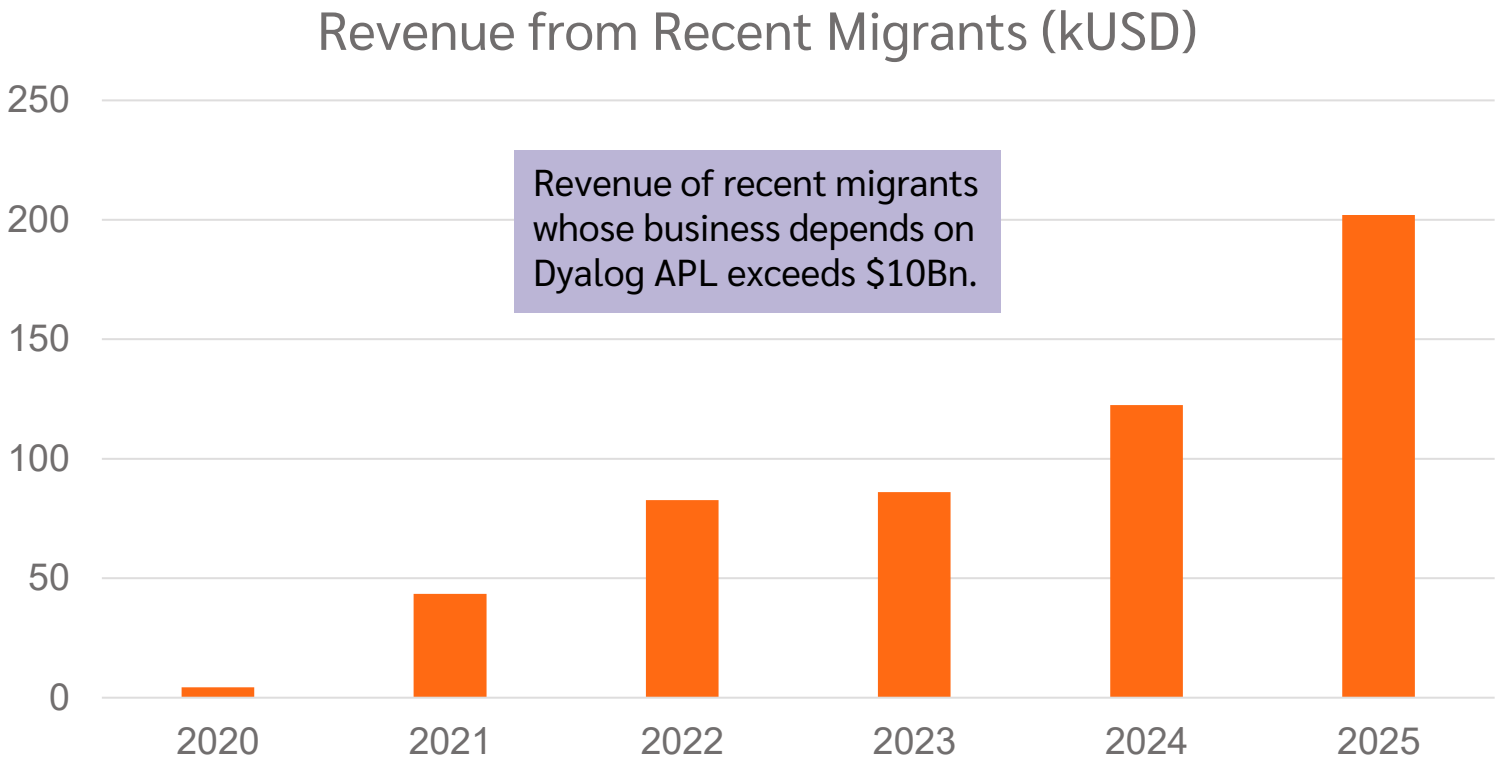
DYNA26

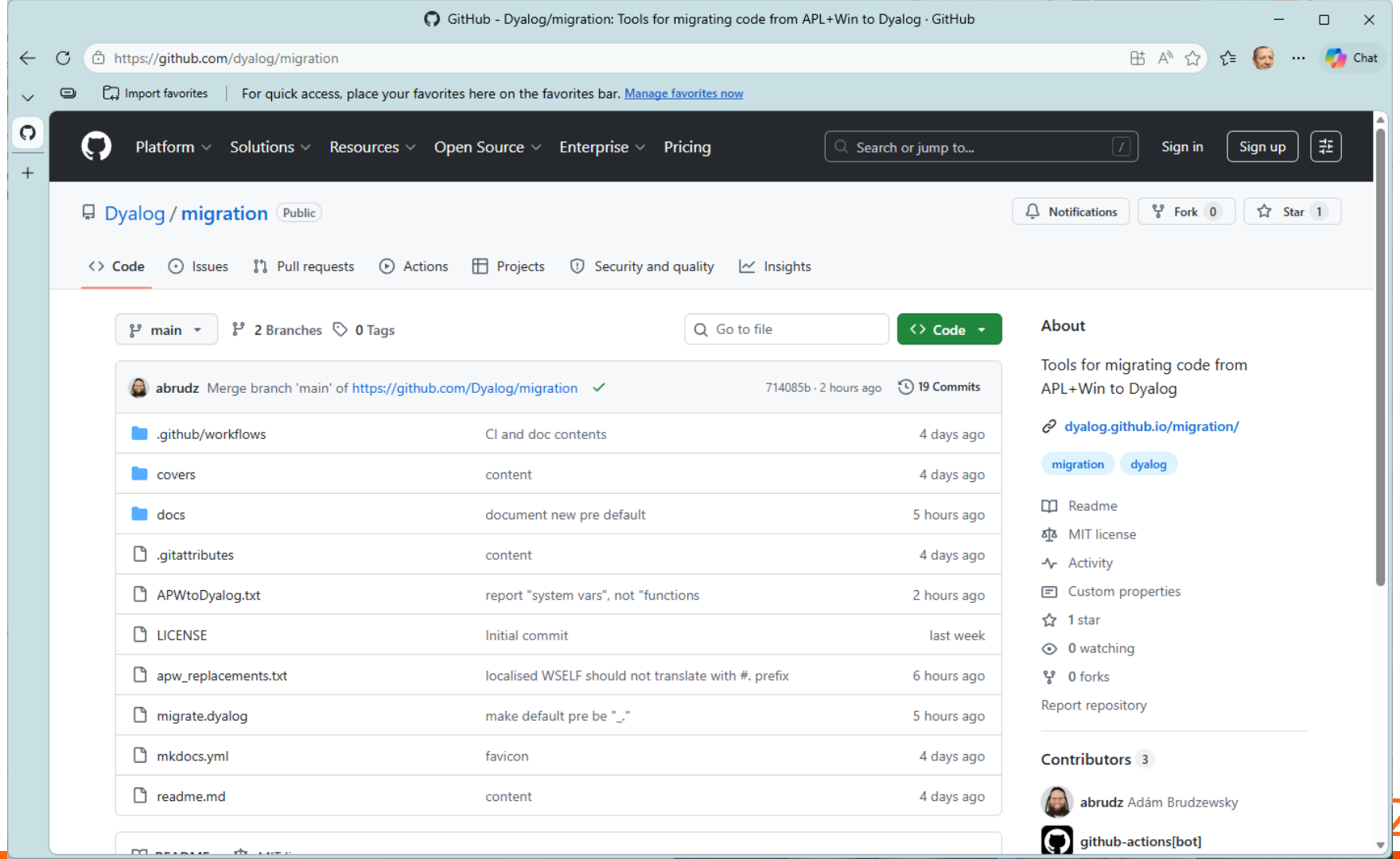
Migration to Dyalog APL

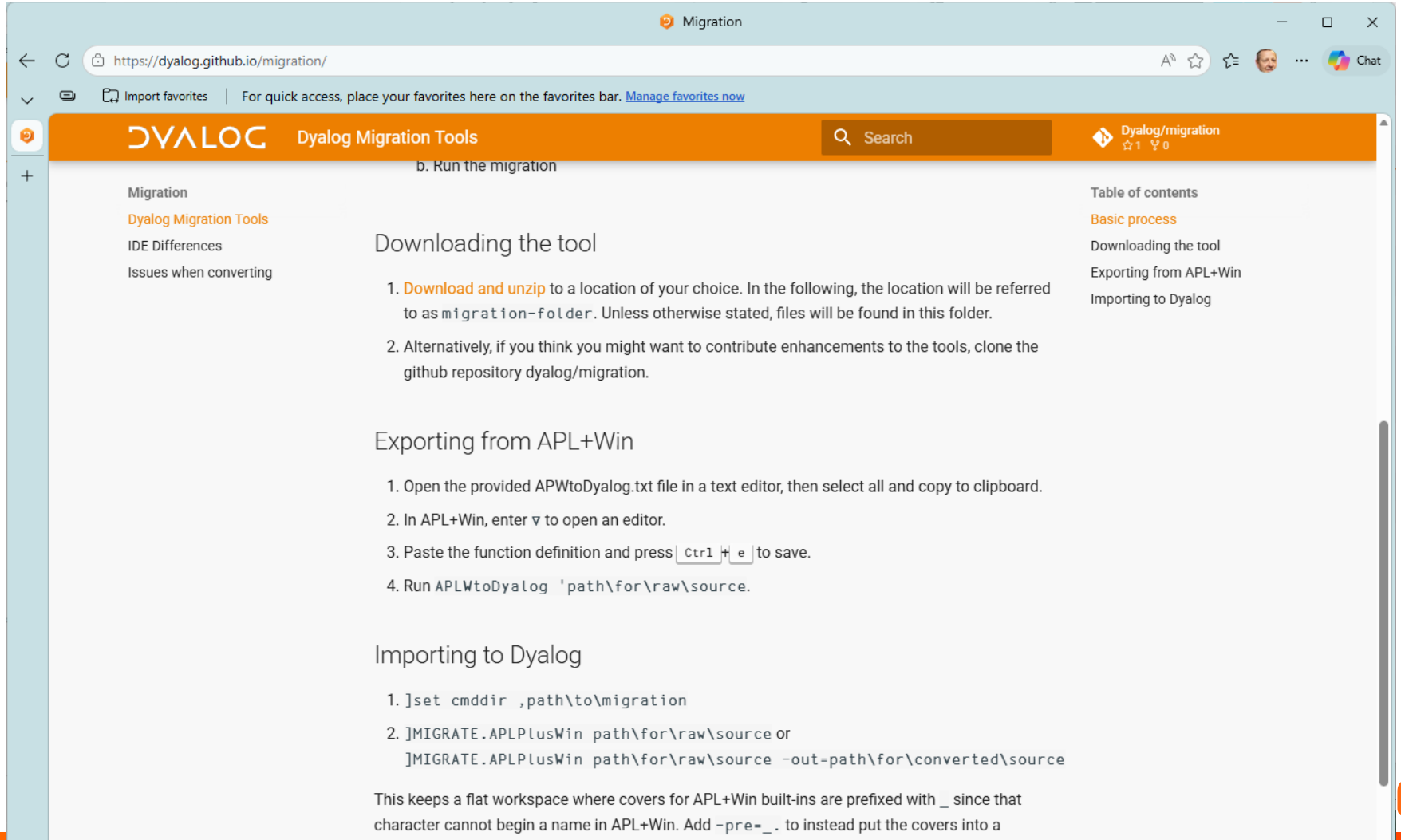
Morten Kromberg, CTO

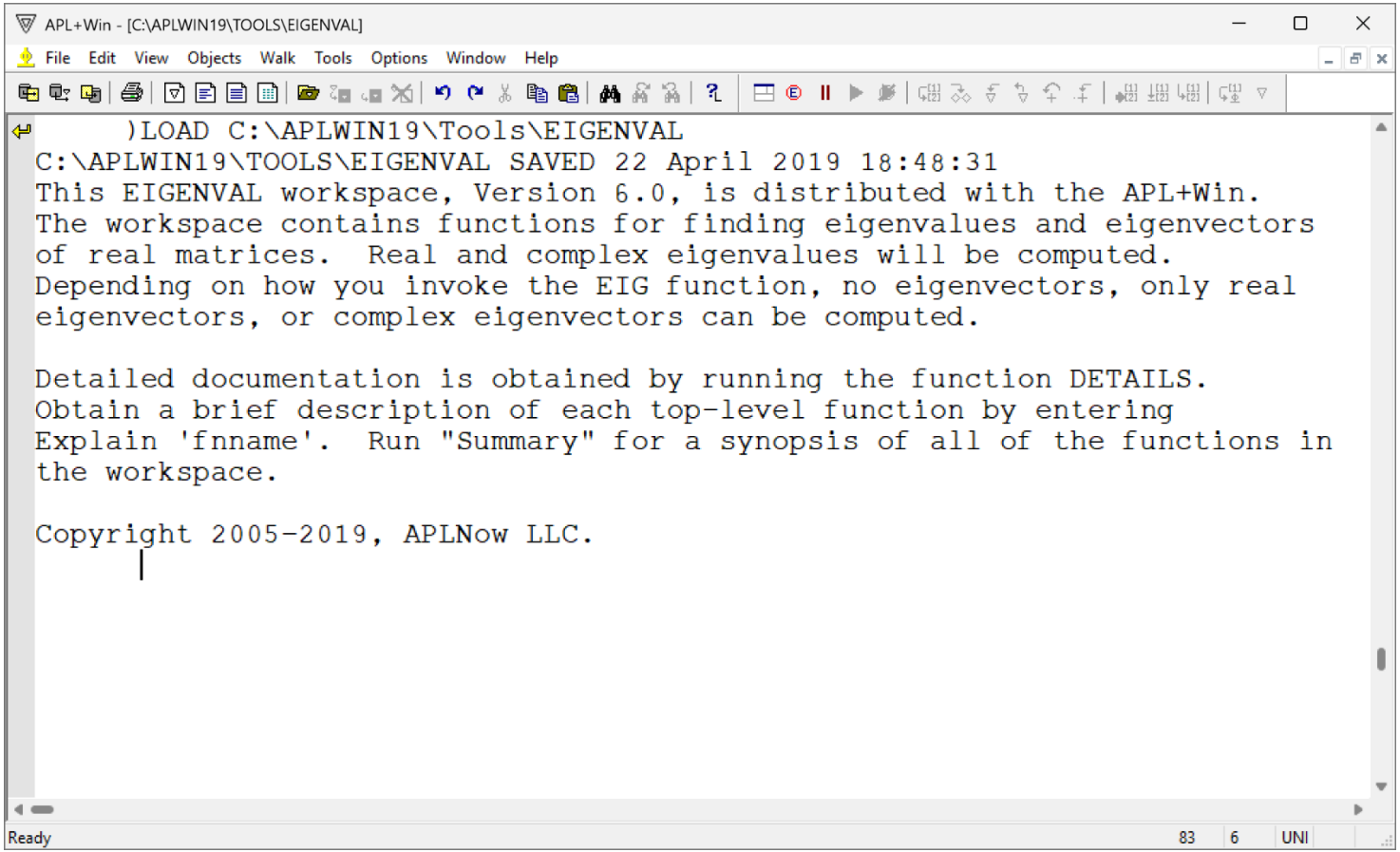

Revenue from Recent Migrants (kUSD)
250
200
150
100
50
0
2020
2021
2022
2023
2024
2025
Revenue of recent migrants whose business depends on Dyalog APL exceeds $10Bn.

