

DataFlex Reports

DataFlex Reports

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Agenda

- › Versions
- › Runtime installer
- › New features

Versions

Versions



Versions

- › Supported versions of DataFlex Reports are
 - › 8.0.x
 - › 7.0.x
 - › 6.2.x

Version 8.0.x

- › Is a 64 bit compiled application created with DataFlex 2021 (v20.0) and is fully Unicode
 - › For ODBC requires a 64 bit ODBC client driver that delivers UTF-16 data
 - › The database itself may have any format as long as the client driver returns UTF-16 data. There is no conversion in DataFlex Reports from/to ANSI/OEM
 - › For the DataFlex Embedded database the data is usually (99.9%) OEM but when it would be ANSI it works as well. There is a conversion option.

32 and 64 bit

- › Version 7 is fully 32 bit and an ANSI product
- › Version 8 is – at integration – available as 64 or 32 bit and a Unicode product
 - › 32 bit is more restrained in size than under version 7 due to Unicode taking up more memory

Versions - Integration

	6.2	7.0.x	8.0 / 8.0.1	8.1.0
18.2	✓	✓	-	-
19.0	✓	✓	✓	✓
19.1	✓	✓	✓	✓
20.0	-	-	✓	✓
20.1	-	-	-	✓

Can I use an older report?

- › The DataFlex Reports Studio can open any report and internally converts this to the current version
 - › The report definition on disk does not change until you make a change and save
 - › There might be “small” differences in the output
 - › Based on bug fixes
 - › Based on new features
- › At integration the print engine can handle report definitions from v5 and up

Library usage

- › It is not a good idea to use the DataFlex migration wizard to migrate the DataFlex Reports Library
 - › Easiest to spot: The wizards cannot be migrated and keep using the old DataFlex (Reports) version
 - › Features introduced in a newer version are not available
 - › Method arguments might have changed
 - › E.g. HTMLPreview in v8 does on v20 does not longer use Base64 while HTMLPreview in v8 on v19.x uses this

