

WildTools 10 Development Notes



*Changes are listed in reverse order—most recent first.
Is that cool or what?*

Log of Activity

9/9/2011

WildTools 10.1.1

WildTools 3D 10.1.1

Baseline Tools 10.1.1

Nuts & Bolts 10.1.1

Special Curves 10.1.1

Doors & Windows 10.1.1

PerspectiveTools 10.1.1

SketchTools 10.1.1

TopoTools 10.1.1

CompositeWallTools 10.1.1

WildThing 10.1.1

CoreUtilities 10.1.1

NewTools 10.1.1

New shipping versions including changes listed below.

Button Dock

Added a new button dock display that goes with the favorites buttons in the dialogs for the Tree, Shrub, Picture Frame and Gradient Fill tools. The purpose of this is to provide a visual framework

for the buttons, like the Finder Dock, so that it will show these images as things that you can click on and they are not to be confused as something else.

While this makes little difference in the display in the dialog, the real reason is that I would like to work on the idea of showing these buttons at the bottom of the drawing window along with a WildFlower button. When implemented this way, it would allow you to change the settings of the tool to your favorites without bringing up the dialog. And the WildFlower idea is similar to the Blossom Cursor concept and it would provide a one-click shortcut to bring up the tool's dialog. It's a new idea and may require a lot of experimentation and work to come up with something that works smoothly. On the other hand, it's equally possible that it will turn out to be a terrible idea that does not work at all.

Tree Tool, Shrub Tool

Added favorites.

Picking, Trim tool and many others

Changed the picking of the Trim tool and many other tools so that it will trim to objects on locked layers.

Find Layer and Magician tools

Now have yellow hilighting of all objects on the target layer.

Knife and Freehand Knife tools

Now cut gradient fills of objects.

Picture Frame Tool

New tool added to the WildTools palette.

With modern color printers you can add a framing mat around the photo, and print both the photo and the framing mat at the same time. This is the purpose of this tool, but it should be quickly obvious that you can use these frames for presentation drawings and maybe even for drawing stepped gradations for raised panel and window muntins—if you really want to dress up a drawing.

In the tool's dialog, you have color pickers for the framing mat and also for the core, which is where the framing mat is typically cut at an angle, revealing the interior color of the mat material.

You have a choice of adding a shadow and also whether you have a core or not.

You have the option of one or two ruled lines on the mat, and if no core is selected, then these choices apply to simple gold framing lines.

You have a choice of a number of styles of mats, cores and framing.

The first two color pickers use colors that are commonly used for picture framing, and they are often pastel colors. These may not be the best choices for frames, but the third color picker offers more appropriate options.

You can save and delete favorites in the dialog by using the plus and minus buttons, and you click on a favorites button to select it.

Foolishness!

The tool also provides a slide show so you can see how the mats and frames will look with various photos. In the past we have had a similar but more limited slide show in the WildTools 3D Cube, which has been eliminated by this bigger and better bit of foolishness of this programmer's 'Easter egg'. There you can see a bit about me and the loves of my life. As you can see, I am blessed with many wonderful people in my life, particularly exceptional women. After visiting us a few years ago and meeting Meredith, Sara, Kakee and my mother, Matt Arnold sent me a note that "The women in your life are incredible." He's right. And also around Christmas when Sara and Kakee were home, I was talking to my older brother who was feeling lonely, and he asked "How do you keep yourself surrounded by so many beautiful women?" With no hesitation or forethought, I answered "Personal magnetism and virility."—*Alfred Scott*

(If you are irritated by this, please note that the photos are stored in an ultra-compact format, and with the elimination of the other photos and the 'About WildTools' dialogs, there is a net savings in the size of WildTools.)

This tool will expire at some point in the future, but it is our intention to keep it running until we have a new version of PC/WT.

Gradient Fill Tool

New tool added to the WildTools palette. The tool uses a Needle and Eyedropper cursors to apply and pick up gradient fills.

The tool provides a method of editing the gradients in the dialog and also in the drawing. You can add a color point by clicking on the line hilited with yellow. You can delete a color points by dragging it off the line. You can rotate the angle by dragging a point outside the bounding box and then moving it around the center.

A color chart provides RGB and HSB sliders and the ability to select and move gradient color points. You can add color points by clicking on a color line in the color chart. You can delete a color point by dragging a selected color point out of the color chart. You can duplicate a color point by dragging a selected color point in the chart over other color points. Note that the slots of the sliders give you a preview of the color that you will get if you drag the slider knob to a new location.

