

File Maintenance Wizard

PxPlus 2019 (v16)

Agenda

- What is the File Maintenance Wizard
- Reasons for redesign
- Highlights
- Sample panels
- Demo
- Review Generated Output



File Maintenance Wizard

What is it?

- Updated tool for creating file maintenance panels
 - Create the layout of the panel(s) based on the Data Dictionary elements
 - Ability to define screen and control properties
 - Generates the panel(s) and associated maintenance object

File Maintenance Wizard

Reasons for Redesign

- Modernize and enhance the interface
- Better use of Data Dictionary and Data Classes
- Add more capabilities and new design features
- Ability to review panel prior to saving



File Maintenance Wizard

Reasons for Redesign

- Panel(s) that will require minimal changes
- Create a simple object that requires minimal or no changes
 - Easy to make modifications if required
 - Reusable object
- Easier to implement new PxPlus enhancements

File Maintenance Wizard

Highlights

- Based on Data Dictionary
- Ability to use and define Templates
- Create maintenance and inquiry type panels
- Single or multi-tabbed (side bar or top/bottom folders)
- Preview capability

File Maintenance Wizard

Highlights

- Define Panel Header attributes
- Enhanced prompt capabilities for Data Dictionary elements
- Improved placement control for browse and action buttons
- Additional text and horizontal lines
- Enhanced the layout design
- Simple object can be re-used and it is easier to override methods
- Create smartphone sized panels

SAMPLE PANELS

File Maintenance Wizard

Standard Browse and Action Buttons

The screenshot shows a window titled "CATS File Maintenance for Sales Rep file". The window contains the following fields and values:

Sales Rep Code:	AN
*Sales Rep Name:	Ann Nelson
*Department:	EAST
Year-to-date orders:	108
Year-to-date Sales:	75,583.54
Prior years orders:	866
Prior Year Sales:	497,698.27

At the bottom of the window, there are navigation buttons (back, forward) and action buttons: Write, Delete, Clear, and Exit.

File Maintenance Wizard

Standard Browse and Action Buttons

The screenshot shows a window titled "CATS File Maintenance for Sales Rep file". The window contains the following fields and controls:

- Sales Rep Code:** A text box containing "AN" with a search icon to its right. To the right of this field is a set of four navigation buttons: a double left arrow, a single left arrow, a single right arrow, and a double right arrow. This set of buttons is highlighted with an orange rectangular box.
- *Sales Rep Name:** A text box containing "Ann Nelson".
- *Department:** A text box containing "EAST" with a search icon to its right.
- Year-to-date orders:** A text box containing "104".
- Year-to-date Sales:** A text box containing "75,583.54".
- Prior years orders:** A text box containing "866".
- Prior Year Sales:** A text box containing "497,698.27".

At the bottom of the window, there are four buttons: **Write**, **Delete**, **Clear**, and **Exit**.

File Maintenance Wizard

Embedded Panel Browse and Action Buttons

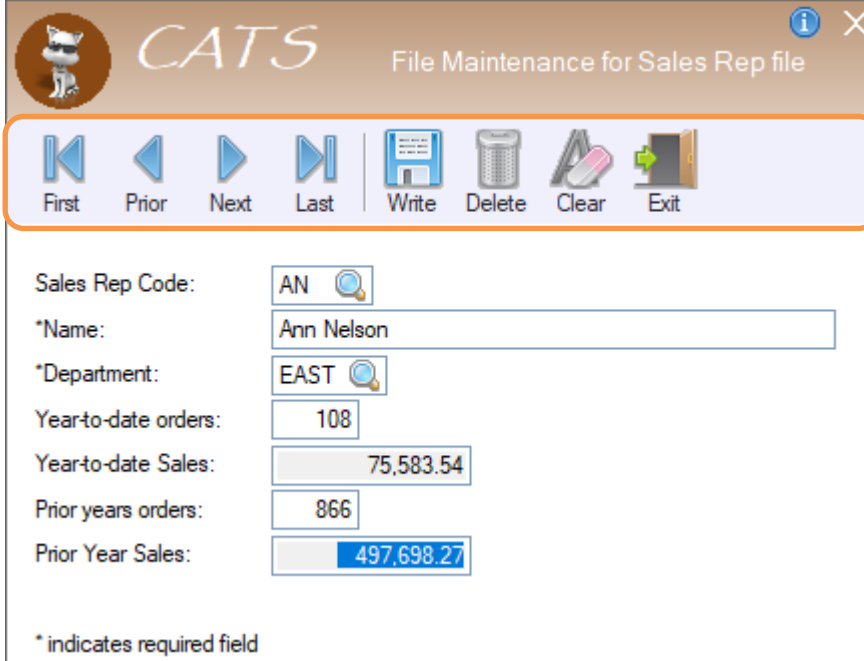
The screenshot shows a window titled "CATS File Maintenance for Sales Rep file". The window contains the following fields and data:

Sales Rep Code:	AN
*Sales Rep Name:	Ann Nelson
*Department:	EAST
Year-to-date orders:	108
Year-to-date Sales:	75,583.54
Prior years orders:	866
Prior Year Sales:	497,698.27

At the bottom of the window are four buttons: Write, Delete, Clear, and Exit. A set of navigation buttons (back, forward, home, end) is highlighted with an orange box.

