

Improving WindX Performance

PxPlus 2017 (v14) & PxPlus 2018 (v15)

Performance Concerns

- Performance affected by number of exchanges
 - Less exchanges of information faster performance
 - An exchange occurs by default on every:
 - Reference to a property on a control
 - Directive that access a control
 - Execution of a remote CALL or Method
 - Remote file IO operation
 - Try to minimize exchanges to improve performance
 - Also avoid Telnet due to protocol overhead

Performance Concerns

- Turbo mode assumes operations succeed and don't wait for reply
 - Most directives and setting of properties work
 - Why wait for workstation to acknowledge?
 - Setting system parameter 'TU' enables this
 - You can set local reporting of errors if needed
 - This is set in Nomads by default

Typical Performance Pitfalls

- Avoid reading properties from controls
 - Each read involves an exchange

Avoid	Preferred	Reason
<pre>WHILE N < id'ItemCount ... WEND</pre>	<pre>Mx = id'ItemCount WHILE N < MX</pre>	Re-reading a static control property causes multiple exchanges
<pre>FOR N = 1 TO id'ItemCount Id'Item=N X\$=Id'ItemText\$</pre>	<pre>LIST_BOX FIND id,0,List\$ N=0 FOR X\$ FROM List\$ N++ ... </pre>	Instead of an exchange reading each item, use the FIND to read the complete contents
Referencing properties in a loop such as 'Sep\$, 'Lock	Read these outside of loop and save value	Each property read causes an exchange with Workstation

Performance Concerns



- Use Pseudo properties to read multiple properties in one exchange
 - Created by merging multiple property names separated and terminated by period

Example: `grid.ctl'colno.row.value. $`

- Reading this property returns string containing values with \$00\$ separator
- Writing this property allows update using similar string
- Reduces multiple exchanges to a single exchange

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 2018 (version 15) release.

- [Using Pseudo Properties](#)
- [WindX Turbo Mode Operation](#)
- [WindX Overview](#)