APL and Microsoft Excel

Richard Park
APL is great, why this?
APL is great, why this?
Microsoft Excel still commonly used
  Data entry
  Processing
  Graphics
  ... + much more
So why APL again?
So why APL again?

- Great for data processing
- Especially arrays (duh!)
- Spreadsheets are arrays
So why APL again?

- Great for data processing
- Especially arrays (duh!)
- Spreadsheets are arrays
So why APL again?

Great for data processing

Especially arrays (duh!)

Spreadsheets are arrays
Modes of Operation

Using Microsoft Excel Files (.xls .xlsx)
- Read Excel Files with Dyalog
- Write Excel Files with Dyalog

Dyalog & Excel inter-processing
- Dyalog as Client
- Dyalog as Server
Using Microsoft Excel Files

Acquiring data from

- The internet
- Databases
- Files
- Computations
- Etc...
Using Microsoft Excel Files

Acquiring data from

- Microsoft Excel!
Using Microsoft Excel Files

Acquiring data from

➢ Microsoft Excel!

https://github.com/the-carlisle-group/XL2APL
Excel Objects

COM: Component Object Model

Collection of workbooks: object

Workbook: object

Sheet: object

Range: object
Excel Objects
COM: Component Object Model
OLE: Object Linking and Embedding
Modes of Operation

Dyalog as Client

Control Microsoft Excel from inside the Dyalog session
Modes of Operation

Dyalog as Server

Write functions and macros as in APL!
Carlisle group:  APL2XL
XL2APL

https://github.com/rikedyp/ [APL2XL, XL2APL]
Documentation & Tutorials
Microsoft Windows-Specific Documentation

These documents are specific to running Dyalog on the Microsoft Windows operating system.

- Dyalog for Microsoft Windows Installation and Configuration Guide (summary)
- Dyalog for Microsoft Windows UI Guide (summary)
- Dyalog for Microsoft Windows Object Reference Guide (summary)
- Dyalog for Microsoft Windows Interfaces Guide (summary)
- Comparison of .NET Framework/Core Interfaces
Charting the APL/Excel Waters
Using Excel and other Applications with Dyalog APL

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Upcoming webinars

4 June 2020
BAA webinar: Paul Grosvenor (BAA Chairman) hosts the British APL Association AGM (15:00 UTC)

11 June 2020
Dyalog webinar: Adám presents Language Features of Dyalog version 18.0 in Depth (part 2) (15:00 UTC)