You can save and delete favorites in the dialog by using the plus and minus buttons, and you click on a favorites button to select it.

While it is not as convenient as the ability to pick up colors with an Apple color picker, note that you can use Apple's DigitalColor Meter to get the RGB values for colors while you use this tool to duplicate colors you can see.

When you are editing an existing gradient in the drawing, you may click with the Needle cursor in the Hot Spot provided for this purpose, otherwise you are editing the object's gradient. The Hot Spot only shows when the gradient that you are editing is different from the gradient of the tool.

At this time, the tool will not edit an object in a group, and after you make a change in the color chart and release the mouse, the screen image jumps and then snaps back right. These are two minor imperfections in the tool that I hope to fix over time.

This tool will expire at some point in the future, but it is our intention to keep it running until we have a new version of PC/WT.

About WildTools Dialog

Eliminated from the WildTools preferences pane the dialog with the photo of me and the girls dancing around me.

WildTools 3D Cube Window

Eliminated the slide show about me and the loves of my life. This has been replaced by the bigger and better foolishness described in the Picture Frame tool above.

Trees & Shrubs

TopoTools Analyze Topo commands

Fixed problem that sometimes caused a crash when leaving the tool's dialog.

Tree Gradient Tool

New tool added to Trees & Shrubs palette. It provides a way to apply the Trees & Shrubs gradient fill color combinations to objects in the drawing.

This tool will expire at some point in the future, but it is our intention to keep it running until we have a new version of PC/WT.

Tool Settings

Changed the saving of the tool settings between sessions of using PowerCADD from saving these in the PowerCADD defaults to individual plist files at User/Library/Preferences in files named com.engsw.WildTools.plist, com.engsw.NutsBolts.plist, com.engsw.PerspectiveTools.plist, etc. If the files are deleted, they will be replaced with new files with default settings.

Contour Text Tool—TopoTools

Fixed problem with text not flipping with Option-toggling. This was fixed before, but then it stopped working with the changes to mirroring text in Mirror by Line. So now it is fixed again.

Line Tool—WildTools

Changed so you can convert a Hatch object to a group of lines with the Yin-Yang cursor (Shift Option click),

Window Tool—Doors & Windows

Changed so you can type a zero face width for the window frame.

6/1/2011

WildTools 10.1.0

WildTools 3D 10.1.0

Baseline Tools 10.1.0

Nuts & Bolts 10.1.0

Special Curves 10.1.0

Doors & Windows 10.1.0

PerspectiveTools 10.1.0

SketchTools 10.1.0

TopoTools 10.1.0

CompositeWallTools 10.1.0

WildThing 10.1.0

CoreUtilities 10.1.0

NewTools 10.1.0

New shipping versions including changes listed below.

Pitch Dimensioning Tool

Fixed problem with fractional choice of 1.

Mirror by Line

Fixed problem so the text is 'right reading'.

Bend Tool

Added to WildTools palette in the same row as the Linear Move, Linear Repeat... tools. It distorts selected objects along an arc.

This new tool will expire at some point in the future, but it is our intention to keep it running until we have a new version of PC/WT.

Scale Tool—WildTools

Added option for selecting with enclosing rectangle with finger technology.

Date Stamp Tool—WildTools

Changed so it uses the formats set in System Preferences/Language and Text.

Trees & Shrubs—Basic Documentation

The Trees & Shrubs tool palette is now part of SketchTools. To use any of these tools, first open the Trees & Shrubs palette, where the tools are located.

These new tools will expire at some point in the future, but it is our intention to keep them running until we have a new version of PC/WT.

All of these tools share a similar Cover Flow design in the tool's dialog. In addition to the obvious and common use of this interface, you may also

- Click and drag left or right to move through the styles of trees, shrubs, etc.
- Use the scroll wheel of a mouse to move through the styles.
- Use two-finger gesture scrolling to move through the styles.
- Click in the Sun image and drag to change the sun angle.
- Use two-finger gesture rotation to change the sun angle.

These tools share a similar color picker design. In addition to moving the slider's thumb, you may also

- Click and drag left or right to move through the color choices.

- Use the scroll wheel of a mouse to move through the colors.
- Use two-finger gesture scrolling to move through the colors.

These tools use multiple color pickers of base and hilite colors, and since the tools place complex objects, the normal tool attributes do not apply, so there is no point in trying to set the attributes of the tools with the Attributes window. Instead, all of the choices are given in the tool dialogs. After the objects are placed in the drawing, then you may use the Attributes window to change the objects.

