

DataFlex Reports Update

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SYNERGY 2019
CRUISING TO NEW HORIZONS

Agenda

- Feature highlights
 - v7.0
 - v6.2
- Examples



Feature highlights v7.0

Feature highlights v7.0

- Edit in preview
- Locale per report
- Option to center a field on a paged
- Distinct count works on most data-types
- Ctrl+Shft+Cursor moves field in larger increments

Edit in preview

Edit in preview

- No longer need to switch back and forth between design and preview tab-page
- Objects can be moved, resized, options can be changed
- Easier to position and size the objects on top of a page layer as the previewer combines the output

Edit in preview

DataAccess
WORLDWIDE

Order: 101

Access Miles
1400 NW 190 Ave
Miami, FL 33176-6017

Access Miles
1400 NW 190 Ave
Miami, FL 33176-6017

Order#	Order Date	Ordered By	Salesperson	Customer#
101	feb 26,2012		None Specified	1

Ship Via	Terms	Phone#	Fax#
Federal Express	NET30	305-555-00	

Product#	Description
RUNMTR	The Runner's Pulse-o-meter
POPUP	The Peter Rabbit Popup Box Set
MENU	Menu Planning for the Busy Family
DT	The Database Programmer's Tool

Field: Customer.Phone_Number

- Field Properties...
- Barcode
- Browse Field Data...
- Insert Sum...
- Lock Size/Position
- Suppress
- Forward
- To Front

Locale per report

Locale per report

- The locale refers to the Windows regional settings and contains formatting options for numbers, dates, currencies, text values such as 'Maart' or 'März' instead of 'March'
- For a part this could be changed in a report by not using the Windows locale for currency and dates and create your own mask

Locale per report

- Prior to v7 the report used the locale defined by the user / account running the report
- With v7 this can be changed dynamically

Locale per report - Windows

- You could see a different currency symbol or different month name than your neighbor
 - Is good and logical as it follows the Windows guidelines
 - Not good when you have Windows setup in English and want to see German formatting

Locale per report - Web

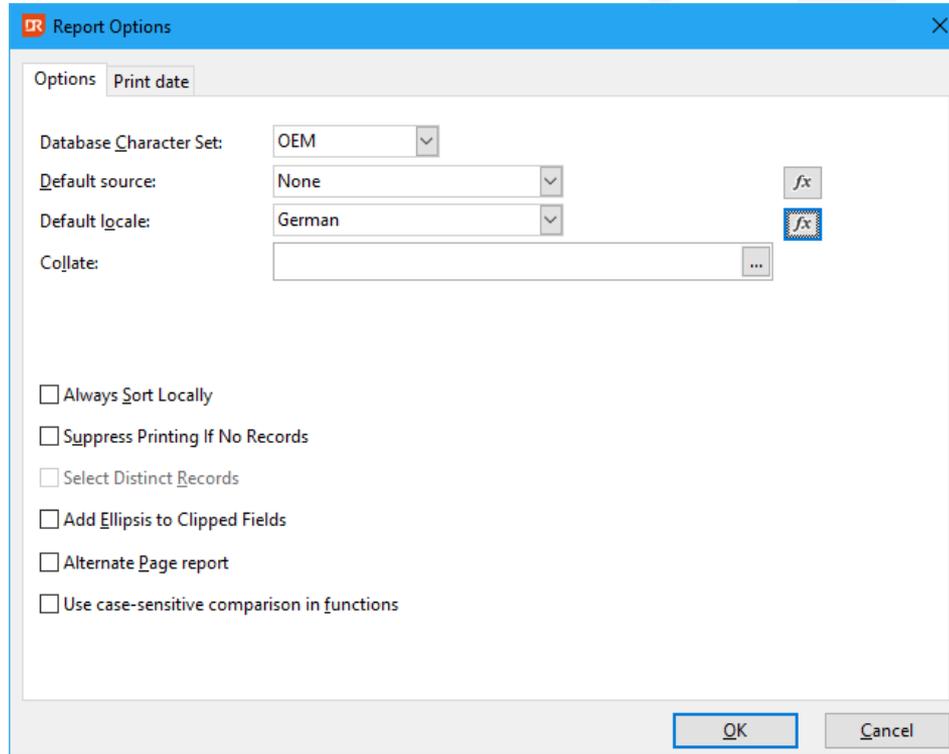
- All webapps run under the same account (usually System) and thus all use the same locale
- Users can login from anywhere and for example don't understand the European date formatting
 - E.g. DD-MM-YYYY vs MM/DD/YYYY
- Or don't know what 'Woensdag' means
 - It is Dutch for 'Wednesday'