File Maintenance Wizard

Embedded Tool Bar and Required Fields



The screenshot shows a software window titled "CATS File Maintenance for Sales Rep file". The window has a title bar with a logo of a cat and the text "CATS". Below the title bar is an embedded tool bar with the following icons and labels: First, Prior, Next, Last, Write, Delete, Clear, and Exit. The main area of the window contains a form with the following fields:

Sales Rep Code:	<input type="text" value="AN"/>
*Name:	<input type="text" value="Ann Nelson"/>
*Department:	<input type="text" value="EAST"/>
Year-to-date orders:	<input type="text" value="108"/>
Year-to-date Sales:	<input type="text" value="75,583.54"/>
Prior years orders:	<input type="text" value="866"/>
Prior Year Sales:	<input type="text" value="497,698.27"/>

* indicates required field

File Maintenance Wizard

Horizontal Lines

Horizontal Lines

Horizontal Lines

Horizontal Lines

File Maintenance Wizard

Additional Text

CATS File Maintenance for Sales Rep file

Sales Rep Code: AN

*Sales Rep Name: Ann Nelson

*Department: EAST

Sales Information

Year-to-date orders:	108
Year-to-date Sales:	75,583.54
Prior years orders:	866
Prior Year Sales:	497,698.27

Write Delete Clear Exit

File Maintenance Wizard

Enhanced Text and Second Column

CATS File Maintenance for Sales Rep file

Sales Rep Code: AN

*Sales Rep Name: Ann Nelson

*Department: EAST

Current Year Sales	Previous Year Sales
Year-to-date orders: 108	Prior years orders: 866
Year-to-date Sales: 75,583.54	Prior Year Sales: 497,698.27

Write Delete Clear Exit

File Maintenance Wizard

Inquiry Only Panel

CATS File Maintenance for Sales Rep file

Sales Rep Code: AN

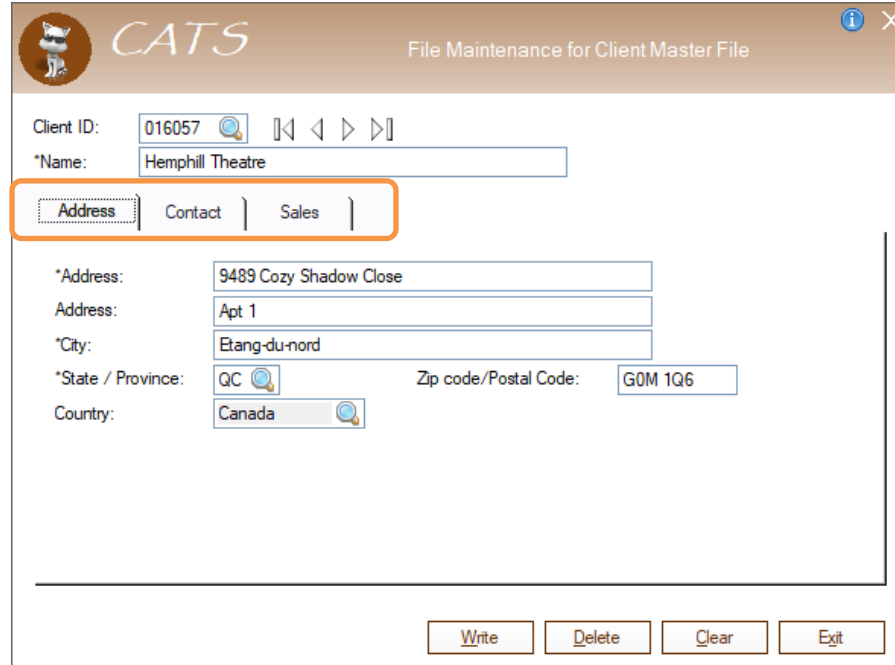
Sales Rep Name: Ann Nelson

Department: EAST

Current Year Sales		Previous Year Sales	
Year-to-date orders:	<input type="text" value="108"/>	Prior years orders:	<input type="text" value="866"/>
Year-to-date Sales:	<input type="text" value="75,583.54"/>	Prior Year Sales:	<input type="text" value="497,698.27"/>

File Maintenance Wizard

Multi-Tabbed Panels



The screenshot shows a software window titled "CATS File Maintenance for Client Master File". The window has a header bar with the CATS logo and title. Below the header, there are input fields for "Client ID" (016057) and "*Name" (Hemphill Theatre). A tabbed interface is present with three tabs: "Address", "Contact", and "Sales". The "Address" tab is selected and highlighted with an orange border. Below the tabs, there are several input fields for address information: "*Address" (9489 Cozy Shadow Close), "Address" (Apt 1), "*City" (Etang-du-nord), "*State / Province" (QC), "Zip code/Postal Code" (G0M 1Q6), and "Country" (Canada). At the bottom of the window, there are four buttons: "Write", "Delete", "Clear", and "Exit".

