Altitude Pilot

User Manual

Version 1.0

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Plexus Technology Limited is an Echelon accredited LONWORKS Independent Developer.

Contents:

1. Purpose

This document is a User Guide for the Plexus Altitude Pilot. It is a reference guide to designing screens that will be displayed on Altitude Clients.

2. Audience

This Altitude Pilot User Guide is intended for system designers and integrators with an understanding of LonWorks® control Networks. A basic understanding of computer graphics and IP networking is assumed.

3. Introduction

Altitude Pilot is a tool for designing web pages that facilitate the control and monitoring of dynamic graphical objects that display in a Web Browser in relation to the value of LONWORKS® Network Variables. Altitude uses a JAVA™ application that is automatically loaded into any compatible Web Browser such as NetScape® Navigator™ or Internet Explorer® and provides dynamic updates without the need for constant 'refresh' of the Web page to display the latest value.

Screens produced using Pilot are served from an Altitude Server for the PC or on a NetServer embedded Server.

3.1. Installing Altitude Pilot

3.1.1. Hardware Requirements

The hardware requirements for Altitude Pilot are as follows:

Pentium Class Processor 350MHz or higher (subject to application)
64 MB RAM (128 MB or more recommended)
1 GB Hard Drive (subject to application)
Windows® 95, 98 or Windows® NT 4.0 (service pack 4 or higher)
Microsoft® Internet Explorer 5.5 or later, or NetScape Communicator® 4.5 or later.
10 Base T Ethernet network with TCP/IP protocol enabled.

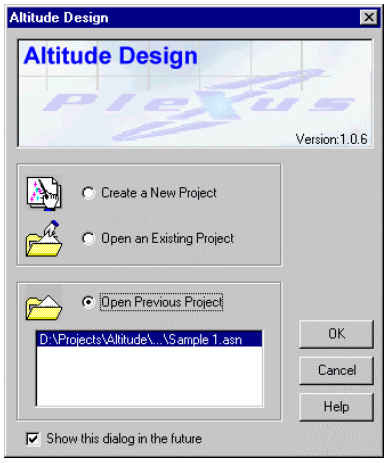
3.1.2. Installing Altitude Pilot

To begin the installation, follow these steps:

1. Close all running Windows® applications
2. Insert the Altitude Pilot CD into your CD-ROM drive.
3. From the Windows Start menu browse to the Altitude Pilot setup program and select open.
4. The Altitude Pilot setup wizard will start and guide you through the rest of the setup process.
5. Restart your computer when instructed to do so.

3.2. Starting Altitude Pilot

When Pilot is started, an option screen is displayed.



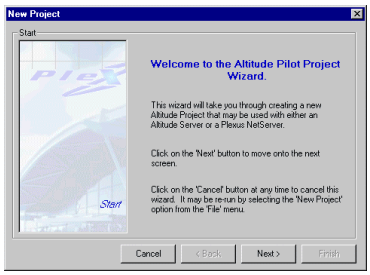
Create a New Project	Runs the New Project wizard. This wizard automates the process of creating different project types and is the best way of creating a new project.
Open an Existing Project	Allows an existing project to be opened from the disk. If your required project is not in the Previous Project list then use this option to browse the disk for it.
Open Previous Project	Displays a list of previously opened projects and allows quick and easy access to them.

Select the required option and click project and click OK

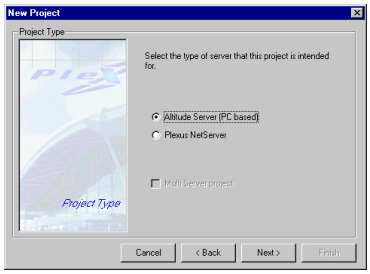
4. To Create A New Project

Select the 'Create a New Project' option on the start screen which will start the Project Wizard. The wizard will create both Altitude PC projects and NetServer projects. If the version of Pilot that you are running is a NetServer version then you will only be able to create NetServer projects.

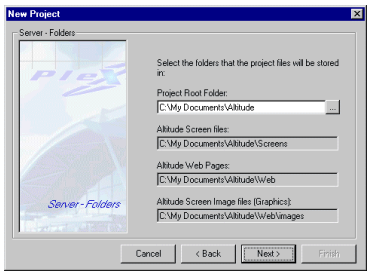
4.1. To Create a PC Project



1. Click 'Next' on the Wizard start screen.



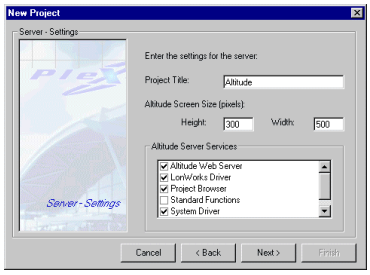
2. Select 'Altitude Server (PC Based)' and click 'Next'



3. Select the folder that the Altitude project files will be stored in.

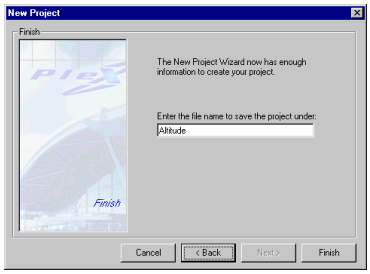
   The default is 'C:\My Documents\Altitude'. To change this click on the browse button '…' which will display a dialog box to go to the required location.

