

What's New in PxPlus 2026

DireXions 2026 - Developing the Future

Agenda

Major Enhancements

Language Enhancements

Graphical Enhancements

Authenticator App

Editor Updates

Data Dictionary / ODBC

PxPlus 2026 Update 1 (v23.10)





Major Enhancements

.NET Interface Enhancements

- .NET Interface
  - Pass arrays directly between PxPlus and .NET
  - Indexed array access for numeric, string, and .NET object handle types
  - Direct access to system DLLs and .NET objects
  - More detail in .NET exception messages
- NOMADS External Controls
  - Define the .NET DLL name as an expression
  - Fewer steps to access .NET components

Learn more at the Streamlining Development Presentation

VS Code Extension Enhancements

Learn more at the Streamlining Development Presentation

- VS Code Extension
  - Support WindX plug-in connections
  - Broader Linux and macOS support
  - Code Navigation for labels, functions, classes and methods
  - Compile text PxPlus programs to binary/tokenized format
  - List binary/tokenized programs back to text
  - Compare binary/tokenized programs
  - View Properties of binary/tokenized programs
  - Auto line numbering for programs that use line numbers
  - Auto Complete extended to PxPlus directives, mnemonics, system functions, parameters and variables, plus context from the open document

Authenticator App Integration

- Added support for Authenticator Apps
- Supports Microsoft Authenticator, Google Authenticator, and other compatible apps
- Provides stronger, industry-standard authentication for NOMADS/iNomads applications

Updated UI Elements

Learn more at the UI Modernization Presentation

- Greater flexibility to modernize application interfaces
- Rounded corner support across a wide range of graphical controls
- Enhanced control over focus indicators
- More control over field and drop box entry heights
- Expanded UI customization through Control Object Properties, 'OPTION' Mnemonics, Themes and Visual Classes
- More modern and consistent application interfaces
- Enhancements can be applied to both NOMADS and non-NOMADS applications
- Makes it easier to modernize existing PxPlus applications while maintaining the application's existing functionality and design

Security Updates

To help keep PxPlus secure, compatible, and aligned with current security standards, several key security components have been updated for PxPlus 2026:

- **OpenSSL 3.5.6 -** Provides the cryptographic library used for secure communications (TLS/SSL)
  - Why it Matters: Keeps PxPlus current with the latest security fixes and cryptographic standards while maintaining compatibility with modern secure environments.
- **Curl 8.19.0 -** Provides secure data transfer capabilities used when communicating with web services and other Internet-based resources (HTTPS, FTP, etc.)
  - Why it Matters: Delivers the latest security fixes, protocol improvements, and compatibility updates for secure web communications
- **Plink 0.83 -** Updates the SSH component used by PxPlus for secure remote communications
  - Why it Matters: Provides the latest security fixes and improves compatibility with current SSH servers and security requirements.

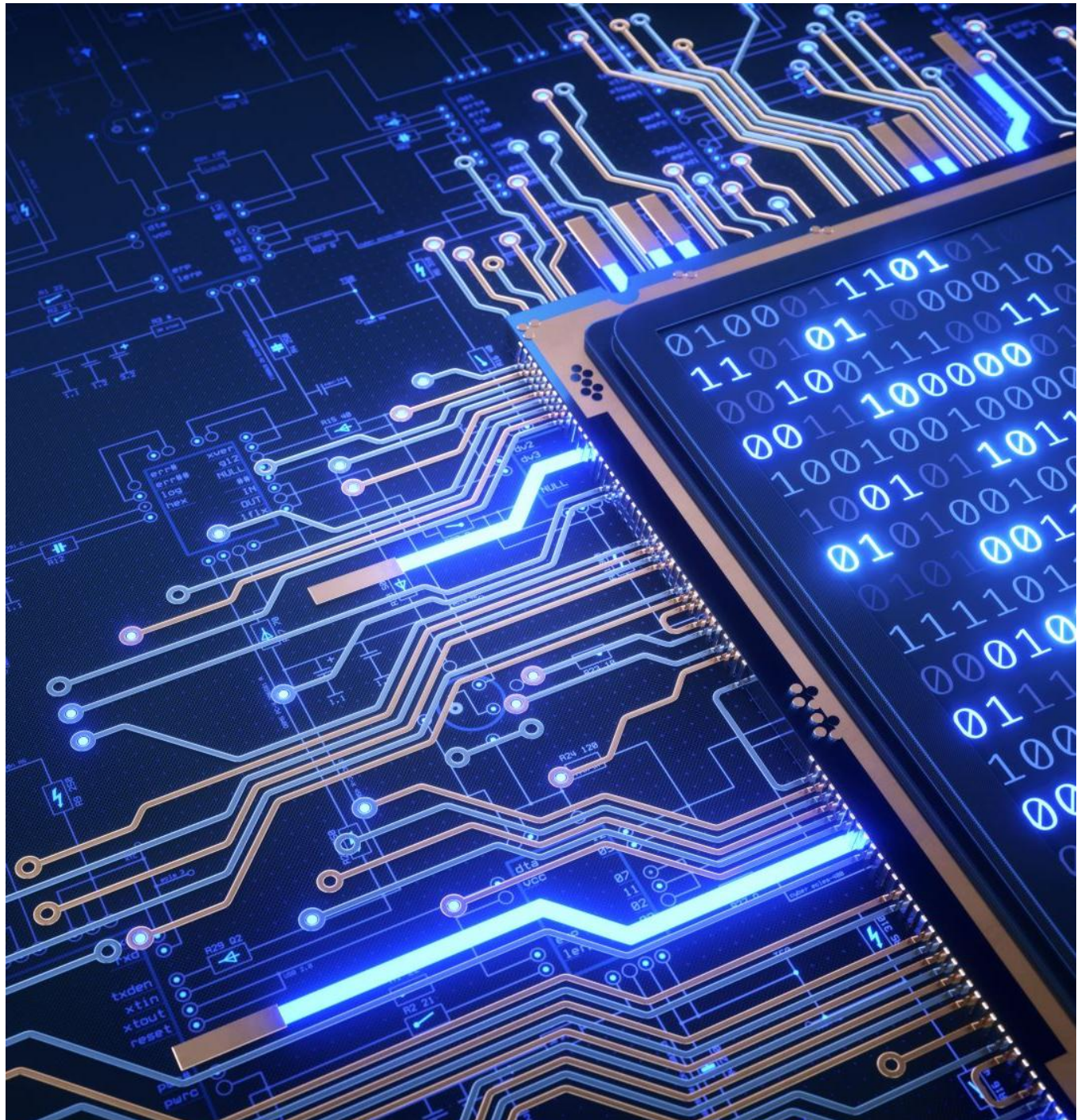
Security Updates

- **CA Root Certificates (Latest Set) -** Provides the trusted certificate authorities used to validate SSL/TLS connections
  - Why it Matters: Keeps certificate validation current by recognizing trusted authorities and removing certificates that are no longer valid.
- **Chromium -** Provides secure data transfer capabilities used when communicating with web services and other Internet-based resources (HTTPS, FTP, etc.)
  - Why it Matters: Delivers the latest security fixes, protocol improvements, and compatibility updates for secure web communications

Security Updates

Updated **PxPlus SQL ODBC Driver** and **PxPlus SQL Server** to utilize OpenSSL 3.5.6 for enhanced security and compliance. Now at 8.20.0000

- Why it Matters: Keeps PxPlus SQL components aligned with current cryptographic standards, addresses known security vulnerabilities, and improves compatibility with modern TLS environments.



Language Enhancements

Directives, Objects, Functions, and Utilities

Directives – Def Object

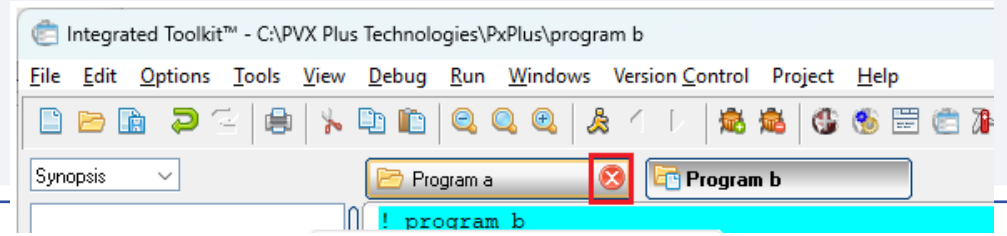
Learn more at the Streamlining Development Presentation

Object	Description
Def Object	Enhanced DEF OBJECT functionality with new properties and methods for the .NET Interface **New Properties** PvxException$ - Read only property returns the last .NET exception error message PvxDllName$ - Name of the DLL returned from the Def Object call or from the Select System object dialog PvxObjName$ - Name of the object name returned from the Def Object call or from the Select System object dialog **New Methods** PvxGetAt[$](index[$]) - Returns the value at the given index from the .NET object PvxSetAt(index[$], value[$]) - Assigns the given value to the element of the given index of the NET object

Directives – Multi-Line

Object	Description
Multi-Line	New option to vertically center text within a Multi-Line control multi_line 100,@10,15,12,3),**opt="m"** multi_line 100,@(10,10,12,3)  multi_line 100,@(10,10,12,3),**opt="m"** 

Directives – Button, Check Box, Radio Button

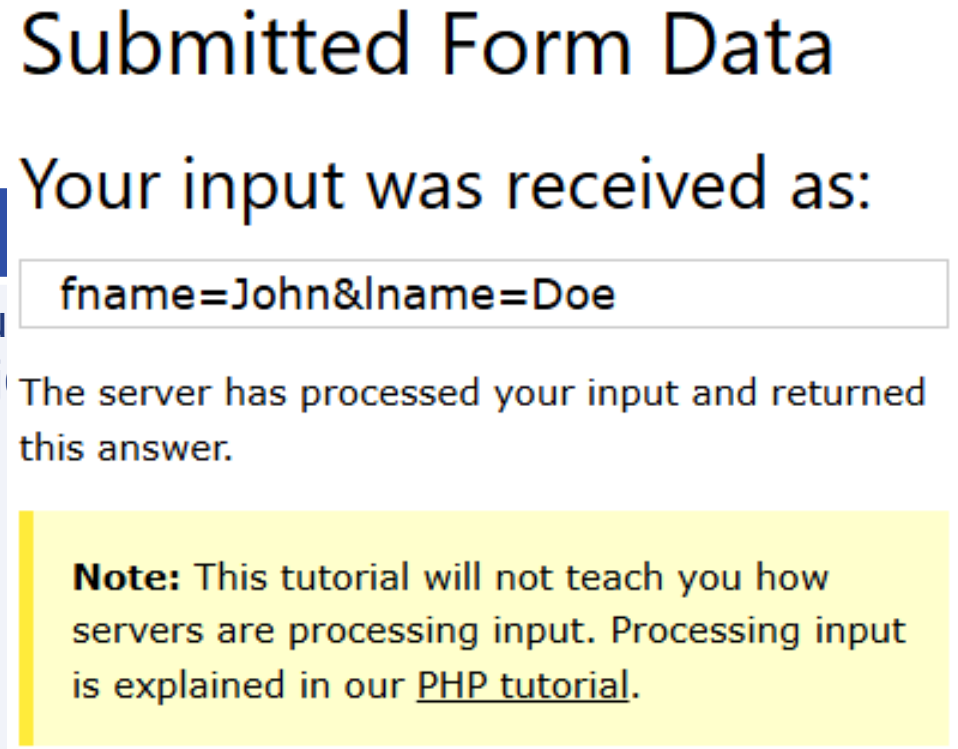
Object	Description
Button Check Box Radio Button	Option for adding a tab close button to Buttons, Check Boxes (image), and Radio Buttons (image). This option was always there but somewhat hidden. Button 100,@(10,10,20,2)="My Button",**opt="x"**  To determine what part of the button was pressed – main button or X icon Button Read 100, mode$ If mode$="X" then the X part of the button was pressed Example of this can be seen in *IT and Ed+ editors, when hovering / closing a program tab 

Objects – Array List

Object	Description
ArrayList	New methods added to help with data manipulation. **Clone()** - Returns a handle to an array list with identical values **Get(index1, index2)** - Gets a subsection of the array list, returned as an array list handle **Pop() / Pop$()** - Gets the last value in the array list and then removes it **Print()** - Prints the string representation of the array list **Remove_range(index1, index2)** - Removes the values within the given range **Reverse()** - Reverses the order of the array list **Set(array)** - Sets array list values to that of the given array list **Shift() / Shift$()** - Gets the last value in the array list and then removes it **String$()** - Returns a string representation of the array list **Swap(index1, Index2)** - Swaps the values at the given indices

Objects – *Browser

Object	Description
*Browser	New Post method that sends an HTTP POST requ was previously available in the Shell.Explorer obj Post(url$ [,postData$ [,headers$]]) x=100 def object x,@(10,10,60,80)="*browser" x'post ("https://www.w3schools.com/action_page.php","fname=John&lname=Doe","Content-Type: application/x-www-form-urlencoded")



Objects – Parse URL Object

Object	Description
ParseURL	New object extracts components and named parameter values from a URL. Various properties and methods make it easy to extract URL components and retrieve query parameter values by name or position. parse_obj=new(*obj/parseURL) x=new("*obj/parseurl") x'url$="https://pxplus.com/products?product=PxPlus&version=2026" print x'site$ >pxplus.com print x'arg$("product") >PxPlus print x'path$ >products print x'arg$("version") >2026

Objects – *Secure

Object	Description
*Secure	New methods and property support Authenticator App setup and time-based verification **New Methods** Secret_Code$(user_email$) - generates a QR code and a Base32-encoded secret Totp_Calculation$(secret$) - calculates the current time-based one-time password (TOTP) **New Property** Secret_Encoded$ - provides the generated secret

Functions – TCB

Object	Description
TCB()	New “compiled_osver" keyword returns the operating system version on Linux/Unix systems TCB(keyword [,ERR=stmtref]) print tcb(“compiled_os") >Redhat print tcb(“**compiled_osver**") >10

Utilities - *tools/dotnetconvert

*tools/dotnetconvert is a new utility to Convert a PxPlus array to a .NET array, or a .NET array to a PxPlus array. There are two formats

Learn more at the Streamlining Development Presentation

Format 1 - Convert a PxPlus Array to a .NET Array

CALL "*tools/dotnetconvert;toarray", pxpArray${ALL}, dotNetArray

pxpArray${ALL} - PxPlus array of numbers or strings to convert

dotNetArray - Numeric variable to hold handle to new .NET array object

Format 2 - Convert a .NET Array to a PxPlus Array

CALL "*tools/dotnetconvert;fromarray", dotNetArray, pxpArray[$]{ALL}

dotNetArray - Handle to a .NET array object to convert

pxpArray${ALL} - PxPlus array of numbers or strings to receive output

Utilities - *web/base32

*web/base32 is a new utility used to encode and decode data in Base32 format. Base32 converts data into a simple text format that can be safely stored or shared across different systems. There are two formats.