Client ID: 016057

*Name: Hemphill Theatre

Address | Contact | Sales

*Address: 9489 Cozy Shadow Close

Address: Apt 1

*City: Etang-du-nord

*State / Province: QC Zip code/Postal Code: G0M 1Q6

Country: Canada

Write Delete Clear Exit

File Maintenance Wizard

Multi-Tabbed Panels

The screenshot shows a software window titled "CATS File Maintenance for Client Master File". The window has a header bar with the CATS logo and title. Below the header, there are input fields for "Client ID" (016057) and "*Name" (Hemphill Theatre). A tabbed interface is visible with three tabs: "Address", "Contact", and "Sales". The "Contact" tab is currently selected and highlighted with an orange border. Below the tabs, the "Contact Information" section contains fields for "Contact Name" (Joseph Davis), "*Phone Number" ((581) 555-6421), "Email Address" (joseph.davis@hemphilltheatre.com), and "Sales Rep Id" (RL). The "Credit Information" section shows "Balance" (0.00), "Credit Limit" (2,000), and "Default Payment Method" (Check). At the bottom of the window, there are four buttons: "Write", "Delete", "Clear", and "Exit".

Client ID: 016057

*Name: Hemphill Theatre

Address | **Contact** | Sales

Contact Information

Contact Name: Joseph Davis

*Phone Number: (581) 555-6421

Email Address: joseph.davis@hemphilltheatre.com

Sales Rep Id: RL

Credit Information

Balance: 0.00 Default Payment Method: Check

Credit Limit: 2,000

Write Delete Clear Exit

File Maintenance Wizard

Multi-Tabbed Panels

Client ID: 016057

*Name: Hemphill Theatre

Address | Contact | **Sales**

Current Year Sales

Year-to-date Sales: 1,510.24

Year-to-Date orders: 2

Prior Year Sales

Prior Year Sales: 7,808.80

*Prior Year orders: 19

Write Delete Clear Exit

File Maintenance Wizard

Multi-Tabbed Panels - Left Sidebar

CATS File Maintenance for Client Master File

Client ID: 016057

*Name: Hemphill Theatre

Address

*Address: 9489 Cozy Shadow Close

Address: Apt 1

*City: Etang-du-nord

*State / Province: QC Zip code/Postal Code: G0M 1Q6

Country: Canada

Write Delete Clear Exit

GENERATED OUTPUT

NOMADS Panel & Object

- Generated Output
 - Panel(s)
 - Maintenance object
- Header panel properties
 - **Object** added as the default program
 - Data Dictionary **Table** added to the Tag field

The screenshot shows the 'Panel Definition' dialog box in PVX Plus. The 'Panel' field is set to 'SALESREP' and the 'Last update' is '2019/07/09 16:36 Len (File Maint.)'. The 'Title' is 'File Maintenance for Sales Rep file'. The 'Default Program' is 'obj=salesrep'. The 'Tag Field' is 'Sales Rep' and the 'Precision' is '<Axis>'. The 'Position' is 'Relative' and the 'Size' is '70' width and '8' height. The 'Panel Transparency (0 - 100%)' is '0'. The 'Background Image' is 'Widget' and the 'Image Alignment' is 'Top Left'. The dialog has buttons for 'Security', 'Notes', 'Popup Menu', 'OK', and 'Cancel'.

Maintenance Object Review

- Object is defined based on Object Name entered on Step 1 – **salesrep**
- Inherits from ***win/fm_maint**
 - Contains necessary methods for file maintenance to work
- Properties from Step 2 are added
- All that is required to run the panel

```
! salesrep.pvc - File Maintenance Object
! Generated by File Maintenance on 09/07/19
!
DEF CLASS "salesrep"
|
| LIKE "*win/fm_maint"
|
| ! Properties
| PROPERTY_Update_Option$="R"
| PROPERTY_New_Option$="0"
| PROPERTY_Clear_Option$="0"
| PROPERTY_Auto_Save_Option$="0"
| PROPERTY_Inquiry_Option$="0"
| PROPERTY_Confirm_New_Rec$="0"
| PROPERTY_Acknowledge_Writes$="0"
| PROPERTY_Confirm_Deletes$="1"
| PROPERTY_Acknowledge_Deletes$="1"
|
END DEF
```

File Maintenance Object

- Situations may arise where additional processing is needed
- Nine user file maintenance methods
 - Added to `*win/fm_maint.pvc` class
- Methods are executed at various points
 - File updates
 - Post-panel display
 - Wrap-up
- Always return success (true)
- Overridden in the maintenance object – `salesrep`

```
DEF CLASS "*win/fm_maint"
```

```
!  
...  
! User File Maintenance functions  
FUNCTION FM_Init()=1  
FUNCTION FM_Wrapup()=1  
FUNCTION FM_Post_Display()=1  
FUNCTION FM_Post_Read()=1  
FUNCTION FM_New_Record()=1  
FUNCTION FM_Pre_Write()=1  
FUNCTION FM_Post_Write()=1  
FUNCTION FM_Pre_Remove()=1  
FUNCTION FM_Post_Remove()=1  
!  
END DEF  
...
```

User File
Maintenance
Methods

File Maintenance Object

User File Maintenance Methods – fm_maint.pvc

User Methods	Method Description
FM_Init()	This method is run after the Pre-Load logic for the panel. If it fails, <code>CMD_STR\$</code> is set to END, and the file maintenance panel will not be displayed
FM_Pre_Remove()	This method is run when the Delete button is pressed – before a possible confirm-delete question is displayed and before the record is deleted. It can be used to check other criteria before the record is deleted; e.g. checking customer data history before deleting a customer record. Failing this, method will preclude the record from being deleted. A message box should be included to indicate why the record was not removed.
FM_Post_Remove()	This method is run after a record is removed and can be used for various purposes, including removing data from related data files. The return value is not checked.