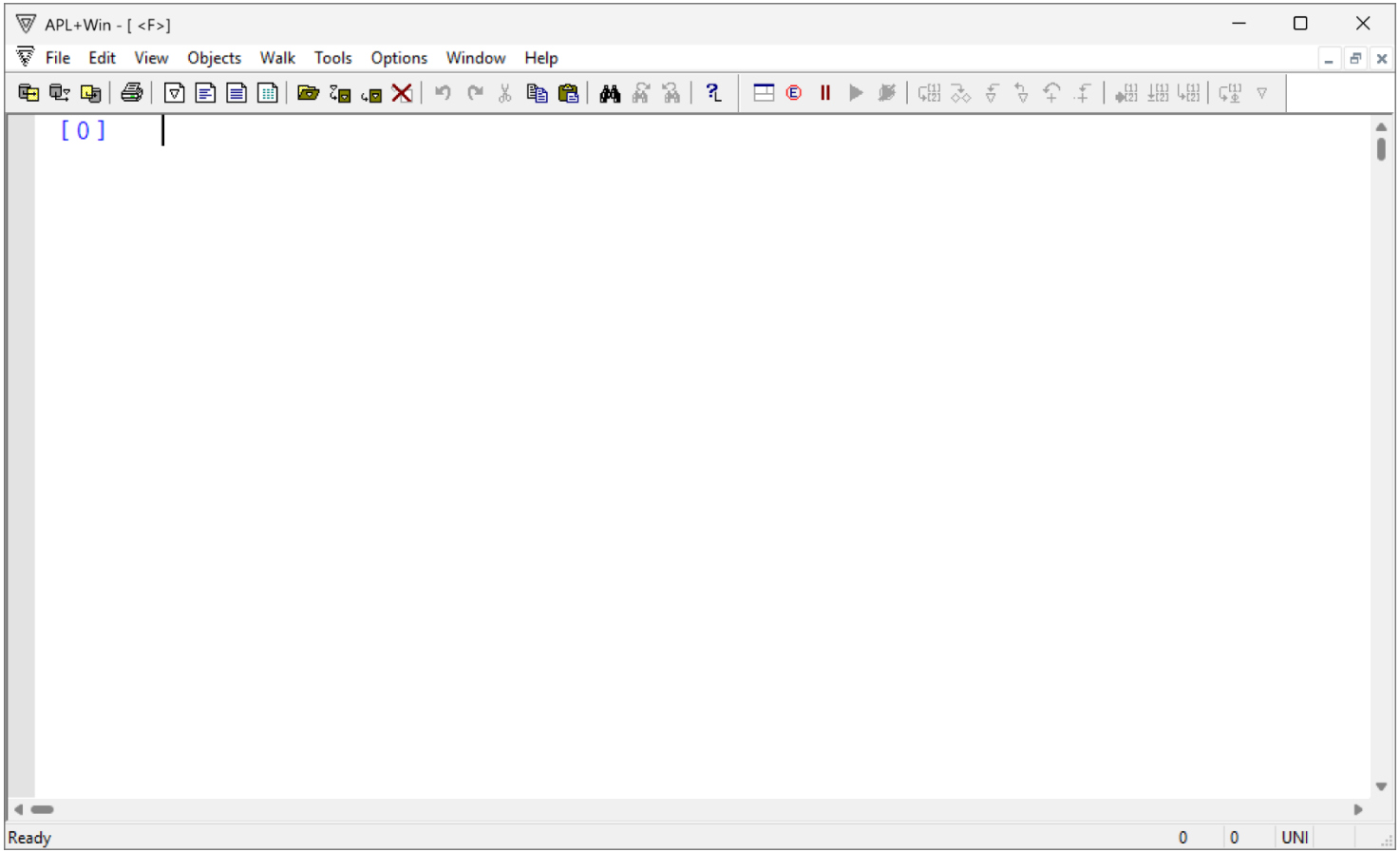
We are creating

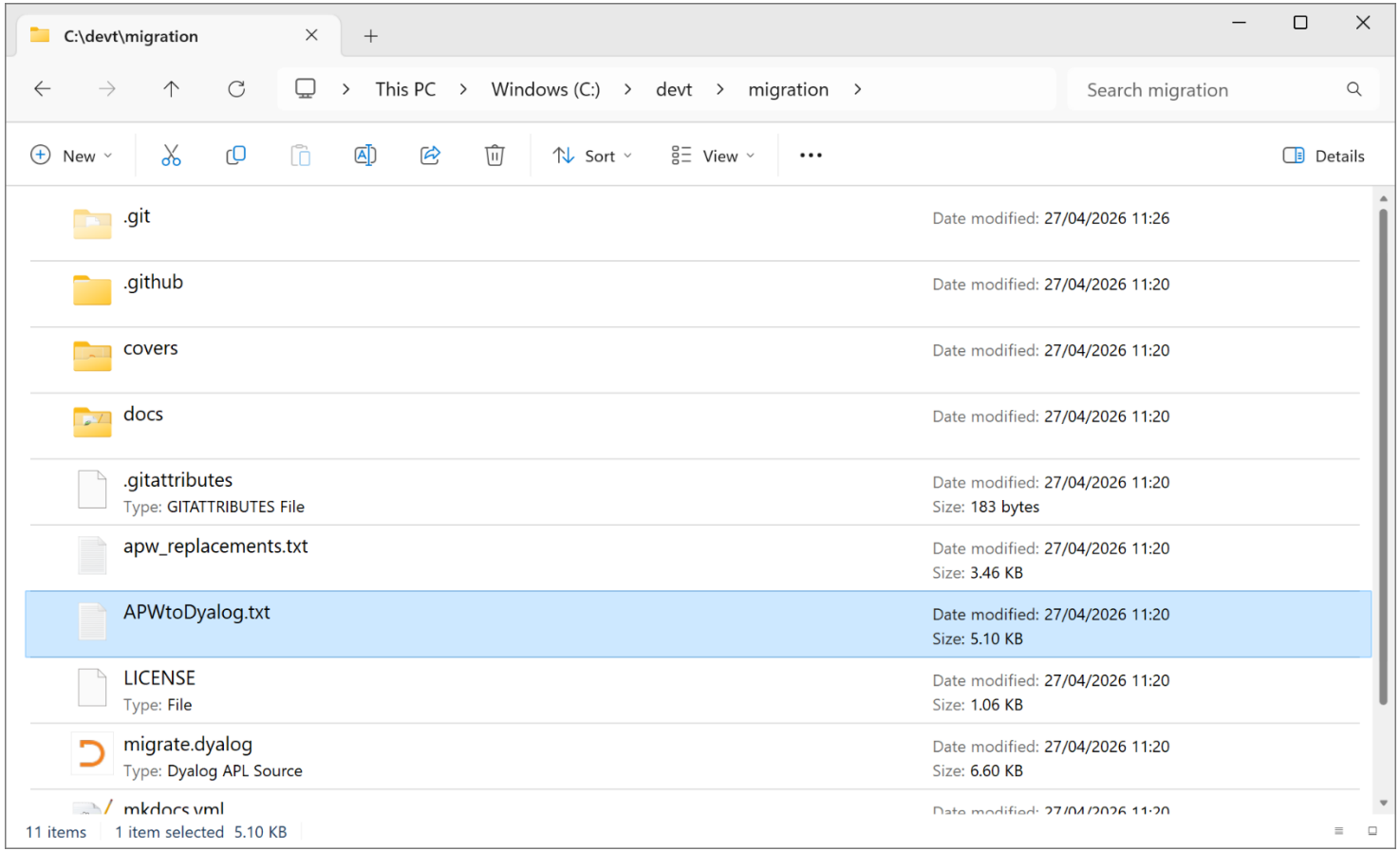
- Tools to easily import source code and data from APL+Win and APL2
- Emulation of non-Dyalog language features
  - In particular, GUI

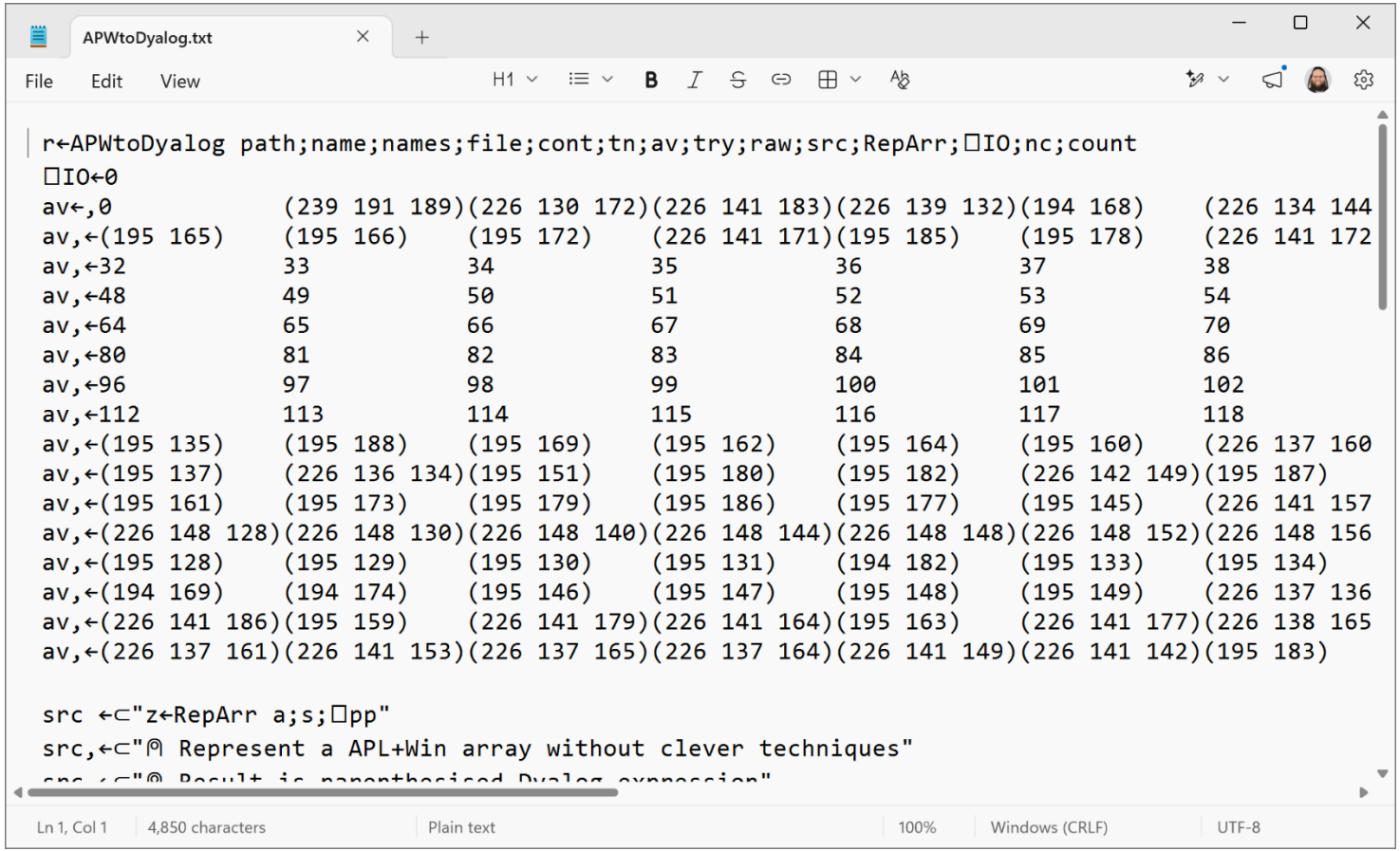

GitHub - Dyalog/migration: Tools for migrating code from APL+Win to Dyalog · GitHub
https://github.com/dyalog/migration
Import favorites
For quick access, place your favorites here on the favorites bar. Manage favorites now
Chat
Platform
Solutions
Resources
Open Source
Enterprise
Pricing
Search or jump to...
Sign in
Sign up
Dyalog / migration
Public
Notifications
Fork 0
Star 1
Code
Issues
Pull requests
Actions
Projects
Security and quality
Insights
main
2 Branches
0 Tags
Go to file
Code
abrudz Merge branch 'main' of https://github.com/Dyalog/migration
714085b · 2 hours ago
19 Commits
.github/workflows CI and doc contents 4 days ago
covers content 4 days ago
docs document new pre default 5 hours ago
.gitattributes content 4 days ago
APWtoDyalog.txt report "system vars", not "functions 2 hours ago
LICENSE Initial commit last week
apw_replacements.txt localised WSELF should not translate with #. prefix 6 hours ago
migrate.dyalog make default pre be "_." 5 hours ago
mkdocs.yml favicon 4 days ago
readme.md content 4 days ago
About
Tools for migrating code from APL+Win to Dyalog
dyalog.github.io/migration/
migration
dyalog
Readme
MIT license
Activity
Custom properties
1 star
0 watching
0 forks
Report repository
Contributors 3
abrudz Adám Brudzewsky
github-actions[bot]


