Presentation summary

Robert Bremer and Robin Six gave an overview of Connexion Macros. Robert explained the OCLC Macro language along with the different statements that users can make such as conditional statements. He also talked about several example macros that appear in the OCLC Macrobook. Robin then walked through the creation of a custom macro and highlighted documentation for learning how to make your own macros.

URLs mentioned during the presentation:

Cataloging software downloads:
https://help.oclc.org/Librarian_Toolbox/Software_downloads/Cataloging_software_downloads
Connexion client macros: oc.lc/macros
GLA Technical Service Workshop: https://vimeo.com/440363659
Macros for the Connexion Client (by Joel Hahn): http://www.hahnlibrary.net/libraries/oml/connex.html
OCLC Connexion Client Guides Basics: Use Macros:
https://help.oclc.org/@api/deki/files/5158/connexion-client-macros.pdf?revision=2
OCLC Macro Language for the Complete Beginner (by Joel Hahn):
http://www.hahnlibrary.net/libraries/oml/lessons/index.html
WaltsMacros: https://github.com/wnickeson/WaltsMacros
Writing OCLC Connexion Client Macros the Simple Way (by Merry Morris):
http://computerwhizzard.50megs.com

Member questions (2020-09-08)

What is the character you use for a subfield delimiter in Connexion Macros?

Answer: The symbol can be generated by keying in: Alt+225. The symbol would be the Unicode symbol: ß, which would look like the Greek beta or the German Eszett. From there you can copy and paste it in the rest of the macro as needed.

It looks like I can create a macro to strip field 020, subfield $z and fast headings from my batches, which currently I strip manually?

Answer: Yes, the macro language will allow you to do both of these tasks with a macro. One way that makes creating macros easier is to use existing macros and tweak them to fit your needs.

Can you tell us about the AddAuthority6xx macro? What it does and what it is useful for?

Answer: The macro provides menu choices to add a 6xx note field to an authority record. A lot of the notes used in authority records in fields 6xx have certain prescribed wording. As the wording for these notes could be rather complex, the macro was created to allow catalogers to choose the note that they needed without having to remember the required wording. It's similar to other macros that provide choices on which option to input in the record, however, like other macros in the OCLCMacrobook, this macro is older and may need updating.

When using text strings to add certain fields, why do the diacritics show up on the character following the one I put it on. For example, in the word Español, the tilde is showing up over the "o" and not the "n".

Answer: When using text strings to add certain fields, you will need to use the Unicode syntax for the diacritic to make it appear properly in the record.

When we use macros that display dialog boxes where a user must make choices, we often get into a situation where Connexion hangs and the system displays and populates the dialog boxes EXTREMELY slowly which kind of defeats the purpose of using macros. I have reported the problem to OCLC and seen it discussed on OCLC-CAT, but other than restarting Connexion I am unaware of any other solution. Is there any other fix available for this problem?

Answer: We are unaware of any other work around for this. We know that there is a memory leak of some kind when using the macro language; for example, if you use the same macro over and over in the same session, but the only current workaround is restarting Connexion.

Can I use OML (OCLC Macro Language) to insert today's date in a text string? I'm specifically wondering if I could use it to insert "OCLC, [today's date]" in a 670 when I'm recording usage and headings as found in OCLC for NACO work or is that already in AddAuthority6xx?

Answer: Yes, that feature is already available in the AddAuthority6xx. It will also insert the current date when citing a database.

It seems like the current text of "other unmediated carrier" in the run33x macro for an unmediated carrier type 338 does not validate. Are there plans to update the drop-down text to "other" which does validate?

Answer: We will look into fixing this.

Is there any place people are pooling their own macros? I know about the Walt and Nick links, but how can we share our one-offs?

Answer: OCLC-CAT and Get Hub are great for sharing Macros.

Can you take OCLC WorldShare questions?

Answer: If we cannot answer, we can direct you to the correct source for help.

Is there a way to resize the macro screen list to show all the macros you have available?

Answer: No. While you do have a slider bar, you cannot resize the window.

When printing labels (regular printing, i.e. no macros), the diacritics come out in the wrong place. How do I fix that before printing? We delete the diacritics before printing the labels, then write them in on the printed labels.

Answer: This might be a good topic to put to OCLC-CAT for help.

We delete the diacritics before printing the labels, but this is certainly manual, time-consuming labor. An alternative is removing the diacritics in the record before printing. Maybe a macro could remove the diacritics before printing?

Answer: Yes, a macro could be written to delete all diacritics from the bibliographic record before printing the labels, although you would want to do this as your last step.

Is there a way to bind macros to a keystroke command, so that you don't have to go into the macro list to run them?