Maintenance Object – How to Override

- Goal to block a delete if there is an outstanding balance
- Sample Maintenance object: [salesrep](#)
 - Add method to be overridden
 - A 'FM_Pre_Remove' routine
 - Check for zero balance and return a success (true) or a fail
 - Define error message box

```
DEF CLASS "salesrep"  
!  
LIKE "*win/fm_maint"  
!  
! Properties  
PROPERTY_Update_Option$="R"  
PROPERTY_New_Option$="0"  
  
!  
! Methods  
FUNCTION FM_Pre_Remove()SALESREP_PRE_REMOVE  
!  
END_DEF  
...  
  
SALESREP_PRE_REMOVE:  
Get Balance info, set variable if balance exists  
IF NOT(balance_exists) THEN RETURN 1  
!  
MSGBOX "Unable to delete due to a Balance"  
!  
RETURN 0  
...
```

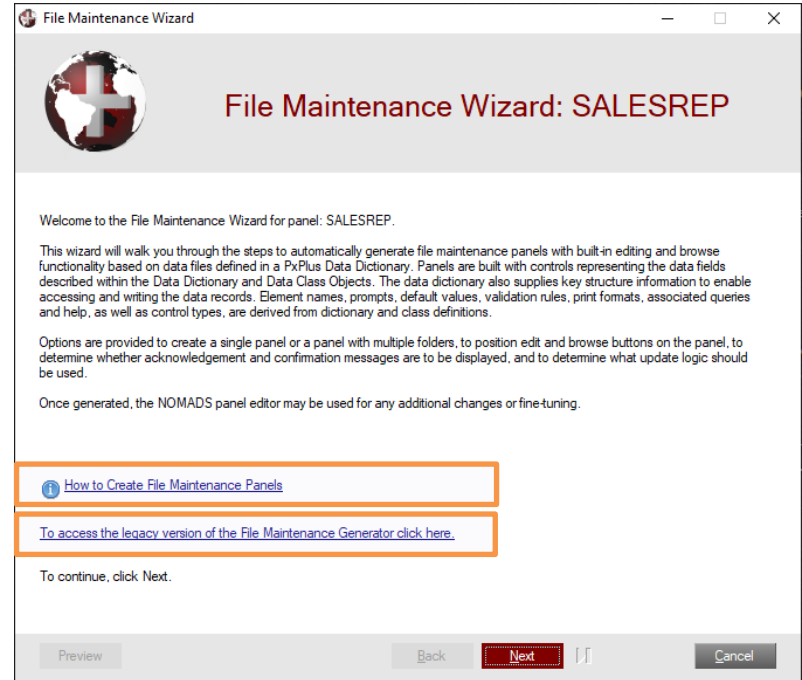
File Maintenance Wizard Recap

- Ability to create maintenance and inquiry panels
- Template-based for ease of panel creation and UI consistency
- Improved the interface to make panel design easier
- See what you designed before committing your panel
- Ability to override base class maintenance methods and re-use them
- Easy to use Wizard style interface

THE STEPS

Wizard Introduction

- Access Help
- Access Legacy File Maintenance



Wizard Step 1 – Object Definition

- Select the File Maintenance Template
 - Enter Panel Title
- Select the Data Dictionary table
- Create a new object or use an existing one
- Determine the type of panel
 - Maintenance
 - Inquiry

File Maintenance Wizard

Step 1: File Maintenance Object Definition

1 2 3 4 5 6 7
Definition Properties Screen Controls Keys Fields Finish

Select the file maintenance template

Template settings may be saved for future use on the final (Finish) step of the wizard. If desired, select an existing template. Press the delete button to delete a template.

File Maintenance Template: None

Select the table from the data dictionary

Table Name: Sales Rep

Panel Title: File Maintenance for Sales Rep file

Enter the maintenance object

The selections made on the next (Properties) step of the wizard are saved in a file maintenance object which will become the default program in the panel header. Choose between creating a new object or using an existing one and then enter the object name. Object names must end in ".pvc".