Locale per report

- Changes

- How numbers, currency values & dates are formatted
- Displays the month name defined in Windows for a certain locale

Locale per report – where to change



Locale per report – use of a function

der: 101

The image shows two overlapping windows from the SAP software interface. The primary window is the 'Report Options' dialog, which has a 'Print date' tab selected. It contains several configuration fields: 'Database Character Set' is set to 'OEM', 'Default source' is 'None', 'Default locale' is 'German', and 'Collate' is empty. There are 'fx' icons next to the 'Default source' and 'Default locale' fields. At the bottom, there is an unchecked checkbox labeled 'Always Sort Locally'. The secondary window is the 'Function editor', which displays a list of 'Available fields' including Report Fields, Summary Fields, Database Fields, Function Fields, Parameter Fields, Special Fields, and Global variables. The 'Function' editor shows a code editor with the text `return {?Locale}`.

Locale per report - parameterized

- Created a parameter for the locale number
- Value is one of the LANG_* constants from cDR.h.pkg

```
cDR.h.pkg x
82
83 // Language definitions
84 Define LANG_NEUTRAL          for |CI$0
85 Define LANG_DEFAULT         for LANG_NEUTRAL
86 Define LANG_AFRIKAANS       for |CI$36
87 Define LANG_ALBANIAN        for |CI$1c
88 Define LANG_ARABIC          for |CI$01
89 Define LANG_ARMENIAN        for |CI$2b
```

Parameter

Parameter name:

Type:

Length: Precision:

Value:

OK Cancel

Demo...



Feature highlights v6.2

Feature highlights v6.2

- Crosstab / Pivot table support
- Copy DataFlex Reports Studio options from an older version during installation
- SQLite driver to create reports on this database
- DSN connection string builder in ODBC wizard
- Formatting functions for Number, Integer, Time, Date & Currency

Feature highlights v6.2

- Bigint support
- Excel export using native datatype
- Side-by-side support for DataFlex Reports Studio
- DataFlex Reports Studio is now DPI aware
 - New icons to support different DPI settings
- Import & Export of RDS table structure and test data

Feature highlights v6.2

- Hide/Show row number in RDS table structure and test data grids
- Hide barcode text and default barcode type
- Positioning and sizing of objects via functions
- RDS Table name can be changed
- RDS example data no longer removed by a table structure change

Crosstabs / Pivot tables

Crosstabs / Pivot tables

	AS	BR	BS	CM	CS	CW	DJ	DM	FF	FMB	HS	JC	JS	JW	KS	LM	MH	MK
Alaska				6811										38374				
Arkansas														27463				
Arizona			96304					27897										
California	6670									60873	84192					238388		1130
Colorado						17919								263575				
Delaware				6060									161440	8862				17615
Florida				58861						14135			8546					
Georgia												9671						
Hawaii																		
Iowa	215865	18616						29290										
Idaho															187586			30908
Illinois			23418												87759		8011	
Indiana													28799			88874	52575	
Massachusetts			33957															42480
Maryland																		
Missouri		44996												12177				
Mississippi						3215												
North Dakota																		
Nebraska	182784																	
New Hampshire	4413											17255				90636		
New Mexico															42775			
New York						26804												
Ohio									26461									15531
Oklahoma		14172							8532	9139						54890		
Oregon		940					246609			29086		287675		23413	31975			
Pennsylvania			5600					38350										
Rhode Island				35476	96616	3105			141591				31717		143610			
Tennessee											143720				4275			
Texas	121289											1092						
Utah										27016								
Virginia																		
Vermont																		15600
Washington	270672																	
Wisconsin				104262											100491	21309		34880
West Virginia																	4500	
Wyoming					25935					22185	12658							