The Leaf tool provides a way to draw the individual elements used for the trees and shrubs.

The Shrub tool has a choice of flowers—clearly this needs more work.

Picking—WildThing

Increased the picking radius slightly when you are zoomed out. This was causing some problems with the Trim tool on horizontal and vertical lines.

3/28/2011

WildTools 10.0.9

WildTools 3D 10.0.9

Baseline Tools 10.0.9

Nuts & Bolts 10.0.9

Special Curves 10.0.9

Doors & Windows 10.0.9

PerspectiveTools 10.0.9

SketchTools 10.0.9

TopoTools 10.0.9

CompositeWallTools 10.0.9

WildThing 10.0.9

CoreUtilities 10.0.9

NewTools 10.0.9

New shipping versions including changes listed below.

Dimension Tolerances

Added ability to have no fractional tolerance for Dimension Line, Dimension Point, Pitch Dimension, Datum Dimension tools in WildTools, 3D Dimension Line tool in WildTools 3D, and Topo Point and Grading tools of TopoTools.

Trees & Shrubs—SketchTools

New tool palette added to SketchTools consisting at this time of a Tree Tool, which is very much a work in progress.

NewTools

Eliminated Tree in Plan Tool.

Tornado Tool—WildTools

Fixed radio button choice in the dialog.

Linear Move Tool—WildTools

Changed so you can move reference file objects.

Section Line Tool—WildTools and Section Contour Tool—TopoTools

Changed so you can assign text attributes to the tool.

3/14/2011

WildTools 10.0.8

WildTools 3D 10.0.8

Baseline Tools 10.0.8

Nuts & Bolts 10.0.8

Special Curves 10.0.8

Doors & Windows 10.0.8

PerspectiveTools 10.0.8

SketchTools 10.0.8

TopoTools 10.0.8

CompositeWallTools 10.0.8

WildThing 10.0.8

CoreUtilities 10.0.8

NewTools 10.0.8

New shipping versions including changes listed below.

We're skipping over 10.0.5, 10.0.6 and 10.0.7 so WildTools and PowerCADD will have similar version numbers.

Knife Tool

Now handles polygons that are visually closed but not actually closed objects as if they were closed.

Dimension Tools

Leading zeros no longer show in the edit text boxes for tolerances in the dialog to agree with PowerCADD dimension setting to strip leading zeros.

Contour Text Tool—TopoTools

Fixed problem with pressing Option key to mirror the text. Now works as it should.

Picking

Changed for spectacular speed increases in the performance of picking with the trim tool and other tools in WildTools. The picking is now about three times faster than with PC8, rather than being about 50 times slower as it was until this change.

Now picks objects inside reference files.

Event Handling

Fixed problem where the program would get locked up if you hit command-tab in the initial click-drag phase of a drawing operation, or when another program would bring up a window in front of PowerCADD.

TopoTools

Added progress bars and screen preview to Analyze Topo/Find Contours and Analyze Topo/Analyze Slope dialogs.

Added check for duplicate points to these two dialogs.

Added marker shapes for Topo Point and Grading tools.

Added display options for Topo Point tool for displaying Z or XYZ dimensions in the topo point object and a choice of whether these are displayed on one, two or three lines.

Changed editing of slope in dialog for Slope Offset and Grading tools to show the same number of decimal accuracy as used in the drawing, but with a minimum of two decimal places. If you type a more accurate number than the number of decimals setting, the number you type will be used and will display when you come back to the dialog.

Import and Export ASCII Survey Coordinates—TopoTools

Added Import and Export ASCII Survey Coordinates to PowerCADD Import and Export menus to handle the import and export of total station coordinates. These handle topo point objects in TopoTools and Topography Tools and use the U.S. standard NEZ and European standard XYZ format.

