File Linking

PxPlus 2016 (v13)

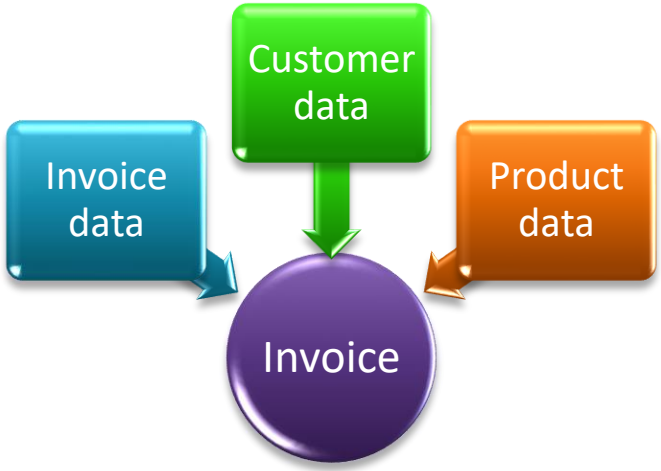
DireXions 2016

File Linking

- Overview
  - Application data is spread across multiple files with cross-reference linkages to bind the relationships

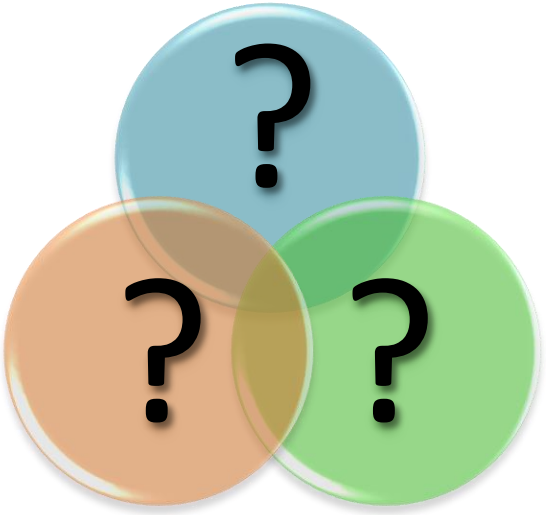
File Linking

- Overview
  - When presenting information to the user, the content is generally made up of bits and pieces from many files



File Linking

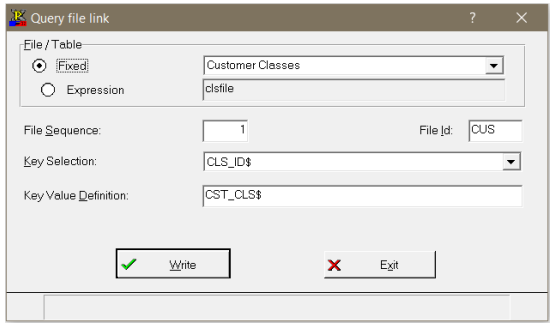
- Overview
  - The challenge is coming up with simple ways to present the complex datasets to the user, keeping in mind that they have no prior in-depth knowledge of the data files, fields, and their relationships as they exist in the application

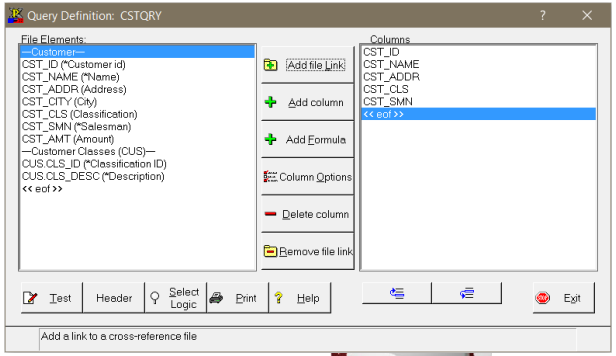


File Linking

In the beginning…

- The *Query System* allows you to display complex datasets
  - File links are set up in the query definition for simple one-to-one relationships





File Linking

Then…

- *Views*
  - Allow you to present and retrieve customized end-user views of various application data
  - System designer defines logical representations of datasets that are relevant and accessible to end-users, regardless of the original physical layout

