The *i*Nomads Evolution



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What is *i*Nomads?

Building blocks of Web Deployment



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Goal for *i*Nomads

Time saving and low cost means to migrate to the Web

- Allows existing application to run from a browser
- Designed to minimize re-development costs
 - Minimal time and effort to migrate application
- Targeted for 'controlled' user counts
 - < 1000 concurrent users</p>
- Long-term to provide full functionality of Windows systems on the Web



iNomads Focus This Session

New functionality within iNomads

- Closer to full native Windows functionality
- Provide options for more Web style interfaces
- Allow more non-Nomads applications to run
- Simplify the setup and configuration



Major Topics

- Floating Overlaid Windows
- 🥯 The Hamburger
- Auto-Paginated Lists and Grids
- Template Designer Wizard
- Graphic Support Lines & Circles
- Native Application Support
- General Enhancements



How did we improve Window management?



- Browser and end-user settings controlled window creation pre-PxPlus 2016
 - New windows might be sent to new Tab or External Window

- Popup blocker could prevent Windows from appearing
- Hard / Inconsistent to restrict Window frame

- PxPlus 2016 now can use iFrames
 - Allows new Floating Window within main display

Floating iFrame window controlled by template setting

- First/top window uses template layout and doesn't float
- Subsequent windows overlay in 'panel' region
 - Windows will honor position relative panel
 - i.e Centered, Relative, Absolute
- Provides a layered look similar to Windows
- On reconnect system, all window are resent



How this was done

- iNomads creates an iFrame over complete browser
 - iFrame slightly dims background to be default
 - Uses semi-transparent dark color (can be stylized with CSS)
- New Window created within that iFrame
 - No template background only title bar
 - Window can be dragged using title bar
 - Resizing is available



Advantages

- Controlled by iNomads and not subject to End-user or browser settings
- Avoids potential issues with Popup blockers
- More consistent display with application on desktop
- Maintains visibility of prior windows
- Faster to display



How to make *i*Nomads look more like other Internet applications?



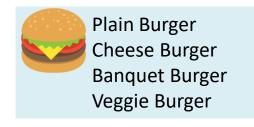
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What is the Hamburger Menu?



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What is the Hamburger Menu?





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What is the Hamburger Menu?

- Generally placed in the upper left/right of screen
 - Provides access to menu options for the applications
 - Commonly used as real estate on the screen is at a premium
 - Used in lieu of an omnipresent menu bar



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Used in lieu of Menu bar

- Hamburger ICON placed in top left of title bar
 - ICON is text thus color controlled by title bar text colour
- When clicked top line menu bar displayed
- Use of Hamburger Icon controlled by template (layout tab)
- Created using the following HTML in title
 - Can be tailored using CSS which currently defaults to top left floating =

<div id='id_3Lines'>≡</div>



How can we improve page load times?



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Scrollable versus Paged output

| Client ID | Name | A | Client ID | Name | |
|-----------|------------------------|----------------|----------------|------------------------|------------------|
| 016057 | Hemphill Theatre | 9489 Cozy Sł | 016057 | Hemphill Theatre | 9489 Cozy Shad |
| 022632 | Irion Winery | 4490 Middle | 022632 | Irion Winery | 4490 Middle Pla |
| 024363 | Falls Theatre | 889 Noble Sr | 024363 | Falls Theatre | 889 Noble Sprin |
| 032475 | Brewster Lighting | 5998 Dusty C | 032475 | Brewster Lighting | 5998 Dusty Circl |
| 033994 | Jackson Formal Rentals | 5201 Lost Jel | 033994 | Jackson Formal Rentals | 5201 Lost Jetty |
| 034538 | Grayson Nursery | 1737 Hazy St | 034538 | Grayson Nursery | 1737 Hazy Stead |
| 038024 | Burleson Construction | 5574 Bright (| 038024 | Burleson Construction | 5574 Bright Gre |
| 038588 | Clay Medical Center | 7158 Lazy Cr 🔻 | | | |
| 4 | | • | Pg: 1 <u>2</u> | <u></u> | 14 4 5 51 |
| | | | rent age | Jump to Page | Shift Columns |
| | | | | | |