The files are comma-separated-value (CSV) text files with five fields for item number, X, Y, Z and description. Item number and description are optional, but there must still be five fields, even if these two are empty. As an example of the contents of the file:

```
1,189.509142,315.943628,100.000000,BENCH MARK  
2,208.914727,330.469605,98.855000,S RWSTAKE  
3,189.067363,319.880290,100.997000,n RWSTAKE
```

To Import ASCII Survey Coordinates:

- Open the file and confirm that it has five comma-separated values as shown above.
- Add a .txt file extension to the file if it does not already have this file extension.
- Set up the coordinates of the current drawing to the desired coordinates for the survey data, which is typically decimal feet or decimal meters. The X, Y and Z coordinates imported will be interpreted as these units, the same as if you typed the coordinates in the Edit Window.
- Set the font and font size for the Topo Point tool. These will be used in creating the topo point objects, so if you want the text size to be small, say three points, then you will want to set the text attributes for the Topo Point tool before you do the import.
- Set the Topo Point tool to the marker style you want used in the import, as well as the choice for displaying Z or XYZ and the number of lines of text these are displayed on.
- From the PowerCADD File menu, choose Import, and then select ASCII Survey Coordinates. Click the Options button and choose whether the data is in the U.S. standard NEZ (which is really Y, X, Z) or European standard XYZ format. Choose if you want to place the topo point objects of TopoTools (WildTools) or Topography Tools (Paolo Rossi). Paolo's objects offer more options for editing after the objects are placed, but you will need Topography Tools—highly recommended—for that. All of the tools in TopoTools work with Paolo's topo point objects, and they are effectively the same as far as TopoTools is concerned.

To help you check things, the first ten points are traced with an orange polygon with a round arrow at the start of the polygon.

If you have Topography Tools, please continue to use the included Import XYZ file capability, which is similar to this and which offers more options.

At this time, Import ASCII Survey Coordinates is a work-in-progress and still needs some more work in dealing with objects that will not fit on the page and setting a global origin to match the imported points.

Picking

Made change for faster response with tools that give a clank sound if you click near an object but not close enough to pick it. This is used all through WildTools, and results in a 4X speed improvement.

Lumber Tool—Doors & Windows

Changed tool-tip display to always be in inches and with no units. So the display changes from 2" x 4" to 2x4.

Dimension Tools

Leading zeros on dimensions and tolerances now work with PowerCADD dimension setting to strip leading zeros.

Tolerances in the dimension tolerance style of plus-something/minus-something now have a minus sign on the lower of the two tolerance.

Tolerances can now be positive or negative values.

Fixed rounding problem so a dimension of 0.0625 will round to 0.063 and not 0.062 as previously.

Fixed occasional bizarre rounding problems with some dimensions rounding correctly in one place in a drawing and not in another.

Resources

Added special cursors to show the 3D and Perspective indicators to the lower right of the cursor. Previously these were drawn by the tool's tickle proc and the image would sometimes lag behind the movement of the cursor. Now it's all part of the cursor.

Converted 'snd' resources to Cocoa sounds. This is to get away from resource files, which are becoming obsolete.