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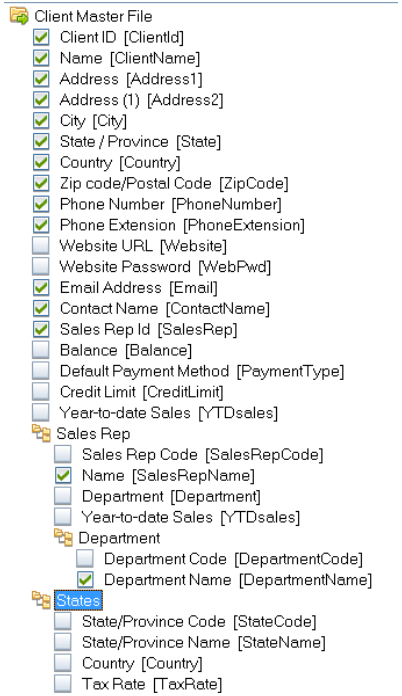
File Linking

Then…

- *Views*
  - The end-user can extract specific data elements for display and reporting purposes — without the need for prior in-depth knowledge of the data files, fields, and their relationships as they exist in the application



File Linking

And now…

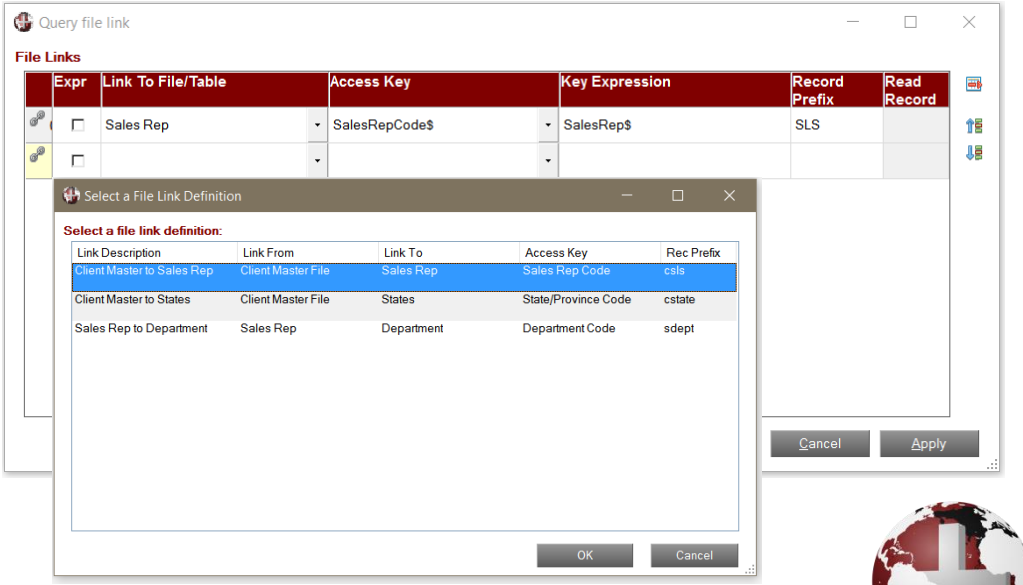
- File Linking
  - Define and maintain the cross-reference linkages that exist between application data files
    - Based on files defined in Data Dictionary Maintenance
    - Specify the related files and the fields that can be used to populate keys to read the related file
    - A one-to-one relationship is supported between the files, where the fields from one file match the key for the cross-referenced file

File Linking

- Why do we need another approach?
  - Define the relationship once, and apply in multiple locations
    - Query links
    - Views relationships
  - Results in a more flexible drill-down approach to selecting data for the Report Designer

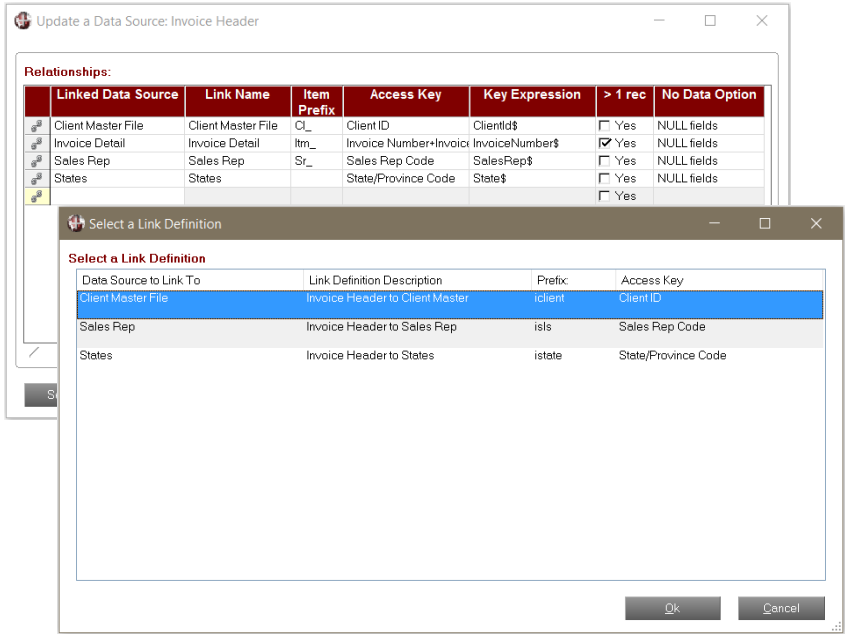
File Linking

- File Linking in Query Definitions
  - Can be used to define file links in query definitions



