Fewer Clicks, More Tricks:
Streamlining Acquisitions Workflow and Maintenance using MacroExpress

EndUser 2006 Session 62

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Why are we here?

• Discuss ideas on how to streamline general acquisitions workflow using macros

• See how Access Reports can be used in conjunction with macros to simulate global updates on Acquisitions records
Workflow macros – Why?

- Speed
- Improved accuracy
- Reduce clicks/typing and potentially reduce chance of overuse injuries
- Consistency - Standardize procedures, notes, etc.
Workflow macros:
General principle: KISS

- I am not the Macro guru…
- Think the problem through in terms of system behavior
- Think the problem through in terms of staff behavior
Workflow macros:
General principle: KISS me again

Consider the audience

- Different operating systems can affect macros
- Different generations of PCs = different processing speed, which affects macros
- Staff use different resolution on desktop, which can affect cursor placement
- One macro with three decision points or 3 simple macros?
Practical considerations

• Prefer scripting to capture

• Timing is everything - window appearance vs. delay

• Use of alt key combinations
  • ALTD-oc-ALTU vs. ALTD-ALTU-oc

• Mnemonic hot keys

<table>
<thead>
<tr>
<th>Macros</th>
<th>Activation</th>
<th>Scope</th>
<th>Modified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add approval line item to order</td>
<td>Win+Alt+A</td>
<td>Global</td>
<td>3/20/2006 1:47 PM</td>
</tr>
<tr>
<td>Create order, add line item (win+alt+o)</td>
<td>Win+Alt+O</td>
<td>Window Specific: &quot;Voy...&quot;</td>
<td>3/14/2006 11:20 AM</td>
</tr>
<tr>
<td>Add to mult. line PD (win+alt+q)</td>
<td>Win+Alt+Q</td>
<td>Window Specific: &quot;Voy...&quot;</td>
<td>3/14/2006 11:20 AM</td>
</tr>
<tr>
<td>Receive order from bib (win+alt+r)</td>
<td>Win+Alt+R</td>
<td>Window Specific: &quot;Voy...&quot;</td>
<td>3/14/2006 11:20 AM</td>
</tr>
<tr>
<td>Add shipping to inv header (win+alt+s)</td>
<td>Win+Alt+S</td>
<td>Window Specific: &quot;Voy...&quot;</td>
<td>3/14/2006 11:20 AM</td>
</tr>
</tbody>
</table>
Firm order macro

Create bib record in cataloging, and then…

• Capture Bib ID to clipboard
  [Print Template Piece Bibliographic]
  \F200

• Activate Acquisitions window

• Issue alt f-n-o for new order

• Fill in default values in header

• Add line using alt l-a-d and paste in bib id
Order macro
Direct Editor view

Macro Text

```xml
```
Order macro
Scripting Editor view

- Clipboard Empty
- Alt Key Down
- Text Type: f
- Alt Key Up
- Text Type: l
- Delay 500 Milliseconds
- Text Type: <TAB><TAB><TAB>
- Control Key Down
- Shift Key Down
- Text Type: <RIGHT ARROW>
- Shift Key Up
- Control Key Up
- Clipboard Copy
- Delay 700 Milliseconds
- Alt Key Down
- Text Type: c
- Alt Key Up
- Delay 700 Milliseconds
- Activate Window: "Voyager Acquisitions"
- Alt Key Down
- Text Type: fno
- Alt Key Up
- Delay 500 Milliseconds
- Wait For Window Title: "New Order"
- Delay 1.5 Seconds
- Alt Key Down
- Text Type: fa
- Alt Key Up
- Wait For Window Title: "Purchase Order"
- Alt Key Down
- Text Type: lad
- Alt Key Up
- Delay 700 Milliseconds
- Clipboard Paste
- Delay 500 Milliseconds
- Text Type: <ENTER>
- Clipboard Empty
Shipping charge on invoice