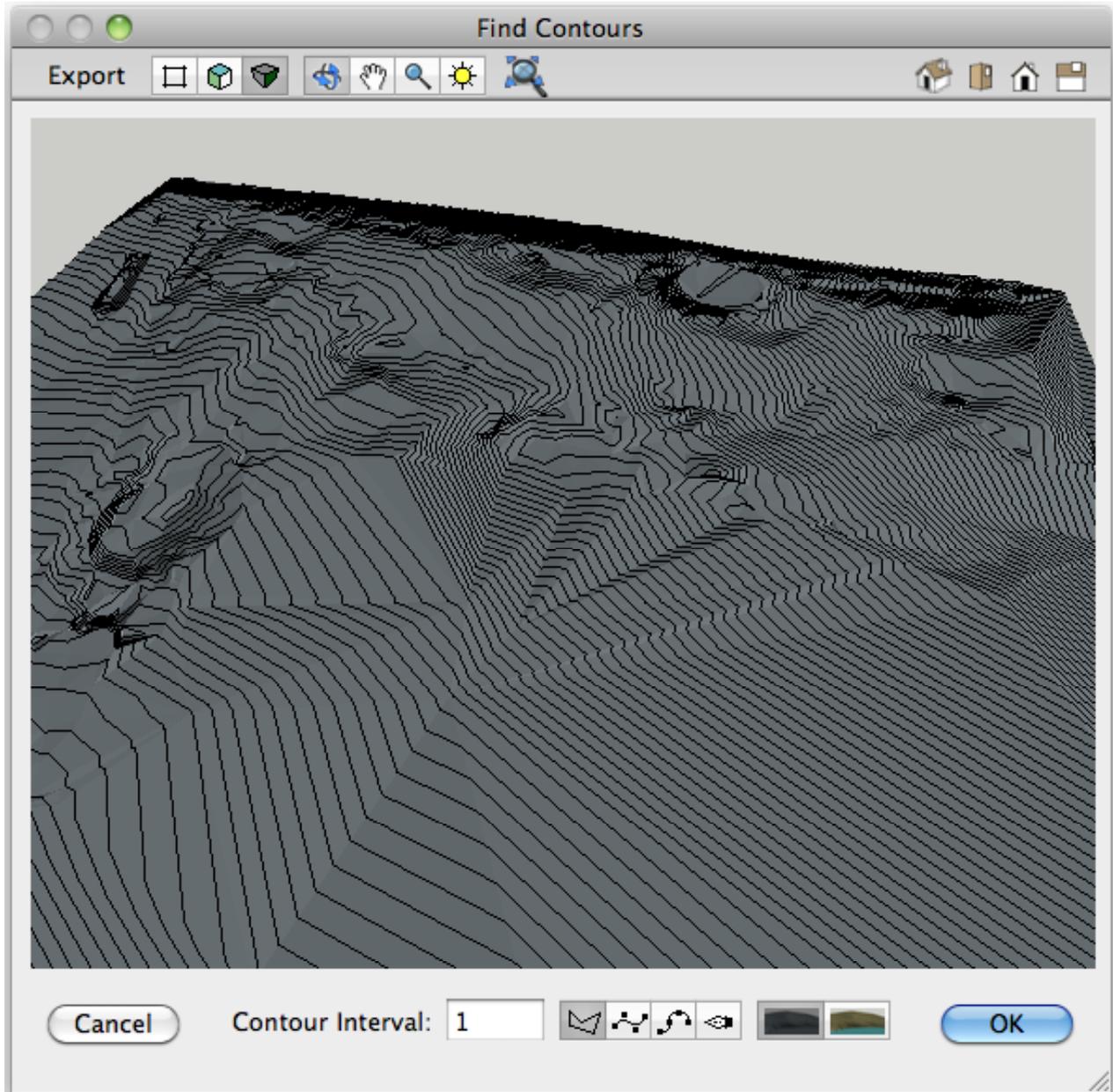
Converted bitmap images used in dialogs from TIFF to PNG files. This results in a dramatic reduction in the size of the WildTools files, so WildTools is now something like 40% smaller, however because they are already compressed, the .dmg file is not as dramatically smaller.

Date Stamp Tool

Changed to prevent a crash with an empty date stamp group object.

Rubber Stamp Tool

Changed so the object 'stuck' to the mouse will now snap.



Wild 3D in TopoTools

Analyze Topo/Find Contours and Analyze Topo/Analyze Slope

Dialogs changed to add 3D views (see *Wild 3D in TopoTools* above). The choices are for 2D, Orthographic 3D and Perspective 3D.

Eliminated Show TIN choices in both dialogs.

Added check for duplicate points, so if duplicate points are found, it brings up an alert and draws red circles around the duplicate points. It will then be up to you to delete the offending duplicate points.

Eliminated two-line choice in Find Contours. The purpose of this was to let you see the disparity between B-Spline, Spline and bézier curves and the polygon choice, but the problem with the curves is now obvious in the 3D views.

Eliminated sun shading in Analyze Slope.

There are four tools: Orbit, Pan, Zoom and Sun.

Scroll wheel zooming (if turned on in PowerCADD) works when all of the tools are active. The scroll wheel zooming is accelerated, same as in WildTools, so a slow movement of the scroll wheel gives you a small adjustment in the level of zoom and a fast movement zooms in or out quickly. This is similar to the way the mouse movement is tracked in the Mac OS.

You may also use Two-Finger gesture scrolling with a track pad (Magic Mouse, Magic Trackpad or on the trackpad of the latest portable Macs). However, this scrolling is handled differently and produces a silky-smooth zooming action and eliminated the problem of overshooting. (For what it's worth, this is a first, as far as we know, for any CAD program, and we hope it's widely copied. It only involves one line of code in the programming.)

Two-finger gesture rotations may also be used to rotate the view, or the Sun when the Sun tool is active.

Pinch zooming is not available because PowerCADD and WildTools are compiled to be compatible with OS 10.5, and this capability cannot be provided until we are compatible with OS 10.6 or later.

The tools are similar to those in SketchUp and Bonzai3D.

Orbit Tool

Use this to view the 3D image from different angles.

You may press the Shift or Option key to Pan.

Pan Tool

Use this to move the image.

Zoom Tool

This is like the Zoom tool in SketchUp, just drag up or down to zoom in and out. It is a 'zoom tool for dummies' in that it is immediately usable by any user, but more sophisticated users will probably use scroll wheel or two-finger scroll zooming.