   Click 'Next'



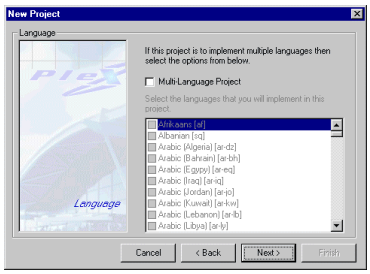
4. Server Settings. Enter a Project Title and select the services required on the server. Altitude screen size sets the default client screen size. See Project options for more details.

   Click 'Next'



5. If the project is to implement multiple languages then select the required options.

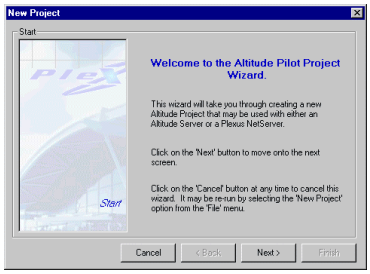
   Click 'Next' to continue.



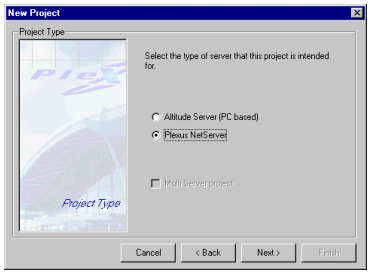
6. Click 'Finish' for the wizard to create the project.

The Server dialog box is now displayed. To connect to a server type in the Server address and Click 'Connect', otherwise click 'Close'. See connecting to a Server for further details on the Server dialog box.

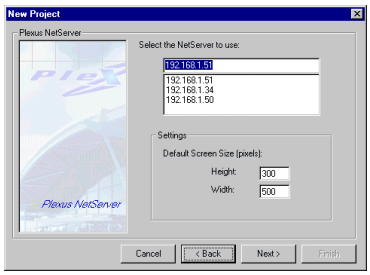
4.2. To Create a NetServer Project



1. Click 'Next' on the Wizard start screen.



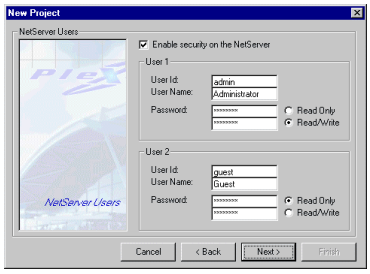
2. Select 'Plexus NetServer' and click 'Next'



3. Select the Net Server to use from the list or type in the IP address.

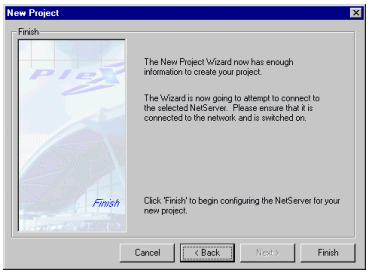
   Altitude screen size sets the default client screen size. See Project options for more details.

   Click 'Next'



4. Enable Security. Two accounts are set up – an Admin account that is used to access the user details and add / change users and an optional guest account. If security is not required you must still have an Admin account but users will not be prompted to login to the Altitude Client.

   Click 'Next'

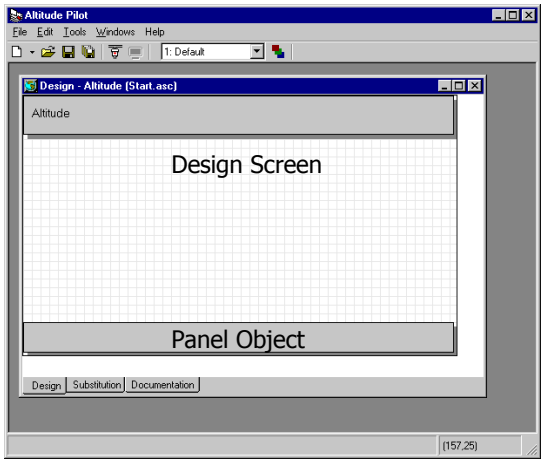


5. Ensure the NetServer is connected to the Network and switched on then click 'Finish' to create the project.

The Server dialog box is now displayed. To connect to a server, enter the NetServer address and Click 'Connect', otherwise click 'Close'. See connecting to a Server for further details on the Server dialog box.

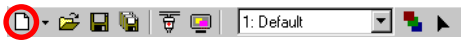
5. The Design Screen

The new project created by the Project Wizard contains a design screen. This is where screens are created using the objects provided in the toolbox. The objects when combined together can create screens as complex or as simple as required



To Add a New Screen

Pilot can have multiple screens open at any one time. To open a new screen click on the New Screen icon on the toolbar.



This will display a new blank screen.

To Add Objects

Items are added to the design screen from the Toolbox. See section 4 for more information.

To Change Properties

All objects have properties that can be modified after they have been added to the design screen. To display the Property screen right click on the object then select Properties from the context menu. For more information see section 5 Object Actions.

To Re-Size Objects

All objects can be resized at any time any creation. To resize an object, select the object, then drag a side or corner selection handle until the object is the size required.

To Move Objects

Select the object required then holding down the main mouse button, drag the object to a new location and release.

To Delete Objects

To delete an object, select the required object and press delete or right click and select Delete from the context menu.