Format 1 – Used for encoding strings

CALL "*web/base32;ENCODE", a$, b$

a$ - Input string to encode

b$ - Output string containing Base32-encoded result

Format 2 – Use for decoding Base32 strings back to the original data

CALL "*web/base32;DECODE", a$, b$

a$ - Input string containing Base32 data

b$ - Output string containing decoded result

Format 1

```
text$="DireXions"
call "*web/base32;encode",text$,base32$
print base32$
> IRUXEZKYNFXW44Y=
```

Format 2

```
base32$="IRUXEZKYNFXW44Y="
call "*web/base32;decode",base32$,text$
print text$
>DireXions
```



Graphical Enhancements



Control Object Properties

Control Object Properties

- Control Object Properties provide greater control over the appearance and behavior of graphical controls — dynamically at runtime
- Why use them?
  - Modernize existing application interfaces
  - Customize control appearance and behavior
  - Modify control properties without recreating controls
  - Improve application usability
- Supported in both NOMADS and non-NOMADS environments

New Properties

Property	Description	Controls
CBCornerRadius$	Supports rounded corners for standard check boxes	Check Box Tri-State Check Box
CornerRadius$	Supports rounded corners for controls	Button Check Box (image) Drop Box List Box Multi-Line Radio Button (image) Tri-State Check Box (image) Variable Drop Box

New Properties

Property	Description	Controls
FieldHeight	Controls the height of the drop box input and drop list area in pixels	Drop Box Variable Drop Box
FocusRect	Suppress or display the dotted focus rectangle on controls	Button Check Box Drop Box List Box Radio Button Tri-State Check Box

Corner Radius Property

- New CornerRadius property sets the corner radius for applicable controls
- Works only in 4D mode
- Buttons are flat
- Various property values are available for each control type
  - Null - Property is not set
  - Round - Sets the default radius of 3 for round corners
  - Square - Sets the default radius of 0 for square corners
  - Value - Enter a value from 0 to 255 inclusive. Depends on control type

Note: Corner rounding is limited based on the control type and/or the control size

Corner Radius Property

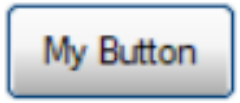
Supported Controls

Control	Supported Range	Property Name
Button	0 to 255 inclusive	CornerRadius$
Check Box, Tri-State Check Box Standard	0 to 255 inclusive	CBCornerRadius$
Check Box Tri-State Check Box with Image	0 to 255 inclusive	CornerRadius$
Drop Box, Variable Drop Box	0 to 3 inclusive	CornerRadius$
List Box	0 to 8 inclusive	CornerRadius$
Multi-Line	0 to 7 inclusive	CornerRadius$
Radio Button with Image	0 to 255 inclusive	CornerRadius$

- All controls set to Round will have a default round radius of 3

Corner Radius Example - Button

print '4D'
x=100
Button x, @(10, 10, 12, 2)="My Button"



x'cornerradius$="round"



x'cornerradius$="30"



Learn more at the UI Modernization Presentation

x'cornerradius$="square"



z=101
Button z,@(10.10,6.3)="{!X}"



z'cornerradius$="round"



z'cornerradius$="30"



Corner Radius Example – Standard Check Box

print '4D'
x=100
Check Box x, @(10, 10, 15, 1)="My Check Box"



x'cbcornerradius$="round"



x'cbcornerradius$="10"



x'cbcornerradius$="square"



Learn more at the UI Modernization Presentation

Focus Rectangle Property

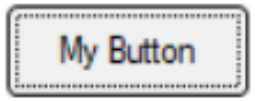
- New FocusRect property controls whether the focus rectangle is displayed when a control has focus
- Can be shown or suppressed for a cleaner, more modern interface
- Provides greater control over the visual appearance of focused controls
- Can be configured for individual controls
- Supported across a variety of graphical controls

Focus Rectangle Example – Button/Check Box

print '4D'
x=100
Button x, @(10, 10, 12, 2)="My Button"



x'cornerradius$="round"



x'focusrect=0



print '4D'
x=100
check_box x,@(10,10,15,1)="My Checkbox"



x'focusrect=0



x'CBcornerradius$="round"

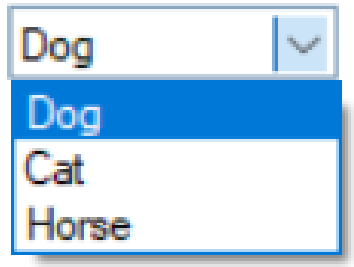


Field Height Property

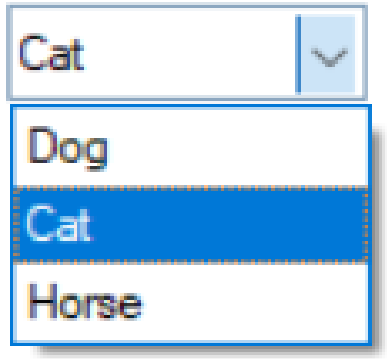
- New FieldHeight property for Drop Box and Variable Drop Box controls
- Controls the height of the input area and drop-down entries in pixels
- Applies the same height to each line in the drop-down section
- Vertically centers text within the control
- Provides greater flexibility for creating larger, cleaner, and more modern controls

Field Height Example – Drop Box

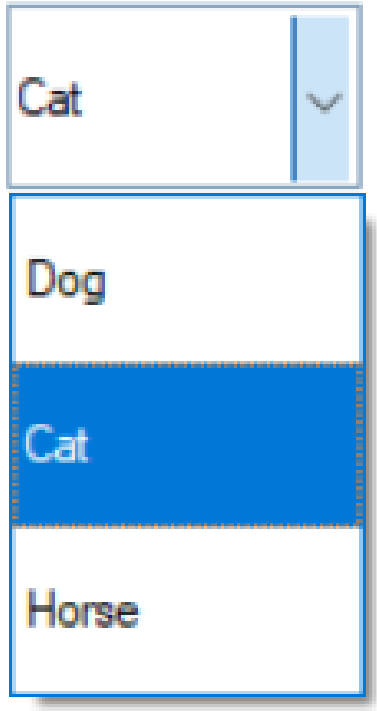
x=100
drop_box x,@(10,10,12,6)
drop_box load x,"Dog/Cat/Horse"



fieldheight=20



fieldheight=40



‘Option’ Mnemonics

- ‘Option’ Mnemonics allow for specific PxPlus environment properties to be set or changed
- Set from a START_UP program, application code, or INI entries
- Changes can be made on the fly within the current PxPlus session
- Dynamically adjust settings when needed rather than requiring a restart or permanent configuration change
- Standardize application behavior and appearance
- 'OPTION' environment property can be retrieved using FIN(0, keyword$) function
- Supported in both NOMADS and non-NOMADS environments
- Added three new Option Mnemonics
  - Corner Radius
  - Focus Rectangle
  - Tab Close Button

‘Option’ Mnemonics – Corner Radius

Corner Radius options for creating round controls

Property	Description
CornerRadBtn	Option to set the corner radius for all Button controls
CornerRadCB	Option to set the corner radius for all standard Check Box and Tri-State Check Box controls
CornerRadCBImg	Option to set the corner radius for all Check Box controls with an image
CornerRadDB	Option to set the corner radius for all Drop Box and Variable Drop Box controls

‘Option’ Mnemonics – Corner Radius

Corner Radius options for creating round controls

Property	Description
CornerRadLB	Option to set the corner radius for all types of List Box controls except Report View and Variable List Boxes
CornerRadML	Option to set the corner radius for all Multi-Line controls
CornerRadRBImg	Option to set the corner radius for all Radio Button controls with an image

‘Option’ Mnemonics – Focus Rectangle

Focus Rectangle options for suppressing or displaying the dotted focus rectangle on controls

Property	Description
FocusRectBtn	Option to suppress or display the focus rectangle for Button controls
FocusRectCB	Option to suppress or display the focus rectangle for Check Box controls and Tri-State Check Box controls (with and without an image)
FocusRectDB	Option to suppress or display the focus rectangle for Drop Box controls except Variable Drop Boxes
FocusRectLB	Option to suppress or display the focus rectangle for List Box controls except Variable List Boxes

‘Option’ Mnemonics – Focus Rectangle

Focus Rectangle options for suppressing or displaying the dotted focus rectangle on controls

Property	Description
FocusRectRB	Option to suppress or display the focus rectangle for Radio Button controls (with and without an image)

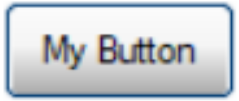
‘Option’ Mnemonics – Tab Close Button

Tab Button Close options for customizing the tab close icon

Property	Description
TabBtnCloseHoverIcon	Option to set the path of an icon to use when hovering over the close button on a Button, a Check Box (with an image), or a Radio Button (with an image) where OPT="x" is set
TabBtnCloseIcon	Option to set the path of an icon to use when hovering over a Button, a Check Box (with an image), or a Radio Button (with an image) where OPT="x" is set

‘Option’ Mnemonic Example – Button Corner Radius

```
print ‘4D’
button 100, @(10, 10, 12, 2)=“My Button”
```




```
print ‘OPTION’(“CornerRadBtn”,”Round”)
button 101,@(10,15,12,2)=“My Button”
```




```
x$=fin(0,”CornerRadBtn”)
Print x$
>Round
```

Learn more at the UI Modernization Presentation

‘Option’ Mnemonic Example – Check Box Corner Radius

print ‘4D’
Check Box 100, @(10, 10, 15, 1)=“My Check Box”



print ”OPTION’(“CornerRadCB”,”5”)
Check Box 101, @(10, 10, 15, 1)=“My Check Box”



x$=fin(0,”CornerRadCB”)
Print x$
>5

Learn more at the UI Modernization Presentation

‘Option’ Mnemonic Example – Tab Close Button

button 100, @(10, 10, 20, 2)=“My Button”,opt=“x”



print ‘OPTION’(“TabBtnCloseIcon”,”c:\icons\close.ico”)
button 101, @(10, 10, 20, 2)=“My Button”,opt=“x”



print ”OPTION”(“TabBtnCloseHoverIcon”,”c:\icons\hover.ico”)
button 102, @(10, 10, 20, 2)=“My Button”,opt=“x”



Learn more at the UI Modernization Presentation



IDE and NOMADS Enhancements

Overview

- Added new attributes to NOMADS controls
- New properties for Themes and Visual Classes
- New attributes added to applicable Data Class control types
- Refreshed the Dark and Light mode Toolkit Themes using the new properties
- Updated the Light mode interface
- Added rounded corners to all Toolkit dialogs. Not inclusive to Light or Dark mode themes.
- Improved rendering of rounded Rectangle Shapes with GDI+ support
- Updated the Progress Bar to use the rounded Rectangle Shape

Screen Designers

Controls with New Attributes – Added to all three designers

Control	Attribute
Button	Corner Radius
Check Box	Corner Radius
Drop Box	Corner Radius
List Box	Corner Radius. Except for Report View, Variable List Box

Screen Designers

Controls with New Attributes – Added to all three designers

Control	Attribute
Multi-Line	Corner Radius Vertically Center Text
Radio Button	Corner Radius
External Control - .NET	Browse System DLLs Button DLL Name Dropbox – Fixed/Expression