Installation

Runtime installer

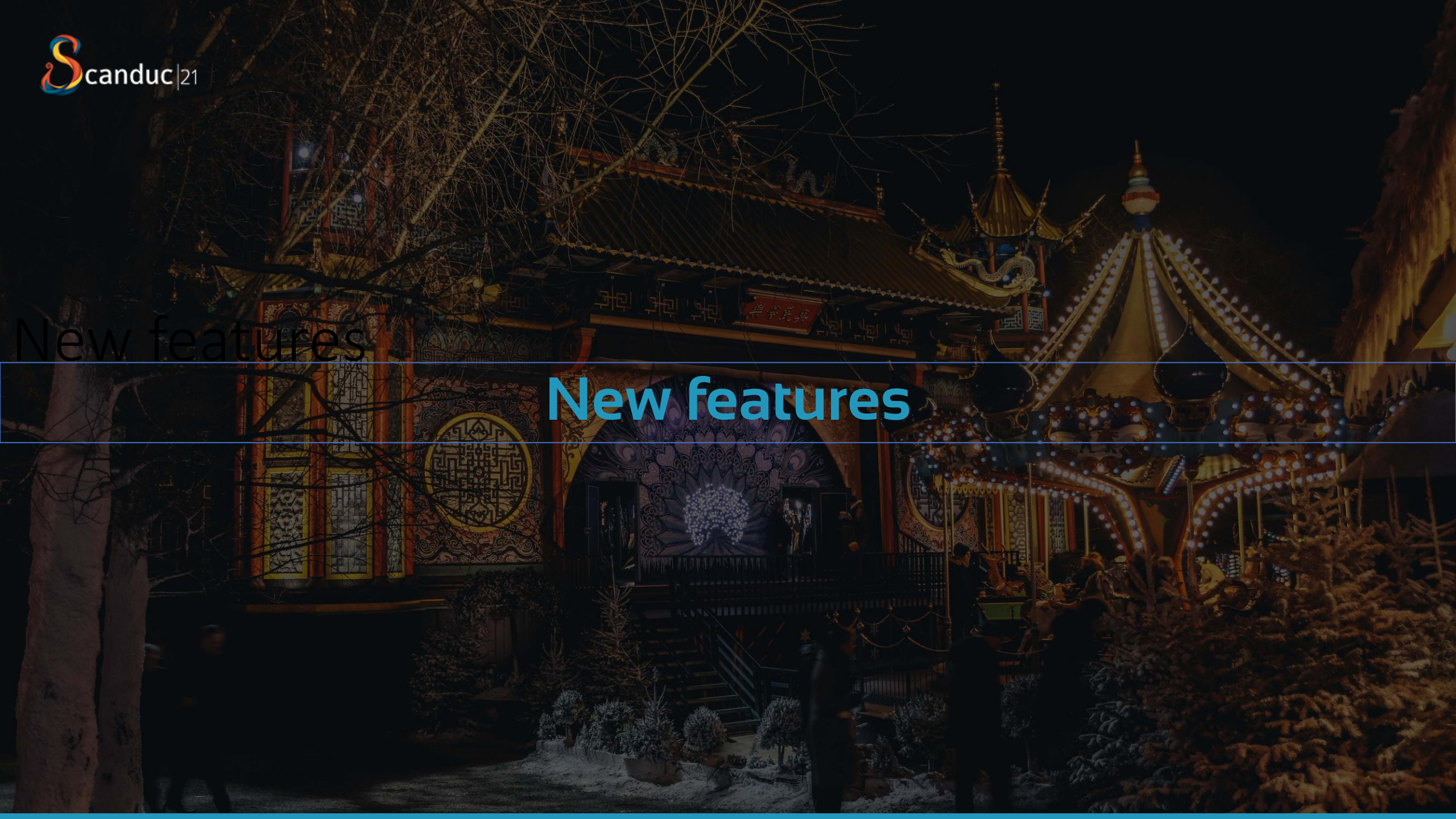


Runtime installer

- › While DataFlex Reports is pretty easy to deploy - only a couple of files to distribute – we decided to create a runtime installer that guides you through the installation process
 - › The runtime installer supports silent installation
- › Download from www.dataaccess.eu
- › Only for DataFlex Reports v8.0.1 and up

New features

New features



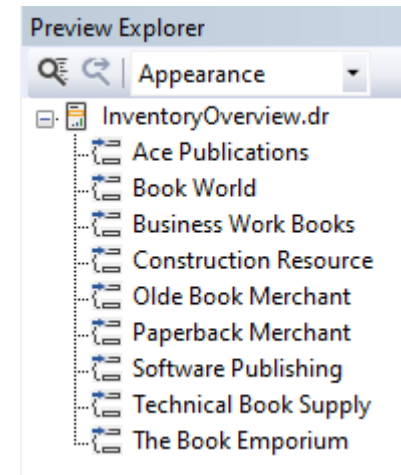
New features - Studio

- › Preview explorer
- › Cancel on error option
- › Function extensions
- › Keep group together
- › Load / Save report definition
- › Unit of measurement configuration
- › Webform support

- › + a number of smaller issues and bugfixes

Preview explorer

- › A new explorer which shows all groups in a formatted report
- › Click an item to navigate to the page



Cancel on error

- › When a report execution leads to an error (e.g. in a function) and the function is used on each page (multiple times) it was not possible to stop the report execution
- › With v8 there is a report option which tells the engine to stop report execution when an error occurred
 - › Needs to be turned on/off on a report by report base

Function extensions

- › For statement
- › Dim with a list of variables
- › Dim of an array variable
- › Else if syntax
- › Unicode support in constants and variables

Keep group together

- › Not the same as “Print next section on same page”
- › Keep group together is a group and not a section option

Custom

Number of customers: 3

MS

<u>Name</u>	<u>City</u>
Rapido Release Bail Bonding	Tupelo

MO

<u>Name</u>	<u>City</u>
Ecol-Stripe LLC	Boonville
Designer Fencing Company	Columbi
Leader Construction Co	Saint Pi

Number of customers: 3

MS

<u>Name</u>	<u>City</u>
Rapido Release Bail Bonding	Tupelo

- › The whole “MO” group moves

Load / Save report definition

- › The report definition for the OCX is stored in a binary format
 - › Fast, secure, ...
 - › Impossible to compare versions of a report
- › The new option makes it possible to save a report in JSON format next to the DR format for execution
 - › Can be compared to a previous version in for example GIT
 - › Can be modified in a text editor and reloaded via the DataFlex Reports Studio

Unit of measurements configuration

- › Internally all sizes and locations are stored in TWIPS
- › Representation is in MM or INCH
- › In v7 the measurement was based on regional settings
- › In v8 one can choose the measurement

Unit of Measurement:

Insert Detail Field Heading

Horizontal position: cm

Vertical position: cm

Width: cm

Height: cm

Horizontal position: inch

Vertical position: inch

Width: inch

Height: inch

Webform support

- › Removed the hyperlink ID attribute for an object
- › Opened the HTML code option
 - › Is much more flexible than the hyperlink ID
 - › Reports using the hyperlink ID convert correctly to HTML code
 - › Can be static or result of a function
 - › For a demonstration see <https://learningcenter.dataaccess.com>

New features - integration

- › Subreport import function
- › Grouptree support
- › Set report locale and language option
- › New HTML previewer events
- › Report save-as option
- › ColumnNumber function
- › Current page spinform / dropdown