Migration
https://dyalog.github.io/migration/
Chat
Import favorites
For quick access, place your favorites here on the favorites bar. Manage favorites now
DYALOG
Dyalog Migration Tools
Search
Dyalog/migration
1
0
b. Run the migration
Migration
Dyalog Migration Tools
IDE Differences
Issues when converting
Downloading the tool
1. Download and unzip to a location of your choice. In the following, the location will be referred to as migration-folder. Unless otherwise stated, files will be found in this folder.
2. Alternatively, if you think you might want to contribute enhancements to the tools, clone the github repository dyalog/migration.
Exporting from APL+Win
1. Open the provided APWtoDyalog.txt file in a text editor, then select all and copy to clipboard.
2. In APL+Win, enter ∇ to open an editor.
3. Paste the function definition and press Ctrl + e to save.
4. Run APLWtoDyalog 'path\for\raw\source.
Importing to Dyalog
1.]set cmddir ,path\to\migration
2.]MIGRATE.APLPlusWin path\for\raw\source or
]MIGRATE.APLPlusWin path\for\raw\source -out=path\for\converted\source
This keeps a flat workspace where covers for APL+Win built-ins are prefixed with _ since that character cannot begin a name in APL+Win. Add -pre=_. to instead put the covers into a
Table of contents
Basic process
Downloading the tool
Exporting from APL+Win
Importing to Dyalog

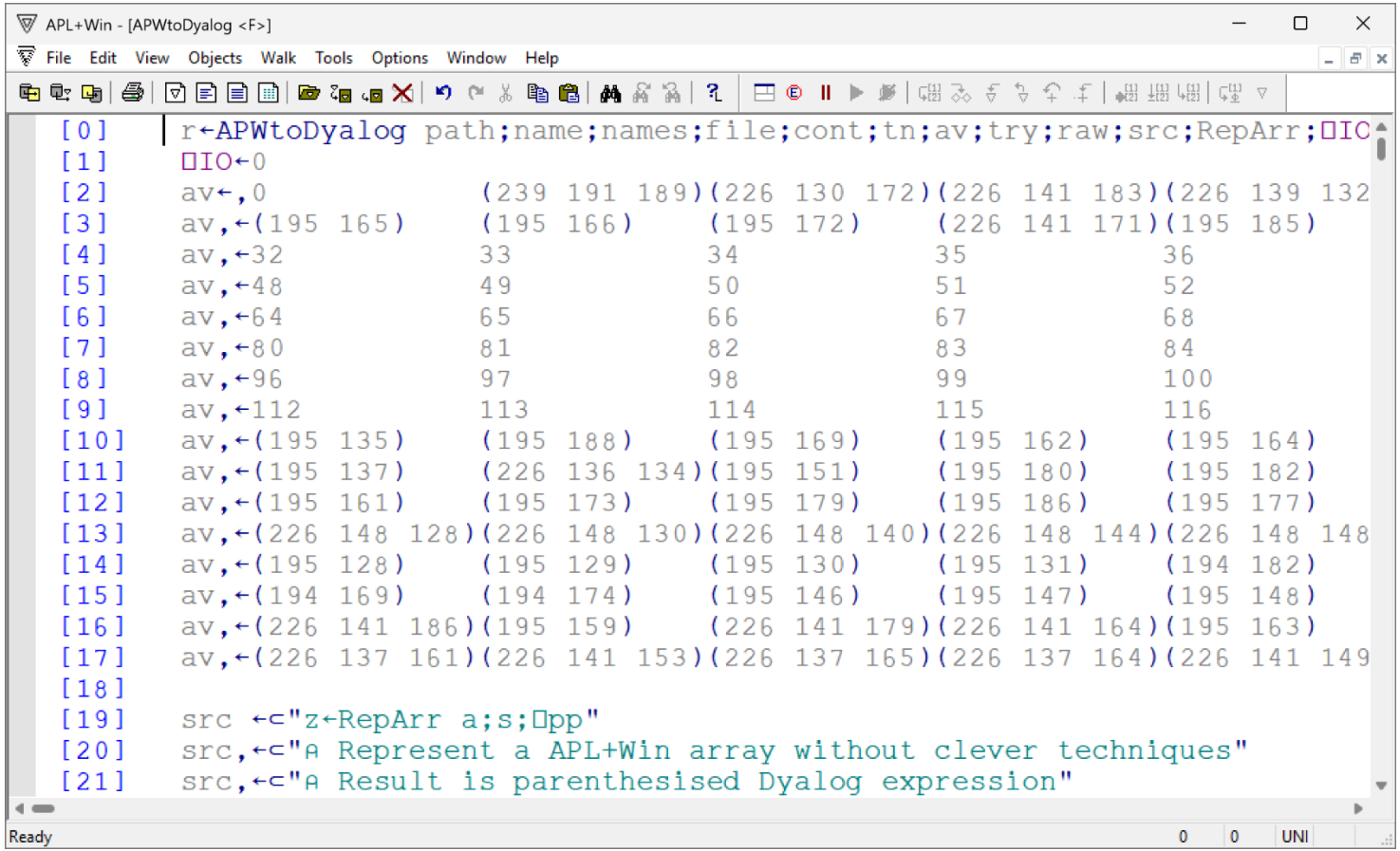

APL+Win - [C:\APLWIN19\TOOLS\EIGENVAL]
File Edit View Objects Walk Tools Options Window Help
)LOAD C:\APLWIN19\Tools\EIGENVAL
C:\APLWIN19\TOOLS\EIGENVAL SAVED 22 April 2019 18:48:31
This EIGENVAL workspace, Version 6.0, is distributed with the APL+Win.
The workspace contains functions for finding eigenvalues and eigenvectors
of real matrices. Real and complex eigenvalues will be computed.
Depending on how you invoke the EIG function, no eigenvectors, only real
eigenvectors, or complex eigenvectors can be computed.
Detailed documentation is obtained by running the function DETAILS.
Obtain a brief description of each top-level function by entering
Explain 'fnname'. Run "Summary" for a synopsis of all of the functions in
the workspace.
Copyright 2005-2019, APLNow LLC.
Ready
83
6
UNI

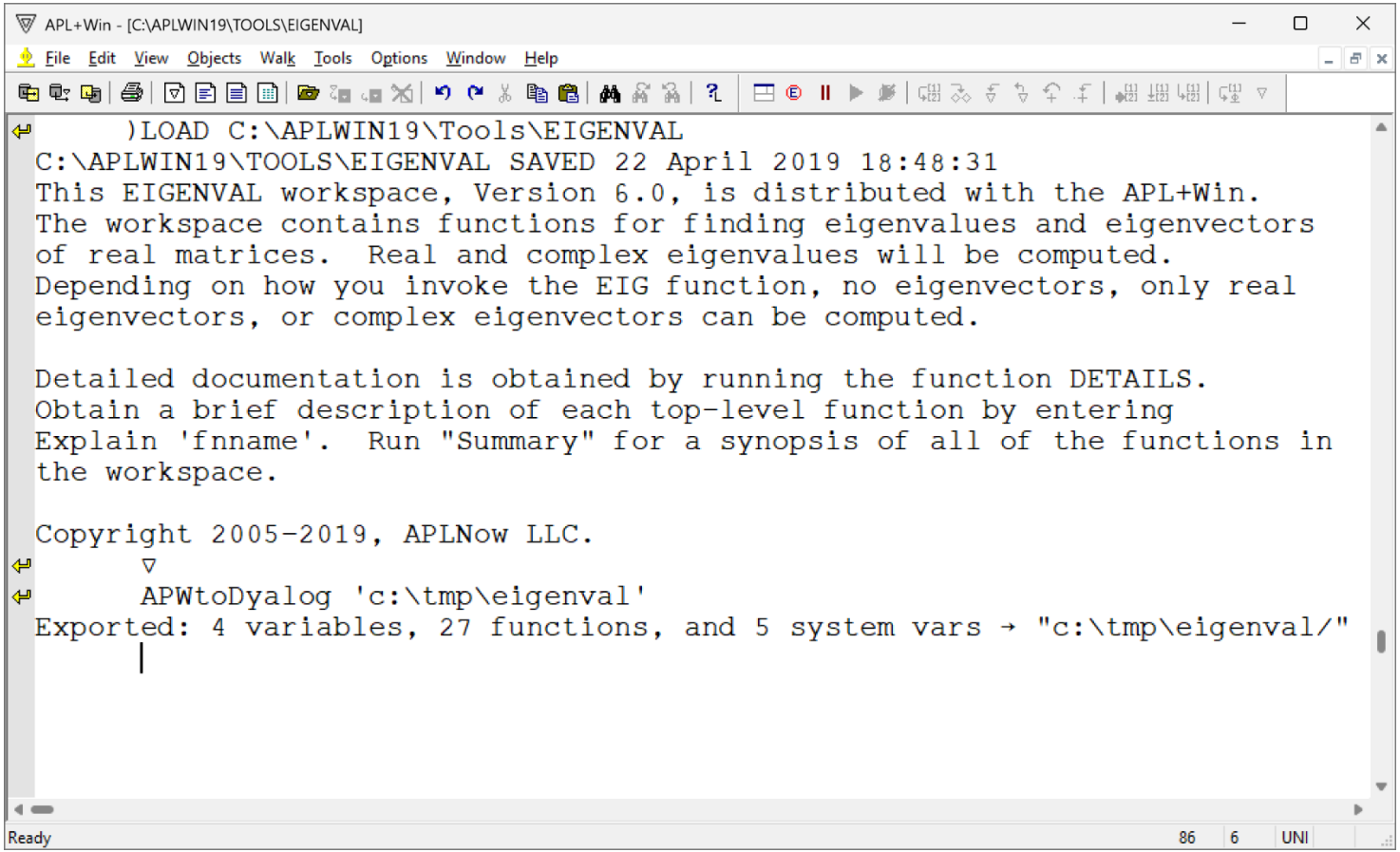

APL+Win - [<F>]
File Edit View Objects Walk Tools Options Window Help
[0]
Ready
0
0
UNI


C:\devt\migration
This PC
Windows (C:)
devt
migration
Search migration
New
Sort
View
Details
.git
Date modified: 27/04/2026 11:26
.github
Date modified: 27/04/2026 11:20
covers
Date modified: 27/04/2026 11:20
docs
Date modified: 27/04/2026 11:20
.gitattributes
Type: GITATTRIBUTES File
Date modified: 27/04/2026 11:20
Size: 183 bytes
apw_replacements.txt
Date modified: 27/04/2026 11:20
Size: 3.46 KB
APWtoDyalog.txt
Date modified: 27/04/2026 11:20
Size: 5.10 KB
LICENSE
Type: File
Date modified: 27/04/2026 11:20
Size: 1.06 KB
migrate.dyalog
Type: Dyalog APL Source
Date modified: 27/04/2026 11:20
Size: 6.60 KB
11 items
1 item selected 5.10 KB



Migrating to Dyalog APL


APL+Win - [APWtoDyalog <F>]
File Edit View Objects Walk Tools Options Window Help
[0] r←APWtoDyalog path;name;names;file;cont;tn;av;try;raw;src;RepArr;⎕IO
[1] ⎕IO←0
[2] av←,0 (239 191 189)(226 130 172)(226 141 183)(226 139 132
[3] av,←(195 165) (195 166) (195 172) (226 141 171)(195 185)
[4] av,←32 33 34 35 36
[5] av,←48 49 50 51 52
[6] av,←64 65 66 67 68
[7] av,←80 81 82 83 84
[8] av,←96 97 98 99 100
[9] av,←112 113 114 115 116
[10] av,←(195 135) (195 188) (195 169) (195 162) (195 164)
[11] av,←(195 137) (226 136 134)(195 151) (195 180) (195 182)
[12] av,←(195 161) (195 173) (195 179) (195 186) (195 177)
[13] av,←(226 148 128)(226 148 130)(226 148 140)(226 148 144)(226 148 148
[14] av,←(195 128) (195 129) (195 130) (195 131) (194 182)
[15] av,←(194 169) (194 174) (195 146) (195 147) (195 148)
[16] av,←(226 141 186)(195 159) (226 141 179)(226 141 164)(195 163)
[17] av,←(226 137 161)(226 141 153)(226 137 165)(226 137 164)(226 141 149
[18]
[19] src ←⊂"z←RepArr a;s;⎕pp"
[20] src,←⊂"⍝ Represent a APL+Win array without clever techniques"
[21] src,←⊂"⍝ Result is parenthesised Dyalog expression"
Ready
0
0
UNI