Screen Designers - Corner Radius

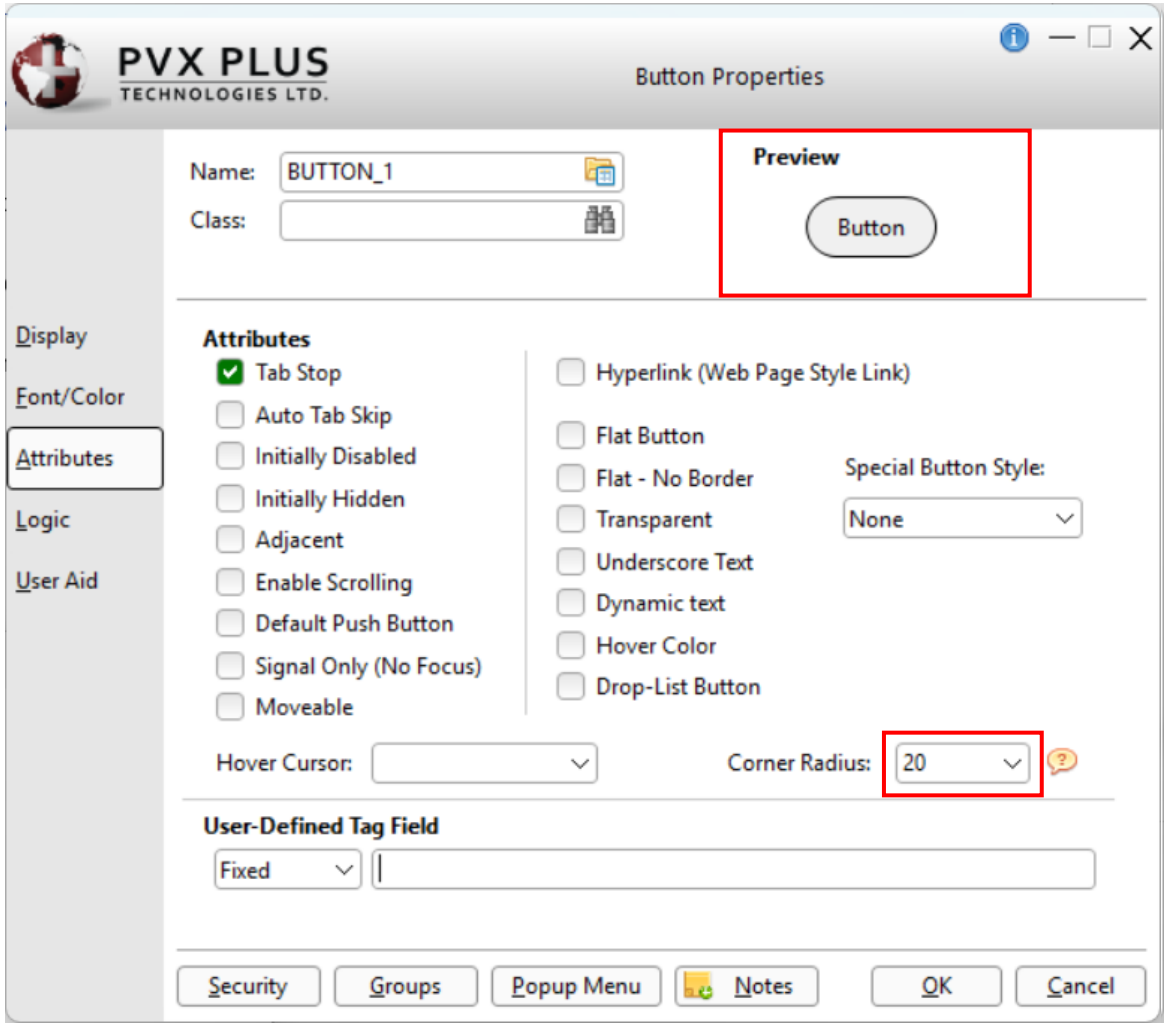
- New Variable Drop Box attribute added to the attributes tab for each applicable control
- Info tip for each control
- Works only in 4D mode
- Attribute values are available for each control type
    - Null - Property is not set
    - Value - Enter a value from 0 to 255 inclusive. Depends on control type
    - Round - Sets the default radius of 3 for round corners
    - Square - Sets the default radius of 0 for square corners

Note: Corner rounding is limited based on the control type and/or the control size

Button Control

- New corner radius Variable Drop Box added to attributes tab
- Variable Drop Box has 4 selections – square, round and a null value
- A value can also be entered
- Preview will display the corner radius set

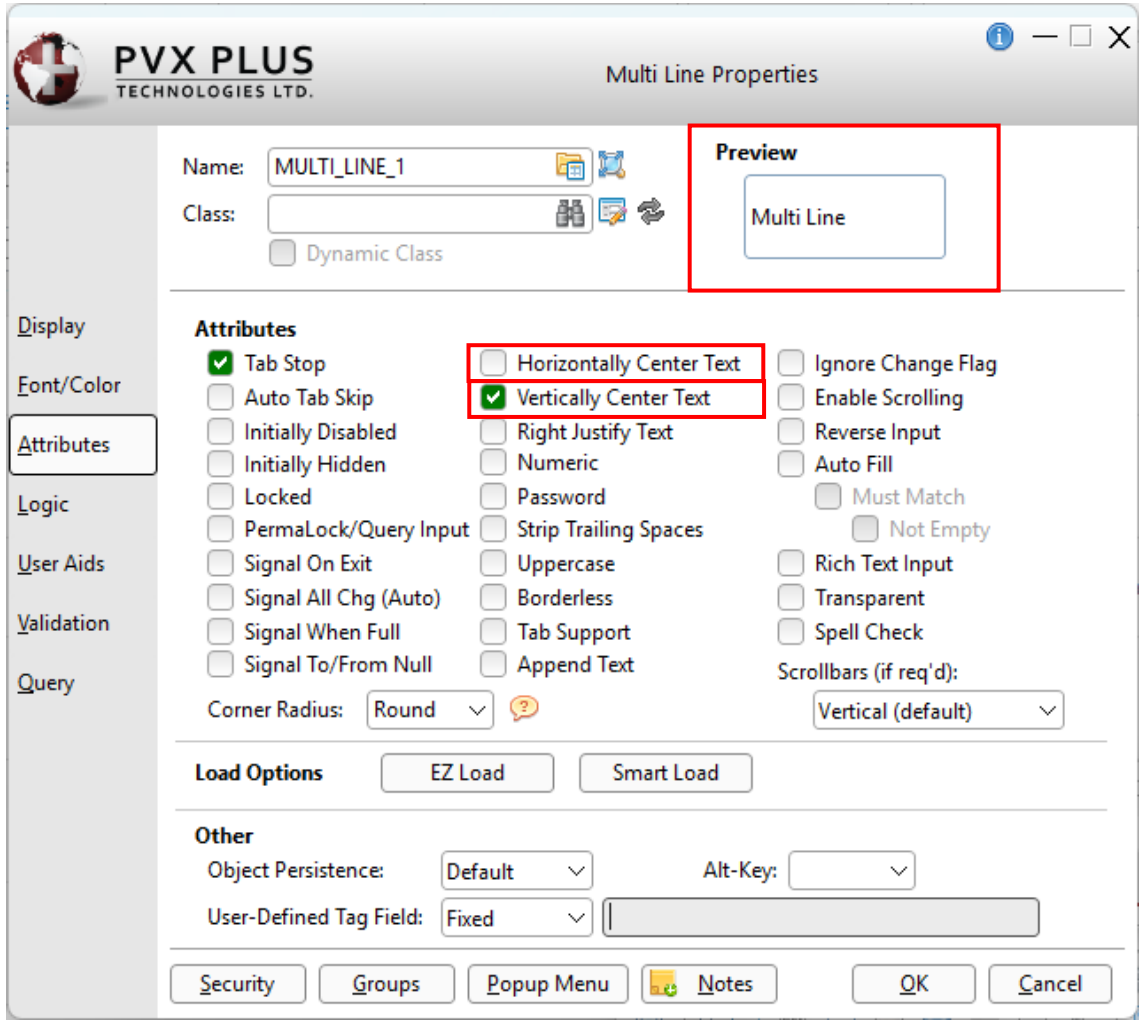
Learn more at the UI Modernization Presentation



Using NOMADS+ / Folder Style screen designer – Light Mode

Multi-Line Control

- New corner radius Variable Drop Box added to attributes tab
- Added Vertically Center Text check box
- When checked it will center the text within the Multi-Line
- Preview will display the centered text
- Renamed Center Text check box to Horizontally Center Text

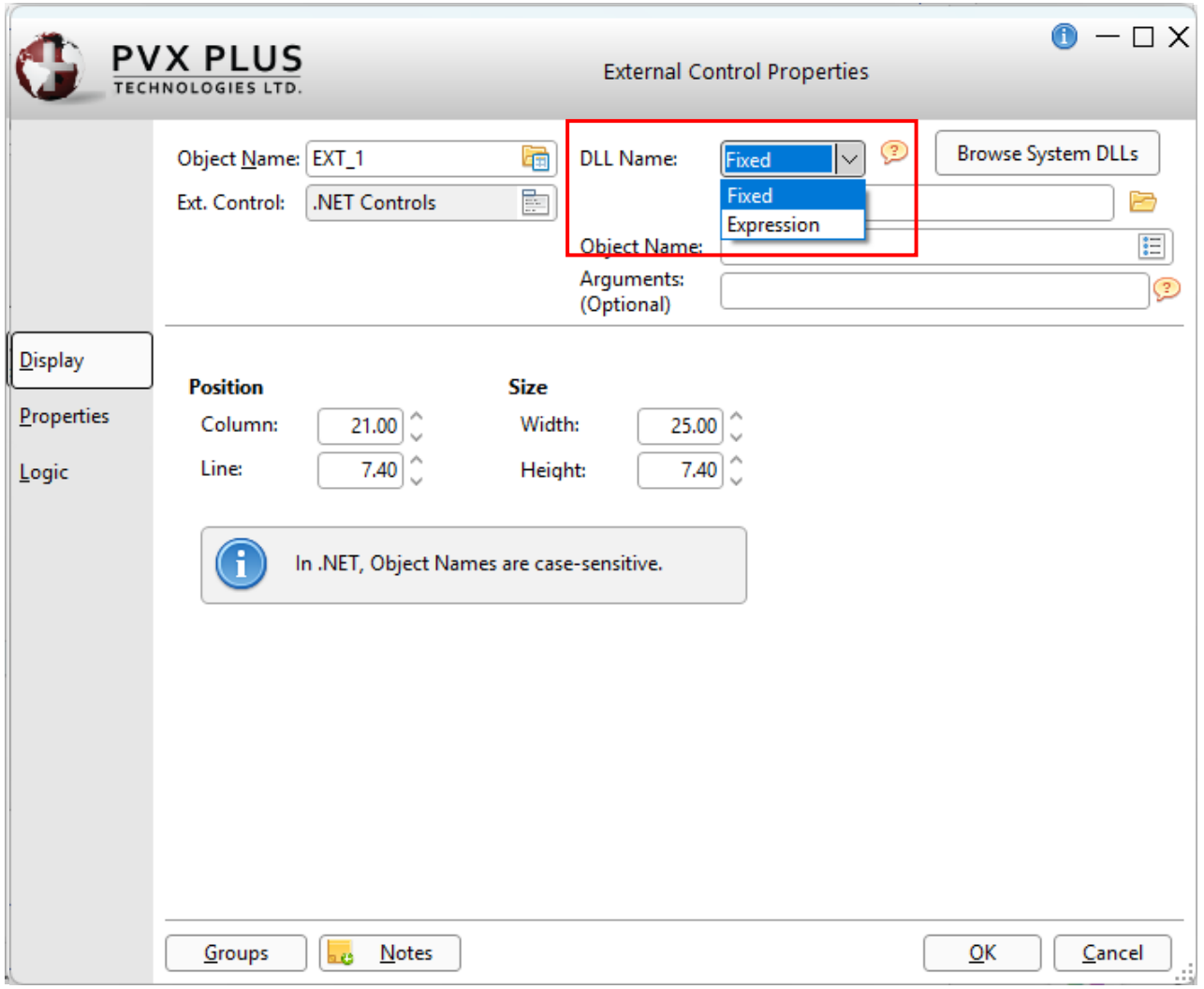


Using NOMADS+ / Folder Style screen designer – Light Mode

External Control

- New features for .NET Controls
  - Added a Browse System DLLs button
  - When selected it can be used to select a System DLL and object
  - Ability to enter an expression for both the DLL name and Object name