To Select Multiple Objects

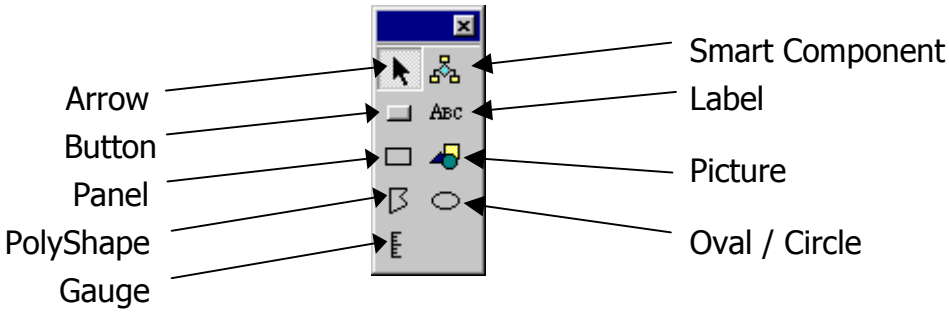
Select the first object then holding down the shift key click on the other objects to select them. Objects can also be selected with the mouse by 'rubber banding' them.

To do this click on the design screen then holding down the main mouse button drag the mouse to create a box around the objects, all the objects enclosed by the mouse box will be selected.

The master shape will be highlighted in green.

6. Toolbox Objects

The objects are provided in the toolbox shown in figure 4.1.



Objects are added to the design screen by selecting the required shape and then drawing it on the screen.

6.1. Adding an Object to the Design Screen

1. Select the object in the Toolbox
2. Click on design screen and holding down the main mouse button drag to draw the shape
3. When the shape is the required size release the mouse to create the shape

Further details on some of the shapes:

Arrow — The arrow is the default tool and is used for manipulating shapes after they have been placed on the design screen.

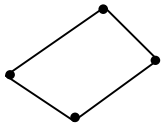
Button — Actions can be assigned to objects that are executed when the object is clicked. The Button is the only object that provides a visual indication that it has been clicked as it animates a button being pressed. Examples of actions are loading another screen or changing a variable value.

Poly Shape — Creates a user-defined shape. When drawing a poly shape, click the left mouse button to create an anchor or 'Node' then when the shape is complete press Enter or right click to finish the shape.

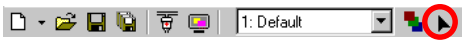
Holding down the Shift key while drawing a poly shape will only allow ninety-degree angles.

Gauge	This is a graduated gauge that can be set to any orientation and the number of major and minor graduations can be defined on the property page.
Smart Component	Creates a pre-defined object with it's own set of properties. Examples of smart components are a thermometer or a clock.
Label	Allows static or dynamic text, such as a changing variable value, to be displayed.
Picture	Allows an image to be displayed on the screen. Accepts *.jpg or *.gif image formats.

6.2. To Add a Node to a PolyShape

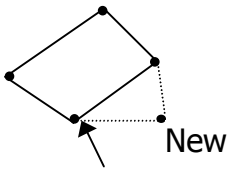

Original

1. Select the PolyShape

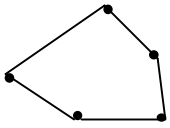


2. Click on the Node Tool button on the toolbar.

3. Hold down the Ctrl key.

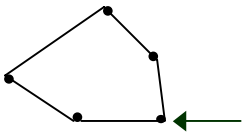


4. Drag an existing node to a new position


New Shape

5. Release to create a new node

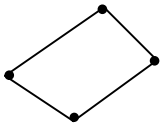
6.2.1. To Remove a Node



1. Select the PolyShape

2. Click on the Node Tool button on the toolbar.

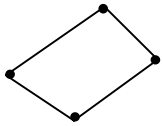
3. Hold down the Ctrl key.



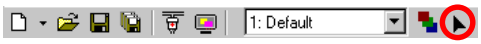
4. Right click on required node to delete it.

New Shape

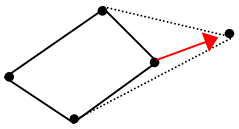
6.2.2. To Move a Node



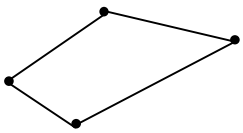
1. Select the PolyShape



2. Click on the Node Tool button on the toolbar.



3. Select the required node and drag to new position.



4. Release to complete node movement

7. Object Actions

Once an object has been added to the design screen, the property page will appear. All objects can be resized after creation and have properties that can be modified.

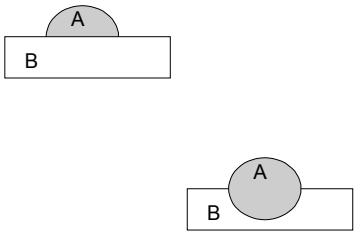
To access the properties, right click on an object to bring up the context menu.

Cut, Copy, Paste & Delete	Cuts or copies the selected object/s to the clipboard, pastes the object onto the design screen or deletes the object.
Duplicate	Creates an instant duplicate of the selected object/s
Object	Contains options to move objects in the object stack, align objects and group objects.

Altitude keeps track of the order objects are added to the screen and this is called the Z order or the stack and new objects are added to the top of the stack.

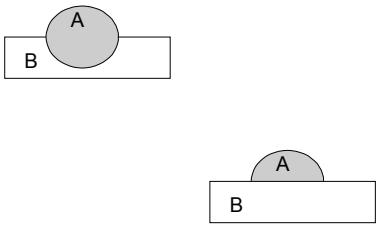
A shape's position in the stack may be changed after it is added and options to move objects backwards or forwards through the stack are under the Object menu.