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- Advantages of Paged output
 - Faster load times for large lists
 - Only sends one page at a time
 - Easier to control on touch screens, such as, a Smartphone
 - Scroll bars can conflict with scrolling of screen
 - User knows roughly the number of items in list/grid
 - Total number of pages defines list length



- Using Paged list boxes/Grids
 - Controlled by template
 - Check box on the "Lists" tab for template configuration
 - Will apply to ALL lists/grids more than 5 or more lines high
 - Override with *i*Nomads class in Nomads definition
 - "pagedview" forces paged output
 - "scrollview" forces scrollable output
 - No program changes
 - Program does not know output is being paged
 - Continue to load list box / grid as per normal

Making it easier to design a browser layout



- Templates control the layout of the pages
 - Define the following information
 - The 'wrapper' used to present Nomads panel or window
 - The font, colors, spacing and other attributes of display
 - Control various system settings, such as, pagination, menu bars, etc.
 - Custom style sheets and system images

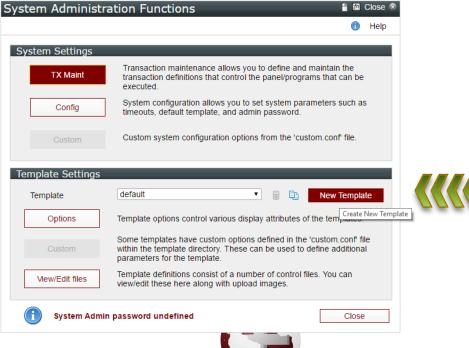


Wizard walks you through definition of template

- Simplifies the creation of new templates
- Wizard based on Wizard-Wizard format
- Steps you through the selection process:
 - Basic layout of web page
 - Size of various headers, footers, and side bars
 - Background colors or images
 - Text fonts, colors, and sizes
 - Built-in menus for access to external web pages



- Two options to initiate Template Wizard:
 - From Desktop RUN *plus/inomads/admin
 - From *i*Nomads txid=admin



Step 1 – Define the basics

| | Template W Step 1: Nam | | - Name the te | emplate and co | onfigure the p | age backgrou | und. | 🖺 🖾 <u>Close</u> 🕅 | | Track your Steps |
|---|---------------------------|--|---------------|--|----------------|--------------|---------|--------------------|------|---------------------|
| Name of Template Background Color Background Image Info | Name: | 2 Layout ge background repeat left top | | Panel Header Panel Keader This will be the | Panel Body | 6 Frames | Folders | 8 Finish | | Advance to |
| Position of Background Image defaults to "left top". Options to repeat, to fill page, line, or vertical column. | | | | E | ack 1 | lext | | Cancel | | Next Step |
| Copyright 2016, PVX Plus Tec | chnologie <u>s Lt</u> e | d | | | | | | | Dire | Xions 2016 |

Step 2 – Select layout 0

| | Template Wiz | emplate Wizard | | | | | | | | | |
|---|-----------------------|--|-------------------|----------------------|---------------------|------------------|---------------------|----------------|--|--|--|
| | Step 2: Select | Step 2: Select Layout - Pick from a selection of pre-defined template layouts. | | | | | | | | | |
| | | 2 | 3 | 4 | 5 | 6 | 7 | | | | |
| Select Basic Page Layout | Name Select layout | Layout | Sections | Panel Header | Panel Body | Frames | Folders | Finish | | | |
| | Panel | Panel | Panel | Panel Pan | el Panel | | | | | | |
| <i>i</i> Nomads comes with 16 default layouts. | | | | | | | | | | | |
| Select the basic layout that best suits your | Panel | Panel | Panel | Panel Pan | Panel | | | | | | |
| needs. | Panel | Panel | Panel | Panel | | | | | | | |
| The advanced layout maintenance in the | | | | AVAN | | | | | | | |
| template customizer can be used to create | Chan | ging the templat | te layout after : | section options have | e been defined will | result in the se | ction options being | g lost. | | | |
| other layout formats. | | | | <u>∎a</u> | ick <u>N</u> e | ext 🔊 | [| <u>C</u> ancel | | | |
| | | | | | | | | | | | |