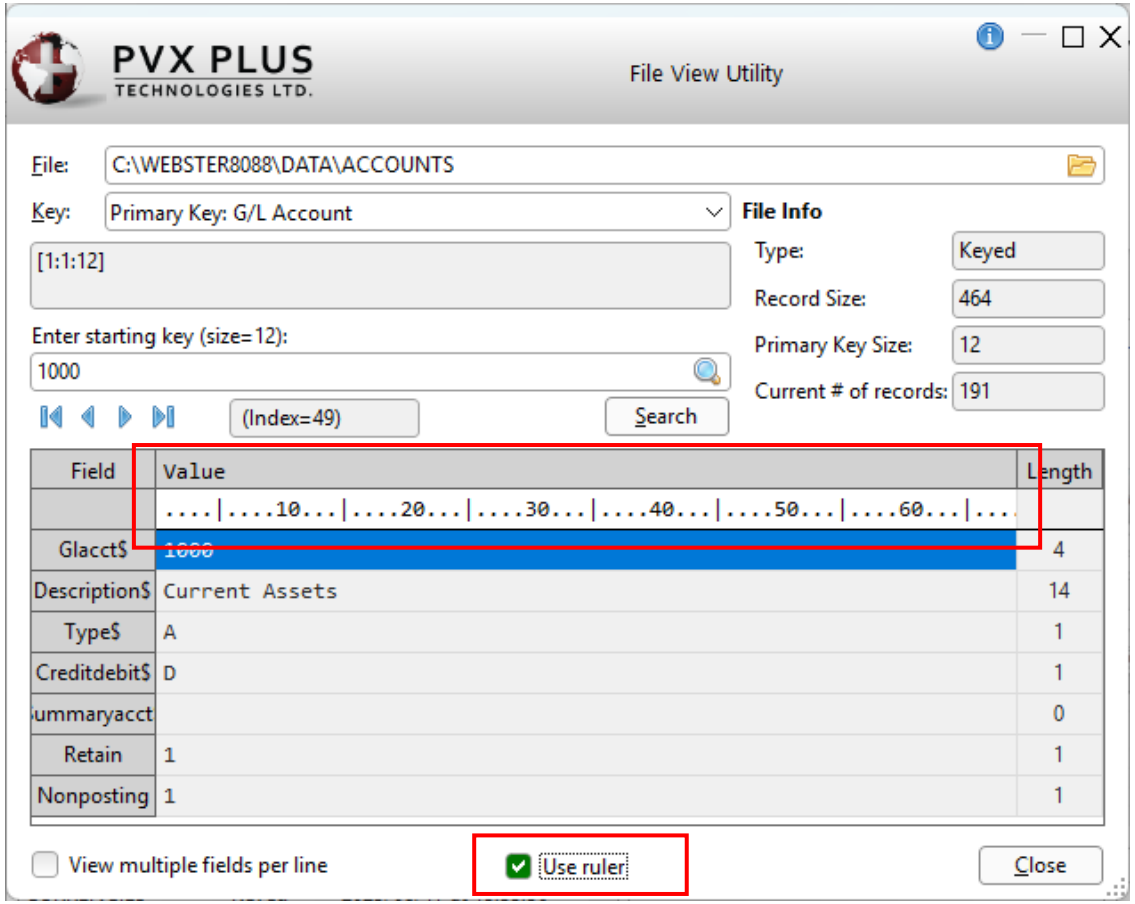
Learn more at the Streamlining Development Presentation



Using NOMADS+ / Folder Style screen designer – Light Mode

File View Utility

- The **File View Utility** is used to view data within a data file
- Two new features were added
  - Ability to copy the data in the grid by double clicking in the Value cell
  - Added a User Ruler checkbox to indicate character positioning with the Value column by adding a ruler and changing font to fixed





Authenticator App and User Security

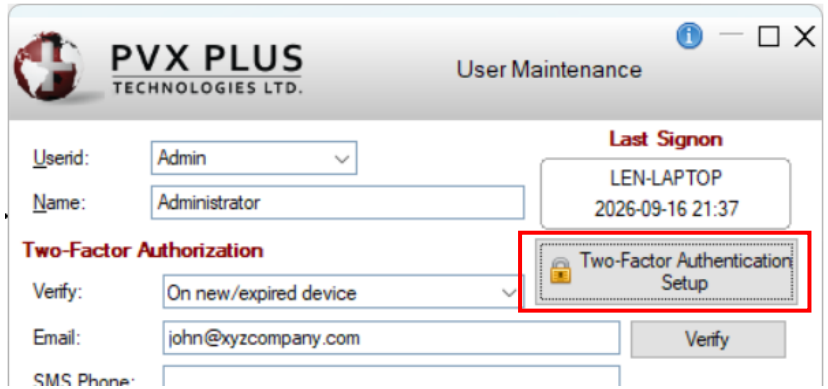
Authenticator Apps and User Security

- Added an Authenticator App as another two-factor authentication (2FA) option for NOMADS/iNomads applications
- Users scan a QR code to set up Microsoft Authenticator, Google Authenticator, or another TOTP-compatible app
    - The QR code is the enrollment/setup mechanism. It contains the secret used to configure the authenticator app
- Uses industry-standard Time-Based One-Time Passwords (TOTP)
    - TOTP verification codes are generated directly by the Authenticator App and change periodically, so the authentication process does not depend on receiving an email or text message
- Users enter the time-sensitive verification code generated by their Authenticator App when signing in
- Provides an alternative to authentication codes delivered by email or SMS
- Helps strengthen application security without requiring additional authentication hardware

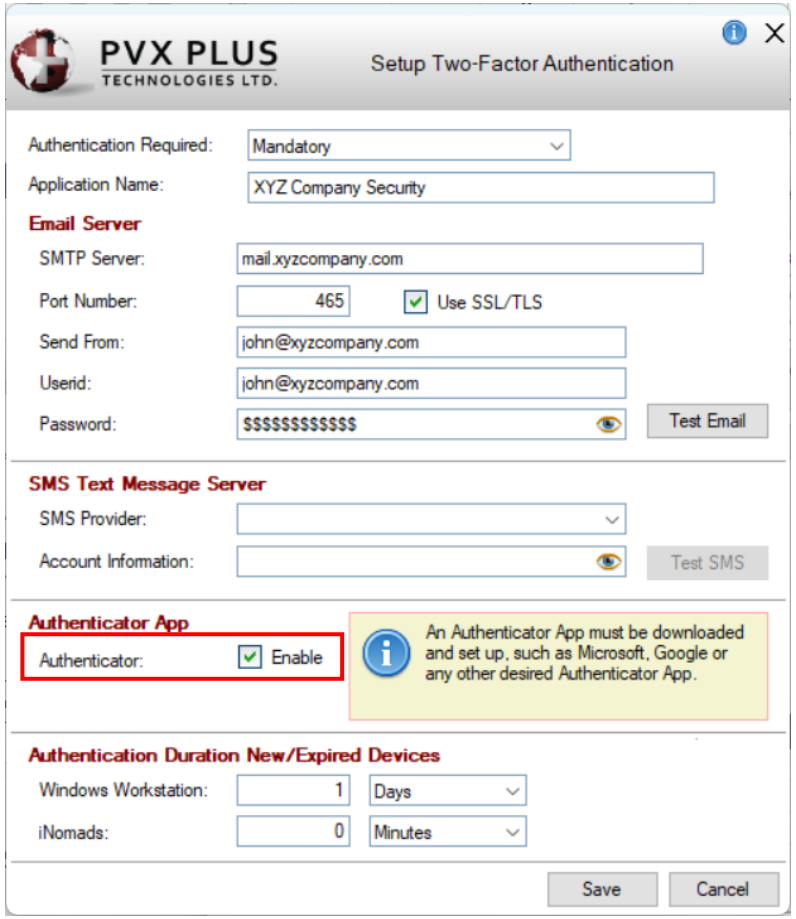
Authenticator Apps and User Security

Enabling the Authenticator App

- In User Maintenance, select the Two-Factor Authentication Setup button



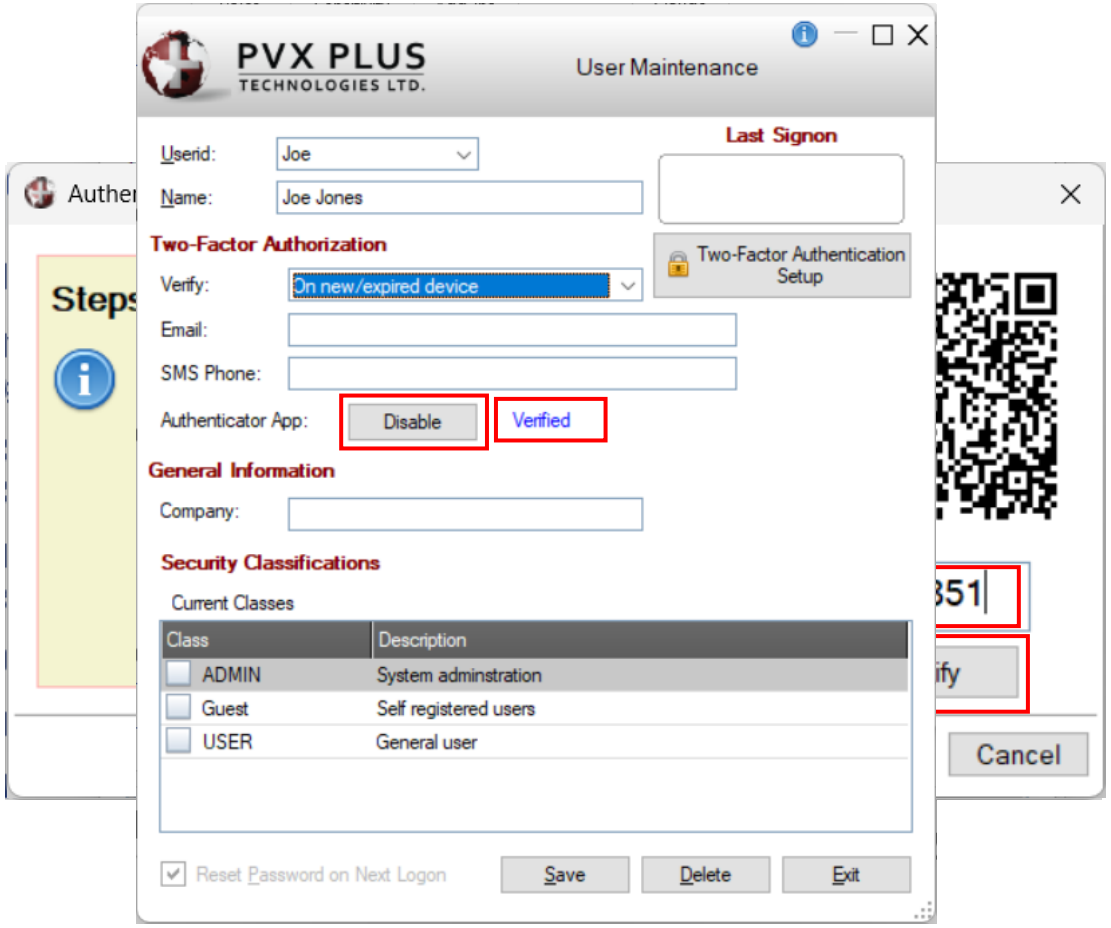
- From the Setup Two-Factor Authentication Setup dialog, check the Authenticator Enable check box in the Authenticator App section
- Once enabled, it becomes available for configuration when setting up a user



Authenticator Apps and User Security

Enabling the User

- Requires Authenticator App
- In User Maintenance a new Authenticator App section was added
- Selecting the Setup button launches the Authenticator Setup dialog
- In this dialog, with your Authenticator App on your phone, scan the QR Code
- When the QR Code is scanned a new entry is created on the App with a verification code
- Enter the verification code and select the Verify button
- If verification was successful a Verified message is displayed with a Disable button
- Selecting Disable button will remove the Authentication