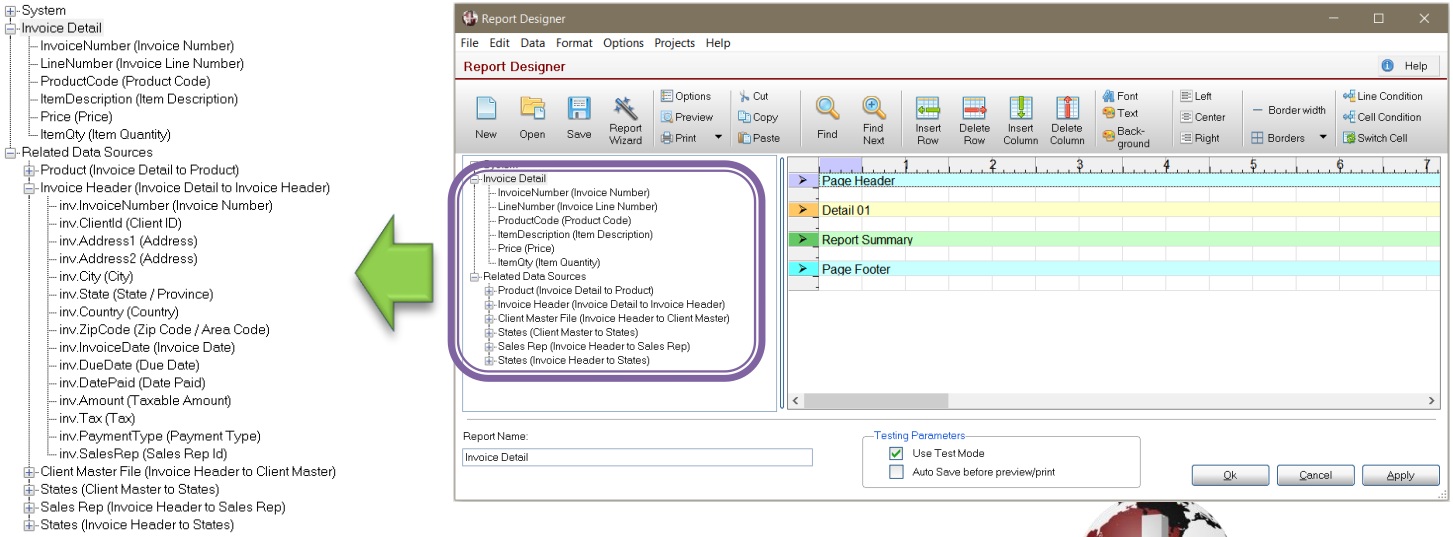
File Linking

- File Linking in Views
  - Can be used to define data source relationships in Views



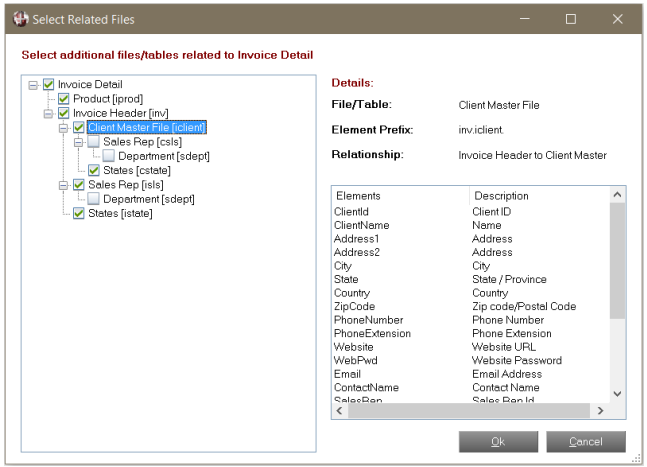
File Linking

- File Linking in the Report Designer
  - Can be used in the Report Designer to select the input data



