

Using Some of those Nifty New Features You Might Have Missed

John Tuohy
DISD 2018
March 2018

So why this talk?

- New versions of DataFlex are released on a regular basis
- Releases often add major new capabilities such as the new web application framework, the mobile web application framework and managed connections. Those we remember
- While these big features get a lot of attention, new releases also include incremental enhancements. Those we may forget about.
- After a while these small improvements start to add up! They are worth a review
- Remember:
 - Not everyone is up to the latest version
 - And even if you are, you may not be using the latest features

The review

- This will be a quick review. We have a lot of items to show and not much time
- So what nifty features have you forgotten about?
- Let's see



DDs just keep getting better

- Local DD Relationships (17.0)
- SQL DD Filters (18.0)
- Better handling of deleted records in views (18.1)
 - FindByRowIdEx (18.1)
- Performance
 - DD buffer much faster (18.1)
 - Attach faster (18.1)
 - Smart-Relates make relates faster (18.2)
 - Extended Fields use less memory (18.1)
- Far more control over cascade deletes (18.1)
- Constraint Improvements (18.0)
 - RebuildAllConstraints (18.2)
- Null parent support (17.0)
- Pre find/Post find events (17.0)
- DD Remember (17.0)
- Committed Records (17.0)



DD_Debugger (the DD Inspector)

DD_Debugger let's you inspect your DDOs at runtime. Some developers can't live without it, others forget it's there

- DD SQL filters and constraint info (18.0)
- Web Version (18.2)



New Language and class capabilities

- Many new date, datetime and time functions (18.2)
 - e.g., DateSet(), DateAddDay()
- RefTable added to the other RefXxxx functions commands (18.2)
 - In addition to, RefClass(), RefProc(), etc.
- Many new Array Functions (18.1)
 - e.g., IsSameArray(), InsertInArray(), InsertInArray(), extended array search
- Base64 Encoding (17.1)
- Character Encoding (18.0 on up)
 - cCharTranslate adds over 20 functions to convert character encoding
- Http support for any verb (18.1)
 - Can't do REST services without it

UChar Array improvements

- Major changes added to 18.1
 - Used to bypass string length limitations
 - Read and write to table columns
 - Read and write to sequential files
 - DDs use them for large columns
 - New functions convert between strings and UChar array types
- Later today you will see how they are used with JSON



Table and SQL Enhancements

- Long Table and Columns names (17.0)
- SQL Connectivity
 - PKs support (18.1)
 - Clustered indexes (18.1)
 - GUID support (18.1)
 - Azure (18.1)
 - Large data handling (18.1)
 - Client cache tuning makes it faster (18.1)
 - Auto reconnect (17.1)
 - Embedded SQL: Fetching data is faster (18.0)
 - Embedded SQL: New fetch to array functions (18.0)
SQLFetchRowValues and SQLFetchResultSetValues



Windows Framework Improvements

- Sometimes it seems like we focus all of our attention on web applications and the new web framework. We haven't forgotten about Windows. Here's a few.
- Font Appearance and scaling (17.0 & 19.0)
- Controls
 - dbParentCombo (18.2)
 - dbSuggestionList (18.0)
 - New button capabilities (18.0)
- Views can be modal or modeless (18.0)



Client SOAP Web Services

- Client web services are improved with each release making it easier to consume web-services
- Major changes in 18.0
 - Null and Nillable data type support
 - SOAP 1.2 Support (17.1)
 - Lots more – hard to explain. The more current you version, the more likely your service will work (or work more easily)



Studio and Debugger Goodies

- Table Viewer (18.0)
- Table Explorer filtering (18.0)
- Table Editor: Native SQL Column Editing (18.1)
- Find in Files is better (18.0 and up)
 - Find results toolbar, better directory/file search, whole word search,
- Smart Todo support (17.0)
- Drag and Drop from Class Palette in source mode (17.1)
- WebApp previewer so much better it's a designer now (18.1 and up)
- Pre-compile / Post-compile (18.2)
- Debugger: Much faster debugging (18.1)
- Debugger: Add to Watch (18.1)



The virtues of being up to date

- There is a big overhead in constantly updating to the latest
 - Trust us on this one – we *feel* your pain
- You can always fall back to “If it’s not broke, don’t fix it”
 - This strategy is no longer viable in the 21st Century
- Keep your DataFlex applications up to date
 - You get all these nifty new features
 - We will keep your application working in an ever changing environment
 - We can’t help you, if you won’t help yourself
 - When 64-bit / Unicode DataFlex is here, will you be ready?

Some of my personal indispensables

- Here are a few Studio development features I use all the time. YMMV
 - Goto Definition
 - Pop Quick Mark (and Push Ctrl+Shift+Q))
 - Code Sense (ctrl-J and ctrl-space)
 - Quick Open tool bar
 - Open Windows Explorer
 - Starting Browser (or not) for WebApp
 - Adding Run current project to the Tools menu
 - Ctrl+F7 in Studio
 - Run multiple Studio instances
 - Debug - Set Next Instruction
 - Debug - Change variable values



That's all for now

I do hope you learned or relearned something