APL+Win - [C:\APLWIN19\TOOLS\EIGENVAL]
File Edit View Objects Walk Tools Options Window Help
)LOAD C:\APLWIN19\Tools\EIGENVAL
C:\APLWIN19\TOOLS\EIGENVAL SAVED 22 April 2019 18:48:31
This EIGENVAL workspace, Version 6.0, is distributed with the APL+Win.
The workspace contains functions for finding eigenvalues and eigenvectors
of real matrices. Real and complex eigenvalues will be computed.
Depending on how you invoke the EIG function, no eigenvectors, only real
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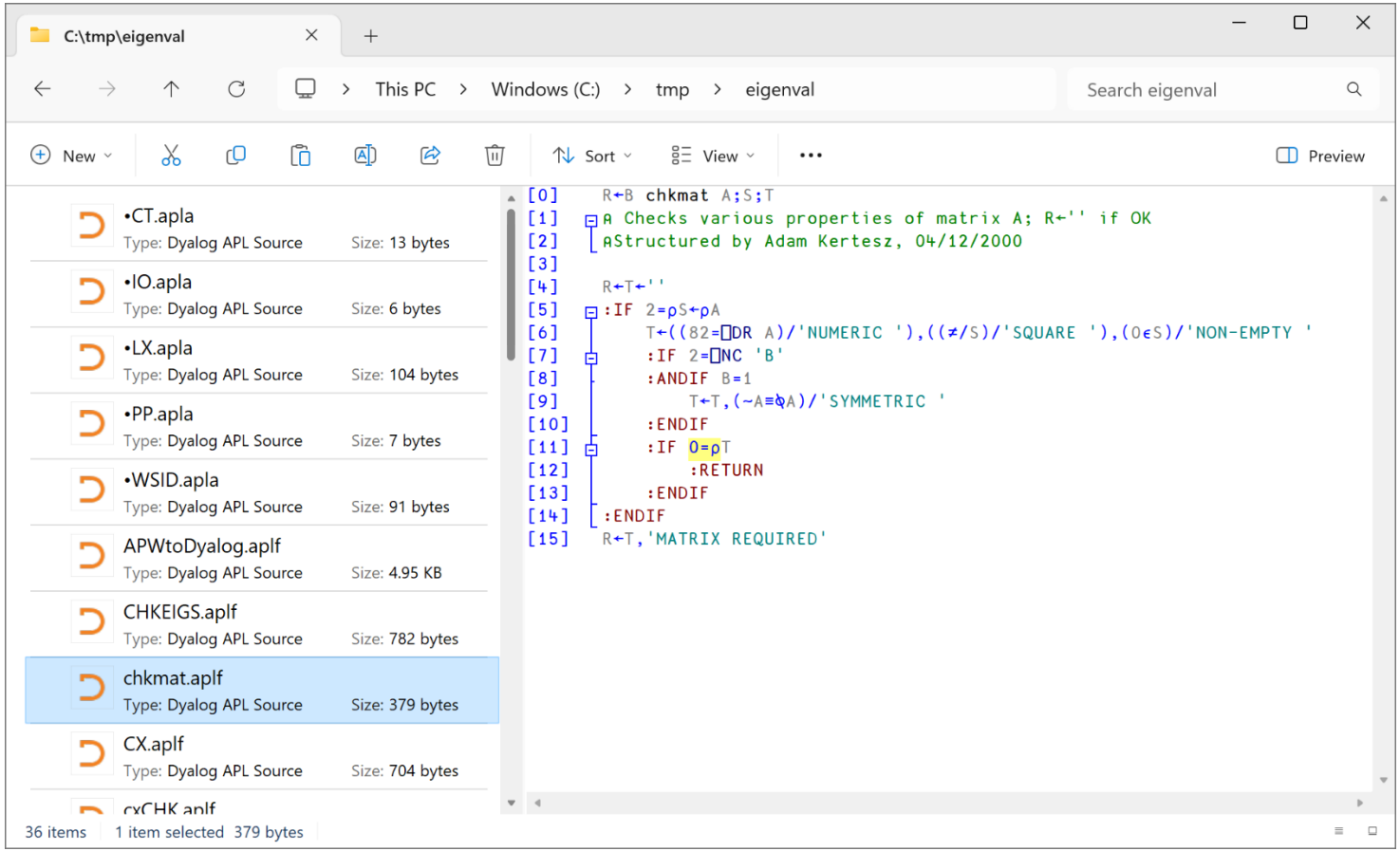
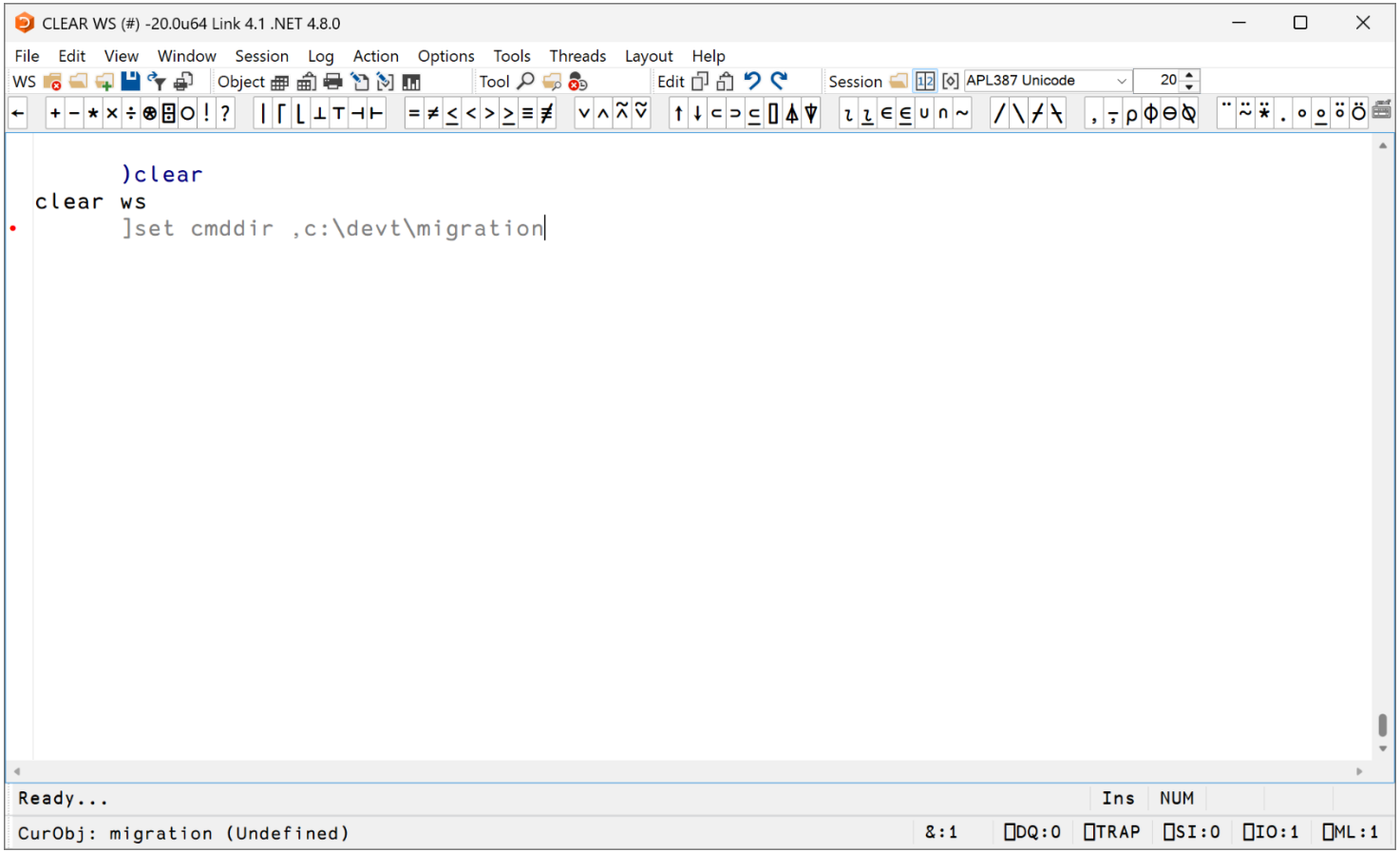
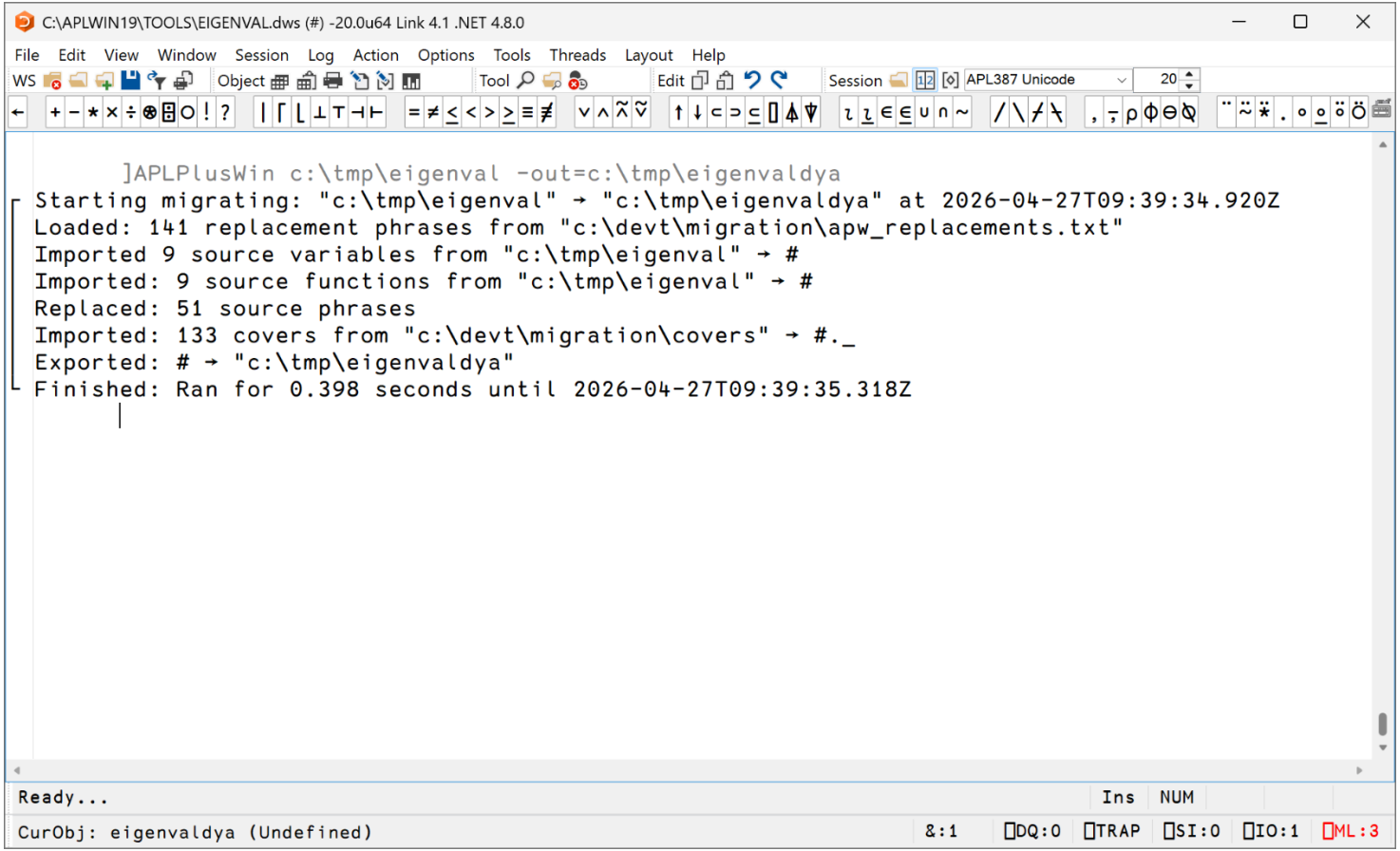
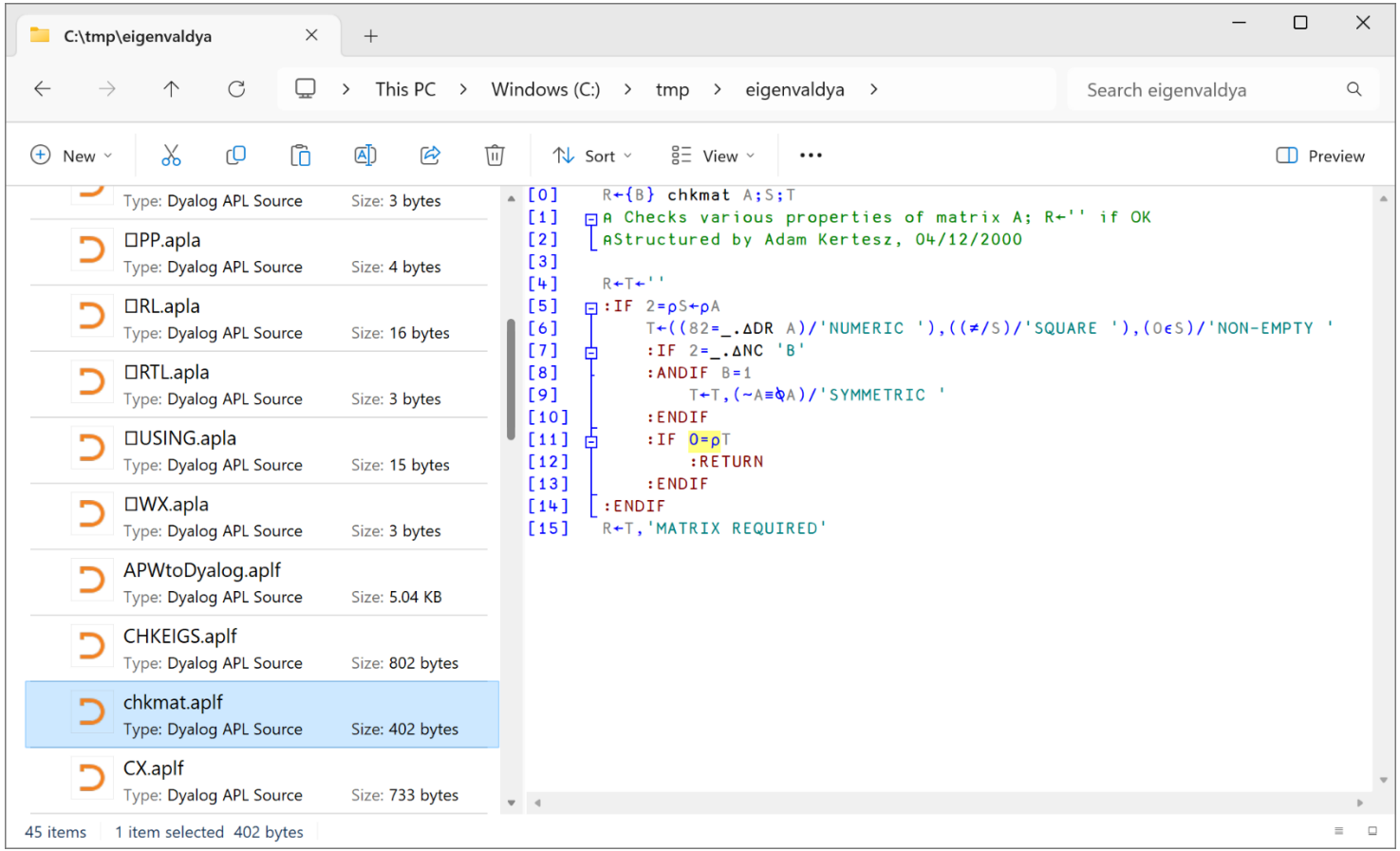
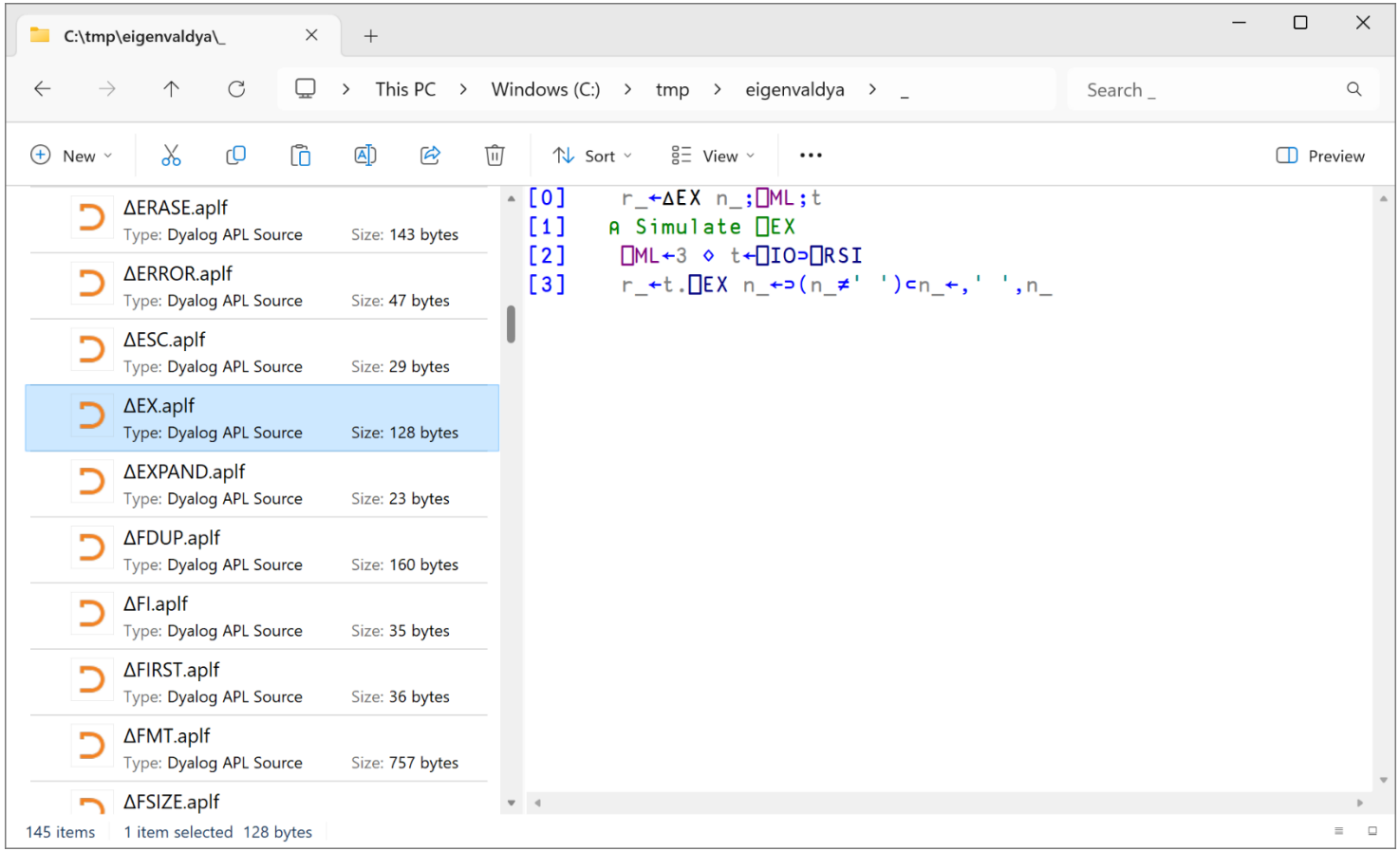
Obtain a brief description of each top-level function by entering
Explain 'fnname'. Run "Summary" for a synopsis of all of the functions in
the workspace.
Copyright 2005-2019, APLNow LLC.
∇
APWtoDyalog 'c:\tmp\eigenval'
Exported: 4 variables, 27 functions, and 5 system vars → "c:\tmp\eigenval/"
Ready
86
6
UNI