Create a New File Maintenance Object

Use an Existing File Maintenance Object

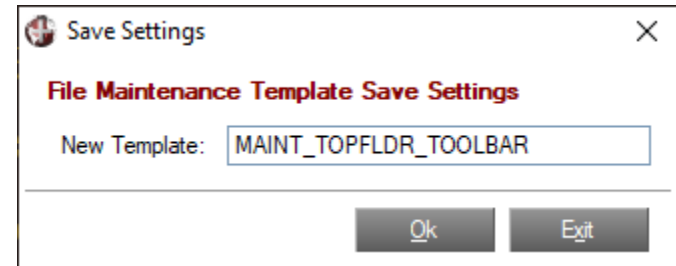
Object Name: salesrep.pvc Inquiry Only

Preview Back Next Finish Cancel

Wizard Step 1 – Object Definition

Templates

- A named collection of all the wizard properties and attributes
- Once a template is selected, property values are brought in
- Create panels with a consistent look and feel
- For a specific user interface
 - SimpleMaint_Statusbar
 - Maint_SidebarFolder
 - Maint_EmbBrowse_Titlebar
 - Inquiry_TopFolder
- Layout of panel or Data Dictionary table not saved
- Template is defined on the Finish step



Wizard Step 2 – Object Properties

- Define object properties
- Choose how records are updated
 - Optimistic locking
 - Full record locking
 - No locking
- Screen behavior
 - New record or writing/deleting a record
- Message options
 - Creating
 - Writing and deleting a record
 - Confirmation and/or acknowledgement

File Maintenance Wizard

Step 2: File Maintenance Object Properties

1 2 3 4 5 6 7
Definition Properties Screen Controls Keys Fields Finish

NOTE: If using an existing file maintenance object, these values are already defined as indicated within the object and are therefore not editable.

Select the update behavior

Select the record locking behavior when a record is updated.

Review Before Write Lock Record No Record Lock

Select the screen behavior

Select the screen behavior on a new record. Select the screen behavior after writing or deleting a record.

Do Not Clear Fields Auto-Clear All Fields Do Not Clear Fields Auto-Clear All Fields

Select the screen behavior for saving changes.

Standard Save Auto-Save Changes

Select record message options

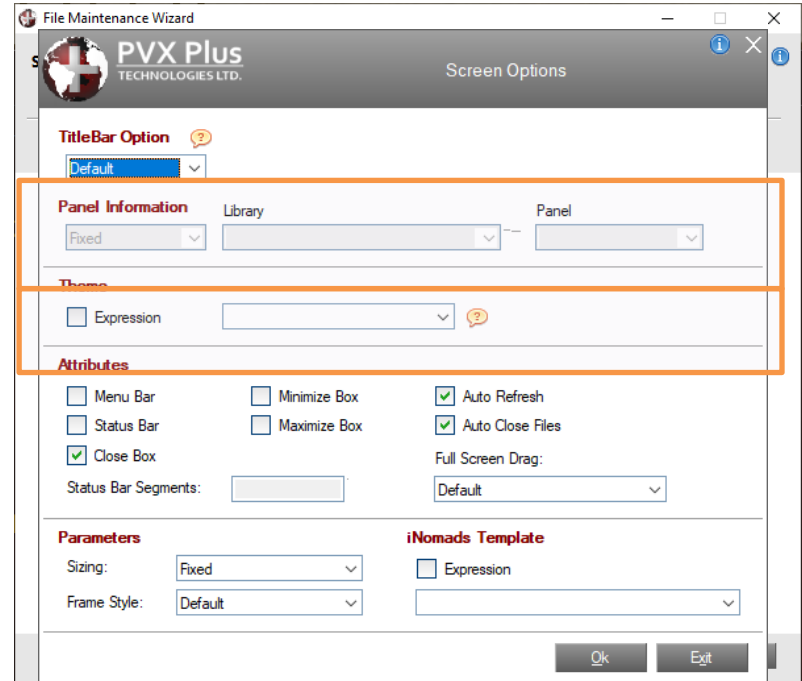
Select the messages that will display when a record is created or when a record is deleted.

Confirm New Record Acknowledge Writes Confirm Delete Request Acknowledge Deletes

Preview Back Next Finish Cancel

Wizard Step 3 – Screen Layout

- Defining Screen options
 - Screen Options button for more options
 - Similar to Header panel
- Positioning of Browse buttons
 - Top/bottom-left/right combinations
 - Beside key
 - None
 - Embedded panel
 - Tab stop



Wizard Step 3 – Screen Layout

- Positioning of Action buttons
 - Write, Delete, Clear, Exit
 - Top/bottom-left/right combinations
 - Embedded toolbar, toolbar, embedded panel
 - Tab stop
- Optional Embedded Panel
 - Choose a library and panel
 - Positioning
 - Top/bottom-left/right/center combinations
 - Bottom bar

File Maintenance Wizard

Step 3: File Maintenance Screen Layout

1 2 3 4 5 6 7
Definition Properties Screen Controls Keys Fields Finish

Define screen options
Define the screen positioning options. Use the Screen Options button to access additional screen options.