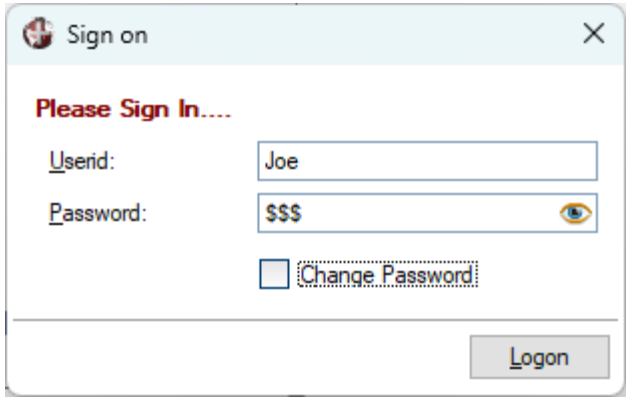


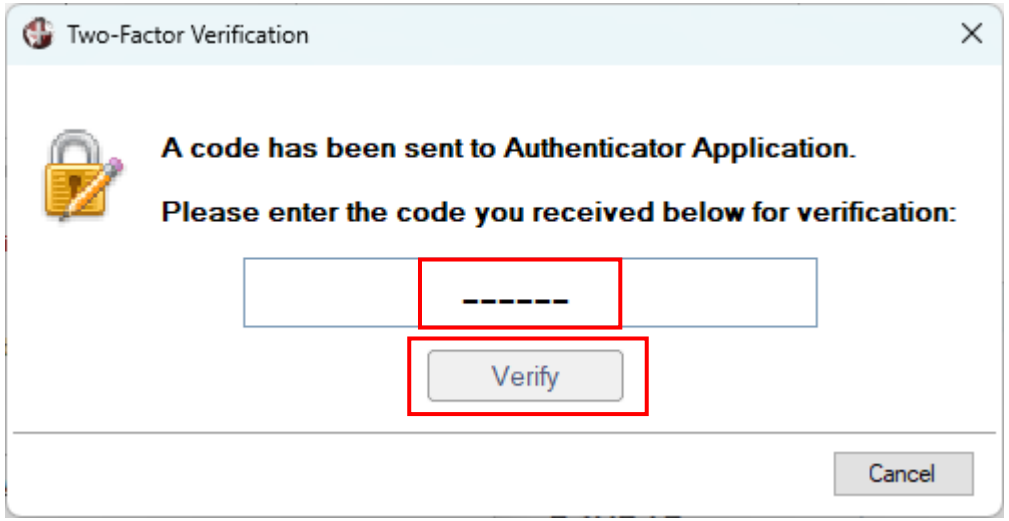
Authenticator Apps and User Security

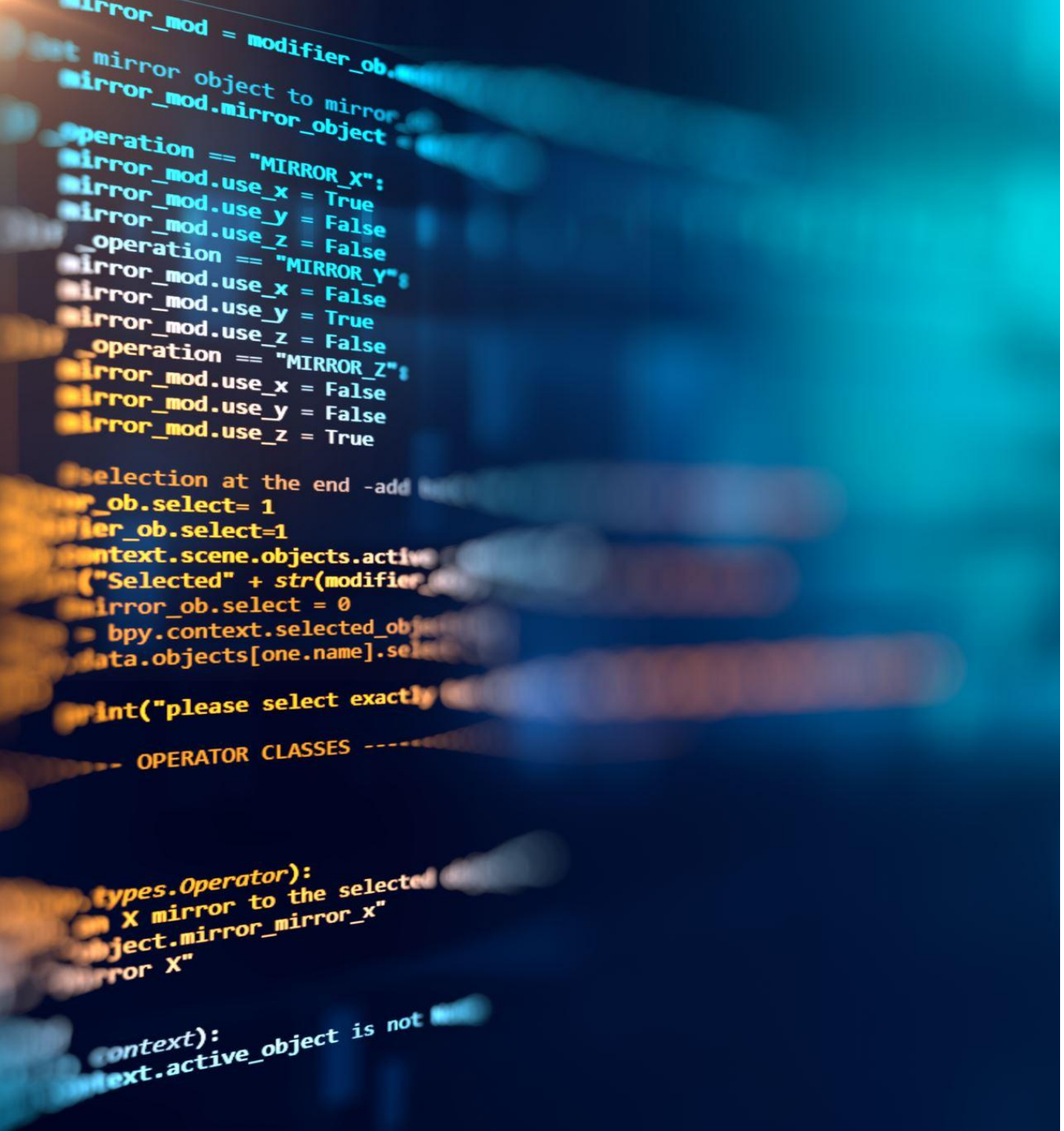
Sign On

- When the user signs on they enter their User Id and Password
- Upon acceptance the Two-Factor Verification dialog is displayed
- On the App a TOTP verification code is generated for the user
- In the Two-Factor Verification dialog enter the generated verification code and select Verify
- If accepted, it continues with the next step

Note: When signing in, if the user has email or SMS verification, they will be asked to select which authentication method to use







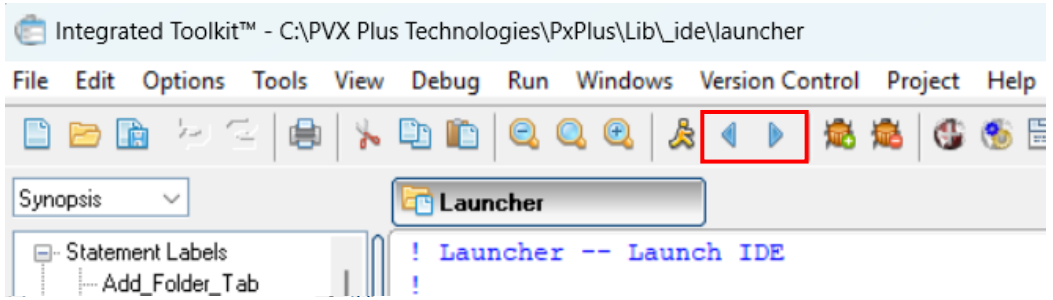
What's New In PxPlus 2026

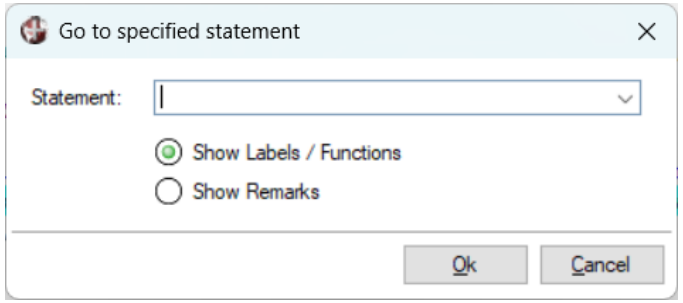
Editor Changes

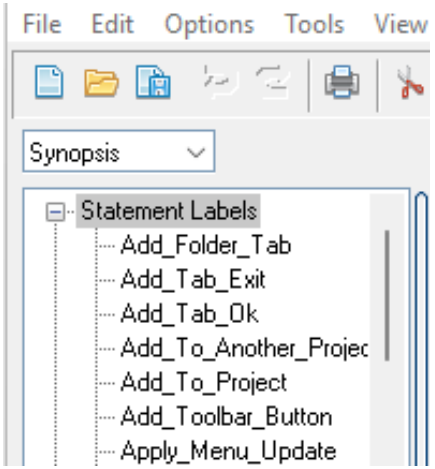
*IT Editor

Enhanced GoTo Navigation

- Replaced old Toggle button
- New Previous and Next GoTo Location toolbar buttons
- Navigate backward and forward through multiple previously visited GoTo program locations
- GoTo history includes locations entered using Goto dialog or selected from Statement Labels and line numbers
- Makes it easier to move between different areas of a program while reviewing and editing code



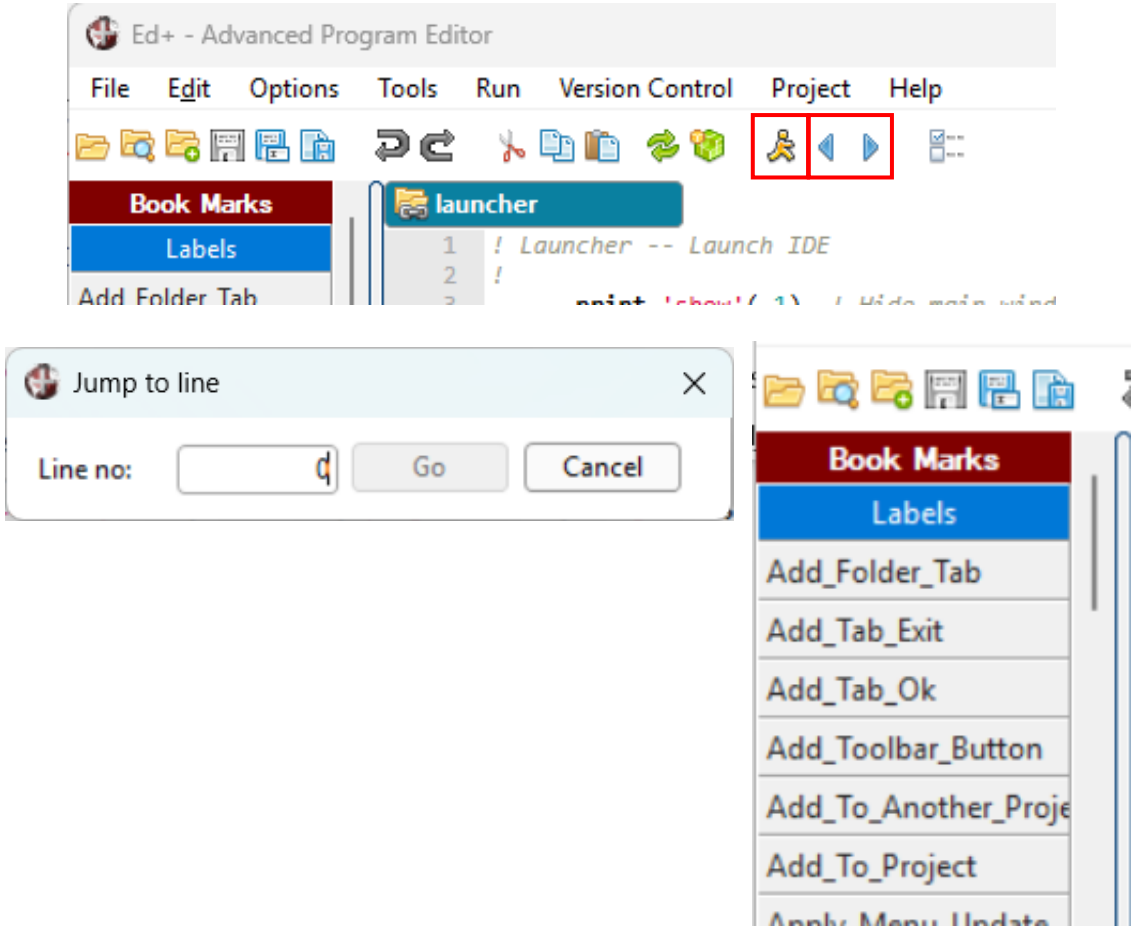




ED+ Editor

Improved GoTo Navigation

- To the toolbar a new GoTo button was added
- New Previous and Next GoTo toolbar buttons
- Quickly move backward and forward through multiple recent GoTo program line numbers and statements/labels
- Tracks locations selected by line number from the Goto dialog and Book Marks labels
- Makes navigating between different areas of a program faster and easier



ED+ Editor

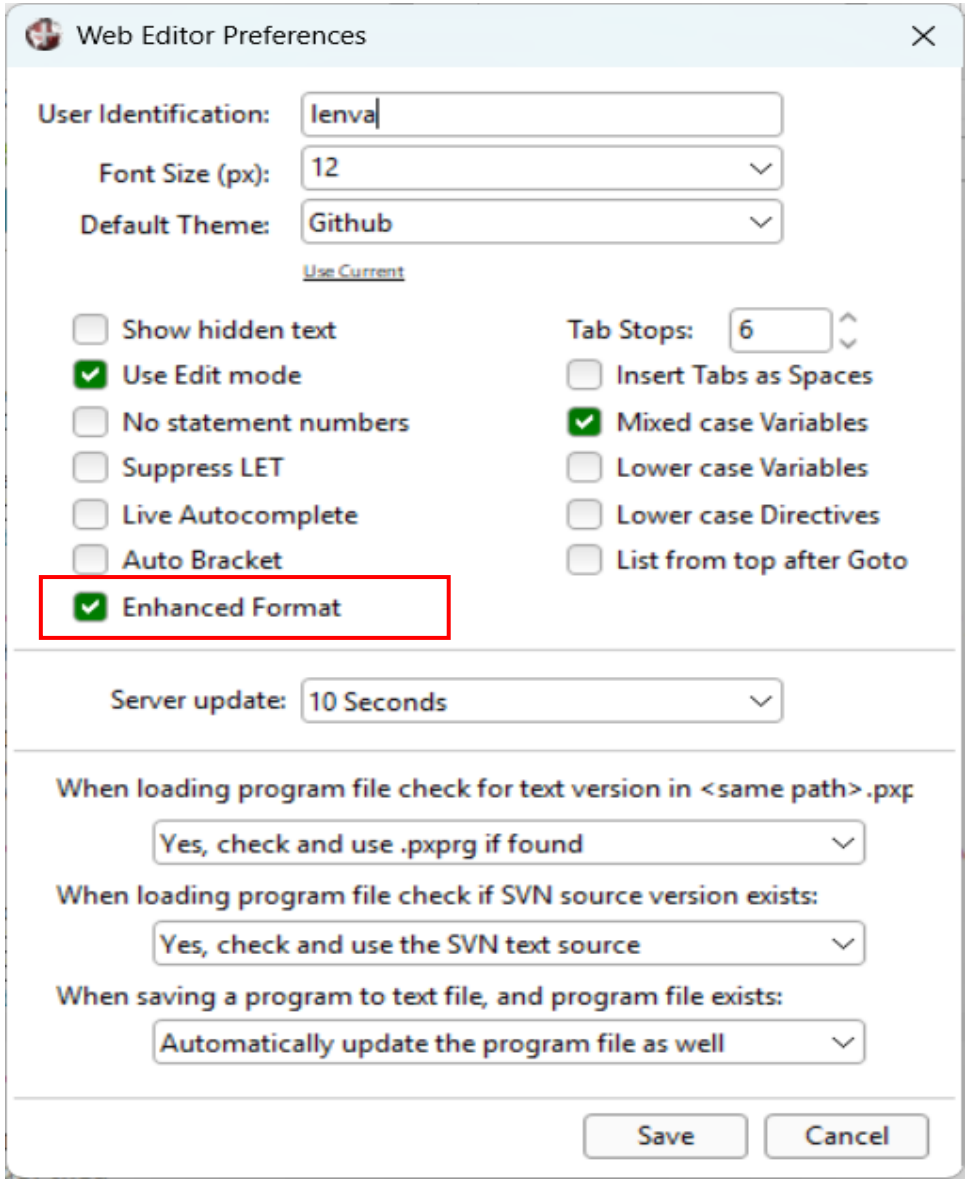
Enhanced Format Option

- New option to automatically reformat programs without line numbers when loaded
- Applies better indentation for cleaner, more readable code
- Previously you needed to manually select the Reformat button