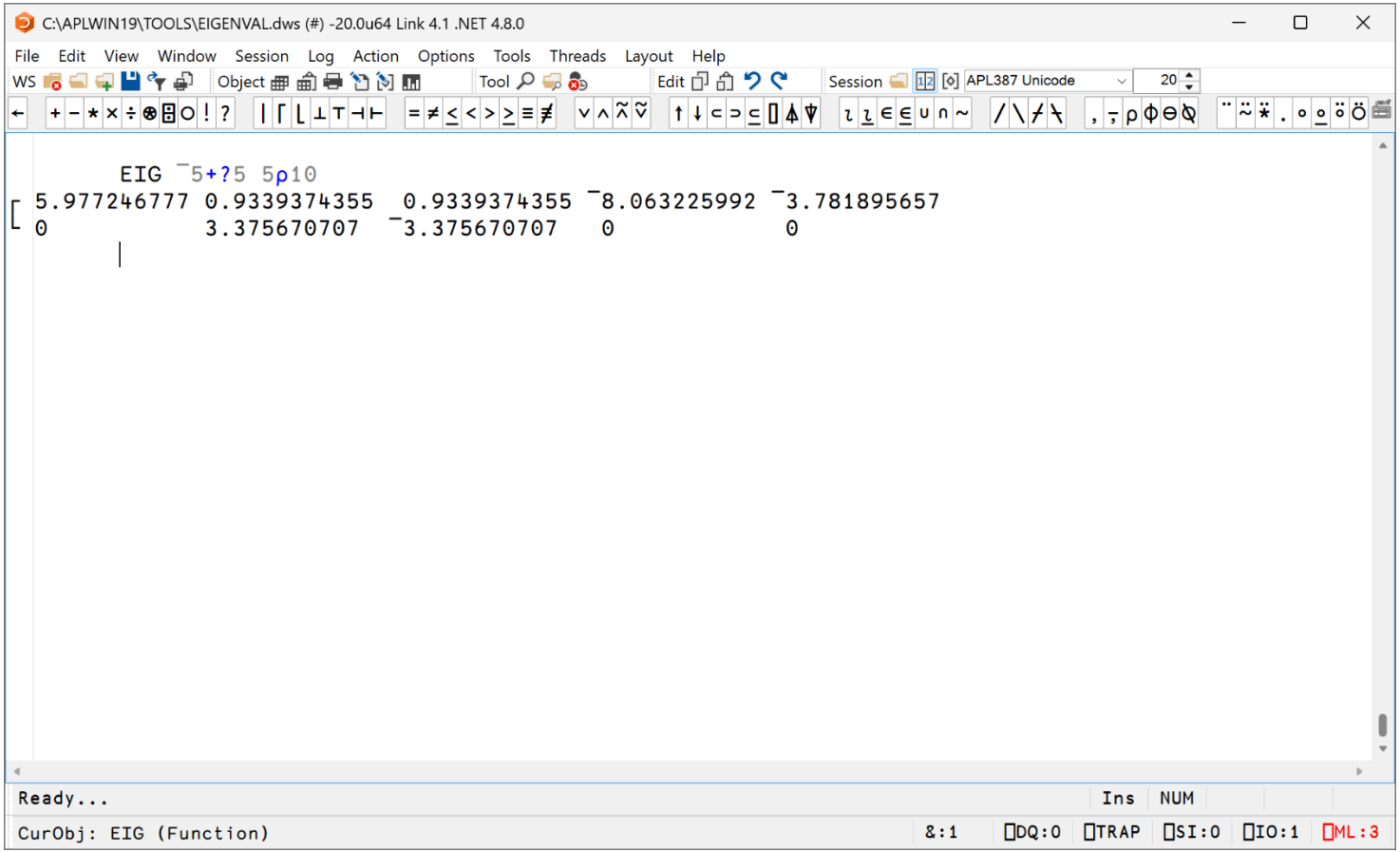

C:\tmp\eigenval
This PC
Windows (C:)
tmp
eigenval
Search eigenval
New
Sort
View
Preview
•CT.apla
Type: Dyalog APL Source
Size: 13 bytes
•IO.apla
Type: Dyalog APL Source
Size: 6 bytes
•LX.apla
Type: Dyalog APL Source
Size: 104 bytes
•PP.apla
Type: Dyalog APL Source
Size: 7 bytes
•WSID.apla
Type: Dyalog APL Source
Size: 91 bytes
APWtoDyalog.aplf
Type: Dyalog APL Source
Size: 4.95 KB
CHKEIGS.aplf
Type: Dyalog APL Source
Size: 782 bytes
chkmat.aplf
Type: Dyalog APL Source
Size: 379 bytes
CX.aplf
Type: Dyalog APL Source
Size: 704 bytes
cxCHK.aplf
36 items
1 item selected 379 bytes
[0] R←B chkmat A;S;T
[1] ⍝ Checks various properties of matrix A; R←'' if OK
[2] ⍝Structured by Adam Kertesz, 04/12/2000
[3]
[4] R←T←''
[5] :IF 2=⍴S←⍴A
[6] T←((82=⎕DR A)/'NUMERIC '),((≠/S)/'SQUARE '),(0∈S)/'NON-EMPTY '
[7] :IF 2=⎕NC 'B'
[8] :ANDIF B=1
[9] T←T,(~A≡⍉A)/'SYMMETRIC '
[10] :ENDIF
[11] :IF 0=⍴T
[12] :RETURN
[13] :ENDIF
[14] :ENDIF
[15] R←T,'MATRIX REQUIRED'

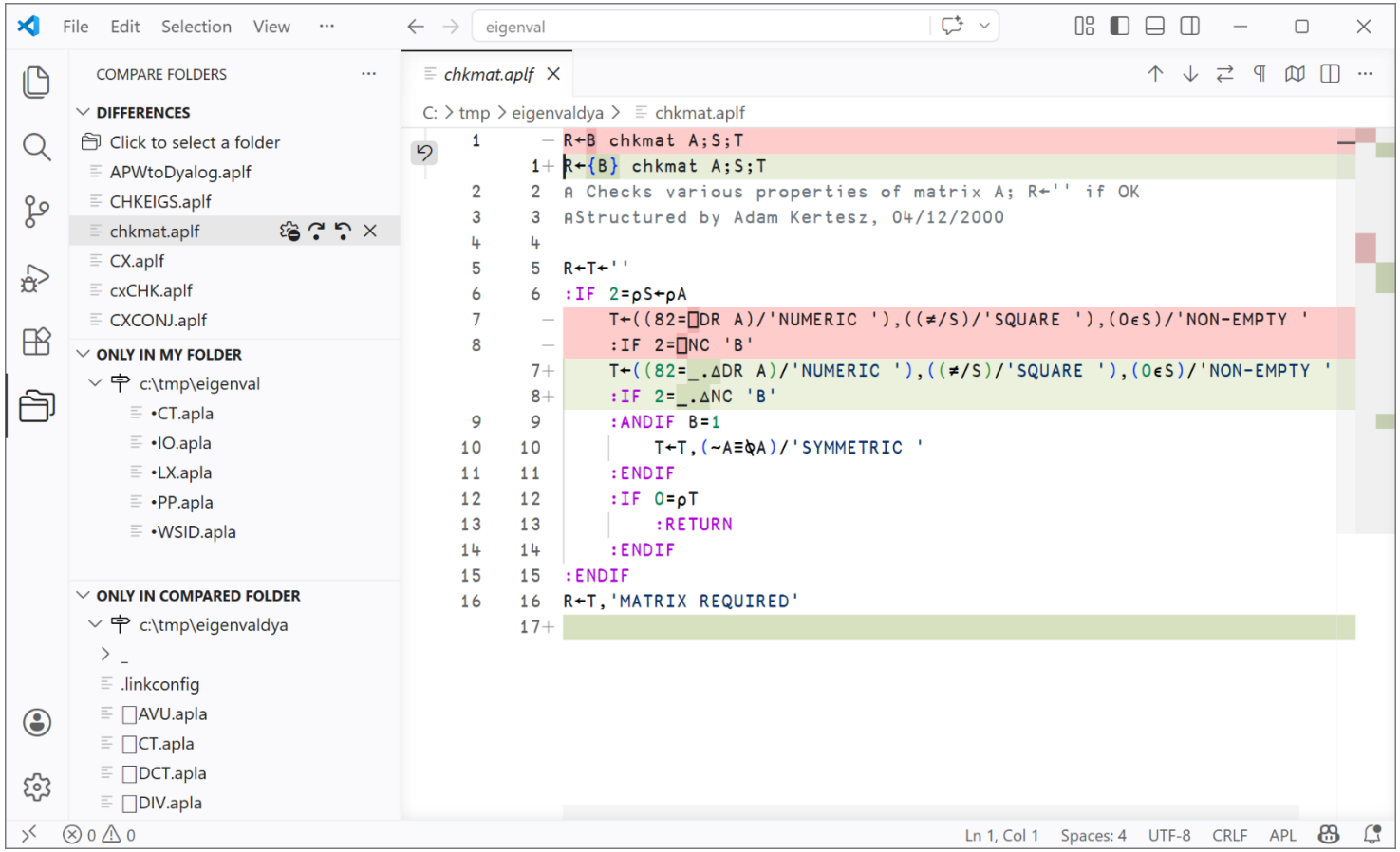

CLEAR WS (#) -20.0u64 Link 4.1 .NET 4.8.0
File Edit View Window Session Log Action Options Tools Threads Layout Help
WS Object Tool Edit Session APL387 Unicode 20
)clear
clear ws
]set cmddir ,c:\devt\migration
Ready... Ins NUM
CurObj: migration (Undefined) &:1 DQ:0 TRAP SI:0 IO:1 ML:1