Sun Tool

Use this to change the rotation angle of the sun.

There are also buttons in the menu bar for the 3D views.

Reduce to Fit button

Click on this to zoom out to show the entire view.

Iso, Top, Front and Side buttons

Eight views are possible. Just click once or twice for the view that you want.

In Find Contours, you have a choice of gray or tan-and-blue colors (where tan is used for above sea level, light blue for sea level, and dark blue for below sea level). These same choices are used in OpenClip Copy Surfaces.

At this time, the 3D views are a work-in-progress and there are a number of problems.

Scroll zooming should zoom in or out on the mouse point. This needs more work.

With track pad zooming, I have the idea of letting you move left and right while you zoom. This is not yet done and may end up being one of those ideas that seems like a good idea when you lay awake in bed in the morning and think about it, but which turns out to be a very bad idea. Stay tuned.

Sometimes the image appears toward the top of the window and is hard to 'look down' on.

Slope Measure Tool—TopoTools

Added accuracy settings.

Door Tool

Changed so you can type a setback of zero.

Distort Points Tool

New larger cancel cursor, and now after you have begun editing things, the Enter or Escape key will get you out of the current operation with the objects remaining distorted.

Shear Points Tool

Now shows shear-about line when the ants are marching, and new cursors show which way you can shear.

Cursors

Complete overhaul of all cursors in WildTools from resource-based cursors to Cocoa cursors. Cursors are no longer limited to 16x16 black and white pixels. Many of the cursors now have colors.

Door Tool

Fixed crash in Show Location bar.

Knife Tool—WildTools

Fixed crash with gray-scale bitmaps.

Surface Texture Tool—WildTools

Fixed crash with missing strings.

12/16/2010

WildTools 10.0.4

WildTools 3D 10.0.4

Baseline Tools 10.0.4

Nuts & Bolts 10.0.4
Special Curves 10.0.4
Doors & Windows 10.0.4
PerspectiveTools 10.0.4
SketchTools 10.0.4
TopoTools 10.0.4
CompositeWallTools 10.0.4
WildThing 10.0.4
CoreUtilities 10.0.4
NewTools 10.0.4

New shipping versions including changes listed below.

We're skipping over 10.0.3 so WildTools and PowerCADD will have similar version numbers.

Squiggle

Squiggle offsets moved from resource to plist.

Edit Window

Reworked internally to use localizable strings.

Added Area and Perimeter to display for Rectangle, Rotated Rectangle, Circle, Ellipse and Rotated Ellipse tools.

Find Layer Tool—WildTools

Changed so it works right when you change to a layer with a custom scale.

Offset Repeat Tool—WildTools

Fixed problem with not-to-scale offset.

Rectangular Tubing Tool—Nuts & Bolts

Added French shapes.

Section Line Tool—WildThing

Now sets text alignment of text in balloons to center, left or right as appropriate for the location in the bubble.

String Resources

Most tool names and other strings of text have been moved from resources to Cocoa localizable strings files. The resource mechanisms are being phased out by Apple so it's a necessary step to keep WildTools current with the OS.

I-Shape Tool—Nuts & Bolts

New graphic display in the sample window of the tool's dialog for information used by steel detailers. These dimensions match the accuracy of the overall dimensions, so they are often rounded up to avoid small fractional or decimal values in a drawing that typically has low dimension accuracy. These dimensions are used for calculating copes and dimensions of mating parts and hole locations. Architects and engineers are typically not concerned with these dimensions.

Nuts & Bolts

All tables of dimensional data moved from resources to Cocoa plists. The resource mechanisms are being phased out by Apple so it's a necessary step to keep WildTools current with the OS.

The new mechanism is more accurate so you will see more round numbers in the dialogs when you make your choices. And it makes it much easier to add new tables of data like those described below.

Tubing, Rectangular Tubing, I-Shape, Channel and Angle Tools—Nuts & Bolts

Added Australian, British and European standards to the menu choices in the tool dialogs. Many thanks to Derek Dubout, François Tribel and Malcolm Woodruff for their help in getting this data together.

Cloud Tool

Fixed problem with Arcs/Beziers radio buttons.

Flood Tool and Flood Action of Grid Line Tool—WildThing

Fixed problem created by the temporary deletion of `polygon.contains()` routine in the PC9 development process. Put routine back in.

Move Points Polygon Select Mode, Polygon Selection tool—WildThing

Fixed problem where it would select objects or points anywhere within the polygon's bounding box.