7.1. To Bring a Shape to the Top of the Stack



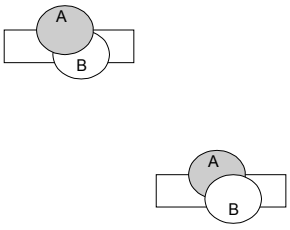
1. Select required shape
2. Right click and select 'Object' then 'Bring to Front' from the context menu
3. The shape has now moved to the top of the stack.

7.2. To Send a Shape to the Bottom of the Stack



1. Select required shape
2. Right click and select 'Object' then 'Send to Back' from the context menu
3. The shape has now moved to the back of the stack.

7.3. To Move a Shape one Position Backwards in the Stack



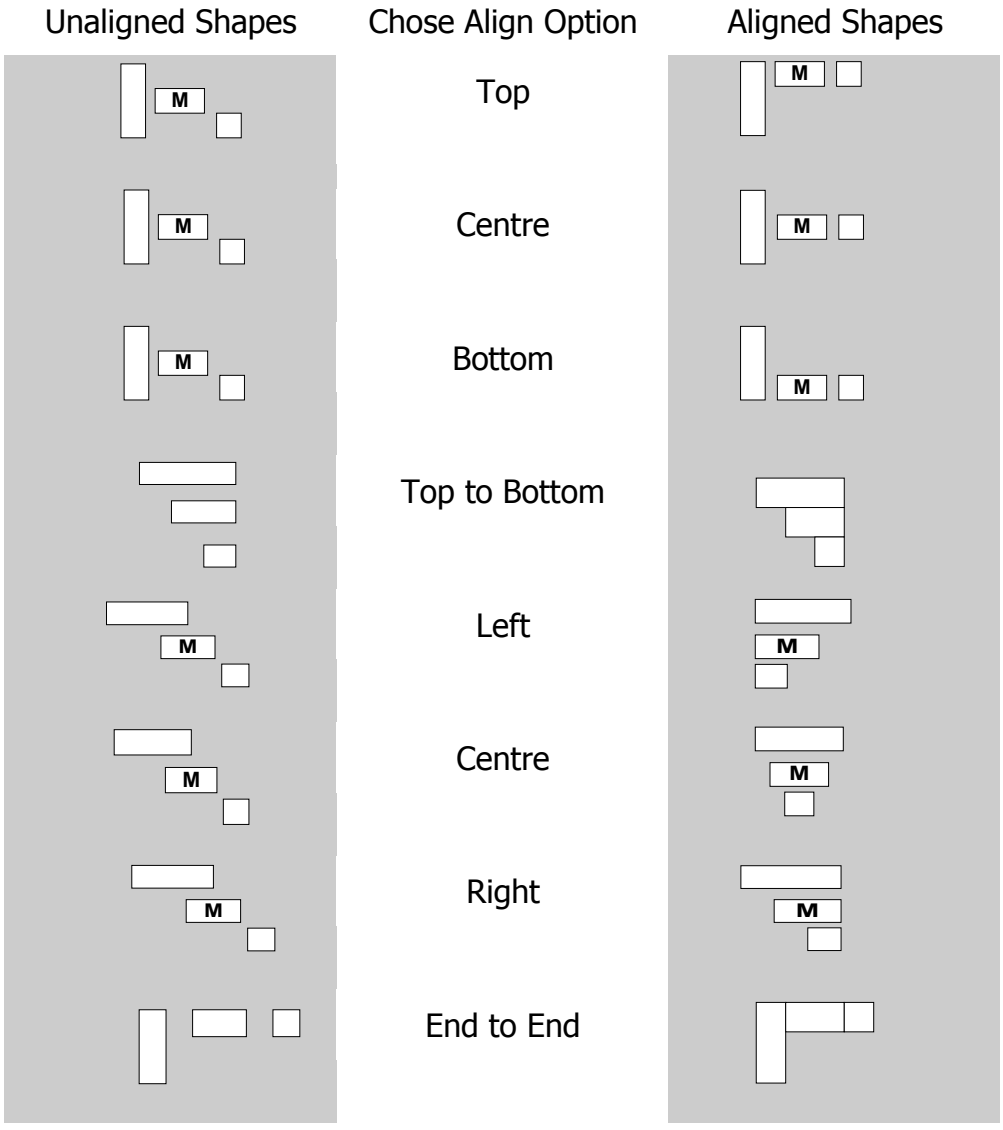
1. Select required shape
2. Right click and select 'Object' then 'Move Backward' from the context menu
3. The shape has now moved one position backwards in the stack.

Note: If nothing appears to happen when selecting Move Backward or Move Forward it is possible the shape has moved in front or behind another shape that it is not touching. Where two shapes are touching they are not necessarily next to each other in the stack so the Move Forward or Move Backward command may need repeating to achieve the desired result.

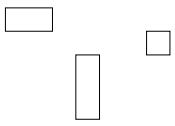
7.4. Align

The Align command contains options to line up shapes with respect to one another.

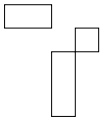
7.4.1. Alignment Options



For end to end and top to bottom alignment as shown first align the shapes to the top or right. Selecting end to end/top to bottom before aligning will align end to end/top to bottom as shown below.



End to End and Top to Bottom when shapes are not vertically or horizontally aligned.



Align to Grid Aligns or 'Snaps' the selected object/s to the design grid

7.5. To Align Shapes

1. Select the shapes you want to align
2. Select the shape you want to align the other shapes to. This shape will be highlighted in a different colour and is the Master shape as represented in the table by an M
3. Right click and select Align from the context menu.
4. Select Horizontal or Vertical alignment then select the required alignment option.