C:\APLWIN19\TOOLS\EIGENVAL.dws (#) -20.0u64 Link 4.1 .NET 4.8.0
File Edit View Window Session Log Action Options Tools Threads Layout Help
WS Object Tool Edit Session APL387 Unicode 20
]APLPlusWin c:\tmp\eigenval -out=c:\tmp\eigenvaldya
Starting migrating: "c:\tmp\eigenval" → "c:\tmp\eigenvaldya" at 2026-04-27T09:39:34.920Z
Loaded: 141 replacement phrases from "c:\devt\migration\apw_replacements.txt"
Imported 9 source variables from "c:\tmp\eigenval" → #
Imported: 9 source functions from "c:\tmp\eigenval" → #
Replaced: 51 source phrases
Imported: 133 covers from "c:\devt\migration\covers" → #._
Exported: # → "c:\tmp\eigenvaldya"
Finished: Ran for 0.398 seconds until 2026-04-27T09:39:35.318Z
Ready... Ins NUM
CurObj: eigenvaldya (Undefined) &:1 DQ:0 TRAP SI:0 IO:1 ML:3


C:\tmp\eigenvaldya
This PC
Windows (C:)
tmp
eigenvaldya
Search eigenvaldya
New
Sort
View
Preview
Type: Dyalog APL Source Size: 3 bytes
⎕PP.apla
Type: Dyalog APL Source Size: 4 bytes
⎕RL.apla
Type: Dyalog APL Source Size: 16 bytes
⎕RTL.apla
Type: Dyalog APL Source Size: 3 bytes
⎕USING.apla
Type: Dyalog APL Source Size: 15 bytes
⎕WX.apla
Type: Dyalog APL Source Size: 3 bytes
APWtoDyalog.aplf
Type: Dyalog APL Source Size: 5.04 KB
CHKEIGS.aplf
Type: Dyalog APL Source Size: 802 bytes
chkmat.aplf
Type: Dyalog APL Source Size: 402 bytes
CX.aplf
Type: Dyalog APL Source Size: 733 bytes
45 items
1 item selected 402 bytes
[0] R←{B} chkmat A;S;T
[1] ⍝ Checks various properties of matrix A; R←'' if OK
[2] ⍝Structured by Adam Kertesz, 04/12/2000
[3]
[4] R←T←''
[5] :IF 2=⍴S←⍴A
[6] T←((82=⎕NC⊂'A')/'NUMERIC '),((≠/S)/'SQUARE '),(0∊S)/'NON-EMPTY '
[7] :IF 2=⎕NC 'B'
[8] :ANDIF B=1
[9] T←T,(~A≡⍉A)/'SYMMETRIC '
[10] :ENDIF
[11] :IF 0=⍴T
[12] :RETURN
[13] :ENDIF
[14] :ENDIF
[15] R←T,'MATRIX REQUIRED'


C:\tmp\eigenvaldya_
This PC
Windows (C:)
tmp
eigenvaldya
_
Search _
New
Sort
View
Preview
ΔERASE.aplf
Type: Dyalog APL Source
Size: 143 bytes
ΔERROR.aplf
Type: Dyalog APL Source
Size: 47 bytes
ΔESC.aplf
Type: Dyalog APL Source
Size: 29 bytes
ΔEX.aplf
Type: Dyalog APL Source
Size: 128 bytes
ΔEXPAND.aplf
Type: Dyalog APL Source
Size: 23 bytes
ΔFDUP.aplf
Type: Dyalog APL Source
Size: 160 bytes
ΔFI.aplf
Type: Dyalog APL Source
Size: 35 bytes
ΔFIRST.aplf
Type: Dyalog APL Source
Size: 36 bytes
ΔFMT.aplf
Type: Dyalog APL Source
Size: 757 bytes
ΔFSIZE.aplf
145 items
1 item selected 128 bytes
[0] r_←ΔEX n_;⎕ML;t
[1] ⍝ Simulate ⎕EX
[2] ⎕ML←3 ⋄ t←⎕IO↓⎕RSI
[3] r_←t.⎕EX n_←⊃(n_≠' ')⊂n_←,' ',n_


C:\APLWIN19\TOOLS\EIGENVAL.dws (#) -20.0u64 Link 4.1 .NET 4.8.0
File Edit View Window Session Log Action Options Tools Threads Layout Help
WS Object Tool Edit Session APL387 Unicode 20
EIG ¯5+?5 5⍴10
5.977246777 0.9339374355 0.9339374355 ¯8.063225992 ¯3.781895657
0 3.375670707 ¯3.375670707 0 0
Ready... Ins NUM
CurObj: EIG (Function) &:1 DQ:0 TRAP SI:0 IO:1 ML:3


File Edit Selection View
eigenval
COMPARE FOLDERS
DIFFERENCES
Click to select a folder
APWtoDyalog.aplf
CHKEIGS.aplf
chkmat.aplf
CX.aplf
cxCHK.aplf
CXCONJ.aplf
ONLY IN MY FOLDER
c:\tmp\eigenval
•CT.apla
•IO.apla
•LX.apla
•PP.apla
•WSID.apla
ONLY IN COMPARED FOLDER
c:\tmp\eigenvaldya
.linkconfig
AVU.apla
CT.apla
DCT.apla
DIV.apla
chkmat.aplf
C: > tmp > eigenvaldya > chkmat.aplf
R←B chkmat A;S;T
R←{B} chkmat A;S;T
⍝ Checks various properties of matrix A; R←'' if OK
⍝Structured by Adam Kertesz, 04/12/2000
R←T←''
:IF 2=⍴S←⍴A
T←((82=⎕DR A)/'NUMERIC '),((≠/S)/'SQUARE '),(0∈S)/'NON-EMPTY '
:IF 2=⎕NC 'B'
T←((82=_.⍙DR A)/'NUMERIC '),((≠/S)/'SQUARE '),(0∈S)/'NON-EMPTY '
:IF 2=_.⍙NC 'B'
:ANDIF B=1
T←T,(~A≡⍉A)/'SYMMETRIC '
:ENDIF
:IF 0=⍴T
:RETURN
:ENDIF
:ENDIF
R←T,'MATRIX REQUIRED'
Ln 1, Col 1 Spaces: 4 UTF-8 CRLF APL

README MIT license

Eigen

Monadic function `Eigen` takes an n×n real or complex matrix and returns an (n+1)×n result of Eigen: `Values⍪⍉↑Vectors`:

```
┌─┬─┬─┬─┐
│ v a l u e s │ ── Eigen values
├─┼─┼─┼─┤
│ v │ v │ v │ v │ ┐
├ e ┼ e ┼ e ┼ e ┤ │
│ c │ c │ c │ c │ │
├ t ┼ t ┼ t ┼ t ┤ ├─ Eigen vectors.
│ o │ o │ o │ o │ │
├ r ┼ r ┼ r ┼ r ┤ │
│ │ │ │ │ ┘
└─┴─┴─┴─┘
```

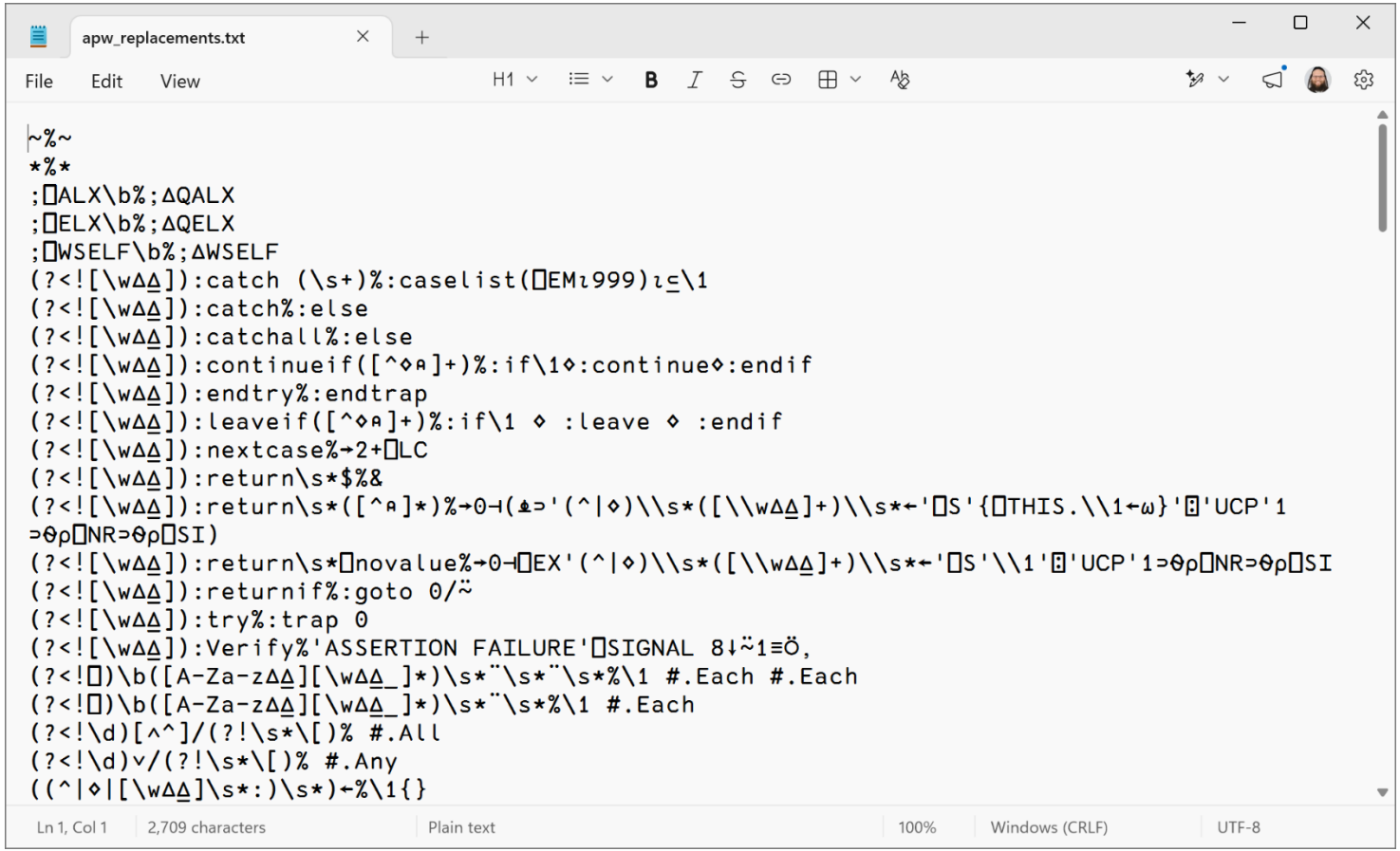
`Eigen` has been constructed from LAPACK (Linear Algebra Package) double- precision C functions which are available as source code from www.netlib.org/lapack

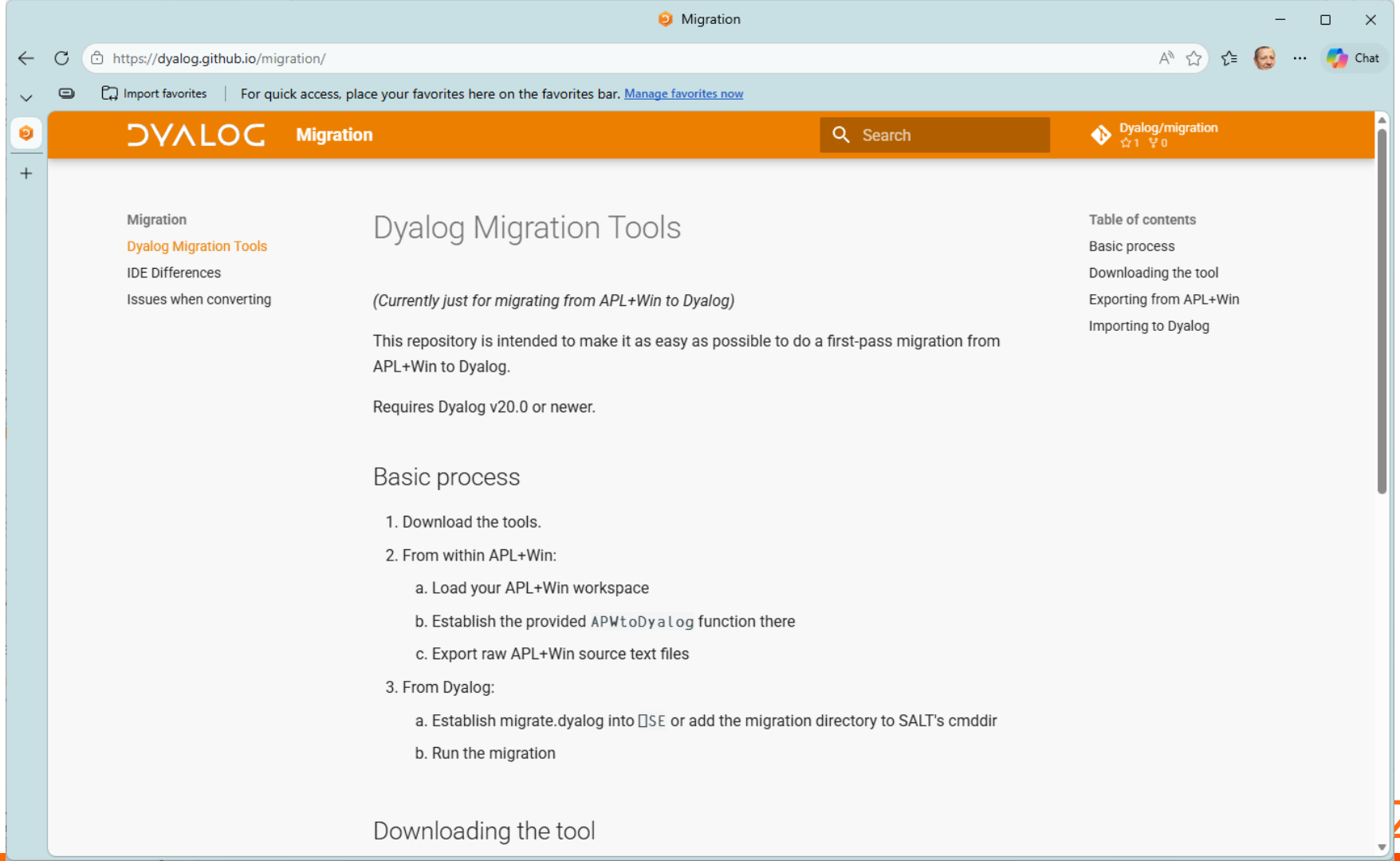
LAPACK.DLL contains these C functions. They can all be called individually through `⎕NA`. You need to examining each function's parameters in the corresponding *.C file (downloaded from the internet) in order to correctly specify their result and argument types.