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Step 3 – Define each section on your web page

| | Template W | izard | _ | _ | _ | _ | _ | 📋 🗖 <u>Close</u> 🛞 | | |
|---------------------------------|----------------|-----------------|----------------|---------------------|-----------------|------------------------|--------------|--------------------|------|-------------|
| | Step 3: Con | figure Layo | ut - Configur | e the layout for | r each section | of the templ | ate. | | | |
| Select Section | | 2 Layout | 3 Sections | 4 Panel Header | 5 Panel Body | 6 Frames | 7 Folders | | | |
| | Click on the t | emplate section | on you wish to | configure | Se | ction: 1 | | | | Define |
| Each section on a page | | 1 | / | Background C | olor: | | |] | | Width or |
| can be adjusted to fit | | | | Background In | nage: | | E5 | | | Height |
| your requirements. | | 2 - Par | el | Repeat: | repeat | v | | | | |
| | | | | Position: | left top | | | | | Add Text, |
| Define the size of each | | | | Width: | 15 | (pixels) 0 (pixels) | | | | Menus & |
| section. | Section Cont | ents | | Height: | 15 | o (pixeis) > | | | | Images |
| For sections that span | Template | | | Co | ontents | | | • / | | indges |
| full page width, no | | | | | | | | • | | |
| width needed. | | | | | | | | 6 | | |
| For section that span | | | | | | | | 18 | | |
| full height, no height | | | | | | | | 12 | | |
| needed. | | | | | | | | | | |
| needed. | | | | I ∢ <u>E</u> | ack <u>N</u> | ext 🕅 | | <u>C</u> ancel | | |
| Comminant 2016 DV/V DIVIS Tools | | - | | | | | | | Dire | eXions 2016 |

Step 4 – Configure panel region

| | Template Wizard | 📋 📶 <u>Close</u> 🚳 |
|---|---|--------------------|
| | Step 4: Configure Panel - Configure the appearance of the panel header and borders. | |
| Define Title Region | 1 2 3 4 5 6 7 Name Layout Sections Panel Header Panel Body Frames Folders Define the appearance of the panel header | Finish |
| Title can be Suppressed | Background Color: Panel Header Text Background Image: Panel Header Text Header Background > | |
| Your panel/window section has specific needs for title and an | Suppress Header Text Text Color: Text Font: Font Size: | |
| optional border. Border can include rounded corners and a shadow effect. | Define the appearance of the panel border Color: Style: standard Width: (pixels) Corner Radius: Shadow | |
| | i∢ <u>B</u> ack № | <u>C</u> ancel |

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Step 5 – Define panel body

| | Template W | lizard | | | | | | 🏥 🗖 <u>Close</u> 🛞 |
|-----------------------|---------------|---------------|-------------------|----------------------|--------------|----------------------|---------------------|--------------------|
| | Step 5: Con | figure Pane | el - Configure | the appearance | of the panel | text and bac | kground. | |
| Background | _1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| of Panel | Name | Layout | Sections | Panel Header | Panel Body | Frames | Folders | Finish |
| | Define the de | rauit appeara | nce for the pane | i background | | | | |
| | Backgroun | d Color: | | | | Pane | I Header (step 4) | |
| | Backgroun | d Image: | | | Es l | Densit | | |
| Font/Color | Repeat: | | repeat | • | | Panel Te Panel Te | | |
| of Contents | Position: | | left top | Ŧ | | Faller it | :XL | |
| or contents | \rightarrow | | | | | | | |
| | Define the de | fault appeara | nce of any text I | ocated in the pane | I | | | |
| | Text Color: | | | | | < Pa | nel Background > | |
| Panel background | Text Font: | | | | | Panel Te | t | |
| - | Font Size: | C |) | | | Pallel It | | |
| ormally controlled by | | | | | | P | anel Border (step 4 |) |
| emplate. | | | | | | | | |
| Program override is | | | | | | | | |
| llowed. | | | | | | | | |
| | | | | | | | | |
| | | | | I⊲ <u>B</u> a | ack <u>N</u> | ext 🔰 | | <u>C</u> ancel |
| | | | | | | | | |

