



DataFlex 18.x Overview

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Timeline

- It may seem like it's been around for a long time, but DataFlex 18.x is only 18 months old...
 - August 2014 – 18.0
 - July 2015 – 18.1
 - February 2016 – 18.2



Major Areas of Development

- Rebranding
- Connectivity
- Studio
- Wizards and Templates
- Windows Framework
- Web Framework
- Data Dictionaries
- Character Encoding
- Mobile / Touch Style
- Web Services
- Deleted Record Handling
- Base System
- Documentation
- Suggestions and Bugs

Rebranding

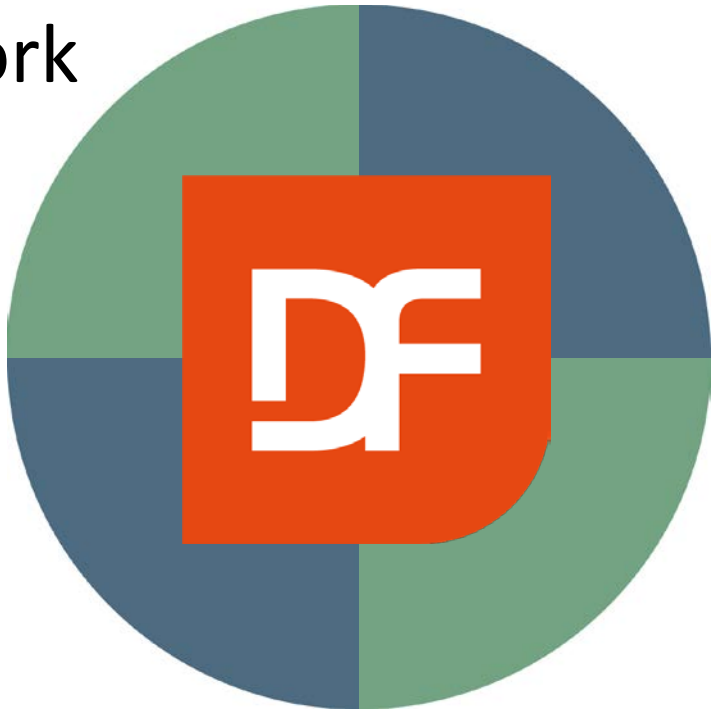
- DataFlex 18.x progresses our vision of a single, complete, high-productivity software platform for developing and deploying Window, Web and Mobile business applications.



DataFlex – Core and Frameworks

Web Framework
Desktop Style

Web Framework
Mobile/Touch
Style



Web Services

Windows
Framework

Connectivity

- DD Support for SQL Filters
- Full modeling of the extended native datatype support in the 6.x drivers
- Improved Embedded SQL interface and performance
- Primary Keys and Clustered Indexes
- SQL Identity Columns
- GUID Columns
- Wizards support Primary Keys and are easier to use
- SQL Azure

Connectivity

- Preserve Triggers and Foreign Keys on Restructure
- Change in Client Cache Timeout Default improves performance
- Improved Large Data Handling via UChar Array support
- DD internal field buffer optimizations (faster finds)
- DD Support for smart relates (faster finds)
- Suggestions and bug fixes

Studio

- Table Viewer
- Table Editor
- Table Explorer Filtering
- WebApp Previewer / Designer
- Class Palette Filtering and Grouping
- Find in Files
- Better control over Web applications
- Message Tracing
- Improved Templates (captions)

Studio

- Workspace Explorer
- Context Menus
- More seamless debugging
- Improved Dashboard
- Improved Migration
- More Configurable (including pre & post compile)
- Faster Performance (Debugger and Web Designer)
- JavaScript sub-classing in the Designer
- Suggestions and Bug Fixes

Wizards & Templates

- Connecting to existing data
- Data Conversion
- Projects
- Views of all types (especially the Mobile/Touch Style)

Windows Framework

- Button, Split Button and Command Link Buttons
- Improved control over context menus
- Windows Explorer styling for Tree Views
- Modal Views
- Parent Combo
- Month Calendar
- Error Handling in Grids
- Improved multi-screen support
- Suggestions and Bug Fixes

Web Framework

- Improved Lists and Grids (complicated data, styling, column types)
- File Upload support (including drag & drop)
- Suggestion Forms
- Groups
- Custom Key Handlers
- Wait Dialogs and Action Modes
- Cookie API
- Error Handling
- Info Balloons
- Progress Bar
- DD Remember

Web Framework

- Multi-row grids and lists
- Optimized scrolling
- Fixed width columns
- Improved loading of dialogs and views
- Structs and arrays in web properties
- Improved performance of complex views
- Parent Combo
- Improved cross-platform compatibility and performance
- Improved layout and alignment
- New Theme
- Suggestions and Bug Fixes



Data Dictionaries

- SQL Filter Methods
- Constraint MetaData Methods
- DD_Debug Improvements
- Extended DD Fields
- Attach_Main_File moved to runtime for increased performance
- Local record buffer performance
- Better control over cascade deletes
- Null relationship support
- Better support for diamond relationships
- Smart relate
- New RebuildAllConstraints method
- Web DD_Debug
- Suggestions and Bug Fixes

Character Encoding

- cCharacterTranslate Class
 - Easier to access and translate data in other formats (DataFlex string processing is OEM based)
- cSeqFileHelper Class
 - Easier to work with sequential files in other formats



Mobile / Touch Framework

- Introduced in DataFlex 18.1
- Drilldown interface that is navigationally contextual
- Mobile style menus and action menus
- Header bar and breadcrumbs
- Multi-line, single-touch lists
- On-screen keyboard support
- Responsive control of user interface
- New theme
- Dashboard



Why we use DataFlex...

- Created a workspace
- Connected to a complex SQL database
- Created a set of business rules (DDs)
- Created a modern, good-looking, responsive web application with a complete set of navigationally contextual views for adding, editing and deleting data according to the business rules
- Used the power of SQL to create and utilize an SQL view that amalgamated key elements of the complex data structure into a tight set of targeted data



Why we use DataFlex...

- Used a handful of simple functions to manipulate that data as a powerful, high-performance filtering mechanism that can then be easily used throughout the application to provide targeted results (in context)
- Tied everything together with a user-friendly dashboard
- Slick navigational interfaces for breadcrumbs, menus (multiple styles) and user access were essentially automatic
- Took advantage of full interfaces for managing access rights and security
- Did it all in a matter of a few hours and in under a couple of hundred lines of code (actually typed)



Web Services

- Nullible / Nillable Support
- Better handling of abstract types and arrays
- Bare requests and responses
- Suggestions and Bug Fixes

Deleted Record Handling

- A major improvement in how DDOs and DEOs handle situations where records are deleted by another user or process.
- Defers or completely suppresses errors and presents meaningful information (that can be augmented)
- Grids can even be seamlessly self-correcting

Base System

- Uchar Arrays
- Struct and Array Functions
- Value Tree
- Time and Date Functions



Suggestions and Bugs

- Especially in DataFlex 18.2, we have focused on implementing YOUR suggestions and addressing bugs
 - 18.0 – 71
 - 18.1 – 23
 - 18.2 - 235



The coolest part of DISD...

...is the interaction between the developer community and our technical teams.

- John Tuohy
- John van Houten
- Harm Wibier
- Martin Moleman
- Marcia Booth
- Dennis Piccioni
- Jack Baugh
- Doug Goldner
- Chuck Atkinson