<table>
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<tr>
<th>Charge Type</th>
<th>Application Method</th>
<th>Amount</th>
<th>Adjustment</th>
<th>Adjusted Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>shipping charge</td>
<td>Amount</td>
<td>$10.00</td>
<td>$10.00</td>
<td>$756.29</td>
</tr>
</tbody>
</table>

Ledger: FY06 6901190
Commit to Fund: 1100shp
Shipping charge macro

Text Type: <ALT>a
Delay 300 Milliseconds
Text Type: s
Delay 300 Milliseconds
Text Type: <TAB>a<TAB>
Delay 300 Milliseconds
Text Type: <TAB>
Delay 300 Milliseconds
Text Type: <TAB>
Delay 300 Milliseconds
Text Type: <TAB>1100shp
Delay 300 Milliseconds
Text Type: <SHIFT><TAB><SHIFT><TAB><SHIFT><TAB><SHIFT><TAB>
Wait Left Mouse Click
Text Type: <ALT>o
Receiving macro

• What are your givens?
• What are the steps you take?
• What is your decision point?
Receiving Decision

Have you written the fund and purchase order numbers in the book?

- Yes
- No

OK  Cancel
Adding an if clause
Receiving Decision point

- Multiple Choice Menu:
  - If Variable %T1% = "A"
    - Activate Window: "Voyager Acq"
    - Text Type: <ALT>fc
    - Delay 1 Seconds
    - Text Type: <TAB><TAB>
  - End If

- If Variable %T1% = "B"
  - Activate Window: "Purchase Ord"
  - Text Type: <ALT>d
  - Text Box Display: Finish Order
  - If Window Title "Quick Line" is on top
    - Text Type: <ALT>s
    - Delay 900 Milliseconds
  - Activate Window: "Voyager Acq"
  - Text Type: <ALT>fc
  - Delay 1 Seconds
  - Text Type: <TAB><TAB>
  - End If

- If Window Title "Line Item" is on top
  - Activate Window: "Voyager Acq"
  - Delay 900 Milliseconds
  - Text Type: <ALT>fc
  - Delay 1 Seconds
  - Text Type: <TAB><TAB>
  - End If

- End If
Receiving Decision box 2

Finish Order

Click "OK" when you are ready to close the order
Receiving Decision macro

- **Multiple Choice Menu:**
  - If Variable %T1% = "A"
    - Activate Window: "Voyager Acq"
    - Text Type: <ALT>fc
    - Delay 1 Seconds
    - Text Type: <TAB><TAB>
    - End If
  - If Variable %T1% = "B"
    - Activate Window: "Purchase Ord"
    - Text Type: <ALT>d
    - Text Box Display: Finish Order
    - If Window Title "Quick Line" is on top
      - Text Type: <ALT>s
      - Delay 900 Milliseconds
      - Activate Window: "Voyager Acq"
      - Text Type: <ALT>fc
      - Delay 1 Seconds
      - Text Type: <TAB><TAB>
    - End If
  - If Window Title "Line Item" is on top
    - Activate Window: "Voyager Acq"
    - Delay 900 Milliseconds
    - Text Type: <ALT>fc
    - Delay 1 Seconds
    - Text Type: <TAB><TAB>
  - End If
- End If
Other macros

• Cancellations - global macro updating purchase order, line item and catalog records

• Ad hoc macros – for example, inserting an identical note into a set of records

• Add line to multiple line PO

• Add line to approval multiple line PO
Project macros – How do I start?

Think it through!

- If very simple or limited result set, can do it from online
- If more complex or large result set, use Access Reports
- Allows much easier repeats, also allows you to keep track of records done
But I don’t know Access …

…Nor am I the Access guru

I know the very basics of Access. I figured out how to pull an Excel spreadsheet into Access.

What are inner and outer joins, anyway??

I do a lot of make-table queries that I probably wouldn’t have to do if I knew more about Access.