7.6. Groups

Grouping allows selected objects to be joined together and treated as one object. This means the shapes are moved , sized and formatted all at the same time as a single 'Group' object.

Select the objects to be grouped then right click and select Object then Group.

7.7. Properties

This item on the object context menu displays the property pages for the selected object. Not all properties are available to all objects, as some are not relevant.

Properties Available to Each Object.

	General	Caption	Colours	Flood	Image	Rotate	Smart Component	Style	Visible	X-Y
Smart Component	X						X		X	X
Button	X	X	X					X	X	X
Label	X	X	X						X	X
Panel	X		X					X	X	X
Picture	X				X				X	X
Poly Shape	X		X	X		X			X	X
Circle	X		X						X	X
Gauge	X		X					X	X	X

7.8. Tags

A tag is a variable reference that is entered on a property page and is in the following format:

[SERVER:]DRIVER.variable.field [Qualifier]

SERVER is an optional server specifier used on multiple server systems to inform the system where to obtain the variable.

DRIVER is the driver id that is installed on a server. For example, if a LonWorks driver were added to the server with the name LNS then the driver id would be LNS.

Variable.field is the variable name as defined by the driver.

For example, *LNS.Subsytem1.node.nvoSpaceTemp* where *LNS* is the driver.

Qualifier is an optional specifier, which is one of the STD functions. When one of the STD functions is added to a variable reference, this function will be executed in relation to the variable.

Variable and function references can be dragged from the project browser and dropped into the tag box and qualifier box respectively, and the reference will be automatically entered.

The function qualifier in this example converts the variable value to local temperature units.

The variable value can be displayed in a label or used to dynamically control a property. Each property page has an independent tag box and qualifier box so different variables can be used to control different properties.

Variable values can be used to:

Change the colour of an object when a certain value is reached.
Make an object visible/invisible when a certain value is reached.
Control the flood fill of an object
Control how an image animates
Control how an object rotates
Control the X-Y of an object to move it around the screen

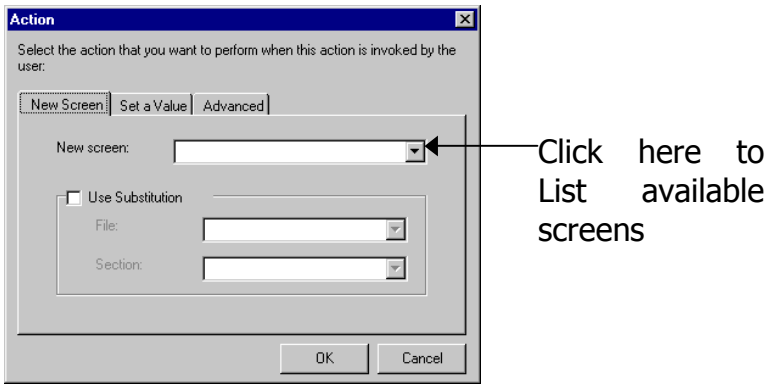
7.9. General Properties

These are general purposes properties.

Item Name	Unique identifying name assigned by the system which cannot be changed by the user.
Item Type	The type of object for example a Button. If an object consists of multiple objects grouped together the object type will be group.
Layer	The layer the object is on. See the section on layers for more information.
Hand Cursor	Changes the cursor to a hand when it is moved over the object.
X	The selected object's left edge position on the design screen.
Y	The selected object's top edge position on the design screen.
Actions	Adds an action to a shape, for example changing screens. Actions can be performed when one of the following events takes place:
Click	Executed after the main mouse button is pressed and released on an object.
MouseDown	Executed when the main mouse button is pressed on an object.
MouseUp	Executed when the main mouse button is released over the same object that the mouse button was pressed down on.
MouseEnter	Executed when the mouse pointer is moved over an object.
MouseExit	Executed when the mouse pointer is moved off an object.

7.10. To Add a Click Action

1. Select the object to which you wish to add an action
2. Right Click and select Properties from the context menu
3. Select the General Tab
4. Click on the 'Click()' button which is the top button under Actions.
5. This displays the action screen



6. Select the New Screen or Set a Value Tab
7. To change to a new screen click the down arrow to drop down a list of all the available screens. There is also the option to use substitution when changing screens. See the section on Substitution for more information.
8. To set a value type in the full variable name and the required value to be set.
9. Click OK and the action is added to the object.

7.11. Caption

Note: The presentation of fonts in Altitude Pilot may not be the same as in a Web Browser.

Caption

The text to be displayed which can be static, dynamic or a combination of the two. For dynamic text, use the Tag property to link to the value of a variable.

For a combination of the two enter the static text first followed by %V which represents the variable value. If available, the unit of measurement can be displayed by adding %U.

i.e. Temperature %V %U

Italic, Bold and Font Size

Basic formatting options.

Alignment

Text alignment options. The vertical options are top, centre or bottom and the Horizontal options are left, centre or right.

Display Format

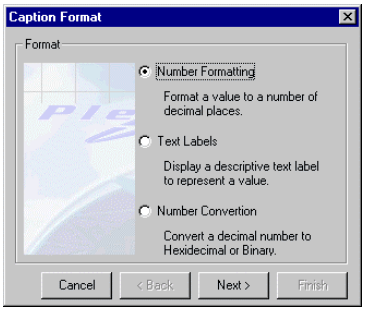
This is a drop down list containing formatting options that can be applied to numerical values.

The first set of options are number formatting that allow you to display up to four decimal places.