For example, look at the `⎕NA` call for `dgeev_` in `Eigen`. Compare this with the parameters specified in file DGEEV.C. All the other double-precision real and complex LAPACK functions can be called in this way using `⎕NA`.

Trace the following line in order to see `Eigen` in action:

```
test.eigen    ⍝ run and trace 10 times
```


apw_replacements.txt
File
Edit
View
H1
~%~
%
;⍞ALX\b%;ΔQALX
;⍞ELX\b%;ΔQELX
;⍞WSELF\b%;ΔWSELF
(?<![\wΔ∆]):catch (\s+)%:caselist(⍞EM⍳999)⍳⊂\1
(?<![\wΔ∆]):catch%:else
(?<![\wΔ∆]):catchall%:else
(?<![\wΔ∆]):continueif([^◇⍝]+)%:if\1◇:continue◇:endif
(?<![\wΔ∆]):endtry%:endtrap
(?<![\wΔ∆]):leaveif([^◇⍝]+)%:if\1 ◇ :leave ◇ :endif
(?<![\wΔ∆]):nextcase%→2+⍞LC
(?<![\wΔ∆]):return\s*$%&
(?<![\wΔ∆]):return\s*([^⍝]*)%→0⊣(⍎⊃'(^|◇)\\s*([\\wΔ∆]+)\\s*←'⍞S'{⍞THIS.\\1←⍵}'⍰'UCP'1
⊃⍬⍴⍞NR⊃⍬⍴⍞SI)
(?<![\wΔ∆]):return\s*⍞novalue%→0⊣⍞EX'(^|◇)\\s*([\\wΔ∆]+)\\s*←'⍞S'\\1'⍰'UCP'1⊃⍬⍴⍞NR⊃⍬⍴⍞SI
(?<![\wΔ∆]):returnif%:goto 0/⍨
(?<![\wΔ∆]):try%:trap 0
(?<![\wΔ∆]):Verify%'ASSERTION FAILURE'⍞SIGNAL 8↓⍨1≡Ö,
(?<!⍞)\b([A-Za-zΔ∆][\wΔ∆_]*)\s*¨\s*¨\s*%\1 #.Each #.Each
(?<!⍞)\b([A-Za-zΔ∆][\wΔ∆_]*)\s*¨\s*%\1 #.Each
(?<!\d)[^^]/(?!\s*\[)% #.All
(?<!\d)⍣/(?!\s*\[)% #.Any
((^|◇|[\wΔ∆]\s*:)\s*)←%\1{}
Ln 1, Col 1
2,709 characters
Plain text
100%
Windows (CRLF)
UTF-8


Migration
https://dyalog.github.io/migration/
Import favorites
For quick access, place your favorites here on the favorites bar. Manage favorites now
Chat
DYALOG
Migration
Search
Dyalog/migration
1
0
Migration
Dyalog Migration Tools
IDE Differences
Issues when converting
Dyalog Migration Tools
(Currently just for migrating from APL+Win to Dyalog)
This repository is intended to make it as easy as possible to do a first-pass migration from APL+Win to Dyalog.
Requires Dyalog v20.0 or newer.
Table of contents
Basic process
Downloading the tool
Exporting from APL+Win
Importing to Dyalog
Basic process
1. Download the tools.
2. From within APL+Win:
a. Load your APL+Win workspace
b. Establish the provided APWtoDyalog function there
c. Export raw APL+Win source text files
3. From Dyalog:
a. Establish migrate.dyalog into ⎕SE or add the migration directory to SALT's cmddir
b. Run the migration
Downloading the tool

Issues when converting

From APL+Win to Dyalog APL

Primitives and syntax

- For `(a a)←1 2` APL+Win sets `a←1` but Dyalog sets `a←2`. This is hard to fix, but probably a rare occurrence.
- If both arguments are empty `,` and `⍪` return their left argument in Dyalog but their right argument in APL+Win
- `"`-delimited character constants can be automatically transformed to use `'` quotes but `⍎` will fail on a `'`-delimited expression that contains `"`-delimited text.
- Pass-though value of modified assignment is the expression on the left in APL+Win but the expression on the right in Dyalog.

System constants

- `⎕SYSVER` looks at the executable timestamp, but the interpreter does actually know when it was created, as shown in the About box
- `⎕SINL` cannot be modelled, but is unlikely to appear in code; use `)SINL`.

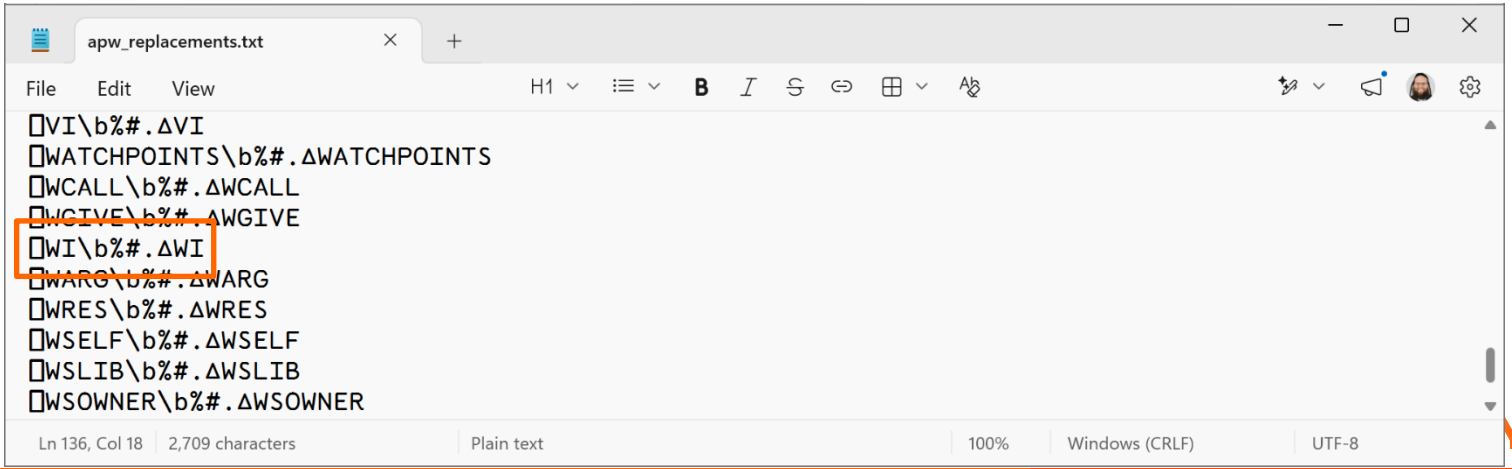
System variables

Status of Code Migration Tool

- Open-source GitHub repo dyalog/migration
- Still a prototype, much more work to follow
  - Only support for APL+Win – APL2 to come
- Pull Requests welcome!

Graphical User Interfaces

- We have an emulator for GDDM / AP126
  - Generates HTML/svg
- And a "∆WI" emulator for APL+Win GUI



Graphical User Interfaces

- We have an emulator for GDDM / AP126
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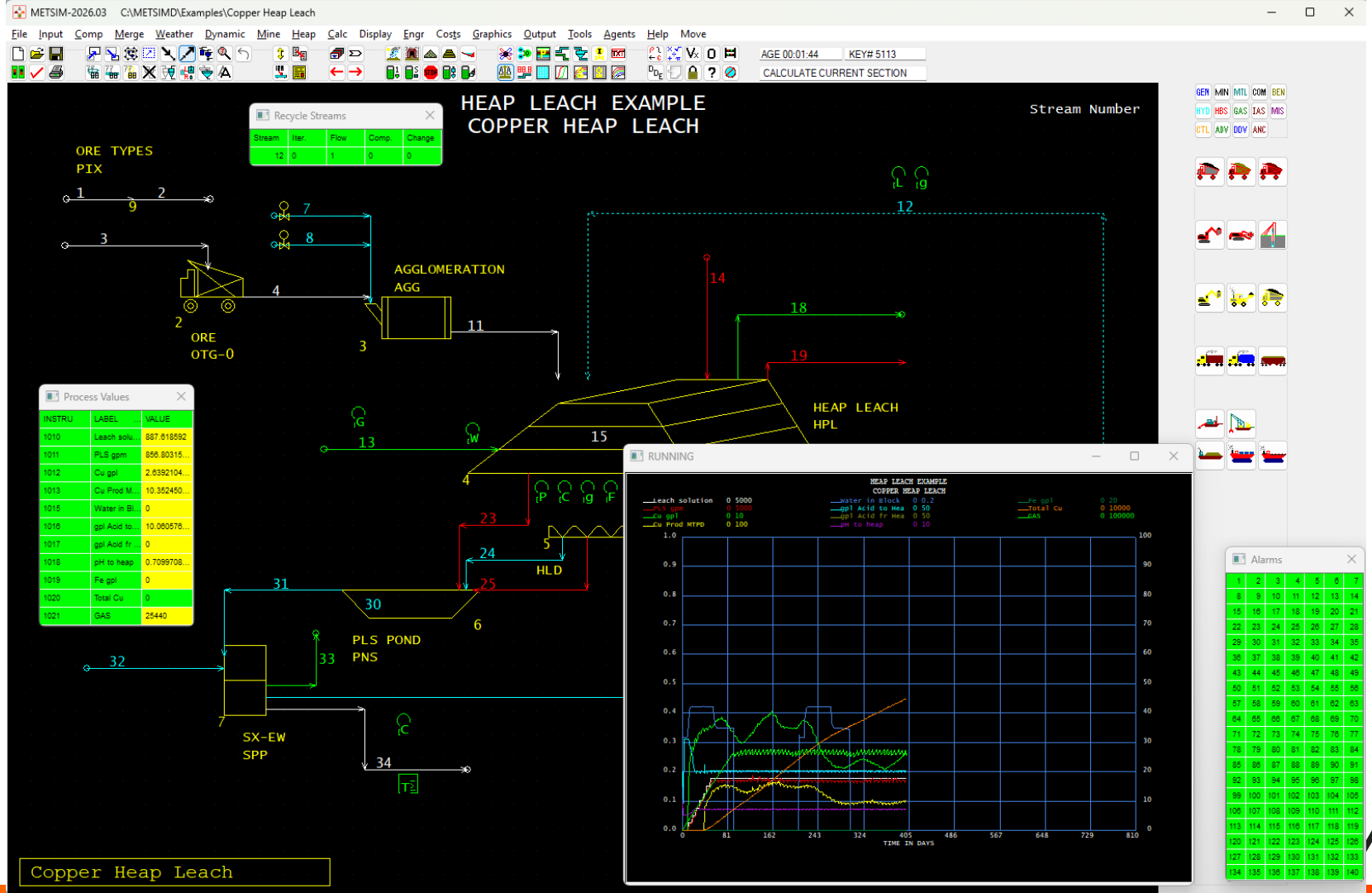
- And a "ΔWI" emulator for APL+Win GUI
  1. A prototype, successfully used for METSIM®


METSIM-2026.03 C:\METSIMD\Examples\Copper Heap Leach
File Input Comp Merge Weather Dynamic Mine Heap Calc Display Engr Costs Graphics Output Tools Agents Help Move
AGE 00:01:44 KEY# 5113
CALCULATE CURRENT SECTION
Recycle Streams
Stream Iter. Flow Comp. Change
12 0 1 0 0
HEAP LEACH EXAMPLE
COPPER HEAP LEACH
Stream Number
ORE TYPES
PIX
AGGLOMERATION
AGG
ORE
OTG-0
HEAP LEACH
HPL
HLD
PLS POND
PNS
SX-EW
SPP
Process Values
INSTRU LABEL VALUE
1010 Leach solu... 887.618592
1011 PLS gpm 856.80315...
1012 Cu gpl 2.6392104...
1013 Cu Prod M... 10.352450...
1015 Water in Bl... 0
1016 gpl Acid to... 10.060576...
1017 gpl Acid fr ... 0
1018 pH to heap 0.7099708...
1019 Fe gpl 0
1020 Total Cu 0
1021 GAS 25440
RUNNING
HEAP LEACH EXAMPLE
COPPER HEAP LEACH
TIME IN DAYS
Alarms
Copper Heap Leach

Graphical User Interfaces

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Graphical User Interfaces

- We have an emulator for GDDM / AP126
  - Generates HTML/svg
- And a "ΔWI" emulator for APL+Win GUI
  1. A prototype, successfully used for METSIM®
  2. A re-implementation by Davin Church – known as "deltaWI".