- New Enhanced Format option is available in the Web Editor Preference dialog



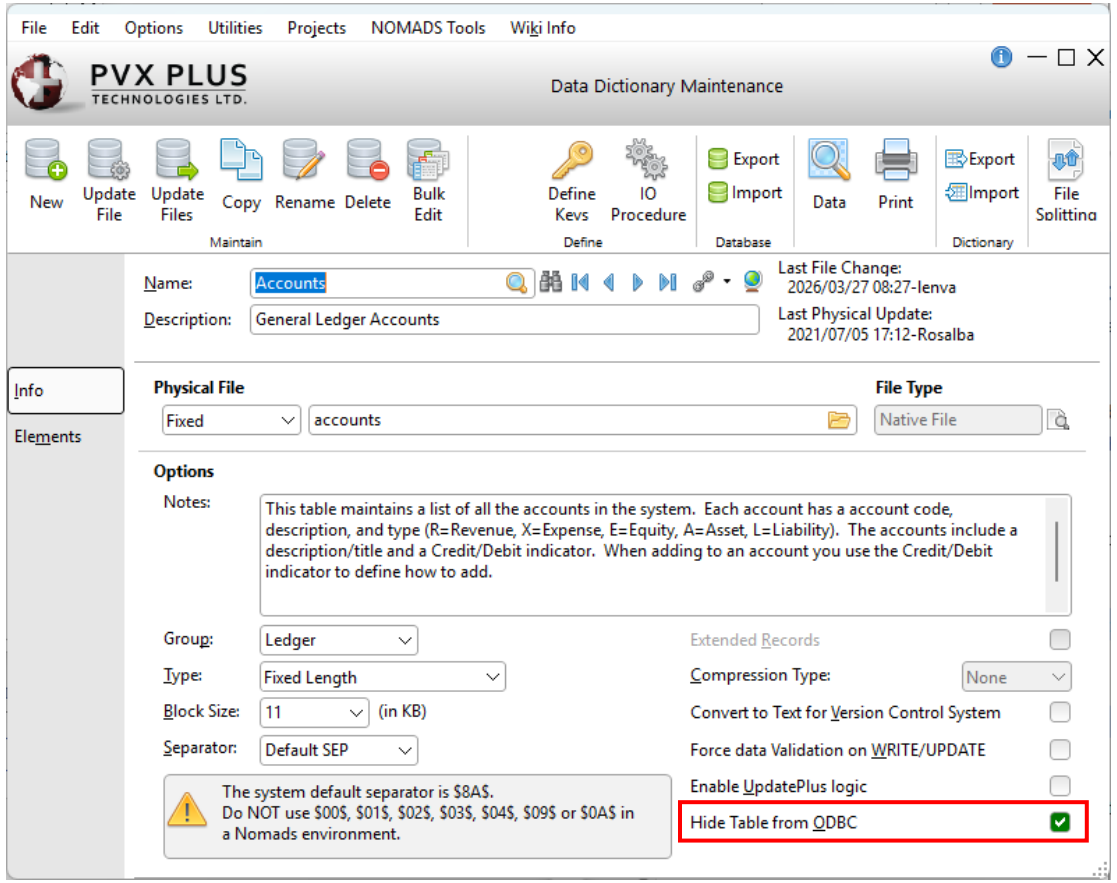


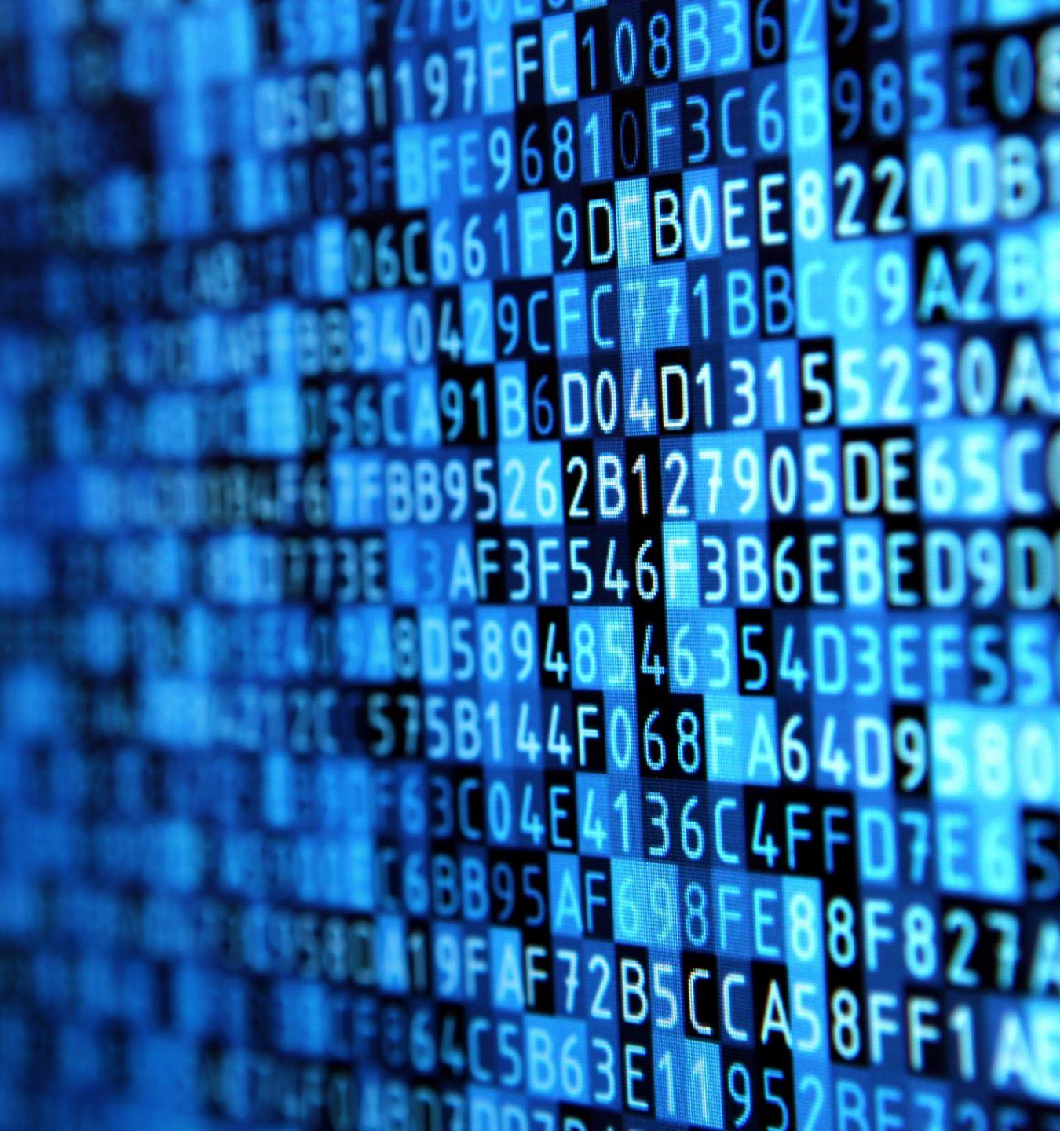


Data Dictionary and ODBC Enhancements

Data Dictionary and ODBC Enhancements

- **Data Dictionary Maintenance**
  - New Hide Table from ODBC option to exclude selected native PxPlus tables from the ODBC driver file list
  - Hides tables without having to prefix the logical table name with an asterisk (*), avoiding potential impacts to existing queries and other references
- **ODBC**
  - Added support for the new setting, allowing tables to be excluded from ODBC access





Themes and Visual Classes

Themes and Visual Classes

- Themes provide consistent styling across controls of the same type across panels
- Visual Classes provide more specific styling for individual controls
- Visual Classes can override Theme settings
- Working together, they provide a flexible and consistent approach to application modernization
- Copy Theme utility makes it easy to copy existing Themes and Visual Classes for creating and customizing your own application themes
- Use the utility to create your own Dark and Light mode themes based on the PxPlus system Toolkit themes

Themes/Visual Classes

Button Properties

Property	Description
Corner Radius	Sets the corner radius for Button controls
Focus Rectangle	Controls whether a dotted focus rectangle displays around the Button text

Themes/Visual Classes

Check Box Properties

Property	Description
CB Corner Radius	Sets the corner radius for standard Check Box controls
Corner Radius	Sets the corner radius for Check Box controls created as buttons when an image is added
Focus Rectangle	Controls whether a dotted focus rectangle displays around the Check Box text

Themes/Visual Classes

Drop Box Properties

Property	Description
Corner Radius	Sets the corner radius for Drop Box controls
Field Height	Sets the height of the drop box input and drop area (in pixels)
Focus Rectangle	Controls whether a dotted focus rectangle displays around the Drop Box selected text

Themes/Visual Classes

Folder Properties (all types)

Property	Description
Tab Corner Radius	Sets the corner radius for folder tabs
Tab Focus Rectangle	Controls whether a dotted focus rectangle displays around the folder tab

Themes/Visual Classes

List Box Properties

Property	Description
Corner Radius	Sets the corner radius for List Box controls. Except for Report View and Variable List Box
Focus Rectangle	Controls whether a dotted focus rectangle displays around the List Box row. Except for Variable List Box

Themes/Visual Classes

Multi-Line Properties

Property	Description
Corner Radius	Sets the corner radius for Multi-Line controls
Vertically Center Text	Centers text vertically within Multi-Line controls
Horizontally Center Text	Previously named Center Text

Themes/Visual Classes

Radio Button Properties

Property	Description
Corner Radius	Sets the corner radius for Radio Button controls created as buttons when an image is added
Focus Rectangle	Controls whether a dotted focus rectangle displays around the Radio Button text

Themes/Visual Classes

Shape-Rectangle Properties

Property	Description
Rounded Corner Radius	Sets the radius value for rounded corners for a rectangle shape

Themes/Visual Classes

Tri-State Check Box Properties

Property	Description
CB Corner Radius	Sets the corner radius for standard Tri-State Check Box controls
Corner Radius	Sets the corner radius for Tri-State Check Box controls created as buttons when an image is added
Focus Rectangle	Controls whether a dotted focus rectangle displays around the Tri-State Check Box text

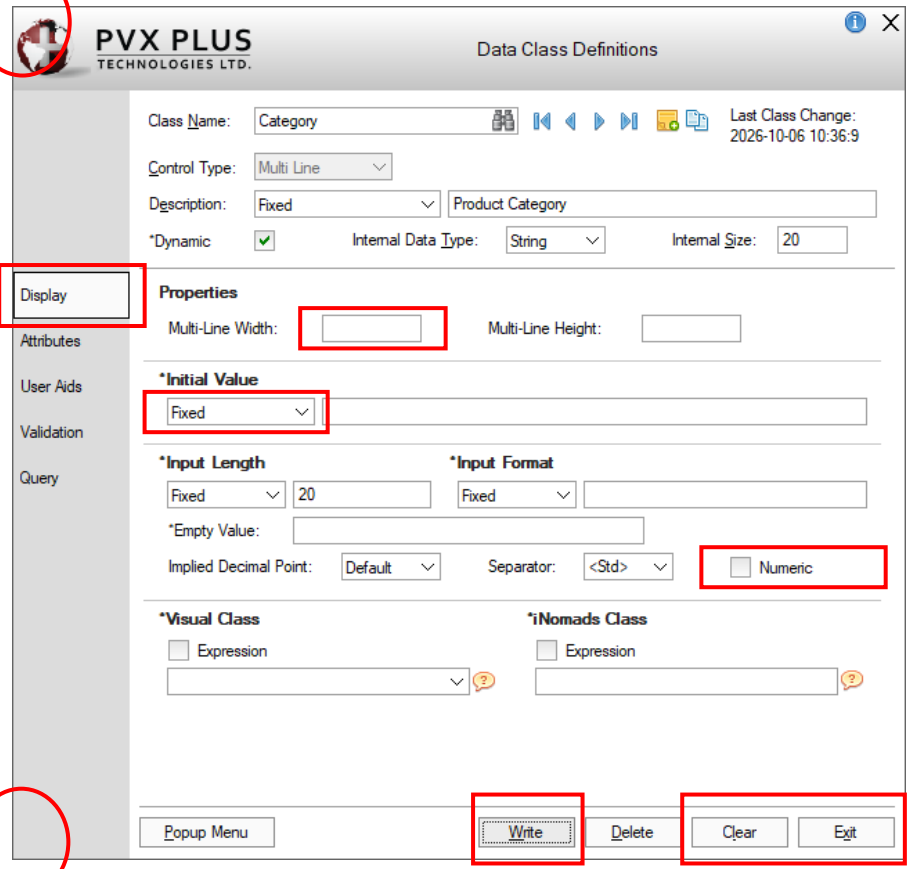
Themes/Visual Classes

Variable Drop Box Properties

Property	Description
Corner Radius	Sets the corner radius for Variable Drop Box controls
Field Height	Sets the height of the drop box input and drop area (in pixels)