The next set allow you to display text to represent a value for example True/False, Yes/No and On/Off where 0 represents False No and off and all other values represent True, Yes and On.

The last two options are Hex and Bin, which will convert a number to its Hexadecimal or Binary equivalent.

Clicking on the browse button '…' displays the wizard, which will format numbers in a couple of easy steps and offers some additional options.



Number Formatting allows you to select the number of decimal places and display a leading zero if required.

Text Labels offers the option of pre-defined and user-defined lists. The user defined option allows you to type a list of values into a table for example 0=Off, 1=Low, 2=Medium, 3=High, etc. (any other number) = Error

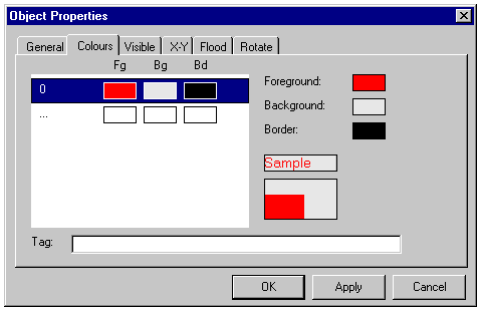
Number Conversion converts the value into its Hexadecimal or Binary equivalent.

Select the required option then click Next and follow the on screen instructions.

Tag See the section on Tags for more information.

7.12. Colours

The foreground, background or border colour of an object can be changed. This is demonstrated on the colours property page.



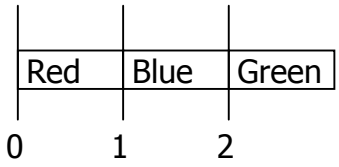
Static and dynamic changes can be made to colours. A range of colours can be configured by linking the display colour to a variable value.

Foreground (fg)
Background (bg)
Border (bd)

Click on the required box to display a colour palette from which to select a colour. To edit the value linked to the colour, double click the value then enter the new value and press enter.

Various values can be added each with a different set of colours so that when linked to a variable the object will change colour as the variable value changes.

Example:



In the example the object will be red when the value is 0, blue when the value is 1 and green when the value is 2.

Tag

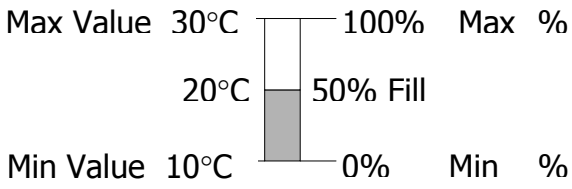
See the section on Tags for more information.

7.13. Flood

This property is used for flood filling polyshapes from the bottom up.

Min % Fill / Max % Fill	This maps to the min and max value
Min/Max	Min and Max values of the specified variable.
Tag	See the section on Tags for more information.

Flood Fill Example



0% Min % fill maps to 10°C Min Value and 100% Max % fill maps to 30°C Max Value

This means that at 20°C the object is 50% flood filled.

7.14. Image

To Select an Image

Click on the browse button '…' This displays the images dialog box.

Select required image

or

Click on the search button:

1. Locate required image and click OK
2. Altitude will copy the selected image file into the images directory.

Select the file from the images dialog box and click OK

To Delete an Image

To delete the image out of the preview box click on the 'X'

Original Image Size

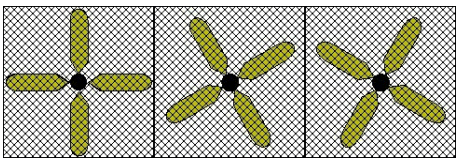
Displays the image at it's original size

Original Aspect Ratio

Returns the selected image to it's original aspect ratio of width to height

To Animate an Image

1. Select a suitable image to animate, for example the fan.



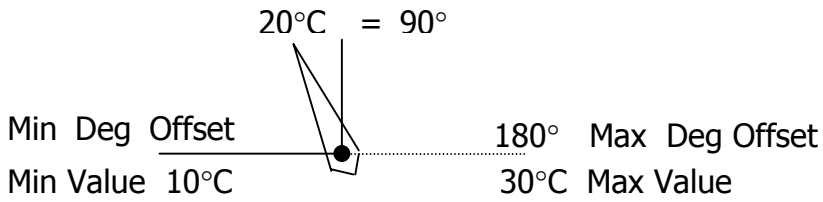
2. Enter the number of Frames to be animated which for the fan is 3.
3. Enter the Animate Value, which is the value at which you want the object to animate. This value is provided by the variable referenced in the tag box.
4. Enter a variable reference into the tag box. See the section on Tags for more information
5. Click OK

Only the first frame will be displayed in the Image object. To manually step through the frames click on the current arrow on the image properties page and the current frame number will be displayed as it steps through.

7.15. Rotate

Min/Max Deg Offset	This maps to the min and max value
Min/Max	Min and Max values of the specified variable.
Centre of Rotation	This is the point at which the object will rotate. The default is the centre of the shape.
Show Centre of Rotation	Displays an indicator on the shape. This can be moved by selecting the Node Tool from the toolbox and dragging the indicator to a new position.
Tag	See the section on Tags for more information.

Rotate Example



0° Min Deg Offset maps to 10°C Min Value and 180° Max Deg Offset maps to 30°C Max Value

This means that at 20°C the object is 90° rotated.

7.16. Smart Component

This property contains custom properties appropriate to each Smart Component.

7.17. Style

This property contains options for buttons, gauges or panels depending on the object selected.