DeltaWI Goals

- Same syntax and usage as ⎕WI with behavior matching APL+Win (and APLX)
- Allow maintaining applications in the APL+Win style after porting
- Many extensions, including Dyalog controls, are being considered
- Windows-only, but portability planned for future

DeltaWI Progress

16 classes supported:
"Simple Applications"

System (#)	List
Button	Listview
Check	Option
Combo	Page
Edit	RichEdit
Form	Selector
Frame	Tree
Label	Spinner

So far:

244 Methods
516 Properties
236 Events

996 Total

Expected this year:
"Meaningful Applications"

CommandBar	ImageList
DateTime	Picture
MDIForm	Printer
Menu	Timer
Progress	
Scroll	
Status	
TrackBar	

(Some uncommonly used features are not yet implemented)

C:\Users\mkrom\AppData\Local\Microsoft\Windows\INetCache\Content.Outlook\SE4Y1CFT\Demo.aplf

File Edit View Help

Search...

```
[0]     Demo;states;⍙WSELF
[1]     '#'⍙WI'Reset'
[2]     ⍙WSELF←'f'⍙WI'New' 'Form'('size' 23 80)('caption' 'Demo')
[3]     ⍙WSELF←':lN'⍙WI'New' 'Label'('where' 1 1 1 15)('caption' 'Name:')
[4]     ⍙WSELF←':eN'⍙WI'New' 'Edit'('where' 0.75 20 1.5 15)('text' 'Davin Church')
[5]     ⍙WSELF←':lA'⍙WI'New' 'Label'('where' 3 1 1 15)('caption' 'Address:')
[6]     ⍙WSELF←':eA'⍙WI'New' 'Edit'('where' 2.75 20 1.5 25)('text' '12345 Anywhere Way')
[7]     ⍙WSELF←':lS'⍙WI'New' 'Label'('where' 5 1 1 15)('caption' 'State:')
[8]     states←↓50 2⍴'ALAKAZARCACOCTDEFLGAHIIDILINIAKSKYLAMEMDMAMIMNMSMOMTNENVNHNJNMNYNCNDOHOKORPARISCSDTNTXUTVTVAWAWVWIWY'
[9]     ⍙WSELF←':cS'⍙WI'New' 'Combo'('where' 4.75 20 10 5)('list'states)('value' 43)
[10]    ⍙WSELF←':lP'⍙WI'New' 'Label'('where' 7 1 1 15)('caption' 'Phone #:')
[11]    ⍙WSELF←':eP'⍙WI'New' 'Edit'('where' 6.75 20 1.5 10)('text' '(123)456-7890')
[12]    ⍙WSELF←':fG'⍙WI'New' 'Frame'('where' 1 50 3.5 15)('caption' 'Gender')
[13]    ⍙WSELF←'.oM'⍙WI'New' 'Option'('where' 1 1 1 10)('caption' 'Male')('value' 1)
[14]    ⍙WSELF←'..oF'⍙WI'New' 'Option'('where' 2 1 1 10)('caption' 'Female')
[15]    ⍙WSELF←':lC'⍙WI'New' 'List'('where' 5 50 15 25)('list'('#'⍙WI'classes'))('value' 10)
[16]    ⍙WSELF←':x'⍙WI'New' 'Label'('where' 9 1 1 15)('caption' 'Languages:')
[17]    ⍙WSELF←':x1'⍙WI'New' 'Check'('where' 9 20 1 15)('caption' 'APL')('value' 1)
[18]    ⍙WSELF←':x2'⍙WI'New' 'Check'('where' 10 20 1 15)('caption' 'Java')('value' 0)
[19]    ⍙WSELF←':bOk'⍙WI'New' 'Button'('where' 19 1 1.5 10)('caption' 'Ok')('style' 1)
[20]    ⍙WSELF←':bCn'⍙WI'New' 'Button'('where' 19 15 1.5 10)('caption' 'Cancel')('style' 2)
```

Function | Last saved by: | Pos: 0/21,1

C:\Users\mkrom\AppData\Local\Microsoft\Windows\INetCache\Content.Outlook\SE4Y1CFT\Demo.aplf

File Edit View Help

Search...

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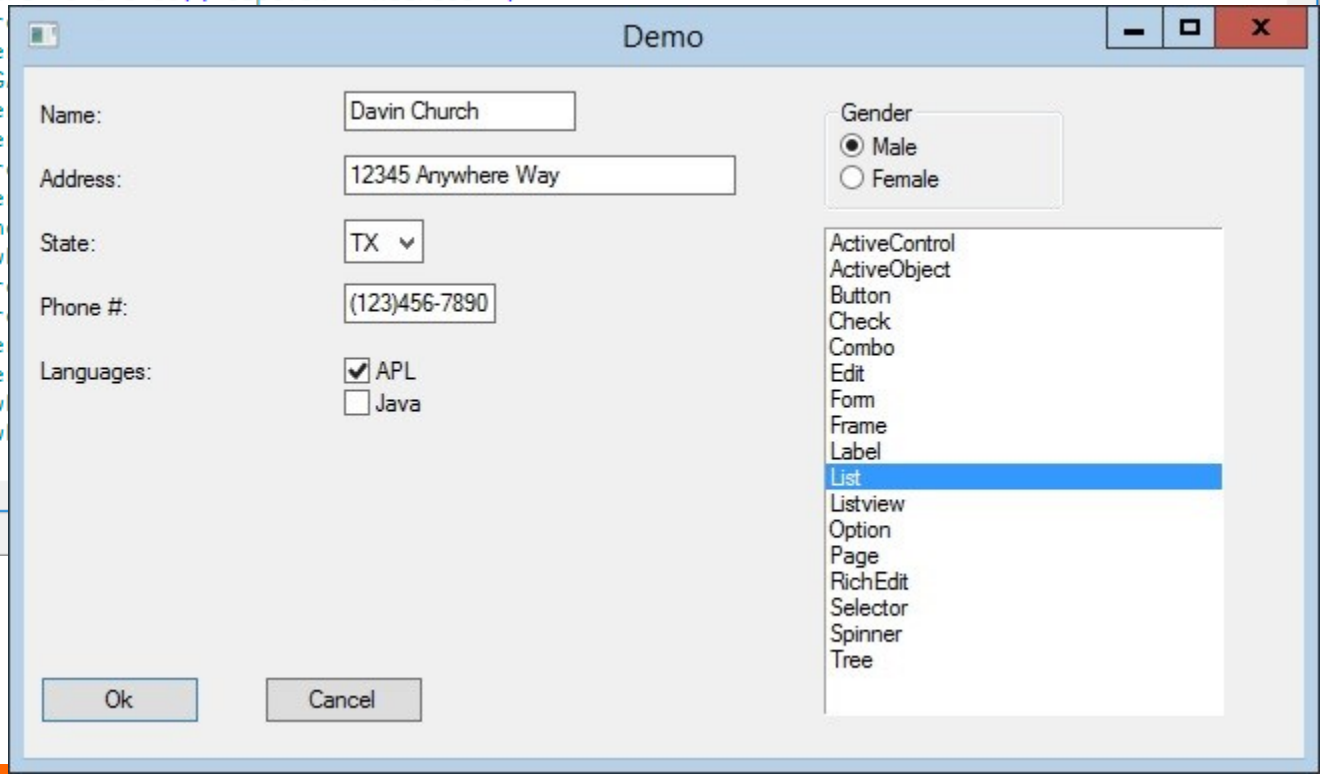
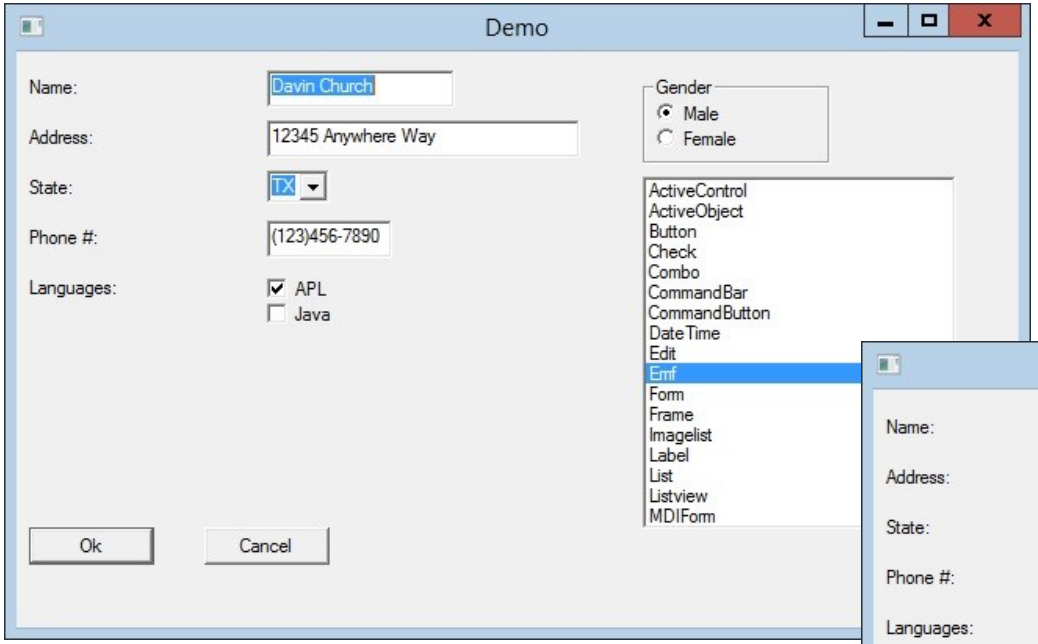
[3]     ⍙WSELF←':lN'⍙WI'New' 'Label'('where' 1 1 1 15)('caption' 'Name:')
[4]     ⍙WSELF←':eN'⍙WI'New' 'Edit'('where' 0.75 20 1.5 15)('text' 'Davin Church')
[5]     ⍙WSELF←':lA'⍙WI'New' 'Label'('where' 3 1 1 15)('caption' 'Address:')
[6]     ⍙WSELF←':eA'⍙WI'New' 'Edit'('wher
[7]     ⍙WSELF←':lS'⍙WI'New' 'Label'('whe
[8]     states←↓50 2⍴'ALAKAZARCACOCTDEFLG
[9]     ⍙WSELF←':cS'⍙WI'New' 'Combo'('whe
[10]    ⍙WSELF←':lP'⍙WI'New' 'Label'('whe
[11]    ⍙WSELF←':eP'⍙WI'New' 'Edit'('wher
[12]    ⍙WSELF←':fG'⍙WI'New' 'Frame'('whe
[13]    ⍙WSELF←'.oM'⍙WI'New' 'Option'('wh
[14]    ⍙WSELF←'..oF'⍙WI'New' 'Option'('w
[15]    ⍙WSELF←':lC'⍙WI'New' 'List'('wher
[16]    ⍙WSELF←':x'⍙WI'New' 'Label'('wher
[17]    ⍙WSELF←':x1'⍙WI'New' 'Check'('whe
[18]    ⍙WSELF←':x2'⍙WI'New' 'Check'('whe
[19]    ⍙WSELF←':bOk'⍙WI'New' 'Button'('w
[20]    ⍙WSELF←':bCn'⍙WI'New' 'Button'('w
```

Function | Last saved by:

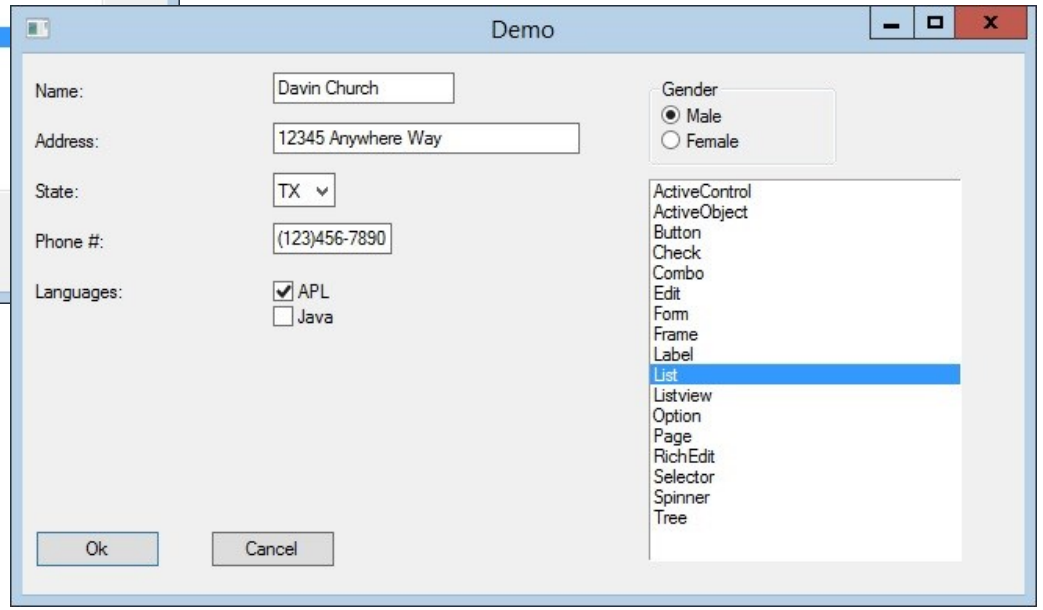




Original

Emulation

(NB: XPLookAndFeel=1)



DeltaWI Implementation

- Source code is currently on GitHub at:
  https://github.com/DavinChurch/DeltaWI
  - Feel free to review code or submit contributions
- Design document available upon request
- All free and open source (but will be supported)

Data

- We have tools to support binary transfer of data in batch or real time between APL systems
- Will be published, also free and open-source
  - (will require a valid APL+Win licence)

Summary

- dyalog/migration available now from GitHub
  - Will be bundled with future Dyalog versions
- deltaWI rewrite available from yearend
  - Testers welcome
  - An EWC-based version (possibly with more restrictions) is possible but not currently scheduled
- More work to do on documenting and resolving language differences
  - Static Analysis may come in handy for the really tricky (but fortunately really rare) bits