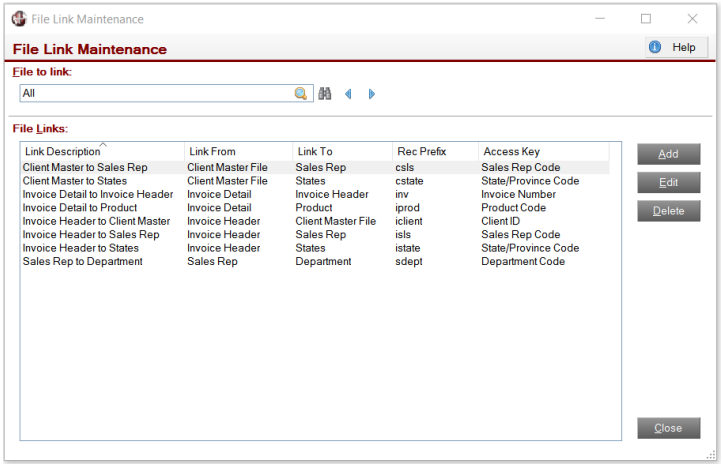
File Linking

- File Linking in the Report Designer
  - Select *Table Name* or *File Path* as *Input Source* (Files must have embedded dictionaries)
  - If the *Input Source* has links defined in **Link File Maintenance**, then you can *Select Related Data Sources* (from *Data* menu or right-click in the data pane)



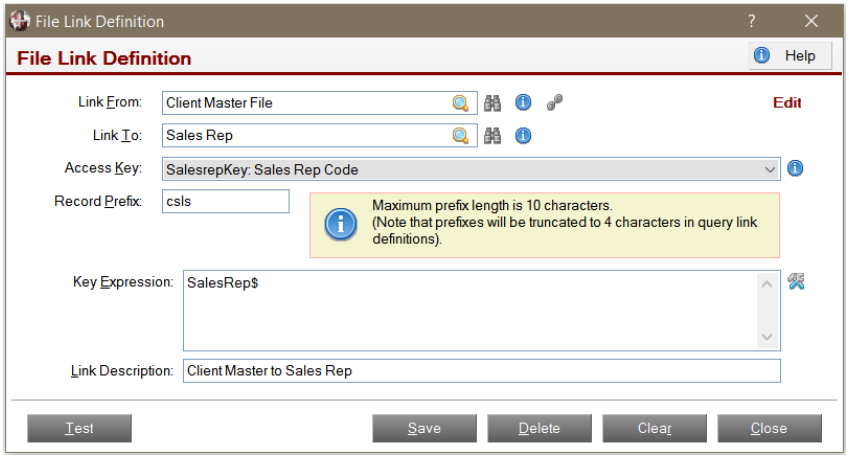
File Linking

- *File Link Maintenance*
  - Maintains the File Link Definitions
    - Display, Add, Edit, Delete definitions



File Linking

- *File Link Definition*
  - Set up the link information
    - Specify the related files and the key expressions to access the related file



File Linking

- Views vs File Linking

Views	File Linking
One-to-one, One-to-many relationships (one-to-many option reduces file access)	One-to-one relationships only (one-to-many requires re-reading linked file)
Only selected fields are available (secure/less flexibility)	All fields are available (Flexible, less secure)
Views must be created ahead of time. If fields are added to a file, Views must be updated to include them.	Data sets are created on the fly. If a file definition changes, the fields are automatically available.

File Linking

- Views vs File Linking

Views	File Linking
In the Report Designer, the list of View fields appears as a logically flat dataset where the links and field origins are not apparent.	In the Report Designer, the File Links are presented in a hierarchical display where you drill down to select the data you want to want to include. The files are then listed separately in the data pane with the links described.
Support for virtual fields	No virtual fields (not required in Report Writer due to Formulas and Calculated Fields)

File Linking

- Views vs File Linking

Views	File Linking

Built-in interfaces the developer can use to allow the end-user to define or select a View:
`PROCESS "View_Main","*views/views.en",v$,type$`
`PROCESS "Select_View","*views/views.en",v$,grp$`
	Currently there are no interfaces the developer can use to present the File Links to the end-user in their application, other than in the Report Designer

Views definition requires Views or Report Writer package, or Professional or e-Commerce Bundle, or iNomads Wayfarer Pack	Base activation only required

Additional Resources

The help link(s) below refer to the current on-line help pages. The functionality may have been further updated since the PxPlus 2016 (version 13) release.

- File Link Maintenance
- File Link Definition
- Query File Links
- File Relationships in Views
- File Linking in the Report Designer