Position: Column: Line:

Location of browse buttons

Library Panel Position Tab Stops

Location of action buttons


Library Panel Position Tab Stops

Optional embedded panel


Library Panel Position

Wizard Step 4 – Control Settings

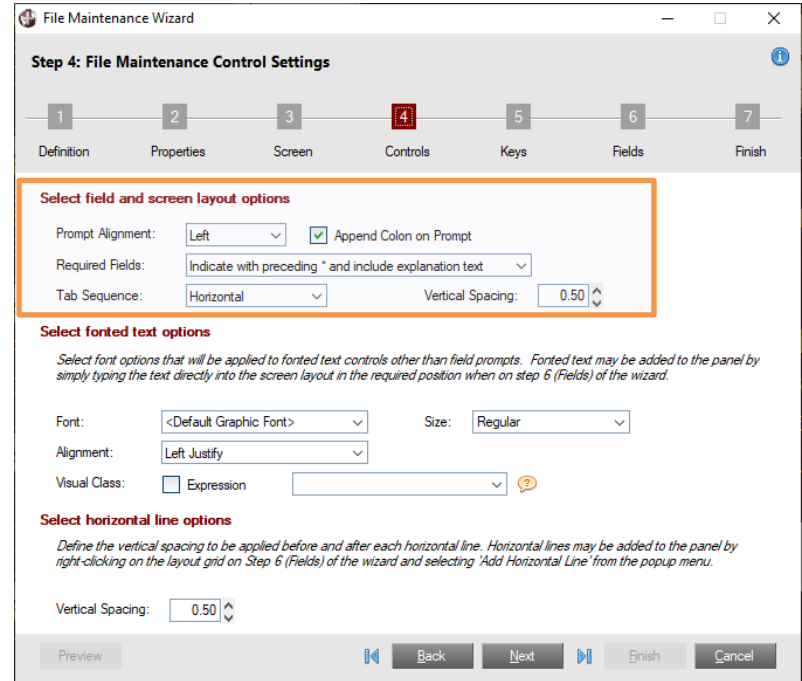
- Field/Control Layout options
- Data Dictionary elements short description
 - Prompt Alignment - left, right, no prompt
 - Display colon
 - Required fields display
 - with *
 - with no *
 - with * and a notation at bottom
 - Control tab sequence – Horizontal, Vertical
 - Vertical spacing – min .50, max 3.0

Year-to-date orders: 

Prior years orders:

Year-to-date orders: 

Prior years orders:



File Maintenance Wizard

Step 4: File Maintenance Control Settings

1 Definition 2 Properties 3 Screen 4 **Controls** 5 Keys 6 Fields 7 Finish

Select field and screen layout options

Prompt Alignment: Append Colon on Prompt

Required Fields:

Tab Sequence: Vertical Spacing:

Select fonted text options

Select font options that will be applied to fonted text controls other than field prompts. Fonted text may be added to the panel by simply typing the text directly into the screen layout in the required position when on step 6 (Fields) of the wizard.

Font: Size:

Alignment:

Visual Class: Expression

Select horizontal line options

Define the vertical spacing to be applied before and after each horizontal line. Horizontal lines may be added to the panel by right-clicking on the layout grid on Step 6 (Fields) of the wizard and selecting 'Add Horizontal Line' from the popup menu.

Vertical Spacing:

Preview

Wizard Step 4 - Control Settings

- Fonted Text options
- Non dictionary specific text
 - Select a Font and Font size
 - Alignment – left, right, center
 - Select a visual class
- Horizontal Line options
 - Vertical spacing – min .25, max 3.0

.25

1.25

*Department



*Department



Year-to-date orders:

Year-to-date orders:

File Maintenance Wizard

Step 4: File Maintenance Control Settings

1 Definition 2 Properties 3 Screen 4 Controls 5 Keys 6 Fields 7 Finish

Select field and screen layout options

Prompt Alignment: Left Append Colon on Prompt

Required Fields: Indicate with preceding * and include explanation text

Tab Sequence: Horizontal Vertical Spacing: 0.50

Select fonted text options

Select font options that will be applied to fonted text controls other than field prompts. Fonted text may be added to the panel by simply typing the text directly into the screen layout in the required position when on step 6 (Fields) of the wizard.

Font: <Default Graphic Font> Size: Regular

Alignment: Left Justify

Visual Class: Expression

Select horizontal line options

Define the vertical spacing to be applied before and after each horizontal line. Horizontal lines may be added to the panel by right-clicking on the layout grid on Step 6 (Fields) of the wizard and selecting 'Add Horizontal Line' from the popup menu.

Vertical Spacing: 0.50

Preview Back Next Finish Cancel

Wizard Step 5 – Key Settings

- Does not apply for single-segment keys
- For multi-segment keys can control the behavior of the 1st segment
- If using a Reference Key, field can be defined

File Maintenance Wizard

Step 5: File Maintenance Key Settings

1 2 3 4 5 6 7
Definition Properties Screen Controls Keys Fields Finish

NOTE: The following options do not apply for single-segment keys.

Primary Key Field(s) SalesRepCode

Fixed Key Segment

Indicate if the data being maintained includes some sort of a fixed value (such as a company code for example) in the first segment of the key. If so, indicate whether this value should be disabled or hidden and enter the value.