- › + a number of smaller issues

Subreport import function

- › Subreports in DataFlex Reports are part of the object structure, in Crystal Reports they were external report definitions
 - › Performance is better with embedded report
 - › Connections between sub and main report easier, more reliable
 - › Downside is that you cannot change them once and use them in many reports
 - › Some developers use the subreport as report banner

Subreports import function

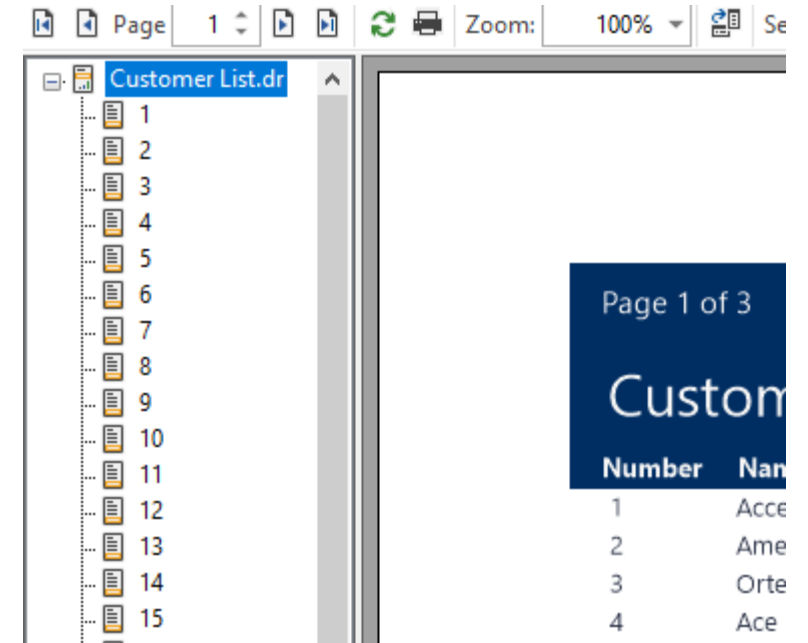
- › Pass report GUID of report that contains the subreport and the subreport GUID
- › In most cases reports only have one subreports embedded in the main report but subreports may contain subreports as well
- › Import status will be returned. In most cases import works

Subreports import function

- › The OCX does not perform checks on whether the subreport matches the logic of the previous subreport
 - › For example; is there a global variable in use in a (filter) function that is not defined in the parent report and/or proper initialized
- › Import should be controlled by developer so that execution should not go wrong

Group tree support

- › The DataFlex Reports Studio calls this the preview explorer
- › Can be positioned left or right of the Windows previewer
- › Contains nodes for all groups in the report
 - › Clicking a node navigates to the correct page in the previewer



Report locale

- › Version 7 came with locale support
- › When running on a shared webserver this makes it possible to control values as the currency symbol, the date format instead of depending on the machine locale
- › Added is a function that makes it possible to control the setting based on a user choice or browser preferred language
 - › In 20.1 the OrderlistReportResults uses pasBrowserLanguages (cWebApp) and then sends SetReportLocaleAndLanguage

Report locale

- › Report should have a parameter (e.g. ReportLanguage) which is used by a function that sets the report default locale
- › OnInitializeReport calls the SetReportLocaleAndLanguage to set the parameter to language

The image shows two overlapping windows from a report design tool. The background window is titled "Report Options" and has a "Print date" tab selected. It contains three dropdown menus: "Database Character Set" set to "OEM", "Default source" set to "None", and "Default locale" set to "None". The foreground window is titled "Function editor" and shows a tree view of "Available fields" with categories: Report Fields, Summary Fields, Database Fields, Function Fields, Parameter Fields, Special Fields, and Global variables. Below the tree, a code editor shows the following function definition:

```
return {?ReportLanguage}
```


New HTML previewer events

- › OnPreHTMLPreviewData and OnPostHTMLPreviewData
- › Usage ideas
 - › Logging the generated SQL statement constructed by the OCX and send to the database server
 - › Setting parameters to supress or show report sections
 - › Report is opened in both events

Report save-as

- › Report definition files can now be modified at runtime
- › For example change the connection string to an ODBC server and database
 - › Makes it easier to let consultants or users to open a report in a Developer or Standard edition Studio, make modifications for use in the organization

ColumnNumber function

- › Searches the report definition for a database column with a given name and returns the column number

New feature for v8.1.0

- › Multiple SQL databases with the same connection
 - › With one ODBC connection string and with the correct credentials you can access multiple databases on the same server
 - › Report structure (.dr) file changes to make this possible
 - › Report made with 8.1.0 cannot be opened with 8.0 / 8.0.1
- › Not the same as multiple database connections such as mix between RDS and SQL



What didn't make it?

What did not make it?

- › We wanted to have HTML support in the print engine
- › The print engine uses GDI+ and there is no feature in there to render HTML data
- › Export to the different formats is another challenge



Thank you!
Are there any questions?