



MISCELLANEOUS LANGUAGE ENHANCEMENTS

DireXions 2024

PXPLUS WIKI

[PxPlus Wiki](#)

- A PxPlus Wiki was added for maintaining application documentation
- The Wiki is a documentation system that provides an easy way to prepare and maintain product documentation
- Standards are based on WikiPedia and MediaWiki

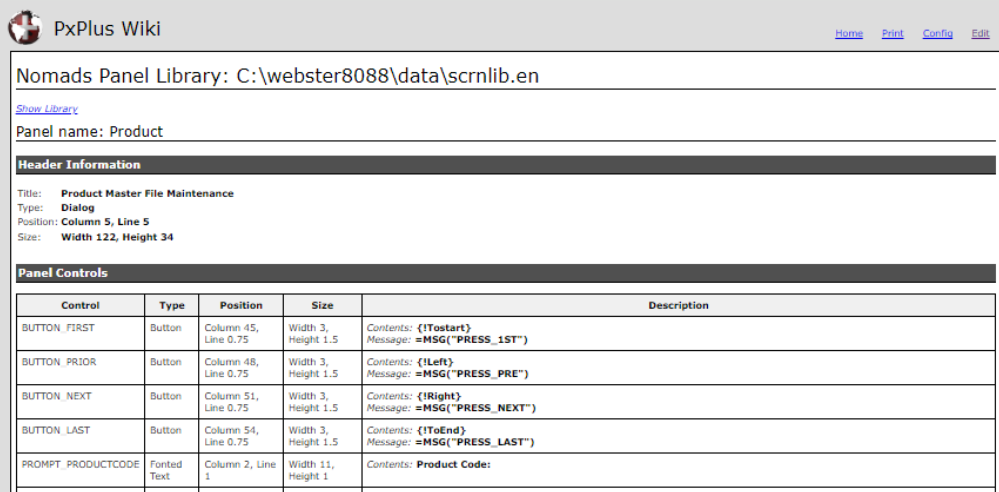
- In NOMADS, Wiki Help can be used to display additional Help documentation
- In Webster+, the Wiki Interface can also be used to display information

- The Wiki Web service can be invoked using the following URL:
`http(s)://www.your_web_site.com/services/pxpwiki.pxp`

See 'NOMADS Panel Designer Enhancements' PDF
for more details

PxPlus Wiki Services

- Wiki can be used to provide developer documentation
 - Displays data dictionary table information in Data Dictionary Maintenance and Webster+ Inspector
 - Displays panel header and panel controls information for a selected panel in all screen designers
 - EZWeb server is automatically started to display the pages
 - By default, the Wiki system is installed and maintained in the Wiki page control file (*pxpwiki.dat*)



The screenshot shows the PxPlus Wiki interface. At the top, it says 'PxPlus Wiki' with navigation links for Home, Print, Config, and Edit. Below that, it displays 'Nomads Panel Library: C:\webster8088\data\scrlib.en' and a 'Show Library' link. The main content area shows 'Panel name: Product' and a 'Header Information' section with the following details: Title: Product Master File Maintenance, Type: Dialog, Position: Column 5, Line 5, Size: Width 122, Height 34. Below this is a 'Panel Controls' table with columns for Control, Type, Position, Size, and Description.