Lock First Segment

Behavior: Disable Locked Segment Hide Locked Segment

Value to Pre-load: Fixed Expression

Cross Reference Key Field

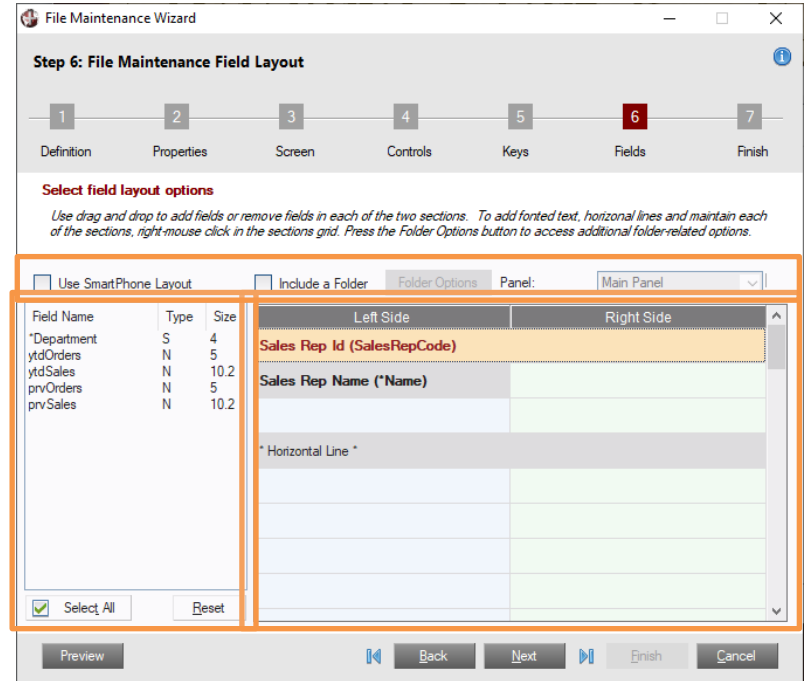
Indicate if there is a unique, single segment key that is to be maintained automatically.

Field that Contains 'Reference Key':

Preview Back Next Finish Cancel

Wizard Step 6 – Field Layout

- All the panel design is done in Step 6
- Three sections
 - Data Dictionary elements
 - Layout grid
 - Additional options



Wizard Step 6 – Dictionary Elements

Dictionary Elements

- Elements loaded into a list box
- Report View with sortable columns
- Drag and drop elements to any cell in the layout grid
- Ability to single or multi-select
- Elements are removed from list box
- Select/Deselect All button to select/unselect all elements
- Reset button clears layout grid

Field Name	Type	Size
*Department	S	4
ytdOrders	N	5
ytdSales	N	10.2
prvOrders	N	5
prvSales	N	10.2

Left Side	Right Side
Sales Rep Id (SalesRepCode)	
Sales Rep Name (*Name)	
* Horizontal Line *	

Wizard Step 6 – Layout Grid

- Left Side and Right Side represents two columns on a panel
- Key field(s) in red are locked at the top and cannot be moved
- Elements from the dictionary in bold font
- Non-elements are in standard font
- Drag/drop items within the grid
 - To any cell in the grid
 - Back to the elements list box

Left Side	Right Side
Sales Rep Id (SalesRepCode)	
Sales Rep Name (*Name)	
Department (*Department)	
* Horizontal Line *	
Current Year Sales	Previous Year Sales
Year-to-date orders (ytdOrders)	Prior years orders (prvOrders)
Year-to-date Sales (ytdSales)	Prior Year Sales (prvSales)

Wizard Step 6 – Layout Grid

- Additional text can be directly typed in an unoccupied cell
- Horizontal lines can also be added
- Additional options with right click on the grid

Left Side	Right Side
Sales Rep Id (SalesRepCode)	
Sales Rep Name (*Name)	
Department (*Department)	Prior years orders (prvOrders)
* Horizontal Line *	
	Prior Year Sales
Year-to-date orders (ytdOrders)	
Year-to-date Sales (ytdSales)	Prior Year Sales (prvSales)

Wizard Step 6 – Layout Grid

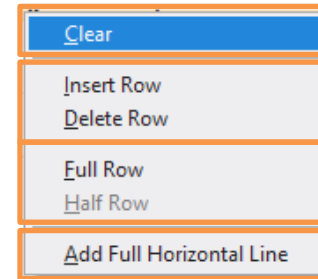
- Layout grid is built on the concept of half rows and full rows
 - Half row encompasses a single column – either left or right section
 - Full row encompasses both the left and right sections
- Horizontal lines are always full rows
- How you use half/full rows will determine width of panel

Left Side	Right Side
Sales Rep Id (SalesRepCode)	
Sales Rep Name (*Name)	
Department (*Department)	Prior years orders (prvOrders)
* Horizontal Line *	
	Prior Year Sales
Year-to-date orders (ytdOrders)	
Year-to-date Sales (ytdSales)	Prior Year Sales (prvSales)