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Step 6 – Frame definition

| | Template Wizard | 📋 🖾 <u>Close</u> 🛞 |
|--|--|--------------------|
| | Step 6: Configure Frames - Configure the appearance of any frames within the panel. | |
| Background of Framed Region | 1 2 3 4 5 6 7 Name Layout Sections Panel Header Panel Body Frames Folders | |
| Border of Frame | Define the appearance of the frame's header background Header Background Color: Header Background Image: Background Color: | |
| Title/Header for Frame | Define the appearance of the frame border Color: Style: Tounded | |
| Framed regions can be highlighted by defining special background and header format. | Define the appearance of the text in the frame header Text Color: Text Font: Text Size: | |
| | i¶ <u>B</u> ack №i | <u>C</u> ancel |

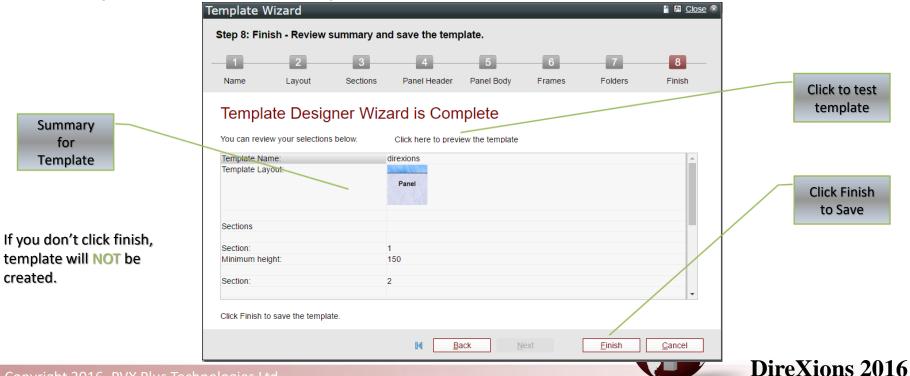
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Step 7 – Folder definition

| | Template W | izard | | | | | | 🗎 🗖 <u>Close</u> 🛞 |
|---|------------------------------------|------------------------------|-----------------|-----------------------|-----------------------|---------------|---------|--------------------|
| | Step 7: Conf | ïgure Folder | - Configure | the appearanc | e of any folde | ers on the pa | nel. | |
| Background for Contents | Name | Layout | 3 Sections | Panel Header | 5 Panel Body | Frames | Folders | 8 Finish |
| Folder Border | Background | Color: | e folder border | | 9 | | | |
| Colors for Tabs | Color: Style: Define the col | standard ors for the fold | ▼ ler tabs | - | | | | |
| Tab text and background colors can be assigned for each state. | Inactive Tab | ext : Background: | | | 9 9 9 9 9 | | | |
| | | | | I ¶ <u>B</u> a | ack <u>N</u> | ext 🕅 | | <u>C</u> ancel |

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Step 8 – Review layout and save



Graphic Support - Lines & Circles

Enhancing support of Graphics



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Graphic Support - Lines & Circles

Direct graphic drawing on Web page support

- iNomads 2014 supported horizontal lines and rectangles
- *i*Nomads 2016 added support for:
 - Circles/Ovals both with the 'CIRCLE' mnemonic or thru Nomads
 - Angled lines with either the 'LINE' mnemonic or thru Nomads
- Typical uses:
 - Custom folder tabs, floor plans, connector lines



Native Application Support

What did we add for non-Nomads programs?



Native Application Support

Mouse and Keyboard events

- Support CTL events for OBTAIN / INPUT from console
- Can track mouse clicks and dragging
- TIM= also supported
 - Can set timeout for single CTL event input



What else were we up to?



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Implemented new run-time menu generation interface

- Allows developer to interface with existing menu logic
- Program defines menu entries, levels, text and URL
- User security can be handled by program to restrict menu
- For more details:

http://manual.pvxplus.com/page/iNOMADS/Menu_Generation.htm



- Improved overall performance
 - Reduced screen redraws using dynamic updates to controls
- Enhanced the look of built in Calendar and Calculator
- Added theme and visual class support
- Drop query was implemented
- HSL and blended color support was added



- Updated standard image library
- Added embedded Query button support
- Integrated in the IDE
 - New Test transaction logic added to Nomads designer



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.

- iNomads Introduction
- 🧕 <u>iFrame</u>
- Hamburger Menu
- Auto paginated Lists
- Template Designer Wizard