9/28/2010

WildTools 10.0.2

WildTools 3D 10.0.2

Baseline Tools 10.0.2

Nuts & Bolts 10.0.2

Special Curves 10.0.2

Doors & Windows 10.0.2

PerspectiveTools 10.0.2

SketchTools 10.0.2

TopoTools 10.0.2

CompositeWallTools 10.0.2

WildThing 10.0.2

CoreUtilities 10.0.2

NewTools 10.0.2

New shipping versions including changes listed below.

Pen, Trim Tools, etc.

Fixed crashes in a core routine used in many Bézier trimming and drawing operations.

9/17/2010

WildTools 10.0.1

WildTools 3D 10.0.1

Baseline Tools 10.0.1

Nuts & Bolts 10.0.1

Special Curves 10.0.1

Doors & Windows 10.0.1

PerspectiveTools 10.0.1

SketchTools 10.0.1

TopoTools 10.0.1

CompositeWallTools 10.0.1

WildThing 10.0.1

CoreUtilities 10.0.1

NewTools 10.0.1

New shipping versions including changes listed below.

Bitmap Transformations

Fixed crashes with grayscale bitmaps.

Date Stamp Tool

Date stamp objects are now advanced text objects to fix a problem with occasional crashes. Drawings saved back to PC8 will not update regularly with these text objects, but WildTools 9 was written defensively and will only deal with the old type of text objects.

Move Points Tool

Now handles rounded rectangles.

WildTools Preferences Pane

Added help button for OpenClip to bring up information on web page.

3D Linear Distribute Tool

Fixed problem with wrong dialog coming up.

8/25/2010

WildTools 10.0

WildTools 3D 10.0

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Special Curves 10.0

Doors & Windows 10.0

PerspectiveTools 10.0

SketchTools 10.0

TopoTools 10.0

CompositeWallTools 10.0

WildThing 10.0

CoreUtilities 10.0

NewTools 10.0

New shipping versions including changes listed below.

OpenClip

Eliminated OpenClip as a separate external (it is now part of TopoTools) and added ability to turn it off in the WildTools preferences pane.

Move Points, Rotate Points, Scale Points, Mirror Points, Shear Points, Distort Points, 3D Move Points, Perspective Move Points Tools

Added mouse shaker feature to switch modes from all objects to selected objects.

Analyze Topo/Find Contours & Analyze Topo/Analyze Slope—TopoTools

Added Export menus to the top of the dialogs, replacing the OpenClip buttons and menus and adding Save as DXF... options for topo contours and 3D surfaces.

Export Wild DXF—TopoTools

Added Export as “Wild DXF” to combine and replace Export for SketchUp and Export Topo Contours. Export 3D Surfaces eliminated and replaced with Export menu items in Find Contours and Analyzed Slope as described above.

Gusset Plate Tool—Nuts & Bolts

Fixed problem with Trim buttons being hooked up backwards.

Door Tool—Doors & Windows

Fixed problem with sample image in dialog. It was in the center of the window.

Export Topo Contours, Export 3D Surfaces—TopoTools

Added to TopoTools. These export contour lines with Z height and 3D surfaces of topo to DXF for import to Bonzai 3D, Form Z, SketchUp and any other 3D modeling program. Choices are added to the menu in the Export command.

Knife Tool

Now transfers Z heights when cutting Beziers, B-Splines or Splines.

OpenClip

Fixed problem with an object that ‘has arrow 1’ or ‘has arrow 2’ but where arrows are ‘null’.

Offset Repeat Tool

Fixed problem with Copy Attributes button not being initialized.

Shift-Toggling

Now working due to change in PowerCADD.

I-Shape Tool—Nuts & Bolts

Fixed problem with centroid line when you flip the side view presentation with the Option key.

Parallel Offset and Thicken Tools—WildTools, WildTools 3D and PerspectiveTools

Simplified Cross-over Clipping choice to a single checkbox, so now it’s either off or using the Max setting.

WildTools Preferences

Eliminated Offset Line, Pen, Knife, Wall Trim and Delete tools as a primary tool choice. Now, each of these tool always has its own row in WildTools.

Eliminated Transformation tool palette as a choice. Tools are now always installed in WildTools palette.

Help Menu

Added Help menu items for WildTools.

Dimension Text Location

WildTools dimensioning tools now use PowerCADD vertical offset settings.

Move Points Tool

Indicator shown with the cursor changed to show when the tool is in a mode to operate on selected objects.

