

# Cross-platform File Functions

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DYALOG

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# Overview

- File portability between platforms
  - Windows, and UNIX<sup>®</sup>, Linux, OS X
- Why now?
  - Code repositories
  - Raspberry Pi and OS X
- Part A: Dyalog files
- Part B: User files



# History

- Dyalog originally on UNIX systems
- Different hardware platforms but workspace portability from the outset
- File extensions not significant to OS
- Windows: another hardware platform with many differences...
- ... including filename extensions



# 14.0 Demo



# Cross-platform, up to V14.0

- Workspaces are portable between platforms
- Windows filename extensions are dealt with largely transparently
- Great for moving to a new platform
- File name differences not so well suited to code sharing – now a "must have"
- 14.1 started to address that



# 14.1 demo



# Cross platform, in V14.1

- Started to deal with inconsistencies in file naming
- Workspace naming only
- Configurable using WSEXT



# 15.0 and beyond

- Extend to all Dyalog file types?
- Extensions by default on all platforms?





# File system access

- Native files
- □SH 'ls \*.txt'
- □CMD 'mkdir \tmp\APLtemp'
- □NA



# 15.0 demo



# Portable file functions – 15.0

- APL functions to access host file system
  - Parse and "normalise" filenames
  - Delete files
  - Create and delete directories
  - Obtain file and directory properties
  - Selectively list directory contents



# Portable file functions – 15.0

- Still being designed
- Portable between platforms
  - Consistent syntax
  - Consistent naming (slashes, globbing)
  - Consistent result format



# Summary

- Cross-platform file extensions
  - .DWS vs no file extension, etc.
- Portable file functions
  - `FILEPARTS`, `MKDIR`, `DEL`, `DIR`