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Crosstabs / Pivot tables

- Works on all data-sources (DataFlex, ODBC, RDS)
- Not limited to one page only
 - Number of rows and columns may not fit on one page
 - You need scissors and glue to make a large print out
- Column/Row width & height can be changed

Crosstabs / Pivot tables

- Different display value for Column and Row can be chosen
- Custom totaling function possible
- Row and column totals can be added
- Grand total value can be displayed

Crosstabs / Pivot tables - Demo

- Inventory sales per salesperson per US state

Other features

SQL Connections

Select from (<= v6.1)

- User DSN
- System DSN
- File DSN
- Enter DSN less connection string

Select from (v6.2)

- Choose existing DSN
- Create DSN less connection
- Choose DataFlex Managed Connection

SQL Connections

- The change helps developers unfamiliar with DSNs
 - The end-result is the same as in v6.1.5 and before
- Managed connections
 - New in DataFlex since v19.0
 - Connection information is read and converted into a connection string
 - Change in connection information in your workspace does not change the connection string in the report. You need to do that at integration level

Formatting functions

- Combine text and variables

Prior to v6.2

Total for order 101 is 1668

Total for order 102 is 396

```
return 'Total for order'  
*CStr({OrderHea.Order_Number})  
*'is'  
|*CStr({OrderHea.Order_Total})
```

With v6.2

Total for order 101 is \$1,668.00

Total for order 102 is \$396.00

```
return 'Total for order'  
*FormatInteger({OrderHea.Order_Number},  
    drWindowsInteger)  
*'is'  
*FormatCurrency({OrderHea.Order_Total},  
    drCustomCurrencyMask, "0.00;$1.1;$1.1-;.,;,$")
```

Excel export – native data-type support

Prior to v6.2

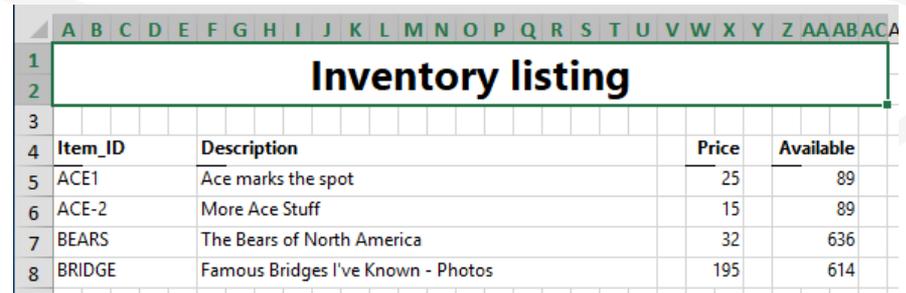
- Green corners indicating Excel does not know the data-type



Item_ID	Description	Price	Available
ACE1	Ace marks the spot	25,00	89
ACE-2	More Ace Stuff	15,00	89
BEARS	The Bears of North America	32,00	636
BRIDGE	Famous Bridges I've Known - Photos	195,00	614

With v6.2

- No green corners



Item_ID	Description	Price	Available
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RDS Import / Export

- Table structure import & export
 - Useful while creating another report with a similar or identical RDS table structure
- Test data import & export
 - Useful for testing from DataFlex Reports Studio
- File format is a JSON

RDS Import / Export

- Library comes with a function that helps writing the JSON test data file
 - Converts the Variant[][] array via a tDRDataSource[] array to a uChar[] array using the cJSONObject class

RDS Import / Export

```
CustomerSales.Json x
1  [ {
2      "riID": "",
3      "bNewRow": false,
4      "vTag": "",
5      "sValue": [ "",
6      "210 On Clark",
7      "8011" ]
8  },
9  {
10     "riID": "",
11     "bNewRow": false,
12     "vTag": "",
13     "sValue": [ "",
14     "228 Fuel Express P",
15     "263771" ]
16 }
```

The screenshot shows the 'Edit RDS Sample Data' window in DataFlex. The 'RDS Tables' pane on the left shows a tree view with 'Customer Sales RDS.dr' expanded to show 'Runtime Datasource' and 'CustomerSales'. The 'RDS Sample Data' pane on the right shows a table with a 'Name' column. A file explorer window titled 'Open DataFlex Reports RDS Test Data File' is open, showing the file 'CustomerSales.Json' selected on the Desktop.