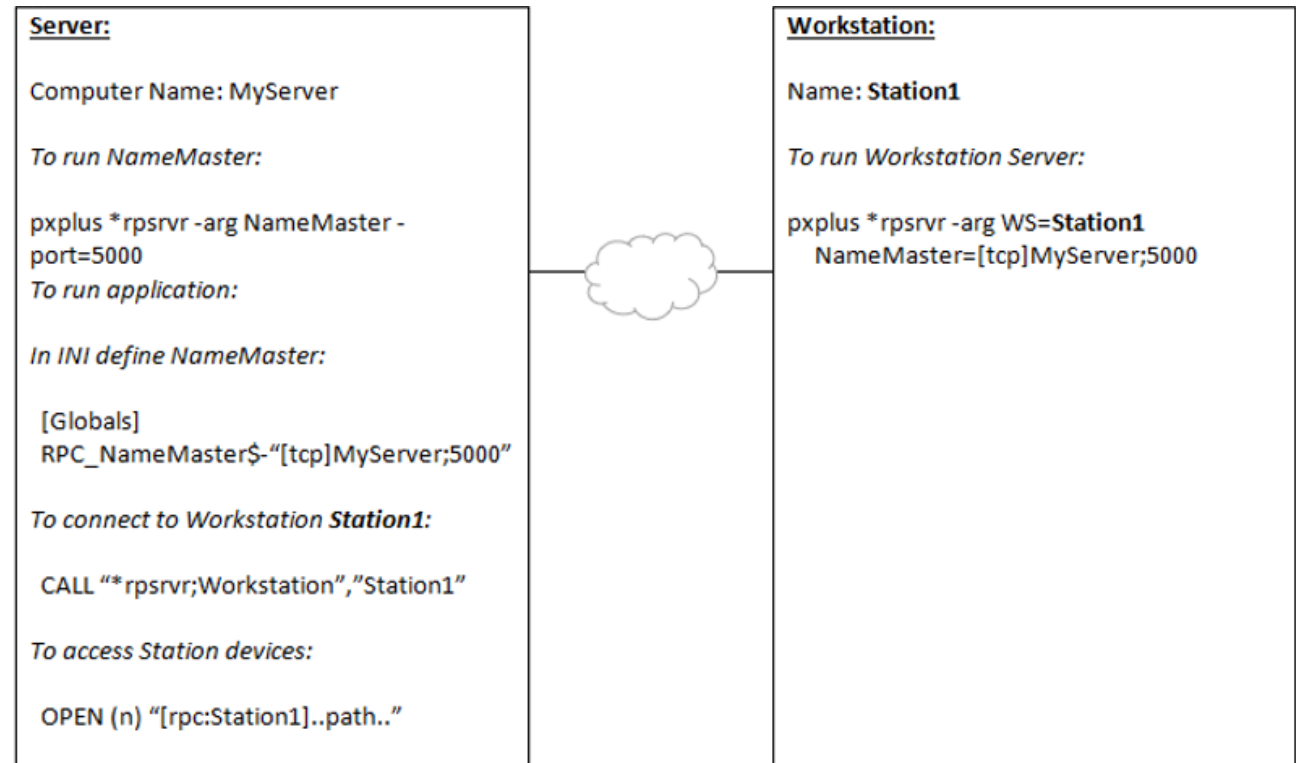
Control	Type	Position	Size	Description
BUTTON_FIRST	Button	Column 45, Line 0.75	Width 3, Height 1.5	Contents: {!ToStart} Message: =MSG("PRESS_1ST")
BUTTON_PRIOR	Button	Column 48, Line 0.75	Width 3, Height 1.5	Contents: {!Left} Message: =MSG("PRESS_PRE")
BUTTON_NEXT	Button	Column 51, Line 0.75	Width 3, Height 1.5	Contents: {!Right} Message: =MSG("PRESS_NEXT")
BUTTON_LAST	Button	Column 54, Line 0.75	Width 3, Height 1.5	Contents: {!ToEnd} Message: =MSG("PRESS_LAST")
PROMPT_PRODUCTCODE	Fonted Text	Column 2, Line 1	Width 11, Height 1	Contents: Product Code:

REMOTE PROCESS SERVER

Remote Process Server

*RPSRVR as Workstation Server

- New feature provides a remote server for workstations
- Used to provide background access to workstation devices and resources where local access is required such as Web-based applications
- Typical server/workstation example





FUNCTIONS

FUNCTIONS - NEW

FUNCTION	Description
DEG()	<p>Converts angle in radians to degrees</p> <pre>aRad=1 PI=3.141592654 degRad=deg(aRad) degPI=deg(PI) print degRad 57.3 print degPI 180</pre>
RAD()	<p>Converts degrees to radians</p> <pre>aDeg=1 halfCircle=180 radDeg=rad(aDeg) PI=rad(halfCircle) print radDeg 0.02 print PI 3.14</pre>

FUNCTIONS - UPDATED

FUNCTION	Description
CVS()	<p>New LINK and URL? formats</p> <p>LINK - Same as URL but does not translate '/' (slash) to %2F.</p> <p>URL? - Same as URL but does not translate either '/' (slash) or ? (question mark) until a ? is found in the string. After the ? (question mark), / (slash) becomes %2F and ? (question mark) becomes %1F as in the URL conversion.</p>
FIB() FIN()	<p>Key information is now returned on external database tables.</p> <pre>x\$=fin(chan) kno_num=dec(x\$(85,1)) key_def\$=X\$(86,128)</pre>
LNO()	<p>New 'Passing a String Expression' format can be used whenever a statement number or label is used after a GOTO, GOSUB, ERR=, etc. The LNO function will evaluate the string expression and use that to find and return the line reference to be used:</p> <pre>GOTO LNO("EVENT "+_EVENT\$,ERR=*NEXT) ! _event\$ is Image pressed</pre> <p>EVENT_IMAGE_PRESSED:</p>
NUM()	<p>Added support for scientific notation. NUM function converts scientific notation either with or without the + after the E (i.e. 0.2E10 = 0.2E+10)</p> <pre>a=num("0.2E+10")</pre> <p>print a 2000000000</p>