Button Style	Flat or 3D effect
Panel Style	Flat, Recessed, Raised or Shadow.
Gauge Style	Gauge Orientation, left, right, top or bottom and Gauge format, the number of major and minor ticks required.

7.18. Visible

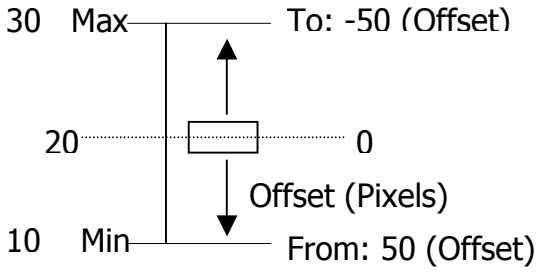
Visible Value	The value at which the object will became visible. This value is provided by the variable referenced in the tag box.
Tolerance	Only applicable when using the Equals of Not Equals operator. The object will become visible within the set tolerance.
Timeout	Used with the Change operator. If the operator is set to change the object will become visible when the value changes and invisible again after the specified timeout.
Operator	Used with the Visible Value property to specify when the object will become visible.
Flash Object	Flashes the object when visible.
Tag	See the section on Tags for more information.

7.19. Slider

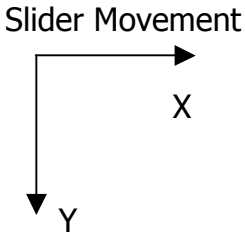
This property refers to an object's position on the design screen.

From/To	Specifies how far the object moves across the screen. This maps to the min and max value.
Min/Max	Min and Max values of the specified variable.
Editable	Makes the object editable so it can be manually moved across the screen using the mouse.
Tag	See the section on Tags for more information.

Slider Example



-50 Offset maps to 30 Max Value and 50 offset maps to 10 Min Value. The zero position is the place where the object was placed at design time (i.e. zero offset) and the slider's range of movement is 50 pixels up or down.



8. Screen Properties

The screen properties are accessed by right clicking on a blank part of the design screen and selecting properties from the context menu.

Changes to these properties only apply to the active screen as each screen has it's own independent set of screen properties.

8.1. General

Screen Title — Each screen can be given a title which can be more descriptive than the file name. The screen title appears on the file open dialog box when you select a file and is the name sent to the client and picked up by the This driver. (This.Title)

Screen Size — Set the height and width of the design screen in pixels. This is the size the screen will appear in the client and should match the size defined in the web page to be displayed in the web browser.

8.2. Background

Background Colour — Displays a colour palette to change the background colour of the design screen

Refresh Rate — This is how long the system waits in milliseconds after receiving an update before refreshing the screen.

8.3. Environment

Snap to Grid — Automatically positions the outer edges of the objects onto the grid lines when adding and moving objects.

Show Grid — Controls the grid display. When selected the grid will be displayed.

9. Project Options

The options screen is accessed by selecting 'Options' from the Tools menu.

9.1. General

Contains options relating to the current project.

Project Type	This will be Altitude Server or NetServer. This is set by the system and cannot be changed.
Project Title	The name of the current project.
Start Screen	The current start screen. This can be changed by selecting another screen from the drop down list.

9.2. Folders

Contains options for setting the default folders in Altitude.

Project Folder	The location of Altitude project files.
Graphics	The location of graphics used in Altitude projects.
Smart Components	The location of the Smart Components used in Altitude projects.

9.3. Design

Contains options relating to the design screen. These options change the settings for new screens and will not affect existing screens. Settings for existing screens are changed from the screen properties page.

Default Screen Size	Set the height and width of the design screen in pixels. This is the size the screen will appear in the client and should match the size defined in the web page to be displayed in the web browser.
Snap to Grid	Automatically positions the outer edges of the objects onto the grid lines when adding and moving objects.
Show Grid	Controls the grid display. When selected the grid will be displayed.
X/Y	The size of the drawing grid squares in pixels.
Default Button Style	Sets the button style for all projects to Flat or 3D.
Save Settings	Saves all grid settings when exiting the project or

on Exit	program.

9.4. Dialogs

Contains options to disable the dialog boxes that are displayed at startup.

Show the 'Tip of the Day' dialog at startup	Re-displays the Tip of the Day dialog when the 'Do not Show this Dialog Again' option has been previously selected.
Show the 'Connect to …' dialog at startup	Re-displays the 'Connect to …' dialog when a project is opened when the 'Do not Show this Dialog Again' option has been previously selected.
Show the 'Start' dialog at startup	Re-displays the 'Start' dialog when Pilot is first started when the 'Do not Show this Dialog Again' option has been previously selected.
Reset 'Tip of the Day'	The tip of the day displays a tip every time Pilot is started and runs through a list from beginning to end. Selecting this option will reset the tips to start again from the beginning.

9.5. Tools

Allows application shortcuts to be added to the Tools menu. Application shortcuts are listed in the dialog box.

Description	The name used to describe the program. This name will be added to the Tools menu.
Program	The full file path to the program
Delete	Deletes the selected application shortcut
Modify	To edit a description select the required shortcut from the list, edit the name in the description box then click Modify.
Add	Displays a browse box to locate the required application

10. Smart Components

Smart Components are different from other shapes in the toolbox in the sense that they are not shapes at all. A Smart Component is a pre-defined object which can have intelligent associations with the data and is a powerful feature of Altitude that compliments the shapes and allows complex screens to be quickly and easily designed.

