R" Us`

```
qid,P370
Q4115189,"""Toys ""R"" Us"""
Q4115189,"""Patterns, Predictors, and Outcome"""
Q4115189,"""Wikidata sandbox item 1"""
```

Combined sample

```
qid,Len,Den,Aen,P31,-P31,P21,P735,qal1545,S248,s214,S143,Senwiki
Q4115189,Douglas Adams,author,Douglas Noël Adams,Q5,Q36180,Q6581097,Q463035,"""1""",Q54919,"""113230702""",Q328,Douglas Adams
Q4115189,"Toys ""R"" Us",testin sample,Toys R Us,Q5,Q36180,Q6581097,Q463035,"""1""",Q54919,"""113230702""",Q328,"Toys ""R"" Us"
```

Samples by value type

Samples use the sandbox item (Q4115189) and can be pasted directly into QuickStatements for testing. Should be risk-free.

Label

qid,Len
Q4115189,Sandbox
Q4115189,"Patterns, Predictors, and Outcome"
Q4115189,"Toys ""R"" Us"

Description

qid,Den
Q4115189,Wikidata item for tests
Q4115189,"sample for Patterns, Predictors, and Outcome"
Q4115189,"description sample for Toys ""R"" Us"

Alias

qid,Aen
Q4115189,Wikidata sandbox
Q4115189,"Predictors, Patterns, and Outcome"
Q4115189,"Toys ""4"" You"

Item

qid,P369

`Q4115189,Q5`
`Q4115189,somevalue`
`Q4115189,novalue`
`L123,Q5`
`L123-S1,Q5`
`L123-F1,Q5`

`somevalue` is for *unknown value* Help, `novalue` for *no value* Help. At the moment, `somevalue` and `novalue` don't work when creating new items! F1 and S1 on Lexeme:L123 would have to exist for it to work.

String or external identifiers (external-id)

`qid,P370`
`Q4115189,"""Sandbox"""`
`Q4115189,"""Patterns, Predictors, and Outcome"""`
`Q4115189,"""Toys ""R"" Us"""`

Monolingual text

`qid,P1450`
`Q4115189,en:"Sandbox"`
`Q4115189,en:"Toys "R" Us"`

`Q4115189,"en:""Toys ""R"" Us"""`
`Q4115189,"en:""Patterns, Predictors, and Outcome"""`

`en` is for English

Date/time

`qid,P577`
`Q4115189,+1856-01-01T00:00:00Z/9`
`Q4115189,+1856-01-01T00:00:00Z/10`
`Q4115189,+1856-01-01T00:00:00Z/11`

Precisions are 9=year, 10=month, 11=day, so the dates are 1856, January 1856 and 1 January 1856.

Image/Commons media file

`qid,P18`
`Q4115189,"""Frans Breydel - A merry company.jpg"""`
`Q4115189,"""'Girl Reading' by Mary Colman Wheeler, El Paso Museum of Art.JPG"""`
`Q4115189,"""Kaubalaeva ""E. Russ"" vrakk.jpg"""`
`Q4115189,""""'L'empereur Napoleon III'' de Franz-Xaver Winterhalter.jpg"""`

Images are:

- File:Frans Breydel - A merry company.jpg
- File:'Girl Reading' by Mary Colman Wheeler, El Paso Museum of Art.JPG (includes a single quote and a comma)
- File:Kaubalaeva "E. Russ" vrakk.jpg (includes double quotes)
- File:"L'empereur Napoleon III" de Franz-Xaver Winterhalter.jpg

URL

qid,P856
Q4115189,"""https://example.com/"""
Q4115189,"""https://example.com/equalsign=test"""
Q4115189,"""https://example.com/underscore_test"""

Coordinates

qid,P625
Q4115189,@43.26193/10.92708

Quantity

qid,P1114
Q4115189,10
Q4115189,+20
Q4115189,+3.1415926
Q4115189,-40

`Q4115189,5.5U11574`
`Q4115189,+60U11573`
`Q4115189,+7.5U11574`
`Q4115189,-80~1.5`
`Q4115189,2.2~0.3`
`Q4115189,+1.2~0.3`

`U11573` is for metre (Q11573), `U11574` for second (Q11574). Note the odd result of `1.2~0.3`.

Full example

Full examples can be found at Help:QuickStatements/examples.

Running QuickStatements

Using QuickStatements version 2

QuickStatements V2 intro screen

Here is how to use QuickStatements (version 2) in basic mode:

1. Go to https://quickstatements.toolforge.org
2. Make sure you are logged into OAuth and your name is visible in the upper-right corner. If not, then log in.
3. Click "New batch".
4. For working with Wikimedia Commons Structured Data:

    1. **Look for the pull-down menu *Create new command batch for ...* and change project from *Wikidata* to *Commons [Batch mode only!]***
    2. **You need "M" ids to work on instead of "Q" numbers. Look up the media identifiers for Commons files with the Minefield tool**
    3. **Use statements in the form of "MXXXX|PXX|QXXX" or use the CSV format option**
    4. **Initiate the query with the "Run" or "Run in the background" button to run it in the *batch mode***
5. **Cut and paste your commands. See the syntax in the section above.**
6. **When you are done, click "Import V1 commands" or "Import CSV commands".**
7. **The tool will convert your commands into human-readable form. Inspect them and click "Run" or "Run in the background" to execute**
8. **As your commands are being processed, double-check the results, and press "STOP" if you detect a problem.**
9. **The user interface will tell you when all commands have been processed.**