Toolkit Modernization

PxPlus 2025



Rounded corners to all toolkit dialogs

Light & Dark Mode

Rounded Controls

Buttons

Check Boxes

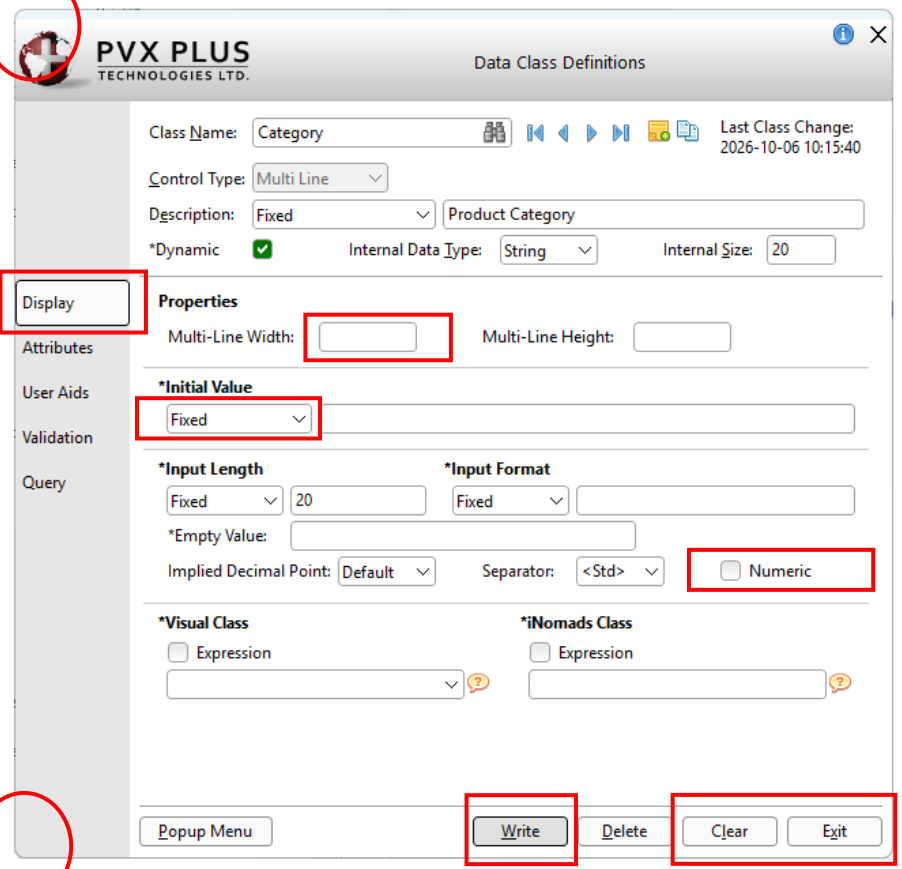
Drop Boxes

Multi-Lines

Folder Tabs

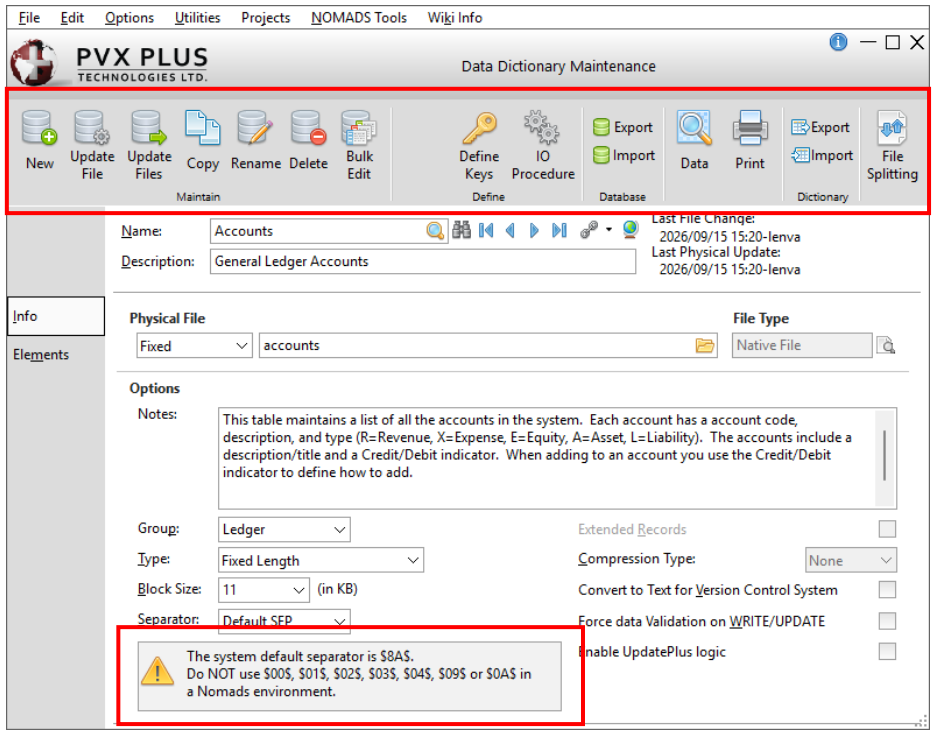
Focus Rectangle

PxPlus 2026



Toolkit Modernization

Data Dictionary PxPlus 2025

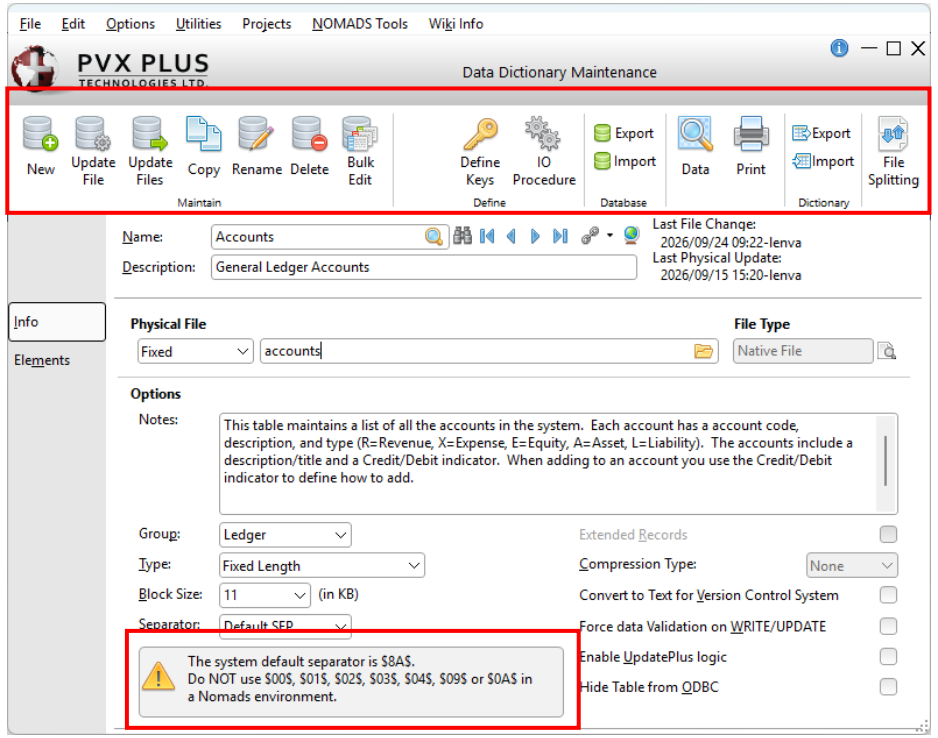


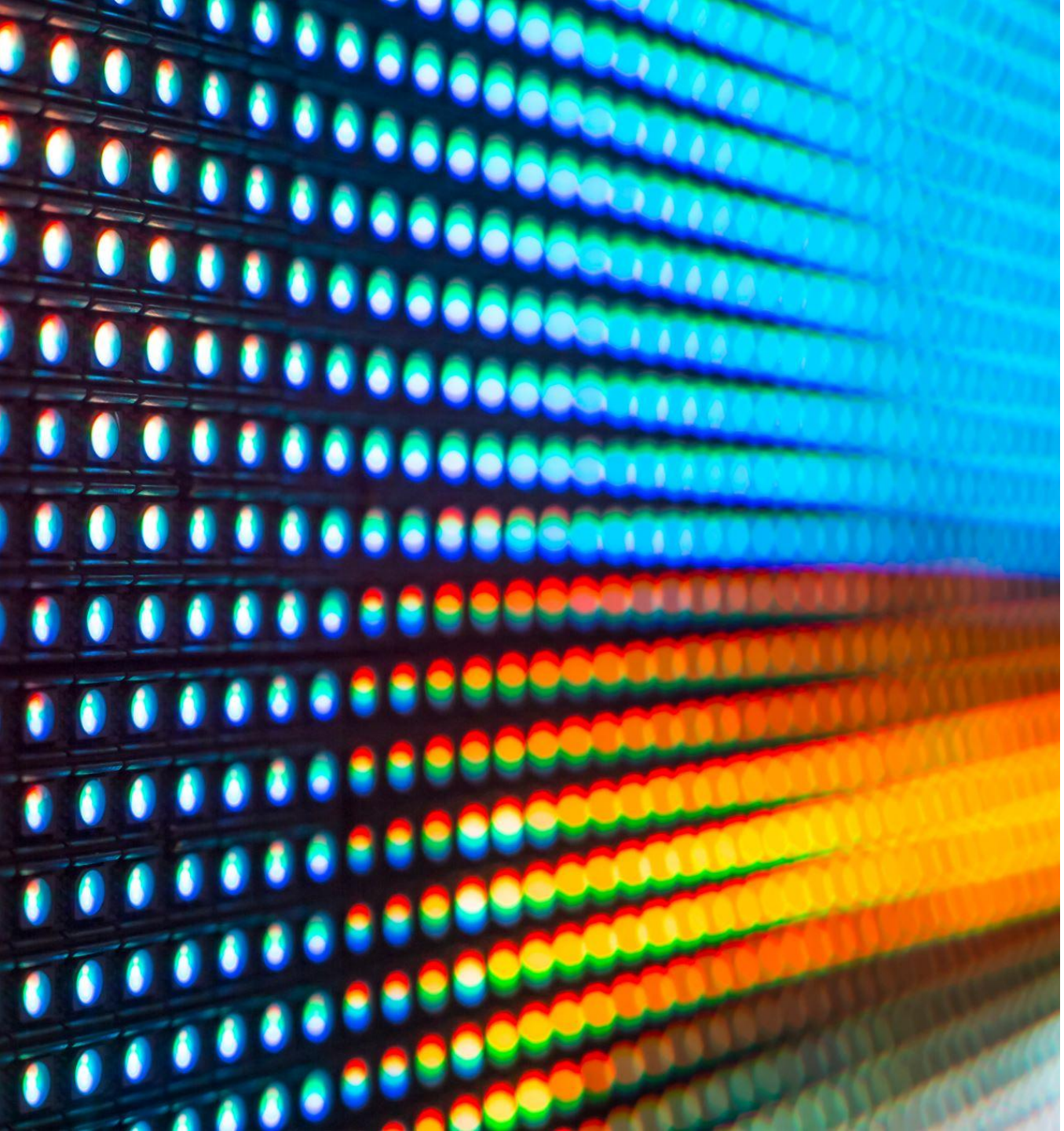
Light Mode Theme

Tool Bar

Message Areas

Data Dictionary PxPlus 2026





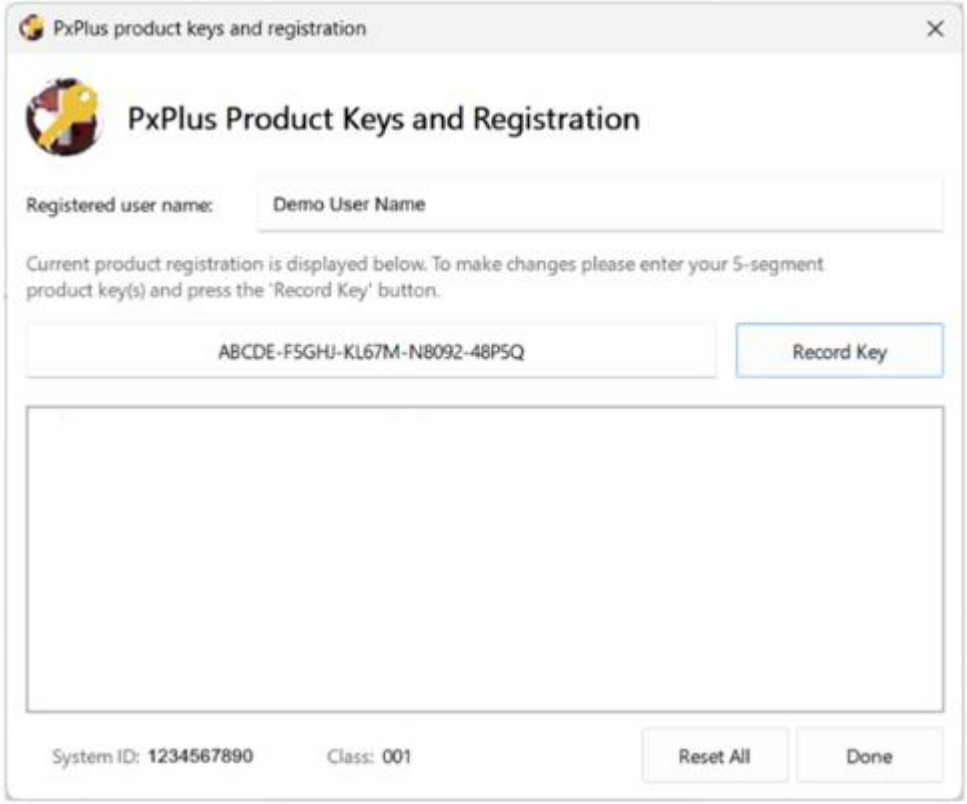
PxPlus 2026 Update 1 (v23.10) Preview

Coming in the Next Release

- Added new timeout argument to the *BROWSER object's ExecJS method
- Enhanced the DROP..ON directive to accept drag-and-drop of email attachments or other virtual sources
- Added the FIN keyword TrueGuiFont to return the true Windows GUI font, including face, size and attributes, as reported by the operating system
- Modernized the PxPlus Message Box to use TrueGuiFont, rounded buttons and updated colors
- Added a FlatFolder property to the Folder object that creates a flat appearance for non-sidebar Folder controls (no 3D look)
    - Added to Folder Control and Themes/Visual Classes
- New configuration directives AllowEmptyHost and AllowEmptyUserAgent added to EZWeb Server

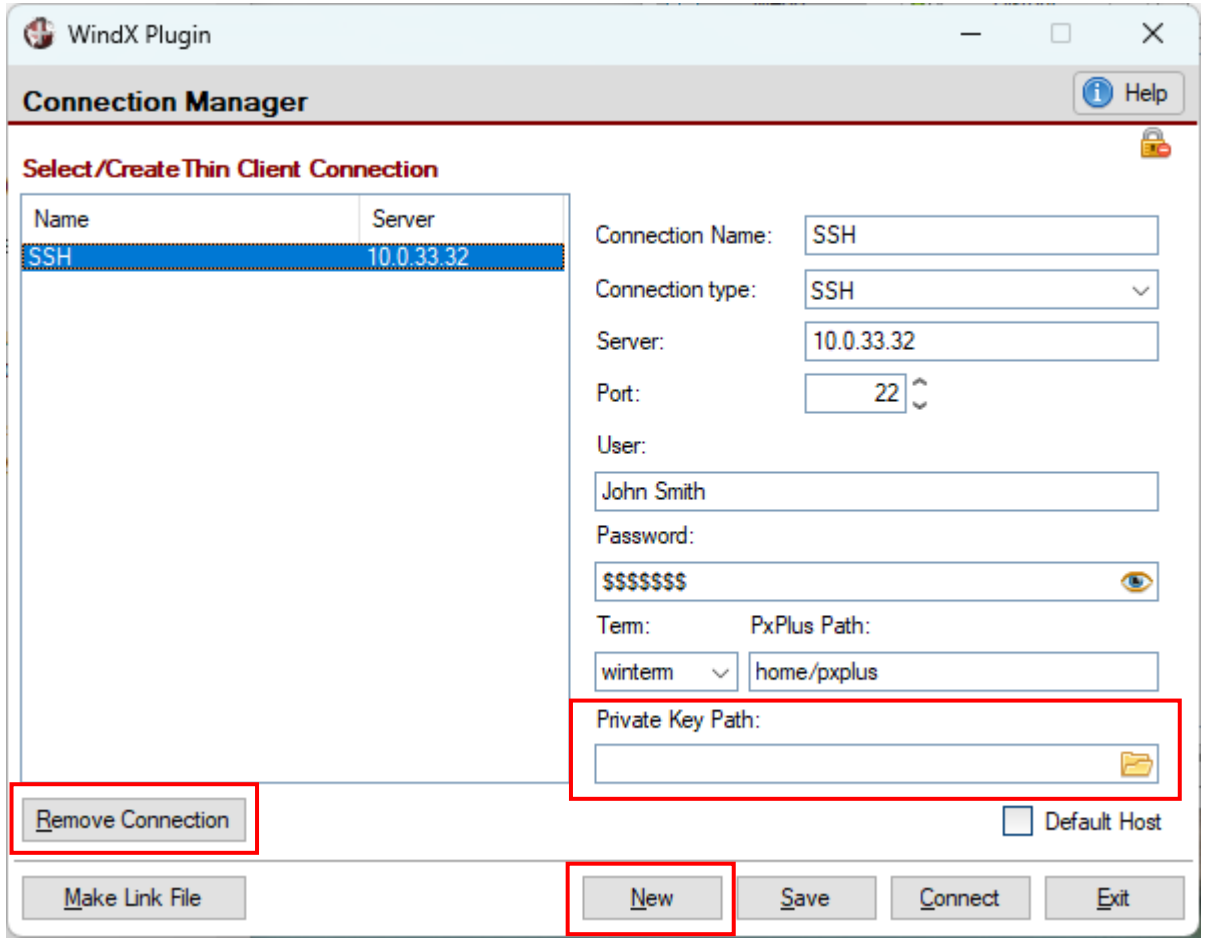
Coming in the Next Release

- Modernized and improved usability of the PxPlus Product Keys and Registration screen
- PxPlus environment and JSON arrays now support the full Unicode character range, from U+0000 to U+10FFFF
- CVS conversion from UTF-8 to Unicode now supports the full Unicode character range, from U+0000 to U+10FFFF
- [MYSQL] Open MySQL/MariaDB Database Link enhancements
    - Improved TLS connection handling
    - Added new OPT=Parameters for additional SSL/TSL connections support and other new features



WindX Improvements

- New Connect Manager Features
  - New Remove Connection button
  - Added a New button making it easier to enter the settings for a new connection
  - Ability to specify a Private Key Path to a PuTTY private key file (.ppk) for SSH authentication
- Added an optional -privateKey argument to the *SSH System Library utility for specifying the path to a PuTTY private key file
- Improved WindX handling of Escape (Ctrl+Break) during NT or SSH connection startup



Toolkit WindX Improvements

- Feedback from several sources highlighted slow performance in parts of the PxPlus Toolkit when used over WindX
- In PxPlus 2025, we addressed some of the slowdown by using pseudo-properties to set multiple control properties at once rather than one at a time. This made some improvements.
- We investigated using WindX Turbo Mode - 'TU' Parameter
- The NOMADS engine already enables 'TU' during panel loading, then turns it Off once the panel launches. It does not apply to Post Display logic for the panel or Post Create logic for individual controls.