Even so, I save a lot of time by using Access and MacroExpress together.
But I don’t know Access pt.2

So, this is not an Access workshop. Chances are some one at your institution knows Access and can help you out, or even run the query for you.
Things to consider…

• Will the work be done by one person or more?

• Does it involve looking at individual records and making decisions, or can you write in repeats?

• Is there an extra PC or laptop around? You can’t run a repeating macro and do something else on your workstation at the same time.
How to decide on repeats

- Examine the data in Access
- Examine the data in Voyager
- Start with a few repeats (10) and look at the records as they pass by
- Increase number of repeats
- Track updates (check column)
- Repeat the Access query when you finish!!!!
Adding a repeat

![Image showing a Repeat Options dialog box with commands and a counter width field.]
Macro to update prices

This macro uses a result table from an Access query and updates prices on serial subscription records.
<table>
<thead>
<tr>
<th>PO_NUMBER</th>
<th>PO_STATUS</th>
<th>LINE_ITEM_ID</th>
<th>LINE_PRICE</th>
<th>VENDOR_CODE</th>
<th>NORMAL_FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>209922</td>
<td>1</td>
<td>515758</td>
<td>4500</td>
<td>HARR</td>
<td>SUBSCRIPTION</td>
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<td>527698</td>
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<td>213532</td>
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<td>219975</td>
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<td>224687</td>
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<td>580943</td>
<td>24500</td>
<td>HARR</td>
<td>SUBSCRIPTION</td>
</tr>
</tbody>
</table>
Serial price update macro at work

The Viewlet of the macro at work can be seen at
http://library.princeton.edu/departments/tsd/order/orddoc.html
Stopping a macro

Macro in progress. Right-click to stop macro.

MacroExpress is open but no macro is running
Common Errors and Problems

• Some other program interferes and macro is no longer working (news feed, IM, etc).

• Nothing seems to be happening: Generally a timing problem. Try inserting (or lengthening) delays between macro commands.

• Macro works on one PC but not another: Try to write the macro using commands and keyboard rather than cursor movements. Also could be timing problem.

• The wrong values are being cut and pasted or are going in the wrong area in Acquisitions: Make sure you start in the right place in Access and have the correct search set up in Acquisitions.
Project: Update Vendor on Orders

- Run Access query to pull out records
- Arrange columns as convenient and put in check box
- Macro uses alt key and tabs
- Can create macro with vendor account or without
Run Access query
Delete unnecessary fields and add Yes/No
Updated version of table

<table>
<thead>
<tr>
<th>VENDOR_CODE</th>
<th>PO_NUMBER</th>
<th>done</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGROSSI</td>
<td>1ACM7413</td>
<td></td>
</tr>
<tr>
<td>AGROSSI</td>
<td>1CCD8504</td>
<td></td>
</tr>
<tr>
<td>AGROSSI</td>
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<td></td>
</tr>
<tr>
<td>AGROSSI</td>
<td>1CGC2978</td>
<td></td>
</tr>
</tbody>
</table>
Vendor macro
Title numbers

• Vendor’s Excel spreadsheet - Pull into an Access table

• Access query to Voyager database to pull out open orders. Consider the data and determine primary match point

• Run macro on the matches to update vendor title number in the line item display Type tab

• Consider the data again

• Second run of matches… Third run of matches…
To Summarize

• Think it through!

• Get the help you need to deal with the programs you’re using

• Use alt key combinations and keyboard rather than cursor

• Experiment

• Have fun!
 Resources


“Getting Started with MacroExpress” EndUser 2005, by Clyde R. Putman

“Macro-Express Voyager Automation to Go: A systematic approach you can take home.” – EndUser 2006, Mark Wilson

“MacroExpress - Reducing keystrokes for accuracy & efficiency Part I: Getting Started with MacroExpress Part II: Macroexpress - It's not just for diacritics any more.” EndUser 2006, Clyde R. Putman, Alan Keely, Masako Patrum

Insight Software Solutions http://www.wintools.com/