Answer: Yes, you can assign using Keymaps or UserTools from the Tool Menu. Information on setting up Keymaps and UserTools can be found in the [OCLC ConnexionClient Guides Basics: Set Options and Customize](#)

I sometimes have problems copying macros from a shared network drive to someone's personal drive (or PC). I get error messages about the syntax of the name or macrobook or that the macro already exists, etc. It's particularly difficult when I try to copy a macro into an existing macrobook. Is there any online documentation for this?

Answer: No, there isn't any official online documentation that we are aware of. However, within Metadata Quality, we share macros by either sharing the whole macrobook or copying and pasting the macro text into a plain text file and sharing the text file. Some macros though may be too big to copy all of the text. If you have a macro that is too big to save the text in a text file, Walter F. Nickeson created a macro, [MacroBookInspector,](#) that will allow you to copy and save the entire text of the macro to a text file for sharing.

Some macros are available in Record Manager. Are there plans to incorporate more macros to Record Manager?

Answer: Macro functionality of some macros that we'd previously done in Connexion Client has been built into Record Manager. Currently there are ongoing investigations into what other functionality can be incorporated into Record Manager as well.

How long did it take you to feel confident in writing macros?

Answer: (Robin) While I feel confident writing macros for what I need to do, it took about a year to learn and I still refer to reference materials and am constantly learning new things. The macros take time to create but they saved time in the long run.

(Robert) Macro writing is a constant learning process. It's based on Visual Basic, so you can often find general examples for what you are looking for online. For example, sorting a list. A good way to learn to write macros is to take another macro and clone it. Then play around and modify to accomplish what you need. Using an already created macro is also a good way to save time.

It would be great to be able to search/display all records that have had actions taken on them by a certain OCLC authorization. For example, to see all the records that cataloger has replaced during a specified time period. I know we can see the number of records using OCLC statistics, but I don't think there is a way to get a list of the actual records.

Answer: No, there is currently no way to see the list of the actual records based on an individual authorization.

If all you want to do is add a variable field to a record, the Constant data function works well.

Answer: Yes, constant data is great to use for the same edit to all records in given list of records.

Member questions (2020-09-17)

What does "have the fixed field turned off" mean?

Answer: In the Connexion Client, the Fixed Fields can be displayed with the textual field name next to each code(s). For example, "Type", "BLvl", "Dtst", etc. You can also have it turned off where it's a single 008 field with all of the codes listed in a flat variable field. There are no labels when using this option. You can change this by going to the View menu, clicking on OCLC Fixed Field, and then choosing one of the options.

Is there a place where we can see other's macros?

Answer: There are a couple example repositories in the presentation. You could also exchange macros and ideas using OCLC-Cat.

Does anyone know where to get the NikAdds macros?

Answer: Joel Hahn wrote that macro. You can find it at
http://www.hahnlibrary.net/libraries/oml/connex.html.

I often use the Cyrillic to Roman macro. Are there other macros that OCLC is aware of for transliteration?

Answer: We only aware of Joel Hahn's transliteration macros, which covers many different scripts including Greek, Hebrew, Korean, etc.

What's the difference between Macros and Text Strings?

Answer: A macro is the entirety of the script that you want to run on a record or on multiple records. A text string was the text inside of the quotes in the example shown in the presentation. A text string can be read into a record by a macro but the macro is the whole thing together.

Can macros be nested?

Answer: You can have a macro that will call another macro. You can also embed what you need from one macro into another macro instead of having to constantly call the second macro.

NikAdds appears to be a good example of an answer to the question of calling another macro from within a macro.

When I use the generate authority macro Connexion Client keeps freezing. The add usage and add 3xx templates are "stuck". Any ideas? I usually have to force Connexion Client to close and then re-start it.

Answer: This isn't a problem with the macros themselves but rather with the macro language and the Connexion Client, which can leak memory. This can freeze up your Connexion Client session. Presumably, more memory in a computer would help, but there is currently no other solution, than to shut down the Connexion Client and restart it. This slowing down and freezing up of the system usually happens when running a macro repeatedly on the same session.

Comments from attendees:

I also suffer from the computer freezing problem. This started when my computer was upgraded to Windows 10 (it is an older computer not designed for Windows 10). It does not happen on PCs built for Windows 10. I have to avoid all macros that initiate menus.

The auth generation macro can appear to freeze when a menu window gets stuck behind another window. Nothing happens until the menu is dealt with.

The freezing of the screen seems to be a problem when you have Connexion open Fullscreen. If you decrease the size of the window, the problem goes away most of the time

On Freezing and Window size: Not for me. In my experience, it does not matter how big Connexion is sized on the screen. It is possible to find a second instance of the running application in the taskbar, select it, and force it to stop. It is a little tricky sometimes, but it can "stop" the macro window, so you don't have to restart Connexion or to shut down and re-boot.

Is OCLC still creating and revising macros for Connexion for member use?

Answer: Yes, one new one is the punctuation macro and a recently revised macro is the macro that generates field 043 because the names of countries have been changed overtime. We could add more if they would have widespread use.