FUNCTIONS - UPDATED

FUNCTION	Description
TCB(WINDOW)	<p>Added ::name option to provide ability to access information for window attributes</p> <pre>TCB(WINDOW index [::name] [,ERR=stmtref])</pre> <pre>X = TCB(WINDOW 1) TCB(WINDOW X::Columns)</pre> <p>Above example returns width of current window</p>
TCB()	<p>Added "OpenSSL Version" keyword to determine version of OpenSSL and new TCB(47) value</p> <pre>print tcb("openssl_version") OpenSSL 3.3.0 9 Apr 2024</pre> <pre>TCB(47)</pre> <p>Returns the maximum number of lines/columns that the system can support (254 or 620, depending on the release you are using and activation levels)</p>



PARAMETERS

PARAMETERS

Parameter	Description
'BD'	New system parameter controls whether Windows GDI+ is used to provide smoother curved and angled lines when the following shapes are drawn: Arc, Ellipse, Pie, Line and Polygon. Default On - Windows GDI+ will be used
'CR'	New system parameter controls whether trailing CR (\$0d\$) will be stripped from text files that were created in Windows and subsequently copied to UNIX/Linux. (UNIX/Linux Only) Default Off - Trailing CR (\$0D\$) will be stripped
'SB'	As of PxPlus 2021, this parameter is now set to On. By default, UNIX/Linux locks records by file and process, not by channel number. This can cause unexpected results if you lock a record on one channel and access it on another. (UNIX/Linux Only)
'E'	New system parameter will cause the ESCAPE directive to generate an internal MSGBOX showing the current program, line number, ERR, RET, FFO, and LFA before dropping to console mode. Default setting is Off; however, it is enabled by default when running Webster+
'TC'	New Option -3 added to use TipColor setting for non-HTML tips. If 'TC' is set to -3 but the TipColor setting is not defined, the default Windows color will be used.
'TI'	System parameter controls whether the system will use the transparent PNG versions of the internal images or the legacy bitmap internal images. Default On - PNG transparent internal images will be used
'SZ'	Defines the maximum memory that the session is allowed to use. Increased the default memory limit from 32MB to 64MB for PxPlus 2024. Default 'SZ'=64000

PARAMETERS

Parameter	Description
<u>'*E'</u>	<p>New system parameter forces PxPlus to mandate that, when converting a string that may contain a numeric value in scientific notation (e.g. 1.2E+10), there must be a + (<i>plus</i>) sign following the E.</p> <p>Default Off - PxPlus will accept numbers in scientific notation with or without a sign. If the sign is not present, PxPlus will assume a positive exponent.</p> <pre>x\$="1E10" y\$="1E+10" print num(x\$) 10000000000 print num(y\$) 10000000000</pre> <pre>set_param '*e' print num(x\$) Error #26: Variable type invalid print num(y\$) 10000000000</pre> <p>Note: If your application is processing JSON data, this parameter should be Off.</p>

A low-angle, upward-looking photograph of a massive, rusted steel tower under construction. The structure is composed of numerous riveted steel beams, creating a complex geometric pattern. The sky is a pale, clear blue. A prominent red banner with a slight perspective is overlaid horizontally across the middle of the image. The banner contains the text 'INI CONTENTS' in white, bold, uppercase letters. Thin red lines extend from the corners of the banner towards the edges of the frame.

INI CONTENTS

PXPLUS INI CONTENTS

INI Parameter	Description
NoTLSv1.3	Disables TLSv1.3 support.
BrowserDebug	Controls whether or not the browser developer console will display in a popup window or any subsequently created *BROWSER controls.
TipColor	Defines the color for non-HTML tips. Setting this option sets the 'TC' system parameter to -3.



ENVIRONMENT VARIABLES

ENVIRONMENT VARIABLES - NEW

Parameter	Description
PXP_CRYPTO_LIB	<p>PXP_CRYPTO_LIB</p> <p>Defines the path and file name of an OpenSSL crypto dynamic library (libcrypto-1.1.dll/libcrypto.so). Setting this overrides the default operating system library search rules and explicitly sets which library to load.</p>
PXP_SSL_LIB	<p>PXP_SSL_LIB</p> <p>Defines the path and file name of an OpenSSL SSL dynamic library (libssl-1.1.dll/libssl.so). Setting this overrides the default operating system library search rules and explicitly sets which library to load.</p> <p>SET PXP_SSL_LIB=C:\path\to\your\libssl-1.1.dll</p>
PVX_UTF8	<p>PVX_UTF8</p> <p>Can be set to establish whether PxPlus will run in UTF-8 compatibility mode. The 'U8' system parameter will be enabled during system initialization.</p>
PXP_WEB_BSZ	<p>PXP_WEB_BSZ</p> <p>For setting a larger TCP block size (BSZ) value that will allow PxPlus Web Server to handle larger responses. Default is 80KB. It is recommended to use EZWeb Server, Apache or IIS to handle responses larger than 700 kilobytes.</p>