Dialogs

More refinement to allow user to press Delete key when there is a lower limit to the value being typed.

Break Line Tool

Fixed crash with double-break in PC9/WT10.

S-Break Tool

Fixed dialog sample display with interactive mode.

Offset Repeat Tool

Fixed problem with the offset with the Reset buttons and with To Scale turned off.

Slope Tool—Doors and Windows

Fixed problem with the Rise text resetting to zero.

Dialogs

Slight change in text editing error handling in dialogs to allow user to press Delete key to delete the text, and type 0 or 0. even when zero is not allowed, such as with the Offset Line tool offset.

Involute Spline and Spur Gear Tools

New tools added to the Nuts & Bolts palette.

Rounded Rectangles

Large number of internal changes caused by (very welcome) change to rounded rectangles that now provide for a rotation angle. Most now work smoothly.

Remaining problems:

Parallel rotated rounded rectangle objects now join parallel rotated rectangles and ellipses in not working right. Do a parallel offset of any of these three object types with the Linked option turned on and you will see the problem when you drag the object handles around. This problem has been around for years and I have yet to figure out what the cure is, but it does little harm and apparently nobody has been using this.

Dialogs

Changed text editing error handling in dialogs to allow for typing two periods as a shortcut for a feet (') character.

Mirror by Line

Rotate by Line

Match

Match Now

Fixed problem where arrow cursor would show and no pick sound would happen when you click on a line.

Contour Text Tool, TopoTools

Now handles lines, rectangles, ellipses and arcs.

Style Tools

Dialog changed to have a sample window and a second reset button to replace the former requirement to press the Option key to get the second, optional style set.

Line Break Tool

Now transfers Z heights.

Nibble Tool

Now transfers Z heights.

Wall Trim Tool

Now transfers Z heights.

Hatchet Tool

Now transfers Z heights.

Knife and Freehand Knife Tools

Now transfer Z heights.

Trim with Object Tool

Now transfers Z heights.

Trim Tool

Now transfers Z heights.

Scissors Tool

Now transfers Z heights.

Bitmap Transformations

Fixed problem with PerspectiveTools transformations

Parallel Offset Tool

Fixed problem with dialog.

Gridline Tool

Now using new masking routines.

Mirror

All mirroring done in Mirror by Line and throughout WildTools is now done with new routines in WildTools.

The differences are:

Rectangles and Ellipses when mirrored about vertical or horizontal lines do not turn into rotated rectangles and rotated ellipses.

Rounded rectangles when mirrored about non-vertical or non-horizontal lines are converted to bezier objects.

Mirror by Line and Mirror Points now mirror bitmaps.

Bitmap Transformations

Completely reworked the transformation of bitmaps where bitmaps are transformed in shape. This is all being done in a new class that handles the CGBitmapRefs of PC9. In the past, if you pasted a bitmap into PowerCADD, you usually got a PICT object and to cut it or transform it, you first had to convert it to a bitmap object. This conversion is no longer required as there are no more PICT objects, only bitmap objects.

The bitmap transformations are improved in that I am now doing my own anti-aliasing so there will be softer edges where in the past there were jagged, stairstepped edges to the bitmaps.

The bitmap transformations are in the following tools

WildTools
Distort Points tool
Shear Points tool
Mirror Points tool

Swirl Tool

WildTools 3D
Shear tools
Unshear tools
Shear and Unshear commands in the WildTools 3D Cube window
3D Swirl tool
3D Mirror tool
3D Rotate and Radial duplication tools
3D Axial Rotation and Radial duplication tools

PerspectiveTools
Perspective Blockout tool
Perspective Camera tool
Perspective Move, Duplicate tools, move and cross-plane moves
Perspective Rotate, and radial duplication tools
Perspective Axial Rotation and duplication tools
Perspective Move Points tool, move and cross-plane moves
Perspective Mirror Tool

Cutting Bitmaps

The following tools cut bitmaps using a new method in WildTools.

Knife tool
Drawing a line across a bitmap with the tool.
Option-clicking on a line across a bitmap

Freehand Knife tool

Drawing a freehand polygon across a bitmap

Option-clicking on a rectangle, ellipse, polygon, spline, b-spline or bezier.

Trim with Object tool

Cutting bitmap with ellipse, rotated ellipse, rectangle, rotated rectangle, or round rectangle.

Needle Tool and Gradients

Needle tool reworked to handle new gradients in PowerCADD. There should be no change in behavior that you can notice.