Wizard Step 6 – Layout Grid

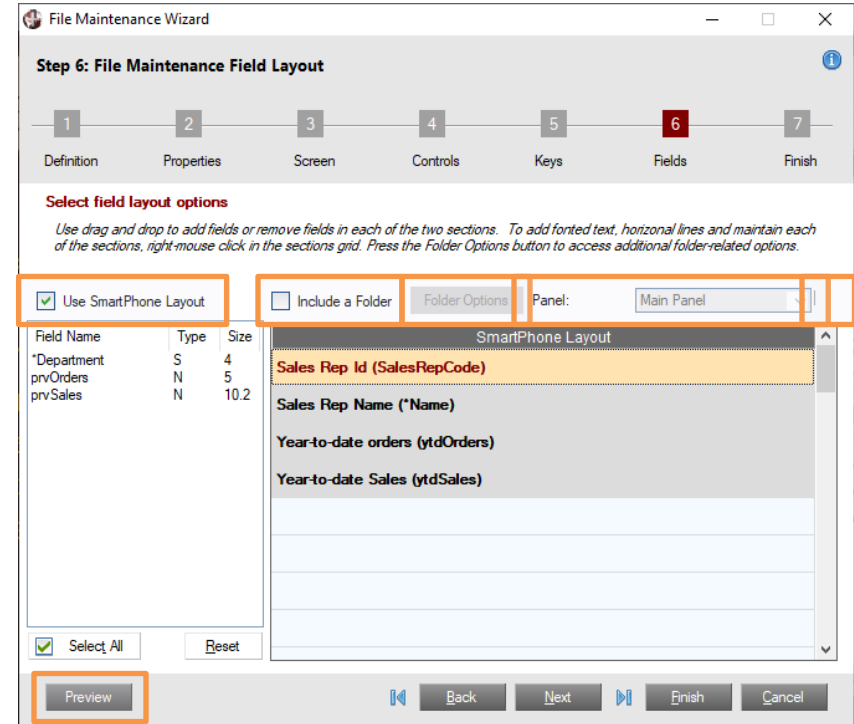
Additional Options to help with panel design

- Grid right click
 - Clear will clear the contents of the cell
 - Insert and Delete Row
 - Full row or half row
 - Add Horizontal Line



Wizard Step 6 – Smartphone Layout

- Option to include a folder
- Folder Options button
 - Folder type, tab width/height, other options
- Current Tab drop box
 - Enter a new tab name or select a tab
 - Changes contents of Layout Grid
- Maintain Folder Tabs button
 - Control order of tabs, add/delete tabs
- Preview button is enabled in this step



Wizard Step 6 – Preview

- Preview screen gives you a true indication of how the panel will look
 - Accessible from all Wizard steps
 - Buttons on the panel are not active
 - Folder tabs and tab sequence are active
- As properties are modified, Preview gives instant feedback on panel design

Preview - File Maintenance for Sales Rep file

This preview allows you to see the layout of your File Maintenance panel although the controls will not actually function. Use the 'Close Preview' button (above) to exit.

Sales Rep Id:

*Sales Rep Name:

*Department:

Current Year Sales

Year-to-date orders:

Year-to-date Sales:

Previous Year Sales

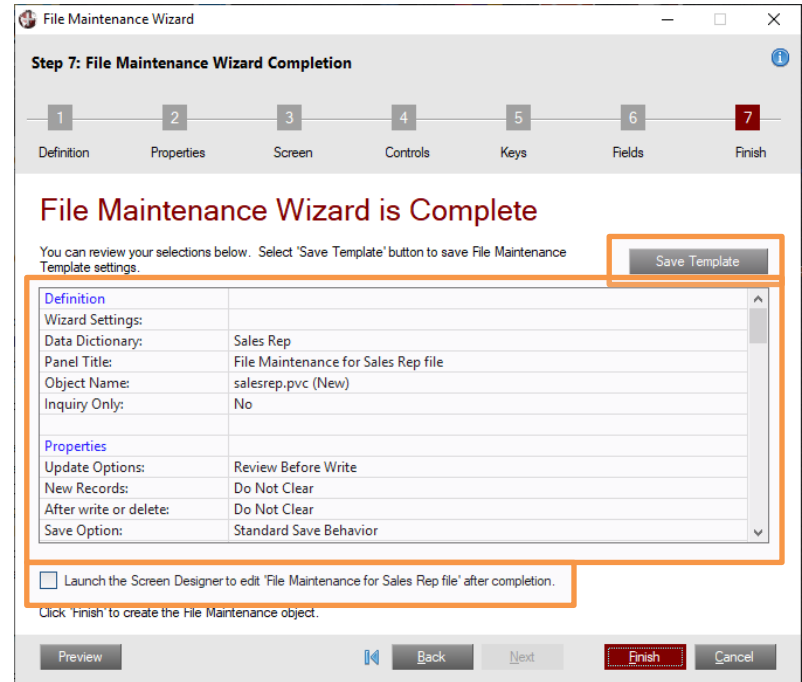
Prior years orders:

Prior Year Sales:

⏪ ⏩ ⏴ ⏵

Wizard Step 7 – Wizard Completion

- Final step of the Wizard
- Gives a warning if no fields are selected
 - Option to add all fields to the panel
- Save the current template or create a new template
 - All wizard properties/attributes will be saved
- Finish grid recaps the wizard settings
- Optionally launch the panel
- Like any wizard, you can go back and make any changes as desired
- Use NOMADS for any additional changes



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 2019 (version 16) release.

- [File Maintenance Generator](#)
 - [Step 1: File Maintenance Object Definition](#)
 - [Step 2: Object Properties](#)
 - [Step 3: Screen Layout](#)
 - [Step 4: Control Settings](#)
 - [Step 5: Key Settings](#)
 - [Step 6: Field Layout](#)
 - [Step 7: Generator Completion](#)
- [File Maintenance and Object Inheritance](#)
- [Updating a Generated File Maintenance Panel](#)