- We looked at enabling TU selectively in programs, especially when loading list boxes and grids and noticed performance improvements immediately
- TU can be set for the duration of the loading and then turned off once loaded. It can be turned on/off multiple times within a program
- When testing, we saw speed increases of 97% in Library Object Selection to 66% in Themes and Visual Classes

Toolkit WindX Improvements

- We analysed our utilities and made changes to the following. There is no impact when you're not using WindX

  - **Utilities Modified**
  - Library Object Selection
  - Library Bulk Edit and Search
  - Query Bulk Edit
  - Query Profile Information Maintenance
  - AutoChart File Maintenance
  - Maintain NOMADS Environment
  - User Reserved Words Maintenance

  - **Properties Grids**
    - NOMADS, Themes, Visual Classes, Bulk Edit Utility and Library Bulk Edit
  - **Data Dictionary**
    - Data Dictionary Maintenance
    - Bulk Edit Data Elements Utility
    - Update Physical Files Utility

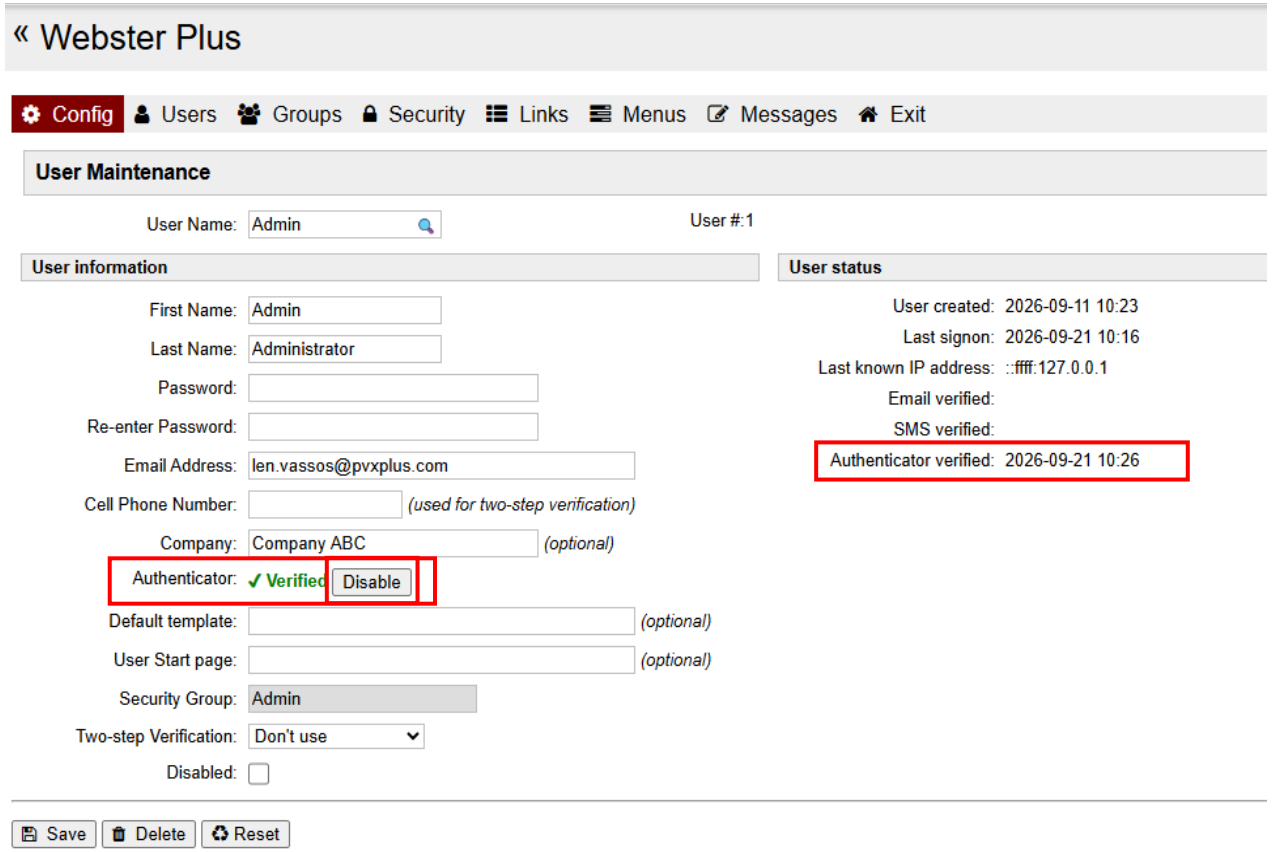
- We have created a How to Speed Up WindX Using Turbo Mode document with tips on how you can try it in your application

Webster+ Authenticator App Integration

- Added support for Authenticator Apps to Webster+
- Similar workflow to NOMADS/iNomads security
- Supports both standard Webster+ security and when NOMADS security is used
- Added to User Maintenance and Account Maintenance
- Two-Factor Verification dialog is displayed after a user logs on

Webster +Authenticator App Integration

- Added to User Maintenance and Account Maintenance (non-Admin users)
- New Authenticator Setup button displays Authenticator screen when selected
- When the QR Code is scanned a new entry is created on the App with a verification code
- Enter the verification code and select the Verify button
- If verification was successful a Verified message is displayed and new Authenticator verified field is updated
- Selecting Disable button will remove the Authentication



PxPlus 2026 Update 1 (v23.10) Release Date

- Mid-November
- New and Updated How-To Tutorials
- New section for all Release Notes going forward

Fixes and Minor Improvements

- Resolved an issue that caused an invalid configuration entry in Data Mirroring on Linux
- Corrected syntax highlighting when using the Visual Studio Code Extension
- Improved extension setting descriptions for the Visual Studio Code Extension
- Added error trapping to *plus/web/request so that errors are returned to the calling program
- Improved SQL ODBC Driver/Server handling of WHERE clauses that reference high variable segment fields

- See Release Notes for all updates and links to features

Thank you



Len Vassos