Smart Components are linked rather than added to the screen and loaded dynamically when the screen is being viewed. If changes are made to a Smart Component on the disk then these changes will be reflected on all screens that use that object.

The power behind the Smart Component is the ability to give it intelligence. A Smart Component can be associated either with a single variable or a set of variables, such as different NV's' on a single LonWorks node or even different NV's on multiple nodes on a LonWorks® sub system.

Smart Components can be created by dragging and dropping a variable with an association from the project browser. For example, a LonWorks NV of type SNVT_temp_p can be associated with a Smart Component representing a thermometer.

Smart Components have custom properties and in the example above dragging the variable SNVT_temp_p onto the design screen can produce a fully configured thermometer with the custom properties automatically completed.

The Time register in the System driver, one of the Altitude Server services, is associated with a clock Smart Component. The following diagrams demonstrated dragging the Time register onto the design screen to instantly produce a configured clock.

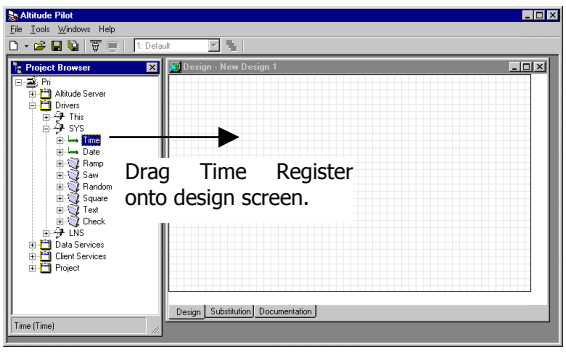


Figure 1 Time Register

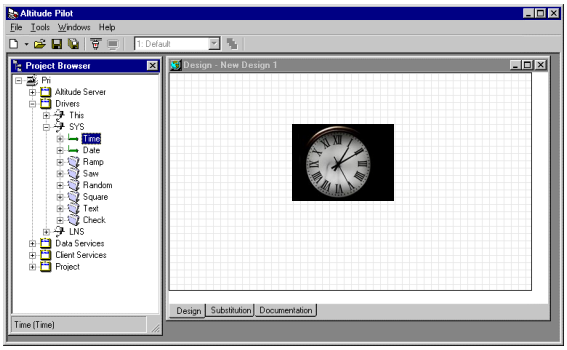


Figure 2 Clock

Releasing the Time register on the design screen produces a configured clock.

Any variable type may also have an association with more than one Smart Component. In this case, a list off all applicable components will be displayed for the appropriate one to be selected.

If no association exists for a variable type then a simple label object will be created to display the value of the variable. If a label is required for a variable that does have an association, hold down the shift key while dragging & dropping the variable.

11. Layers

Altitude Pilot has the functionality to assign shapes to different layers. The layers are accessed from the toolbar.

The layers can be turned on and off in both the design environment and in the client. Turning a layer off hides the layer and makes the shapes on it invisible. Layers can also be made inactive, which means any shapes on that layer cannot be selected or moved.

For example, if you are designing an office layout the background can be done first on one layer then that layer can be made inactive while you add the lighting layout to a different layer without affecting the shapes on the background.

The Layers dialog box is accessed from the Tools menu.

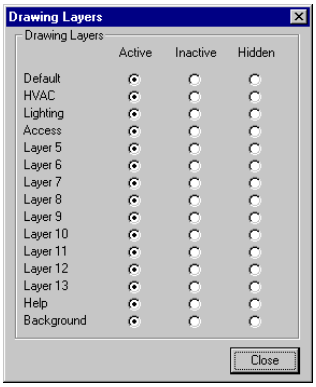


Figure 3 Drawing Layers Control

12. Connecting to a Server

Connecting to an Altitude Server displays the project browser in Pilot. This allows all available variables to be browsed while designing screens.

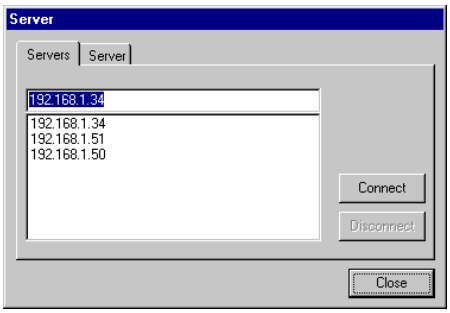
Variables can be dragged from the browser and dropped directly into the tag property on any of the property pages.

Variables can also be dragged and dropped directly onto the design screen. If a variable is associated with a smart component then the smart component will be added to the screen, otherwise a label will be created.

After designing the screens, a connection to a server is required to display the screens in an Altitude client.

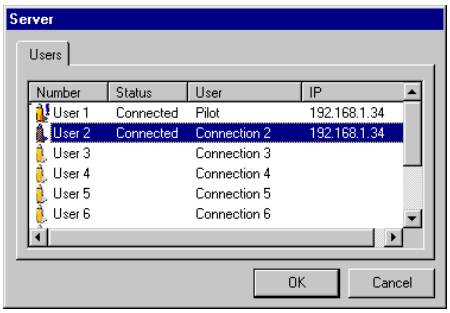
An Altitude client is a web browser on the same or a different PC that is connected to the same server.

12.1. To Connect to a Server



1. Click on the Connect button on the toolbar
2. Select a server or type in an IP address and click Connect. If connecting to a NetServer you will be asked to connect twice – once to open the project and once to connect to Altitude.

3. Click on the View button on the toolbar



4. Select an appropriate connection and click OK

5. The active screen is sent and displayed on the client.

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