The OCLC Guide ("Basics: Use Macros") has a lot of info on the CS functions, but is there a document that talks about the Visual BASIC (VBA) component of OML? It doesn't seem to work exactly like VBA.

Answer: You would have to go to documentation outside of the Basics: Use Macros document that covered VBA. While most VBA commands do work, not everything will work exactly the same. There is also the situation where some VBA commands are newer than the set of commands available when OML was created. You can often find VBA documentation and commands by searching online and these examples can be very helpful when creating your own macros, especially when the command is more complex, such as sorting a list.

Walter Nickeson added that OML seems to be virtually identical to IBM's CognosScript. (https://www.ibm.com/support/knowledgecenter/SSTQPQ_7.5.0/com.ibm.swg.im.cognos.cgspmac.7.5.0.doc/cgspmac_id1997CognosScriptStatementsandFunctions.html)

When would you use constant data to insert a field or several fields, rather than a macro?

Answer: Depends on what fits best into the project your working on and your workflow. Sometimes inserting a text field works, sometimes constant data works, and sometimes macros work.

I really like the 33X macro but find that it still leaves blank 33X fields behind that have to be deleted. Am I missing something? Is there a way to auto-delete those once the macro runs?

Answer: This might be a prompt from the Workform. If you create a record using a Workform, then the prompt for the 33x fields will appear on the screen. Running the Add33x macro will not remove the ones already in the record from the Workform but will add the appropriate new once into the record. All of the prompt fields in the Workform will be removed when you do a Reformat command.

An attendees list of favorite macros, which were written by Walt Nickeson and Joel Hahn:

- CopyDateTo264_4201601
- Add040$beng
- BrowseAuthorityIndex
- InsertHeading
- Add&Edit007
- Show006_201502
- Generate043
- Show041_201801
- DeleteAllSuchPlus_ 201801
- PasteUnformattedPlus_201806RDAHelper_201813
- RelatorHelper_201804
- Enhance505_20050521 (with NikAdds)
- EnhancedContentsCleaner1801
- 508-511to700_20050324
- VisMatHelper_201706
- MusicFFHelper_201701
- PunctuationAdd
- PunctuationRemove
- DisplayFieldCharValues2017
- ShortcutKeysIndex_201742
- MacroIndex_201803
- NikAdds

When I've used dialog boxes, I can't seem allow the user to choose from a menu or enter a custom entry. Is there a way to do that? To clarify, the box will accept the user's choice from the menu options, but it won't accept an input that isn't an option.

Answer: Yes. Dialog boxes are one of the more complex things to do with using Connexion macros. You have to define the box, define all of the variables that are going to capture the data from the box, then command to display the box as a specific point in the process. Because of this, when a dialog box isn't working properly it could be that either the macro was corrupted or there could be something missing. Walter Nickeson offered his help with dialog box creation, if anyone needs assistance.

I tested using the Latin2Cyrillic (Russian) to a record in my save file. The Russian script looks like it had invalid characters in it: А страы дроп оф блоод / ‡c Росеанна М. ∎∎ите. This is not a record I want in Cyrillic; I'm just playing with it now to see how it looks, the ampersands look wrong this is what I was transliterating: A stray drop of blood / ‡c Roseanna M. White.

Answer: Maybe something that you can fix so you may need to fiddle with macro. The sequences should be an ampersand, pound, and "x" followed by four characters and end with a semicolon.

Attendees also added:

- The problem with the Russian record may be because the transliteration is incorrect.
- The transliteration macros don't work for languages they are not meant for, like English.

When I'm authorizing bib headings, I can do everything with keystrokes except get to the next record. That seems to require a mouse. Is there another way?

Answer: So, if you are controlling headings in bibliographic records and processing a set of bibliographic records in a save file, then *CS.GetNextRecord* ought to work. You can also use Keymaps go forward or back in list. To do this, go to the Tools menu, click on Keymaps, check the "Menu item" option and select ViewNavigateRecordsandListsForward and ViewNavigateRecordsandListsBack to assign Keymaps.

Will a macro language be planned for Record Manager?

Answer: Adding OML to Record manager is not possible, which is why some of the most popular macros have been built into Record Manager. We do continue to add to Record Manager functionality so if you have an idea, you can submit an enhancement request via Community Center.

Can we use ISO 639-3 language codes in the 008, or only MARC language codes?

Answer: Only MARC language codes in field 008 (or the Language Fixed Field) but you can use ISO 639-3 language codes in field 041, with the second indicator coded 7 and the appropriate code in subfield $2. OCLC is also trying to make more use of field 041 in our discovery system so that we have those more granular representations of languages that you can put into field 041 but cannot put into field 008.

Attendee comment:

Just wanted to shout out this webinar from Georgia Library Association that went in depth on macros, text strings, constant data, etc. I hadn't had time to delve in before recently and it was a great introduction: https://vimeo.com/440363659