Dynamic layout

- Change of size and position of an object via one of the UnitXX functions
 - UnitCm or UnitInch or UnitPt

Field Properties

Common Position HTML Border Font Text

Horizontal position: 10,8818 cm

Vertical position: 0,0529 cm

Width: 5,5203 cm

Height: 0,4938 cm

Lock Position and Size

Function editor

Available fields

- Report Fields
- Summary Fields
- Database fields
- Function Fields
- Parameter Fields

```
if {?HidePhone} then
  return UnitCm(7.8483)
else
  return UnitCm(10.8818)
end
```

Dynamic layout

- To go from

Customer List			
Number	Name	Phone	E-Mail
4	Ace Manufacturers, Inc.	309-555-3215	ami@acemanfinc.com

- to

Customer List		
Number	Name	E-Mail
4	Ace Manufacturers, Inc.	ami@acemanfinc.com

Examples



Integration Examples

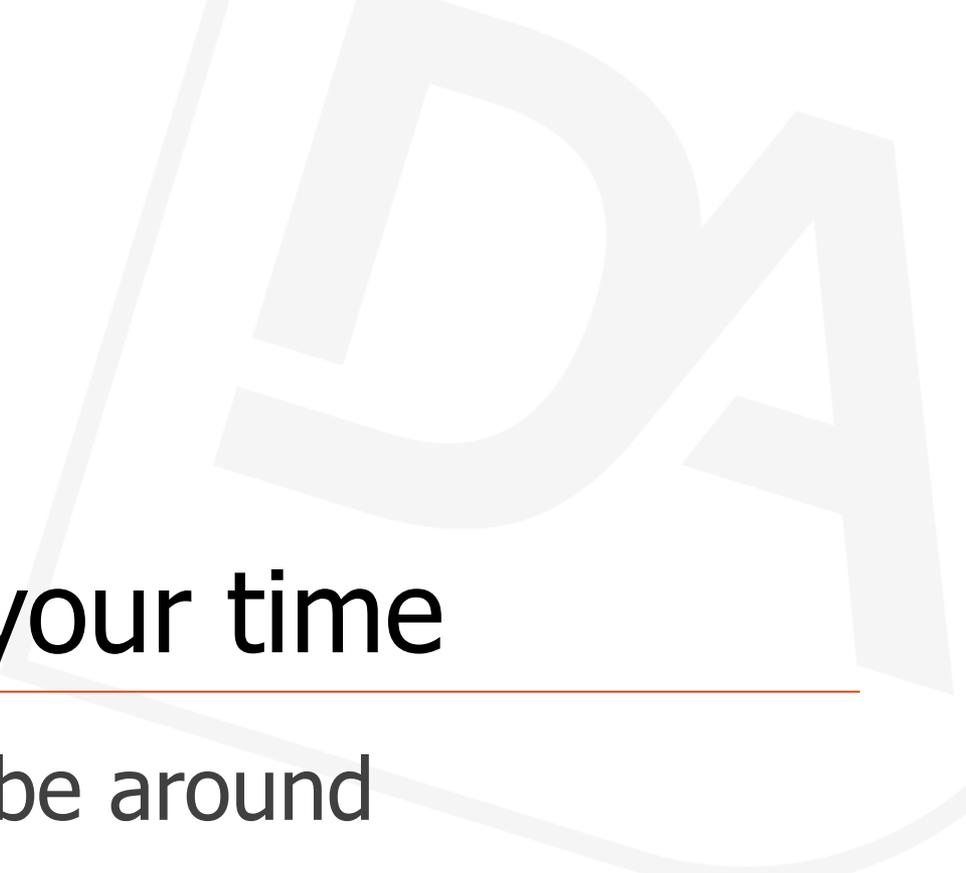
- DataFlex 19.1 contains example reports for
 - Windows Order Entry
 - Windows Order Entry Tab
 - Web Order
 - Web Order Mobile

Integration Examples

- New is that they are alive!
 - In 19.0 and before a PDF or a pre generated HTML stream was shown
 - You could change options and criteria but they were not used if you did not own a DR license and did not recompile the examples

Integration Examples

- Reports in the workspaces are not the same
- Integration code is different as well



Thank you for your time

For questions I will be around